Stage 2 Cost Recovery Impact Statement

Mid Point Review of the Oil Pollution Levy 2016/2022

Agency Disclosure Statement

1. This Cost Recovery Impact Statement (CRIS) has been prepared by Maritime New Zealand (Maritime NZ). It provides an analysis of options to reset Oil Pollution Levy (the Levy) rates for the second half of the 2016/2022 levy period covered in the current Oil Pollution Levies Order 2016 (the Order).

2. Maritime NZ has undertaken a mid-point review of the Levy (2016/2022) and has sought feedback on three options for the amount of revenue sought and how the levy is applied to the contributing sectors for the second-half of the six year Levy period.

3. Several pieces of work shaped the new levy allocation proposals and provided the basis for the calculations and assumptions reflected in the options. Those were:
   - A refresh of the New Zealand Marine Oil Spill Readiness and Response Strategy (the Strategy);
   - A refresh of the Marine Oil Spill Risk Assessment (MOSRA 18) incorporating the latest data and improvements in modelling capabilities to re-assess risk matters and consequently sector shares of risk;
   - A review of the 2016/17 – 2018/19 Capability Plan[1], to ensure it remains valid and appropriate, and
   - A re-forecast of expected activity levels by Maritime NZ, projecting forward trends over recent years for the period from July 2019 to June 2022.

4. All of these steps are intended to ensure that the capability plan remains valid:,
   - the levy paying sectors and individual levy payers are paying appropriate amounts based on statistical risk share for each sector (the correct parties contribute the correct share of target revenue); and
   - the forecast future activity levels for all sectors (the correct amount is collected from each sector so that we neither over, nor under recover revenue against the target revenue total).

5. Throughout the analysis, the following key assumptions were made:
   - Maritime NZ assessments of capability requirements and estimated costs, as independently reviewed by the International Tanker Owners Pollution Federation[2] (ITOPF), are accurate;

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[1] Capability Plan for Marine Oil Spill Readiness and Response 2016/17-2018/19
https://www.maritimenz.govt.nz/public/consultation/OPL/documents/capability-plan-marine-oil-spill.pdf .

- the proportions of oil spill risk that MOSRA 18 has calculated for each industry sector are correct; and
- Trends over the last three years of actual sector activity will continue over the next three years.

6. Any changes to current levy rates need to be in place by 1 July 2019.

Craig Smith

Manager, Maritime New Zealand

[*Signature of person*] [*Date*]

Executive summary

7. New Zealand needs effective capability to manage the likelihood and consequences of marine oil spills. Although the likelihood of a major oil spill is low, the environmental, financial and cultural impacts of such an incident would be significant. Maritime NZ sets the strategy for the overall vision and objectives for New Zealand's oil spill readiness and response, supported by a capability plan detailing the equipment, services and personnel needed to support the strategy's delivery. The Levy funds activities under the Capability Plan (the Plan).

8. In 2016 the previous government agreed to a six-year implementation of a comprehensive plan, setting indicative levy rates for that period with a commitment to a review of the Levy after three years ('the mid-point review') The review would assess, amongst other things, whether enough revenue is being generated to deliver activities under the updated capability plan, how this amount is spread between contributing parties and what the possible options might be for the Levy in the second half of the current six-year plan.

9. At the mid-point of the six-year period, total revenue to date is less than originally forecast. This is due to the Levy coming into force six months later than originally planned, and actual activity being less than forecast, there was a revenue shortfall of $1.3 million over years one to three. This shortfall was reduced to $0.78 million, through the use of operating reserves from the Oil Pollution Fund. Not enough revenue being generated by the Levy could significantly affect the ability to implement the Plan and meet New Zealand's oil spill response obligations.

10. As a result of the review three options were put forward that took into account a revised risk assessment and re-forecast sector activity levels identified during this process:

    - Option One (Status Quo): Baseline Levy + Capability Levy (no change to current Levy rates or sector risk shares). Due to changes in activity levels and quantities and types of oils used as fuel or carried as cargo, Option One generates revenue significantly below that originally planned and consulted on for Years Four, Five and Six of the Plan period. This will impact baseline capability and the ability to fully implement the Plan.

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[2] ITOPF members are tankers owners, and associates include other ship owners and oil pollution insurers. It is the maritime industry's primary source of technical advice, expertise, assistance and information on effective response to ship-source pollution.

- Option Two (Levy Rates A): Baseline Levy + Capability Levy (retains the same overall revenue targets for 2020-2022 established in 2016 and sector risk shares adjusted to reflect the updated statistical risk). Option Two sustains baseline capability and delivers Years Four, Five and Six of the Plan as per the 2016 programme and will mean the majority of the plan is fully completed to the original timescales.

- Option Three (Levy Rates B): Baseline Levy + Capability Levy (retains the same overall revenue targets for 2020-2022 established in 2016 but adds the shortfall in funding from 2017-2019 and sector risk shares adjusted to reflect the updated statistical risk). Option Three sustains baseline capability, delivers Years Four, Five and Six of the Plan as per the 2016 programme plus recovers the net funding deficit from Years One to Three, and so supports the delivery of the overall six-year plan within the original timeframe.

11. As a result of the updated risk assessment Option Two and Three adjusted the levy rates across the six sectors. Five of the six sectors are proposed to see relatively significant changes to their share contribution (either an increase or decrease). Further details on the changes for sectors can be found in Appendix Two and Three.

12. Eight submissions were received during the consultation period. Some of the submissions were made on behalf of a number of maritime operators. Seven indicated a preferred option, and one did not support any of the options (although they did support the intention to set the target revenue from the Levy in line with Option Two). Of the seven that expressed a preference for an option, one submitter preferred Option One, five submitters preferred Option Two, and one submitter preferred Option Three.

13. All submitters support continued investment to maintain an appropriate level of response capability for marine oil pollution events in New Zealand. There was overall support from submitters for activities in the Plan. Three overall issues were raised by submitters:

    - Perceived shortfalls with the MOSRA methodology;

    - The cumulative impacts of border fees and levies on the maritime sector; and

    - The longer-term implications of the expected changes to bunker fuel composition that likely will arise from revisions to MARPOL Annex VI.

14. The Oil Pollution Advisory Committee (OPAC) considered the summary of submissions and agreed to recommend to the Maritime NZ Authority (the Authority) that Option Two should be taken forward, in line with the majority of the submissions.

15. Maritime NZ initially supported Option Three as the ideal operational solution. This was the option recommended in the consultation document. Having considered OPAC's views, and the majority of submissions, Maritime NZ is now of the view that Option Two should be the recommended option.

16. Maritime NZ put forward their preferred option to the Authority. The Authority does not recommend Option One because it does not provide sufficient funding to deliver the Plan. Pre-consultation, the Authority's preferred option was Option Three as it would assure the full delivery of the Plan within the original six-year timeframe agreed by the Government at the time. The Authority now recommends Option Two for the following reasons:

    - They are confident that through Maritime NZ's careful planning and allocation of resources the vast majority of the Plan can still be achieved through Option Two within the original timescale, i.e. by 30 June 2022;

- The capability impact is relatively minor and can be managed (any outstanding items can be addressed at the start of the next cycle);
- The majority of submitters and OPAC preferred Option Two; and
- OPAC's continued positive engagement and strong support of the process overall remains a significant contributor to the effective functioning of the system.

Status quo

17. New Zealand needs effective capability to manage the likelihood and consequences of marine oil spills. Although the likelihood of a major oil spill is low, the environmental, financial and cultural impacts of such an incident would be significant. Maritime NZ sets the strategy for the overall vision and objectives for New Zealand's oil spill readiness and response, supported by a capability plan detailing the equipment, services and personnel needed to support the strategy's delivery. The Levy funds activities under the (the Plan).
18. The current capability and funding levels for the Marine Pollution Response Service (MPRS) were determined in 2016, based on the Capability Plan for Marine Oil Spill Readiness and Response 2016/17-2018/19 and the New Zealand Marine Oil Spill Readiness and Response Strategy 2015-2019.
19. The oil pollution levies imposed by the Order, are levies intended generally to provide money for the Fund to be applied by it for the purposes set out in section 331(1) of the Act.
20. The current levy rates under the Order apportion levy contributions for each industry sector as determined by MOSRA 15. This assessment was conducted by risk management specialists Navigatus Consulting Limited and has been updated regularly. This risk assessment uses the likelihood and consequence of a potential oil spill to calculate risk per sector, and thereby apportion liability (Levy contribution) for each sector. That liability is applied to calculate the levy rate or rates for the sector.
21. At the mid-point of the six year period, total revenue to date is less than originally forecasted. Due to the Levy coming into force six months later than originally planned, and actual activity being less than forecasted, there was a revenue shortfall of $1.3 million over years one to three. This shortfall was reduced to $0.78 million, through the use of operating reserves from the Oil Pollution Fund.
22. Maritime NZ commenced the scheduled mid-point review in 2017, and undertook public consultation between November 2018 and January 2019. In preparation for the mid-point review, the sector share risk assessment, forecast activity levels and other relevant data were checked and updated. This work indicated that if the Levy rates and sector risk shares are not adjusted appropriately, then the remaining shortfall from years one to three will not be recovered, and the Levy will under recover further for years four to six.
23. A significant reduction in revenue generated could result in a slowdown in delivering the Plan. This puts New Zealand at risk when preparing for and responding to oil spills in the marine environment, and obligations, as a party to the International Maritime Organization's International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC). A significant reduction in revenue generated puts at risk our ability to:

    - maintain current equipment and capabilities to respond to oil spills;

- protect in-shore and near-shore areas in the event of a spill, thereby reducing the consequences of the spill and reducing response costs;
- manage oil spills further out to sea closer to the source, thereby better protecting the shoreline from spill impact and reducing response costs;
- support more effective oil spill responses through improved technical and scientific knowledge.

Reviews of cost recovery charges

24. Several pieces of work provided input into this mid-point review of the Levy, and shaped the new levy allocation proposals and provided the basis for the calculations and assumptions made

    - A refresh of the New Zealand Marine Oil Spill Readiness and Response Strategy to the 2018 – 2022 version (the Strategy) [3];
    - A refresh of the Marine Oil Spill Risk Assessment (MOSRA 18) incorporating the latest data and improvements in modelling capabilities to re-assess risk matters and consequently sector shares of risk;
    - A review of the Plan, to ensure it remains valid and appropriate;
    - A re-forecast of expected activity levels (projecting forward trends over the last three years) for the period from July 2019 to June 2022.

25. The Strategy and Capability Plan continue to highlight the need for New Zealand to be able to respond to significant spills, which are of low probability but high impact, such as the *MV Rena* incident.

26. The ITOPF provided an independent evaluation of the Capability Plan (2016/17-2018/19), and concluded that Maritime NZ's assessment of capability requirements, and its capital and operational cost estimates under the plan, are well considered and reasonable.

Risk profile update

27. MOSRA 15 incorporated significant improvements, including better quality data on oil types and volumes shipped and used as fuel, better information on vessel activity (from vessel tracking data) and improved modelling of marine oil spill consequences. Compared to previous assessments, MOSRA 15 was far more effective at modelling the effect of winds, currents and sea temperature on potential oil spills.

28. This work significantly altered the previous risk assessment and the risk profiles of industry sectors, which are expressed as percentage 'shares' of overall risk.

29. MOSRA 18 was an update on the MOSRA 15 risk model to map oil spill risk. This drew information from a range of sources, such as event probability and environmental consequences.

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[3] New Zealand Marine Oil Spill Readiness and Response Strategy 2018-2022 - https://www.maritimenz.govt.nz/public/environment/responding-to-spills/documents/Oil-spill-response-strategy.pdf .

30. The key factors that were considered and included in the MOSRA 18 update include: vessel activity and routing; the proportion of oil types carried; and assumptions regarding standards of pilotage across each large vessel sector, ferry schedules and, for tankers, full compliance with IMO Regulation 13G (double hulls and bunker protection). MOSRA 18 also uses the latest available national and international data on any such changes and on accidents and incidents. Looking globally overall accident rates have been fairly steady in the last few years but there have been a number of significant cargo and cruise casualties in recent times.

31. Maritime NZ propose no change to the core methodology for allocating the Levy target amount to contributing sectors. However, for Options Two and Three we propose to apply the MOSRA 18 risk assessment (which apportions each sectors 'share' of the total oil spill risk - 100%) and applies that share to the proportion of total required revenue each sector contributes. Option One (the Status Quo option), proposes no changes to Levy rates or the percentage risk share allocated to each sector of the maritime industry, notwithstanding changes to the risk assessment. It uses a revised activity forecast and accordingly generates a forecast revenue total, rather than us setting target revenue.

32. While some submitters consider the revised MOSRA and re-forecast of sector activity levels to be a step forward, seven of the eight submitters raised varying questions and concerns with the MOSRA methodology, including:

- the accuracy of the data used;
- the specific sector risk shares;
- how a change in the relative risk of an oil spill in one sector results in an alteration to the risk posed by another sector;
- reviewing and updating it to take account of more accurate information about actual numbers of crossings for one particular sector;
- whether it factors in actual oil spill incidents in New Zealand;
- the implications of MARPOL Annex VI.

33. Whilst, alternative methodologies have been explored and benchmarking undertaken of other jurisdictions, these assessments support the continued use of the MOSRA to support the setting of the Levy rates.This approach has been applied for many years. It is transparent, is administratively efficient, and well established. Updating the risk model and the data that drives the model and considering the changes to the activity of parties who contribute to the risk (more/less vessels and voyages, different routes, different oil cargo types and volumes etc.) ensures the fairest, most objective and accurate alignment between activity that generates the risks and Levy liability.

34. Maritime NZ agrees it will be appropriate to consider the implications of MARPOL Annex VI, and the potential change in bunker fuel as part of the OPL 2021/22 review.

35. By ignoring the more up to date and accurate data now available from MOSRA 18, retaining risk allocations based on MOSRA 15 would unfairly levy shares across the sector.

36. The OPAC expressed support for the process that Maritime NZ has followed for the mid-point review, acknowledging the approach taken is understood and considered a sound way to go forward, even though for some sectors the cost impacts may be challenging.

Cost Recovery Principles and Objectives

37. The public policy objectives as identified by the mid-point review of the Oil Pollution Levy 2015/16 are to:

- Have a robust preparedness and response capability to mitigate marine oil spills and to meet New Zealand's OPRC obligations.
- Ensure that the method of charging and collecting the Levy is:
  - efficient - compliance and administrative costs are minimised and proportionate to the amount of levy collected. Industry should be certain about the amount of Levy they are required to pay;
  - equitable – those who pose a similar degree of risk are levied at a similar rate and those who pose a greater risk pay more than those posing a lesser risk;
  - effective - the total levy is sufficient to support full cost recovery of New Zealand's oil spill response and preparedness services;
  - durable – is unlikely to require significant modification through time as it is transparent, enforceable and likely to be supported by industry and government.

38. A comparison the three options on these criteria can be found in Table One.

39. Specific oil spill response capability objectives are

- current equipment and capability to respond to oil spills is maintained
- New Zealand's in-shore and estuaries and harbours are protected in the event of a spill, reducing the consequences of the spill and reducing response costs overall
- New Zealand's oil spill response is effective and efficient, reducing spill impacts on people and the environment and reducing overall spill response costs,
- oil spills can be managed farther out to sea, close to the source, better protecting the shoreline from spill impact and reducing response costs overall,
- technical and scientific knowledge about oil spill response is improved, supporting more effective responses.

40. A comparison of the three options on the specific oil spill response capability objectives can be found in Appendix One.

Policy Rationale: Why a levy? And what type is most appropriate?

41. One of the transport system funding principles are that costs should be allocated primarily according to who creates and exacerbates the risks in the system and receive benefit from participating in the system; where particular groups create more significant risks or derive more benefit, graduated approaches should be used.

42. Individuals and businesses enter the transport system because they see a personal, social or commercial benefit in participating in the system. This participation creates risks for other people (such as environmental risks). These activities include risk activities that

could lead to incidents such as oil spills. Regulators can be involved in air, land and sea incident response and coordination in relation to these risks.

43. Most of these regulator functions have characteristics of club goods[4]. Participants benefit from operating within an efficient and effective system which targets the costs of that system to the risk exacerbators and the direct and indirect beneficiaries.

44. The basic premise of oil pollution preparedness and response is that the potential polluter pays. The Levy applies to all commercial vessels over 100 gross tons and 24 metres or more in length (except those operating in fresh water), offshore oil installations, exploration wells and oil pipelines.

45. Six sectors each pay a proportionate share of the total target revenue, based on an assessment of New Zealand's overall statistical oil spill risk profile, (the MOSRA). The sectors are: Foreign Tankers, Domestic Tankers, Foreign Passenger and Cargo, Domestic Passenger and Cargo, NZ Fishing Vessels and Offshore Oil and Gas. Rates are set to raise the revenue required from each sector using data on oil carried as cargo (persistent and non-persistent) and vessel weight (as a proxy for oil carried for fuel). The rates are collected on either a per annum or per port visit basis.

46. The Order provides for a levy with two separate components[5]:

- The 'Baseline Levy' to maintain business as usual in terms of meeting Maritime NZ's obligations to maintain oil pollution preparedness and response capability at the level considered appropriate at the time the levy was last set; and

- A 'Capability Levy', as an additional component to give effect to the Capability Plan. This additional capability component has to date, allowed Maritime NZ to replace and update obsolescent equipment, provide better training for response personnel, and develop faster more effective responses to larger national level spill incidents and incidents occurring further out to sea. The greater the ability to prevent oil reaching the shoreline, the less the consequences will be, thereby reducing impacts on communities and saving time and money.

Levy methodology

47. The MOSRA ensures each sector is contributing to the Levy proportionate to the level of statistical risk they potentially pose. Based on forecast activity levels, specific rates are set for oil carried as cargo (persistent and non-persistent[6]), and oil used as bunker fuel (based on a proxy of vessel gross tonnage), which generate the Levy revenue target. Depending on the sectors, revenue may be raised by annual invoice adjusted for actual activity, the number of port visits or retrospectively after the activity occurs.

48. Sector risk share analysis considers which sector has the greatest risk compared to others. Although the MOSRA considers statistical risk arising from marine activities, the

[4] Club goods - most funding of the transport regulatory system occurs through levies that are spread across groups of people who are the primary risk exacerbators and who underpin the need for the regulation, as well as (often) the primary beneficiaries of an effectively functioning regulatory system. The Treasury Guidelines apply to cost recovery for club goods, as well as private goods.

[5] There is also a "Capital Equipment" levy of $0.6 million per annum for three years (ending in 2018/19) to meet the cost of the additional response equipment recommended in 2010

[6] A distinction is drawn between these two fuel types as they have different characteristics and therefore different levels of impact on the environment.

sector share allocation is not concerned with whether there has been an increase or decrease in the total marine oil spill risk, but rather apportions a share of New Zealand's total marine oil spill risk to each sector, based on their contribution.

49. Maritime NZ propose no change to the core methodology for allocating the Levy target amount to contributing sectors, however, for Options Two and Three we propose to apply the MOSRA 18 risk assessment (which apportions each sectors 'share' of the total oil spill risk (100%) and applies that share to the proportion of total required revenue each sector contributes. Option One (the Status Quo option) proposes no changes to Levy rates or the percentage risk share allocated to each sector of the maritime industry, notwithstanding changes to the risk assessment. It uses a revised activity forecast and accordingly generates a forecast revenue total, rather than us setting target revenue.

50. The OPAC expressed support for the process that Maritime NZ has followed for the mid-point review, acknowledging the approach taken is understood and considered a sound way to go forward, even though for some sectors the cost impacts may be challenging.

51. Having determined what share of the Levy revenue should be raised from each sector, a method is required to translate this overall sector share into a rate for individual vessels or operators within the sector. The levy rates for the different sectors of the three options are outlined in Appendix Three.

Impact analysis

Capability options

52. Maritime NZ set out the three options for the second-half of the six year levy period. All three options have been developed on the basis that the refreshed Strategy does not require any fundamental changes to capability components or levels, and that the Plan remains valid.

53. <u>Option One - Status Quo: This option would not change the current Levy rates, or reflect changes in risk shares or activity levels</u>. Because of changes to forecasts of activity levels and the volumes and types of oil carried as cargo, this option would result in a substantial revenue shortfall, in total, of around $2.6 million over the next three-year period (in addition to the net shortfall of $0.78 for the first three years). This would require Maritime NZ to slow down the delivery of the Plan by around two years.

54. Under Option One Maritime NZ would have to delay by around two years achieving most of the oil spill response objectives, such as;

- Delaying the replacement out-of-date equipment, maintaining current contracts (aerial response, modelling), retaining training levels. Acquiring additional stocks of dispersant.

- Delaying the purchase of oil spill control agents, which can be used to disperse oil before it reaches the New Zealand shoreline through aerial dispersant application reducing the costs of the response by preventing or reducing shoreline impact

- Not fully delivering National Response Team Training to meet the Goals and Objectives of the revised National Marine Oil Spill Response Strategy giving improved readiness for response and more effective spill responses at the national level

- Delaying the purchase of additional stocks of dispersant allow for longer periods of continuous operations before relying on overseas stockpiles, enabling more rapid dispersal of oil for dispersible oils, reducing the volumes that might reach the shoreline

- Delaying the tracking of oil spills and the effects of dispersant through tracking buoys/flurometry allows response measures to be better tailored to the specific circumstances.

55. Option One would risk meeting our oil spill response objectives (as outlined in Appendix One). This option was only supported by one submitter.

56. Option Two – Adjust Levy rates to maintain target revenue and reflect revised risk shares and activity levels: This option would set the same Levy target revenue for years four to six as agreed in 2015/16; as well as adjusting the risk shares and specific levy rates to reflect the updated risk assessment, and revised forecast activity levels. The residual balance of the shortfall from years one to three ($0.78 million) would not be recovered. Option Two would ensure we achieve the vast majority of our oil spill response objectives (as outlined in Appendix One). This option was supported by five submitters and OPAC.

57. Maritime NZ consider that the impacts of Option Two would be minor and manageable. Asset replacement and capability enhancement would need to be scaled back slightly, but core operational activity (training, exercises, assurance etc.) would be unaffected.

58. Maritime NZ would be able to achieve most of the oil spill response objectives within the original six year timeframe, such as;

    - Replacing out-of-date equipment, maintaining current contracts (aerial response, modelling), retaining training levels. Acquiring additional stocks of dispersant,
    - Purchasing oil spill control agents, which can be used to disperse oil before it reaches the New Zealand shoreline through aerial dispersant application reducing the costs of the response by preventing or reducing shoreline impact,
    - Having coastal on-water containment and recovery systems enable the management oil spills farther from shore in less-sheltered waters and even offshore in benign weather conditions reducing the costs of the response by preventing or reducing shoreline impact,
    - Delivering incident Management System maintenance and improvements support effective response planning and efficient financial management of large-scale, enduring responses,
    - Purchasing additional stocks of dispersant allow for longer periods of continuous operations before relying on overseas stockpiles, enabling more rapid dispersal of oil for dispersible oils, reducing the volumes that might reach the shoreline.

59. We are confident that through careful planning and allocation of resources, most of the Plan could still be achieved through Option Two. There would be a slight delay to completing the replacement of dispersant stocks (approximately six months after the end of the three-year period) and we would not purchase dispersant effectiveness capability (flurometry equipment). Dispersant could be shipped into New Zealand and flurometry equipment sourced from Australian authorities – albeit both with some time delay. If more resources are required to deal with an unexpected marine oil spill, we would be able to access additional equipment offshore and that there are funding mechanisms to meet these costs.

60. Option Three - Adjust Levy rates to maintain target revenue plus recovery of the residual shortfall, and reflect revised risk shares and activity levels. This option is the same as Option Two, except that it would apply a moderate increase in the overall levy target for years four to six to make up the residual balance of the shortfall from years one to three

61. Option Three ensures sufficient revenue to deliver: the current levels of regulatory, compliance, readiness response services relating to marine oil spills the full delivery of the Plan within the original timeframe (by 30 June 2022), ~~and~~ to the capability level approved by Government. Option Three would ensure we achieve all our oil spill response objectives (as outlined in Appendix One).

62. Option Three does propose to generate additional revenue ($0.78m) to enable the Plan to be delivered within the original timeframe. This option was only supported by one submitter.

63. Table One sets out the implications of each option. For further details on meeting the oil spill response objectives refer to Appendix One:

	Option One (Status Quo)	Option Two (revised levy rates)[7]	Option Three (revised levy rates & recovery of shortfall)
Total revenue proposed to be collected over years four, five and six ($m)	22.554	25.1	25.88
Sector share contributions	No change.	Changes proposed – as set out in Appendix Three.	Changes proposed – as set out in Appendix Three.
Efficient - compliance and administrative costs are minimised and proportionate to the amount of levy collected	Yes – sectors are charged the Levy on either an annual basis or a per port visit basis (for foreign tanker, passenger and cargo)	Yes – sectors are charged the Levy on either an annual basis or a per port visit basis (for foreign tanker, passenger and cargo)	Yes – sectors are charged the Levy on either an annual basis or a per port visit basis (for foreign tanker, passenger and cargo)
Equitable – those who pose a similar degree of risk are levied at a similar rate and those who pose a greater risk pay more than those posing a lesser risk	No – this option does not take into account the revised risk assessment so some sectors will be paying higher rates even though they have been assessed as a lower risk	Yes - this option takes into account the revised risk assessment so sectors will be paying rates according to the level of risk.	Yes - this option takes into account the revised risk assessment so sectors will be paying rates according to the level of risk
Effective - the total levy is sufficient to support full cost recovery of New Zealand's oil spill response and preparedness services	No – There would be a shortfall of around $2.6m (in addition to existing $0.78m slowing down the programme of work and scale back equipment procurement by around two years. MNZ would not be able to replace and update essential assets and equipment used in an oil spill.	Mainly yes - this option would enable the completion of the majority of the updated capability plan to the original timeframe. The capability impacts of this option are relatively manageable. This will result in some equipment obsolescence and some reduction in the capability development and enhancement within the period.	Yes - this option will ensure that essential assets and equipment are replaced, modernised or improved, consistent with the updated capability plan and to the original timeframe. It will also result in MNZ benefitting from significant improvements in the training of readiness and response teams.
Durable – is unlikely to require significant modification through time as it is transparent, enforceable and likely to be supported by industry and government.	No – doesn't generate enough revenue, other funds may need to be accessed. Doesn't reflect revised risk assessment so industry won't support paying more than their risk level.	Yes – it reflects the revised risk assessment, which includes the most up to date information.	Yes – it reflects the revised risk assessment, which includes the most up to date information.

[7] This was the amount of target revenue set for Years Four to Six when the Levy was set in 2016

64. As a result of the updated risk assessment levy rates have been adjusted across the six sectors. Five of the six sectors are proposed to see relatively significant changes to their share contribution. Specifically:

- the foreign tankers, domestic tankers and the offshore oil and gas sectors will see a proportionally significant *decrease*
- the foreign cargo and passenger vessels, and domestic cargo and passenger sectors will see a proportionally significant *increase.*

65. To determine risk levels for all the sectors the MOSRA takes account of the latest available data on vessel numbers and types, vessel routing and activity (passages made, area of operation and miles steamed) and oil cargo volumes (where appropriate). For the foreign passenger and cargo sector there has been an increase in number of vessels, more passages undertaken and more accurate data on the routes taken by those vessels. As well as an increase in the domestic passenger sector, MOSRA 18 identified a number of new domestic passenger routes since MOSRA 15. As a consequence overall the risk share for these sectors increases.

66. The potential changes to levy payers within the sector are outlined in Appendix Two and Appendix Three.

Consultation

Consultation with OPAC and industry

67. Alongside the public consultation, OPAC was formally consulted as required under the Act. OPAC is chaired by the Director of Maritime NZ and has representative membership (appointed by the Minister of Transport) as follows:

- New Zealand Shipping Federation
- Fishing Industry (including Seafood Industry Council)
- Major oil companies
- Oil distribution and exploration (Petroleum Exploration Association NZ) industries
- NZ Association of Ship Owners and Agents (Shipping NZ)
- New Zealand ports
- Local Government
- NZ government officials (Ministry for the Environment, Ministry of Transport).

68. OPAC discussed the Levy Consultation Mid-Point Review Results paper and noted the submissions made, and Maritime NZ's responses to those submissions.

69. OPAC agreed to recommend to the Authority that Option Two should be taken forward, in line with the majority of the submissions. Option Two maintains the progress on implementing the Capability Plan while updating the levy allocation between sectors and reflecting the latest activity forecasts.

70. OPAC expressed strong support for the process that Maritime NZ has followed for the Levy Review, acknowledging that the approach taken is understood and is considered a

sound way to go forward, even though for some sectors the end result in terms of costs may be challenging.

Public consultation

71. Maritime NZ released a public consultation document, *Mid Point Review of the Oil Pollution Levy 2016/22 – Consultation Document*, from 6 November 2018 to 18 January 2019. Eight submissions were received. All submitters acknowledged the importance of New Zealand having suitable marine oil spill preparedness and response capability and the need for all industries involved to contribute to the levy, but differed in their views on the option required to achieve that goal.

72. Of the seven submitters who indicated a preference, one preferred Option One, five preferred Option Two and one preferred Option Three.

Conclusions and recommendations

73. All submitters and the OPAC support continued investment to maintain an appropriate level of response capability for marine oil pollution events in New Zealand. There was overall support from submitters for activities in the Plan, although there was some variation as to the timeframe over which the delivery of the Plan should be completed. Option One is not recommended because if there isn't sufficient revenue being generated by the Levy it could significantly affect the ability to implement the Plan and meet New Zealand's oil spill response obligations.

74. While Option Three had initially been supported by Maritime NZ we have taken into consideration that the majority of submitters supported Option Two, and that this option was supported by OPAC. When Option Two was submitted to the Authority as Maritime NZ's preferred option the Authority agreed with this recommendation. Therefore Maritime NZ recommends that Option Two be implemented.

75. Under Option Two the method for charging and collecting the Levy is;

- Efficient - compliance and administrative costs are minimised and proportionate to the amount of levy collected
- Equitable - those who pose a similar degree of risk are levied at a similar rate and those who pose a greater risk pay more than those posing a lesser risk
- Durable - is unlikely to require significant modification through time as it is transparent, enforceable and likely to be supported by industry and government.
- Effective – most likely the total levy is sufficient to support full cost recovery of New Zealand's oil spill response and preparedness services. It allows for almost the full Baseline capability to be maintained and the majority of the capability plan to be delivered to the original six-year timeline, i.e. by 30 June 2022. Option Two is comprised of Baseline funding + Capability funding over three years at a cost of $8.354 M per annum. Rates are set to raise the same target revenue for years Four, Five and Six of the Levy period, as was consulted on in 2015/16.

76. This option would not allow the net funding deficit from Years One to Three (approx. $0.78m) to be recovered. However, Maritime NZ is confident that through careful planning and allocation of resources the vast majority of the Capability Plan can still be

achieved through Option Two. The capability impact is relatively minor and could be managed. This view was supported by the Authority.

77. While there would be a slight delay to completing the replacement of dispersant stocks (approximately six months after the end of the three-year period) and Maritime NZ would not purchase dispersant effectiveness capability (flurometry equipment). Dispersant could be shipped into New Zealand and flurometry equipment sourced from Australian authorities – albeit both with some time delay. If more resources are required to deal with an unexpected marine oil spill, Maritime NZ is able to access additional equipment offshore and that there are funding mechanisms to meet these costs.

78. Under Option Two Maritime NZ can still ensure;

- current equipment and capability to respond to oil spills is maintained;
- New Zealand's in-shore and estuaries and harbours are protected in the event of a spill, reducing the consequences of the spill and reducing response costs overall;
- New Zealand's oil spill response is effective and efficient, reducing spill impacts on people and the environment and reducing overall spill response costs;
- oil spills can be managed farther out to sea, close to the source, better protecting the shoreline from spill impact and reducing response costs overall;
- technical and scientific knowledge about oil spill response is improved, supporting more effective responses.

Implementation plan

79. A revised Order in Council will be required. It is intended that this be in place from 1 July 2019.

80. If the Order in Council is not in place by 1 July 2019 the existing baseline and capability levy will continue to be collected at the current rates.

81. Due to previous revisions of the Levy, implementation of any changes will not be significant. There will need to be minor changes to Maritime NZ's finance systems to account for the revised rates and levy payers will need to be notified of the changes. However, should a delayed implementation date beyond 1 July 2019 be required, the implementation would be more problematic.

Monitoring and evaluation

82. Maritime NZ undertakes an oil pollution preparedness and response capability review every five years. These reviews update and clarify the type, location and amount of oil spill services needed to fulfil New Zealand's oil pollution response obligations and the amount of expenditure required (and therefore Levy revenue needed). The subsequent action plan then assesses the costs (or savings) associated with any change in New Zealand's preparedness and response regime.

Review

83. The current six year levy period runs to 2022. Maritime NZ will begin work on the next full review of the OPL in 12 to 18 months. This review will allow for changes in shipping

activity, the implications of MARPOL Annex VI and associated risks to be reflected in levy rates. Maritime NZ will continue to monitor volume changes for revenue and levy rate implications.

Appendix One: Capability benefits delivered by each option

The table below summarises the benefits delivered under Options One, Two and Three to New Zealand in terms of capability of responding to marine oil spills in terms of capability at responding to marine oil spills for the remaining three years of the six year period.

Key:

1	The option fully delivers the benefit
2	The option substantially delivers the benefit
3	The option partially delivers the benefit
4	The option delivers a limited benefit
5	The option does not deliver the benefit

Spill response objectives	Achieved by	Option One	Option Two	Option Three
The current equipment and capabilities to respond to oil spills is maintained	Out-of-date equipment is replaced, current contracts are maintained (aerial response, modelling), current staffing and training levels are retained	3	2	1
New Zealand's in-shore and near-shore areas are protected in the event of a spill so reducing the consequences of the spill and reducing response costs overall	Sub-sea oil plumes and gas clouds can be modelled, to predict where oil or gas may go and so support more effective measures to prevent it from reaching the shoreline	2	1	1
	Oil spill control agents can be used to disperse oil before it reaches the New Zealand shoreline through aerial dispersant application reducing the costs of the response by preventing or reducing shoreline impact	3	1	1
	Oil can be contained and recovered on-water in shallow areas close to the shore, preventing a large amount of	1	1	1

	oil from reaching the shore reducing the costs of the response			
	Tracking of oil spills and the effects of dispersant through tracking buoys/flurometry allows response measures to be better tailored to the specific circumstances	5	5	1
	Additional stocks of dispersant allow for longer periods of continuous operations before relying on overseas stockpiles, enabling more rapid dispersal of oil for dispersible oils, reducing the volumes that might reach the shoreline	3	2	1
New Zealand's oil spill response is effective and efficient so reducing spill impacts on people and the environment and reducing overall spill response costs	National Response Team Training is delivered at 2015 levels maintaining a baseline capability for major, national level spills	2	1	1
	National Response Team Training is enhanced to meet the Goals and Objectives of the revised National Marine Oil Spill Response Strategy giving improved readiness for response and more effective spill responses at the national level	3	1	1
	Incident Management System maintenance and improvements support effective response planning and efficient financial management of large-scale, enduring responses	2	1	1
Oil spills can be managed farther out to sea, close to the source so better protecting the shoreline from spill impact and reducing response costs overall-	Coastal on-water containment and recovery systems enable the management oil spills farther from shore in less-sheltered waters and even offshore in benign weather conditions reducing the costs of the response by preventing or reducing shoreline impact	3	1	1
	Contracts with 'vessels of opportunity' provide the ability to deploy equipment far from the shore when necessary significantly increasing latent capacity to undertake response measures away from the shoreline	3	1	1
Technical and scientific knowledge about oil spill response is improved supporting more effective responses	Additional positions established supporting the improvement of international relationships and core technical and scientific knowledge plus maintenance of new equipment items improving skills and knowledge and thus response effectiveness	2	2	2

Appendix Two: MOSRA 18 Sector Shares (Adjusted for Bunker Fuel Risk Component) Compared to MOSRA 15 Sector Shares (as implemented)[8]

Sector	MOSRA 18 Sector Contribution	MOSRA 15 As implemented Sector Contribution	Change from MOSRA 15 as implemented
Foreign Tankers	**45.51%**	58.34%	(12.83)%
Domestic Tankers	**11.91%**	18.87%	(6.96)%
Foreign Cargo and Passenger Vessels	**25.40%**	9.05%	16.35%
Domestic Cargo and Passenger Vessels	**16.1%**	9.05%	7.05%
Domestic Fishing Vessels	**1.05%**	0.84%	0.21%
Offshore Oil and Gas	**0.03%**	3.85%[9]	(3.82)%

8 The sector share applies to target revenue for each option; it does not change between options.

9 MOSRA 15 Sector Shares were adjusted for bunker fuel and then amended by Government decisions on from original MOSRA 15 result.

Appendix Three: Potential changes to sector percentage share and financial contribution under Options Two and Three

Sector[10]	Current target and actual share and revenue based on 2016 Levy as implemented (MOSRA 15 adjusted by Government decisions)			MOSRA 18 proposed contributions	Variance to 2016 Levy	Target revenue per sector by option and change from 17/18 actual revenue received (m)[11]			
	Target Percentages[12]	Target Revenue[13] Year Two[14] (17/18 $m)	Actual Revenue Year Two[15] (17/18 $m)	Target Percentages[16]	%	Option Two Target Revenue	Change from 17/18 Actual Revenue	Option Three Target Revenue	Change from 17/18 Actual Revenue
Foreign tanker	58.34%	$4.534	$4.193	45.51%	(12.83%)	$3.802	$(0.391)	$3.921	$(0.272)
Domestic tanker	18.87%	$1.467	$1.415	11.91%	(6.96%)	$0.995	$(0.420)	$1.026	$(0.389)
Foreign cargo and passenger vessels	9.05%	$0.703	$0.880	25.40%	16.35%	$2.122	$1.242	$2.188	$1.308
Domestic cargo & passenger vessels	9.05%	$0.703	$0.688	16.1%	7.05%	$1.344	$0.656	$1.386	$0.698
Domestic fishing vessels	0.84%	$0.066	$0.073	1.05%	0.21%	$0.088	$0.015	$0.090	$0.017
Offshore oil & gas	3.85%	$0.299	$0.250	0.03%	(3.82%)	$0.003	$(0.247)	$0.003	$(0.247)
TOTALS	**100**	**$7.772**	**$7.499**	**100**	**-**	**$8.354**	**$0.855**	**$8.614**	**$1.115**

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10 Sectors vary very widely in terms of the number of vessels, the number of voyages and the number of port visits. Some charging is per port visit (foreign levy), some is annual (domestic).

11 Figures give indicative contribution by sector for options Two and Three and comparison to actual revenue received in 17/18; showing quantum increase or decrease.

12 Final target percentages after adjustments for bunker fuel component. In addition cabinet decisions increased the offshore oil and gas percentage from the MOSRA 15 result. Target percentage figures are, therefore, slightly different from the figures consulted on in 2016.

13 Target revenue for each year (One to Six) rises year-on-year as activity levels were/are forecast to increase each year.

14 Year Two target revenue was $7.41 million, sector share target was based on final percentages and forecast activity in all sectors.

15 17/18 is the last year for which actual revenue received figures are available. Current year would expect to see increased revenue ($7.69 million forecast, target $7.99) as activity has increased.

16 As proposed in consultation document (MOSRA 18 results including bunker fuel adjustment).