

New Zealand Marine Oil Spill Readiness and Response Strategy 2018–2022



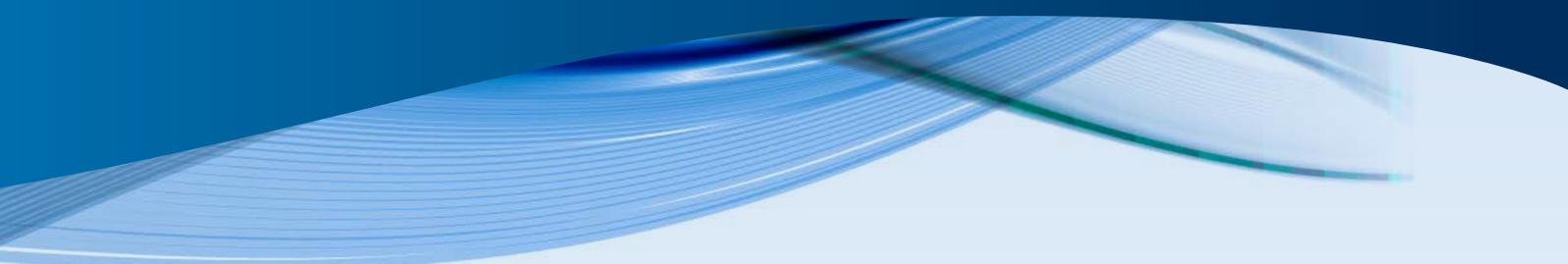


Foreword

KEITH MANCH, DIRECTOR, MARITIME NZ

The New Zealand Marine Oil Spill Readiness and Response Strategy 2018–2022 is the fifth and latest version of a strategy that is required under the Maritime Transport Act 1994.¹ This revision builds on the previous edition and provides information about how New Zealand responds to marine oil spills, as well as setting the vision, principles, goals, and objectives for New Zealand’s marine oil spill readiness and response for the next five years (see overview in Figure 1).

¹ In the context of this strategy, Maritime NZ focuses on both readiness and response. Readiness is the development of operational systems and capabilities before a marine oil spill happens. Response is the actions taken immediately before, during, or directly after a marine oil spill incident to control and contain the spill and to protect people and resources.



The vision of the strategy – New Zealand has an efficient, effective, resilient and fit-for-purpose marine oil spill response system – fits well with Maritime NZ’s ‘safe, secure and clean’ vision and directly reflects what we are working to achieve.

The four goals outlined in the strategy, with their supporting objectives, target the areas we believe are critical for maintaining and improving our overall readiness and response system. These areas are:

- New Zealand’s ability to respond to a significant spill
- having a readiness and response system that reflects national and international best practice
- industry and regional councils having the capability to respond to their own and local spills respectively
- the relationships and partnerships we need to implement, support, and improve our readiness and response system.

Typically, most marine oil spills in New Zealand’s waters are small in volume, so are easily managed and of low impact. However, New Zealand also needs to be ready to respond to significant spills, which are low probability events but of high impact. Therefore, the marine oil spill response system needs to be broad in its application with the capability to mount a response to all spills in New Zealand’s waters.

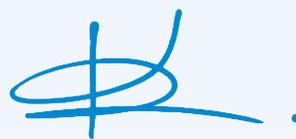
The system continues to reflect world’s best practice, but is carefully adapted to New Zealand’s marine and

maritime environments. This is challenging because our marine waters are extensive and often remote, and the maritime industry is complex and dynamic with rapidly changing technology, multiple stakeholders, and diverse views.

The regular review of the strategy provides an excellent opportunity to capture the most important principles and lessons and to cast an eye to the future for emerging trends and opportunities in marine oil spill response and readiness.

This strategy is complemented by a capability plan that describes the additional capabilities Maritime NZ needs to give effect to the strategy and the work required to achieve the strategy’s goals and objectives.

Finally, Maritime NZ would like to acknowledge its partners (locally and internationally), all of which are valued contributors to New Zealand’s capability to respond to a significant marine oil spill incident, and thank everyone who contributed to the development of this strategy.



Keith Manch
Director, Maritime NZ

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Purpose statement

The New Zealand Marine Oil Spill Readiness and Response Strategy 2018–2022 meets the requirements under section 283 and section 284 of the Maritime Transport Act 1994.

The purpose of the strategy is to:

- promote a standard and coordinated national marine oil spill readiness and response system
- provide Maritime NZ with the strategic intent and direction to shape how New Zealand maintains and

enhances its preparation for readiness and response to marine oil spills.²

- describe actions to be taken and by whom in a response to a marine oil spill.

The strategy also provides a core element of Maritime NZ's contribution to government outcomes for managing the health, safety, and environmental risks from the oil and gas industry when it is operating in New Zealand's marine environment.

Components of this edition of the strategy

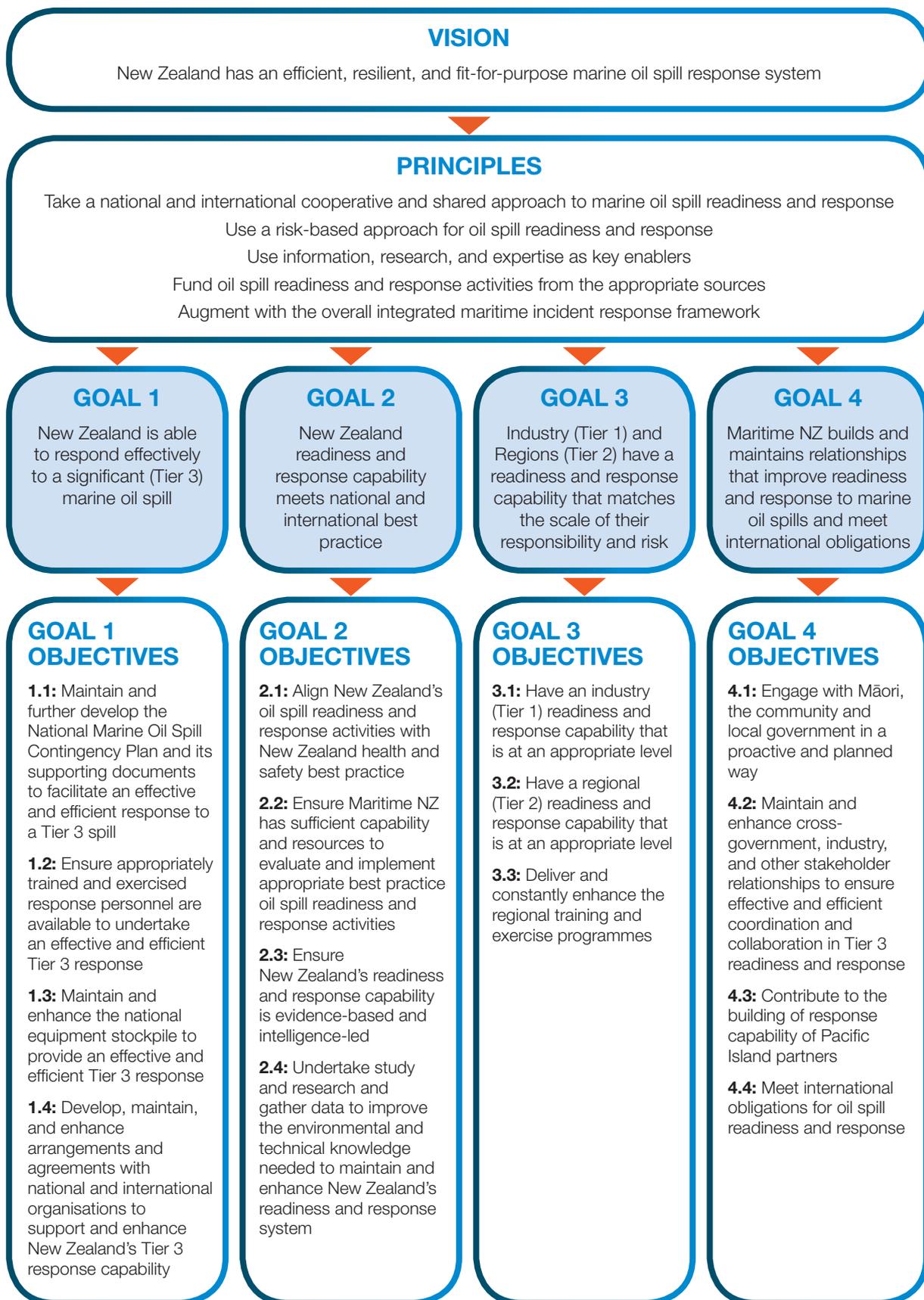
The strategy for 2018–2022 is shaped by the lessons of the past, but also looks to the future. As well as providing information about how Maritime NZ will respond to spills, as required by the Maritime Transport Act 1994, the strategy sets the vision and values, principles, goals, and objectives for the next five years to ensure New Zealand's readiness and response system is appropriate, efficient, and effective.

How the components of the strategy fit together is shown in Figure 1 (the goals and objectives are not presented in priority order). The vision and values are then discussed (page 3) with the principles, goals, and objectives discussed on pages 17–33.³

2 Maritime NZ is the government agency responsible for providing an effective marine oil spill response system.

3 A glossary of technical terms is in Appendix A.

Figure 1 Components of New Zealand’s Marine Oil Spill Response Strategy



Vision and values for New Zealand's response to marine oil spills

Vision – New Zealand has an efficient, effective, resilient, and fit-for-purpose marine oil spill response system

The strategy's vision supports Maritime NZ's overall vision of a maritime community that works and plays safely and securely on clean waters. (An introduction to Maritime NZ is on page 4.)

Values – integrity, commitment, and respect

Maritime NZ's key values are that it acts with integrity, commitment, and respect. These values guide Maritime NZ's behaviour and action when working collaboratively with local government, industry, the community, and iwi to minimise the risks of a marine oil spill and to reduce the effects of a spill should one occur.

Maritime NZ also recognises and acknowledges the different perspectives and values of all who play a part in responding to marine oil spills, in particular, the community and iwi.

Introduction to Maritime NZ

Maritime NZ is the national regulatory, compliance, and response agency⁴ for the safety, security, and environmental protection⁵ of New Zealand waters. A core role of Maritime NZ is incident response in the maritime domain, which means:

- managing the development and improvement of national maritime incident and oil spill readiness and response capability
- leading New Zealand's responses to significant maritime incidents and emergencies, including oil spills
- providing a national land, sea, and air search and rescue coordination service.

To deliver these functions we work with other government agencies, local government, and operators to maintain a tiered response capability that includes the provision of equipment, risk assessments, contingency plans, and training response staff. For significant and major maritime incidents, Maritime NZ takes the role of response leader.

To build capability we:

- have developed this strategy (to complement the Integrated Maritime Incident Readiness and Response Strategy), and maintain and review it regularly
- develop and maintain strong relationships with other agencies and international parties to facilitate a transparent and shared understanding of respective roles in a response, formalising such understandings in contracts or memoranda of understanding
- maintain oil spill contingency plans that give effect to this strategy
- prepare capability plans
- build and maintain a sustainable, well-trained, and well-exercised pool of responders across all necessary response functions

- train and exercise the response plans at organisational and national levels
- aim to have, or to be able to access, sufficient resources (people, technology, and equipment) to effectively implement the strategy and associated plans.

With regards to marine oil spills our responsibilities are set out in the Maritime Transport Act 1994 and this strategy. To meet them we deliver several outputs, including:

- developing, maintaining, and administering this strategy
- developing and maintaining appropriate international cooperation arrangements
- ensuring that tiered contingency oil spill response plans are developed and maintained at national, regional, and operator levels to give effect to this strategy
- developing and maintaining a national training plan for oil spill responders and the implementation of that plan in accordance with this strategy
- undertaking regular training for and exercising of contingency response plans at national, regional, and operator levels
- providing sufficient resources, including response equipment, to effectively implement this strategy and associated contingency plans.

The original strategy was developed in 1992 and has been revised four times since then. The last revision was in 2014.⁶

4 About 230 staff are distributed across head office in Wellington, 10 regional offices, the Marine Pollution Response Centre in Auckland, and the Rescue Coordination Centre New Zealand in Lower Hutt.

5 Maritime NZ also works closely with the Environmental Protection Agency, which has accountability for ensuring environmental protection in New Zealand's exclusive economic zone.

6 Maritime NZ (2006) *NZ Marine Oil Spill Response Strategy*. Wellington: Maritime New Zealand. www.maritimenz.govt.nz/Publications-and-forms/Environmental-protection/Oil-spill-response-strategy.pdf

Context for this strategy

International and national governance

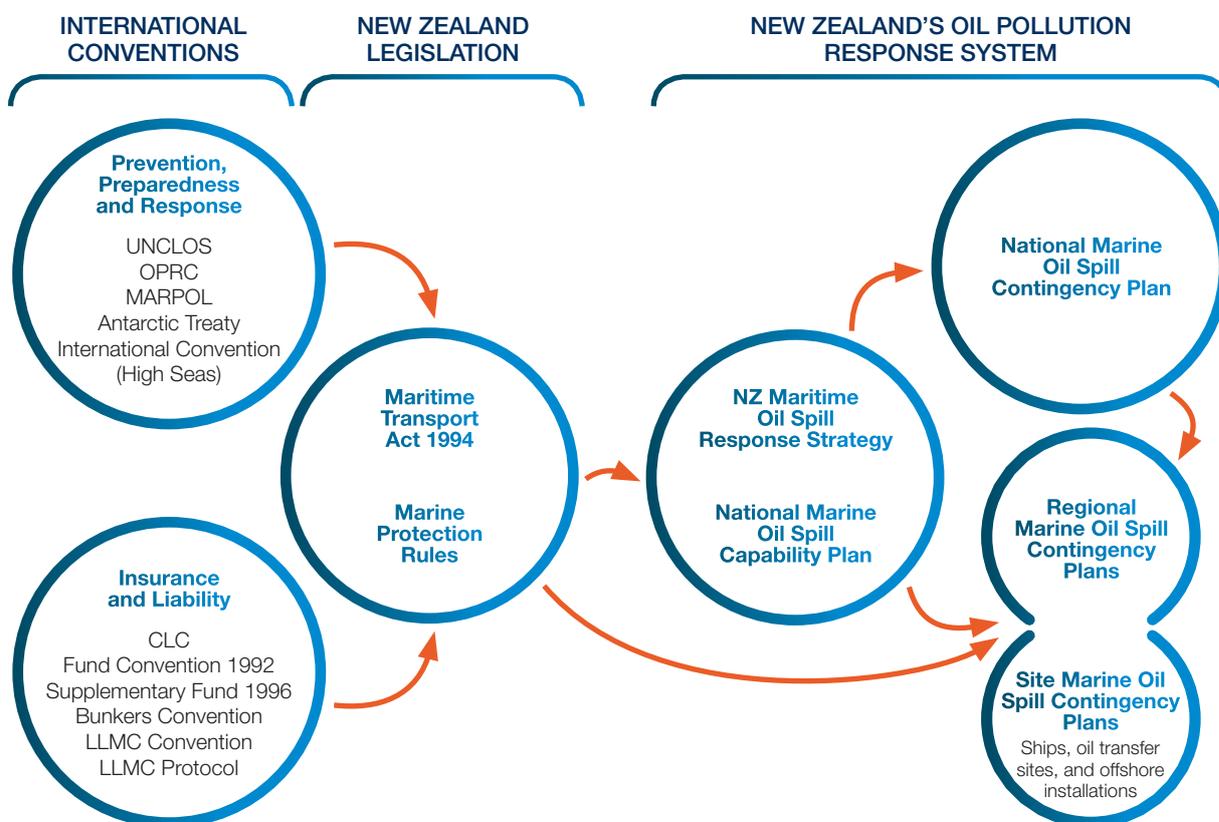
The Maritime Transport Act 1994 requires the Minister of Transport to ensure New Zealand meets all its international obligations related to maritime matters. The strategy is a critical component for meeting the oil pollution and oil spill response aspects of these obligations.⁷ This strategy also meets requirements under part 23 of the Act, which sets out the domestic obligations for plans and responses to protect the marine environment from marine oil spills. Obligations apply across government (Maritime NZ), local

government, and various industry sectors (ships, oil transfer sites, and offshore installations).

Marine Protection Rules, which are made under the Maritime Transport Act 1994, implement international conventions and standards and form part of New Zealand's maritime law. These rules regulate, among other things, the development of marine oil spill contingency plans, which are required for planning a response to oil spills by industry operators, regional councils, and Maritime NZ.

Figure 2 shows the international and national governance arrangements and where the strategy fits into the overall scheme for marine oil spill readiness and response.

Figure 2: Governance arrangements for New Zealand's marine oil spill readiness and response



Note: Acronyms are explained in the Glossary in Appendix A and details about international requirements are in Appendix B.

⁷ International requirements relevant to the strategy are described in Appendix B.



Three-tiered readiness and response approach

Following international best practice and convention guidance, New Zealand has implemented a three-tiered approach to all aspects of marine oil spill readiness and response.⁸ This approach ensures an appropriate response capability is readily available to deal with oil spills commensurate to the risks.

The tiers can be described as follows.⁹

- **Tier 1 oil spills** are responded to and resolved by the operator. Oil spill response capability is based on risk. The level of response is expected to consist of a timely 'first strike' and includes the capacity to assist if there is an escalation to a Tier 2 or Tier 3 response.
- **Tier 2 oil spills** are generally those beyond the capability of the operator acting alone and the response is led and resolved by the local regional council. The specific capacity required by the regional council is based on the risks at its location.

- **Tier 3 oil spills** are generally more complex, of longer duration and impact, and beyond the response capability of the regional council or operator. The response is nationally led and coordinated by Maritime NZ.

Organisations likely to respond at the various tiers must prepare contingency plans and have a response capability appropriate to their respective levels of risk and responsibility (see Appendices C and D). Figure 3 shows the different tiers and who is responsible for the planning and response at each tier.

Tier 1 and Tier 2 responses can be escalated in an integrated and efficient manner to the next tier, depending on the actual or potential consequences of the event. Tier 3 responses may be augmented and supported with assistance from other national and international organisations and agencies.

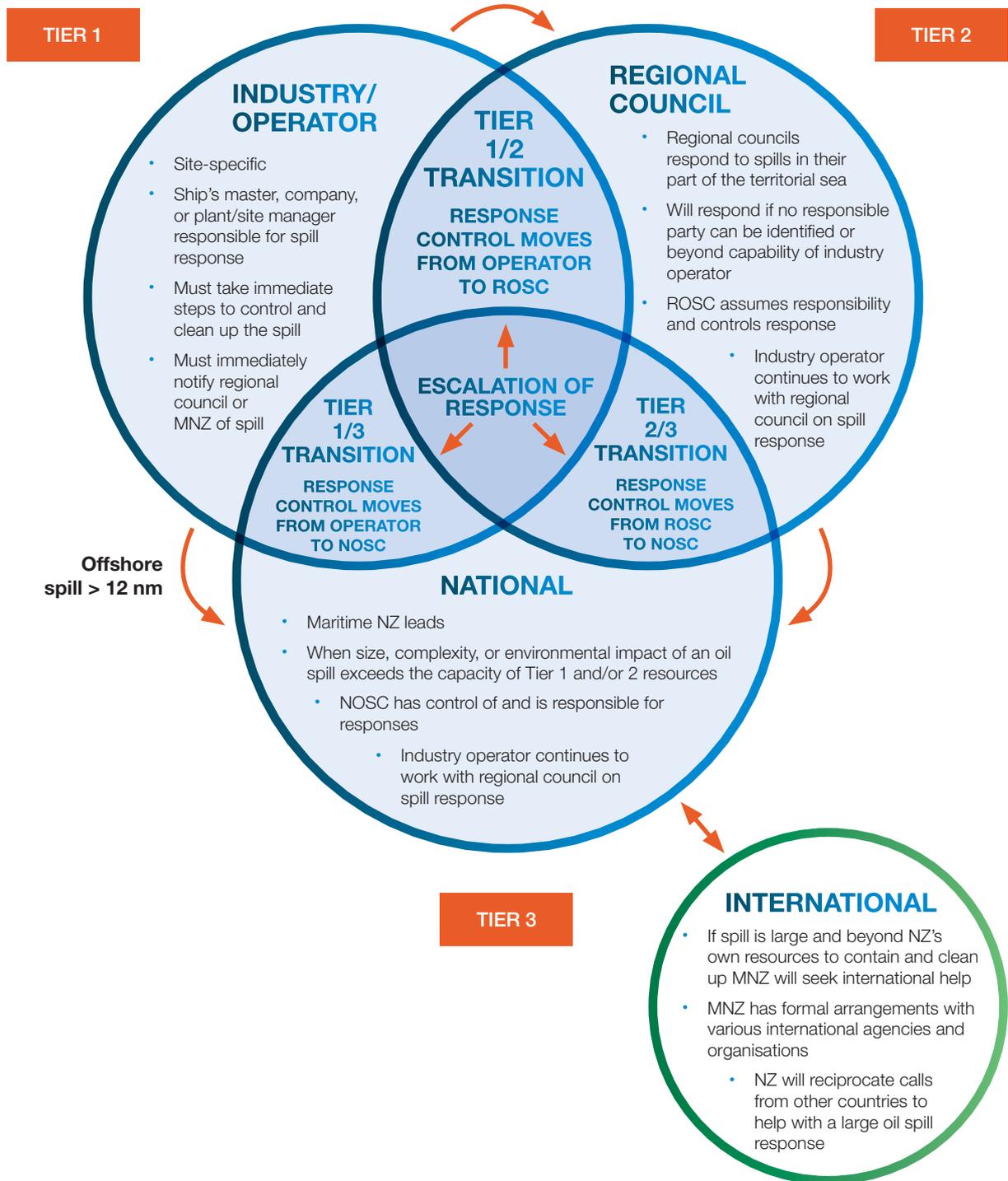
Arrangements are in place to secure overseas assistance if the scale of an incident is beyond the nation's domestic capability. These arrangements are reciprocal, so New Zealand is expected to assist its overseas partners if requested.¹⁰

8 IPIECA (2007) IPIECA Guide to Tiered Preparedness and Response – Volume 14. London: International Petroleum Industry Environmental Conservation Association.

9 An expanded definition is in Appendix D.

10 Each request for assistance outside New Zealand is considered on a case-by-case basis, bearing in mind the requirement to continue to maintain New Zealand's own response capability.

Figure 3: New Zealand's three-tiered marine oil spill response system



Note: MNZ = Maritime NZ; nm = nautical mile; NOSC = National On-Scene Commander; NZ = New Zealand; ROSC = Regional On-Scene Commander.

Oil Pollution Advisory Committee

The Maritime Transport Act 1994 establishes the Oil Pollution Advisory Committee (OPAC). OPAC is made up of industry and government representatives appointed by the Minister of Transport. OPAC advises the Maritime NZ Authority on the strategy, the fixing and levying of oil pollution levies, the use of the Oil Pollution Fund, and any other matter related to oil spills that the Minister or Director of Maritime NZ specifies.¹¹

Oil Pollution Fund

The main financial support for oil pollution readiness and response functions is the Oil Pollution Fund. The Maritime Transport Act 1994 requires Maritime NZ to establish and administer the fund, which is required to cover the:

- purchase of equipment or anything else required to implement or assist in implementing a regional (Tier 2) or national (Tier 3) response to marine oil spills
- reasonable costs Maritime NZ or a regional council incurs in investigating a suspected marine oil spill and in controlling, dispersing, and cleaning up any marine oil spill
- costs of services associated with planning and responding to marine oil spills that are services provided for under a contract
- costs to Maritime NZ or a regional council of taking measures to avoid marine oil spills.

The fund is derived from the Oil Pollution Levy. The levy is collected from:

- ships, domestic and foreign vessels exceeding 24 metres length overall and more than 100 gross tonnes
- oil sites (floating, production, storage and offloading units, oil pipelines, and oil platforms).

Each sector pays the levy at a rate proportional to the overall risk created by the various activities in which the sector is engaged. Every financial year, Maritime NZ produces a financial plan for expenditure from the fund, which is referred to OPAC for agreement and recommendation for approval to the Minister of Transport.

The levy is subject to a regular review process so an appropriate level of funding is always available.

The levy is set so that the sum total of levies collected meets the annual cost of maintaining New Zealand's marine oil spill readiness and response capability as defined in this strategy.

The last review of the levy concluded in June 2016,¹² and the next review is scheduled to be completed by June 2019.

If emergency access to Crown funding is needed during a response, it is arranged through the Ministry of Transport, the Domestic and External Security Secretariat, and the Treasury.

Relationship of this strategy with the Integrated Maritime Incident Readiness and Response Strategy

Maritime NZ has updated the Integrated Maritime Incident Readiness and Response Strategy, which is an overall strategy with associated plans for 'major maritime incidents', outlining what needs to be done to manage all aspects of large-scale, major, and/or complex maritime incidents. The integrated strategy focuses on non-oil matters such as salvage, pollution other than oil pollution, investigation, communications, and community and Māori engagement. The two strategies provide for a seamless response to marine incidents, no matter their scale and complexity, and for the start of recovery activity.

Waters covered by this strategy

This strategy applies to marine oil spills in:

- the internal waters of New Zealand (landward of the boundary of the territorial sea to the low water mark), but only to instances where a spill would inevitably reach marine waters such as spills from vessels or industrial sites on rivers
- New Zealand marine waters (from the baseline to 200 nautical miles, comprising the territorial sea and exclusive economic zone)
- the waters beyond the outer limits of the exclusive economic zone but over the continental shelf of New Zealand.¹³

11 The authority for and functions and membership of OPAC are set out in section 282 of the Maritime Transport Act 1994.

12 See the Maritime Transport (Oil Pollution Levies) Order 2013, which sets out specific financial levies for coastal trade ships (including oil tankers), fishing vessels, offshore petroleum rigs and platforms, and oil pipelines.

13 New Zealand continental waters comprise New Zealand marine waters and the waters beyond the outer limits of the exclusive economic zone but over the continental shelf of New Zealand (section 222(1) of the Maritime Transport Act 1994). This is in respect of the Director of Maritime NZ's powers under sections 248 and 249, provisions in Marine Protection Rules under sections 246, 390, and 451, and New Zealand's international obligations regarding pollution from seabed activities (see Article 208 of the United Nations Convention on the Law of the Sea, 1982).

Inland oil spill responses are addressed under the Resource Management Act 1991 and are within the jurisdiction of the regional council. However, Maritime NZ will use all endeavours to assist where an inland spill is beyond the region's capacity to respond.

New Zealand will undertake measures on the high seas (beyond 200 nautical miles and continental shelf waters) as may be necessary to manage danger to the coastline from the threat of pollution by oil following a maritime incident.¹⁴

Engagement with Māori

In light of the importance to Māori of the marine environment and the principles of the Treaty of Waitangi, Maritime NZ seeks to work closely with Māori in respect to marine oil spills.

Maritime NZ:

- works closely with regional councils to ensure Māori are consulted on contingency planning and response through regional marine oil spill contingency plans
- involves, as appropriate, iwi authorities and Māori in oil spill responses
- takes steps to address Māori interests identified through these processes.

These commitments are consistent with Maritime NZ's work to engage effectively with Māori communities on many issues, including when managing complex marine incidents.

Important risks, trends, and events influencing this strategy

To inform this strategy and, in turn, develop the detailed National Marine Oil Spill Contingency Plan and the Capability Plan, Maritime NZ assesses the risks of a marine oil spill occurring.¹⁵ The Marine Oil Spill Risk Assessment was last completed in 2015.

A variety of information from national and international sources (including what marine oil spills have occurred, why, and where) has been carefully considered. Marine oil spill responses in New Zealand and internationally have been reviewed to see what lessons can be learnt and how response capability can be improved.

Maritime NZ has looked to the future at such things as likely changes in shipping activity, the evolution of marine oil and gas exploration and production activity, and the emergence of new and different activities in the marine environment.

By understanding the current and future nature of the maritime sector, learning lessons from Maritime NZ's and others' experiences, and assessing future risks and trends, this strategy and the resulting oil spill response system will be future proofed and adaptable to change.

Drivers that informed this revision of the strategy

Requirements of the Maritime Transport Act 1994

The New Zealand legal framework that drives this strategy is described in Appendix C.

New Zealand Marine Oil Spill Response Strategy 2015–2019

This version of the strategy acknowledges the success of the previous strategy with regard to providing an effective means of directing New Zealand's oil spill readiness and response activities by way of clear goals and objectives.

Focus on building New Zealand's National Response Capability

This version of the strategy builds on the previous version to focus New Zealand's response capability towards Tier 3 or national spill responses as this is where the greatest risk to New Zealand lies. Examples of the focus on a national response capability include the considerable development of the National Response Team, enhancement of the national equipment stockpile, and the move to providing only a national capability for wildlife and dispersant response options (rather than having a regional capability as well).

International and domestic incidents

The continuing theme for international and domestic incidents is one of incidents involving large ships and persistent bunker fuel spills and smaller spills from smaller domestic vessels as a result of vessel casualties or bunkering mishaps.

Offshore oil and minerals activity

New Zealand has had an offshore oil and gas industry for many years. The five producing offshore fields (Kupe, Pohokura, Maui, Maari, and Tui) are all in the Taranaki basin. Recently, offshore oil and gas exploration activity has decreased, although it is likely to continue in Taranaki and other regions.

¹⁴ See the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969, which is discussed in Appendix B.

¹⁵ Risk analysis covers both the *likelihood* and the *consequence*, in particular, the environmental impact of a spill.



Although the likelihood of a major offshore oil and gas incident is very low, the consequences are likely to be severe. Under this strategy, the offshore oil and gas industry, as the expert in this field, must be able to access appropriate well-control capability. Maritime NZ will ensure industry meets this requirement.¹⁶

Interest in offshore mining for iron-sands, phosphate, gas hydrates, and seafloor massive sulphides is increasing. These types of operations all require large processing and support vessels, so lead to an increased (yet still low) risk of a marine oil spill. This strategy focuses on ensuring industry has an appropriate level of oil spill response capability for any given activity.

Domestic and international shipping trends

In summary, vessels (containerships and cruise ships) are getting larger, but, in general terms, safer, and more vessels are expected to visit New Zealand in the years ahead. Maritime NZ evolves oil spill response capability by locating the right equipment, personnel, and training in the right geographical areas based on maritime traffic patterns and risks.

Regardless of fluctuations in shipping activity (and offshore activity), the response capability requirements remain fairly constant based on the likely spill scenarios and associated response activities that these shipping activities present.

Government's approach to managing security risks

Managing the risk and responding to marine oil spills requires activities from across a broad spectrum – from measures to prevent oil spills to systems and capabilities in readiness for an event to actions needed in a response, and, finally, to efforts and processes to bring about recovery and regeneration.

These four elements – reduction, readiness, response, and recovery – are used across all sectors and all tiers of government to manage the risks to national security.¹⁷

This strategy's focus is to provide strategic direction and planning for the **readiness** and **response** elements in order to manage the risk from marine oil spills. Table 1 summarises the main features of each element to show how they provide for an integrated approach to marine oil spills.

¹⁶ See Maritime NZ (2015) *Well Control Contingency Plan Guidance Note* (version 2), www.maritimenz.govt.nz/commercial/environment/operators/documents/Well-Control-Contingency-Plan-Guidance.pdf

¹⁷ DPMC (2011) *New Zealand's National Security System*. Wellington: Department of the Prime Minister and Cabinet. www.nzic.govt.nz/assets/Publications/DPMC-NZ-National-Security-System-2011.pdf

Table 1: Features of the four elements of an integrated approach to marine oil spills

ELEMENT	DESCRIPTION	KEY FEATURES
<p>REDUCTION</p> <p><i>Supporting activities seeking to minimise risks from oil spills</i></p>	<p>Identification and analysis of the risks from marine oil spills to the maritime environment, including taking steps to eliminate these risks if practicable, and, if not practicable, reducing the magnitude of their impact and the likelihood of them occurring.</p>	<p>Various international conventions and domestic laws, regulations, and rules</p> <p>Education and advice</p> <p>Vessel safety and spill prevention standards</p> <p>Tracked vessel movements</p> <p>Industry agreements for immediate rescue and salvage resources</p> <p>Industry operating within a safety culture</p> <p>Health, safety, and environmental regime for offshore oil and gas</p> <p>Site marine oil spill contingency plans*</p>
<p>READINESS</p> <p><i>A key driver for and focus of the New Zealand Marine Oil Spill Readiness and Response Strategy</i></p>	<p>Development of operational systems and capabilities before a marine oil spill happens, including contingency plans for industry, regions, and the country as a whole, oil spill response equipment and other resources, and responders undertaking specific exercise and training programmes.</p>	<p>Risk assessment and intelligence-led environmental sensitivity undertaken</p> <p>Contingency plans that are comprehensive, integrated, well understood, monitored, exercised, and compliant with relevant legislation and rules</p> <p>Systems developed for research into the application, effectiveness, and environmental risks and benefits of new spill technologies, innovations, and/or products</p> <p>Well trained and exercised response personnel</p> <p>Fit-for-purpose National and Regional Equipment stockpiles</p> <p>Arrangements and agreements to access additional resources</p>
<p>RESPONSE</p> <p><i>A key driver for and focus of the New Zealand Marine Oil Spill Readiness and Response Strategy</i></p>	<p>Actions taken immediately before, during, or directly after a marine oil spill incident to control, contain, and manage the consequences of the hydrocarbon release in order to protect life, the environment and economic and property interests, and to help communities recover.</p>	<p>Sufficient equipment available for a fit-for-purpose response</p> <p>Sufficient personnel available to respond</p> <p>A best practice health and safety work environment</p> <p>Appropriate systems and procedures in place to facilitate a response</p>
<p>RECOVERY**</p> <p><i>Supporting activities seeking to minimise environmental impacts from oil spills</i></p>	<p>Coordinated efforts and processes to bring about the immediate, medium-term, and long-term regeneration of the marine environment and wider community (as required) following a marine oil spill. Maritime NZ's focus is on assisting recovery authorities to undertake base-lining activities at the start of a response and monitoring the environmental effects of the response activities.</p>	<p>Procedures for the transition from response to recovery</p> <p>Processes in place to promote environmental, economic, social, and cultural recovery after a spill, including:</p> <ul style="list-style-type: none"> determining whether impacts have occurred and assessing them establishing and implementing a restoration plan (if needed) monitoring results over time building resilience for the future.

* Site marine oil spill contingency plans contain measures for the prevention of oil spills.

** Recovery starts and is concurrent with response actions. The effectiveness of recovery is influenced by the effectiveness of the incident response.

Marine oil spills reduction and recovery

Multiple government agencies are involved in reduction and recovery functions for marine oil spills. These functions are at the margins of the main purpose of this strategy and are explained briefly below. Maritime NZ's wider activities extend to aspects of marine oil spill reduction and recovery, for example, policy work and broader incident response capability development activity.

Reduction

Protection of New Zealand's marine environment (ie, reduction of risk) is provided by international conventions (for example, MARPOL¹⁸), legislation, rules, regulations, and standards. These documents form part of the global framework for combating marine pollution and reducing the risk of oil spills. This framework sets out the technical requirements for ship construction and pollution prevention equipment and operation, and for restrictions on the deliberate disposal of waste into the sea.

Legislation and government agency activity form a part of the reduction framework. Within 12 nautical miles of the shore, discharges from ships and offshore installations are regulated by the Resource Management Act 1991 and regulations made under that Act. Regional councils carry out compliance activity.

For offshore oil and gas installations, WorkSafe New Zealand is responsible for rules under the Health

and Safety in Employment Act 1992 and its associated regulations, that focus on ensuring that 'oil stays in the pipe' and the risk of a loss of containment is as low as reasonably practicable. WorkSafe New Zealand maintains regulatory oversight throughout the life cycle of oil and gas drilling and production.

Maritime NZ's role in reduction

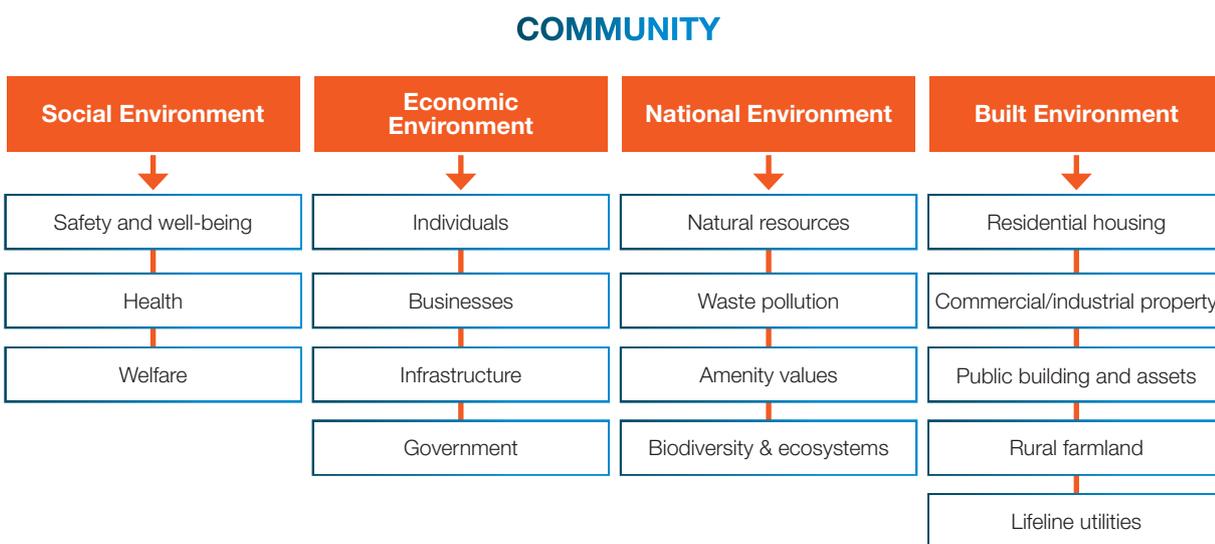
Maritime NZ:

- leads New Zealand's contribution to the development of conventions at the International Maritime Organization and other international organisations
- contributes to the development of national laws, regulations, rules, and standards
- supports, encourages, and requires compliance with this framework as part of its regulatory oversight of vessels, offshore installations, ports and dumping permits.

Recovery

Recovery starts as soon as the response to an incident begins and typically continues well after the active response phase concludes. The Ministry of Transport is often the lead agency for recovery activities in a maritime oil spill or maritime incident response. Following the civil defence model, recovery encompasses the community and four key environment threads of activity with the specific requirement for each thread dependent on the particular circumstances of the incident (see Figure 4).

Figure 4: Recovery activity threads for civil defence emergency management



18 The International Convention for the Prevention of Pollution from Ships.

Maritime NZ's role in recovery

Maritime NZ is not the lead agency for recovery activity. However, as the lead agency for response activities in an oil spill, Maritime NZ will be fully engaged with the recovery authorities (whether Māori, local, regional, or national) from the beginning of the response.

This applies most directly in the 'natural environment' thread where Maritime NZ will need to:

- support initial environmental base-lining activity, which supports the recovery authorities in assessing the degree to which the original environment has been restored
- carry out monitoring of the environmental effects of response activities.

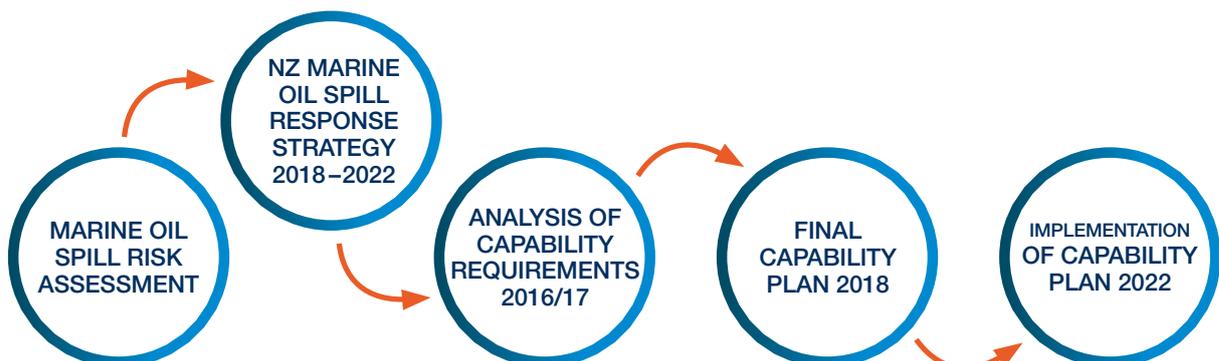
Implementing this strategy

The implementation of this strategy revolves around the Capability Plan (see Figure 5).¹⁹ This plan describes the tasks and actions and their associated costs that Maritime NZ and others will be taking to implement the strategy to achieve its goals and objectives.

The Capability Plan was first developed alongside the 2015 version of the strategy and covered a six year period from 2016/17 to 2021/22. The plan was informed by the Marine Oil Spill Risk Assessment 2015 and considered capability requirements (people, equipment, training, exercise, and organisation), alongside analysis of environmental impacts from spills and future trends in the oil and maritime industries.

Maritime NZ will review and update the Capability Plan, with input from key stakeholders, in particular OPAC and regional councils to align it to this version of the strategy and to ensure that it remains relevant and appropriate.

Figure 5: Key steps for implementing the New Zealand Marine Oil Spill Readiness and Response Strategy[#]



Capability planning is organised by financial years (e.g. 2018/19 – 2021/22, which covers the period from 1 July 2018 to 30 June 2022).

¹⁹ Capability Plan for Marine Oil Spill Readiness and Response 2016/17 – 2018/19 Version 1.0 dated 01 August 2015.

Principles, goals, and objectives of this strategy

Principles

This strategy is underpinned by four principles (as shown in Figure 1, page 2).

1. INTEGRATE WITH THE OVERALL MARITIME INCIDENT FRAMEWORK

This strategy recognises that managing significant oil spill incidents can also involve matters such as salvage, pollution other than oil pollution, investigation, communications, and community and iwi engagement. It contributes to a comprehensive and integrated response arrangement to minimise the impacts of oil spills and other marine environment pollution from vessels, offshore petroleum facilities, and oil transfer sites on the New Zealand community, environment, cultural and heritage resources, economy, and infrastructure.

2. TAKE A NATIONAL AND INTERNATIONAL COOPERATIVE AND SHARED APPROACH TO MARINE OIL SPILL READINESS AND RESPONSE

This strategy supports a national and international cooperative and shared approach to marine oil spill readiness and response. This involves having an integrated oil spill management and response system to coordinate the involvement of all relevant players with a role in minimising the impacts of marine oil spills on the New Zealand community, environment, culture, economy, and infrastructure. The system will meet all statutory requirements and be efficient, effective, resilient, and fit-for-purpose. Response capability will be maintained and developed through successful relationships and partnerships between Maritime NZ, regional councils, government agencies, industry, the community, iwi, and non-governmental and overseas agencies.

3. USE A RISK-BASED APPROACH FOR OIL SPILL READINESS AND RESPONSE

The approach and implementation of this strategy is underpinned by an active assessment of the risks of a marine oil spill. A transparent and systematic process is used when identifying and assessing risks and in communicating these risks to all relevant parties. The risk-based approach will be used in decision-making for preparing and planning for marine oil spill response.

4. USE INFORMATION, RESEARCH, AND EXPERTISE AS KEY ENABLERS

This strategy encourages the best use of information in decision-making for readiness and response, the undertaking of relevant research activity, and the efficient gathering and management of information. It supports the development and maintenance of the appropriate variety of skills, expertise, and leadership capabilities needed for an effective, efficient, and resilient oil spill response structure. This strategy promotes the sharing and understanding of best practice approaches to oil spill risk management and operational response.

5. FUND OIL SPILL READINESS AND RESPONSE ACTIVITIES FROM THE APPROPRIATE SOURCES

The funding of oil spill readiness and response activities is based on three principles.

- Industry pays for and provides Tier 1 readiness capability and response activities.
- The Oil Pollution Fund pays for regional (Tier 2) and national (Tier 3) readiness activities, as well as responses to un-sourced spills.
- The polluter pays for Tier 2 and Tier 3 responses²⁰.

²⁰ International conventions and national legislation and regulation may limit the quantum of the liability of the polluting party or parties.

Goals and objectives

This strategy seeks to achieve four goals (shown in Table 2 alongside goal-specific objectives). The text following the table (pages 19–32) explains each goal in more detail. The goals and objectives are largely structured in accordance with the internationally recognised three-tiered readiness and response approach (discussed in Appendix D).

These goals and objectives shape the future capability requirements for New Zealand and Maritime NZ and, in turn, the resources needed to give effect to this capability.

Table 2: Goals and objectives

GOAL	OBJECTIVE
Goal 1 NEW ZEALAND IS ABLE TO RESPOND EFFECTIVELY TO A SIGNIFICANT (TIER 3) MARINE OIL SPILL	1.1: Maintain and further develop the National Marine Oil Spill Contingency Plan and its supporting documents to facilitate an effective and efficient response to a Tier 3 spill.
	1.2: Ensure appropriately trained and exercised response personnel are available to undertake a Tier 3 response.
	1.3: Maintain and enhance the national equipment stockpile to provide an effective and efficient Tier 3 response.
	1.4: Develop, maintain, and enhance arrangements and agreements with national and international organisations to support and enhance New Zealand's Tier 3 response.
Goal 2 NEW ZEALAND READINESS AND RESPONSE CAPABILITY MEETS NATIONAL AND INTERNATIONAL BEST PRACTICE	2.1: Align New Zealand's oil spill readiness and response activities with New Zealand health and safety best practice.
	2.2: Ensure Maritime NZ has sufficient capability and resources to evaluate and implement appropriate best practice oil spill readiness and response activities.
	2.3: Ensure New Zealand's readiness and response capability is evidence-based and intelligence-led.
	2.4: Undertake study and research and gather data to improve the environmental and technical knowledge needed to maintain and enhance New Zealand's readiness and response system.
Goal 3 INDUSTRY (TIER 1) AND REGIONS (TIER 2) HAVE A READINESS AND RESPONSE CAPABILITY THAT MATCHES THE SCALE OF THEIR RESPONSIBILITY AND RISK	3.1: Have an industry (Tier 1) readiness and response capability that is at an appropriate level.
	3.2: Have a regional (Tier 2) readiness and response capability that is at an appropriate level.
	3.3: Deliver and constantly enhance the regional training and exercise programmes.
Goal 4 MARITIME NZ BUILDS AND MAINTAINS RELATIONSHIPS THAT IMPROVE READINESS AND RESPONSE TO MARINE OIL SPILLS AND MEET INTERNATIONAL OBLIGATIONS	4.1: Engage with local government, Māori and the community in a proactive and planned way.
	4.2: Maintain and enhance cross-government, industry, and other stakeholder relationships to ensure effective and efficient coordination and collaboration in Tier 3 readiness and response.
	4.3: Contribute to the building of response capability of Pacific Island partners.
	4.4: Meet international obligations for oil spill readiness and response.

Goal 1

NEW ZEALAND IS ABLE TO RESPOND EFFECTIVELY TO A SIGNIFICANT (TIER 3) MARINE OIL SPILL

Significant Tier 3 events are rare but have the potential to cause widespread damage and affect many people. Therefore, this is the prime area of focus and effort for the timeframe of this strategy. The other goals are essential in supporting Goal 1.

An effective response requires appropriate plans and procedures to be in place, well-trained and well-exercised response personnel, access to appropriate oil spill response equipment and arrangements, and agreement with support organisations to provide access to additional personnel and resources not immediately available to Maritime NZ.

Maritime NZ leads the readiness for and response to a Tier 3 incident in cooperation with Māori and iwi authorities, the industry responder (spiller), regional council, wider industry, the community, and other domestic and overseas agencies as required and appropriate. Tier 3 events usually call for substantial resources to be mobilised, nationally and internationally, and for these resources to be integrated into a well-organised and coordinated response.

Significant progress was made under the previous strategy to update the National Marine Oil Spill Contingency Plan and to develop and enhance the capability of the National Response Team, national equipment stockpile, aerial capability, and WebEOC. This strategy seeks to build on that progress.

Objective 1.1: Maintain and further develop the National Marine Oil Spill Contingency Plan and its supporting documents to facilitate an efficient and effective response to a Tier 3 spill

A Tier 3 response is guided by the National Marine Oil Spill Contingency Plan,²¹ which is developed and maintained by Maritime NZ. Planning for a Tier 3 incident endeavours to ensure the information required to respond at this level is available either directly in the Tier 3 plan or in an integrated fashion across the Tier 1 to Tier 3 plans and the national plan's supporting documents.

To ensure the incident response team is ready and able to respond effectively and efficiently to a Tier 3 incident, Maritime NZ makes sure that plans and supporting documents are integrated and provides the incident response team with all the information (resources and procedures) it requires.

To achieve objective 1.1, two activities are planned.

1. REVIEW THE CONTENT AND STRUCTURE OF THE NATIONAL PLAN AND UPDATE AS APPROPRIATE

The national plan was last updated in March 2017. This update followed a significant review and reflected improvements made in recent years to Maritime NZ's capability to respond to significant marine oil spills and non-oil incidents. The update also reflects the more integrated and streamlined approach Maritime NZ is progressively introducing into its broad suite of response documents (strategies, plans, procedures, and guidelines).

The national plan has been written in such a manner that its content should remain up to date and relevant until the legislatively required review in 2020.

2. REVIEW, UPDATE, AND PRODUCE NEW NATIONAL PLAN SUPPORTING DOCUMENTS WHERE APPROPRIATE.

The 2017 updated national plan saw the creation of 'supporting documents'. These are the variety of documents that support the implementation of the national plan. The supporting documents were previously annexes and chapters in the previous national plan as well as additional procedures, policies, and guidelines. These documents will be reviewed and updated, so they are relevant for use in preparing for and responding to a national-scale oil spill.

The national plan supporting documents are intended to be a dynamic resource that meets the ever-expanding Tier 3 response capability. New supporting documents will be produced as required.

Objective 1.2: Ensure appropriately trained and exercised response personnel are available to undertake a Tier 3 response

Tier 3 oil spill responses typically involve significant numbers of trained response personnel. Maritime NZ provides training for oil spill responders at two levels: regional and national. Regional training provides responders trained to respond to Tier 2 spills as well as providing a pool of responders that can be called up during a Tier 3 response. The National Response Team is trained at the national level and receives additional and specific Tier 3 response training. A national exercise programme regularly tests and enhances the National Response Team's capability.

²¹ www.maritimenz.govt.nz/Environmental/Responding-to-spills-and-pollution/The-national-plan.asp

Activities to achieve objective 1.2

To achieve objective 1.2, three activities are planned.

1. MAINTAIN AND ENHANCE THE NATIONAL RESPONSE TEAM

Maritime NZ's personnel resource for a large-scale oil spill response is based around the National Response Team. This team forms the core of the incident response team during an incident and is supported by regionally trained responders and arrangements with other personnel support providers. The team is made up of staff from Maritime NZ, regional councils, other central government departments and agencies, and industry.

Maritime NZ maintains the structures, competencies, and functional requirements required for the National Response Team.

The National Oiled Wildlife Response Team, which was once seen as a standalone entity, has now been integrated into the National Response Team.

Maritime NZ also ensures a sufficient number of National On-Scene Commanders (NOSCs) continue to have the required training and resources to enable them to lead a Tier 3 response effectively.

National Response Team personnel training and exercise programmes produce sufficiently qualified, trained, and experienced personnel who are ready to undertake a Tier 3 response.

2. DEVELOP AND IMPLEMENT A NATIONAL RESPONSE TEAM TRAINING PROGRAMME

Training for the National Response Team is transitioning from informal training to formal training with the development of the National Response Team Training Programme. Once development is completed, all existing and new team members will receive training in accordance with this programme. Maritime NZ will continuously improve this training programme.

3. IMPLEMENT A NATIONAL RESPONSE TEAM EXERCISE PROGRAMME

The National Response Team is regularly exercised in accordance with the National Response Team Exercise Programme to ensure members maintain and further develop the skills and experience gained through the training programme.

Objective 1.3: Maintain and enhance the national equipment stockpile to provide an effective and efficient Tier 3 response

As part of giving effect to the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC)²² and the Maritime Transport Act 1994, Maritime NZ owns a variety of oil spill response equipment (valued at over \$14 million in 2014).

National response equipment is stored at various locations around the country. The amount and type of equipment available in a location is based on the location's assessed risk and likely spill scenario and associated response actions.

National equipment consists of specialised equipment, typically used in a Tier 3 response. Significant equipment includes harbour and inshore recovery vessels, booms, skimmers, dispersants, and dispersant application systems.

For a Tier 3 response, equipment can be mobilised quickly from anywhere in the country and transported by road and air to the scene of an oil spill.

To achieve objective 1.3, two activities are planned.

1. IMPLEMENT AN ASSET MANAGEMENT PROGRAMME

A comprehensive, long-term asset management plan is vital to ensure that all equipment-based capabilities are well managed and that, as far as possible, "spikes" in capital expenditure do not occur. The Marine Pollution Response Service currently operates such a programme, using a rolling ten-year plan. This plan is informed by the Capability Plan and is reviewed and updated annually.

2. REVIEW THE EQUIPMENT DISTRIBUTION MODEL AND RE-DEPLOY AS APPROPRIATE

Maritime NZ reviews the location and extent of its equipment holdings at least every three years and has an acquisition programme to ensure New Zealand is equipped to respond effectively to oil spills, in particular, a Tier 3 response. Equipment is paid for by the industry through the Oil Pollution Fund and is Maritime NZ's property. Planning for new or replacement equipment is undertaken in consultation with OPAC.

22 See further information on the OPRC under objective 4.4, page 33, and in Appendix B.



Objective 1.4: Develop, maintain, and enhance arrangements and agreements with national and international organisations to support and enhance New Zealand’s Tier 3 response capability

In a significant Tier 3 oil spill response, it is highly likely expertise, resources, and equipment from external suppliers within and outside New Zealand will be used in addition to those of Maritime NZ, the regional council, and the operator.

Maritime NZ requires arrangements to be in place so it can access specialist oil spill response equipment and expertise from overseas, as well as contracts and arrangements with domestic organisations to provide access to the specialist and non-specialist oil spill response resources required to facilitate and support a Tier 3 response.

To achieve objective 1.4, two activities are planned.

1. MAINTAIN AND DEVELOP ARRANGEMENTS WITH INTERNATIONAL SPECIALIST OIL SPILL RESPONSE ORGANISATIONS TO LEVERAGE NATIONAL RESPONSE TEAM DEVELOPMENT OPPORTUNITIES AND FOR ACCESS TO ADDITIONAL EQUIPMENT, PERSONNEL, AND OTHER RESOURCES

New Zealand’s primary relationships are with Australia, through a memorandum of understanding with the Australian Maritime Safety Authority, and Oil Spill Response Limited (through a formal Associate Agreement). These relationships provide for cooperation with exercises, training, response equipment, and expertise. Significant oil spill response resources can

also be provided by them and by other international organisations to broaden New Zealand’s response capability.

2. MAINTAIN AND DEVELOP ARRANGEMENTS WITH DOMESTIC ORGANISATIONS TO PROVIDE SERVICES TO FACILITATE AND SUPPORT TIER 3 OIL SPILL RESPONSE ACTIVITIES

Oil spill response operations require significant resources in addition to the oil spill response equipment that Maritime NZ owns or accesses through international agreements. Identifying appropriate vessels and aircraft and having existing contracts and arrangements in place with their operators enables more effective response activities. Maritime NZ also actively develops, maintains, and enhances all necessary contractual and functional relationship arrangements with suppliers for services such as information and communications technology, transport, waste, and labour, which are essential to support response activities.

3. MAINTAIN AND ENHANCE ARRANGEMENTS TO PROVIDE A NATIONAL OILED WILDLIFE RESPONSE CAPABILITY

Undertaking an oiled wildlife response is one of the core aspects in an oil spill response in New Zealand and a critical measure of success. An effective oiled wildlife response requires access to well-trained specialist oiled wildlife responders and response equipment. Maritime NZ maintains a contract for provision of these services. A wildlife response capability plan has been developed that outlines the oiled wildlife readiness activities to be undertaken. This plan will be implemented in accordance with the wildlife contract.

Goal 2

NEW ZEALAND'S READINESS AND RESPONSE CAPABILITY MEETS NATIONAL AND INTERNATIONAL BEST PRACTICE

Maritime NZ seeks to identify and implement best practice wherever possible in New Zealand's oil spill readiness and response activities. This includes ensuring readiness and response activities occur in a safe manner, utilise up-to-date and appropriate techniques, and are informed by evidence-based and intelligence-led decisions.

Objective 2.1: Align New Zealand's oil spill readiness and response activities with New Zealand health and safety best practice

The health and safety of responders and the public during oil spill readiness and response activities is the highest priority, so it is essential that appropriate systems, procedures, and practices are in place.

To achieve objective 2.1, two activities are planned.

1. DEVELOP AND MAINTAIN HEALTH AND SAFETY SYSTEMS AND PROCEDURES FOR ALL ASPECTS OF OIL SPILL READINESS AND RESPONSE ACTIVITIES

Maritime NZ's health and safety system and procedures have been reviewed and updated to align with the Health and Safety at Work Act 2015. Work is underway, and will continue, to develop and maintain all appropriate processes and procedures.

2. EMBED EFFECTIVE HEALTH AND SAFETY PRACTICES IN ALL OIL SPILL READINESS AND RESPONSE ACTIVITIES

Constant vigilance and attention is required to firmly embed effective health and safety practices in readiness and response activities. Maritime NZ is embedding a health and safety culture by emphasising the importance of health and safety during all training, exercising, and response activities.

Objective 2.2: Ensure Maritime NZ has sufficient capability and resources to evaluate and implement appropriate best practice oil spill readiness and response activities

Maritime NZ regularly assesses its personnel capability and resourcing needs, so it can undertake readiness activities and in-house analysis of environmental, technical, and equipment information to ensure it is implementing best practice oil spill response and readiness activities.

To achieve objective 2.2, two activities are planned.

1. ASSESS MARITIME NZ PERSONNEL CAPABILITY AND RESOURCING NEEDS REGULARLY

Oil spill readiness and response requirements are constantly changing and evolving. Maritime NZ will continue to regularly assess the demands placed on its staff to undertake readiness and response activities, as well as the resources required for efficient and effective implementation. Personnel and resource requirements are included in funding reviews.

2. MAINTAIN AND ENHANCE MARITIME NZ'S INFORMATION MANAGEMENT SYSTEM (WEBEOC)

WebEOC has undergone significant development and is now seen as an essential part of New Zealand's oil spill readiness and response capability. Maritime NZ will continue to utilise and develop WebEOC to provide effective support, information management, and information sharing during oil spill responses.

Objective 2.3: Ensure New Zealand's readiness and response capability is evidence-based and intelligence led

Maritime NZ bases its activities on evidence and intelligence that is collected, collated, analysed, and then used to assess risks and inform decision-making.

To provide the most efficient and effective response, responders must have access to all the appropriate intelligence that is available on the incident and sensitive resources. Staff at all levels must be appropriately trained to ensure they have the knowledge and skills to assess the situation and the potential outcomes of the response actions.

To achieve objective 2.3, three activities are planned.

1. USE NET ENVIRONMENTAL BENEFIT ANALYSIS IN OIL SPILL RESPONSE DECISION-MAKING

A net environmental benefit analysis (NEBA) is the process used to make the best choices to minimise the impacts of oil spills on people and the environment. The basic premise is that the environmental impacts of the response option being used should be as low as possible and, in any event, less than the effects of the original pollution if that were left untreated; that is, intervention should have a net positive environmental benefit.

NEBA is challenging and complex and is critically reliant on intelligence regarding sensitive resources in the path of the spill and technically knowledgeable staff to analyse the outcome of various response techniques on the sensitive resources.

2. INCORPORATE THE INTELLIGENCE CYCLE IN READINESS AND RESPONSE ACTIVITIES

The purpose of intelligence is to get the best response outcome by using the most relevant information available. The process of creating intelligence is referred to as the intelligence cycle: direct, collect, evaluate, collate, analyse, respond, disseminate, and review. Maritime NZ will implement the intelligence cycle into all aspects of readiness and response activities.

3. FOCUS ON TECHNOLOGY SOLUTIONS TO IMPROVE SITUATIONAL AWARENESS

Maritime NZ will constantly improve its information management systems for both readiness and response activities.

Objective 2.4: Undertake study and research and gather data to improve the environmental and technical knowledge needed to maintain and enhance New Zealand's readiness and response system

Maritime NZ undertakes study and research and gathers relevant information to ensure New Zealand's response capability accounts for environmental issues, different site and regional settings, technological advances, and emerging issues and trends.

To achieve objective 2.4, three activities are planned.

1. MAINTAIN AND ENHANCE ACCESS TO ENVIRONMENTAL INFORMATION FOR USE DURING OIL SPILL RESPONSE

Industry and government agencies have roles to play in identifying, collating, and making available existing information. The collection and reporting of such information will, over time, provide a comprehensive baseline from which to underpin decisions during an oil spill.

Data and information for the New Zealand coastline and offshore varies in quality and quantity. In some areas (for example, offshore Taranaki), data and information is significant so the area is well understood, but other areas are not so well understood.

Maritime NZ will review environmental information to identify gaps and develop a strategy to fill these gaps.

2. MAINTAIN AND ENHANCE MARITIME NZ'S STAFF'S ENVIRONMENTAL AND TECHNICAL KNOWLEDGE FOR OIL SPILL RESPONSE

Good environmental, technical, and equipment knowledge is necessary for assessment and decision making during oil spill readiness and response activities. The potential threats posed by an oil spill, particularly in the early stages, need to be rapidly assessed so resources are deployed most effectively to minimise environmental harm.

Maritime NZ will continue to better understand offshore oil and gas industry operations and emergency response techniques through on-going engagement, workshops, and training opportunities (nationally and internationally).

Goal 3

INDUSTRY (TIER 1) AND REGIONS (TIER 2) HAVE A READINESS AND RESPONSE CAPABILITY THAT MATCHES THE SCALE OF THEIR RESPONSIBILITY AND RISK

Industry operators of vessels,²³ oil transfer sites, and offshore installations must have an effective Tier 1 oil spill response capability that is reflected in an approved marine oil spill contingency plan.

Regional councils are responsible for responding to oil spills within their region that are beyond the capability of the spiller. Regional response requirements and expectations are evolving given the enhanced expectations for industry to deal with spills that were typically responded to by the regional councils, and the move towards providing a national response capability for some oil spill response options that have previously been part of the regional response tool kit. This enables Maritime NZ and regions to refocus the Tier 2 response capability requirements and the resources required to provide this.

Objective 3.1: Have an industry (Tier 1) readiness and response capability that is at an appropriate level

Industry (Tier 1) response readiness (funded and resourced directly by industry) and the role industry plays in managing or contributing to the response to a marine oil spill are important aspects of New Zealand's oil spill response system.

Each industry site or vessel operator is responsible for providing response equipment and training and exercising its response personnel. Maritime NZ and regional councils work with industry, through risk assessment and contingency planning, to ensure that, in the event of an oil spill, appropriate capability exists for each site to conduct an industry-level response that is commensurate with the risk from the operation.

A Tier 1 response is about the accountability and responsibility for the initial spill response, so industry capability and sensitive resource information requirements at the planning stage may be significant.

Regional councils have the delegated responsibility to approve OTS marine oil spill contingency plans. This responsibility includes ensuring each operator has an appropriate Tier 1 response capability, auditing operators, and inspecting sites to make sure they are operating in accordance with their approved plan.

To achieve objective 3.1, two activities are planned.

1. CONTINUE TO WORK WITH REGIONAL COUNCILS AND OPERATORS TO BRING TIER 1 RESPONSE CAPABILITY UP TO THE REQUIRED STANDARD

There remains significant work to complete in order to ensure that operators' Tier 1 response capability is appropriate to the scale of, and risks posed by, their operations. Addressing this issue is a priority for Maritime NZ.

Maritime NZ will support the development of operators' Tier 1 response capability by actively engaging with operators and regional councils to provide guidance, advice, and expertise on Tier 1 response requirements and capability. The focus continues to be working with the major oil transfer sites as these pose the greatest potential risk.

2. SUPPORT OPERATORS TO DEVELOP AN EFFECTIVE TIER 1 RESPONSE CAPABILITY SUPPORTED BY APPROPRIATE TRAINING AND EXERCISING

Industry retains responsibility for providing appropriate training to its response personnel and ensuring their response capability is exercised. Maritime NZ may support industry by providing training and assistance with exercises where appropriate. Maritime NZ and regional councils will ensure operators are meeting their statutory requirements by undertaking regular audits and inspections.

Objective 3.2: Have a regional (Tier 2) readiness and response capability that is at an appropriate level

In line with the previous strategy, regional response requirements are based on having a capability to respond to the typical Tier 2 spills that have occurred over the last 15 years. These spills largely result from small vessel casualties, such as fishing vessel groundings and sinkings, or from bunkering mishaps and bilge discharges within ports.

It is acknowledged that there are Tier 2 spill scenarios with response requirements that exceed the typical response activities discussed above. For these events, New Zealand's response system allows these spills to be effectively responded to with external assistance to a regional council using aspects of other regions capability and the national response capability.

²³ Oil tankers of 150 tons gross tonnage or more and other ships of 400 tons gross tonnage or more must have a shipboard marine oil spill contingency plan.

Maritime NZ ensures regional response equipment is located appropriately for the regional risk of an oil spill. It also works closely with regional councils to coordinate the exercising and training of local responders for Tier 2 responses (for which regional councils are responsible) and in Tier 3 response operations. An important aim is to ensure that there is a sufficient number of trained regional personnel to support and sustain a significant Tier 2 or Tier 3 response.

To achieve objective 3.2, three activities are planned.

1. REVIEW THE CONTENT AND STRUCTURE OF REGIONAL MARINE OIL SPILL CONTINGENCY PLANS, THEN UPDATE THE PLANS IN LINE WITH THE REVIEW'S RECOMMENDATIONS

The structure and content of the Regional Marine Oil Spill Contingency Plans will be reviewed, taking into consideration the updated Tier 2 response capability. Accordingly, regional councils will update plans as part of their three-year review cycle.

2. SUPPORT REGIONAL COUNCILS TO MAINTAIN THEIR REQUIRED TRAINED PERSONNEL NUMBERS

The number of trained responders each region is required to maintain was reviewed and resulted in the need for more appropriate regionally trained personnel. Maritime NZ will work closely with regional councils to ensure they maintain their trained personnel numbers at the required level.

3. REVIEW REGIONAL EQUIPMENT STOCKPILES AND THEIR DISTRIBUTION, THEN UPDATE THEM IN LINE WITH REVIEW RECOMMENDATIONS

Changing Tier 2 response expectations and the enhancements being made to operators' Tier 1 response capability requires a review and update of the content and distribution of regional equipment stockpiles.

Objective 3.3: Deliver and constantly enhance regional training and exercise programmes

Maritime NZ is responsible for providing and coordinating training for those who will be involved in Tier 2 (regional) and Tier 3 (national) responses. Maritime NZ regularly assesses and reviews the effectiveness and efficiency of its training of spill responders and actively explores new and different delivery techniques and tools.

To ensure response capability is maintained, Maritime NZ assesses all Tier 2 planning, management, and operational response procedures by conducting regular exercises.

The main aims of regional exercise programmes are to test regional contingency plans, maintain and develop individual and collective skills, develop overall response capability, improve response efficiency, and ensure cost-effectiveness. Regional exercise programmes are relevant to the three primary response roles of regions: Tier 2 responses, the transition from Tier 2 to Tier 3, and involvement in Tier 3 responses.

To achieve objective 3.3, two activities are planned.

1. PROVIDE OR COORDINATE A REGIONAL TRAINING PROGRAMME THAT IS UP TO DATE AND FIT-FOR-PURPOSE

Maritime NZ is responsible for providing and coordinating training for those who will be involved in Tier 2 (regional) responses. Maritime NZ regularly assesses and reviews the effectiveness and efficiency of its training of spill responders and actively explores new and different delivery techniques and tools.

2. DEVELOP AN EFFICIENT AND EFFECTIVE REGIONAL EXERCISE PROGRAMME

To ensure response capability is maintained, Maritime NZ assesses all Tier 2 planning, management, and operational response procedures by conducting regular exercises.

The main aims of regional exercise programmes are to test regional contingency plans, maintain and develop individual and collective skills, develop overall response capability, improve efficiency, and ensure cost-effectiveness. Regional exercise programmes are relevant to the three primary response roles of regions: Tier 2 responses, the transition from Tier 2 to Tier 3, and involvement in Tier 3 responses.

Goal 4

MARITIME NZ BUILDS AND MAINTAINS RELATIONSHIPS THAT IMPROVE READINESS AND RESPONSE TO MARINE OIL SPILLS AND MEET INTERNATIONAL OBLIGATIONS

Objective 4.1: Engage with local government, Māori and the community in a proactive and planned way

Effective engagement (including education) with local government, the wider community and Māori is essential for creating public confidence in New Zealand's ability to prepare for and respond to marine oil spills.

A successful oil spill response is measured not only by how effectively oil was removed from the environment, but also by the public's perception of how the incident was managed. An important contributor to creating a positive public perception of an oil spill response is to enable public concerns and interests to be included in response planning, meeting local communities' desire to be involved in response activities where possible, and having a smooth transition from the response phase to recovery.

To achieve objective 4.1, four activities are planned.

1. INCORPORATE MĀORI VALUES AND ISSUES IN OIL SPILL READINESS AND RESPONSE ACTIVITIES

Maritime NZ involves Māori in oil spill response activities by having Māori representation and liaison in the incident response structure. This aims to ensure the concerns of Māori are taken into consideration when decisions are made on the response activities to be undertaken.

2. DEVELOP STRATEGIES TO ENGAGE AND EDUCATE THE LOCAL COMMUNITY AND ASSIST THEM WITH COPING WITH THE IMPACTS OF AN OIL SPILL IN A POSITIVE MANNER

A vital component of assisting a local community to deal with the impacts of an oil spill is to provide it with accurate and timely information on the impacts, as well as realistic expectations about what response activities can achieve.

3. DEVELOP STRATEGIES TO PROACTIVELY INVOLVE MĀORI AND THE COMMUNITY IN OIL SPILL RESPONSE ACTIVITIES

During a significant marine pollution incident, Māori and the wider community often have a sense of ownership in how the incident is dealt with and a desire to be involved in response activities. Involvement of Māori and

the wider community in response activities will not only meet their needs, but also provide a valuable resource for response activities, particularly for shoreline clean-up and wildlife response.

It is important to have a set of principles, systems, and practices that can guide the engagement and potential assistance to Maritime NZ (and other responders) from the community, Māori, and volunteers. This guidance is integrated into contingency plans and used in training and exercises. It aids consultation and liaison with affected communities and iwi, helps identify interest groups and representatives, and highlights areas of interest and concern.

4. MAINTAIN AND ENHANCE STRATEGIES AND PROCEDURES FOR ENGAGING WITH MEDIA DURING OIL SPILL RESPONSES IN A PROACTIVE MANNER

This engagement supports and helps the community and iwi, when appropriate, and communicates key messages about all aspects of New Zealand's readiness and response. It educates the community and iwi about the nature of the threat, the potential impacts of marine oil spills, and the operational constraints on response actions. Engagement also develops an understanding among the community and iwi of the tiered nature of response and the roles and responsibilities of different agents at each tier and promotes the reporting of all marine pollution incidents.

Objective 4.2: Maintain and enhance cross-government, industry, and other stakeholder relationships to ensure effective and efficient coordination and collaboration in Tier 3 readiness and response

Maritime NZ plays a part in the stewardship and security of New Zealand's maritime interests, in particular the safety and protection of the environment. A key component of this stewardship includes Maritime NZ's activities to prevent and respond to marine oil spills.

Maritime NZ is the lead government agency for marine oil spill response. In preparing for and responding to significant (Tier 3) marine oil spills, Maritime NZ relies on a coordinated and cooperative effort across the government agencies responsible for ensuring New Zealand's maritime interests are secure.²⁴

²⁴ Agencies include the Department of Conservation, the Ministry for Business, Innovation, and Employment, the Ministry of Foreign Affairs and Trade, the Ministry for Primary Industries, the New Zealand Customs Service, the New Zealand Defence Force, New Zealand Police, the National Maritime Coordination Centre, and GEOINT New Zealand.

Maritime NZ is a member of the Maritime Security Oversight Committee, which promotes the stewardship and security of maritime interests by the responsible government agencies through a collective approach.

To achieve objective 4.2, three activities are planned.

1. DEVELOP SYSTEMS AND PROCEDURES TO ASSIST WITH THE TRANSITION FROM RESPONSE TO RECOVERY ACTIVITIES

Maritime NZ is responsible for ensuring response activities enhance the transition to the recovery phase of an oil spill incident. The development of procedures in conjunction with the Ministry of Transport to assist with this is an important aspect of Maritime NZ's readiness strategy.

2. EDUCATE STAKEHOLDERS ABOUT OIL SPILL RESPONSE ACTIVITIES

Maritime NZ seeks to optimise its effectiveness and efficiency for readiness and response to a Tier 3 spill by increasing its collaboration with other agencies in strategic planning, procurement, and operational planning and activity. This includes sharing information to establish an understanding of risks, ensuring this strategy aligns with the strategies of other agencies involved in maritime security, taking a collective approach to mitigating risks from oil spill events, and integrating oil spill response into wider exercise programmes that address overall maritime incidents and engage central government agencies.

Maritime NZ also ensures its roles and responsibilities, as described in the Maritime Transport Act 1994, are recognised and accounted for in any new or amended legislation that defines functions and accountabilities in New Zealand's maritime domain.

An important contributor to this work is OPAC, which is a statutory body comprising representatives from regional councils, port companies, shipping, the fishing and oil industries, and other government agencies. OPAC is charged with advising Maritime NZ on oil spill response issues. Maritime NZ regards OPAC as a main contact point for the wider sector.

3. DEVELOP AGREEMENTS WITH KEY GOVERNMENT STAKEHOLDERS

With some government agencies Maritime NZ has, or intends to, develop formal relationships using memoranda of understanding (see Appendix F). These memoranda improve clarity and certainty about respective roles and responsibilities and expectations for collaboration and reporting lines in a Tier 3 response.

Maritime NZ seeks to work constructively with the parties it regulates and their representative organisations. Maritime NZ also seeks to implement this strategy constructively with the maritime sector and oil

industry, which play a part in contributing to the overall regime for oil readiness and response.

Objective 4.3: Contribute to the building of response capability of Pacific Island partners

New Zealand is a party to the Noumea Convention, which has adopted the Pacific Ocean Pollution Prevention Programme (PACPOL).²⁵ This programme assists Pacific Island nations with marine pollution response, including developing the Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN).

One of the main mechanisms in PACPLAN is the provision for island member states to seek support and assistance from one of the metropolitan members (Australia, France, New Zealand, and the United States) for marine pollution readiness and response. New Zealand is the primary source of assistance for Cook Islands, Fiji, Niue, Western Samoa, Tokelau, and Tonga.

To achieve objective 4.3, two activities are planned.

1. DEVELOP AND IMPLEMENT A PROGRAMME TO SUPPORT THE DEVELOPMENT OF RESPONSE CAPABILITY AMONG NEW ZEALAND PACPLAN ISLAND NATIONS

Assistance for readiness typically takes the form of response training, the development of contingency plans, equipment recommendations, and risk assessments. Maritime NZ is looking at ways it can better deliver on PACPLAN on a long-term sustainable basis, including the necessary expertise, funding, and resources.

2. ASSIST WITH MINISTRY OF FOREIGN AFFAIRS AND TRADE, AND THE SECRETARIAT OF THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME INITIATIVES AS REQUIRED

From time to time the Ministry of Foreign Affairs and Trade and the Secretariat of the Pacific Regional Environment Programme undertake initiatives to enhance the oil spill response capability of Pacific Island nations. Maritime NZ will assist with oil spill response-related activities and initiatives when requested.

25 See Appendix B.



Objective 4.4: Meet international obligations for oil spill response and readiness

The Maritime Transport Act 1994 requires the Minister of Transport to ensure New Zealand meets all its international obligations related to maritime matters (see Appendix B).

A key obligation relates to the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC). The OPRC was developed by the International Maritime Organization and sets out the principles for establishing national oil spill readiness and response capability. It is an important driver for setting up the New Zealand readiness and response system and establishes measures for dealing with marine oil pollution incidents nationally and in cooperation with other countries. State parties to the convention undertake, individually or jointly, to carry out all appropriate measures to prepare for and respond to oil pollution incidents. This strategy will help guide the delivery of the appropriate measures for New Zealand.

Adherence to the three liability conventions is also relevant: the Convention on Civil Liability for Oil Pollution Damage, 1992 (the 1992 CLC), the Convention on Limitation of Liability for Maritime Claims (LLMC Protocol), and the International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunker Convention).

New Zealand also has interests in Antarctica, specifically the Ross Sea Region. As a signatory to the Antarctic Treaty, it has accepted obligations in regard to environmental protection in the region.

To achieve objective 4.4, two activities are planned.

1. UNDERTAKE INTERNATIONAL MARITIME ORGANIZATION ACTIVITIES AS REQUIRED

The implementation of this strategy will help Maritime NZ help New Zealand to meet its international treaty and convention obligations for oil spill readiness and response and to adhere to relevant subsidiary bodies and instruments, particularly those arising from the country's membership of the International Maritime Organization.

2. ASSIST AUSTRALIA AND PACPLAN COUNTRIES WITH OIL SPILL RESPONSE WHEN REQUESTED

When called on, Maritime NZ will assist with oil spill responses in Australia and the Pacific by providing response personnel and equipment. This is part of the reciprocal arrangement in place with the Australian Maritime Safety Authority and New Zealand's obligations under PACPLAN. To provide effective support, Maritime NZ must maintain and enhance its relationships with these countries.

Appendices

Appendix A: Glossary

Antarctic Treaty, 1959 *see Appendix B*

baseline of the territorial sea

The low water mark along the coast of New Zealand, including the coast of all islands, except where, in the case of the sea adjacent to a bay, the baseline is a straight line or series of straight lines across the bay, where the entrance to that bay exceeds 24 nautical miles (see sections 5 and 6 of the Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act 1977).

Bunkers Convention *see Appendix B – International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001*

Cabinet Committee on Domestic External Security Coordination

One role of this committee is to coordinate and direct the national response to a major crisis or to circumstances affecting national security (such as a natural disaster, biosecurity problem, health emergency, or terrorist or military threat) within New Zealand or involving New Zealand's interests overseas.²⁶

CLC *see Appendix B – International Convention on Civil Liability for Oil Pollution Damage, 1992*

clean-up *see oil spill response*

continental shelf

The sea bed and subsoil of those submarine areas that extend beyond the territorial limits of New Zealand, throughout the natural prolongation of the landed territory of New Zealand, to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baseline from which the breadth of the territorial sea is measured (as described in sections 5, 6, and 6A of the Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act 1977) where the outer edge of the continental margin does not extend to that distance.

contingency plan

A plan prepared in anticipation of an incident. In this case, the contingency is for an oil spill incident. The contingency plan prepared for a site or region usually consists of guidelines and operating instructions

intended to prevent an oil spill and in the event of a spill increase the efficiency and effectiveness of clean-up operations and to protect areas of biological, social, and economic importance.

Coordination Centre

A local, regional, or national centre that coordinates the response to an oil spill and supports local, regional, and national level responses.

dispersant

A chemical formulation containing non-ionic surface active agents that lower the surface tension between oil and water, enabling oil film to break up more easily and disperse within the water with natural or mechanical agitation.

Domestic and External Security Secretariat

A formal responsibility of the Department of the Prime Minister and Cabinet.

Duty Controller

A rostered staff position within Maritime NZ to provide 24-hour contact for maritime incidents and emergencies. The Rescue Coordination Centre New Zealand has a separate Duty Manager.

environmental baseline

Baseline environmental condition before impact of oil spill.

exclusive economic zone

All marine waters from the outer edge of the territorial sea (12 nautical miles) seaward for 188 nautical miles until the 200 nautical mile limit (see section 9 of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977).

first strike

Means a rapidly available, prompt initial response capability that can be quickly deployed and is intended to limit the effect of an oil spill incident in such a way that it is resolved or the effects reduced until such time as other resources can be deployed in support. The extent of this capability will vary from location to location depending on potential risks.

²⁶ This explanation is from the Department of the Prime Minister and Cabinet's website (www.dpmc.govt.nz/cabinet/committees/des).

floating, production, storage and offloading unit

A floating vessel used in the production, storage, and offloading of oil.

Fund Convention *see Appendix B – International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992*

GEOINT New Zealand

Geospatial Intelligence New Zealand, which undertakes the exploitation and analysis of imagery and geospatial information about features or activities of defence, security, economic, safety or intelligence interest, conceptualised in the context of location and time.

gross tonnage

The total volume of the interior of a ship, measured in tons (units of 100 cubic feet).

incident controller

A generic term for the person responsible for leading and managing the incident response team (may be at local, regional or national level) – (*see also On-Scene Commander.*)

internal waters of New Zealand

Any areas of the sea on the landward side of the baseline of the territorial sea of New Zealand (*see section 4 of the Territorial Sea and Exclusive Economic Zone Act 1977*).

Intervention Convention *see Appendix B – International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969*

iwi

The largest social grouping in Māori society is the iwi (tribe). Iwi usually consist of several related hapū (sub-tribes).

iwi authority

A formal body that represents an iwi for the purposes of the Resource Management Act 1991; and is recognised by that iwi as having authority to do so.

LLMC Convention *see Appendix B – Convention on the Limitation of Liability for Maritime Claims 1976*

LLMC Protocol *see Appendix B – 1996 Protocol to the LLMC Convention*

marine oil spill

The actual or probable release, discharge, or escape of oil into the internal waters of New Zealand or New Zealand marine waters (*see section 281 of the Maritime Transport Act 1994*). It must either be directly into the sea or ultimately reach marine waters.

Marine Protection Rules

The rules made by the Minister of Transport or Director of Maritime NZ under part 27 of the Maritime Transport Act 1994.

marine waters *see New Zealand marine waters*

Maritime Incident Response Strategy

An overall strategy with associated plans for 'major maritime incidents', outlining what needs to be done to manage all aspects of large-scale, major, and/or complex maritime incidents.

Maritime New Zealand

The authority established originally as the Maritime Safety Authority under the Maritime Transport Act 1994 as a body corporate, owned by the Crown with perpetual succession. Maritime NZ is responsible for providing effective marine pollution prevention and an effective marine oil pollution response system.

MARPOL *see Appendix B – International Convention on Prevention of Pollution from Ships, 1973, and 1978 Protocol*

National Marine Oil Spill Contingency Plan

The plan produced by the Director of Maritime NZ (sometimes referred to as the National Plan).

National On-Scene Commander *see On-Scene Commander*

National Response Team (NRT)

A group of oil spill responders who receive specialist training to enable them to perform essential functions during a Tier 3 response. During an incident the NRT makes up the core incident response team, which is supplemented by other oil spill responders who have received basic training. The NRT is maintained through Tier 3 training and exercising and currently has more than 100 members.

New Zealand continental waters

New Zealand marine waters and waters beyond the outer limit of the exclusive economic zone of New Zealand, but over the continental shelf of New Zealand.

New Zealand marine waters

The territorial sea of New Zealand and the waters of the exclusive economic zone of New Zealand.

NOSC (National On-Scene Commander) *see On-Scene Commander*

Noumea Convention *see Appendix B – Convention for the Protection of the Natural Resources and Environment of the South Pacific Region*

Off-shore installation

Any artificial structure (including a floating structure other than a ship) used or intended to be used in or on, or anchored or attached to, the seabed for the purpose of the exploration for, or the exploitation or associated processing of, any mineral.

oil

Petroleum in any form, including crude oil, fuel oil, sludge, oil refuse, and refined products (other than petrochemicals).

oil industry

Explorers for oil, producers, refiners, and marketers of oil, and associated carriers and service contractors.

Oil Pollution Advisory Committee (OPAC)

Section 282 of the Maritime Transport Act 1994 establishes the Oil Pollution Advisory Committee. OPAC is made up of industry and government representatives appointed by the Minister of Transport. OPAC advises the Maritime New Zealand Authority on the New Zealand Marine Oil Spill Response Strategy, the fixing of the Oil Pollution Levy, the use of the Oil Pollution Fund, and any other matter related to oil spills that the Minister or the Director of Maritime NZ specifies from time to time.

Oil Pollution Fund

A statutory fund that receives its income from the Oil Pollution Levy. The Fund provides money for New Zealand's preparations for oil spill response and to meet the costs of clean-up where no spiller can be found to meet the costs.

Oil Pollution Levy

A differential levy imposed on all vessels carrying oil as cargo (tankers) or fuel, according to a formula based on the risk of an oil spill from the particular operation. Offshore installations also pay a set levy based on an assessment of their contribution to overall risk.

oil spill response

Actions taken to confirm the presence of an oil spill, stop its flow from the source, contain it, collect it, protect areas from damage by it, mitigate its effects on the environment, and clean up wildlife and areas contaminated by it.

oil transfer site

Any land, site, building, structure, or facility (whether on land or above the sea) that is used to transfer oil, or at or from which oil is transferred, to, or from, a ship or offshore installation (see section 281 of the Maritime Transport Act 1994). The term 'facility' includes mobile transfer sites such as vehicles.

On-Scene Commander

The person responsible for controlling and managing a marine oil spill clean-up at Tier 2 or Tier 3 level. Regional On-Scene Commanders are appointed by the relevant regional councils (Tier 2). National On-Scene Commanders are appointed by the Director of Maritime NZ (Tier 3).

OPAC *see* **Oil Pollution Advisory Committee**

OPRC *see* **Appendix B – International Convention on Oil Preparedness, Response and Cooperation, 1990**

Pacific Islands Regional Marine Spill Contingency Plan

A plan providing for cooperative regional responses to major marine spills in the Pacific Island region, including linkages and mechanisms for accessing regional and supra-regional assistance. Island member states can seek support and assistance from Australia, France, New Zealand, and the United States for marine pollution preparedness and response. *See also Appendix B.*

Pacific Ocean Pollution Prevention Programme

A programme with a mission to protect the public health, safety, environment, and natural resources of the Pacific Islands from the effects of ship-sourced marine pollution.

PACPLAN *see* **Pacific Islands Regional Marine Spill Contingency Plan**

PACPOL *see* **Pacific Ocean Pollution Prevention Programme**

place of refuge

A place where a vessel can anchor or berth in relative safety to enable measures to be taken to forestall or minimise the effects of damage (for example, to minimise the leakage of oil). Also known as a 'safe haven'.

prevention of a marine oil spill

Any action taken before and during the normal operation of a ship, offshore installation, pipeline, or oil transfer site to lower the likelihood of a marine oil spill occurring.

regional councils

The 11 councils that form part of local government and are charged with the integrated management of the natural and physical resources of a region: Northland Regional Council, Waikato Regional Council, Bay of Plenty Regional Council, Hawke's Bay Regional Council, Horizons (Manawatu-Wanganui Regional Council), Taranaki Regional Council, Wellington Regional Council, West Coast Regional Council, Southland Regional Council, Canterbury Regional Council, and Otago Regional Council. Six unitary authorities also carry out the role of a regional council (as well as that of a territorial authority): Auckland Council, Nelson City Council, Gisborne, Marlborough, and Tasman District Councils, and Chatham Islands Council.

regional marine oil spill contingency plan

A plan prepared by a regional council and approved by the Director of Maritime NZ under section 292 of the Maritime Transport Act 1994. This plan is sometimes referred to as a regional plan.

Regional On-Scene Commander *see* **On-Scene Commander**

regional plan *see* **regional marine oil spill contingency plan**

Rescue Coordination Centre New Zealand

A national service centre operated by Maritime NZ that provides a 24/7 search and rescue coordination service for sea, air and land as well as alerting for maritime incidents and accidents, including oil spills, and at sea collisions.

risk

An index of values derived from an assessment of possible oil spill scenarios where the risk equates to the probability of a particular event occurring, multiplied by a value that represents the magnitude of the impact that the event would create:
risk = likelihood x consequences.

ROSC (Regional On-Scene Commander) *see* **On-Scene Commander**

Secretariat of the Pacific Regional Environment Programme (SPREP)

The agency charged by the governments and administrations of the Pacific region with the protection and sustainable development of the region's environment. In partnership with the International Maritime Organization, it is implementing the Pacific Ocean Pollution Prevention Programme.

shipboard marine oil spill contingency plan

A plan prepared under Marine Protection Rule, Part 130A, that implements the requirements of the International Convention on Prevention of Pollution from Ships, 1973, and 1978 Protocol (MARPOL) to specify the measures to be taken in respect of an oil spill from a ship.

significant marine spill

A large-scale oil spill for which the timing and location are impossible to predict and that will have severe environmental consequences. The overall response to such a spill is likely to be beyond New Zealand's domestic capability and international assistance may be needed.

site marine oil spill contingency plan

A plan prepared under the Marine Protection Rules for any oil transfer site or pipeline that specifies the measures to be taken in respect of a marine oil spill. Sometimes referred to as a site plan.

site plan *see* **site marine oil spill contingency plan**

small local oil spill

A spill of such size and effect, and in such a location, that the spiller (a Tier 1 site or ship) or regional council (Tier 2) can adequately respond to it within its own capability.

SPREP *see* **Secretariat of the Pacific Regional Environment Programme**

Supplementary Fund *see* **Appendix B – International Supplementary Fund for Compensation for Oil Pollution Damage, 2003**

territorial sea

Those areas of the sea having, as their inner limits, the baseline (described in sections 5, 6, and 6A of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977) and, as their outer limits, a line measured seaward from that baseline, every point of which line is distant 12 nautical miles from the nearest point of the baseline.

threat

The possible impact or consequences that a spill of oil could create if allowed to come into contact with a biological, social, or economic resource.

Tier 1 response (of the approach to marine spill readiness and response)

Site-specific response, including most shore-side industry with oil transfer sites, offshore installations, and all vessels from which a spill of oil is possible. All Tier 1 sites and most larger commercial ships (which meet MARPOL 73/78 requirements) are expected to plan for and be able to provide a clearly identifiable first response to pollution incidents for which they are responsible. See

also site, shipboard, and offshore installation marine oil spill contingency plans in Appendices C and D.

Tier 2 response (of the approach to marine spill readiness and response)

Regional council's response, which are expected to plan for and respond to marine oil spills within their part of the territorial sea (out to 12 nautical miles) where the spills exceed the clean-up capability of Tier 1, or for which no responsible party can be identified. See also Appendices C and D.

Tier 3 response (of the approach to marine spill readiness and response)

Maritime NZ's response, detailed in the National Marine Oil Spill Contingency Plan, for spills within a region that are beyond the resources of the region, or which occur within the Exclusive Economic Zone but outside regional council boundaries.

UNCLOS see *Appendix B – United Nations Convention on the Law of the Sea, 1982*

WorkSafe New Zealand

WorkSafe New Zealand is a Crown agency and New Zealand's primary workplace health and safety regulator. It works alongside other such regulators, namely Maritime NZ, the New Zealand Police, the Civil Aviation Authority, and the New Zealand Transport Agency.



Appendix B: International conventions relevant to this strategy

New Zealand is a member of all the conventions described in this appendix.

International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990

The International Maritime Organization developed the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC). The OPRC sets out the principles for establishing national oil spill readiness and response capabilities. OPRC is a key driver for setting up the New Zealand readiness and response system. OPRC establishes measures for dealing with marine oil pollution incidents nationally and in cooperation with other countries.

OPRC was adopted in 1990 and came into force in 1995. In 2000, a protocol relating to hazardous and noxious substances was adopted.

In accordance with OPRC and its Annex, state parties to the convention undertake, individually or jointly, to take all appropriate measures to prepare for and respond to oil pollution incidents.

OPRC applies to:

- vessels of any type operating in the marine environment (except warships and government vessels)
- fixed or floating offshore installations or structures engaged in gas or oil exploration or production activities, or the loading or unloading of oil
- sea ports and oil handling facilities (for example, oil terminals and pipelines).

New Zealand completed its accession to the OPRC in 1999. The main requirements for OPRC are implemented by Part 23 of the Maritime Transport Act 1994. They are to:

- develop a national system for responding to oil spills
- have a national authority responsible for readiness and response
- have training and people in place to respond to regional marine-based oil spills
- hold equipment ready for use during a marine oil spill
- have an exercising regime for trained people and equipment
- have contingency plans in place so some preparation is done before an oil spill occurs
- engage in regional cooperation in other countries.

United Nations Convention on the Law of the Sea, 1982 (UNCLOS)

General obligations exist under UNCLOS to protect and preserve the marine environment and to take measures to prevent, reduce and control pollution of the marine environment (e.g. Articles 192 and 193). This includes, for example, measures to minimise pollution from installations or devices used in exploration or exploitation of the natural resources of the seabed. Also, measures to ensure activities under jurisdiction and control are so conducted so as to not cause damage by pollution to other States and their environment.

Article 221 of UNCLOS provides general powers for parties to take and enforce measures beyond the territorial sea to protect their coastline or related interests from pollution or threat of pollution following a maritime casualty or acts relating to such a casualty, which may reasonably be expected to result in major harmful consequences.

Article 198 provides that 'when a State [neighbouring country] becomes aware of cases in which the marine environment is in imminent danger of being damaged by pollution, it shall immediately notify other States it deems likely to be affected by such damage'.

Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (Noumea Convention)

The Noumea Convention requires parties to take all appropriate measures to prevent, reduce and control pollution of the Convention Area, from any source, and to ensure sound environmental management and development of natural resources, using for this purpose the best practicable means at their disposal, and in accordance with their capabilities (Article 5). The Convention Area includes New Zealand's EEZ.

Parties shall also take all appropriate measures to prevent, reduce and control pollution in the Convention Area resulting directly or indirectly from exploration and exploitation of the sea-bed and its subsoil.

International Convention for the Prevention of Pollution from Ships (MARPOL)

The International Convention for the Prevention of Pollution from Ships (MARPOL) is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes.

MARPOL provides ships' construction and operational requirements to prevent pollution from ships. Annex 1 of MARPOL requires every oil tanker of 150 gross tonnes and above and other ships greater than 400 gross tonnes to have pollution emergency plans.

Annex 1 in particular covers prevention of pollution by oil from operational measures as well as from accidental discharges.

MARPOL provides for exemptions from discharge restrictions (and prosecution) where:

- a discharge is necessary to secure the safety of a ship or save a life at sea or prevent a larger spill
- it is necessary during a spill response to discharge oil or use dispersants to minimise the overall damage from pollution, and is approved by the relevant government.

International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 (Intervention Convention)

The Intervention Convention provides general powers for parties to take measures on the high seas as may be necessary to prevent, mitigate, or eliminate grave and imminent danger to their coastline or related interests from the threat of pollution by oil following a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences. Various consultation requirements are applicable depending on the urgency of the event in question.

The 1973 Protocol Relating to Intervention on the High Seas in Cases of Pollution other than Oil extends the scope of application to include some oils defined in MARPOL and not covered by the Intervention Convention and also other hazardous and noxious substances.

International Regime for Compensation for Oil Pollution Damage Caused by Spills from Oil Tankers²⁷

Convention on Civil Liability for Oil Pollution Damage, 1992 (the 1992 CLC)

The 1992 CLC provides for the recovery of pollution costs and payment of compensation from owners and operators of oil tankers carrying persistent oil. It applies to spills of both bunker oil and persistent oil carried as cargo, from tankers that fall within the definition of "ship" in the Convention. It is based on the principle of strict liability (that is, the owners of tankers that spill oil are liable regardless of whether they were actually at fault, with few exceptions).

The 1992 CLC places a compulsory obligation on tanker owners to maintain insurance or other financial security specifically to cover pollution damage, and to carry on board each tanker a certificate attesting to the fact such cover is in force. Most tanker owners arrange this insurance with a Protection and Indemnity Club (P&I Club). The financial security certification requirements contained in the convention are only required for those tankers carrying more than 2,000 metric tons of persistent oil in bulk as cargo.

The 1992 CLC has been incorporated into New Zealand law through Part 25 of the Maritime Transport Act 1994.

Section 347 of the Maritime Transport Act 1994 specifies the limits of liability of CLC ship-owners for oil pollution damage. The maximum amount of liability is fixed at:

- 4.51 million units of account²⁸ for ships less than 5,000 tonnes
- 4.51 million units of account plus 631 units for each additional unit of tonnage up to a maximum aggregate amount of 89.77 million units of account.

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (Fund Convention)

This fund is for spills of persistent oil originating from oil tankers only. It is used:

- where the total value of claims exceeds the limit of compensation available under the 1992 CLC, and
- where compensation may be available under the Fund Convention.

The International Oil Pollution Compensation Fund 1992 (IOPC Fund) is a worldwide intergovernmental organisation established to administer the regime of compensation created by the Fund Convention.

²⁷ www.iopcfunds.org/uploads/tx_iopcpublishations/Text_of_Conventions_e.pdf

²⁸ A unit of account relates to a Special Drawing Right set by the International Monetary Fund. See the Maritime Transport (Maximum Amount of Liability for Pollution Damage) Order 2003.



The fund is financed by contributions levied on any person who has received in a calendar year more than 150,000 tonnes of crude oil or heavy fuel oil after sea transport in a 1992 fund member state.

International Supplementary Fund for Compensation for Oil Pollution Damage, 2003 (Supplementary Fund)

The Supplementary Fund was adopted in May 2003 to supplement the compensation available under the CLC and the Fund Convention with an additional third tier of compensation.

Membership of the Supplementary Fund is optional and open to any state that is a member of the 1992 fund. It provides additional compensation of up to 750 million units of account for each incident that exceeds the compensation available under the CLC and the Fund Convention. New Zealand will make a decision in 2015 on accession to this fund.

International Convention on Civil liability for Bunker Oil Pollution Damage, 2001 (Bunkers Convention)

The Bunkers Convention imposes strict liability for bunker oil pollution. New Zealand acceded to this convention in 2014.²⁹ This convention:

- applies to bunker oil spills originating from all ships, except 1992 CLC oil tankers
- is based on the principle of strict liability (that is, owners of ships that spill oil are liable regardless of whether they were actually at fault, with few exceptions)
- requires owners of ships greater than 1,000 gross tonnage to carry compulsory insurance to cover any pollution damage following an oil spill
- extends strict liability beyond the owner to the charterer, manager, and operator
- does not have its own limits of liability; instead it requires insurance be maintained to limits specified in the Convention on the Limitation of Liability for Maritime Claims, 1976 and its 1996 Protocol
- aims to ensure adequate, prompt and effective compensation is available to persons who suffer damage caused by spills of oil, when it is carried as fuel in a ship's bunkers
- is based on the existing regime for oil pollution from tankers set up under the CLC, which covers pollution damage caused by spills of oil from tankers
- covers oil pollution damage caused in the territorial sea and exclusive economic zone; the cost of

²⁹ Before this date New Zealand had unilateral laws requiring New Zealand and foreign ships to hold bunker liability cover.

preventative measures is also covered whenever taken to prevent or minimise such damage

- covers 'pollution damage' only, which means:
 - loss or damage caused outside the ship by contamination resulting from the escape or discharge of bunker oil from the ship
 - the costs of preventive measures and further loss or damage caused by preventive measures.

Convention on the Limitation of Liability for Maritime Claims 1976 (LLMC Convention) and its 1996 Protocol (LLMC Protocol)

The provisions of the LLMC Convention as amended by the LLMC Protocol have the force of law in New Zealand, as a result of the Maritime Transport Amendment Act 2013. The provisions:

- allow ship-owners to limit their liability to pay compensation for general ship-sourced damage
- apply to claims for loss of life and personal injury, as well as loss or damage to property and to pollution damage where no other convention applies.
- do not impose strict liability on the ship-owner to pay compensation for damage
- calculate the ship-owners' liability limit based on the size of the ship.

The LLMC Protocol came into New Zealand law through the Maritime Transport Amendment Act 2013, which changed section 84 of the Maritime Transport Act 1994. It increases the liability limits for maritime claims in relation to vessels.

The LLMC Convention and LLMC Protocol do not apply to offshore installations.

Antarctic Treaty, 1959, and the Protocol on Environmental Protection to the Antarctic Treaty, 1991

The objective of the Protocol on Environmental Protection to the Antarctic Treaty, 1991 is to ensure the comprehensive protection of the Antarctic environment and associated ecosystems. The Antarctic includes all the area south of 60° south latitude. Annex IV to the Protocol relates to marine pollution, specifically prohibiting the discharge of oil, noxious liquid substances, and garbage in the Antarctic Treaty area. Annex VI (not yet in force) relates to liability for environmental emergencies.

The Protocol is administered by the Ministry of Foreign Affairs and Trade. The Protocol has been enacted into domestic legislation by the Antarctica (Environmental Protection) Act 1994. This Act allows the Governor-General to extend provisions of the Maritime Transport Act 1994 to 'Antarctic waters' (defined as the territorial

sea of New Zealand adjacent to the Ross Dependency and other seas south of 60 degrees south latitude). To date, this has not been done.

Maritime NZ is not responsible for conducting a Tier 3 or national response to a marine oil spill in waters adjacent to the Ross Dependency. Antarctica New Zealand has developed the Scott Base Fuel Spill Prevention and Response Plan. Maritime NZ provides technical support for oil spill planning and response in the waters adjacent to the Ross Dependency and assists Antarctica New Zealand in developing the contingency plan.

Other international and regional agreements

The Strategy and National Contingency Plan provide mechanisms for New Zealand to enter into mutual aid arrangements with other countries impacted on by maritime environmental emergencies, giving effect to New Zealand's obligations under OPRC. New Zealand has entered into the following international cooperation agreements.

Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN)

As above, New Zealand is a party to the Noumea Convention. The Noumea Convention includes the Protocol Concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region, 1986 (Noumea Pollution Protocol). The Noumea Pollution Protocol requires parties to establish and maintain, within their respective capabilities, the means of preventing and responding to pollution incidents, and provides formally for cooperation when responding to marine spills.

In 2000, consistent with the Noumea Convention and Noumea Pollution Protocol, member countries adopted PACPLAN. PACPLAN provides for cooperative regional responses to major marine spills in the Pacific Island region, including linkages and mechanisms for accessing regional and supra-regional assistance.

One of the key mechanisms in PACPLAN is the provision for the 22 island members to seek assistance from one of the so-called 'non-island' (developed) member states for support and assistance with marine pollution preparedness and response. The non-island states are Australia, France, New Zealand, and the United States. New Zealand is listed as the primary source of assistance for Cook Islands, Fiji, Niue, Samoa, Tokelau, and Tonga.

Bilateral agreement with Australia

New Zealand has a bilateral agreement with Australia on cooperation in preparedness and response for oil spill response and management.

Appendix C: New Zealand legal requirements for marine oil spill readiness and response

This appendix summarises New Zealand legal requirements for marine oil spill response, including the role of the Maritime Transport Act 1994, the function of Marine Protection Rules, the New Zealand Marine Oil Spill Response Strategy, the three-tiered approach to marine spill preparation and response and marine oil spill contingency plans.

Maritime Transport Act 1994

The main domestic legislation for Maritime NZ and its oil spill response responsibilities is the Maritime Transport Act 1994 (the Act).³⁰ The overall purpose of the Act is to:

- continue Maritime NZ
- enable the implementation of New Zealand's obligations under international maritime agreements
- ensure participants in the maritime transport system are responsible for their actions
- consolidate and amend maritime transport law
- protect the marine environment
- continue, or enable, the implementation of obligations on New Zealand under various international conventions relating to pollution of the marine environment
- regulate maritime activities in New Zealand and New Zealand waters, and
- regulate maritime activities and the marine environment in the exclusive economic zone and on the continental shelf as permitted under international law.

Most of New Zealand's marine protection legislation is provided by the Act and the Marine Protection Rules that come under the Act.

Marine Protection Rules

Comprehensive provisions exist in New Zealand maritime law to protect the marine environment from pollution by ships and offshore installations, and from dumping at sea. These provisions are in the technical standards the Minister of Transport sets under the Act known as the Marine Protection Rules.³¹

The rules are organised into series of 'parts' that relate to a particular marine protection topic. Part 130 relates

to the planning and response to marine oil spills. The rules give effect to the provisions of international marine environment protection conventions, including the International Convention on Prevention of Pollution from Ships, 1973, and 1978 Protocol; the International Convention on Oil Preparedness, Response and Cooperation, 1990; and the International Convention on Civil Liability for Oil Pollution Damage, 1992 (see Appendix B).

New Zealand Marine Oil Spill Response Strategy

In relation to marine oil spills, the Act specifically requires the Director of Maritime NZ to prepare and review the New Zealand Marine Oil Spill Response Strategy.

Section 284 of the Act defines the purpose of the Strategy as being to:

- describe the action to be taken, and by who the action is to be undertaken, in response to a marine oil spill in New Zealand marine waters
- promote a standard response to marine oil spills in New Zealand, and
- promote the coordination of marine oil spill contingency plans and the action taken in response to marine oil spills under such plans.

The Strategy provides Maritime NZ's strategic intent and direction to prepare for and respond to marine oil spills.

Three-tiered approach to preparedness and response and contingency plans

In line with international practice, New Zealand has a three-tiered approach to managing all aspects of marine spill preparation and response.³² A key aspect of this is the preparation by each tier of contingency plans for responding to an oil spill.

Marine oil spill contingency plans

Marine oil spill contingency plans must be produced according to standards provided in the Act, the Marine Protection Rules, and any guidelines issued by the Director of Maritime NZ. Each regional, site, or installation plan must also be consistent with this Strategy and the National Marine Oil Spill Contingency Plan.

30 The Maritime Transport Act 1994 is available from the Parliamentary Counsel Office legislation website (www.legislation.govt.nz).

31 The Marine Protection Rules are available from the Maritime NZ website (www.maritimenz.govt.nz/rules).

32 See Appendix D for details about New Zealand's three-tiered approach.

The purpose of the plans is to promote in New Zealand planned responses to marine oil spills at shipboard, site, regional, and national levels and identify any delegated powers and the responsibilities of all those involved in oil spill incident response.

National Marine Oil Spill Contingency Plan (Tier 3 response)

The Act requires the Director of Maritime NZ to prepare a National Marine Oil Spill Contingency Plan and review the plan at least once every three years.^{33, 34}

The purpose of this plan is to promote a planned and nationally coordinated response to any marine oil spill that is:

- beyond the resources of the regional council within whose region it is located
- outside the region of any regional council, but within the exclusive economic zone, and is an oil spill for which Maritime NZ considers a national response is required.

The plan describes the national marine oil spill response organisation and procedures, and information on spill response resources and clean-up techniques. It provides guidance on the administrative and operational procedures involved in the preparation, mobilisation, operation, and termination of a national (Tier 3) marine oil spill response.

When reviewing the plan, the Director must consider:

- New Zealand's obligations under international conventions and agreements in relation to response to marine oil spills in the internal waters or marine waters of New Zealand
- the New Zealand Marine Oil Spill Response Strategy.

Regional marine oil spill contingency plans (Tier 2 response)

Regional marine oil spill contingency plans should provide an effective response to marine oil spills from oil transfer sites, ships, and offshore installations within the 12 nautical mile limit that are beyond the capacity of the spiller to deal with, but which do not require national or international help. Regional councils must consult on their plan with relevant persons, including the Department of Conservation and iwi within its region.

Marine Protection Rule, Part 130C, sets out the requirements for regional marine oil spill contingency plans, which regional councils prepare and submit to Maritime NZ for approval.³⁵ The elements to be included in regional plans include response actions and personnel responsibilities, descriptions of risk and threat sites within the region, response structures and communication systems, sampling procedures for prosecution purposes, and arrangements for the disposal of recovered oil. Regional plans are to be reviewed at least every three years.

Shipboard marine oil spill contingency plans (Tier 1 response)

Under the Marine Protection Rule, Part 130A, oil tankers of 150 tons gross tonnage or more and other ships of 400 tons gross tonnage or more must have a shipboard marine oil spill contingency plan.³⁶ This applies to New Zealand ships and ships of the New Zealand Defence Force and gives effect to regulation 37 of Annex 1 of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Shipboard marine oil spill contingency plans are approved by Maritime NZ. International ships must carry a shipboard oil pollution emergency plan approved by their flag state.

The purpose of the shipboard plan is to assist ship's personnel to take the necessary action to stop or minimise an unexpected oil spill and to mitigate its effects. Plans must be tailored to each ship, taking into account the type and size of ship, cargo, route, and shore-based management structure.

Oil transfer site marine oil spill contingency plans (Tier 1 response)

Under the Marine Protection Rule, Part 130B, all owners of oil transfer sites (that is, sites where oil is transferred to or from a ship or an offshore installation) are required to have an oil transfer site marine oil spill contingency plan to help personnel deal with an oil spill.³⁷

The plan must cover prevention measures, the procedures for reporting marine oil spills, actions to be taken to contain and clean up a spill, and details of the response equipment available.

Regular updates and reviews of the plan are required, as are exercises using the plan. The power to approve plans has been delegated by the Director of Maritime NZ to regional council officers. Plans must be approved.

33 See sections 296–298 of the Act.

34 The National Marine Oil Spill Contingency Plan is available from the Maritime NZ website (www.maritimenz.govt.nz/Environmental/Responding-to-spills-and-pollution/The-national-plan.asp).

35 The authority for Part 130C is in sections 289–292 of the Act.

36 The authority for Part 130A is in sections 287, 386, and 390 of the Act.

37 The authority for Part 130B is in sections 287, 386, and 390 of the Act.

Offshore installations

Marine Protection Rule Part 131 provides rules for offshore installations to prevent pollution of the marine environment by substances used or produced in offshore mineral exploration and exploitation. This part is concerned with discharges of oil, other harmful substances and garbage. It requires operators to develop a Discharge Management Plan — a form of environmental management plan — which must be approved for all offshore installations and promotes the application of “best practicable option” to prevent or minimise adverse effects on the environment arising from discharges.

The rules provide, where appropriate, for different requirements for installations in the territorial sea (which are subject to the Resource Management Act 1991) from the requirements for offshore installations within the exclusive economic zone or beyond the exclusive economic zone but above the continental shelf of New Zealand.

Part 131 gives effect to applicable provisions of the International Convention for the Prevention of Pollution from Ships 1973/78 (MARPOL) and the International Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC).

Certificates of Insurance

Marine Protection Rule Part 102, together with associated provisions in the Maritime Transport Act 1994, elaborates the requirement that owners of ships carrying more than 2,000 tonnes of persistent oil in bulk as cargo have certificates which verify the existence of public liability insurance sufficient to cover any claims for oil pollution damage arising from a marine oil spill. The requirement gives effect to provisions of the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage (1969) to which New Zealand is party.

Part 102 also requires other ships of 400 gross tons or more and offshore installations within New Zealand continental waters to hold certificates of insurance for liability cover for oil pollution damage.

In summary, Part 102 of the Marine Protection Rules applies to:

- oil tankers, both New Zealand flag and visiting foreign ships carrying more than 2,000 tonnes of persistent oil in bulk as cargo
- other ships of 400 gross tons or more, both New Zealand flag and visiting foreign ships, and
- regulated offshore installations.



Appendix D: Three-tiered readiness and response approach

Introduction

New Zealand has implemented a three-tiered approach to all aspects of marine oil spill preparation and response.³⁸ This is a well-established and internationally recognised system used to do the following:

- define and structure levels of oil spill response capabilities; this approach is not used to categorise the size or scope of a spill
- plan for appropriate resources to be rapidly mobilised and cascaded to an incident location, and
- enable response escalation for an oil spill of any magnitude.

It has been developed as a means to ensure an appropriate response capability is readily available to deal with oil spills commensurate to the risks.

Tier 1 and Tier 2 responses can be escalated in an integrated and efficient manner to the next tier, depending on the scale of the event. Tier 3 responses may be expanded and enhanced with assistance from other national and international organisations and agencies. Organisations likely to respond at the various tiers must prepare contingency plans and have a response capability appropriate to their respective levels of risk and responsibility:

- Tier 1 – industry
- Tier 2 – regional councils and unitary authorities³⁹
- Tier 3 – Maritime NZ (together with industry and international partners).

The roles and responsibilities for organisations required to prepare and maintain contingency plans are detailed in the Maritime Transport Act 1994 (the Act) and various supporting Marine Protection Rules (discussed in Appendix C).

If the scale of an incident is beyond the nation's domestic capability, arrangements are in place to secure overseas assistance. This relationship is reciprocal, so New Zealand is expected to assist its overseas neighbours if requested.

Overview

The tiers can be described as follows.

- **Tier 1 oil spills** are spills where the response is managed, coordinated, and conducted by the operator. Oil spill response capability is based on an assessment of risk and their response (contingency) plans are approved by authorities. In general the operator of an approved plan must maintain an appropriate “first strike” (immediate response) capability and the ability to assist if there is an escalation to a Tier 2 or Tier 3 response.
- **Tier 2 oil spills** are spills where the response is managed, coordinated and conducted by the local regional council.⁴⁰ A Tier 2 spill will typically have more serious actual or potential consequences than a Tier 1 spill and so will require a greater degree of oversight and assurance by the authorities and most likely additional resources to the Tier 1 capability.
- **Tier 3 oil spills** are spills that are generally more complex, of longer duration and have the most serious actual or potential consequences. They require the greatest level of oversight and assurance and the most significant resources (national and international). Typically the response required is beyond the response capability of the regional council or operator. The response is nationally led and coordinated by Maritime NZ.

Table 3 contains more detail on the general characteristics of each of the three tiers based on the management of the oil spill, circumstance of the spill, and resources at risk. These characteristics can be used to develop criteria for evaluating the need to escalate the response. This is a general list of characteristics, so not all will apply in all cases.

38 IPIECA (2007) *IPIECA Guide to Tiered Preparedness and Response – Volume 14*. London: International Petroleum Industry Environmental Conservation Association.

39 Six territorial authorities (Auckland Council, Nelson City Council, the Gisborne, Tasman, and Marlborough District Councils, and Chatham Islands Council) also perform the functions of regional councils, so are unitary authorities.

40 A Tier 2 response may also be required where the spiller cannot be identified.

Table 3: Tiered response characteristics for marine oil spills

CHARACTERISTIC	TIER 1	TIER 2	TIER 3
APPLICATION			
AGENT	Site specific: oil transfer sites, offshore installations (including rigs and platforms), pipelines, vessels from which a spill of oil into environment is possible	Regional: regional councils and unitary authorities	National: Maritime NZ
RESPONSE TO THE SPILL			
RESPONSIBILITY	Ship's master, company, plant or site manager	Regional councils and unitary authorities	Maritime NZ
DELEGATION/AUTHORITY	Appointed incident controller	Regional On-Scene Commander	National On-Scene Commander
RESPONSE PERSONNEL	Site operator	Site and regional councils (Maritime NZ may be involved)	Multiple from across government, regional council, and industry
CONTINGENCY PLAN FOR RESPONSE	Shipboard marine oil spill contingency plan (New Zealand ships) Shipboard oil pollution emergency plan (other flag states) Oil transfer site marine oil spill contingency plan Offshore installation marine oil spill contingency plan	Regional marine oil spill contingency plan	National marine oil spill contingency plan
MONITORING OF PLANS FOR RESPONSE	Regional council or Maritime NZ	Maritime NZ	Maritime NZ
RESOURCES	Resourced from site and operator	Requires regional council resources and Maritime NZ regionally based oil spill response equipment	Requires national and/or international resources
TYPE OF SPILL INCIDENT			
TYPE OF RESPONSE	Mostly self-contained first-strike but may escalate to Tier 2 or Tier 3	Mostly self-contained 'initial response', but may be more complex or larger scale and/or escalate to Tier 3	Complex campaign Possibly offshore Requires National Response Team
DURATION	Single – multiple shifts	Single – multiple shifts to days	Days to months
HAZARDS	Single – multiple hazards	Single – multiple hazards	Multiple hazards

CHARACTERISTIC	TIER 1	TIER 2	TIER 3
RESOURCES AT RISK			
HUMAN	Potential for serious injury and loss of life	Potential for serious injury and loss of life	Potential for serious injury and loss of life
ENVIRONMENT	Usually isolated impact and/or with natural recovery expected within weeks	Usually isolated impact and/or with natural recovery expected within weeks	Potentially significant area affected and/or impact Recovery may take months or years
WILDLIFE	Individual to group of fauna	Individual to group of fauna	Potentially large number of fauna
ECONOMY	Business level disruption	Business level disruption and potential for local impact	Disruption to local economy and potentially national impact
SOCIAL AND BUSINESS	Reduced services for operator	Reduced services for operator and/or disruption to local area activities	Wide spread and on-going impacts on local community and potentially New Zealand as a whole
INFRASTRUCTURE	Short-term failure	Short-term to medium-term failure	Significant impairment to local and potentially the national economy
MEDIA	Local, regional, and potentially national media coverage	Local, regional and potentially national media coverage	National and likely international media coverage

Roles and responsibilities at each tier

Tier 1

Industry plans and response are site-specific or vessel-specific and include onshore industry with oil transfer sites, offshore installations (including rigs and platforms), pipelines, and certain vessels from which a spill of oil into the marine environment is possible.

All vessels,⁴¹ oil transfer sites, and offshore installations are expected to be able to provide a marine oil spill contingency plan, which provides a clearly identifiable first response to marine oil spill incidents for which they are responsible (see Appendix C).

The response capability at a site should be based on the specifics of the operation and the risk (likelihood and consequence) of an oil spill using factors such as location, oil type, and volumes transferred. A Tier 1 response needs to be timely, provide a complete response for spills that remain at Tier 1 or at least be effective until the response escalates for significant

spills. The response should include monitoring and assessment and be able to contribute to a Tier 2 or Tier 3 response for a spill from their operation and/or enhance a Tier 2 or Tier 3 response. The operator should have access to response equipment that is commensurate to its oil spill risk and appropriate arrangements in place with response providers at both ends of the spill response scale. For example, from local arrangements to respond to a spill from an unstaffed fuel stop to formal arrangements with outside service providers, including overseas agencies, if appropriate.

The site operator's personnel need to be trained and exercised and their capability able to be demonstrated. The operator will involve other agencies in training and exercising as appropriate.

In an actual or probable oil spill from a vessel, the ship's master is responsible for notifying⁴² authorities and ensuring containment efforts begin immediately. Depending on the circumstances and resources and equipment available, the master may also initiate

⁴¹ International ships must carry a shipboard oil pollution emergency plan that their flag state has approved.

⁴² All marine pollution discharges or accidental spills of harmful substances, including oil, into New Zealand's waters need to be reported immediately. Spillers report marine pollution and spills to: the regional council responsible for the area where the spill occurred, Maritime NZ, or Taupo Maritime Radio.

clean-up operations, if safe for the personnel involved. If the spill is onshore or from an offshore installation, the company, plant, or site manager is responsible for ensuring these actions occur without delay.

After notifying the regional council or Maritime NZ of a spill within the territorial sea, the person in charge must take immediate steps to control the spill in accordance with the relevant approved contingency plan. If that person seeks assistance, or if the Regional On-Scene Commander (ROSC) considers a Tier 2 response is appropriate, they will respond in accordance with the applicable regional contingency plan.

If the spill is significant or outside the territorial sea (such as an offshore installation, a vessel in transit, or in waters around offshore islands within the exclusive economic zone), and the National On-Scene Commander (NOSC) considers it appropriate, they may initiate a Tier 3 response, take charge, and respond in accordance with the National Oil Spill Contingency Plan.

Tier 2

Regional response is the responsibility of regional councils and those unitary authorities acting as regional councils. Each regional council must produce, maintain, and implement a regional marine oil spill contingency plan when required (see Appendix C).

Within their regions, these councils will respond to marine oil spills that exceed the clean-up capability of an industry Tier 1 response. They will also respond to those spills for which no responsible party can be identified. Maritime NZ will provide regional councils with sufficient equipment, training, and opportunities to exercise their expertise to undertake this role. Regional councils need to be aware of the Tier 1 response capabilities of significant oil transfer sites within their area as this may be beyond the resources of a Tier 2 response.

Regional response capability is based on the Tier 2 incidents they typically have had to respond to over the last 15 years (for example, bunkering or bilge discharge spills in ports and spills from fishing vessels). Maritime NZ sets up regional equipment stockpiles based on the oil spill risk for each region.

Maritime NZ works with regional councils to ensure there are always sufficient trained responders and resources to undertake a sustained Tier 2 or Tier 3 response. Regions should have the capability to provide and mobilise an initial Emergency Coordination Centre and to provide an initial or 'skeleton' Incident Management Team.

Tier 2 spill response is led by the Regional On-Scene Commander (ROSC). During an incident, if a spiller cannot be identified or if a spill is beyond the capability of the spiller to respond, the ROSC may assume responsibility for the clean-up operation within their region directly. The ROSC will decide whether it is

appropriate for any action to be taken in response to that marine oil spill. In accordance with the Act, the principal objective of the ROSC in taking any such action is to prevent further pollution from the marine oil spill, and to contain and clean up the oil spill in accordance with the relevant regional marine oil spill contingency plan. The action taken in response to the spill must not cause unreasonable danger to human life or cause an unreasonable risk of injury to any person.

The ROSC is responsible for notifying Maritime NZ as soon as the ROSC becomes aware of a marine oil spill response operation. The ROSC may seek the support of Maritime NZ at any stage, and Maritime NZ may appoint a representative to support the ROSC, where appropriate, to offer technical advice.

If the spill is beyond the capability or resources at the disposal of the regional council, Maritime NZ should be notified as soon as possible, and either additional support can be requested via adjacent regional councils or from the national response capability, or the response will be escalated to a Tier 3 response.

Tier 2 to Tier 3 transition

The factors and characteristics that can lead to an escalation from a Tier 2 to a Tier 3 response or an offshore/significant Tier 1 incident to a Tier 3 response are outlined in Table 3. The Tier 2 to Tier 3 transition depends on the timing of the escalation to Tier 3, and the arrival of the NOSC and the National Response Team to the Emergency Coordination Centre.

When a Tier 3 is declared, the NOSC assumes control of the incident. Elements of the operation may be delegated to the ROSC while the NOSC is on the way to the incident. However, the elevation of an incident to Tier 3 is the responsibility of the NOSC. This enables the NOSC to ready the Emergency Coordination Centre and local response for the next level of operations.

Maritime NZ provides and coordinates training and exercising for regional responders in relation to Tier 2 spill response. This takes account of the fact regional council personnel and resources also play a fundamental role in Tier 3 responses. In a significant incident that escalates to Tier 3, the Tier 2 responders maintain the response during the transition phase under the direction of the NOSC, and continue on to form an integral and vital part of clean-up activities at the Tier 3 level.

Tier 3

Tier 3 response is the responsibility of Maritime NZ.⁴³ The NOSC may assume responsibility and respond in accordance with the National Marine Oil Spill Contingency Plan when, due to size, complexity, and/or environmental impact, containing and cleaning up a marine oil spill exceeds the capacity of the resources available at Tier 1 and/or Tier 2. The NOSC will also

43 Maritime NZ is available 24/7 to respond to a Tier 3 incident.

control and manage the response to any oil spill within the exclusive economic zone, and those beyond the exclusive economic zone over the New Zealand continental shelf.

Maritime NZ is responsible for the National Oil Spill Contingency Plan. This entails the maintenance of generic oil spill response information containing all operational procedures, which is supplemented by regional and local information contained in the regional plan in order to facilitate a successful response (see Appendix C).

In addition and as appropriate, Maritime NZ produces 'special area' contingency plans, such as the plan for Fiordland. These plans are developed when an area is of such environmental significance or has such complex response issues that it is deemed necessary to address contingency planning for the area at a national level.

New Zealand's Tier 3 response capability is made up of Maritime NZ, the regional councils, contractors, consultants, industry, and agencies where agreements are in place (see Appendix F for Maritime NZ's relationships with other government and international agencies).

In a Tier 3 response, the NOSC assumes control of and responsibility for the marine oil spill response operations. The functions and powers of the NOSC are the same as those described for the ROSC. However, the directions of the NOSC will prevail over those of the ROSC.

If a large marine oil spill occurs anywhere in New Zealand's area of responsibility, and it is beyond the nation's resources to contain and clean up, the Director

of Maritime NZ may seek international support for the Tier 3 response. Through the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC), and formal contracts and agreements New Zealand has established arrangements to provide for international support. The National Marine Oil Spill Contingency Plan will be used to plan for and carry out a response involving international resources.

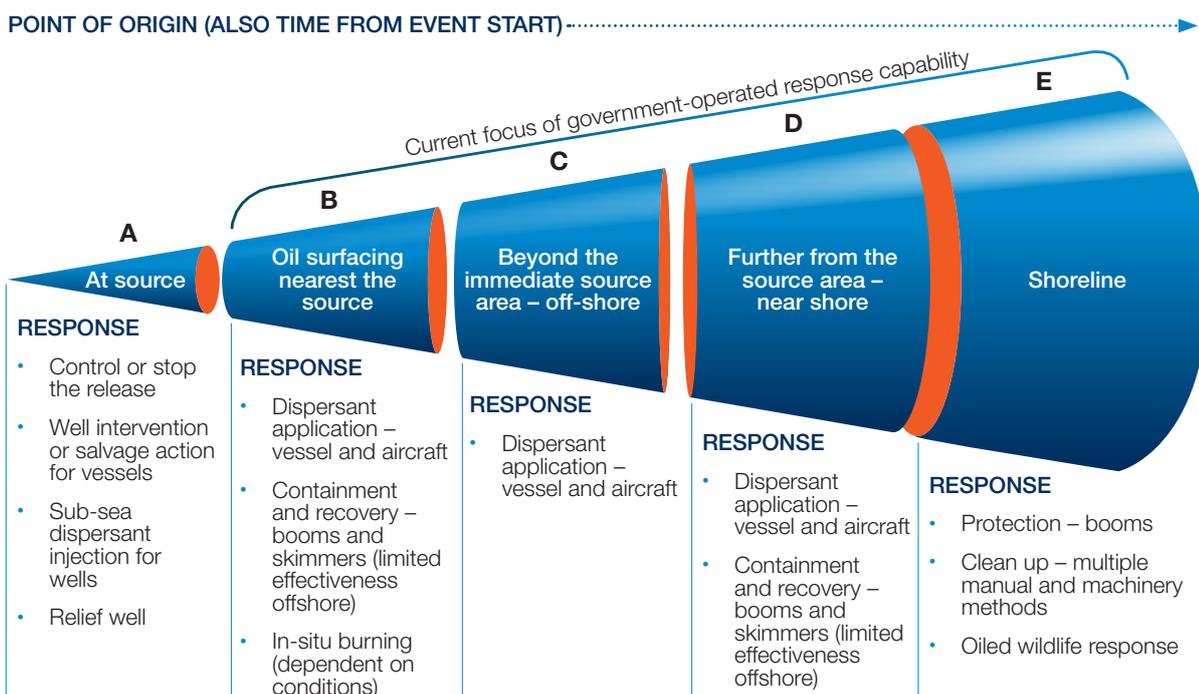
New Zealand has reciprocal obligations to fulfill international agreements and conventions to provide assistance beyond New Zealand marine waters to neighbouring countries, including Australia and the South Pacific. Operational arrangements needed to allow these obligations to be met, such as memoranda of understanding, will be included in the national plan.

Cone of response model for Tier 3 spill response

Following significant oil spill incidents resulting from a loss of well control at an offshore installation (eg, *Montara* and *Deepwater Horizon*), various governments and industry and stakeholder groups have recommended the best response strategies in such a scenario.

These strategies have been developed into the cone of response model. This model has been subsequently adapted to show the range of response techniques for any offshore maritime oil spill, whatever the source, from the point of origin to the shore. Figure 6 shows the various tactics that may be deployed during such an incident.

Figure 6: Cone of response model



In the cone of response model, from the source to the shore, an array of resources can be used to locate, assess, remediate, and remove the oil. Sufficient skilled and trained personnel are needed to undertake the various aspects of the response and, depending on the size and location of the incident, the amount of resources required to be deployed can be large.

Table 4 lists the resources required for the various response strategies under the cone of response.

At any time during a Tier 3 offshore oil spill response, movement of the spill will be assessed. This assessment may include trajectory modelling, aerial observation, and shoreline-based surveys.

Table 4: Cone of response strategies and resources*

AREA	RESPONSE STRATEGY	RESOURCE REQUIRED
A: AT SOURCE	Control or stop release: well intervention, containment and/or salvage action for vessels	Capping and/or containment devices from well or vessel, intervention from installation, support vessels
	Subsea dispersant injection for wells	Injection devices, approved dispersants, support vessels, monitoring devices, laboratory sample analysis
	Relief well	Drilling rigs for relief well, support vessels
B: OIL SURFACING NEAREST THE SOURCE	Aerial dispersant application	Dedicated aircraft and gear for aerial dispersant application, helicopters, spotter aircraft, dispersant**
	Surface dispersant application	Vessel spray system, vessels able to deploy dispersant, aerial support, dispersant
	Containment and recovery	Booms, large capacity skimmers, deployment vessels, aerial support, tracking buoys
	In-situ burning	Fire retardant booms, barges, support vessels, smoke monitoring devices
C: BEYOND THE IMMEDIATE SOURCE AREA – OFFSHORE	Aerial and surface dispersant application	<i>As above</i>
D: FURTHER FROM THE SOURCE AREA – NEAR SHORE	Aerial and surface dispersant application	<i>As above</i>
	Containment and recovery	<i>As above</i>
E: SHORELINE	Protection	Inshore booms, inshore skimmers.
	Clean-up	Heavy machinery, manual equipment, large manpower resources, oiled wildlife response***

Note:

- * Monitoring of the spill occurs for all stages of the response and in some cases might be the only response needed if the environmental effect is seen to be minor. Monitoring and natural depredation may be more of a viable option than in-situ burning. Also, new technology response tools, such as biotechnology, will continue to develop over the life-span of this strategy.
- ** A dispersant must be approved under Marine Protection Rule, Part 132, before it can be used to contain or clean up an oil spill in New Zealand waters.
- *** Oiled wildlife response may be initiated as part of C and D and would include collection of oiled wildlife, hazing, and reconnaissance.

Offshore oil spill response is a demanding discipline where the adverse operating environment (weather and sea conditions), deployment distances, and technical and logistical challenges can combine to reduce the effectiveness of available response techniques. Given these factors, the government wants to ensure the best possible prevention measures are in place and that response capabilities operated by government are focused on the most effective solutions available.

Offshore oil and gas well control

The regulatory framework for oil exploration and production in New Zealand is based on international best practice and comprises a multi-stage system covering permitting, health and safety, environmental considerations, and response planning (including loss of well control). The focus is on hazard mitigation and preventing spills from occurring and ensuring operators have plans and resources in place to minimise the likelihood and reduce the effect of any adverse event.

Globally the petroleum exploration and production industry is constantly adapting and reconstructing its approach to managing offshore oil pollution risks. Regulators are working together internationally to help improve global oil pollution preparedness and determine the appropriate level of oil spill preparedness within their jurisdictions.⁴⁴

It is a fundamental principle in New Zealand and overseas that preventing an oil spill and maintaining or recovering well control is the responsibility of the operator. They have the resources, expertise, and proximity to maintain or re-establish control, and the means to ensure local and global resources are on call and available when they are required. All operators must produce to the government detailed plans of how they will maintain and regain control of a well and respond to an oil spill.

During a loss of well control incident resulting in a release from the seabed, well interventions including activating blowout preventers, introduction of subsea dispersant injection and well control, either through capping systems or relief well drilling, are the responsibility of industry. The industry plans and activities would be closely overseen and monitored for the government by Maritime NZ, who would call on the arrangements it has made for independent expert advice on this highly technical matter (for example, Boots and Coots – Singapore).

Incident management (command, control, and coordination) of the incident resulting from a worst case scenario would be complex, demanding, and of a large scale. Ultimately, the incident would be resolved successfully, but possibly over a long time. The Act provides the Director of Maritime NZ with extensive powers to oversee and control the industry response as well as the mandate for the national oil spill response effort. A full government crisis management effort would be essential, including input from multiple departments and agencies and extensive cross-government coordination.

Comprehensive marine oil spill contingency plans are in place, for industry and for the government. Industry would respond initially and immediately using resources identified in their approved contingency plans. For a large scale spill, Maritime NZ would activate the extensive arrangements in the national plan, immediately deploying response capability based in New Zealand and at the same time activating international support arrangements.

Maritime NZ would work in the context of existing government crisis management systems and processes including being situated in the National Crisis Management Centre, with local Emergency Coordination Centres as required, and the involvement of the Cabinet Committee on Domestic External Security Coordination, the Officials Committee for Domestic and External Security Coordination, and watch groups, while also drawing on the resources of the National Response Team – a nationally coordinated structure and capability that is in place and ‘ready to go’ in an oil spill incident. Organised volunteer involvement may also be a feature of a large-scale response event (as it was after the Christchurch earthquakes and the **Rena** incident).

44 For example, see the International Offshore Petroleum Environmental Regulators (www.ioper.org).

Appendix E: Maritime NZ's relationship with other agencies

Table 5: Agencies Maritime NZ uses in a maritime incident, including a marine oil spill, and whether arrangements are formalised in a memorandum of understanding

GOVERNMENT DEPARTMENTS AND REGIONAL COUNCILS	MEMORANDUM OF UNDERSTANDING WITH MARITIME NZ THAT INCLUDES MARITIME INCIDENT RESPONSE
Department of Conservation	No – however can provide services relating to the coastal environment, access to any existing volunteer networks, and advice and assistance with wildlife (marine mammals), marine reserves and the conservation estate.
Department of Internal Affairs	Yes – on provision of interpretation and translation services in support of both the response and investigation teams.
Department of the Prime Minister and Cabinet	No – used primarily in an advisory capacity.
Environmental Protection Authority	Yes – to provide expert advice.
Ministry for Primary Industries	Yes – to access the National Biosecurity Capability Network (NBCN) and the National Aquatic Biodiversity Information System (NABIS), and to provide expert advice and resources.
Ministry for the Environment	No – used primarily in an advisory capacity.
Ministry of Business, Innovation, and Employment	Yes – used primarily in an advisory capacity.
Ministry of Civil Defence and Emergency Management	No – but inter-agency note on ability to access administration and financial services people and to give depth to infrastructure support in a Tier 3 response.
Ministry of Foreign Affairs and Trade	Yes – used primarily in an advisory capacity.
Ministry of Health	Yes – on public health advice at national and regional levels, including the opening and closing of beaches when pollution has the potential to affect public health.
Ministry of Justice	No – used primarily in an advisory capacity.
Ministry of Social Development	Yes – on the engagement of job brokers to source and hire paid responders, welfare coordination and Enhanced Task Force Green.
Ministry of Transport	No – but inter-agency note to provide strategic and financial expertise during a significant incident, and coordination of whole of government liaison activities.
New Zealand Customs Service	Yes – to provide information used for charging maritime safety charges and oil pollution levies.
New Zealand Defence Force	Yes – to provide New Zealand Defence Force assets (Royal New Zealand Navy, New Zealand Army, and Royal New Zealand Air Force) to undertake and support response operations.

GOVERNMENT DEPARTMENTS AND REGIONAL COUNCILS	MEMORANDUM OF UNDERSTANDING WITH MARITIME NZ THAT INCLUDES MARITIME INCIDENT RESPONSE
Fire and Emergency New Zealand	Yes – to provide advice (particularly dealing with hazardous substances), assistance and support to response operations, including access to their mobile information technology and communication units and hazardous materials vehicles.
New Zealand Police	Yes – to assist and support response operations and provide specialist support to the incident investigation team.
Regional Councils	Yes – with each regional council for the utilisation of council resources and staff for Tier 3 marine oil spill readiness and response.
Te Puni Kōkiri	Yes – but a potential MoU on assisting with iwi engagement and relationship management is under discussion.
WorkSafe New Zealand	No – used primarily in an advisory capacity, but an MoU is under development.
OTHER AGENCIES	FORMAL ARRANGEMENT WITH MARITIME NZ
Australian Maritime Safety Authority	Yes – for support and assistance from personnel during an oil spill response and participation in training and exercising.
Boots and Coots	Yes – contract for advice and support around well control during an offshore oil rig spill.
London Offshore Consulting Pte Ltd	Yes – contract for independent salvage advice and support, particularly the technical feasibility and acceptability of all salvage plans submitted by salvors and the monitoring of all wreck removal operations.
National Institute of Water and Atmosphere (NIWA)	Yes – to provide pre-pollution site assessment (establishment of environmental baselines), monitoring activities, rapid environmental surveys, specialist scientific advice, and support to response operations.
Oil Spill Response Ltd	Yes – Associate Agreement to provide access to OSR resources (equipment and advice on preparing for and responding to oil spills).
Wildbase Oil Response, Massey University	Yes – contract to provide a response to avoid, remedy or mitigate any detrimental impacts on wildlife during an oil spill response and train a regional network of responders.

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