

## Four International Maritime Environmental Conventions/Protocols

A DISCUSSION PAPER FOR PUBLIC COMMENT November 2007 DISCUSSION DOCUMENT



#### MINISTERIAL FOREWORD

New Zealand has demonstrated its commitment to being a good international citizen by becoming party to a number of international maritime conventions/protocols which promote safety and good environmental practice.

As a coastal national that depends on sea trade, New Zealand benefits from international agreements that regulate shipping.

The four international maritime environmental conventions/protocols discussed in this document have been promulgated by the International Maritime Organization. They provide global mechanisms for addressing and responding to the risk of pollution from spills of hazardous and noxious substances, and establish liability and compensation regimes to ensure that those who may be impacted by maritime incidents such as spills of bunker oil are quickly and fairly compensated for their economic loss or environmental damage.

The purpose of this discussion document is to set out the facts concerning the potential costs and benefits of New Zealand becoming party to these international conventions/protocols. I encourage your input and submission which will help us assess whether the conventions/protocols are in New Zealand's best interests.

Hon Harry Duynhoven

**Minister for Transport Safety** 

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#### INFORMATION FOR PERSONS MAKING SUBMISSIONS

We would like to know what you think about the issues raised in this discussion document. When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of an organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

Submissions in relation to this discussion paper are invited from all interested parties. Submissions will be considered in the development of policy recommendations to the government, along with legislative changes necessary to implement the obligations contained in any of the conventions/protocols.

To aid respondents in making submissions, a discussion document response template can be found in Appendix 1. This template can be downloaded from the Ministry of Transport website, <a href="www.transport.govt.nz/4conventions">www.transport.govt.nz/4conventions</a>, and emailed to <a href="mailto:4conventions@transport.govt.nz">4conventions@transport.govt.nz</a>. It is not necessary to provide written copies of e-mail submissions.

You may also post your hard copy submission to:

Attention: David Weinstein Ministry of Transport PO Box 3175 WELLINGTON 6140

#### The closing date for submissions is 19 December 2007.

Submissions or comments provided to the Ministry of Transport on this discussion document will be subject to the Official Information Act (OIA) 1982. The OIA requires information to be made available unless there is good reason, pursuant to the Act, to withhold the information.

If you want information that you provide to be treated as confidential, please clearly identify the material and why you wish the information to be withheld.

The Ministry of Transport is offering stakeholders the opportunity to meet with officials to clarify any issues and answer any questions pertaining to this discussion document. The Ministry will be arranging sessions in Christchurch, Wellington and Auckland to meet interested stakeholders. If you wish to take up this opportunity, please email seaadmin@transport.govt.nz or ring (04) 439 9095.

#### **EXECUTIVE SUMMARY**

As an island nation surrounded by the world's largest ocean and with a heavy reliance on shipping for our international trade, New Zealand has a strong interest in the effective regulation and peaceful management of international shipping which passes through New Zealand waters. New Zealand has shown its commitment to being a good international citizen by becoming party to a number of international maritime conventions/protocols which promote safety and good environmental practice.

The discussion document outlines the general process for government consideration of international conventions/protocols. The document examines the background, risks, legislative implications, and potential costs and benefits of New Zealand becoming party to each of four international maritime environmental conventions/protocols promulgated by the International Maritime Organization.

The following table identifies the four conventions/protocols under consideration, a brief description, and some key points raised in the body of the paper.

#### **EXECUTIVE SUMMARY: FOUR CONVENTIONS/PROTOCOLS**

Name	International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 ( <b>Bunkers Convention</b> )
Description	The Bunkers Convention establishes a liability regime for damage from bunker oil spills. The regime consists of strict but limited liability for shipowners and requirements for compulsory insurance to cover that liability.
Key Points	Strict liability would speed the process for obtaining compensation payments for bunker oil spills, and encourage greater compliance and care for environmental protection amongst potential polluters.
	The potential costs imposed by the Bunkers Convention are limited as many of the requirements of the Convention are already met by New Zealand domestic law.
Name	Protocol of 1996 to amend the International Convention on the Limitation of Liability for Maritime Claims 1976 ( <b>LLMC Protocol</b> )
Description	The LLMC Convention 1976 sets out the shipowners' right to limit their liability in respect of various types of maritime claims. The LLMC Convention also identifies conduct that will bar a limitation claim, the formula for calculating the limits of liability and the unit of account to be used. The 1996 LLMC Protocol significantly increases the liability limits for compensation established by the LLMC Convention, whose values have been eroded by inflation.
Key Points	Claimants would receive more appropriate levels of compensation.
	Most affected ships will already be insured at the higher amounts specified by the Protocol. Therefore the costs of compliance with the Protocol are not significant.
Name	Protocol Relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil 1973, as amended (Intervention Protocol)
Description	The Intervention Protocol affirms the rights of coastal states to take measures on the high seas to protect their coastlines and other interests from pollution by substances other than oil.
Key Points	The benefits of early intervention for New Zealand include the possible minimisation of health and injury risks to those on board a stricken vessel and the potential to prevent serious harm to wider public health and the environment.
	The potential costs imposed by the Intervention Protocol are limited as many of the requirements of the Protocol are already met by New Zealand domestic law.
	There is a small potential risk of increasing the liability of the government if intervention measures taken were found to be in contravention of the Protocol. This risk could be minimised by conducting appropriate consultations with the affected parties.

Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances 2000 (**OPRC-HNS Protocol**) Name The OPRC-HNS Protocol establishes national and regional measures for preparing and Description responding to maritime pollution spills from hazardous and noxious substances (HNS) other than oil. **Kev Points** Becoming party to the OPRC-HNS Protocol would help ensure that New Zealand is adequately prepared for, and capable of, responding to major spills of HNS in New Zealand waters. The ability to provide an effective response to an HNS incident has a number of benefits to New Zealand which include reducing or avoiding risks to public health and the environment, providing greater safety and security for those on a stricken vessel, other maritime traffic and those ashore. A rapid and effective early response could result in reducing or preventing a major catastrophic incident. Preliminary estimates of the costs of implementing the Protocol are in the order of \$2 million in one-off capital and \$2.5 million in annual ongoing costs. These costs could be met in a number of ways, including general or more targeted levies on vessels.

#### INTRODUCTION

- 1. This discussion paper considers whether New Zealand should become party to four multilateral maritime environmental conventions/protocols administered by the International Maritime Organization (IMO) (for a summary of the conventions/protocols considered, please refer to the Executive Summary on pages 5–6).
- 2. This document seeks your views on whether it is in New Zealand's best interests to become party to these international environmental conventions/protocols.
- 3. Once the submission process has been completed and the results have been analysed, the Ministry of Transport will forward a National Interest Analysis to Government, along with advice on whether New Zealand should become party to any, or all, of the conventions/protocols.
- 4. If Government agrees to proceed with becoming party to one or more of the conventions/protocols, then appropriate legislation must be drafted. Amendments to the Maritime Transport Act 1994 and possibly other primary legislation, as well as subsequent Rules or Regulations may be required. A draft Bill to implement the provisions of the convention(s)/protocol(s) would be introduced in the House of Representatives following Select Committee consideration of the National Interest Analysis and text of the conventions/protocols. Once implementing legislation is in place, New Zealand would deposit the instrument(s) with the IMO Secretariat to become party to each of the respective conventions/protocols. If the relevant convention/protocol is already in force (LLMC Protocol, Intervention Protocol, OPRC-HNS Protocol), New Zealand would become bound by the provisions of the convention/protocol three months later. If the relevant convention/protocol is not yet entered into force (Bunkers Convention), New Zealand would become bound by the provisions of the convention/protocol once it enters into force.
- 5. A related international maritime environmental convention, the International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004 (Ballast Water Convention 2004) is the subject of a separate discussion document issued by Biosecurity New Zealand (Biosecurity NZ). For further information and to make a submission with your views on whether New Zealand should become party to the Ballast Water Convention, contact Biosecurity NZ or visit their website at: <a href="http://www.biosecurity.govt.nz">http://www.biosecurity.govt.nz</a>.
- 6. The Ministry of Transport is also consulting on a discussion paper on Port and Harbour and Navigation Safety Management (closing date for submissions is 19 December 2007), which could also lead to amendments to the Maritime Transport Act. Information on how you can make a submission on this discussion paper can be found at the Ministry of Transport's web site, www.transport.govt.nz/portandharbour.

#### **BACKGROUND**

## INTERNATIONAL MARITIME ORGANIZATION (IMO) AND INTERNATIONAL MARITIME ENVIRONMENTAL CONVENTIONS/PROTOCOLS

- 7. The International Maritime Organization (IMO) is a United Nations agency with 167 Member States and three Associate Members. The IMO coordinates the development, negotiation and ratification of international maritime conventions/protocols. New Zealand is an active member of the IMO and has become party to a number of international maritime safety and environmental conventions/protocols.
- 8. Some key international maritime environmental conventions/protocols that New Zealand is party to are:
  - the International Convention for the Safety of Life at Sea (SOLAS) and Protocols
  - the International Convention for the Prevention of Pollution From Ships 1973, as modified by the Protocol of 1978 (MARPOL 73/78) and some of their Annexes
  - the International Convention on Civil Liability for Oil Pollution Damage 1969 (CLC 1969).
- 9. Three conventions/protocols that New Zealand is already party to are the direct precursors to those under consideration in this paper. They are:
  - International Convention on Oil Pollution Preparedness, Response, and Co-operation 1990 (OPRC Convention 1990), which relates to preparedness and response to oil spills
  - International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution
    Casualties 1969 (Intervention Convention 1969), which gives powers to state parties to intervene on
    ships that pose a risk of oil pollution
  - Convention on Limitation of Liability for Maritime Claims, 1976 (LLMC Convention 1976), which limits the liability of shipowners and salvors against claims for loss of life or personal injury, or damage to property incurred from the activity of ships.
- 10. Appendix 2 is a glossary with a brief description of key IMO environmental conventions/protocols. Appendix 4 contains a table of all of the IMO conventions/protocols that New Zealand is party to.
- 11. If New Zealand agrees to become party to the LLMC Protocol and/or the OPRC-HNS Protocol, it would be bound by any future amendments to those protocols that are adopted under the procedure of 'tacit acceptance'. Tacit acceptance occurs when a state becomes bound by a treaty or amendments to a treaty without stating consent. This procedure has been employed since the mid-1970s by the IMO as a way to reduce the time it takes for technical amendments to IMO conventions/protocols to enter into force. For example, the LLMC Protocol establishes a tacit acceptance procedure for amendments to the financial limits set for claims covered by the Protocol. If an amendment is adopted by a two-thirds majority of the parties of the convention/protocol, it will enter into force 18 months after notification by the IMO unless one quarter of the parties object to the amendment during the intervening period. The OPRC-HNS Protocol establishes a tacit acceptance procedure for technical amendments to the appendices to the Protocol. Such amendments will enter into force for those parties that have not objected to the amendment. This is after a period to be determined by the Marine Environment Protection Committee at the time of authorisation.

## WHY IS NEW ZEALAND CONSIDERING BECOMING PARTY TO THESE INTERNATIONAL CONVENTIONS/PROTOCOLS?

- 12. New Zealand chooses to become party to international maritime conventions/protocols because:
  - New Zealand wants to be a good international citizen and play its equal role among maritime trading nations
  - New Zealand helps to combat sub-standard shipping (thus reducing the risk of safety and
    environmental incidents) by supporting global efforts to ensure all ships meet high safety and
    environmental standards and carry adequate liability insurance. By exercising effective flag and port
    state control, New Zealand is part of an effort that makes it difficult for sub-standard ships to operate
    internationally
  - conventions lead to improved standards of operation for all ships, and they also lead to better quality shipbuilding. These both improve the overall standards of environmental performance, which reduces the risk of marine pollution
  - as a trading nation that imports and exports large quantities of goods by sea shipping, New Zealand
    obtains economic benefits from the universal rule of law established by international maritime
    conventions/protocols. These rules promote commerce and trade by standardising regulations and
    requirements of ships in most ports they visit.

- 13. New Zealand is considering becoming party to the conventions/protocols in this paper for the following specific reasons.
  - Bunkers Convention Application of the Convention's rules in New Zealand would align our
    maritime law with that of other trading jurisdictions. This would provide certainty for international
    shipping and promote efficiency in the market for liability insurance. Becoming party would
    safeguard the interests of those parties that may suffer loss or damage from bunker oil pollution.
  - LLMC Protocol Becoming party to the Protocol would lift the current limits of liability, which have been eroded by inflation, and streamline the process for any future adjustments to the limits.
  - Intervention Protocol Becoming party to the Protocol would affirm New Zealand's right under
    international law to intervene on the high seas following a maritime casualty causing pollution or the
    threat of pollution from hazardous substances, and therefore potentially reduce the risk of a spill of
    hazardous substances impacting on New Zealand's interests.
  - OPRC-HNS Protocol The risk and number of accidents that result in actual or potential releases of
    hazardous and noxious substances (HNS) is increasing. While New Zealand has well-established
    plans for responding to oil spills, our capacity to respond to an HNS spill at sea is still very limited.
    Becoming party to the OPRC-HNS Protocol would require New Zealand to develop improved
    response capability, to prevent, limit the extent of, and reduce the impacts of HNS incidents.

#### HOW THE CONVENTIONS/PROTOCOLS APPLY TO SHIPS VISITING NEW ZEALAND

14. The top seven flag states for ships visiting New Zealand are Panama, China (including Hong Kong), Liberia, Barbados, Cyprus, Marshall Islands, and Antigua & Barbuda (refer to Illustration 1).

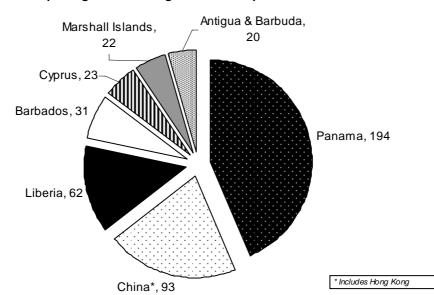


Illustration 1: Top 7 flag states visiting New Zealand ports in 2006

<sup>&</sup>lt;sup>1</sup> Flag state refers to that authority under which a country exercises regulatory control over the commercial vessel which is registered under its flag. This involves the inspection, certification, and issuance of safety and pollution prevention documents.

These countries have signed few of the conventions/protocols relevant to this document as shown in Table 1.

Table 1: International maritime conventions/protocols signed by top 7 flag countries visiting New Zealand ports				
Nation	Intervention Protocol	LLMC Protocol	OPRC/HNS Protocol	Bunkers Convention
Antigua & Barbuda				
Barbados	Х			
China	Х			
Cyprus		X		Х
Liberia	Х			
Marshall Islands	Х	X		
Panama				

15. The top five countries of final departure for ships prior to arriving in New Zealand are Australia, Japan, Singapore, Fiji and the United States (refer to Illustration 2). Foreign ships that come to New Zealand need to comply with international maritime conventions/protocols that other countries they visit are party to. Those ships that have come from Australia will already have had to meet the requirements for the Intervention Protocol, LLMC Protocol and the OPRC-HNS Protocol, and those from Japan and Singapore will have had to comply with two of the conventions/protocols under discussion (refer to Table 2).

Illustration 2: Top 5 countries of final departure for ships prior to arriving at New Zealand ports in 2006

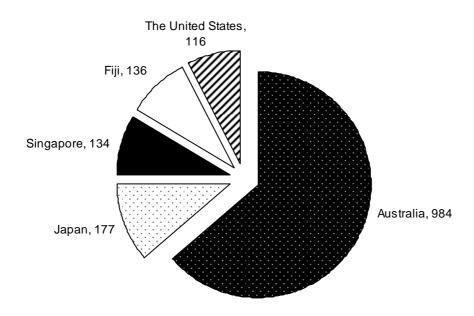


Table 2: International maritime conventions/protocols signed by top 5 countries of final departure for ships prior to arriving at New Zealand ports				
Nation	Intervention Protocol	LLMC Protocol	OPRC/HNS Protocol	Bunkers Convention
Australia	X	X	Х	
Fiji				
Japan		Х	Х	
Singapore			Х	Х
United States	Х			

16. As more countries become party to these conventions/protocols, ships that do not comply with convention/protocol requirements are finding it more difficult to trade internationally.

#### STRATEGIC GOVERNMENT PERSPECTIVE

17. Government has outlined four key themes of economic transformation, environmental sustainability, national identity, and families young and old. The conventions/protocols being considered give particular effect to two of these themes.

#### **ECONOMIC TRANSFORMATION**

18. Transportation of goods by sea is critical to the economic growth and wellbeing of New Zealand. The international shipping routes that service New Zealand carry 99.75 percent by weight of all of our exports (87 percent of exports by value). About 22 million tonnes of exports and 19 million tonnes of imports move through New Zealand ports each year.

#### **ENVIRONMENTAL SUSTAINABILITY**

- 19. While the number of oil spill incidents in New Zealand remains low, an ever-present risk of pollution by oil or hazardous substances exists from ships visiting and transiting through New Zealand waters.
- 20. The conventions/protocols being considered aim to:
  - provide an international framework that assists maritime commerce
  - minimise environmental risk of marine pollution
  - provide a robust international liability and compensation system in the event of a serious incident.
- 21. The environmental aims of the four conventions/protocols are also aligned with the environmental principles that support the government's developing Oceans Policy.

## EVALUATION AND ASSESSMENT CRITERIA FOR BECOMING PARTY TO CONVENTIONS AND PROTOCOLS

- 22. In 2002, the Government introduced the New Zealand Transport Strategy (NZTS) with the aim of ensuring that New Zealand will have an affordable, integrated, safe, responsive and sustainable transport system by 2010. The NZTS aims to assist economic development, improve safety and security, enhance access and mobility, promote and protect public health and ensure environmental sustainability.
- 23. To consider whether the four conventions/protocols outlined in this discussion document are in the best interests of New Zealand, the NZTS objectives will form the basis of assessment criteria for evaluating the advantages and disadvantages of each of the conventions/protocols.<sup>2</sup>

In making any marine protection rules, the Minister or the Director...shall have regard to, and shall give such weight as he or she considers appropriate in each case to, the following:

(a) the need to

(i) protect the marine environment

(ii) maintain and improve maritime safety

(ab) whether the proposed Rule

(i) assists economic development

(ii) improves access and mobility

(iii) promotes and protects public health (iv) ensures environmental sustainability

(b) The recommended international practices of the International Maritime Organization relating to protection of the marine environment

(c) The costs of implementing measures for which the Rule is being proposed

(d) The risk to the marine environment if the proposed Rule is not made.

<sup>&</sup>lt;sup>2</sup> Section 392 of the Maritime Transport Act Section 392 defines the following criteria to be taken into account in making marine protection rules:

#### NZTS ASSESSMENT CRITERIA

Assisting economic development	Does the convention/protocol create greater certainty for business across different jurisdictions? Will it reduce barriers to trade? Will it facilitate international commerce? Will it minimise or reduce the risk of property damage or economic loss from a maritime pollution incident?
Ensuring safety and security	Does the convention/protocol provide a safer and/or more secure maritime environment?
Promotes and protects public health	Will the convention/protocol help minimise harm to public health and wellbeing? Will it reduce the likelihood of harmful substances being released into the environment with potential consequences for human health?
Ensuring environmental sustainability	Will the convention/protocol help prevent or minimise marine pollution? Will the convention/protocol help to preserve the marine ecosystem and ensure that it is passed on to subsequent generations without degradation?

- 24. Three types of costs can be identified in bringing into effect the new international conventions/protocols.
- 25. The first is the cost borne by government in considering the new conventions/protocols, i.e. the policy work and the resources required to prepare for, and bring in new legislation required by the conventions/protocols. These costs are generally considered part of the role of government agencies, and therefore are borne out of existing resources within the Ministry of Transport, Maritime New Zealand (Maritime NZ), Parliamentary Counsel Office, etc.
- 26. The second set of costs are those that will fall directly on government agencies, such as Maritime NZ, for measures such as the resourcing of preparedness and response exercises for the OPRC-HNS Protocol, or the development of a National Plan for responding to HNS maritime incidents. This may also apply where another agency is contracted to perform a task or service on behalf of Maritime NZ. For example, under the OPRC-HNS Protocol, the New Zealand Fire Service may be required to initiate new training for their staff to respond to HNS incidents in a maritime environment. They would seek to recover their costs, either directly from government, or by charging for their services under contract to Maritime NZ.
- 27. Thirdly, shipping companies, shipowners and ports will incur compliance costs such as developing HNS emergency plans.
- 28. Some of these costs have already been met, or are largely being met by service providers due to similar or overlapping requirements imposed by existing legislation, domestically or internationally. A discussion on funding implications options for funding the implementation of the OPRC-HNS Protocol (should New Zealand agree to become party to the Protocol) can be found in the section on Funding Implications and Mechanisms.
- 29. The issues of assessing costs and benefits of becoming party to the conventions/protocols have been determined using the following parameters:

#### PARAMETERS FOR ASSESSING COSTS AND BENEFITS

Benefit and cost assessment	What is the cost of implementing the convention? Are the costs outweighed by the benefits?
Equity/polluter pays principle	Does the party who creates the pollution incident bear the costs of cleanup and recompensing those parties who have suffered personal, property or economic loss?

30. Therefore, a matrix can be outlined for assessing and evaluating the conventions/protocols as follows:

#### MATRIX FOR ASSESSMENT OF CONVENTION/PROTOCOL

Assessment criteria	Become party to convention/protocol
Assisting economic development	
Promotes and protects public health	
Ensuring environmental sustainability	
Improves safety and security	
Benefit and cost assessment	
Equity / polluter pays principle	

31. In evaluating whether New Zealand should maintain the status quo or become party to the convention, the convention/protocol can be assessed against the status quo as *strengthening*, *weakening* or *no difference/no change*.<sup>3</sup>

## INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR BUNKER OIL POLLUTION DAMAGE, 2001 (BUNKERS CONVENTION)

#### **EXPLANATION OF THE CONVENTION**

- 32. Bunker oil is the oil used in the propulsion of a ship (as opposed to oil carried as cargo, as in oil tankers).
- 33. The Bunkers Convention was adopted by the IMO in 2001 to create a liability and compensation regime for bunker oil spills from ships that are not oil tankers. The Bunkers Convention will enter into force internationally 12 months after 18 states (including five states with ships whose combined tonnage is not less than 1 million) have adopted the Convention. To date, 15 states have adopted the Convention.
- 34. The objective of the Convention is to ensure adequate, prompt and effective compensation is available to a person<sup>4</sup> who suffers economic loss or environmental damage caused by pollution of the marine environment from bunker oil.
- 35. The Bunkers Convention makes the shipowner strictly liable for the damage that results from bunker oil that escapes from the ship (ie the shipowner is liable regardless of fault). To claim compensation, a person who suffers damage would not need to prove fault on the part of the shipowner.
- 36. Subject to some exceptions, the Convention applies to loss or damage caused outside a ship by contamination resulting from the escape or discharge of bunker oil into the territory including the territorial sea and Exclusive Economic Zone (EEZ) of a state party. It also covers the costs of preventative measures taken to minimise damage from bunker oil discharge.
- 37. Under the Convention, compensation is available for costs of reasonable measures undertaken (or to be undertaken) of reinstatement for damage to the environment.
- 38. The Convention requires owners of ships of flag states to carry compulsory insurance for pollution damage. Such insurance, or other financial security, is required in respect of ships of 1000 gross tonnage or more, up to the limits of the Civil Liability Convention (an explanation of the Civil Liability Convention can be found in Appendix 2).

<sup>&</sup>lt;sup>3</sup> It would also be theoretically possible to make changes to domestic law to meet the requirements of the convention/protocol without becoming party. This paper has only analysed the advantages and disadvantages of becoming party. In our assessment of each convention/protocol, there is no additional benefit in implementing the convention/protocol without becoming party.

becoming party.

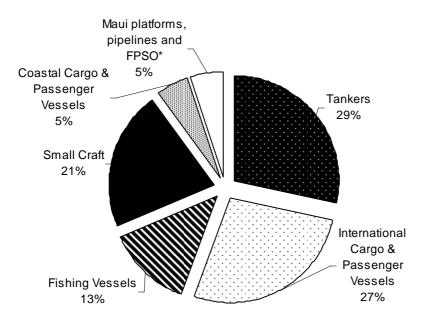
4 "Person" means any individual or partnership or any public or private body, whether corporate or not, including a state or any of its constituent subdivisions.

- 39. The Bunkers Convention does not apply to oil pollution damage (from oil tankers) to which the Civil Liability Convention applies.
- 40. The Bunkers Convention would introduce the limitation of liability for polluters responsible for bunker oil spills, using the limits established in the LLMC Convention. The adoption of the LLMC Protocol (discussed later in this document) would increase the liability limits under the Bunkers Convention accordingly.

#### WHAT IS THE PROBLEM?

- 41. Almost all large ships use oil for propulsion and the risk of a bunker oil spill is present, to some extent, for all countries with coastal and overseas trade served by ships.
- 42. In New Zealand the three largest response operations of the last 10 years (costing some five million dollars) have all involved bunker oil and visiting foreign ships. Illustration 3 shows the sources of marine oil spills.

Illustration 3: Source of spills in New Zealand



Source: New Zealand marine oil spill risk assessments 2004 \*FSPO stands for Floating Production, Storage and Offtake Facility

#### WHAT ARE THE RISKS?

- 43. New Zealand has taken action to reduce the risk of spills from oil tankers by signing a number of IMO conventions/protocols (including the Intervention Convention and OPRC Convention). A major spill from an oil tanker could have significant consequences. However, while the consequences would be great, the relative risk is low as few large tankers operate in New Zealand waters.
- 44. Shipping, largely provided by overseas-based carriers, traverses large parts of the coast and ventures into or near a number of areas with significant environmental and economic values. These vessels carry hundreds of tonnes of bunker oil fuel. A spill incident involving the release of such fuel could have significant economic and environmental impacts, and it can be argued that the risk of such an incident is currently the most significant marine pollution risk in New Zealand waters.
- 45. Without the Bunkers Convention, any person or entity suffering loss from a bunker oil spill must go through a complex and time consuming process in local and international courts to seek compensation. The Convention was developed in the late 1990s following difficulties in resolving liability following significant bunker spills, and establishes the principle of 'strict liability' and the ability to take action against the insurer directly. Thus, the risk of not becoming party to the convention/protocol is one of potential financial exposure for parties affected by an incident.

### TO WHAT DEGREE IS NEW ZEALAND ALREADY COMPLYING WITH THE PROVISIONS OR INTENT OF THE CONVENTION?

- 46. New Zealand has already anticipated elements of the Convention. Marine protection rules made under the Maritime Transport Act 1994 already require certain ships to have liability cover for bunker oil spills. These Rules, made in 2005, were motivated by groundings of large ships in or near New Zealand harbours in 2002, and concerns about the fiscal risk should these ships not have insurance to pay for substantial oil spill response costs.
- 47. Under Section 363 of the Maritime Transport Act 1994, and the Maritime Transport (Certificates of Insurance) Regulations 2005, regulated ships of 400 gross tonnage or more, entering New Zealand waters, are already required to hold indemnity insurance which would cover bunker oil spills.
- 48. The Bunkers Convention requires that state parties have a robust certificate issuance system, maintain adequate electronic records of such certificates, and have a mechanism for reporting and notifying the IMO of the particulars of ships in certain circumstances.
- 49. New Zealand already has an existing certificate issuance and reporting system, which was recently reviewed by the IMO. New Zealand has advised it will be implementing improvements to this reporting system based upon the IMO review.

#### WHAT NEW OBLIGATIONS WOULD THE CONVENTION IMPOSE AND ON WHOM?

- 50. The administrative and reporting requirements under the Bunkers Convention are largely met under existing domestic law and only minimal changes to administrative procedures would be required to comply with the Convention.
- 51. New legislation would be required to ensure that courts have jurisdiction to hear claims and to allow the recognition and enforcement of foreign judgments.
- 52. Domestic legislation would need to be revised to ensure that it aligns with the liability regime required under the Convention.
- 53. In respect of New Zealand ships and foreign ships in New Zealand territorial waters of 1000 gross tonnage or more, New Zealand would need to ensure that its domestic legislation is aligned with the Convention so that:
  - registered owners have insurance or other financial security to cover their liability under the Convention
  - certificates of insurance, issued by a state party, are carried on board ships to verify that insurance exists.
- 54. The Convention gives the option to state parties of extending its requirements to warships. New Zealand would need to determine whether the Convention would apply to warships and other government ships on non-commercial service.
- 55. Convention requirements must be applied to government-owned ships on commercial service. The government may, in respect of state-owned ships, comply with the compulsory insurance provisions of the Convention, or self-insure.
- 56. If New Zealand government-owned ships did not maintain insurance (or other financial security) to cover liability under the Convention, the government would be obliged to:
  - guarantee the liability of such ships
  - ensure that government-owned ships have certificates of guarantee issued by an appropriate state authority
  - ensure that an appropriate state authority is tasked with certifying such certificates of guarantee
  - enable recognition of final judgments from courts in other state parties in respect of Convention claims
  - ensure that New Zealand courts have jurisdiction to entertain actions for Convention claims
  - allow compensation actions to be brought only in the courts of a state party where pollution damage occurred, or where preventive measures were taken.

#### **OPTIONS AND ANALYSIS**

#### Option 1 Maintain the status quo and not become party to the Convention

New Zealand has the choice of keeping our domestic law as it is. The current Maritime Transport Act anticipates elements of the Bunkers Convention and requires insurance to be held for certain ships.

#### Option 2 Become party to the Convention

58. Under this option, New Zealand would become party to the Bunker Convention and align its domestic legislation and practices to meet the requirements of the Convention.

Table 3: Assessment of becoming party to Bunkers Convention against strategic objectives		
Assessment criteria	Impact of becoming party to convention	
Assisting economic development	Strengthens. The Convention provides greater assurance to industries impacted by bunker oil spills. The entitlement to limit liability (based on ship size) creates certainty for business and makes for efficiency in insurance markets because the upper limit of potential liability is a known quantity. The Convention mechanism will facilitate and speed up affected parties obtaining compensation payments from insurers.	
Promotes and protects public health	No difference.	
Ensuring environmental sustainability	Strengthens. The Convention clarifies the strict liability for polluters. This can encourage greater compliance and care for environmental protection by shipowners.	
	The Convention provides funding for restitution of the marine environment. The definition of pollution damage goes beyond property damage and economic loss to cover harm to the environment valued for its ecosystem services, amenities, existence and what will be passed on to subsequent generations.	
Improves safety and security	No difference.	
Benefit and cost assessment	Neutral or no difference (refer to Table 4).	
Equity/polluter pays principle	Strengthens. The Convention expedites the claims process, provides assurance to victims and limits the financial burden to government.	
	Under the Convention a claim may be made against the insurer. This is a significant benefit if the shipowner is unable, because of insolvency, or limited assets (it may be a one ship company) to make good any claims.	

#### Table 4: Qualitative cost-benefit assessment of becoming party to the Bunkers Convention

#### Potential costs

#### To the New Zealand government:

There would be no significant implementation cost to the government since New Zealand has a compulsory public indemnity insurance requirement.

#### To the shipping industry:

If the level of payouts increases over time, there may be some adjustments in insurance premiums (especially for shipowners with poor performance).

There may be a small cost of obtaining an extra Certificate of Insurance.

#### To the insurance sector:

If the Convention increases the number and the amount of claims, there may be an increase in insurance premiums to cover an increased level of payments (but subject to the limits set under LLMC Convention or Protocol). But any change should be treated as a liability transfer between shipowners and insurers. In aggregate terms, these liabilities are collectively met by shipowners through insurance premiums.

#### To the import and export industry:

Any potential impact on freight charges would be very small to negligible. Again this is a transfer payment not a direct cost.

#### Potential benefits

#### Financial:

The Convention may simplify the claim procedures and thus reduce the legal and court costs to claimants and shipowners.

The Convention could minimise the problems associated with cost recovery (thus reduce financial burden to the government). If more costs are recovered from foreign ships, this is a national benefit. If the costs are from domestic ships, this is counted as a transfer payment.

#### **Economic:**

The Convention ensures victims of bunker oil pollution will be compensated by an insurer. This reduces the uncertainty faced by the affected industries (including commercial fisheries and aquaculture).

Innocent parties who happen to be in harm's way and suffer property or economic loss are not out of pocket.

The Convention is a comprehensive package of uniform rules across different jurisdictions covering most, if not all, foreseeable issues in dealing with liability and compensation for bunker oil spill pollution damage. Benefits include time limits for bringing a suit, the choice of forum in which to hear claims, and enforcement of judgements in New Zealand and other jurisdictions.

#### **Overall comment:**

Though there may be some minor cost implications to the government and shipowners, becoming party to the Convention can reduce the inefficiency and uncertainty associated with insurance liability.

#### **QUESTIONS**

- Should we become party to the Convention? If yes, why? If not, why?
- Are there other costs to industry of becoming party? What would be the additional costs of compliance?

# PROTOCAL OF 1996 TO AMEND THE INTERNATIONAL CONVENTION ON THE LIMITATION OF LIABILITY FOR MARITIME CLAIMS 1976 (LLMC PROTOCOL)

#### **EXPLANATION OF THE PROTOCOL**

- 59. The 1976 International Convention on the Limitation of Liability for Maritime Claims (LLMC Convention) was adopted by the IMO in 1976 and came into force internationally in December 1986. New Zealand implemented the LLMC Convention through Part VII of the Maritime Transport Act 1994 (MTA). The Convention was later amended by the 1996 Protocol, which came into force in May 2004.
- 60. The main purpose of the LLMC Protocol 1996 is to provide enhanced compensation liability limits. The limits are being increased substantially to take account of the erosion by inflation of the value of the limits set in 1976 by the LLMC Convention. The increased liability under the Protocol reflects the increased costs of loss or damage that may be caused while, at the same time, providing a limit on the liability of the shipowner.
- 61. The enhanced limits introduced by the LLMC Protocol are set out in Tables 5, 6 and 7.

TABLE 5: LLMC Protocol - Schedule of revised liability limits for claims for loss of life or personal injury (Note: liability limits are in 'units of account'5) Size of ship in tons 1976 LLMC Convention 1994 Maritime Transport Act 1996 LLMC Protocol 300 or less 166,677 units of account 2.000.000 units of 333,000 units of account account 301-500 as above 333,000 units of account as above plus 500 for each ton from 501-3,000 plus 500 for each ton from plus 800 for each ton 501-3,000 501-3,000 from 2,001-30,000 3,001-30,000 plus 333 for each ton from plus 333 for each ton from as above 3,001-30,000 3,001-30,000 30,001-70,000 plus 250 for each ton from plus 250 for each ton from plus 600 for each ton 30,001-70,000 30,001-70,000 from 30.001-70.000 In excess of 70,000 plus 167 for each ton in plus 167 for each ton in excess plus 400 for each ton in excess of 70,000 of 70,000 excess of 70,000

TABLE 6: LLMC Protocol – Schedule of revised liability limits for other claims (Note: liability limits are in 'units of account')			
Size of ship in tons	1976 LLMC Convention	1994 Maritime Transport Act	1996 LLMC Protocol
300 or less	167,000 units of account	83,333 units of account	1,000,000 units of account
301-500	as above	167,000 units of account	as above
501-30,000	plus 167 for each ton from 501-30,000	plus 167 for each ton from 501-30,000	plus 400 for each ton from 2,001-30,000
30,001- 70,000	plus 125 for each ton from 30,001-70,000	plus 125 for each ton from 30,001-70,000	plus 300 for each ton from 30,001-70,000
In excess of 70,000	plus 83 for each ton in excess of 70,000	plus 83 for each ton in excess of 70,000	plus 200 for each ton in excess of 70,000

<sup>&</sup>lt;sup>5</sup> As at 19 October 2007 each unit of account had a value of about NZ\$2.07

TABLE 7: LLMC Protocol – Schedule of revised liability limits for passenger claims (Note: liability limits are in 'units of account')		
1976 LLMC Convention <sup>6</sup>	1996 LLMC Protocol	
46,666 units of account multiplied by the number of passengers the ship is authorised to carry but not exceeding 25 million units of account	175,000 units of account multiplied by the number of passengers which the ship is authorised to carry	

#### **BACKGROUND**

- 62. The 1976 LLMC Convention established a set of uniform rules relating to the limitation of liability for maritime claims against shipowners and salvors replacing the International Convention Relating to the Limitation of the Liability of Owners of Seagoing Ships, which was signed in Brussels in 1957, and came into force in 1968. Under the LLMC Convention, persons entitled to limit their liability are:
  - shipowners, including the owner, charterer, manager and operator of a seagoing ship
  - salvors and any person rendering services in direct connection with salvage operations.
- 63. The main claims subject to limitation under the LLMC Convention are:
  - claims in respect of loss of life or personal injury
  - claims in respect of loss resulting from delay in the carriage by sea cargo, passengers or their luggage.
- 64. The LLMC Convention sets out the rules and conduct for limiting the liability of claims. The limits of liability under LLMC Convention are determined as follows:
  - limits for loss of life or injury to a passenger are based on the number of passengers the ship is certified to carry
  - for other claims the limit of liability is on a sliding scale based on the gross tonnage of the ship.

#### WHAT IS THE PROBLEM?

65. The LLMC Convention entered into force in 1986. Since that time inflation has significantly eroded the value of the Convention limits. The LLMC Protocol significantly increases the amount of compensation payable in the event of an incident in line with inflation. It also introduces the 'tacit acceptance' procedure for updating these amounts. This means that, in future, amounts can be raised with a given date for entry into force after consideration and adoption by the IMO Legal Committee, providing a specified number of objections are not received.

#### WHAT ARE THE RISKS?

66. If New Zealand does not ratify the LLMC Protocol, claimants in New Zealand courts would be disadvantaged in any successful action against a shipowner. Any assessment of liability would be based on the lower limits found in the LLMC Convention.

## TO WHAT DEGREE IS NEW ZEALAND ALREADY COMPLYING WITH THE PROVISIONS OR INTENT OF THE PROTOCOL? WHAT OBLIGATIONS WOULD THE PROTOCOL IMPOSE AND ON WHOM?

- 67. New Zealand is complying with the provisions and intent of the Convention. The LLMC Convention was implemented into New Zealand law as a schedule in Part VII of the Maritime Transport Act 1994. The Protocol would simply extend the existing compensation thresholds. The LLMC Protocol would also cover claims made under the Bunkers Convention, if New Zealand were to become party.
- 68. No new obligations would be imposed on the government by becoming party to the LLMC Protocol. Those who are potentially liable under the LLMC Convention are also liable under the Protocol. Shipowners will presumably seek to insure their increased liability. This is usually done through Protection and Indemnity Clubs (P&I) who provide mutual liability insurance cover to their members.

<sup>&</sup>lt;sup>6</sup> The Maritime Transport Act 1994 applies the same limits for passenger claims

- 69. For New Zealand to implement the Protocol an amendment to Part VII, Section 87 of the Maritime Transport Act 1994 would be required.
- 70. New Zealand may choose to exclude claims for pollution by HNS substances, which would otherwise be subject to the liability limits of the Protocol.

#### **OPTIONS AND ANALYSIS**

#### Option 1 Maintain the status quo and not become party to the Protocol

71. This option poses no changes to the current New Zealand position.

#### Option 2 Become party to the Protocol

72. This option would require changes to domestic law to align liability levels with the LLMC Protocol revised amounts.

TABLE 8: Assessment of LLMC Protocol against strategic objectives		
Assessment criteria	Impact of becoming party to convention	
Assisting economic development	Strengthens. The Protocol provides claimants with compensation which more accurately reflects their losses.	
Promotes and protects public health	No difference.	
Ensuring environmental sustainability	No difference.	
Improves safety and security	No difference.	
Benefit and cost assessment	Strengthens. The benefits of claimants receiving equitable compensation are significant. There is likely to be minimal or no impact on insurance premiums.	
Equity/polluter pays principle	Strengthens. The LLMC Protocol limits ensure that successful claimants receive compensation that reflects current costs.	

#### Table 9: Qualitative cost-benefit assessment for becoming party to the LLMC Protocol

Potential costs

#### To the New Zealand government:

No additional cost

#### To the shipping industry:

Shipowners of most foreign vessels already hold insurance which will cover the higher liability limits under the LLMC Protocol, and they therefore would be unlikely to incur additional compliance costs. If the total payouts increase, there may be some adjustment in insurance premiums (especially for shipowners with poor performance).

#### To the insurance sector:

P&I Clubs base their premiums on the number of claims made in the year by members. The Protocol may result in an increase in the total payouts and some adjustment in insurance premiums. But any change should be treated as a liability transfer between shipowners and insurers. In aggregate terms, these liabilities are collectively met by shipowners through insurance premium.

The extent of impact on the industry will depend on the number of countries who become party to the Protocol.

#### To the import and export industry:

There could be a small impact on freight charges if the shipping industry wishes to pass on any additional costs to customers. However, the potential impact would be small to negligible. This is a transfer payment not a direct cost.

Potential benefits

#### **Economic:**

This Protocol ensures claimants of maritime incidents can obtain compensation that better reflects actual losses (especially for severe incidents such as those involving personal injuries). This reduces the uncertainty faced by the affected parties.

#### **Environmental:**

No direct impact on environmental effects.

#### Public health and safety & security:

No direct impacts on public health, safety and security.

#### **Overall comment:**

Currently New Zealand is already party to LLMC Convention. Becoming party to the LLMC Protocol will put our compensation limits in line with countries that have adopted the Protocol.

#### **QUESTIONS**

- Should New Zealand become party to the Protocol? If yes, why? If not, why?
- Are there other costs to industry of becoming party to the Protocol? What would be the additional costs of complying?
- Should New Zealand exclude claims for HNS pollution from the Protocol?

# THE PROTOCOL RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF POLLUTION BY SUBSTANCES OTHER THAN OIL 1973, AS AMENDED (INTERVENTION PROTOCOL)

#### **EXPLANATION OF THE PROTOCOL**

- 73. The Intervention Protocol allows a party to take intervention measures on the high seas to prevent, mitigate or eliminate danger to its coastline or other interests from pollution or the threat of pollution by harmful hazardous and noxious substances (HNS) other than oil after a maritime casualty.
- 74. The Intervention Protocol supplements the Intervention Convention by extending state powers of intervention to include incidents involving pollution by substances other than oil. In 1973, New Zealand signed the Intervention Protocol indicating its support and intention to ratify the treaty, but has yet to formally become party to the Protocol. The Intervention Protocol came into effect in 1983.
- 75. The substances covered by the Protocol are:
  - (a) oil carried in bulk (other than crude oil, fuel oil, diesel oil and lubricating oil)<sup>7</sup>
  - (b) noxious substances
  - (c) liquefied gases when carried in bulk
  - (d) radioactive substances
  - (e) any other substances that are liable to:
    - (i) create hazards to human health
    - (ii) harm living resources and marine life
    - (iii) damage amenities, or
    - (iv) interfere with other legitimate uses of the sea.
- 76. The Intervention Protocol allows measures to be taken against any manner of sea-going vessel and any floating craft (including state-owned ships on commercial service). The Protocol prohibits states from taking intervention measures against foreign warships and other state-owned ships on government non-commercial service. It does not apply to offshore installations.
- 77. Under the Intervention Protocol, New Zealand could exercise intervention powers only where a ship has suffered major damage and where there is a grave and imminent threat of harmful consequences to New Zealand's coastline, or related interests, from pollution.
- 78. The Intervention Convention 1969 permits a state to take proportionate measures to prevent, mitigate or eliminate grave and imminent danger of oil pollution to their coastline or related interests. These measures must cease as soon as this danger is averted. In taking action the state is obliged to avoid any risk to human health, afford assistance to any person in distress and facilitate the repatriation of ship's crew.
- 79. If a state takes intervention measures in contravention of the Intervention Convention, or exceeding what was reasonably necessary, the state would be required to pay compensation to the shipowner.
- 80. Before undertaking intervention measures, the Intervention Convention requires that the state consult with other states affected, the flag state of the vessel, and any person known to have interests that could be affected by those intervention measures. The state must also notify these parties after action has been taken. The state may consult with independent experts from a list maintained by the IMO.
- 81. When intervention measures are taken, the Intervention Convention requires a state to notify any affected states (including the flag state) and any affected parties, without delay. (This requirement is in addition to the requirement to consult before measures are taken.)
- 82. The Intervention Convention's obligations fall on the state. However, as a result of intervention, shipowners and individuals could be required to co-operate with a person taking intervention measures. Most ships affected by the Convention would be foreign owned and flagged.
- 83. The Intervention Protocol extends these obligations to HNS other than oil.
- 84. The Protocol allows amendments to the list of substances covered to be adopted by a two-thirds majority of the parties to the Protocol present and voting.

While the Protocol covers all oil carried in bulk, crude oil, fuel oil, diesel oil and lubricating oil are covered by the Intervention Convention.

#### **BACKGROUND**

- 85. The need for states to have powers to intervene on the high seas in cases in which a maritime casualty threatened their coastline was illustrated by the 1967 Torrey Canyon disaster, in which 120,000 tonnes of crude oil was spilled off the western coast of Cornwall.
- 86. The Intervention Convention was adopted in 1969 to allow states to intervene on the high seas in respect of oil pollution threats. New Zealand is party to the Intervention Convention.
- 87. In 1984, the United Nations Convention on the Law of the Sea (UNCLOS) recognised the right of states to take measures, pursuant to international law, to protect their coastline or related interests, from the threat of pollution following a maritime casualty. New Zealand is party to UNCLOS.

#### WHAT ARE THE RISKS?

- 88. The likelihood of a serious HNS incident occurring on the high seas (outside the EEZ) that poses a risk to New Zealand is low, but the potential consequences of such an event are unknown. If, for example, a major container vessel fire, or a major spill of a hazardous substance occurred in the sea outside of the EEZ, the most likely way of protecting New Zealand's waters and coast would be to keep the vessel outside of the EEZ.
- 89. The risk to New Zealand of HNS incidents is not adequately covered by current legislation, particularly if there is a risk on the high seas.
- 90. Becoming party to the Protocol would affirm New Zealand's right under international law to intervene in such instances and therefore provide more options to manage the risk of a spill of hazardous substances impacting on New Zealand's interests.

## TO WHAT DEGREE IS NEW ZEALAND ALREADY COMPLYING WITH THE PROVISIONS OR INTENT OF THE PROTOCOL?

- 91. New Zealand currently has provisions in Part 20 of the Maritime Transport Act that allow the Director of Maritime NZ to:
  - (a) declare a ship in New Zealand continental waters, a hazardous ship
  - (b) take measures in respect of that ship and its cargo
  - (c) order any ship in New Zealand continental waters to render assistance or assist in intervention measures.

#### WHAT NEW OBLIGATIONS WOULD THE PROTOCOL IMPOSE AND ON WHOM?

92. To give effect to the Protocol, minor changes to Part 20 of the Maritime Transport Act 1994 would be required which could extend the existing powers of the Director of Maritime New Zealand to intervene in cases of maritime casualties involving a risk from HNS. New procedures would need to be established regarding consultation with, and notification of, other parties. However these procedures would be the same as those required by the Intervention Convention.

#### **OPTIONS AND ANALYSIS**

#### Option 1 Maintain the status quo and not become party to the Protocol

- 93. Under this option, New Zealand would not ratify the Intervention Protocol.
- 94. New Zealand would continue to rely on provisions in Part 20 of the Maritime Transport Act.
- 95. Current domestic legislation permits intervention within the EEZ. This is probably the area of greatest risk to New Zealand's interests in the event of an HNS spill. Therefore domestic law already covers the circumstance of the greatest potential risk to New Zealand.

#### Option 2 Become party to the Protocol

96. Under this option New Zealand would make changes to domestic legislation to meet the requirements of the Protocol. Becoming party would affirm New Zealand's right in international law to intervene where risk of harm to assets or the environment is posed by substances other than oil.

Table 10: Assessment of Intervention Protocol against strategic objectives		
Assessment criteria	Impact of becoming party to convention	
Assisting economic development	No difference.	
Promotes and protects public health	Strengthens. Early state intervention may minimise the health and injury risks to those on board a stricken vessel. It could reduce the risk of a serious chemical spill that could impact on public health.	
Ensuring environmental sustainability	Strengthens. By intervening at the time of an incident, New Zealand would have more response options which could reduce the harm caused by pollution from an HNS incident. For example, a vessel could be directed further offshore, or other action could be taken to prevent the vessel spilling HNS in a sensitive area.	
Improves safety and security	Strengthens. Early intervention, providing more response options could provide greater safety and security for those on a stricken vessel, other maritime traffic and those ashore.	
Benefit and cost assessment	Strengthens. The benefits of becoming party to the Protocol relate to the potential to prevent significant damage to marine industries. This would outweigh any costs that might apply where New Zealand was judged to have acted prematurely or unnecessarily.	
	Consultation requirements will also ensure that New Zealand is consulted where intervention by other governments may affect our interests.	
Equity/polluter pays principle	No difference.	

#### Table 11: Qualitative cost-benefit assessment for becoming party to the Intervention Protocol

#### Potential costs

#### To the New Zealand government:

New Zealand is party to the Intervention Convention that applies to oil pollution. Therefore any additional implementation costs would be incremental and minimal.

There is a potential risk of increasing the liability of the government if the intervention measures taken are considered to be "contravention" of the Protocol. However, this risk could be minimised by conducting appropriate consultations with the affected parties.

#### To other industries:

No cost implication.

#### Potential benefits

#### **Economic:**

By providing more options for response to an incident, the Protocol may help to minimise the impacts of HNS spills that may threaten New Zealand's coastline which could have significant impacts on New Zealand businesses (including commercial fisheries, aquaculture and other coastal businesses).

The Protocol's dispute resolution mechanisms have the potential to save costs by limiting the need for recourse to court action to settle disputes.

#### **Environmental:**

The Protocol's requirement of consultation will help ensure the best response options are taken and taken early. This may reduce the harm caused by HNS spills at high seas that may threaten New Zealand's coastline.

#### Public health and safety & security:

State intervention can also minimise risk to health (and risk of injury) of those on board.

#### **Overall comment:**

The potential impacts of HNS spills at high seas on New Zealand's coastline are expected to be lower than that of spills within New Zealand waters. Since the additional implementation costs would be marginal but there are potential benefits from minimising such risk, in our opinion, it would be cost beneficial to become party to the Protocol.

#### **QUESTIONS**

- Should New Zealand become party to the Protocol? If yes, why? If not, why?
- Are there other costs to industry of becoming party to the Protocol? What would be the additional costs of complying?

# PROTOCOL ON PREPAREDNESS, RESPONSE AND CO-OPERATION TO POLLUTION INCIDENTS BY HAZARDOUS AND NOXIOUS SUBSTANCES 2000 (OPRC-HNS PROTOCOL)

#### **EXPLANATION OF THE PROTOCOL**

- 97. In 2000, the International Maritime Organization adopted the OPRC-HNS Protocol to establish preparedness and response measures for hazardous and noxious substances (HNS) incidents. The Protocol entered into force in June 2007.
- 98. The 2000 OPRC-HNS Protocol complements the 1990 OPRC Convention by establishing national and regional measures for dealing with pollution incidents from HNS (other than oil).
- 99. The OPRC-HNS Protocol requires parties to have systems in place for response to spills of HNS into the marine environment.
- 100. The Protocol includes requirements for national and shipboard contingency plans, access to appropriate equipment and expertise, as well as systems for international cooperation.
- 101. The Protocol does not apply to warships and other government ships on non-commercial service, however it specifies that each party shall ensure that these vessels act in a manner consistent with this Protocol.
- 102. The Protocol is not intended to address terrorist events.

#### **BACKGROUND**

- 103. HNS include a wide range of substances that could pose a hazard to human health or the environment, or have the potential to harm amenity values and other legitimate uses of the sea.
- 104. HNS can come in solid, liquid or gaseous form and might be transported by ships in bulk or packaged form. These include, but are not limited to Dangerous Goods (DGs) as defined in the International Maritime Dangerous Goods (IMDG) Code.
- 105. In 1990, the IMO adopted the International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC Convention) to establish preparedness and response measures for oil pollution incidents. New Zealand became party to the OPRC Convention in 1999.

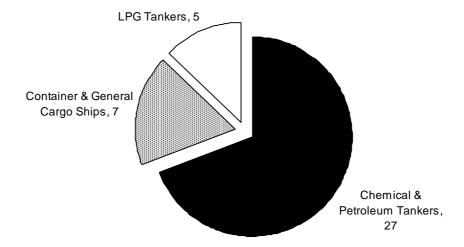
#### WHAT IS THE PROBLEM?

106. As a result of being party to the OPRC Convention 1990, New Zealand has a comprehensive national system for preparedness and response to marine oil spills. No similar comprehensive system exists for maritime incidents involving HNS.

#### WHAT ARE THE RISKS?

107. In 2006, there were 39 shipping incidents worldwide that resulted in reported HNS spills, with an average of 33 incidents a year during the period 2003–2006 (data from International Oil Pollution Compensation Funds, 2007). These incidents involved a range of vessel types and HNS cargoes, including chemical and petroleum tankers (27 out of 39 for 2006), container and general cargo ships (7) and LPG tankers (5).

Illustration 4: Vessels involved in HNS spills worldwide in 2006



- 108. The costs of response to, and damage resulting from, such incidents can be very high. In 2000, the chemical tanker levoli Sun sank in the English Channel. The cost of salvaging its cargo of approximately 6,000 tonnes of hazardous chemicals, in order to prevent environmental pollution, was approximately \$12 million Euro (\$NZ 18 million).
- 109. Almost all HNS imported to or exported from New Zealand travel by sea, with the import trade dominating. With the exception of liquefied natural gas (LNG), New Zealand sees all of the above types of vessels and HNS cargoes. Hence there is the potential for a similar type and scale of incident to occur within New Zealand waters.
- 110. Based on risk assessment data from 2006, it is estimated that about 2 percent of all containers contain some dangerous goods. A detailed discussion of the assessment of risks posed by the carriage of HNS by sea in New Zealand with further detail on quantities of the HNS materials trade can be found in Appendix 6.
- 111. With Australia and Japan signatories to the OPRC-HNS Protocol, a significant percentage of foreign ships visiting New Zealand ports already have shipboard HNS emergency plans, as they will have just visited an Australian or Japanese port which requires that they comply with the Protocol.

## TO WHAT DEGREE IS NEW ZEALAND ALREADY COMPLYING WITH THE PROVISIONS OR INTENT OF THE PROTOCOL?

- 112. New Zealand is party to the MARPOL Convention 1973/1978. Rules made under the Maritime Transport Act 1994 give effect to MARPOL through design and operational standards for preventing pollution from oil, noxious liquid substances and harmful substances in packaged form.
- 113. Port companies are currently required by Part 24A of the maritime rules to have emergency plans for HNS, but there are currently no clear models available for guidance regarding these plans. Vessels carrying HNS are also subject to certain guidance clauses such as notification of cargoes carried and delivery conditions. These are haphazardly followed.
- 114. The New Zealand Fire Service (NZFS) is generally the first responder to HNS incidents on land, and a regionally-based framework of Hazardous Substances Technical Liaison Committees (HSTLCs) (headed by the regional Fire Services) exists for coordinating and providing advice in response to such incidents. These HSTLCs are voluntary informal networks with membership including regional council staff and local chemical industry representatives. They meet irregularly, but are available to provide advice in the event of an incident.
- 115. While they are often called on to respond to maritime incidents due to their expertise in dealing with HNS, the NZFS has no legal responsibility to tackle maritime emergencies.

#### **CASE STUDY - 1973 PARNELL CHEMICAL LEAK**

In February 1973, the motor vessel Good Navigator arrived at the Port of Auckland carrying, as deck cargo, 50 drums of the defoliant chemical tributyl phosphorotrithioite, destined for Sydney.

During a storm at sea two weeks earlier, a number of drums were damaged and some of the chemical leaked out. While berthed in Auckland, 25 of the drums were unloaded and were taken to overnight storage in Parnell. The following morning it was discovered that the drums were leaking, fuming and producing a smell that affected nearby residents.

The Fire Service and Police were called to deal with the leakage. The incident escalated into a state of civil emergency that remained in force for seven days. In all, 643 people were referred to hospital, with 53 admitted

A Commission of Inquiry into the Parnell Civil Defence Emergency was appointed to inquire into the matters and events surrounding the declaration of the civil emergency.

The inquiry resulted in:

- improved definition of "dangerous goods"
- better packaging
- · marking and labelling to indicate the correct name and class of the goods being carried
- better transport and storage requirements
- ships were required to carry a plan showing where dangerous goods were stowed.

The Fire Service Act (1972) was amended to clarify the authority, powers and responsibility of the NZFS to deal with such emergencies. It was recommended that Emergency Services Co-ordinating Committees (ESCC) under the chair of the Police and a sub committee, the Hazardous Substance Technical Liaison Committee (HSTLC), under the chair of the NZFS be formed.

The recommendations and resultant changes have seen legislative changes relating to labelling and transportation and storage of hazardous materials within New Zealand. The NZ Fire Service is now the lead agency for emergencies involving fires, accidents, spillages and leakage of hazardous materials.

Thirty years on, labelling, packaging and product knowledge is greatly improved. Hazardous materials/hazardous and noxious substances (HNS) would not be landed in New Zealand with little or no warning. Transportation and storage is better controlled. The emergency services and other agencies (Environmental Risk Management Authority, Ministry for the Environment, Maritime NZ, Civil Aviation Authority, Department of Labour, regional councils etc.) have clearer mandates and authority. Agencies subscribe to the Coordinated Incident Management System (CIMS) and make use of advisory groups and organisations.

However, the authority, powers and responsibility for dealing with an HNS incident in the maritime environment are not clear, in particular when any incident occurs on board a ship at sea. There is no clear mandate for any single organisation, or group of organisations, to collaborate to mitigate the effects of a HNS incident on board a ship at sea. Even if, by agreement, there were such a group, the financial outlay for establishment, training, maintaining readiness to respond and the recovery of costs is not provided for under existing provisions.

#### WHAT OBLIGATIONS WOULD THE PROTOCOL IMPOSE AND ON WHOM?

#### Legislative measures

- 116. To meet OPRC-HNS Protocol requirements, new domestic legislation would be necessary to:
  - designate a competent, responsible national authority and operational contact point for coordination, reporting to the IMO, cooperation on research and development, and support to other parties who require technical assistance
  - require that New Zealand has a national contingency plan, including detailed plans for coordinating and responding to a pollution incident, and communications capabilities
  - require that New Zealand vessels carrying HNS products have approved shipboard contingency plans
  - · require an inspection regime of foreign flagged vessels in New Zealand ports
  - prescribe HNS spill reporting requirements
  - require that ports and other HNS handling facilities have approved and maintained pollution incident plans
  - establish a prosecution regime.

#### **National HNS plan**

- 117. If New Zealand becomes party to the OPRC-HNS Protocol, a national contingency plan would be required to prevent or minimise HNS incidents. The development of any HNS Plan would need to take account of existing emergency management arrangements. These include the role of the Transport National Emergency Response Plan and the Transport Response Team in incidents with significant transport implications, and whole of government initiatives aimed at responding to risks from chemical, biological, radiological or explosive materials.
- 118. Operational capability would need to be developed to ensure New Zealand's HNS capability is adequate. Operational measures necessary to develop these response procedures will require training of response personnel, establishment of 24 hour communication capabilities, undertaking regular exercises and training courses, and review of HNS response plans. This national system would need to ensure clear lines of responsibility, delegation and interagency cooperation. Spill response procedures would need to be in place along with pre-positioned equipment, periodic exercising and trained personnel. Further elements required would include an inspection regime, education programs, a prosecution regime and a 'no blame' near-miss reporting regime.
- 119. A detailed outline of operational options is in Appendix 6. This sets out two alternative approaches. The first is a 3-Tiered response framework which mirrors the current oil spill model. The second is a two level response model based on minor and catastrophic incidents.

#### International arrangements

- 120. New Zealand would be required, as appropriate and within our ability to do so, to make arrangements with neighbouring states to cooperate and provide advisory services, technical support, and access to response equipment, personnel cargo and materials. New Zealand would also be required to co-operate on research and development related to preparedness and response. New Zealand would have response reporting obligations and would undertake to supply information as required to the IMO. These arrangements include the opportunity for New Zealand to be involved in and access international expertise and research.
- 121. Where there is international cooperation, the Protocol makes provision for cost recovery.

#### **OPTIONS AND ANALYSIS**

122. Options 1 and 2 below outline the choice of whether to become party to the OPRC-HNS Protocol. Further below are three structural options for implementation of the Protocol.

#### Option 1 Maintain the status quo and not become party to the Protocol

123. Under the status quo option, New Zealand would not ratify the OPRC-HNS Protocol. Based on the risk assessment information, government could decide to take measures to prepare and respond to HNS spills without becoming party to the Protocol. Alternatively, government could decide that the risks are not sufficient to warrant investment in preventative measures.

#### Option 2 Become party to the Protocol

124. Under this option New Zealand would become a full party to the Protocol, making legislative and operational changes to fully comply with the Protocol.

Table 12: Assessment of OPRC HNS Protocol against strategic objectives		
Assessment criteria	Impact of becoming party to convention	
Assisting economic development	Strengthens. The Protocol would help minimise the cost to marine business in case of an HNS incident and strengthen confidence in freight and transport.	
Promotes and protects public health	Strengthens. The ability to effectively respond to an HNS incident could reduce the seriousness of a chemical spill and reduce risks to public health.	
Ensuring environmental sustainability	Strengthens. There are substantial environmental benefits in the ability to take action against HNS threats to the New Zealand coastline.	
	The Protocol would provide an impetus for an improved response capability, which would limit the extent of, and reduce the impacts from, HNS incidents.	
	Information supplied to the IMO by state parties and access to international expertise and research will help New Zealand improve its own response capability. The Protocol also provides for international co-operation, permitting ready access to and movement of response equipment, personnel cargo and materials.	
Improves safety and security	Strengthens. An HNS response capability provides greater safety and security for those on a stricken vessel, other maritime traffic and those ashore. A national system of response preparedness would ensure clear lines of responsibility, delegation and interagency cooperation.	
Benefit and cost assessment	Uncertain. The cost of setting up and maintaining a HNS response capability is significant. If the improved response keeps a minor incident from becoming catastrophic, then potentially huge costs would be avoided. However, the likelihood of such an incident is very low and the ability to reduce the impact of a potentially catastrophic incident is limited.	
Equity / polluter pays principle	If those involved in the transport and importation of HNS (who generate the risk of an HNS spill incident) are levied to help fund ongoing preparedness and response costs, then this would improve equity and meet the polluter pays principle.	

#### Table 13: Qualitative cost-benefit assessment for becoming party to the OPRC-HNS Protocol

#### Potential costs<sup>8</sup>

Potential costs to the New Zealand government:

Capital and one-off costs to government for establishing a robust preparedness and response regime are estimated at \$2 million, comprising:

- costs of developing national contingency plans ~\$300,000
- costs of response equipment ~ \$1 million capital
- costs of developing response procedures ~ \$250,000
- additional communication capability costs ~ \$250,000
- information / technology resources ~ \$250,000.

Ongoing cost estimate is \$2.5 million annually, comprising:

- costs of maintaining national contingency plans ~ \$175,000
- human resources/personnel costs ~ \$750,000
- training costs ~ \$500,000
- costs of response exercises ~ \$300,000
- operational costs ~ \$750,000.

To cover the increase in ongoing operational costs, there may need to be a user pays levy. Such charges would be treated as a transfer payment.

#### Costs to the shipping industry:

Some domestic ships would have a one-off cost of about US\$3,000 - US\$5,000 to create an HNS emergency plan if they do not have one already. Most foreign ships would already be compliant with the Protocol in creating and maintaining spill response plans, maintaining on-board equipment and training of crew as these requirements are already required under the MARPOL 73/78 to which New Zealand is party.

#### Costs to ports and HNS handling facilities:

Ports and HNS handling facilities are expected to incur the costs of preparing and maintaining site contingency plans, including the training of personnel to respond to Tier 1 or Level 1 - minor incidents and some Tier 2 incidents (depending on the Operational Option preferred). In many cases, ports and HNS facilities will already have plans similar in nature as required under the RMA or HSNO legislation.

It is envisaged that government would lead the coordination and provision of specialist HNS maritime spill training for emergency services personnel and that local port staff would be invited to participate and benefit from such training.

Costs to regional/local government depend on which implementation option is selected. Costs will include staff time for training and staff response time involved in any HNS marine spill incident.

#### Costs to the import and export industry:

Any potential impact on freight charges (if the shipping industry passes on additional costs to customers) would be very small.

#### **Potential Benefits**

The Protocol would help improve the efficiency and effectiveness of international co-ordination and response to HNS spills and thus could help achieve the following potential benefits:

Access to expert international research, development and HNS spill response practice and technology. Access to practical assistance in the event of a major HNS spill.

#### Economic:

Help minimise negative effects on businesses (including commercial fisheries and aquaculture) and hence improve business confidence in freight transport.

<sup>&</sup>lt;sup>8</sup> If becoming party to this Protocol is supported, some audit work would be needed to examine the availability of resources and capacity across a number of government agencies, and more specifically regarding the New Zealand Fire Service. This would provide a more accurate indication of the cost to government of meeting the Protocol requirements. Therefore the costs outlined below are initial estimates only.

#### Environmental:

Help minimise the effects of HNS spills on the environment by responding on time with appropriate measures.

#### Public health.

Help reduce the harm caused by HNS spills (effects will depend on the type of spills being released to the environment).

#### Safety & security:

The requirements regarding contingency response plans and equipment will help improve the safety of personnel working on-board the ships, at ports and other HNS handling facilities.

#### **QUESTIONS**

- Should New Zealand become party to the OPRC-HNS Protocol? If yes, why? If not, why?
- What are the costs to industry of complying? Do you agree with the comments about costs, or are there costs not identified in this document that will fall on government and industry? What are they?

#### STRUCTURAL FRAMEWORKS FOR IMPLEMENTATION OF THE PROTOCOL

125. The Ministry has identified three possible alternative frameworks that could be employed to implement the Protocol should New Zealand decide to become party.

## Framework Option 1 – Expand the oil spill response framework into a marine pollution spill response framework

- 126. New Zealand currently has a robust oil spill response framework at the national level, with a dedicated oversight group (Oil Pollution Advisory Committee OPAC), a dedicated levy to fund a preparedness and response capability (about \$2.5m per year) and a network of trained regionally based responders, backed up by on-going training and pre-positioned equipment.
- 127. This framework could be expanded to form a marine pollution spill response capability, utilising the existing committee structure (which could become a Marine Pollution Advisory Committee or MPAC). New members would need to be brought in from the chemical industry. The levy would need to be expanded to cover HNS spills, and the MPAC, in association with Maritime NZ and others, would need to develop a national plan which incorporates both oil pollution response and HNS response.
- 128. The advantage of expanding the oil framework would be to draw upon an existing structure, expanding the current resources and mandate to develop a capability for response to HNS incidents. The command and control systems, in the event of an HNS spill, would be similar to that currently employed in an oil spill response, however a different and new network of HNS responders would need to be developed and trained.
- 129. A new marine pollution levy could be developed out of the existing oil pollution levy. This would include a wider cross-section of vessels.
- 130. The disadvantage of this option is that responding to an HNS spill is significantly different to responding to an oil spill. A completely new set of skills would be required, and the great majority of the existing oil spill equipment would be useless in responding to an HNS spill. Currently OPAC is an effective committee, but significantly expanding its role and introducing a new workload and memberships from a different industry could risk reducing its focus on funding oil spill response.

## Framework Option 2 – Mirror the oil spill response framework by creating a stand-alone HNS spill response framework

131. Option 2 would require the creation of a new organisational framework for responding to HNS spills. It could mirror the oil spill response framework, with the creation of an HNS Spill Advisory Committee (HNSSAC) and a separately targeted HNS levy to fund an ongoing preparedness and response capability. This would also include regular training, exercises and the purchase and upkeep of HNS spill response equipment.

132. A disadvantage of Option 2 is that as HNS spills can be infrequent, it could be difficult to maintain an effective organisational framework that is seldom called into action. It could also be seen as unnecessarily replicating most of the oil pollution framework, which might just as easily be dealt with by one unified administrative structure.

Framework Option 3 – Adapt and expand the land-based Hazardous Substances Technical Liaison Committee (HSTLC) framework into a regional and national maritime hazardous substances response framework

- 133. Option 3 utilises the existing land-based HNS response framework, and expands its structure and role to develop a capability for a marine-based HNS spill response. The HSTLCs, which are headed by the NZFS, have a national committee and regional HSTLC groups comprising local and Regional Council staff, representatives from the chemical industry and other local industries that use chemicals and hazardous substances.
- 134. The national HSTLC already has a member from Maritime NZ and could serve as the national advisory committee dealing with maritime HNS spill response, following the development of the skills and expertise relating to marine HNS spills. While this national group has expertise in chemical spill response, its membership and role would need to be significantly modified to take on the responsibility of preparedness and response to marine spills.
- 135. As the HSTLCs already have Regional Council representation, those councils who have ports or harbours within their geography are already likely to have a maritime environmental focus and capability, due to the increased number of hazardous material (land based) incidents that occur in these areas.
- 136. A disadvantage of Option 3 is that the HSTLCs, which are regionally based, vary in their strength from region to region. As voluntary advisory bodies, they could not necessarily be relied upon to spearhead the development of a robust HNS spill response network, as they do not currently have the necessary administrative resources.
- 137. HSTLCs have limited, or no capability or expertise in maritime response. They also have no existing networks in the shipping industry and would have difficulty developing and administering an HNS spill fund levy in that sector. Regional Councils may well object to taking on this role.

#### **QUESTIONS**

 Which of the three structural framework options do you support for leading the development and ongoing management of an HNS maritime spill preparedness and response capability?

#### **OPERATIONAL CONSIDERATIONS**

- 138. Separate from the type of structural framework employed to organise and administer the ongoing HNS maritime spill preparedness and response capability, is the question of how New Zealand should organise operational responses to HNS spill incidents. These operational considerations are important as they will identify the roles and responsibilities of different organisations and stakeholders, depending on the 'tier' or minor or catastrophic level of the response. They will also determine the resource requirements and costs for providing a real and robust preparedness and response capability.
- 139. Regional and District Councils, HNS contractors, the chemical industry, the NZFS, New Zealand Defence Forces, New Zealand Police, and government maritime response and regulatory agencies will be interested in the greater detail and mechanisms for responding to HNS spills. These groups will be consulted and provide key input into the development of a National HNS Maritime Spill Plan which will be required if New Zealand agrees to becomes party to the OPRC-HNS Protocol.
- 140. Appendix 6 details two suggested operational response options to an HNS maritime incident, with Option A mirroring the current oil spill model of a 3-tiered response, and Option B proposing a two level response model based on minor or catastrophic level incidents.

#### **QUESTIONS**

Which of the operational options discussed do you support and why?

#### **FUNDING IMPLICATIONS AND MECHANISMS**

- 141. The Ministry of Transport's analysis of the four conventions/protocols in this paper indicate that only one, the OPRC-HNS Protocol, would involve significant costs to either government or industry. The Bunkers Convention and LLMC Protocol are liability regimes for foreign ships that will, in virtually all cases, already have in place the insurances required to meet the convention's requirements. Similarly, with the Intervention Protocol there are not expected to be any new measures involving additional cost to industry or government. Therefore, the following discussion of funding mechanisms refers to meeting the costs of the OPRC-HNS Protocol.
- 142. If New Zealand becomes party to the OPRC-HNS Protocol, there will be new one-off and ongoing costs involved in implementation (refer to Table 13).

#### OPTIONS FOR FUNDING IMPLEMENTATION OF THE OPRC-HNS PROTOCOL

143. Options for resourcing the one-off and ongoing costs of bringing into effect the OPRC-HNS Protocol are outlined below.<sup>9</sup>

#### 144. Direct government funding to Maritime NZ

Government may agree to provide new monies to Vote Transport – Maritime NZ for the one-off costs of establishing the Protocol. They may also agree to new additional ongoing funding to Maritime NZ for carrying out the ongoing activities required by the Protocol. This would require a new budget bid for consideration by Government.

#### 145. Cost recovery through user pays levy

All maritime users and the general public would benefit from reducing the risk and impact of marine pollution from HNS spills. Therefore, an argument can be mounted for a cost recovery mechanism that captures a range of vessel types and maritime users, as an equitable mechanism for obtaining revenue for HNS spill prevention. Funding options 1, 2 and 3 below could follow this broad based user-pays approach. However, it could be argued that small recreational boating users pose little or no risk of causing an HNS spill and therefore should not be subject to a levy.

- 146. Option 4 sets out an alternative approach, with a levy specifically targeted at only those vessels that carry HNS goods and therefore are responsible for creating the risk that the Protocol addresses.
- 147. In addition to appropriate targeting, an important consideration is that the charging mechanism be relatively easy to administer at a low cost. Some targeted mechanisms may be too costly to administer, given the revenue sought.

## FOUR OPTIONS FOR TARGETING AND COLLECTING HNS SPILL PREPAREDNESS AND RESPONSE COSTS FROM MARITIME USERS

#### 148. Funding Option 1: Expand Oil Pollution Levy to marine pollution levy

When the OPRC Convention was implemented in New Zealand, an Oil Pollution Advisory Committee was established and an Oil Pollution Levy created to provide an ongoing fund for preparedness and response to maritime oil spills. This levy generates about \$2.5m per year towards the costs of oil pollution preparedness. This is targeted at ships that carry oil as cargo and those with substantial amounts of bunker oil.

- 149. As there is already an established mechanism for levy collection, one option for funding the OPRC-HNS Protocol is to expand the scope of the oil pollution levy to encompass HNS spills as well as oil spills in a marine pollution levy. If this option was supported, the targeting and formula for the existing levy would need to change, as would the role and membership of the Oil Pollution Advisory Committee.
- 150. Funding Option 2: Marine Safety Charge to include new environmental levy component

  Maritime NZ already gains significant user pays funding through a Marine Safety Charge. In a similar way
  that all maritime users benefit from the services provided by a Marine Safety Charge, all maritime users
  would also benefit from the environmental protection services of the Protocol. Therefore this option
  proposes that a new component of the Marine Safety Charge be added reflecting the ongoing costs of
  carrying out the Protocol. This would therefore increase the Marine Safety Charge amount, through an
  identifiable environmental levy sub-component charge.

<sup>&</sup>lt;sup>9</sup> Note that the Ministry of Transport and Maritime New Zealand are currently reviewing possible changes to the Marine Safety Charge. This work is limited to existing activities.

#### 151. Funding Option 3: Separate stand alone environmental levy

A third option is to create a new, stand alone, environmental levy, separate to but along similar lines as the Oil Pollution Levy.

152. This new 'environmental levy' would be specifically for gathering revenue to fund the OPRC-HNS Protocol, but could also be used (now or in the future) as a mechanism for funding other environmental services, or, for example, the Ballast Water Convention which is currently under consideration by Biosecurity NZ. A separate administrative mechanism would need to be set up for planning, oversight, targeting, collection and reporting on the levy. This could be in the form of a Marine Pollution Advisory Council (again, mirroring the Oil Pollution Advisory Council). The Council would decide on the levy amount and agree to disbursements of the fund for ongoing and one off activities and measures (e.g. reimbursements arising from an HNS spill incident). A Marine Pollution Advisory Council would rely on advice from Maritime NZ's Marine Pollution Response Centre regarding what preparedness measures, new equipment, training and exercises were required.

#### 153. Funding Option 4: Separate stand alone HNS levy

A further option is to create a new stand alone levy mechanism specifically to gather revenue for HNS response and preparedness. It would be narrowly targeted solely at shipping lines/vessels that carry HNS and receivers who import (and/or use) HNS.

#### **QUESTIONS**

- If New Zealand decides to become party to the OPRC-HNS Protocol, which of the means of funding the Protocol do you support?
  - 1. Direct government funding
  - 2. User pays levy
- Of the four user pays funding mechanisms described, which would you support and why?
  - 1. Expand Oil Pollution Levy to marine pollution levy
  - 2. Marine Safety Charge to include new environmental levy component
  - 3. Separate stand alone environmental levy
  - 4. Separate stand alone HNS levy

# **LIST OF APPENDICES**

- 1. International Maritime Environmental Conventions Discussion Document Response Template
- 2. Glossary of Maritime Abbreviations, Terms and IMO Conventions/Protocols
- 3. Website Links for Conventions/Protocols Treaty Text
- 4. List of International Maritime Conventions/Protocols New Zealand has Become Party to
- 5. OPRC HNS Protocol Risk Assessment
- 6. OPRC-HNS Protocol Operational Options

# **APPENDIX 1: INTERNATIONAL MARITIME ENVIRONMENTAL CONVENTIONS/ PROTOCOLS – DISCUSSION DOCUMENT RESPONSE TEMPLATE**

The template below is suggested for your feedback and comments on the discussion document.

David Weinstein, Ministry of Transport Postal address: PO Box 3175, WELLINGTON 6140 Email address: 4conventions@transport.govt.nz
Or, for more information contact: 04 439 9350

The closing date for submissions is 19 December 2007.

## **SUBMISSION FORM**

Name of Submitter	
Contact details (Address, phone, email)	
Are you submitting as an individual or on behalf of an organisation?	Individual/On behalf of an organisation
Organisation you represent (if on behalf of an organisation)	
Official Information Act 1982 disclosure Your submission may be subject to disclosure under the Official Information Act 1982. Persons making submissions that include commercially or otherwise sensitive material that they wish the Ministry to withhold under the Act should clearly identify the relevant information and the applicable grounds under which the Ministry could withhold the information.	
Is this information commercially or otherwise sensitive?	OK to disclose/Sensitive material - please do not disclose
Do you wish your comments to be disclosed publicly?	OK to disclose/Please do not disclose
If you are an individual, do you wish your identity to be disclosed?	OK to disclose/Please do not disclose

# QUESTIONS SOUGHT FOR COMMENT – SUGGESTED SUBMISSION TEMPLATE

Convention/Protocol	Should we become party?	Why/Why not? Comments
Bunkers Convention		
LLMC Protocol		
Intervention Protocol		
OPRC-HNS Protocol		
Issue	Comment	
Are there other costs in becoming party? What are they?		
OPRC-HNS Protocol:		
Which structural option do you prefer?		
OPRC-HNS Protocol:		
Which operational option do you prefer?		
OPRC-HNS Protocol:		
How should implementation be funded?		
OPRC-HNS Protocol:		
Which user pays funding mechanism do you support/prefer?		

# APPENDIX 2: GLOSSARY OF MARITIME ABBREVIATIONS, TERMS AND IMO CONVENTIONS/PROTOCOLS

#### **COMMON ABBREVIATIONS**

CLC - International Convention on Civil Liability for Oil Pollution Damage, 1969

DG code - Dangerous Goods code

EEZ - Established Economic Zone

FPSO - Floating Production, Storage and Offtake Facility

HNS - Hazardous and Noxious Substances

HNSAC - Hazardous and Noxious Substances Advisory Council

HSTLC - Hazardous Substances Technical Liaison Committee

IMDG Code - International Maritime Dangerous Goods Code

IOPC Fund - International Oil Pollution Compensation Fund

ITOPF - International Tanker Owners Pollution Federation

LLMC Convention - Convention on Limitation of Liability for Maritime Claims, 1976

LNG - Liquefied Natural Gas

LPG - Liquefied Petroleum Gas

MARPOL - The International Convention for the Prevention of Pollution from Ships

MPAC - Marine Pollution Advisory Council

MTA - The Maritime Transport Act, 1994

New Zealand Marine Oil Spill Risk Assessment, 2004

nm - Nautical Mile

NZFS - New Zealand Fire Service

NZDF - New Zealand Defence Force

NZTS - New Zealand Transport Strategy

ODESC - Officials Domestic and External Security Committee

OPAC - Oil Pollution Advisory Council

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

P&I Clubs - Protection and Indemnity Clubs

RMA - Resource Management Act, 1991

RoRo - Roll on, Roll off vessels

SOLAS - International Convention for the Safety of Life at Sea, 1974

TEUs - Twenty-foot Equivalent Units

#### **COMMON TERMS**

Combination carrier – A bulk carrier that is designed to carry a number of different cargoes in separate tanks or holds

Flag state - The state in which a vessel is registered

Gross Tonnage - The entire internal cubic capacity of the ship expressed in tons of 100 cubic feet to the ton

High Seas - International Waters

Nautical Mile - A nautical mile is a unit of distance equal to 1,852 metres

Strict Liability - responsibility for the damage and loss caused by acts and omissions regardless of culpability

#### INTERNATIONAL TREATIES AND CONVENTIONS

#### **Ballast Water Convention 2004**

International Convention for the Control and Management of Ship's Ballast Water and Sediments. The Ballast Water Convention was adopted by an international conference in 2004.

#### **Civil Liability**

Convention International Convention on Civil Liability for Oil Pollution Damage and Protocol of 1992 to amend CLC. The Civil Liability Convention was adopted to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from maritime casualties involving oil-carrying ships.

The Convention places strict liability for such damage on the owner of the ship from which the polluting oil escaped or was discharged.

The Convention requires ships to maintain liability insurance cover in the event of an incident.

1992 Protocol widened the scope of the Convention to cover pollution damage caused in the EEZ. Environmental damage compensation is limited to costs incurred for reasonable measures to reinstate the contaminated environment. It allows expenses incurred for preventive measures to be recovered even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage.

The Protocol also extended the Convention to cover spills from sea-going vessels constructed or adapted to carry oil in bulk as cargo so that it applies to both laden and unladen tankers, including spills of bunker oil from such ships.

## **Intervention Convention**

International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969. The Intervention Convention gives powers to state parties to intervene in the decisions about ships that pose a risk of oil pollution.

#### **LLMC Convention**

1976 convention on Limitation of Liability for Maritime Claims. The LLMC Convention limits the liability of shipowners and salvors against claims for loss of life or personal injury, or damage to property incurred from the activity of ships.

#### **MARPOL 73/78**

MARPOL 73/78 is the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. MARPOL is short for marine pollution and 73/78 short for the years 1973 and 1978. MARPOL 73/78 is one of the most important international marine environmental conventions/protocols. Its stated aim is to preserve the marine environment through the complete elimination of pollution by oil and other harmful substances and the minimization of accidental discharge of such substances. MARPOL has a number of Annexes focused on specific pollution issues:

- Annex I Oil
- Annex II Noxious Liquid Substances carried in Bulk
- Annex III Harmful Substances carried in Packaged Form
- Annex IV Sewage
- Annex V Garbage
- Annex VI Air Pollution.

New Zealand is party MARPOL Annexes I, II, III, and V.

#### **OPRC Convention 1990**

International Convention on Oil Pollution Preparedness, Response, and Co-operation 1990. The Convention requires that states have a comprehensive national system for preparedness and response to marine oil spills. New Zealand is party to the OPRC Convention 1990.

#### **SOLAS**

International Convention for the Safety of Life at Sea is concerned with the safety of ships at sea.

The main objective of the SOLAS Convention is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. Flag states are responsible for ensuring that ships under their flag comply with its requirements. A number of certificates are prescribed in the Convention as proof that this has been done.

New Zealand became party to SOLAS in 1990.

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

UNCLOS is often described as a "constitution for the oceans". It sets out a comprehensive regime for the law of the sea, covering such matters as territorial sea limits, navigational rights, the legal regime applying to the 200 nautical mile limit of the EEZ and the continental shelf, the high seas and the legal status of resources of the deep seabed outside the limits of any nation's jurisdiction, passage of ships through narrow straits, conservation and management of fisheries, the protection and preservation of the marine environment, marine scientific research, the transfer of marine technology and dispute settlement procedures. Over 150 states are party to UNCLOS and many aspects of its provisions are widely regarded as reflecting customary international law so that they are legally binding on all states.

New Zealand played an active role in the negotiations of both UNCLOS, and became party to the Convention on 19 July 1996.

# APPENDIX 3: WEBSITE LINKS FOR CONVENTIONS/PROTOCOLS TREATY TEXT

**Bunkers Convention** 

http://www.austlii.edu.au/au/other/dfat/treaties/notinforce/2002/25.html

LLMC Protocol

http://www.admiraltylawguide.com/conven/protolimitation1996.html

Intervention Protocol

http://sedac.ciesin.org/entri/texts/intervention.high.seas.casualties.protocol.1973.html

**OPRC-HNS Protocol** 

http://www.austlii.edu.au/cgi-

bin/disp.pl/au/other/dfat/treaties/notinforce/2003/9.html?query=hazardous%20noxious%20liability

# **APPENDIX 4: LIST OF INTERNATIONAL MARITIME** CONVENTIONS/PROTOCOLS TO WHICH NEW ZEALAND IS PARTY

KEY:

x = New Zealand is party d = denounced<sup>10</sup>

# **Table A: International Maritime Conventions** wontions to which Now Zoaland is narty

	Conventions to which New Zealand is party								
X	IMO Convention 48	d	FUND Convention 71						
X	IMO amendments 91		FUND Protocol 76						
X	IMO amendments 93	X	FUND Protocol 92						
X	SOLAS Convention 74		FUND Protocol 2003						
X	SOLAS Protocol 78		NUCLEAR Convention 71						
X	SOLAS Protocol 88		PAL Convention 74						
	Stockholm Agreement 96		PAL Protocol 76						
X	LOAD LINES Convention 66		PAL Protocol 90						
X	LOAD LINES Protocol 88		PAL Protocol 02						
X	TONNAGE Convention 69	X	LLMC Convention 76						
X	COLREG Convention 72		LLMC Protocol 96						
X	CSC Convention 72	X	SUA Convention 88						
	CSC amendments 93	X	SUA Protocol 88						
	SFV Protocol 93		SUA Convention 2005						
X	STCW Convention 78		SUA Protocol 2005						
	STCW-F Convention 95	X	SALVAGE Convention 89						
X	SAR Convention 79	X	OPRC Convention 90						
	STP Agreement 71		HNS Convention 96						
	STP Protocol 73		OPRC/HNS 2000						
X	INMARSAT Convention 76		BUNKERS CONVENTION 01						
X	INMARSAT OA 76		ANTI FOULING 01						
	INMARSAT amendments 94		BALLASTWATER 2004						
X	INMARSAT amendments 98	NAIROBI WRC 2007							
X	FACILITATION Convention 65								
X	MARPOL 73/78 (Annex I/II)								
X	MARPOL 73/78 (Annex III)								
	MARPOL 73/78 (Annex IV)								
X	MARPOL 73/78 (Annex V)								
	MARPOL Protocol 97 (Annex VI)								
X	London Convention 72								
X	London Convention Protocol 96								
X	INTERVENTION Convention 69								
	INTERVENTION Protocol 73								
d	CLC Convention 69								
	CLC Protocol 76								
X	CLC Protocol 92								

<sup>&</sup>lt;sup>10</sup> For several conventions a Protocol replaced a Convention and party states were invited by the IMO to denounce the earlier convention when becoming party to the Protocol.

# APPENDIX 5: OPRC-HNS PROTOCOL - RISK ASSESSMENT

#### **RISK ASSESSMENTS**

- The first national assessment of the risks posed by the carriage of HNS by sea in New Zealand was
  prepared in 2000 (Woodward-Clyde, 2000). The risk assessment looked at the HNS trade over a 12month period (1999), reviewed the accident record for New Zealand and assessed the state of
  preparedness and response to marine HNS emergencies in New Zealand at that time.
- Between 1994 and 2000 there were 26 reported shipping-related incidents of HNS releases in New Zealand. In the same period, there were eight instances of cargo lost overboard that may have contained some HNS.
- 3. It was estimated that a shipping accident involving a vessel carrying HNS liquids in bulk could be expected in a New Zealand port approximately once every two years, with a spill from such an incident likely to occur around once every 13 years. The trade in packaged HNS was estimated at less than 1 million tonnes for the year, most of this being carried in shipping containers. Around 1.1 million TEU (twenty ft. equivalent units) were handled in New Zealand ports in 1999 and it was estimated that perhaps 4 5 percent of those contained some dangerous goods.
- 4. Updating of the previous risk assessment has been undertaken to see to what extent it has changed since 1999. Data has been gathered for the year 2006. The types of vessels operating and the types of HNS carried by them do not appear to have changed significantly. The main HNS trades in New Zealand are:

#### **Bulk liquids**

- Petroleum tankers (crude oil, condensate and petroleum products).
- LPG carriers.
- Methanol export tankers.
- Chemical parcel tankers (a range of hazardous and non-hazardous chemicals).
- Chemical barges (in-harbour transfer, Auckland only).

Table 1 (page 45) estimates the volumes of the bulk petroleum and non-petroleum liquid trade. Figures for 2006 are provisional as this stage. Volumes are in millions of tonnes.

#### **Bulk solids**

• Bulk carriers (eg ammonium nitrate, sulphur, fertilisers).

## Packaged dangerous goods (solids, liquids and gases)

- Container ships.
- Mixed break/bulk and general cargo.
- Coastal RoRo (Roll on Roll off) ships.

APPENDIX 5 Table 1: Bulk liquid trade								
Petroleum bulk liquids	1999	1999		2006*				
	Port calls	M Tonnes	Port calls	M Tonnes				
Crude oil and condensate loadings (Taranaki)	54	1.9	37	1.1				
Crude oil imports (Marsden Point)	47	4.8	49	4.5				
Product, condensate & blendstock transfers (Marsden Point)	110	2.7	134	3.0				
Finished product discharges (New Zealand ports)	311	3.9	300	3.6				
Sub-total	522	13.3	520	11.8				
Non-petroleum bulk liquids	1999	1999		2006				
	Port calls	M Tonnes	Port calls	M Tonnes				
Methanol exports (Taranaki)	109	1.96	8	0.36				
LPG (4 ports)	186	0.32	161	0.17				
Chemicals & other bulk liquids	168	0.33	170	0.35**				
Sub-total	469	2.61	339	0.88				

<sup>\*</sup> Figures for 2006 are provisional

- 5. While domestic consumption of fuels has increased since 1999, domestic production of crude oil and condensates is lower. Other changes since that time include increased volumes through the refinery to Auckland pipeline, optimisation of New Zealand coastal tanker operations and increasing direct imports of fuels to New Zealand ports. On balance, the volumes of petroleum cargoes being handled, and the size of vessels carrying them have not changed significantly over this period.
- The changes since 1999 reflect a significant drop off in domestic production of methanol (due to reduced availability of natural gas) and also of LPG. However deliveries of LPG to New Zealand ports (supplemented by imports) have increased significantly (99 calls in 2006 vs. 56 in 1999).

# **BULK SOLIDS**

7. The number of port calls by ships carrying solid bulk cargoes in 1999 was estimated to be around 800. Only a small proportion of these were considered hazardous. No figures are available for 2006 as yet, but the types of hazardous bulk cargoes being handled are believed to be generally the same as before e.g. fertilisers, ammonium nitrate.

## **PACKAGED SUBSTANCES - CONTAINERISED CARGO**

- 8. The trend of increasing containerisation of cargo noted in the 2000 report has continued. While the overall number of containers handled in New Zealand ports has increased significantly (from around 1.1 million TEU in 1999 to 1.6 million TEU in 2006<sup>11</sup>), the number of port calls by container vessels is marginally lower (2,800 in 1999 vs. 2,500 in 2006). This reflects the increasing use of larger vessels and rationalisation of services.
- 9. The previous risk assessment suggested that perhaps 4 5 percent of all containers handled contained some dangerous goods. Data collected from port companies in 2006, indicates that a little under 2 percent is perhaps more realistic i.e. about 33,000 TEU per annum. This figure is expected to be more reliable than the previous estimate, given the widespread introduction of computer-based cargo tracking systems since 1999.

11 Reported figures for TEU should be treated with some caution as they include a significant number of empty containers as well as containers which are shifted on board the vessel when in port.

<sup>\*\*</sup> Includes acids and alkalis, solvents, tallow and vegetable oils

- 10. The previous report also noted that there was a significant proportion of hazardous cargo in transit (i.e. cargo which does not come off the ship). This is not generally tracked by port companies (other than explosives which may require to be removed while the vessel is in port). As yet there is no current data but it is expected that if anything, the quantity of such cargo will have increased as container services become more regionally based with increased hubbing.
- 11. There were five incidents involving HNS spills on container vessels worldwide in 2005. One of these occurred in New Zealand where there was a fire in a container carrying bagged fishmeal. Recent international incidents involving container ships such as the Hyundai Fortune (fire) and the MSC Napoli (grounding, cargo lost overboard) have highlighted the potential implications of HNS carried on large container ships. While these vessels were larger than those currently operating into New Zealand (5,500 and 4,400 TEU respectively) similar scenarios are equally possible.

## COASTAL RORO (ROLL ON, ROLL OFF) SERVICES

12. The coastal RoRo fleet has changed since 1999 with the end of fast ferry services and new vessels on Cook Strait service, giving increased freight capacity. The number of port calls is still around 8-9,000 per year. Around 16,000 tonnes of dangerous goods were carried across Cook Strait in 2006. The International Maritime Dangerous Goods Code (IMDG Code) has specific requirements on the carriage of dangerous goods on passenger/freight vessels and the operators tend to consolidate dangerous goods (DG) freight on specific sailings.

## **RECENT NEW ZEALAND INCIDENTS**

13. A search for data on incidents and near misses involving HNS cargo has identified 14 occurrences, necessitating some level of response since the beginning of 2004. Not all involved spills nor occurred on vessels. Three incidents were of a serious nature (a fire in a container, a tank failure on a chemical tanker and the Northland fumigant incident). Others were more minor and in some cases the cargo was suspected as hazardous but later confirmed to be non-hazardous. As there is no reporting system for HNS spill or leaks, accurate data is difficult to compile.

# **APPENDIX 6**

## **OPRC-HNS PROTOCOL - OPERATIONAL OPTIONS**

## **Operational options**

- 1. Two proposals are presented for a chain of command and operational response to an HNS maritime spill. These are:
  - A) Operational option A mirror the current oil spill model of a three tier response to an HNS incident
  - B) Operational option B a two level response model based on minor or catastrophic incidents.

#### Operational Option A - three tiered response

## Tier 1 – Minor incident

- 2. A Tier 1 incident would indicate a minor, non life/environment-threatening spill that could be cleaned up by the spilling ship or port authority with little external support. A private contractor or NZFS support could be provided at this level. <sup>12</sup> The role of the NZFS would be to identify the substance or substances involved in the incident, contain it (if possible) and make it safe (if possible). Subsequent clean-up and site restoration would be handled by the shipowner responsible for the spill, the owner of the product, the land owner (if the HNS material was discharged into the sea from land), or an independent contractor.
- 3. Tier 1 would be site specific and defined as occurring in marine waters at a port, onboard a vessel, or adjacent to a vessel either underway, at anchor in a harbour or berthed alongside.

#### Resources required at Tier 1

- 4. The NZFS, local port staff or ship staff will primarily respond to any incident at this level. There may be some assistance sought from appointed contractors but this will be reimbursed by the spiller and once made safe, the control of the incident will reside with the spiller. There would be little additional resource to current NZFS inventory or training required under this option.
- 5. The NZFS could be the lead agency and would provide the incident controller under the Coordinated Incident Management System (CIMS). Use of the NZFS brings all its existing and supporting resources such as personal protective clothing, breathing apparatus, detection, identification and monitoring equipment, decontamination equipment and technical advisors.

## Tier 2 – Minor incident with potential human or environmental threat

6. A Tier 2 incident is considered a minor spill or potential minor spill which although non life-threatening, could adversely affect human habitability and/or threaten areas of the environment. Tier 2 incidents would fall under the Resource Management Act's (RMA) sphere of responsibility, and be within the resources of the region (including NZFS Hazmat unit capabilities) to respond and be rendered safe within a 24 hour period. Tier 2 would further be defined as any HNS incident occurring within current regional boundaries and out to the territorial sea (12 nautical mile limit), at anchor or underway but with a sea state less than four (two metre seas).

## Resources required at Tier 2

- 7. The Regional Council will respond to an incident at this level, however many Regional Councils have limited or no capability to respond to incidents at sea, and even less ability to deal with an HNS maritime spill. Command and control will be initially with the NZFS, with actual incident response being sourced with the nearest NZFS Hazmat unit, supporting appliances, and trained HNS responders. The site of the incident and safety cordon will become a NZFS responsibility until/unless the safety or integrity of a vessel becomes navigationally endangered. Once a vessel becomes endangered, the incident will escalate to a Tier 3 level. Some extra safety equipment is needed locally/regionally for a Tier 2 response, with boat-to-ship, ship-to-ship and/or helicopter-to-ship transfer skills being the focus of training for local response personnel. Currently Tier 2 is outside the training and resourcing of the NZFS. Some additional safety equipment, training and interaction with shore-based resources could deal with the incident.
- 8. At this level, it is anticipated that Maritime NZ (or a similar organisation, e.g. the Regional or District Council) would take the lead agency role under CIMS, with the NZFS or a private contractor being tasked with the actual front line operation.

<sup>&</sup>lt;sup>12</sup> The New Zealand Fire Service would recommend that all spills or leakages be reported to them to enable an independent assessment of risk to life and the environment.

## Tier 3 Catastrophic incident

9. Tier 3 is a catastrophic or potentially catastrophic spill where human life is endangered (or potentially endangered) and/or the environment will or potentially will suffer significant damage. Also a Tier 3 will exist where any Tier 1 or Tier 2 incident occurs between the Territorial Sea (12 nautical mile limit) and the EEZ (200 nautical miles), or at any stage during a Tier 1 or Tier 2 when the responding party considers they do not have the ability or capability to deal with or render safe an HNS incident.

## Resources required at Tier 3

- 10. Maritime NZ will be the lead agency in a Tier 3 incident. Maritime NZ will exert command and control over any HNS incident at this level. Response assets may be requested from NZFS, the NZ Defence Forces (where available), other government agencies (such as Conservation, Customs or Fisheries vessels), appointed HNS contractors, or, in 'alongside incidents', the NZ Police.
- 11. There will be a requirement to convene the Officials Domestic and External Security Committee (ODESC) and draw on chemical expertise from the Ministry for the Environment (MfE), the Environmental Risk Management Authority (ERMA), and/or specialist chemical experts. If the HNS incident site is within an RMA region, then Regional Council HNS representatives will be involved in the Maritime NZ command team. A National Response Team of approximately 50 NZFS personnel specialised in onboard firefighting and maritime HNS response complete with specialist equipment would need to be available for immediate/stand-by response in a Tier 3 incident.
- 12. While Maritime NZ would be seen as the lead agency, a number of other agencies may be tasked with different parts of the operation. For example, NZ Defence Forces may have responsibility for transportation and deployment onto a vessel and for overseeing safety on board, with the NZFS responsible for operations directly involved with identification, containment and decontamination activities.

# Operational Option B - 2 Level Response: Minor & Catastrophic

#### Level 1 - Minor incident

- 13. A minor incident would indicate a non life/environment-threatening spill that could be cleaned up by the spilling ship or port authority with little external support. A private contractor or NZFS support could be provided at this level. The role of the NZFS would be to identify the substance or substances involved in the incident, contain it (if possible) and make it safe (if possible). Clean-up and site restoration would be handled by the shipowner responsible for the spill, the owner of the product, the land owner (if the HNS material was discharged into the sea from land), or an independent contractor.
- 14. Minor incidents under this concept would be site specific and defined as occurring in marine waters at a port, onboard a vessel, or adjacent to a vessel either underway, at anchor in a harbour or berthed alongside, or within the 12 nautical mile limit as defined by the RMA.

### Resources required at Minor incident level

15. The NZ Fire Service, local port staff or ship staff will primarily respond to any incident at this level. There may be some assistance sought from appointed contractors but this will be reimbursed by the spiller and once made safe, the control of the incident will reside with the spiller. There would be little additional resource to current NZFS inventory or training required. Regional Council involvement will be to monitor at this level only.

## Level 2 - Catastrophic incident

16. A catastrophic or potentially catastrophic spill including a minor but potentially endangering HNS spill or where human life is endangered (or potentially endangered) and/or the environment will or potentially will suffer damage. Also a Catastrophic HNS incident will declared anywhere from the territorial sea out to the EEZ if provisions under the minor spill category are exceeded (i.e. a vessel cannot manage their own HNS incident); or a catastrophic spill can be declared at any stage during a minor spill when either responding party considers they do not have the ability or capability to deal with or render safe an HNS incident or the Regional Council deems it necessary.

## Resources required at catastrophic incident level

17. Maritime NZ will be the lead agency in a catastrophic incident and exert command and control over any HNS incident at this level. Response assets may be requested from NZFS, the NZ Defence Forces (where available), other government agencies (such as Conservation, Customs or Fisheries vessels), appointed HNS contractors, or, in 'alongside incidents', the NZ Police.

- 18. There will be a requirement to convene the Officials Domestic and External Security Committee (ODESC) and draw on chemical expertise from the Ministry for the Environment (MfE), the Environmental Risk Management Authority (ERMA), and/or specialist chemical experts. If the HNS incident site is within an RMA region, then Regional Council HNS representatives will be involved in the Maritime NZ command team.
- 19. A National Response Team of approximately 50 NZFS personnel specialised in onboard firefighting and maritime HNS response complete with specialist equipment would need to be available for immediate/stand-by response in a catastrophic incident.
- 20. While Maritime NZ would be seen as the lead agency, a number of other agencies may be tasked with different parts of the operation. For example, NZ Defence Forces may have responsibility for transportation and deployment onto a vessel and for overseeing safety on board, with the NZFS responsible for operations directly involved with identification, containment and decontamination activities.

### Operational Option A or B would require:

- ports to be 'ranked' according to their risk of spill to personnel and environment. This ranking will be proportionate to the type of equipment and personnel to be available for HNS incidents
- contingency plans, exercises, training courses to be developed
- equipment to be pre-positioned
- bilateral/multilateral international agreements to be created
- HNS contractors to be identified and appointed.

# **NOTES**

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