

Regulatory Impact Statement: Improving the financial security regime for offshore installations

Agency Disclosure Statement

1. The Ministry of Transport (the Ministry) has prepared this Regulatory Impact Statement. It provides an analysis of the options for improving New Zealand's financial security regime for offshore installations.
2. The recommendations are drawn from the best information currently available to officials. However analysis is constrained by a lack of available information in three areas.
3. The first of these is detailed information on the likely costs of pollution damage to other parties, and costs incurred by public agencies in preventing and cleaning up a pollution spill from an offshore installation in New Zealand. While trajectory oil spill models are currently required as part of the regulatory regime for offshore installations, detailed work is required to determine the likely costs and damages from current or future operations. The costs of previous incidents and current requirements in other jurisdictions have instead been used in the following analysis.
4. The second is the current financial state of operators in estimating the magnitude of the status quo. Officials are currently unable to confidently assess financial records of each current and future operator, to establish their ability to pay for the relevant costs and damages that are over and above the level guaranteed by a third party.
5. The final, and related, area is the ability of current and future operators to meet new financial assurance requirements. Initial discussions with industry indicate an acceptance that the current requirement needs to increase. However these discussions could not establish whether all current and future operators could meet the proposed higher level. To establish the extent of these impacts, operators will be asked as part of the consultation process, whether and how they would meet the increased minimum requirement. The outcome of consultation will inform the final decision.
6. There is also uncertainty regarding the likelihood of a significant spill from an offshore installation. A recent study of historical blow-outs of exploration wells in the North Sea estimates the risk of a blow-out at 1 in 8,130 wells drilled, however, this does not include the risk of other types of incidents occurring. While the likelihood of a significant pollution incident in the maritime environment is very low, the chance of an incident still remains. If an incident occurred in the near future, there could be significant financial implications for the government and the public.

Dale Warburton, Senior Adviser
Ministry of Transport
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Executive Summary

7. New Zealand's regulatory framework for offshore exploration and production focuses on preventing spills by ensuring operators have plans in place to minimise the likelihood, and reduce the effect, of any adverse event. Intertwined within separate stages of the regulatory regime, different agencies oversee a financial security regime that aims to ensure operators are financially able to undertake their proposed activities and meet subsequent legal obligations.
8. In the unlikely event of a pollution incident, owners and operators of offshore installations are liable for the full costs of pollution damage to other parties, and costs incurred by public agencies in preventing and cleaning up a spill. To support this requirement, and as part of the financial security regime, operators are required under Marine Protection Rule Part 102 (Part 102) to provide evidence of financial assurance, such as insurance or alternative financial security, which covers the operator's potential liability to at least the minimum amount specified.
9. Part 102 ensures that affected parties may make a compensation claim to the third party guarantor named in the financial assurance to cover the prevention costs, clean up costs, and damages associated with a pollution incident. Part 102 currently sets the minimum requirement at 14 million International Monetary Fund Units of Account, or approximately NZ\$26 million, irrespective of the operation's type, possible risk, or the potential impact of a spill.¹
10. The financial assurance aspect of New Zealand's current financial security regime is based on similar frameworks designed for pollution spills from ships. However due to differences between the two industries, the current financial assurance requirement is inappropriate for offshore installations, too rigid, insufficient, and therefore fails to adequately reflect current and future production and exploration activity.
11. Should the costs and damages related to a pollution incident from an offshore installation exceed the amount secured, there is no international compensation mechanism, such as those available for some ship incidents, to ensure payment of compensation to those affected.
12. To settle a compensation dispute beyond the amount secured, proceedings may need to be brought against the owner/operators through a foreign or domestic court process at the cost of those bringing the proceedings. Should owners/operators not have the financial capability to pay all response costs and compensation in the event of a spill, the current regime exposes the government to the risk of bearing the clean up costs incurred by public agencies, such as Maritime New Zealand. The government may also face pressure to provide compensation to the public if the owner or operator is unable to meet damages awarded against them. A failure to pay all response costs and compensation in the event of a spill would also undermine confidence in the industry.
13. To improve its effectiveness and efficiency, officials propose to undertake a review of the financial security regime for offshore installations. As part of this review,

¹ As at 28 February 2014, 1 International Monetary Fund Unit of Account is equal to NZ\$1.847 million. Based on this rate, 14 million units of account equates to NZ\$25.8 million.

consideration will be given to a regime that reflects Australia and the United Kingdom's approach by allowing the level of financial assurance to be scaled depending on an assessment of the likely costs and damages of an incident from each installation.

14. To provide greater protection for the government and other parties until the wider review is completed and implemented, officials propose an interim increase in the current minimum requirement from 14 million International Monetary Fund Units of Account, or approximately NZ\$26 million, to 162 million International Monetary Fund Units of Account, or approximately NZ\$300 million.²
15. Current insurance products on the market appear to prevent operators from meeting their legal requirements under Part 102 solely through insurance, although it is unclear whether tailored insurance could be available if sought by operators. Most operators have instead simply relied on alternative financial security, and in particular a Parent Company Guarantee, where the liability of a subsidiary company is guaranteed by its parent company.
16. Operators that currently meet their requirements through financial security, rather than by insurance, may face difficulty in securing additional security to meet the increase to NZ\$300 million. As part of the consultation process, operators will be asked whether they would be able to, and how they plan to, meet the increased minimum requirement. The outcome of consultation will inform how Part 102 is finalised.

Status quo and problem definition

Context

17. Crude oil is New Zealand's fourth-largest commodity export, worth around NZ\$2 billion a year. The government collects \$380 million annually in royalties from the oil and gas industry. New Zealand's oil and gas production, and its associated economic benefits, are currently generated from the Taranaki basin. At a minimum, the industry provides 3,730 full time equivalent jobs and supports a further 3,970 full time equivalent jobs in other parts of the economy (total full time equivalent staff nationwide 7,700).³
18. At present there are nine offshore oil and gas installations in operation, although there is considerable potential for growth of the offshore oil and gas industry.⁴ New Zealand has 18 petroleum basins and the government is supportive of further development, within a regime that provides robust health, safety, and environmental standards. The net present value of future royalty income from yet-to-be-discovered fields has been estimated at NZ\$5.3 billion.⁵ This is based on anticipated new production coming on stream over the period 2011-2050. Should production activity continue at 2010 levels, the expected royalty value is NZ\$1.191 billion.

² As at 28 February 2014, 1 International Monetary Fund Unit of Account is equal to NZ\$1.847 million. Based on this rate, 162 million units of account equates to NZ\$299.214 million.

³ <http://www.pepanz.com/news-and-issues/issues/economic-contribution-to-nz/>

⁴ Two of these are temporary platforms. Kan Tan is expected to conclude its drilling programme in November or December this year, while the ENSCO 107 may be in operation until August 2015.

⁵ <http://www.med.govt.nz/about-us/pdf-library/petroleum-expert-reports/woodwardreport.pdf>

19. In 2009 the government's Petroleum Action Plan was launched with the aim of ensuring New Zealand is able to maximise the benefit of the responsible development of its oil and gas resources.⁶
20. As part of the Petroleum Action Plan, an independent review of the adequacy of New Zealand's health, safety and environmental legislation for offshore petroleum operations was completed in December 2010. It 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 made eight prioritised recommendations for strengthening the regime. As part of the seventh recommendation, the government was urged to investigate whether current levels of financial assurance required from offshore installations are sufficient.
21. As part of its response to the Petroleum Action Plan, the government asked the Ministry of Transport (the Ministry) to explore increasing the current minimum financial security requirement for offshore installations [EGI(11)165 refers]. This work follows actions to address the recommendations given highest priority, reflecting the importance of improving the prevention regime in the first instance.

Regulatory framework for offshore installations

22. New Zealand uses the prevention-control-response-recovery framework for regulating offshore exploration and production. The primary focus is on minimising hazards and preventing spills from occurring by ensuring that operators have plans and resources in place to minimise the likelihood, and reduce the effect, of any adverse event.
23. Although it is difficult to provide precise figures for the risk of a significant oil or gas incident, the likelihood of a significant incident in the maritime environment is generally very low. An event would require a confluence of circumstances that are unlikely and would require the failure of sophisticated multi-stage prevention systems and planning. A recent study of historical blow-outs of exploration wells in the North Sea estimates the risk of a blow-out at 1 in 8,130 wells drilled, however this does not include the risk of other types of incidents occurring.⁷
24. In recent years New Zealand's regulatory regime for oil and gas has been strengthened to reflect lessons learned from Pike River, the Deepwater Horizon incident in the Gulf of Mexico, and the *MV Rena* incidents. These changes were a result of the government's intention to ensure a robust regime is in place in anticipation of an increase in exploratory activity.
25. The strengthened regime has four essential elements and require operators to:
 - obtain an exploration or production permit, which includes an assessment of an operator's technical and financial capability, compliance history and a preliminary assessment of an operator's capability and systems that are likely to be required to meet applicable health, safety and environmental legislation
 - obtain a marine consent from the Environmental Protection Authority, including approval of an environmental impact assessment

⁶ <http://www.med.govt.nz/sectors-industries/natural-resources/oil-and-gas/petroleum-action-plan>

⁷ Acona Flow Technology. 2012. Report: Blowout Risk Evaluation – Labrador Sea south-west of Greenland

- submit and have accepted a safety case to the High Hazards Unit, and must arrange an independent examination of well design, construction, integrity and maintenance
- have a Discharge Management Plan (DMP) approved by Maritime New Zealand that identifies procedures to reduce the discharge of harmful substances and minimise the risk of an accidental spill, and details emergency response plans that are in place in case a spill does occur⁸

Financial security regime for offshore installations

26. Intertwined within the regulatory framework for offshore installations is a financial security regime that aims to ensure operators are financially able to meet their proposed activities and subsequent legal obligations.
27. Within the financial security regime, requirements for offshore operators are currently considered at different stages of the regulatory regime by multiple agencies. In particular the financial security regime includes:
 - under the Crown Minerals Act 2013 an assessment of an operator's financial capability to carry out their proposed exploration or production activities
 - under Marine Protection Rule Part 200 (Part 200) financial checks are made to demonstrate that operators have the financial means to undertake their emergency response plans and procedures in the event of an oil spill resulting from all potential types of well control failure⁹
 - under Marine Protection Rule Part 102 (Part 102) operators are required to provide evidence of external financial assurance, such as insurance or other financial security, to meet the full costs related to pollution damage to other parties, and costs incurred by public agencies in preventing, controlling, and cleaning up a spill from their installation

Liability requirements in a spill incident from offshore installations

28. Under Part 26A of the Maritime Transport Act 1994, owners and operators of offshore installations are liable, in the event of a spill from their installations, for the full costs related to pollution damage to other parties, and costs incurred by public agencies in preventing, controlling, and cleaning up a spill.
29. To provide an assurance that operators are able to meet their fiscal liabilities under Part 26A, operators are also required to hold a Certificate of Insurance issued by Maritime New Zealand under Part 102. The requirements under Part 102 does not

⁸ Amendments made in 2013 to the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act and the Maritime Transport Act transferred responsibility for regulating discharges from offshore installations from Maritime New Zealand to the Environmental Protection Authority (EPA). Maritime New Zealand will remain responsible for approving marine oil spill contingency plans including well control contingency plans, which are currently part of Part 200. The Maritime New Zealand functions will be specified in a new rule, Rule Part 131 – Offshore Installations – Marine Oil Spill Contingency Plans and Oil Pollution Prevention Certification. Part 131 will not include rules relating to the discharge of chemicals used in drilling and production processes, the oil content of production water, displacement water, offshore processing drainage, oil and oily mixtures from machinery spaces and garbage – which are all waste streams to be regulated as a result of the transfer of functions to the EPA.

⁹ In the future this will be Part 131

lessen the likelihood of an incident occurring, which is instead provided by the prevention regime outlined above.

30. A Certificate of Insurance is issued once operators provide evidence of external financial assurance, such as insurance or other financial security, that meets their potential liabilities up to an amount specified in Part 102.¹⁰ Under the Maritime Transport Act, self insurance is not permitted as an option for granting a Certificate of Insurance.¹¹
31. If an operator is unable to pay the prevention costs, clean up costs, and damages associated with a pollution incident, Part 102 provides an avenue for affected parties to make a claim to the third party guarantor named in the Certificate of Insurance. In a worst case scenario where an operator goes into receivership following a major incident, the requirements under Part 102 limit the Crown's exposure to costs and damages.

Current required level of financial assurance

32. Currently Part 102 applies a fixed minimum requirement for all offshore installations, irrespective of the operation's type, possible risk, or the potential impact of a spill. The minimum is currently set at 14 million International Monetary Fund Units of Account, or approximately NZ\$26 million.¹²
33. The requirement and criteria under Part 102 originated from similar requirements for ships under the International Convention on Civil Liability for Oil Pollution Damage 1969. However, unlike for ships, there are no international conventions that either impose or limit liability for installations, or provide funding mechanisms for ensuring the payment of compensation for pollution damage over and above the limited liability level. The fixed level has remained at this rate since Part 102 was first introduced in 1998, and is linked to the original figure for ships when the Protocol to the International Convention on Civil Liability for Oil Pollution Damage was developed in 1976.
34. Most operators with a current Certificate of Insurance have relied on alternative financial security equal to the minimum of NZ\$26 million. They have been achieved through a Parent Company Guarantee where the liability of a subsidiary company is guaranteed by its parent company.^{13 14}
35. Although operators hold insurance as part of their normal business operations, current insurance products on the market appear to prevent operators from meeting their legal requirements under Part 102 solely through insurance. It is unclear whether operators

¹⁰ Part 102 also requires vessels carrying oil as cargo to have certificates verifying existence of public liability insurance sufficient to cover any claims for oil pollution damage arising from a marine oil spill. The requirement gives effect to provisions of the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage (1969) to which New Zealand is party.

¹¹ Self insurance is a method of managing risk by setting aside funds to be used if a later event occurs.

¹² As at 28 February 2014, 1 International Monetary Fund Unit of Account is equal to NZ\$1.847 million. Based on this rate, 14 million units of account equates to NZ\$25.8 million.

¹³ Parent Company Guarantees provide a basis to bring a claim directly against the party providing the guarantee under the Maritime Transport Act 1994. However, this is only up to the minimum amount prescribed by Part 102 and could still require enforcement proceedings in a foreign jurisdiction.

¹⁴ The exceptions include the floating, production, storage and offloading units (FPSO) Raroa and Umuroa. The Raroa is a converted oil tanker that has been permanently moored over the Maari oilfield since 2008. The operators hold protection and indemnity insurance, which is appropriate for their operation.

have sought tailored insurance as a means to meet their Part 102 requirements, and have instead simply relied on alternative financial security.

Cost of pollution incidents

36. To be effective in the event of a spill, the required level of financial assurance needs to reflect the likely clean-up costs and pollution damage associated with a pollution incident in most cases. However the potential cost of damage and clean up associated are highly variable, dependent on a range of factors, including the:
- type of installation
 - type and quantity of hydrocarbon released, which depends on the characteristics of a particular oil well, for example, possible spill quantity will be affected by the well's flow characteristics and capacity
 - weather conditions and ocean currents at the time of the spill
 - location and proximity to other-party interests
 - length and type of the shoreline affected, for example, whether the shoreline is rocky, sandy, or contains an estuary
 - area affected and the sensitive resources affected, for example, economic impacts on tourism, fishing, or aquaculture
 - effectiveness of response effort.
37. New Zealand has a range of offshore installations producing both waxy crude oils and light condensates. The effects associated with spills of these different oils vary. Lighter oils have a greater short term toxicity and lower persistence. The waxy crudes have components likely to cause chronic, longer term effects on sensitive biology, and would require a greater clean-up effort due to their relative persistence.
38. Well pressures in existing New Zealand installations vary. The wells supplying one of the producing facilities have sufficiently low well pressures that they have to be pumped. However, wells in the remaining fields all flow under pressure. Recent potential worst case scenarios in some Discharge Management Plans for exploration wells have listed very high flow rates during a well blowout.
39. New Zealand's geographical isolation also has implications if an oil spill occurred. Maritime New Zealand advises that should an operator lose control of their well, appropriate capping vessels and equipment would have to be sourced from overseas. The delay in capping the well is likely to result in a larger impact zone, and subsequently higher clean up costs and damage.
40. Impacts would be felt on the fishing stock, and those impacts may go beyond the actual duration of the spill. The timing of any event could affect its impact on the ability of the sensitive resource to sustain its previous activity. If a spill occurs at a spawning or breeding time it may cause substantially greater impacts due to the potential to affect breeding stock.
41. Fortunately New Zealand does not have a history of significant pollution incidents from offshore installations. Although not an offshore installation, during the 2011 *Rena*

grounding, the clean-up of the 350 tonnes of fuel oil spilt cost \$47 million. While this does not include compensation for damages, the cost of clean up was more than the current minimum financial assurance requirement for offshore installations.

42. Internationally, there are a number of recent, high profile incidents highlighting the potential variability in costs and damages. The clean-up costs for the 2010 Deepwater Horizon well blowout in the Gulf of Mexico are in excess of NZ\$16 billion, with at least an additional NZ\$9 billion paid to local residents for compensation. The cost of the 2009 Montara well blowout in Australia was approximately NZ\$250 million. However, it did not involve any shoreline impact and there were limited at-sea interests in terms of fishing in the vicinity of the incident.

Approaches taken by other jurisdictions

43. While regulatory frameworks for offshore installations are not completely comparable between countries, other jurisdictions, within their financial security regime, require financial assurance from operators that they are able to meet their liability in the event of an incident. These generally include a mix of requirements to cover the operator’s ability to respond to a well blow out, any clean-up cost incurred by a public authority and liabilities to other parties for economic damages.
44. Other countries tend to set a requirement appropriate for possible costs associated with each operation, whereas New Zealand’s requirement in relation to clean up costs and pollution damage is a fixed sum in legislation. New Zealand’s fixed requirement for all operators is also significantly below other jurisdictions. A summary of the requirements in these countries is provided below, while more information is provided in Appendix 1.

Owner/operator liability	Minimum financial assurance requirement	Other points
Australia		
Unlimited liability	Currently moving toward an assessment for financial assurance based on possible costs and damages. Level required has not yet been established.	Previous regime only required to hold insurance for expenses and liabilities when directed. Insurance between NZ\$121 million and NZ\$362 million was common practice.
United Kingdom		
Unlimited liability	Graduated figure determined by categorisation of activity ranging between NZ\$300m and NZ\$880m based on possible costs and damages.	Operates in tandem with the Offshore Pollution Liability Agreement (OPOL), an industry liability agreement for costs and damages.
United States		
NZ\$87m limited liability for pollution damage. Unlimited liability for clean-up costs.	NZ\$12m or NZ\$35m depending on operation. Can be increased to maximum of NZ\$175m if justified based on risk of operation.	Works alongside Oil Spill Liability Trust Fund (OSTLF) that provides up to NZ\$1.2b of compensation per incident. Funded primarily through a levy on oil.
New Zealand		
Unlimited liability	Single fixed figure of NZ\$26m	

Problem definition

45. The financial assurance aspects of New Zealand’s current financial security regime is inappropriate for offshore installations, too rigid, insufficient, and therefore fail to adequately reflect current and future production and exploration activity.

Inappropriate for offshore installations

46. The financial assurance requirement for offshore installations is based on similar frameworks designed for pollution spills from ships. Unlike for ships, there are no international conventions relevant to offshore installations that impose liability, limit liability, or provide an international fund for ensuring the payment of compensation for oil pollution damage and costs over and above the limited liability level.
47. Should the costs and damages related to a pollution incident from an offshore installation exceed the amount secured by the Certificate of Insurance, there is no international funding mechanism, such as those available for ship incidents, to ensure payment of compensation to those affected. To settle a compensation dispute beyond the amount secured, proceedings may need to be brought against the owner/operators through a foreign or domestic court process at the cost of those bringing the proceedings.
48. Should operators not have the financial capability to pay all response costs and compensation in the event of a spill, the current regime exposes the government to the risk of bearing the clean up costs incurred by public agencies, such as Maritime New Zealand. The government may also face pressure to provide compensation to the public if the owner or operator is unable to meet damages awarded against them. A failure to pay all response costs and compensation in the event of a spill would also undermine confidence in the industry.

Too rigid

49. The fixed minimum required for financial assurance also provides insufficient flexibility to set a requirement that reflects the likely costs and damages of an incident from each individual oil and gas operation.
50. There are wide variations in possible costs and damages as evidenced from previous events, and the large number of factors relevant to the cost of damage and clean up associated with pollution from offshore installations. Regardless of the likely costs and damages from their operations, currently all operators with a Certificate of Insurance have provided evidence of financial assurance equal to the minimum fixed requirement.
51. Despite the wide variation in potential impacts, a fixed minimum requirement creates a tension between setting a level that reflects the costs and damage in most pollution incidents, and minimising the compliance costs for operators whose potential costs and damage are lower. For example, a relatively high fixed level would likely cover the costs and damages in most incidents, but would require some operators to provide a level financial assurance that is excessive for the characteristics of their operation.

Insufficient

52. Based on previous international incidents, and requirements in other jurisdictions, any significant incident is likely to exceed the current minimum fixed level of NZ\$26 million. Operators are not required to, and currently do not, provide financial assurance that is appropriate to the potential costs of clean up and compensation to other parties' damage from their installation.
53. Therefore the current minimum requirement of NZ\$26 million does not ensure there will be adequate, effective, and prompt compensation available to those affected by a

pollution incident. In the event of a major incident, the current level exposes the government and other parties to a risk of non-recovery for clean up costs and pollution damage. A failure by an operator to pay all response costs and compensation in the event of a spill would also undermine confidence in the industry.

Size of the problem

54. Determining whether there is adequate, effective, and prompt compensation available to those affected from a pollution incident is dependent on the probability of an incident occurring, the costs and damage related to that incident, and the financial status of each operator.

Probability of an incident occurring

55. The presence and level of the minimum financial assurance, in itself, does not alter the probability of an oil spill occurring. Instead New Zealand's overarching framework for regulating the safety of exploration and production provides the mechanism to reduce the likelihood of a pollution spill.
56. Although it is difficult to provide precise figures for the risk of a significant oil or gas incident, the likelihood of a significant incident from any of the nine current offshore installations is very low. An event would require a confluence of circumstances that are unlikely and would require the failure of sophisticated multi-stage prevention systems and planning. A recent study of historical blow-outs of exploration wells in the North Sea estimates the risk of a blow-out at 1 in 8,130 wells drilled, however this does not include the risk of other types of incidents occurring.¹⁵
57. If the level of required financial assurance is sufficiently high, regardless of the number of oil spills occurring, adequate compensation will be available without exposing the government to the risk of bearing the clean up costs, and the public to the risk of bearing the damage from oil pollution. Alternatively if there was a zero chance of an incident occurring, there would not be a need for financial assurance. It is therefore, more pertinent to assess whether the current financial assurance requirement is likely to cover expected liabilities and costs in most instances.

Costs and damage of incidents

58. Estimating an appropriate level of financial assurance required of operators is made difficult by the unknown extent of a potential spill from current, or any future, offshore installations. The cost of damage and clean up required from oil spills can be highly variable, and depend on a complex range of factors as outlined in paragraph 36 above.
59. The current fixed rate of NZ\$26 million has been in place since 1998 and appears to be based on the original level used when the International Maritime Organisation were developing a convention related to the liability for oil pollution from vessels in 1976. Ignoring that costs and damages vary by each incident, an incident costing NZ\$26

¹⁵ Acona Flow Technology. 2012. *Report: Blowout Risk Evaluation – Labrador Sea south-west of Greenland*

million in 1976 would cost approximately NZ\$193 million in 2013 after adjusting for inflation.¹⁶

60. Even if comprehensive information and modelling of all current, and future, operations were available, the number of variables makes it impossible to accurately predict the cost of damage and clean up cost of any one incident. Instead jurisdictions generally implement a worst-case scenario regime.
61. In terms of actual incidents, there are few domestic examples of relevant oil spills from offshore installations to compare against. The clean-up of the 350 tonnes of fuel oil spilt during the Rena incident cost \$47 million. While this was a vessel oil spill rather than from an installation, the cost is greater than the current minimum insurance requirement for offshore installations, and does not include compensation for damages.
62. There are a number of recent, high profile, incidents highlighting the potential variability in costs and damages. The clean-up costs and damage for the 2010 Deepwater Horizon well blowout in the Gulf of Mexico are in excess of NZ\$25 billion, while the cost of the 2009 Montara well blowout in Australia was approximately NZ\$250 million.
63. Based on previous incidents, requirements set out in other jurisdictions, and the history of the current figure, officials believe that in almost all cases, the costs and damages associated with a spill incident from an offshore installation would be higher than the current minimum financial assurance requirement.

Financial status of each operator

64. The final aspect of understanding the size of the problem relates to the likelihood that an operator is unable to pay for the relevant costs and damages that are over and above the level guaranteed by a third party.
65. Most operators with a current Certificate of Insurance have relied on alternative financial security equal to the minimum of NZ\$26 million. They have been achieved through a Parent Company Guarantee where the liability of a subsidiary company is guaranteed by its parent company.
66. Officials are currently unable to confidently assess the financial ability for operators to meet the potential costs and damages over and above the current NZ\$26 million. To protect their international reputation and future exploration activity, operators are likely to have the incentive to pay for costs and damages over and above the current NZ\$26 million.
67. The use of Parent Company Guarantees does provide an indication that most operators are a subsidiary of a larger international parent company. There are however, a number of smaller New Zealand based operators that do not have an international parent company to draw funds from. These operators are more susceptible to being unable to meet their liability requirements.

¹⁶ Using the Reserve Bank of New Zealand's inflation calculator, which can be found at http://www.rbnz.govt.nz/monetary_policy/inflation_calculator/, NZ\$26 million dollar in Q4 of 1976 is equal to NZ\$192,953,523 in Q4 of 2013.

68. While most operators have not used a contract of insurance to meet their Part 102 obligations, officials understand that operators hold additional incident related insurance, such as operators extra expense (OEE) or other public liability insurance, as part of their normal business operations. OEE is a specialised insurance policy available to oil or gas well operators that typically provides hierarchical protection against the costs and damages associated with an out of control well. The total insured value would first be allocated to pay out on the cost of controlling the well, then remaining funds from the policy would be put toward the cost of re-drilling, and finally to proven third party damage.
69. Insurance could be used to meet their costs and damage liability in those circumstances that are covered under the insurance agreement. Although due to the hierarchical protection, OEE may leave insufficient funds available for clean up costs incurred by public agencies and damages to third parties.
70. As with the overall financial state of each operator, information on the coverage and level of insurance is not available, and therefore officials are unable to establish the extent to which insurance may finance costs and damages that are over and above the level guaranteed by a third party.

Summary

71. Overall incomplete information makes it difficult to calculate or estimate the size of the issue at hand. Based on previous incidents, requirements set out in other jurisdictions, and the historical nature of the current minimum level, officials consider that the current requirement would not meet operators' liability in almost all cases.
72. However, the clear unknown is the extent to which all operators have additional financial ability or are able to buy appropriate insurance cover to meet their liability over and above the current level.

Objectives

73. The financial assurance aspect of New Zealand's current financial security regime is inappropriate for offshore installations, too rigid, insufficient, and therefore fails to adequately reflect current and future production and exploration activity.
74. In determining an appropriate response to the issues raised above, the objectives are to:
 - ensure the financial assurance requirement is appropriate to the offshore industry
 - ensure there is effective, prompt, and adequate compensation for clean up costs incurred by public agencies and to other parties which suffer economic damage
 - increase protection to the government against the risk of bearing any clean up costs, and the public from bearing the damage from a spill incident
 - minimise compliance costs

- future proof legislation from an evolving offshore exploration and drilling environment
- provide flexibility to adapt to changing operating environments such as technological developments, improved modelling of impacts, and changing costs of clean up and damages

Options and impact analysis

75. Consideration has been given to five options to address the issues raised above.

Option 1 – Retain the status quo

76. The first option is to retain the status quo with a fixed financial assurance requirement of NZ\$26 million.
77. To protect their international reputation and future exploration activity, operators may be incentivised to hold sufficient capital or finance to address the relevant costs and damages that are over and above the minimum level guaranteed by a third party.
78. Given the potential impact of an incident, retaining the current minimum financial assurance requirement at NZ\$26 million does not ensure there is effective, prompt and adequate compensation to those affected by a spill. It also continues to expose the Government and other parties to a risk of non-recovery for clean up costs and pollution damage in the event of an incident.
79. Officials do not consider the cost of meeting the current requirements is unnecessarily prohibitive to companies exploring and extracting oil and gas in New Zealand. There has been no indication that current operators have faced difficulty in meeting the current requirements.
80. This option does not address the issue of the inappropriateness of the current regime for the offshore industry, does not introduce flexibility to adapt to changing operating environments, and does not future proof current legislation from an evolving offshore exploration and drilling environment.
81. This option is not recommended as it does not adequately satisfy the stated objectives.

Option 2 – Remove the requirement for operators to hold financial assurance

82. The requirement for operators to hold financial assurance could be removed from the Maritime Transport Act and Part 102. It would require amendments to primary and secondary legislation.
83. The liability provisions in the Maritime Transport Act would remain with operators continuing to be responsible for all costs and damages related to a spill.
84. As with option one, this option does not ensure that adequate compensation for costs related to oil pollution damage to third parties, and costs to public agencies would be available. Without financial assurance, there could be a significant delay in the recovery of costs from the operator, and some owners or operators could be unable to meet damages awarded against them.

85. This option would increase the government's and public's risk of bearing any clean up costs, and damage from oil pollution. It also does not address the issue of the inappropriateness of the current regime for the offshore industry, does not introduce flexibility to adapt to changing operating environments, and does not future proof current legislation from an evolving offshore exploration and drilling environment.
86. This option would reduce compliance costs for operators, and therefore would not be prohibitive to companies exploring and extracting oil and gas in New Zealand.
87. This option is not recommended as it does not adequately satisfy the stated objectives.

Option 3 – Increasing the minimum financial assurance requirement

88. The third option is to increase the fixed minimum level of financial assurance required.
89. Compared to the status quo, an increase would provide a greater assurance that operators can meet their costs for clean-up and compensation for pollution damage, and increase the protection to government and public from bearing the costs related to an oil spill. However, given the wide variation in possible cost of oil spill incidents, an increase may not be sufficient for all potential spills and the resulting damage and clean up costs.
90. Given the variability in the type and scale of oil and gas installations, increasing the fixed level may introduce an unnecessary compliance burden for some operators. This option may force lower risk operators to hold financial assurance that is in excess of the likely cost and damage from their installation, and could be prohibitive to those operators.
91. Increasing the fixed financial assurance requirement therefore creates a trade off between increasing the amount of compensation available, and increasing the compliance costs for operators regardless of the likely cost from their operation.
92. Setting a sufficiently high fixed requirement to meet a high impact scenario, as indicated by the NZ\$880 million required in the United Kingdom regime, would ensure there is adequate compensation available. It would protect the government from the risk of bearing any clean up costs, and the public from bearing the damage from oil pollution. However, it would likely be prohibitive to operators with relatively low potential impacts.
93. Setting a higher fixed requirement to meet most scenarios, as indicated by the NZ\$300 million required in the United Kingdom regime, would provide a higher degree of assurance than the status quo that there is compensation available. It would better protect the government from the risk of bearing any clean up costs, and the public from bearing the damage from oil pollution. However, there would remain a risk from incidents with costs and damages greater than NZ\$300 million.
94. This option does not address the issue of the inappropriateness of the current regime for the offshore industry, does not introduce flexibility to adapt to changing operating environments, and does not future proof current legislation from an evolving offshore exploration and drilling environment.
95. On its own this option is not recommended as it does not adequately satisfy all of the stated objectives.

Option 4 – Flexible assessment

96. The fourth option is to adopt a flexible framework for requiring financial assurance in the offshore drilling environment, similar to that applied in Australia and the United Kingdom. This option would enable each individual installation to be assessed and apply a financial requirement that is appropriate based on the potential impact of a spill from that installation.
97. A flexible approach would more accurately reflect the likely clean up costs or pollution damage of an incident resulting from their particular operation, and therefore provide the greatest assurance that there is effective, prompt and adequate compensation available to those affected.
98. A flexible approach provides the greatest protection to the government from the risk of bearing any clean up costs, and to the public from bearing the damage from oil pollution. Under this option, 'riskier' operations would be required to provide greater financial assurance, which would lower the risk to third parties of bearing the cost and damage from a spill.
99. This option would have implications for companies exploring and extracting oil and gas in New Zealand. A cost-based approach is likely to increase their financial assurance requirements for the majority of operators. Those operators would be required to either increase their insurance coverage, or find additional financial security, to cover their new requirement. Although the compliance burden is expected to be proportional to the likely costs resulting from an incident at their installation.
100. This option would also increase an operator's compliance cost from providing information required for an assessment. Government agencies responsible for undertaking the assessment of each operator would also face increased costs.
101. There is also likely to be inefficiencies in the broader financial security regime as offshore operators face multiple financial assessments at different stages of the regulatory regime by different agencies. The presence of multiple financial assessments is likely to result in higher compliance costs across the entire financial security regime than is necessary. Within the current financial security regime, this inefficiency is likely to be exacerbated by a more complex financial assurance assessment.
102. Removing a fixed minimum and introducing a flexible financial assurance requirement would improve the appropriateness to the offshore industry, and would allow the requirements to adapt to any future changes to the operating environment.
103. There are immediate issues in implementing a flexible assessment of financial assurance. Cost assessments for installations are highly specialised, and require a significant level of technical understanding of the functioning of the oil sites and drilling operations. The expertise required for this is not held by transport agencies.
104. To fully consider how a flexible framework for assessment could work, how it would be undertaken, when it should be undertaken and which agency should undertake it, would take some time before a workable solution was agreed upon by all the agencies involved in regulating offshore installations. At a minimum, changes to secondary legislation would be required. This work would not be able to be completed before the commencement of the 2014/15 drill season.

105. Although a flexible approach is preferred by officials, the time required to establish such a regime continues to expose the government to the risk of bearing any clean up costs, and the public to the risk of bearing the damage from oil pollution from an offshore installation.
106. The timing issue could be addressed by increasing the current financial assurance required, as described in Option 3. However the inefficiencies, and subsequent compliance costs, resulting from multiple financial assessments at different stages of the regulatory regime by different agencies would remain.
107. It is the second preferred option.

Option 5 – Review of financial security regime with an interim increase in the minimum requirement

108. The final option is to undertake a review of the overall financial security regime for offshore installations that aims to ensure operators are financially able to undertake their proposed activities and meet subsequent legal obligations.
109. As part of this review, consideration will be given to a regime outlined in Option 4 that would allow the minimum level of financial assurance to be scaled depending on an assessment of the likely costs of clean up that would be incurred by public agencies, and other party damages, associated with a pollution incident from each offshore installation. This option would address the timing concerns raised in Option 4, by increasing the current fixed financial assurance required, as described in Option 3, until a review is completed and implemented.
110. The review would look at the broader financial security regime for assessing the ability of operators of offshore installations to financially meet the likely preventative costs, clean up costs and pollution damage of an incident from their operation. Not only would this examine the requirements under Part 102, but how this sits alongside other financial requirements under the Exclusive Economic Zone and Continental Shelf Act, Crown Minerals Act and Part 200¹⁷ to ensure consistency and efficiency, and minimise compliance costs for operators and government agencies.
111. A review would also need to consider where in the regulatory regime financial security assessments would fit, how each financial security requirement would interact, how offshore operations are assessed, what levels of financial assurance are appropriate in New Zealand conditions, what type of financial assurance should be acceptable, whether an industry fund is appropriate and necessary, what regulatory changes would be necessary, and the government agencies that would be responsible for implementing the new regime.
112. Changes to secondary legislation would be required, with changes to primary legislation also likely. This work would not be able to be completed before the commencement of the 2014/15 drill season. While there is currently no new exploration drilling activity planned for the 2014/15 season, development drilling will continue near existing installations.

¹⁷ In the future this will be Part 131.

113. Of all the available options, an overarching review would provide the best chance of ensuring the financial assurance requirement is appropriate to the offshore industry, future proofing legislation from an evolving offshore exploration and drilling environment, and providing sufficient flexibility to adapt to changing operating environments.
114. Until the review is completed and implemented, an increase in the minimum level of financial assurance required provides greater assurance that there is effective, prompt and adequate compensation available, and increases the protection to the government and the public from bearing the financial impact from an oil pollution incident.
115. As with Option 3 there is limited information available to undertake a thorough analysis of an appropriate interim fixed rate of financial assurance. Utilising the United Kingdom as the most appropriate comparator, officials consider that an interim increase should position New Zealand closer to their requirements.
116. NZ\$300 million equates to United Kingdom's lowest requirement for clean up costs and damages. Although based on local modelling and conditions, when updating their regime the United Kingdom found that the majority of scenarios would fall within this level, with only certain limited cases requiring a higher assurance.
117. As an interim measure, United Kingdom's lowest level of NZ\$300 million is considered appropriate for New Zealand. It would provide better assurance that compensation for clean-up and pollution damage will be available. Officials therefore recommend that operators should be required to hold financial assurance of at least 162 million International Monetary Fund Units of Account, or approximately NZ\$300 million, until such time that a new regime has been developed.
118. Initial discussions with industry indicate an acceptance that the minimum level of public liability assurance needs to increase. However, the new requirement will impact current and future operators and officials cannot guarantee that no operators will choose to surrender their permit or be deterred from exploration as a consequence of the increase.
119. It is likely that industry's response to the proposal will be to raise concerns about the lack of available insurance products and restrictions on the acceptable types of alternative financial security. As outlined earlier, current insurance products on the market appear not to meet the legal requirements under Part 102. Should tailored insurance be available to operators, an increase to NZ\$300 million would increase costs for current and future operators. Initial consultation with insurance brokers suggest that, depending on the operator, premiums for a NZ\$300 million insurance policy could be approximately NZ\$3 million.
120. To establish the extent of these impacts, operators will be asked as part of the consultation process, whether and how they would meet the increased minimum requirement. The outcome of consultation will inform how the Rule is finalised.
121. This option is recommended.

Consultation

122. This Regulatory Impact Statement supports a Cabinet paper seeking approval that the Ministry of Transport release a consultation document on the proposal to increase, in the interim, the current minimum requirement for financial assurance from 14 million International Monetary Fund Units of Account (approximately NZ\$26 million) to 162 million International Monetary Fund Units of Account (approximately NZ\$300 million).
123. The purpose of the consultation process is to formally test this information, and ensure the proposed requirement is appropriate to achieve the desired outcomes. Consultation will canvas stakeholders views on:
- the adequacy of the current fixed minimum financial assurance requirement of NZ\$26 million
 - how operators currently meet the financial assurance requirement
 - issues they have encountered in meeting the requirement in the past
 - increasing the fixed minimum financial assurance requirement to NZ\$300 million
 - if and how operators expect to meet the new requirement
 - the likely compliance costs in meeting the new requirement
 - expected impacts of meeting the new requirement
 - how long operators will need to meet the new requirements
124. Consultation will entail notifying industry and stakeholders that may potentially be affected by an oil spill from an offshore installation of the consultation document. Information will also be made available on the Ministry of Transport's website and the consultation will be noted in the *Gazette*.¹⁸ Consultation will be undertaken over a four week period.

Conclusions and recommendations

125. The financial assurance requirements of New Zealand's current financial security regime is inappropriate for offshore installations, too rigid, insufficient, and therefore fails to adequately reflect current and future production and exploration activity.
126. The current minimum financial assurance requirement specified in Part 102 is not adequate to ensure that sufficient funds are available to provide compensation for the potential costs that may be incurred by third parties who suffer loss or damage, or costs incurred by public agencies who may be required to undertake preventative measures and clean up activities.
127. It is recommended that New Zealand reviews the financial security regime for offshore installations, and as part of this review, consider a regime that would allow the

¹⁸ The Ministry will be consulting on the rule amendment at the same time and is required by law to undertake public consultation.

minimum level of financial assurance to be scaled depending on an assessment of the likely costs of each operation. This approach would align New Zealand with practices in Australia and the United Kingdom, where individual operations are assessed and the financial assurance requirement is based on the potential costs associated with each individual operation.

128. An overarching review would provide the best chance of ensuring the financial assurance requirement is appropriate to the offshore industry, future proofing legislation from an evolving offshore exploration and drilling environment, and providing sufficient flexibility to adapt to changing operating environments. It should also help improve the efficiency of the financial security regime and therefore reduce compliance costs for operators and government agencies.
129. A more flexible financial assurance requirement should better ensure there is adequate, effective and prompt compensation, and reduce the likelihood that the government will be expected to provide compensation if the owner or operator is unable to meet damages awarded against them.
130. Until this work is completed and implemented, officials believe there is a need to increase the current minimum to provide better protection to the government from the risk of bearing any clean up costs, and the public from bearing any damage from oil pollution, in the event of a spill incident from an offshore installation.
131. Officials recommend that, until the review is completed and implemented, the current minimum requirement should be increased from 14 million International Monetary Fund Units of Account (approximately NZ\$26 million) to 162 million International Monetary Fund Units of Account (approximately NZ\$300 million). Consultation is proposed to formally test the level of the increase, and its appropriateness to achieve the desired outcomes.

Implementation plan

132. Should Cabinet agree to the review of the financial security regime, officials will report back to Cabinet by the end of 2014 on options for an improved financial security regime.
133. Should Cabinet agree to increase the minimum financial assurance requirement to NZ\$300 million in the interim, the Minister will need to sign a Rule Amendment. As the requirement is set in International Monetary Fund Units of Account, the rule amendment would set the requirement at 162 million International Monetary Fund Units of Account.
134. After the Minister signs the Rule Amendment to increase the requirement, there is a gazettal notice period of at least 28 days before the change will come into effect. The Ministry is seeking feedback on whether this timeframe is appropriate.
135. Maritime New Zealand will begin to implement the new requirement once applications are made. As Certificates of Insurance are issued for a 12 month period, current operators will be required to meet the new level once they reapply for a Certificate of Insurance.

Monitoring, evaluation and review

136. It is proposed that the current requirement is increased with a later review to be undertaken to consider options for improving the current regime.
137. Operators are required to hold a Certificate of Insurance before they begin their offshore activity. Once an application is received from an operator, Maritime New Zealand evaluates the evidence of financial assurance. This includes a check of the type of financial assurance provided and the financial level to ensure it complies with the obligations under Part 102. Once Maritime New Zealand is satisfied an operation has suitable financial assurance, a Certificate of Insurance is issued for a 12 month period.
138. As this evaluation is undertaken before an activity begins, there is little ongoing monitoring of their compliance with the current, or proposed increased, requirement. Instead an operator would be required to apply for a subsequent Certificate of Insurance once the original expires.
139. As part of the subsequent review, policy work undertaken by the agencies will draw on operators' experiences in meeting the new requirement. In particular this will include the types of financial assurance operators have used to meet the higher requirement, the compliance costs they have faced in meeting the higher requirement, and the impact on their operation of meeting the new requirement. This information will assist in informing the subsequent review. The monitoring, evaluation and review requirements will be reconsidered as part of the review.

Appendix 1 – Approaches taken by international jurisdictions

Australia

1. Financial assurance is compulsory in Australia. The level required must be approved by authorities on a case by case basis that reflects the costs of an individual installation.
2. Amendments in 2013 clarifies an operator's requirement to maintain sufficient financial assurance to ensure it can deal with all costs, including extraordinary costs, expenses or liabilities arising in connection with the carrying out of a petroleum activity, including expenses relating to the clean up or other remediation of the effects of a spill.
3. Previously, operators only needed to hold insurance when directed to do so by the responsible Minister. Recent amendments to the Act now require every operator to hold sufficient financial assurance to ensure they can meet the costs and liabilities related to their petroleum activities.
4. Based on the previous regime, the Australian government considered holding insurance between NZ\$121 million and NZ\$362 million to be standard practice. The amendments to the Act do not provide any guidance as to the level of financial assurance required.
5. Minimum requirements for the current regime are unavailable. Work is currently underway to implement the amendments and establish the most appropriate way to set cost-based financial assurances. The work is expected to be completed by the end of 2014.
6. Prior to recent amendments, the Australian regime combined control of well and public liability, but did not cover third party claims, or environmental damage. The Maritime Transport Act requires that compensation should be available to persons that suffer damage or loss as a result of an oil pollution incident. The previous Australian regime is not directly comparable to New Zealand as it did not cover third party claims.

United States

7. Under the United States' Oil Pollution Act of 1990, the owner or operator of an offshore installation is liable for the costs associated with the containment or cleanup of the spill and any damages resulting from the spill. United States operators must provide evidence of financial responsibility to cover clean up costs and pollution damage resulting from an incident. Offshore operators have limited liability for pollution damage up to NZ\$87 million, but unlimited liability for clean up costs. Offshore facilities are required to maintain evidence of financial responsibility of either at least NZ\$12 million or NZ\$35 million. This can be increased to a maximum of NZ\$175 million under regulations if justified based on the relative risk of the operation.
8. The United States have also established the Oil Spill Liability Trust Fund (OSLTF), which is used for costs not directly paid by the operator responsible for a spill up to NZ\$1.2 billion. The OSLTF is available to pay for the removal costs incurred by federal or state governments; the costs for the government in assessing natural resource damages; developing and implementing restoration plans; uncompensated removal costs and uncompensated damages; and administrative costs
9. The primary source of revenue for the fund is a NZ\$0.06 per barrel fee on imported and domestic oil. Other revenue sources for the fund include interest on the fund, cost

recovery from the parties responsible for the spills, and any fines or civil penalties collected.

United Kingdom

10. United Kingdom's cost based financial responsibility assessment has four categories, NZ\$300 million, NZ\$440 million, NZ\$590 million, and NZ\$880 million, to address pollution damages and clean up costs from exploration. Further security is required for well control and is set according to the expected costs of relief well drilling and capping.
11. The United Kingdom's guidelines identify that in the majority of scenarios NZ\$300 million would be sufficient to meet the claims for clean-up and compensation for oil pollution damage.¹⁹ However, in certain limited cases spill clean-up and pollution compensation costs could exceed the NZ\$300 million limit.
12. The United Kingdom also requires operators to hold financial assurance for well control. New Zealand's regime requires, under Maritime Protection Rule Part 200, an assessment of an operator's financial capability to undertake their proposed Well Control Contingency Plan that details an operator's procedures in the event of an oil spill resulting from all potential types of well control failure. The operator, as the party responsible for stopping the release of oil, must demonstrate they have prepared for a worst-case scenario and have the means to resolve the situation, no matter how unlikely it might be. As operators provide financial assurance for dealing with a well blowout under Part 200,²⁰ this hasn't been included when considering a new minimum requirement under Part 102.
13. The United Kingdom's regime operates in tandem with the Offshore Pollution Liability Agreement (OPOL), an industry agreement covering certain European countries. The United Kingdom requires all offshore operators to accept liability under OPOL for pollution damage and clean up costs up to a maximum of NZ\$300 million per incident. OPOL requires operators to provide evidence of NZ\$300 million worth of financial assurance, such as insurance, financial guarantees, or self insurance.
14. Should an operator be unable to meet their requirement under OPOL, then other members agree to meet the claim up to the NZ\$300 million limit. If the assessment for exploration exceeds OPOL's level of NZ\$300 million, operators need to provide additional financial assurance.

¹⁹ Oil and Gas UK *Guidelines to assist licensees in demonstrating Financial Responsibility to DECC for the consent of Exploration and Appraisal Wells in the UKCS*. Issue 1. November 2012.

²⁰ In the future the assessment undertaken by Maritime New Zealand under Part 200 will be undertaken under the new Part 131, as some current functions of Part 200 are being transferred to the EPA.