Executive Summary

1. It is proposed that New Zealand accedes to the Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (Supplementary Fund Protocol).

2. New Zealand’s accession to the Supplementary Fund Protocol would increase the level of compensation available to New Zealand in the event of a major spill from an oil tanker, from $377 million to $1.392 billion.1

3. The Supplementary Fund Protocol is the highest level of international insurance, which together with the 1992 Civil Liability Convention and 1992 Fund Convention, provides member states with up to $1.392 billion in compensation for oil pollution damage in the event of an oil spill from a tanker, without needing to prove fault. 2

4. Currently New Zealand has the ability to claim up to $377 million of compensation through its accession to the 1992 Fund Convention. Should current claims be in excess of $377 million, compensation will be provided pro-rata to claimants and legal action will be required for outstanding payments. This could expose the Crown to unrecoverable costs, particularly for oil spill response and clean up.

5. Compensation could be used to fund actions taken to prevent or minimise oil pollution damage, compensation for property damage, direct economic loss from interruption of business or fishing operations, and actions taken to restore the environment.

6. The Supplementary Fund Protocol requires member states to contribute money when there is a spill in a member country requiring compensation. There is only a marginal administrative cost at other times. To date, there have been no claims made to the Supplementary Fund Protocol.

7. If a spill requiring compensation from the Supplementary Fund does occur, New Zealand’s contribution would be approximately 0.53 percent of the compensation provided to the Supplementary Fund Protocol member country within which the spill occurred.

8. In most cases, New Zealand’s contribution would be 0.265 percent as oil tanker insurers representing 90 percent of the world’s oil tanker tonnage have agreed to pay half the compensation required.

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1 International Oil Pollution Compensation Funds are set through Special Drawing Rights as defined by the International Monetary Fund. Amounts expressed in this document are in approximate NZ dollars, at an exchange rate of 1.856 NZ dollar per SDR as at 10 January 2014. Because of this, all figures in this paper that are based on Special Drawing Right amounts are approximate.

2 Pollution damage means a) loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; b) the costs of preventive measures and further loss or damage caused by preventive measures.
9. On balance, New Zealand’s accession to the Supplementary Fund Protocol provides New Zealand access to an inexpensive global insurance scheme for oil tanker spills. Accession to the Supplementary Fund Protocol ensures there are funds available to provide compensation for an oil tanker spill in New Zealand, reducing the financial risk to the Crown and third parties. The costs associated with this insurance are minor, and are appropriate to the level of risk that New Zealand is exposed to from the transportation of oil.

Nature and timing of proposed treaty action

10. The Supplementary Fund Protocol was adopted by the International Maritime Organization (IMO) on 16 May 2003 and entered into force on 5 March 2005.

11. It is proposed that New Zealand accedes to the Supplementary Fund Protocol by an Instrument of Accession deposited with the IMO once Parliament has considered the Supplementary Fund Protocol and implemented its requirements in domestic law.

12. Once implementing legislation is passed, the Supplementary Fund Protocol would enter into force in respect of New Zealand ninety days after the deposit of an Instrument of Accession (Article 19) with the International Maritime Organization.

Reasons for New Zealand to become party to the Supplementary Fund Protocol

Background

13. The Supplementary Fund Protocol is part of the International Oil Pollution Compensation (IOPC) funds. The IOPC funds are intergovernmental conventions that provide three levels of compensation for oil pollution damage from spills of oil from tankers carrying oil as cargo, to countries that have acceded to the fund conventions.

14. Three levels of compensation are available through the following conventions and protocols:
   - 1992 Civil Liability Convention (establishes that compensation is to be paid by the ship owner up to a limit of $166 million)
   - 1992 Fund Convention (establishes a fund that provides up to $377 million of compensation including the 1992 Civil Liability Convention limit)
   - Supplementary Fund Protocol (establishes a fund that provides up to a total of $1.392 billion of compensation, including the $377 million available from the 1992 Fund Convention and 1992 Civil Liability Convention)

15. New Zealand has acceded to the conventions for the first and the second level of the IOPC funds, which together provide compensation of up to around $377 million in the event of an oil spill from an oil tanker, regardless of fault. The first level sets compensation payable by the ship owner. The second and third levels provide an international fund for oil spill compensation that is financed by levies on oil imports.
16. In 2009 the government’s Petroleum Action Plan\(^3\) was launched. It was aimed at ensuring New Zealand is able to maximise the gains from the responsible development of its oil and gas resources. The Petroleum Action Plan comprised eight core workstreams, one of which was to commission an independent review of the adequacy of New Zealand’s health, safety and environmental legislation for offshore petroleum operations.

17. The aim of the independent review was to ensure that the legislative structure, and institutional capabilities and practices in New Zealand were fit for purpose, and compared favourably to international best practice.

18. The review looked at the health, safety, and environmental regimes in four petroleum producing countries (Ireland, the United Kingdom, Norway and Australia) and compared these with New Zealand’s regulatory frameworks for offshore petroleum operations to see if there were any major gaps.

19. The review was completed in December 2010 and concluded that New Zealand’s health, safety, and environmental arrangements for offshore petroleum operations already incorporated a number of key characteristics of international best practice. However, the review also identified some areas where New Zealand’s regulatory framework could be improved and made eight recommendations to that effect.

20. Government agencies involved in regulating the offshore industry have been working on giving effect to the recommendations of the independent review. They have strengthened the regulatory regime to cover all stages of offshore operations (exploration, production, and cessation) to ensure that processes are in place to manage health, safety, and environmental risks and ensure that New Zealand attracts high-quality operators that will comply with its standards.

21. One of the recommendations of the independent review was directed at the Ministry of Transport. The recommendation was that:

   **Government investigate whether current levels of insurance and liability are sufficient and consider ratifying international instruments which provide additional or stronger levels of insurance and liability in relation to both shipping and installations involved in offshore petroleum activities**

22. The Supplementary Fund Protocol establishes a third level of compensation to meet claims that exceed the total compensation available under the first two levels. It provides funding for compensation over and above the $377 million limit, up to an aggregate limit of $1.392 billion for any one incident.

23. The Supplementary Fund Protocol works on a pay-as-you-go basis applying to members that have received more than 150,000 tons of contributing oil in a calendar year. Levies on oil imports are only collected when the cost of an oil spill in a Contracting State exceeds the compensation payable under the 1992 Fund Convention, rather than funds being built up from regular annual levies.\(^4\)

24. Contracting States to the 1992 Fund Convention may become Contracting States to the Supplementary Fund Protocol. Accordingly, as a Contracting State to the 1992 Fund Convention, New Zealand is entitled to accede to the Supplementary Fund Protocol.

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\(^3\) http://www.med.govt.nz/sectors-industries/natural-resources/oil-and-gas/petroleum-action-plan

\(^4\) The Supplementary Fund Protocol refers to ‘tons’, where as New Zealand uses metric tonnes. 1 ton = 0.907 tonnes. Both amounts are referred to this in this paper, depending on whether the source is the Supplementary Fund Protocol or a New Zealand source.
Why accede to the Supplementary Fund Protocol?

25. Oil tankers in operation in New Zealand generally carry between 55,000 and 100,000 tonnes of oil as cargo, in addition to bunker fuel. It is likely that it would take an oil spill of at least 10,000–20,000 tonnes affecting particularly sensitive areas of New Zealand's coast for the current $377 million compensation level to be exceeded. This is based on international examples, as well as oil spill cost estimation models used by the United States Environmental Protection Agency and the International Maritime Organization.

26. The likelihood of a major spill involving an oil tanker is low, but the consequences could be severe. In a severe event, depending on the weather and the type of operation, oil is likely to affect a large area of the New Zealand coastline.

27. While New Zealand has not experienced a significant oil spill from an oil tanker, and major tanker spills are infrequent globally, the potential costs can far exceed the limit of $377 million that presently applies in New Zealand.

28. Maritime New Zealand has developed a New Zealand Marine Oil Spill Risk Assessment, which has modelled the probability of oil spills around the New Zealand coastline based on ship and oil tanker movements and the sensitivities of the shoreline and surrounding areas.

29. The area likely to experience a heavy oil spill from an oil tanker is the Whangarei Harbour, where oil tankers carry imported heavy oil to the Marsden Point Oil Refinery. The Northland East Coast approach to Marsden Point is also considered high risk, as is the Taranaki coast, due to oil tanker movement to collect oil from offshore installations.

30. Table 1, below, identifies the sensitivity factors of these coastlines and oil spill probability, based on the New Zealand Marine Oil Spill Risk Assessment undertaken by Maritime New Zealand.

### Table 1: Marine Oil Spill Risk Assessment oil spill estimates

<table>
<thead>
<tr>
<th>Area</th>
<th>Sensitivity factors</th>
<th>Spill size (tonnes)</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whangarei Harbour</td>
<td>Mangrove swamps, salt marshes and wildlife.</td>
<td>10,000</td>
<td>1 in 20 year event</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20,000–50,000</td>
<td>1 in 100 year event</td>
</tr>
<tr>
<td>Northland East Coast (Cape Reinga to Mangawhai)</td>
<td>Rocky coast, salt marshes, mangrove swamps. Wildlife and habitats.</td>
<td>10,000–20,000</td>
<td>1 in 100 year event</td>
</tr>
<tr>
<td>Taranaki Coast</td>
<td>Cobble or boulder beaches. Wildlife and habitats.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 These estimates are based on Maritime New Zealand's Marine Oil Spill Risk Assessment. This models the probability of oil spills around the New Zealand coastline based on ship and oil tanker movements and the sensitivities of the shoreline and surrounding areas.
31. A tanker oil spill in New Zealand waters may give rise to environmental and economic effects. These include potential damage to New Zealand’s aquaculture industry and fishing stocks and decreased demand for New Zealand seafood. An oil spill could also potentially impact shipping vessels reaching or leaving ports, resulting in delays, and costs for exporters and importers. The environmental damage if oil reaches our coastline, or the occurrence of an oil spill itself, could damage New Zealand’s tourism industry.

32. Should an oil tanker spill in New Zealand result in pollution damage that exceeds the $377 million of compensation currently available under the 1992 Fund Convention, the Crown could be exposed to costs, particularly for oil spill response and clean up. Legal action would be necessary to recover unpaid costs which may result in a shortfall to the Crown.

33. The Supplementary Fund provides compensation above that available under the 1992 Fund Convention.

Advantages and disadvantages to New Zealand of the treaty entering into force for New Zealand

Advantages

34. By becoming a party to the Supplementary Fund Protocol, New Zealand will be eligible to receive an increased amount of compensation for responding to an oil spill. This would provide access to total compensation of up to the $1.392 billion (including the first two levels) for any one incident without needing to prove fault.

35. The increased compensation could be used to prevent or minimise pollution damage, property damage, or direct economic loss from interruption of business or fishing operations. The compensation would also cover actions taken to restore the environment.

36. New Zealand’s accession to the Supplementary Fund Protocol would also be beneficial to the maintenance of New Zealand’s standing internationally. The Supplementary Fund Protocol is in force for 29 States. It would support the New Zealand “brand” as a responsible maritime regulator and constructive participant in the international maritime system. New Zealand is among five Organisation for Economic Co-operation and Development countries (New Zealand, Chile, Iceland, Israel, and Mexico) who have not acceded to the Supplementary Fund Protocol (excluding land-locked countries and the United States, which has its own arrangements).

Disadvantages

37. Becoming a party to the Supplementary Fund Protocol would require New Zealand oil importers to make a contribution to the Supplementary Fund Protocol when there is an oil spill in a country that has signed up to the Supplementary Fund Protocol that exceeds the compensation available under the 1992 Fund Convention.

38. Should New Zealand oil importers not fulfil their obligations to communicate information on oil receipts to the Supplementary Fund, and this results in a financial loss for the

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6 Australia, Barbados, Belgium, Canada, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Republic of Korea, Slovenia, Spain, Sweden, Turkey, United Kingdom of Great Britain and Northern Ireland. In 2014 Slovakia will become a Party to both the 1992 Fund Convention and the Supplementary Fund Protocol.
Supplementary Fund, the New Zealand Government would then be liable to compensate the Supplementary Fund for the loss. This obligation is further explained in paragraph 44 of this paper.

39. Certain environmental impacts, such as losses of ecosystems or wildlife, are outside the scope of the compensations regime under the 1992 Fund Convention and the Supplementary Fund Protocol.\(^7\)

**Overall assessment of the advantages and disadvantages to New Zealand**

40. New Zealand’s accession to the Supplementary Fund Protocol will ensure that there are increased funds available to provide compensation for an oil tanker spill in New Zealand. The costs associated with this insurance are relatively minor, and are appropriate to the level of risk that New Zealand is exposed to from the transportation of oil. Further information about the costs is provided in paragraphs 56 to 71, under the costs section of this paper.

**Legal obligations which would be imposed on New Zealand by the treaty action, the position for reservations to the treaty, and an outline of any dispute settlement mechanisms**

41. As a party to the Supplementary Fund Protocol, New Zealand would be agreeing to the following legal obligations.

42. Under Article 10 of the Supplementary Fund Protocol, the Supplementary Fund Protocol will be financed by a levy on receipts of contributing oil (after sea transport to port) and terminal installations within a State party to the Protocol. Contributions to the Fund will be paid by public or private entities that receive more than 150,000 tons of contributing oil per year. This will require the four New Zealand oil importing companies to pay a levy directly to the Supplementary Fund.

43. The levy is based on reports of oil receipts in respect of individual contributors. Articles 13 and 20 will require Contracting States to communicate every year to the Supplementary Fund Protocol the name and address of any person in that State who is liable to contribute, as well as the quantity of contributing oil received by any such person. This applies whether the oil receiver is a government authority, a State-owned company, a private company or an individual.

44. When a Contracting State does not fulfill its obligations to communicate information on oil receipts in accordance with Article 13, and this results in a financial loss for the Supplementary Fund, the Contracting State shall be liable to compensate the Supplementary Fund for such loss. New Zealand already communicates information on oil receipts in accordance with Article 15 of the 1992 Fund Convention and any communication made under the 1992 Fund Convention is deemed to be made under the Supplementary Fund Protocol.

45. Article 14 deems all Contracting States to receive at least 1 million tons of contributing oil. In the event that New Zealand receives less than 1 million tons, it is obliged to collect from New Zealand oil importing companies sufficient funds so as to cover the gap between oil actually received (for which contributions will have been made directly to the Supplementary Fund) and 1 million tons.

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\(^7\) This would mean that claims made for compensation following the loss of a species are not compensated. This differs to claims made for economic loss due to reduced or damaged fish stocks.
46. Currently, the New Zealand oil companies receive in total approximately 5.5 million tons of contributing oil per year, and it is unlikely that the New Zealand Government will be called upon to make any contribution. In the event that New Zealand’s oil imports fall below the minimum threshold specified in Article 14, the New Zealand Government would need to put in place arrangements with the New Zealand oil importing companies to meet this minimum payment.

47. Should annual oil imports consistently fall below the 1 million ton minimum, New Zealand could denounce the Supplementary Fund Protocol. Such denunciation would be effective 12 months after its deposit with the International Maritime Organization.

48. Article 2(2) requires parties to recognize:
   - the Supplementary Fund as a legal person capable of being a party in legal proceedings before the New Zealand courts
   - the Director of the Supplementary Fund as the legal representative of the Supplementary Fund

49. In accordance with Article 7(1):
   - New Zealand courts must be given jurisdiction to entertain an action against the Supplementary Fund for compensation
   - the Supplementary Fund must be given the right to be a party to proceedings for compensation initiated under the 1992 Civil Liability Convention

Reservations

50. There are no provisions in the Supplementary Fund Protocol dealing with reservations or declarations.

Dispute resolution

51. The Supplementary Fund has the right to be a party to any legal proceedings and must be advised of any legal action in order for the Supplementary Fund to be bound by any court finding.

Measures which the government could or should adopt to implement the treaty action, including specific reference to implementing legislation

52. Article 12 of the Supplementary Fund Protocol requires State Parties to take all appropriate legal, administrative, and other measures to ensure contributors comply with their obligations to the Supplementary Fund.

53. The Maritime Transport Act 1994 already provides cover for the existing requirements of the 1992 Fund Convention. Amendment to Part 26 of the Maritime Transport Act to incorporate the Supplementary Fund Protocol will be required. Amendment to the Maritime Transport (Fund Convention) Levies Order 1996 would also be required.

Economic, social, cultural and environmental costs and effects of the treaty action

Social and cultural costs and effects

54. There are no social or cultural costs and effects identified.

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8 José Maura is the Director of the Supplementary Fund
**Environmental costs and effects**

55. The Supplementary Fund Protocol does not provide compensation for spills from offshore oil installations or compensation for environmental impacts such as losses of ecosystems or wildlife.

**Costs to New Zealand of compliance with the Supplementary Fund Protocol**

56. Under the Supplementary Fund Protocol, there would be minor administrative costs. There would be costs to oil importers if a claim was made to the Supplementary Fund Protocol by a State that is party to it.

**Administrative costs**

57. Maritime New Zealand will be required to verify oil import quantities for the purpose of the Supplementary Fund Protocol. However, as it currently does this for the 1992 Fund Convention there are no additional administrative costs.

**Economic costs and effects**

58. The most significant factors that determine the high costs of oil spills are the characteristics of the spill and spill locations. Costs are most affected by the:

- contamination of highly concentrated fishing and tourism areas
- time taken for the oil to spill (e.g. slow or periodic leaks from a sunken or stricken tanker)
- difficulty and time taken to clean up the oil spill

59. The costs associated with an oil tanker spill will be determined by the level of response and effort to clean up any spilled oil. Responding to a large sized oil spill is likely to be very costly.

60. Acceding to the Supplementary Fund Protocol may result in increased costs to oil importers, depending on claims made to the Supplementary Fund Protocol. There are currently four companies (BP Oil, Chevron NZ, Mobil Oil NZ, and Z Energy) importing oil to New Zealand.

61. If a spill requiring compensation from the Supplementary Fund Protocol does occur, New Zealand oil importers' contribution to compensation payments would be approximately 0.53 percent of the compensation provided to the Supplementary Fund Protocol member country within which the spill occurred. This is the proportion of total Supplementary Fund Protocol member States' oil imports that would be represented by New Zealand's current imports.  

62. To reduce the impact on oil importers, and ensure adequate responsibility by ship owners, an international group of protection and indemnity insurers, representing 90 percent of the world’s oil tanker tonnage, voluntarily agreed to pay half of the compensation paid by the Supplementary Fund Protocol where the tanker ship is insured by one of its members (the Tanker Oil Pollution Indemnification Agreement 2006 (TOPIA)).

63. Should a spill occur globally requiring the maximum compensation of $1.392 billion, New Zealand oil importers would be required to pay:

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9 In 2012, New Zealand imported 5.448 million tons of oil. This represents 0.54% of the 1.012 billion tons of oil imported by Supplementary Fund Protocol member countries.
$2.709 million should the tanker be part of TOPIA

$5.418 million should the tanker not be part of TOPIA

64. Should New Zealand accede to the Supplementary Fund Protocol, New Zealand oil importers would only be required to pay a supplementary levy\(^\text{10}\) on their share of imported oil when there is a spill requiring compensation from the Supplementary Fund.

65. Should New Zealand oil importers not fulfill their obligations to communicate information on oil receipts, and this results in a financial loss for the Supplementary Fund, the New Zealand Government would then be liable to compensate the Supplementary Fund for the loss.

66. The government could fund the cost to the Supplementary Fund, to avoid the oil import industry having to contribute to the Supplementary Fund. However, this option has not been considered as the potential fuel cost increase is very marginal (modelled at between 1/35th and 1/13th of a cent per litre) and is not expected to have a significant impact on consumers. In addition, voluntary government contributions or subsidies are likely to be administratively complicated and in contravention of the principle of ‘user (or beneficiary/causer) pays’.

Cost scenarios

67. To assess the potential cost impact on New Zealand oil imports from increased levies as a result of becoming party to the Supplementary Fund Protocol, two cost scenarios, each over a ten year period, have been modelled. The costs are based on 3 and 6 spills occurring requiring the maximum $1.392 billion available from the Supplementary Fund and 75 percent of the maximum (i.e. $1.044 billion).

68. These are examples only and do not reflect estimated or statistically probable spill frequencies. The scenarios model spill occurrence to be significantly more frequent than what has occurred historically (there have been 4 spills that have exceeded the 1992 Fund Convention within the last 14 years although all occurred either before the Supplementary Fund Protocol was established or in non-member states).

69. The two scenarios are summarised in the table below with further information provided in the appendix.

70. Based on these scenarios New Zealand’s average annualised costs are estimated to be between $0.626 million and $1.703 million per year. This represents an increase in the cost of fuel of between 0.029 cents per litre and 0.078 cents per litre (i.e. 1/35th – 1/13th of a cent per litre), assuming the costs are passed on to the consumer.

71. If New Zealand does not accede to the Supplementary Fund Protocol and a spill occurs that exceeds the $377 million of compensation currently available, the Crown may need to fund the remainder of the costs.

\(^{10}\) Since 1996 New Zealand oil importers have contributed on average between $0.85 million and $0.385 million (2012 dollars) per year to the 1992 Fund Convention.
Scenario A (3 spills over 10 years) | Scenario B (6 spills over 10 years)
--- | ---
Spills requiring maximum compensation available ($1.392 billion) | 1 covered by TOPIA | 1 covered by TOPIA
 | 1 not covered by TOPIA
Spills requiring 75 percent of maximum compensation available ($1.044 billion) | 2 covered by TOPIA | 3 covered by TOPIA
 | 1 not covered by TOPIA
Total cost to New Zealand per year | $0.626 million | $1.703 million
Increase fuel cost (cents/litre) | 0.029 cents | 0.078 cents
Percentage increase in pump price for fuel based on notional cost of $2.16 per litre of petrol | 0.013 percent cost increase | 0.036 percent cost increase

Completed or proposed consultation with the community and parties interested in the treaty action

72. This National Interest Analysis supports a Cabinet paper, which seeks agreement to undertake consultation on the proposal to accede to the Supplementary Fund Protocol.

73. Interested parties will also have a further opportunity to comment on the accession to the Supplementary Fund Protocol during the Select Committee process and the Parliamentary treaty examination process, if Cabinet decides to proceed with legislation to implement the Supplementary Fund Protocol.

Subsequent protocols and/or amendments to the treaty and their likely effects

74. Any future amendments to the Supplementary Fund Protocol would be considered in accordance with Articles 23 and 24 of the Supplementary Fund Protocol.

75. Article 23 allows the IMO to convene a conference for the purpose of revising or amending the Supplementary Fund Protocol at the request of no less than one-third of the Contracting States.

76. Article 24 sets out the “tacit acceptance” procedure for amending the compensation limits. In brief, an amendment to the limit previously circulated by the IMO and adopted by a meeting of the Legal Committee of the IMO will be deemed to be accepted 12 months after notification of its adoption to all State Parties, unless one quarter of those States advise that they do not accept the amendment. The amendment will come into force 12 months after it has been deemed to have been accepted.

Withdrawal or denunciation provision in the treaty

77. Article 26 provides that the Supplementary Fund Protocol may be denounced by any Contracting state at any time after the date on which it comes into force for that state.
Such denunciation would take effect 12 months after the deposit of the instrument of
denunciation with the Secretary-General of the IMO, or on a later date, if any, specified
in the instrument.

78. Under Article 28 of the Supplementary Fund Protocol, the Supplementary Fund Protocol
would cease to be in force if the number of Contracting States falls below seven or the
total quantity of contributing oil received in the remaining Contracting States falls below
350 million tons, whichever occurs earlier.

79. Denunciation would be subject to the New Zealand treaty process. Termination of the
Supplementary Fund Protocol would require repeal of the corresponding domestic
legislation.

Adequacy Statement

80. The Ministry of Transport Regulatory Impact Assessment Panel has assessed the
National Interest Analysis as meeting the quality assurance criteria.
Appendix – modelled spill scenarios and cost implications.

### Scenario A

**Description:** Three international oil spills requiring compensation from the Supplementary Fund Protocol

Spill costs: 1 spill at $NZ 1,392m (max) and 2 spills at $1,044m (75% of max)

All spills are covered by the International Group of P&I Clubs and the Tanker Oil Pollution Indemnification Agreement

<table>
<thead>
<tr>
<th>Impact of each spill (NZ$ million)</th>
<th>Cost of spill</th>
<th>Covered by first two tiers</th>
<th>Covered by TOPIA</th>
<th>Covered by supp fund</th>
<th>NZ share (%)</th>
<th>NZ share ($m)</th>
<th>Instances</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered by TOPIA</td>
<td>1,392</td>
<td>377</td>
<td>507.616</td>
<td>507.616</td>
<td>0.53%</td>
<td>2.709</td>
<td>1</td>
<td>2.709</td>
</tr>
<tr>
<td>Covered by TOPIA</td>
<td>1,044</td>
<td>377</td>
<td>333.62</td>
<td>333.616</td>
<td>0.53%</td>
<td>1.780</td>
<td>2</td>
<td>3.561</td>
</tr>
<tr>
<td><strong>Total Cost Impact for New Zealand (NZ$ million)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>6.270</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NZ share over 10 years</th>
<th>Annual share over 10 years</th>
<th>Million tonnes of oil imported each year</th>
<th>Annual cost of imported oil</th>
<th>Increase in cost of oil (%)</th>
<th>Increase in costs (c/l at the petrol pump)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6.270</td>
<td>$0.627</td>
<td>5.608</td>
<td>$4,700</td>
<td>0.013%</td>
<td>0.029</td>
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</table>

### Scenario B

**Description:** Six international oil spills requiring compensation from the Supplementary Fund Protocol

Spill costs: 2 spills at $NZ 1,392m (max) and four spills at $1,044m (75% of max)

1 of the max sized spill and 3 of the 75% sized spills are covered by the International Group of P&I Clubs and the Tanker Oil Pollution Indemnification Agreement

<table>
<thead>
<tr>
<th>Impact of each spill (NZ$ million)</th>
<th>Cost of spill</th>
<th>Covered by first two tiers</th>
<th>Covered by TOPIA</th>
<th>Covered by supp fund</th>
<th>NZ share (%)</th>
<th>NZ share ($m)</th>
<th>Instances</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covered by TOPIA</td>
<td>1,392</td>
<td>377</td>
<td>507.616</td>
<td>507.616</td>
<td>0.53%</td>
<td>2.709</td>
<td>1</td>
<td>2.709</td>
</tr>
<tr>
<td>Not covered by TOPIA</td>
<td>1,392</td>
<td>377</td>
<td>0</td>
<td>1015.232</td>
<td>0.53%</td>
<td>5.418</td>
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<tr>
<td>Covered by TOPIA</td>
<td>1,044</td>
<td>377</td>
<td>333.616</td>
<td>333.616</td>
<td>0.53%</td>
<td>1.780</td>
<td>3</td>
<td>5.341</td>
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<tr>
<td>Not covered by TOPIA</td>
<td>1,044</td>
<td>377</td>
<td>0</td>
<td>667.232</td>
<td>0.53%</td>
<td>3.561</td>
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<td>3.561</td>
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<tr>
<td><strong>Total Cost Impact for New Zealand (NZ$ million)</strong></td>
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<tr>
<th>NZ share over 10 years</th>
<th>Annual share over 10 years</th>
<th>Million tonnes of oil imported each year</th>
<th>Annual cost of imported oil</th>
<th>Increase in cost of oil (%)</th>
<th>Increase in costs (c/l at the petrol pump)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$17.029</td>
<td>$1.703</td>
<td>5.608</td>
<td>$4,700</td>
<td>0.036%</td>
<td>0.078</td>
</tr>
</tbody>
</table>
Notes

1. The International Group of P&I Clubs represent approximately 90% of the world’s ocean-going tonnage (source: http://www.igpandi.org)


3. NZD/SDR (at 10/01/2014) is 1.856. 203 million SDR = NZ$377 million; 750 million SDR = NZ$1.392 billion

4. Tanker Oil Pollution Indemnification Agreement (TOPIA) which provides that ship owners will contribute 50% of the total costs of compensation in respect of payments made by the Supplementary Fund, where the tanker ship is insured by one of the members of the International Group of P&I Clubs. (source: A joint IPIECA/ITOPF Publication, February 2007, Oil spill compensation - a guide to the international conventions on liability and compensation for oil pollution damage, www.ipieca.org/system/files/publications/Compensation_1.pdf)

5. For 2010 (source: IOPC Contributing oil received in the calendar year 2012 (as reported by 25 November 2013))

6. Based on a barrel of oil weighing around 139kg (7.2 barrels per tonne), and average of oil price per barrel for West Texas and Brent of US$91 and US$106 on 13/01/2014 at NZD/USD 0.838

7. Based on $2.16 for regular 91 petrol