Impact Summary: Development of regulations under the EEZ Act for decommissioning offshore oil and gas infrastructure

Section 1: General information

Purpose
The Ministry for the Environment is solely responsible for the analysis and advice set out in this Regulatory Impact Statement, except as otherwise explicitly indicated. This analysis and advice has been produced for the purpose of informing the public to be consulted on a government discussion document.
Key Limitations or Constraints on Analysis
Assumptions and scope: The analysis (and supporting evidence) carried out for amendments to the EEZ Act through the Resource Legislation Amendment Act 2017 (RLAA) in relation to decommissioning still applies. It has been assumed that the regulations would be created within the existing regulation-making powers, therefore no further changes to the EEZ Act are considered as part of this regulatory impact assessment. There is some uncertainty about the scale of costs and benefits at this stage, since the number and complexity of decommissioning plans and consents that are likely to be submitted under the regulations is unknown. There are only preliminary estimates of the possible cost per plan, as there is no comparable decommissioning activity or planning activity that has been undertaken to date in New Zealand. Further information and views will be sought through the public consultation, and the analysis in this pre-consultation RIS will be refined and updated, taking into account the submissions received. Furthermore, any functions relating to decommissioning would be monitored, evaluated and reviewed by the Ministry as part of the wider EEZ Act framework to help address any information gaps and build up our information.
Responsible Manager (signature and date):
  John Robertson Acting Director, Marine Environmental Risk and Science Ministry for the Environment

Section 2: Problem definition and objectives

2.1 What is the policy problem or opportunity?

Decommissioning is the work that is undertaken to take equipment permanently out of service at the end of its life.

Decommissioning is an activity that has to occur at the end of production for offshore oil and gas facilities in New Zealand.

There are currently four petroleum production fields operating in New Zealand's Exclusive Economic Zone (EEZ), which will need to be decommissioned. Depending on production and economic factors, decommissioning of the first of these facilities is expected to begin within the next 5 years.

The infrastructure in place varies between fields, but these activities would likely involve a combination of:

- preparing facilities for decommissioning
- plugging wells and severing well casings
- cleaning and/or removing pipelines and other production infrastructure
- removing or partially removing platforms
- disposing of platforms and other infrastructure
- removing debris and potential obstructions
- monitoring the site and/or any infrastructure left behind

Decommissioning is likely to involve activities that are restricted under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act, the Act). Restricted activities (unless permitted or prohibited by legislation) will each require either a marine consent or a marine dumping consent.

Right now, marine consents are considered on an activity-by-activity basis, with no opportunity for the regulator, iwi or the public to consider the outcomes of the decommissioning project as a whole.

Analysis in 2015 and 2016 identified gaps in the regulatory framework. Most of the gaps were associated with the fact that the EPA could only grant or decline (on the basis of their effects) individual marine consents for which an operator applied. There was no scope to direct operators to apply for marine consents that better met sustainable management and protection purposes, nor to require early engagement to identify an agreed overall approach to a decommissioning project.

The marine consent process does not provide for a working dialogue to develop the best options for decommissioning, and the activity-by-activity approach does not reflect

international good practice, guidelines and standards.

The detailed analysis is recorded in other documents[1].

Changes to the EEZ Act, which came into force from 1 June 2017, were intended to provide a project-level approach to regulating decommissioning through a "decommissioning plan".

The Resource Legislation Amendment Act 2017 (RLAA) introduced changes that were designed to achieve the following:

- require operators to submit a decommissioning plan for acceptance by the EPA before they can apply for marine consent to undertake decommissioning activities
- allow the EPA to accept the plan subject to meeting certain criteria (to be developed through regulations)
- require public consultation to occur early in the process (on the plan) when options are being considered, instead of on the later marine consents
- allow the EPA to remain the decision-maker on the later marine consents to improve consistency
- require all future marine consent applications for the placement of structures and pipelines for the purpose of petroleum production to demonstrate a consideration of decommissioning
- make the abandonment of pipelines a restricted activity subject to a marine consent from the EPA

The decommissioning plan regulatory framework created in the EEZ Act will not apply until regulations come into force. Section 29E gives power for the making of these regulations.

Regulations under the EEZ Act would not manage all aspects of decommissioning, but the regulatory framework for decommissioning would be incomplete without them.

Regulations will provide detail to make sure the relevant provisions operate effectively and to ensure that the effects of decommissioning are managed in the best possible way.

They are also intended to provide a clear and transparent process for how operators would approach decommissioning their offshore infrastructure. The process would provide greater certainty for the public, the Government and operators.

Objectives:

The primary objective of the regulations is to ensure that **all offshore infrastructure from petroleum production operations will be decommissioned in a manner that meets New Zealand's international obligations and achieves the purpose of the EEZ Act**. The decommissioning regulations must be consistent with the purpose of the EEZ Act to promote sustainable management and protect from pollution, and would work toward the following objectives:

- ensure that the environmental regulatory framework explicitly provides for New Zealand's obligations under relevant international conventions and reflects

[1] In particular, see the *Regulatory Impact Statement: Resource Legislation Amendment Bill 2015: EEZ Amendments* and *Regulatory Impact Statement: Resource Legislation Amendment Bill 2015: Decommissioning of offshore installations in the EEZ.*

international best practice for decommissioning

- ensure that processes are efficient and cost-effective, with the cost to government and operators proportionate to the level of environmental effects addressed[2]
- ensure that the process is clear and flexible, allowing for a case-by-case approach to be taken depending on the infrastructure involved[3]
- ensure that consultation with iwi and the public is appropriate and fit for purpose

Options have been assessed as meeting these objectives—

- significantly better than the status quo (✓✓)
- better than the status quo (✓)
- no better than the status quo, or having no effect (-)
- worse than the status quo (x)
- significantly worse than the status quo (xx)

Preferred options are highlighted in tables.

We have had the proposed policy reviewed by ERM, an environmental consulting firm with experience of both NZ legislation and the international offshore oil and gas industry. ERM reviewed a draft version of a discussion document that explained the policy proposals, analysed how the proposals would work in practice, and highlighted potential gaps in the policy. The ERM report has informed both the final discussion document and this RIS.

2.2 Who is affected and how?

The changes seek to—

- ensure that **operators** carry out decommissioning in line with good practice and New Zealand's obligations: by completely removing installations and structures unless there is a good case for another approach to be preferred. This is intended to eliminate the long term risk associated with infrastructure abandoned in the environment and minimise effects on the environment and existing interests.
- encourage **operators** to take a strategic approach to decommissioning projects.
- encourage **operators** to engage early with relevant iwi, existing interests and agencies.
- provide opportunities for **iwi** to engage in planning discussions that consider decommissioning as a whole, rather than on individual activities.
- provide opportunities for the **public** to engage early in planning for decommissioning, rather than during the later marine consent stage. This is intended to give operators greater certainty about public views and to ensure that outcomes of consultation can influence the decommissioning approach in a meaningful way.

[2] Petroleum mining decommissioning incurs significant expenditure near or after the end of production at which point there will be little or no assessable income. Under current settings the Crown may be liable to pay up to 48 percent of decommissioning costs as tax and royalty rebates to operators. While these arrangements are regulated under the Income Tax Act 2007, it remains in the interests of both the operator and the Crown to ensure that safe, pragmatic and cost-effective solutions are developed.

[3] A review of the proposed policy undertaken by ERM notes that there is considerable variety and extent of subsea equipment associated with offshore petroleum installations, including flowlines, umbilicals and mooring systems, and that decommissioning of these components may represent significant cost and complexity.

We predict that operators would support these changes. We also predict that the proposed process would benefit relevant iwi and the public.

We will seek the views of industry (operators), iwi and the public through consultation.

2.3 Are there any constraints on the scope for decision making?

Section 29E provides for the making of regulations prescribing—

- the information that must be included in a decommissioning plan,
- the process for dealing with a decommissioning plan, and
- the criteria against which a decommissioning plan must be assessed.

Non-legislative tools like guidance or forms will also be considered for implementing the policy agreed, after consultation in 2018, before regulations are drafted.

Other legislative changes are without the scope of this project. The project is not intended to—

- make further changes to the primary legislation.
- alter operational arrangements of the regulator, including cost-recovery arrangements. Functions of the regulator related to processing and advising on decommissioning plans will be cost-recoverable under existing provisions of the Act.
- address decommissioning or regulatory processes outside the EEZ, including in the territorial sea and on land.
- address matters governed by other regimes, including issues of health and safety, liability, financial assurance, or tax.

Section 3: Options identification

3.1 What options have been considered?

The purpose of the EEZ Act is—

(a) to promote the sustainable management of the natural resources of the exclusive economic zone and the continental shelf; and

(b) in relation to the exclusive economic zone, the continental shelf, and the waters above the continental shelf beyond the outer limits of the exclusive economic zone, to protect the environment from pollution by regulating or prohibiting the discharge of harmful substances and the dumping or incineration of waste or other matter.

Section 29E of the EEZ Act, as amended, provides that regulations can be made prescribing—

(a) information that must be included in a decommissioning plan

(b) the process for dealing with a decommissioning plan

(c) the criteria against which a decommissioning plan must be assessed.

In addition, we anticipate that non-statutory guidance will be useful to provide further detail and direction. As a starting point, in this document we consider the following:

1. What to define as a decommissioning activity

   What activities will be treated as decommissioning activities in New Zealand? And to what extent should peripheral activities be addressed in the decommissioning plan process?

2. General approach to decommissioning plans

   What outcomes are acceptable, and to what extent should the approach incorporate or reflect international standards, guidelines and good practice?

Those considerations will largely determine the **criteria** against which a decommissioning plan will be assessed, and will also inform the process for dealing with a plan and the information that must be included. In order to deliver this general approach we consider options for the following:

3. Content of a decommissioning plan

   A decommissioning plan contains an operator's proposal for how it will deal with petroleum infrastructure at the end of its life. The **information requirements** will influence how an operator determines its proposed approach to the decommissioning project. We consider in this section what matters operators should take into account, what methodologies they should use, and what engagement they should carry out to arrive at a proposed approach.

   A decommissioning plan also includes contextual information to inform public consultation and the regulator's decision. We consider in this section, and throughout the document, what information should form part of the proposal (and be binding once accepted) and what should be considered part of the context (non-binding but relevant to discussion and decision-making).

4. Process for dealing with a plan

   We consider in this section options for how the EPA should **deal with a plan** submitted for acceptance, especially how it should conduct public consultation.

Appendix 1 summarises the preferred policy options under the following headings:

- general approach
- information in a decommissioning plan (could be implemented in regs under s29E(a))
- process for dealing with a plan (could be implemented in regs under s29E(b))
- criteria for assessing a plan (could be implemented in regs under s29E(c))

1. What to define as a decommissioning activity

The decommissioning plan process in the Act sets out that—

- operators may submit a decommissioning plan to the EPA for acceptance. There will be public consultation on this plan.
- marine consents for restricted activities related to decommissioning must include an accepted decommissioning plan and be in accordance with that plan
- marine consent applications for discretionary activities, submitted in accordance with an accepted decommissioning plan ("covered" by the plan), will be non-notified

The requirement for a decommissioning plan is triggered when a person intends to apply for marine consent to undertake a discretionary activity in relation to decommissioning. The wording of Section 38(3) is that:

If the [marine consent] *application relates to an activity that is to be undertaken in connection with the decommissioning of an offshore installation used in connection with petroleum production, or a structure, submarine pipeline, or submarine cable associated with such an installation,—*

(a) the application must include an accepted decommissioning plan that covers the activity; and

(b) the proposed carrying out of the activity must be in accordance with that plan.

The word "decommissioning" is not defined in the legislation. The intention in regulations is to capture all activities that must be undertaken to an offshore petroleum installation and its associated structures and pipelines to take them permanently out of service after the installation has ceased to be used for petroleum production purposes.

In the interpretation of this provision, we considered some peripheral activities, and whether they should be captured by the requirement for a decommissioning plan:

1.1 Well plugging and abandonment. Wells need to be plugged and abandoned when they are no longer used for production. Well plugging and abandonment (P&A) is a critical part of decommissioning, but may also occur throughout the life of the field. The activity is also regulated by requirements under health and safety legislation. P&A could be addressed by—

(a) **requiring consent applications that relate to P&A to be covered by an accepted decommissioning plan**. While this may represent a more complete approach to decommissioning planning, it could complicate the regulatory process for operators who intend to plug and abandon wells before cessation of production (COP). In response, the operator may choose to submit a partial decommissioning plan to cover early P&A work, or this may create a perverse incentive to delay P&A work until a full decommissioning plan is prepared and accepted. Unplugged wells present an undesirable source of environmental and

safety risk.

(b) excluding P&A activities from the requirement for a decommissioning plan. This would avoid the downsides of option (a), but might create duplication in the process after the end of field life, as applications for P&A activities would be processed as fully notified marine consents, rather than processed as part of the decommissioning plan. It would be more efficient to include P&A activities in the plan.

(c) allowing flexibility for P&A activities to be progressed either under an accepted decommissioning plan and subsequent non-notified consent(s), or under fully notified marine consent(s). Early P&A would not be discouraged, and all post-COP work could be considered together in the decommissioning plan. Appropriate public consultation would be carried out in either case.

Our preferred approach is option (c). It is most in line with the objectives of the regulations, as indicated in the table below. This option would avoid inefficient or duplicated regulatory processes, and provide a clear, flexible process for P&A work to be undertaken without delay. It would provide appropriate opportunities for public consultation. The ERM review supported this approach to P&A activities.

1.1	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	x	x	-
(b)	-	-	x	x	-
(c)	-	-	✓	✓✓	✓

1.2 Drill cuttings. Cuttings piles have been deposited on the seabed from previous drilling activities. Some of these were deposited before the EEZ Act was enacted, and others were consented under the current regime. Cuttings piles generally contain drilling fluids, and are likely to have environmental effects if moved or otherwise disturbed. Cuttings piles could be addressed by—

(a) requiring decommissioning plans to include proposals for dealing with cuttings piles. This would align with international best practice, in that other jurisdictions such as the UK require consideration of cuttings piles in decommissioning plans. However, since the deposit has already been consented, this requirement would essentially duplicate the regulatory process.

(b) providing for consideration of the effects of disturbing cuttings piles, in relation to proposals for site remediation or dealing with other infrastructure. Cuttings piles are part of the existing environment and disturbing them could have adverse environmental impacts. This could be a material consideration in a comparative assessment of options.

Our preferred approach is option (b). It is most in line with the objectives of the regulations, as indicated in the table below. This option would provide for the consideration of the relevant environmental effects, in line with the purpose of the Act. It would be efficient and fair, not re-litigating consented deposits, but allow flexibility for cuttings piles to be considered where an operator proposes to disturb them.

1.2	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation

(a)	✓	✓	x	x	-
(b)	✓	-	✓	✓	-

1.3 New use. Some production infrastructure could be intended for re-use at the end of its life, either in situ or at another location. Activities associated with re-use could be addressed by—

(a) **including all re-use activities as a type of decommissioning activity.** The outcome of re-use would be accepted as part of the decommissioning plan, and the later consents would be non-notified.

(b) **excluding re-use activities from the scope of decommissioning** (status quo). Although the effects of re-use may be considered in the plan where they are relevant to the assessment of decommissioning options, the regulator's acceptance of the plan would not constitute acceptance of the proposed re-use. Discretionary re-use activities would be considered a new project and would still be subject to fully notified marine consent processes.

(c) **including only reefing as a type of decommissioning activity.** Reefing is a type of re-use that has been specifically allowed for in some countries. States in the Gulf of Mexico, for instance, participate in a "rigs-to-reefs" programme which facilitates the placement of toppled or dismantled platforms as artificial reefs, and shares cost savings between operators and the state.

While we note that some jurisdictions make special provisions for reefing, it is not considered appropriate to make reefing non-notified under a decommissioning plan in the New Zealand context.

Since the placement or toppling of a platform to create a reef is a new use unconnected with petroleum production, it is considered appropriate that it is subject to a separate publically notified consent process like any other new activity, and not covered by a decommissioning plan.

The review by ERM notes that the focus in some regions on in-situ reefing has limited relevance to the deeper waters off Taranaki (where most of New Zealand's existing offshore oil and gas infrastructure is located). The environment in that area is not well suited to the creation of productive artificial reefs. There could be opportunities for relocation of material for reefing or reefing-in-place of future installations in other areas.

Our preferred approach is option (b), the status quo. It is most in line with the objectives of the regulations, as indicated in the table below. Other options do not allow for consideration proportionate to the potential effects of the activities, or provide for adequate public consultation on new uses.

1.3	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	✓	x	x	xx
(b)	-	-	-	-	-
(c)	-	-	x	x	x

2. General approach to decommissioning plans

The regulations will set a process for determining what specific decommissioning outcomes are sought through each decommissioning plan. In proposing a general approach to decommissioning plans, we consider international guidance, standards and good practice, and to what degree it is appropriate for the regulatory system in New Zealand to reflect these.

2.1 Identifying the preferred approach to decommissioning projects. The approaches available to an operator for any given decommissioning project could range from complete removal to complete abandonment, with intermediate options involving partial removal.

Abandonment of material in situ is considered a form of 'dumping' under the EEZ Act, **except** for the abandonment of a submarine pipeline, which is a restricted activity subject to marine consent but not a dumping activity. Any approach that involves the dumping or abandonment of any part of the installation or structure (i.e., any approach other than complete removal) will require dumping consent(s) under the EEZ Act.

While it is not intended to duplicate the consent process in the decommissioning plan, it is important that the EPA reaches a decision on the plan that can be implemented through the later marine consents.

Proposals to dump material should be treated in line with the purpose of the Act, New Zealand's international obligations, and international good practice.

The EEZ Act

The purpose of the EEZ Act is two-fold: both to promote sustainable management of resources; and to protect the marine environment from pollution, including by regulating or prohibiting the dumping of waste or other matter.

Under section 62 of the Act, when the EPA assesses a consent for a dumping activity or for abandonment of a pipeline, it must refuse the application if—

(a) the [EPA] *considers that the waste, other matter, or pipeline may be reused, recycled or treated without—*

(i) more than minor adverse effects on human health or the environment; or

(ii) imposing costs on the applicant that are unreasonable in the circumstances; or

(b) the waste, other matter, or pipeline is identified in such a way that it is not possible to assess the potential effects of dumping or abandoning it on human health or the environment, or

(c) the marine consent authority considers that dumping the waste or other matter or abandoning the pipeline is not the best approach to its disposal in

the circumstances.

In effect, this means that a dumping consent application or application to abandon a pipeline needs to demonstrate:

- that alternative options **either** would have more than minor adverse effects on human health or the environment, **or** would impose unreasonable costs, and
- that dumping or abandoning is the best approach to disposal.

These provisions serve the purpose of the Act to protect the marine environment from pollution by regulating dumping.

The London Convention and Protocol

New Zealand is party to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and its 1996 Protocol (London Protocol), and principles of the Convention and Protocol are reflected in the regulation of dumping and discharge activities under the EEZ Act.

The London Protocol stresses the need to protect the marine environment from all sources of pollution and to promote the sustainable use and conservation of marine resources. The London Protocol defines pollution as waste and other matter introduced into the sea as a result of human activity which is likely to lead to harmful effects on the marine environment. Under the London Protocol, dumping of all waste at sea is prohibited except for certain types that are subject to a permit granted by the coastal state.

While pipelines are excluded from the scope of the London Protocol, the abandonment of platforms or other man-made structures at site and the disposal into the sea of platforms, structures and other matter are considered 'dumping' under the London Protocol.

The London Protocol also prohibits the export of wastes or other matter to other countries for dumping or incineration.

UNCLOS and the IMO Guidelines and Standards

New Zealand is party to the United Nations Convention on the Law of the Sea 1982 (UNCLOS). UNCLOS includes in article 60.3 a requirement that *"[a]ny installations or structures which are abandoned or disused shall be removed to ensure safety of navigation, taking into account any generally accepted international standards established in this regard by the competent international organisation."*

The International Maritime Organisation (IMO) is the competent international organisation in this regard, and has established standards in the 1989 IMO

Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (IMO Resolution A. 672(16)). While not binding, these guidelines and standards represent generally accepted good practice.

A guiding principle of the IMO Guidelines and Standards is a presumption of complete removal of installations and structures—with a process for the State to approve partial dumping/abandonment in appropriate cases (for instance, where platforms meet standards of being particularly old, large or otherwise difficult to remove completely). The IMO Guidelines and Standards apply to installations and structures, but not specifically to pipelines.

Other international practice

The OSPAR Convention operates in the North-East Atlantic, and New Zealand is not party to the agreement. However, it does set out another good practice framework for decommissioning policy. Like the IMO guidelines and standards, OSPAR decision 98/3 sets out a general principle of complete removal with a process to approve partial dumping/abandonment in certain cases. That approach is reflected in the policy and practice of signatory nations such as the UK and Norway, which require approval from the Convention to permit incomplete removal.

Comparative assessment is a commonly used tool for assessing available options against the full range of contributory factors to select the preferred approach to a decommissioning project. It can support understanding of the complex relationships between factors and provide a transparent ranking of alternatives. The IMO guidelines, the OSPAR convention, and legislation and guidance in other jurisdictions set out matters to be considered in comparative assessments, which usually include a range of environmental, technical, safety and economic factors.

In New Zealand, the regulations could provide that,—

(a) consistent with international standards and good practice, **for installations and structures complete removal is presumed, and proposals for incomplete removal must be supported by a comparative assessment** that demonstrates why an alternative approach is preferred. The assessment should provide a robust and transparent evaluation of all the available options, and clearly demonstrate how the decision on the preferred option has been reached.

(b) in conjunction with option (a), **a comparative assessment of options for decommissioning a pipeline is only required if a plan proposes to abandon or partially abandon the pipeline**. This would be consistent with the approach taken with installations and structures, but would not account for the fact that the effects associated with removing or abandoning a pipeline are likely to differ from those associated with installations and structures.

(c) in conjunction with option (a), **all pipeline proposals must be supported by a**

comparative assessment of available options. There is no expectation under the IMO Guidelines and Standards to presume the complete removal of pipelines. There is also potential for the environmental effects of removal (i.e. potentially disturbing habitat over kilometres) to be greater in comparison to the effects of leaving wholly or partially in place. It would therefore be appropriate to evaluate all the decommissioning options for pipelines. We note that, in relation to consent applications, the EEZ Act treats the abandonment of a pipeline differently to the dumping of waste or other matter.

(d) in order to find the best outcome in every case, for installations and structures **a comparative assessment is required to support all proposals**, including those for complete removal. This approach is less consistent with international standards and good practice, and provides less incentive to completely remove infrastructure.

Our preferred approach is to include options (a) and (c)—to presume complete removal of installations and structures, to require a comparative assessment to support proposals other than complete removal of installations and structures, and to require a comparative assessment to support all pipeline proposals. This approach is most in line with the objectives of the regulations, as indicated in the table below. The ERM report supports this approach.

The presumption for complete removal of installations and structures is a key principle in international guidelines, standards and good practice policy. It furthers the purpose of the Act to protect the marine environment from pollution by regulating dumping, and is consistent with the other decision-making frameworks in the Act.

It will be proportionate to the effects of the activity (whereas requiring a comparative assessment for proposals to remove installations or structures completely could be disproportionate to the likely effects). We consider that a presumption in relation to pipelines (b) would not allow for consideration of pipeline removal in a manner proportionate to the potential effects (which could be substantial), so would not further the Act's purposes of sustainable management and protection. Option (c) is therefore preferred in relation to pipeline proposals.

2.1	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	✓✓	✓✓	✓	✓	✓
(b)	-	-	x	x	✓
(c)	✓	-	✓	✓	✓
(d)	✓	x	x	✓	✓

2.2 Use of existing frameworks. Several frameworks for decommissioning have been established under international conventions, including UNCLOS, the London Convention and Protocol, and the OSPAR Convention (New Zealand is party to UNCLOS and the London Convention and Protocol. It is not party to OSPAR). Frameworks have also been established in the domestic context of other jurisdictions including the UK, Norway, Australia and the United States. In New Zealand, information requirements and decision-making criteria could—

(a) **codify the 1989 IMO Guidelines and Standards** for the Removal of Offshore

Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone (IMO Resolution A. 672(16)).

(b) **adopt another international framework.** Decision 98/3 of the OSPAR Convention has been implemented in the legislation of Norway and the UK. A UK Guidance note in particular sets out a detailed good practice framework for preparing decommissioning programmes and carrying out comparative assessments for programmes that seek derogation from the general rule of complete removal. While New Zealand is not required to seek the approval of parties to OSPAR (as Norway and the UK are), much of the framework in the UK guidance could be useful and relevant to the New Zealand context.

(c) **tailor the content to be specific to the New Zealand context.** Some of the guidelines and standards relate to matters outside the remit of the EEZ Act (for instance, assignment of liability, maintenance of aids to navigation). It will not be possible to address all of the matters in the IMO Guidelines through regulations under Section 29E of the Act. In addition, there are a number of considerations relevant to the New Zealand context that are not addressed in the IMO Guidelines and Standards. A tailored approach would have regard to the relevant matters from IMO so far as they are within the remit of the Act, and also allow consideration of other matters such as cultural values and incorporation of good practice from other national jurisdictions.

In order for the regulator to make the evaluation recommended in paragraph 2.1 of the IMO Guidelines any decommissioning plan that proposes an approach other than complete removal should, for the proposed approach, describe:

- any potential effect on the safety of surface or subsurface navigation, or of other users of the sea
- the rate of deterioration of any material left on the seabed and its present and possible future effects on the environment
- the potential effect on the marine environment, including living resources
- the risk that the material will shift from its position in the future
- the costs, technical feasibility, and risks of injury to personnel associated with removal
- the determination of a new use or other reasonable justification for allowing the installation or structure or parts thereof to remain on the seabed.

In order to give effect to the relevant provisions of the IMO Standards, the regulator should not approve a plan that proposes an approach other than complete removal unless it is satisfied that:

- the abandonment or dumping of material would not cause unjustifiable interference with existing interests
- any installation or structure that projects above the surface of the sea would be adequately maintained to prevent structural failure
- entire removal would not be technically feasible or would involve unreasonable cost
- with respect to partially removed installations or structures, an unobstructed water column is provided above the material, sufficient to

ensure safety of navigation, but not less than 55 m

- the materials would remain in location on the seabed and not move under the influence of waves, tides, currents, storms or other foreseeable natural causes so as to cause a hazard to navigation

However, other relevant matters should also be considered in the evaluation—these are discussed in the sections below.

(d) include relevant provisions of specific guidance under the London Convention and Protocol. For the regulator to consider the application in a manner consistent with New Zealand's commitments under the London Protocol, if an approach other than complete removal is proposed, the plan should describe:

- any exclusion of future uses
- any destruction of hazardous constituents
- any treatment to reduce or remove hazardous constituents
- opportunities for offsite recycling
- any effects on human health

and the regulator should accept the proposal only if:

- there are no other opportunities to re-use, recycle or treat the material without undue risks to human health or the environment or involving disproportionate costs.

Our preferred approach is to include options (c) and (d)—the regulations draw on relevant provisions from the IMO guidelines and standards and specific guidance under the London Convention and Protocol, and allow for the consideration of other matters also. This approach is most in line with the objectives of the regulations, as indicated in the table below. In particular, this approach allows development of more robust engagement and consultation in the New Zealand context, and would allow matters raised to be taken into account in decision-making. We consider that this broader consideration is more proportionate to the potential effects of decommissioning.

2.2	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	✓	✓✓	x	✓	x
(b)	✓	✓✓	x	✓	x
(c)	✓	✓	✓	✓	✓✓
(d)	✓	✓✓	✓	✓	✓

3. Content of a decommissioning plan

The Act sets out in section 100A that a decommissioning plan must—

(a) identify the offshore installations, structures, submarine pipelines, and submarine cables that are to be decommissioned; and

(b) fully describe how they are to be decommissioned; and

(c) if it is a revised decommissioning plan referred to in section 100C, identify the

changes from the accepted decommissioning plan that it is intended to replace; and

(d) include any other information required by the regulations.

Regulations may elaborate on the requirements under (a) to (c). Regulations, together with any guidance, are needed to ensure that the decommissioning plan requirements are clear and proportionate to the effects of the project. They should ensure that plans contain all the information needed to inform public discussions and regulatory decisions.

3.1 Background information. The regulations may elaborate on the identifying information required—there should be enough information to give appropriate context for public discussion and for regulatory decision-making. International good practice examples suggest requirements similar to the following components:

(a) **A description of the material (installations, structures, pipelines) to be decommissioned including the amount, type, location, surveyed depth, size, stability, age and condition of the material.** Similar wording is used in the UK Guidance regarding preparation of decommissioning programmes.

(b) **A description of the existing environment.** This requirement could be omitted until the marine consent stage (a description of the existing environment is included in environment plans in Australia—this tool is analogous to the marine consent in New Zealand). However, if the proposed approach is other than complete removal, a description of the existing environment will be necessary to inform a comparative assessment of effects, and a brief description is useful context for public discussion and decision-making in any case.

Our preferred approach is to include both component (a) and component (b). We consider that both of these components will improve performance against the objectives over the status quo, as indicated in the table below. The descriptions reflect good practice in other jurisdictions, and setting down the requirements in regulations or guidance will make the regulatory system more clear and transparent. We consider that including these elements of background information will lead to a more informed and meaningful public consultation, and allow a more complete consideration of effects, consistent with the purpose of the Act.

3.1	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	✓	✓	✓	✓	✓
(b)	✓	✓	-	✓	✓

3.2 Description of the proposed approach to the decommissioning project. The requirement for the operator to "fully describe" how the installations, structures, pipelines and cables are to be decommissioned is somewhat open to interpretation. The decommissioning plan is not intended to replace or duplicate the marine consent application process. It should deal with the high-level outcomes proposed (that is, what will be removed and what, if anything, will be left behind), and describe the implications of these in enough detail for the public to make informed submissions and for the regulator to come to a decision. The regulations should acknowledge that decommissioning plans will be prepared well in advance of decommissioning and will likely rely to some degree on estimates and assumptions. We consider that it would

be necessary to include, at least briefly:

(a) **a description of anticipated methods for undertaking decommissioning of material, and an indicative schedule.**

(b) **a description of activities associated with preparation of the site for decommissioning and/or activities following from decommissioning.** This would include proposals for post-decommissioning monitoring activities such as seabed sampling surveys to monitor levels of hydrocarbons, heavy metals and other contaminants in sediments and biota.

A description of methods and timing is similar to a description of activities for a marine consent. In conjunction with (a) and/or (b) above, acceptance of the plan could either—

(c) **accept the description as part of the plan, and restrict the operator** to the programme of activities described; or

(d) **consider the description as context** which demonstrates the feasibility of achieving the outcomes proposed and describes the likely environmental effects, but **does not restrict the operator** to the programme of activities. Since the effects of specific activities on the environment and existing interests will be considered at the marine consent stage, it is not necessary to bind the operator to a programme of activities at the decommissioning plan stage. And since some of the activities may take place years after submission of the decommissioning plan, it is desirable to allow flexibility for operators to use methods that might not have been available or considered at the time the plan was accepted.

Our preferred approach is to include both (a) and (b), descriptions of methods and schedule for decommissioning, and descriptions of preparatory and follow-up activities. We consider that these requirements will lead to a more informed consultation, clearer expectations for the operator, and better reflections of international good practice than the status quo (which sets out no explicit requirement), as indicated in the table below. In relation to binding the operator to the activities and timing described, our preferred approach is option (d). We consider that binding the operator is likely to be inefficient, since each activity is also subject to a marine consent process, and it is likely to require revisions of the plan for small changes in circumstances or methods. Option (d) would provide a more efficient and more flexible process, and provide for more appropriate consultation on the high-level outcomes.

3.2	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	✓	-	✓	✓
(b)	-	✓	-	✓	✓
(c)	-	-	xx	xx	-
(d)	-	✓	-	✓	✓

3.3 **Comparative assessment methodology**. As discussed in section 2.1, the proposed regulatory approach to decommissioning includes a general principle of complete removal, with a process for the regulator to assess proposals other than complete removal on a case-by-case basis. A case to abandon or incompletely remove elements of the infrastructure should be supported by a comparative assessment that

demonstrates why that approach is preferred and why it should be accepted by the regulator. The policy intent is for a comparative assessment to identify the decommissioning option with the best environmental outcome that is technically feasible and does not involve unreasonable cost. The ERM review notes that decommissioning plans are likely to include a number of assumptions and estimates, and recommends that the regulations make clear what level and certainty of information is required for the regulator to make a decision. The assessment should use a robust, consistent methodology to identify the preferred option. It could use:

(a) **ALARP** – identifying the option where negative environmental impact is "as low as reasonably practicable" (an established methodology), as referenced in Australian environmental legislation.

(b) **BPEO** – identifying the "best practicable environmental option" (an established methodology), as described in the 12th report of the UK's Royal Commission on Environmental Pollution.

(c) **a methodology explicitly set out** in regulations or guidance. This would allow us to tailor the methodology to the New Zealand context, while drawing on good practice principles set out in established methodologies, including:

- providing a robust and transparent evaluation of all the available options
- considering the full range of environmental, technical, safety and economic factors
- identifying the option with the best environmental outcome that is technically feasible and does not involve unreasonable cost.

Any of these options would improve the system compared to the status quo, they would reflect international good practice, ensure that effects are considered in a manner proportionate to their scale, and provide a clear framework for operators to prepare a comparative assessment, as indicated in the table below. Our preferred approach is option (c), as we consider that this would be more flexible to include considerations relevant to New Zealand—such as cultural impacts—and will allow for the use of language and concepts already in use in New Zealand legislation or practice, improving clarity. The ERM report supports a multi-factor comparative assessment, and suggests that guidance on the inclusion and weighting non-environmental factors will be necessary to support the regulations.

3.3	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	✓	✓	✓	-
(b)	-	✓	✓	✓	-
(c)	-	✓	✓	✓✓	-

3.4 **Cultural values**. The EEZ Act contains a more limited consideration of cultural values in decision-making than does the RMA. Only those cultural values or customary rights that are captured within the definition of "existing interests" are explicitly required to be considered in existing processes under the EEZ Act (although cultural values may be, and sometimes are, considered in some processes as "any other matter").

However, this does not preclude the consideration of cultural values in regulations,

provided it is not inconsistent with the purpose of the Act. The assessment of a decommissioning plan will be a new process under the Act, and is not intended to duplicate the marine consent process, but to consider appropriate factors at a project level. These regulations could provide that—

(a) explicit consideration of cultural effects is limited to "effects on existing interests" (status quo). In the EEZ Act 'existing interest' means, in relation to New Zealand, the exclusive economic zone, or the continental shelf (as applicable), the interest a person has in—

a. any lawfully established existing activity, whether or not authorised by or under any Act or regulations, including rights of access, navigation, and fishing:

b. any activity that may be undertaken under the authority of an existing marine consent granted under section 62:

c. any activity that may be undertaken under the authority of an existing resource consent granted under the Resource Management Act 1991:

d. the settlement of a historical claim under the Treaty of Waitangi Act 1975:

e. the settlement of a contemporary claim under the Treaty of Waitangi as provided for in an Act, including the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992:

f. a protected customary right or customary marine title recognised under the Marine and Coastal Area (Takutai Moana) Act 2011

(b) wider cultural values are given weight in comparative assessments of decommissioning options, and any potential or future effects of the proposed approach on cultural values are described in the decommissioning plan. Given the permanence of the decommissioning proposals (that is, all material will either be removed or permanently abandoned), and following discussion with iwi, we consider that it is important that cultural values beyond "existing interests" are taken into account in identifying the best approach to a decommissioning project.

Our preferred approach is option (b). This is more proportionate to the scale of effects than restricting consideration to effects on existing interests. We also consider that it will provide for more meaningful consideration of matters likely to be raised during consultation, as indicated in the table below. The ERM report suggests that assessment of cultural effects may be difficult to ascertain and document within the decommissioning plan, and recommends guidance on how the regulator should address a plan with limited cultural effects information.

3.4	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	-	-	-
(b)	-	-	✓	-	✓✓

3.5 Safety implications of removal. The IMO Guidelines include "risks of injury to personnel associated with removal of the installation or structure" as a matter for the

State to consider when evaluating a proposal. Legislation in Norway and the UK (both parties to OSPAR) includes explicit consideration of safety aspects in comparative assessments, along with environmental, technical, economic and societal considerations. The US legislation is much more prescriptive, and allows the Regional Supervisor to approve an alternate removal depth if, for instance, "divers must be used and the seafloor sediment stability poses safety concerns". In New Zealand the Health and Safety at Work Act 2015 (HSWA) requires employers to eliminate or minimise risks to workers.

We note that acceptance of a decommissioning plan by the EPA would not be a substitute for requirements under the HSWA—safety implications are typically included to support the proposal of one decommissioning option over another (for instance, if one option has been excluded from the assessment because it is considered unsafe).

It is important that the accepted decommissioning plan can be implemented, and some consideration of safety is considered necessary in order to avoid the situation that an operator is bound to a course of action under the EEZ regulations that, under health and safety legislation, they are unable to undertake. If risks to health and safety are cited in decommissioning plans as reasons to prefer incomplete removal, it is likely that the EPA will need to consult with WorkSafe NZ.

(a) consider safety explicitly in a comparative assessment. This would be most in line with good practice examples in other jurisdictions. However, framing the assessment in this way could pose a risk that not all of the methods for implementing removal are identified at the beginning of the assessment.

This could lead to options for removal being ruled out on grounds that the obvious method for implementing removal poses risk to personnel, even when other, safer (though potentially more costly), methods for removal are available.

(b) consider as part of technical feasibility. Since, under Health and Safety legislation, operators already have a duty to protect workers from harm, it is reasonable to consider that the range of feasible options includes only those that do not pose an unacceptable risk to personnel—that is, an option would be considered *not technically feasible* if it is *not technically feasible to do safely*. The range of available options should include any safe, technically feasible approach, even where that approach is costly—so that the assessment can evaluate whether it is unreasonably costly for the scale of effects.

Our preferred approach is option (b), as indicated in the table below. While either option would provide for a flexible case-by-case approach, we consider that framing safety as an element of feasibility (for the purposes of a decommissioning plan under the EEZ Act regime) is likely to lead to a more complete identification of available options at the beginning of the assessment. This is most consistent with the sustainable management purpose of the Act, and will ensure a transparent assessment of whether costs are proportionate to the level of effects.

3.5	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	✓	-	✓	-
(b)	✓	-	✓	✓	-

3.6 Waste streams. The intent of the policy is to encourage a strategic approach to planning for decommissioning, which may include consideration of factors outside the EEZ. In some jurisdictions, options for disposal of waste away from the site are considered as part of the evaluation of decommissioning proposals.

Any dumping or abandonment in the EEZ would be subject to marine dumping consent, which includes consideration of the effects of dumping as well as alternative methods of disposal and practical opportunities to reuse, recycle or treat waste. Re-use, recycling or final disposal outside the EEZ is subject to other regimes, where the effects can best be considered. The policy could provide that—

(a) waste streams are not considered. The disposal of waste would still be considered under other relevant regimes or processes. However, this would not encourage an early, strategic approach to decommissioning planning and could incentivise delaying consideration of waste until late in the process. It could lead to operators committing to removal outcomes that they are not technically or legally able to implement.

(b) the plan must give effect to the principles of the waste hierarchy. The UK Guidance specifically requires decommissioning programmes to do this, with re-use the preferred option, followed by recycling, with dumping/abandonment as a last resort. Given the extended nature of the decommissioning project, it seems reasonable to expect that the availability and economic feasibility of different disposal and re-use/recycling options could change between the time when the plan is accepted and the disposal of material, so it is not desirable to lock operators into particular methods of dealing with waste.

(c) the plan must demonstrate that disposal of any waste can technically and legally be accomplished. This approach would require an operator to give consideration to waste streams early in the planning process, without binding them to a particular disposal method.

Our preferred approach is option (c). While some other jurisdictions include detailed consideration of waste disposal options in decommissioning-plan analogues, we consider that that approach would not be appropriate in New Zealand, given that these factors will be considered in later regulatory processes (including marine dumping consent processes if the proposal is for dumping at sea).

We consider that option (c) furthers the purpose of the Act to protect the environment from pollution; that it provides, to a degree, for consideration of waste in line with international good practice; that detailed consideration of specific waste streams only in relation to a dumping consent (or by the relevant authority outside the EEZ) is most proportionate to the level of effects; and that it provides appropriate flexibility for the operator to respond to changing circumstances. These considerations are reflected in the table below.

3.6	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	x	-	-
(b)	✓✓	✓	x	✓	✓
(c)	✓	✓	✓	✓✓	✓

3.7 Engagement and consultation. Section 100D of the Act requires that the regulations—

> *require the owner or operator of the offshore installation, structure, submarine pipeline, or submarine cable to consider each submission* [received during public consultation] *and either—*
>
> *(i)* *amend the plan in response to the submission; or*
>
> *(ii)* *explain to the EPA why it does not propose to amend the plan in response to the submission.*

in order to meet the requirement of "providing for public consultation."

We consider that the identification of the preferred approach should be informed by both targeted engagement with relevant iwi, agencies and existing interests early in the process, and public consultation on the draft plan. Appropriate inclusion of engagement and consultation in preparation of the plan could be ensured by the following additive requirements:

(a) **requiring the plan to describe engagement and consultation undertaken with relevant iwi, agencies, existing interests and the public.** Information on engagement with relevant iwi, agencies and existing interests should be included before the draft plan is released for public consultation.

(b) in conjunction with option (a), **requiring the plan to demonstrate that the operator has assessed the merits of feedback from engagement and consultation, and has taken it into account in the identification of the preferred option.**

(c) in conjunction with option (a), **requiring the plan to describe any engagement activities to be undertaken during and post-decommissioning.**

Our preferred approach is to progress all of component (a), component (b) and component (c). We consider that all of these components would improve the performance of the regulatory system against the objectives, compared with the status quo (no explicit requirement beyond formal public consultation), as indicated in the table below. They would better reflect international good practice, make the consultation requirements clear and transparent, and ensure that consultation is meaningful. Requiring the plan to demonstrate that feedback has been taken into account (b) would encourage consideration of effects on communities or existing interests in a way that is proportionate to those effects.

3.7	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	✓	-	✓	✓
(b)	-	✓	✓	✓	✓✓
(c)	-	✓	✓	✓	✓

4. Process for dealing with a plan

A critical function of the decommissioning plan is to provide a forum for public consultation on

the decommissioning project in an appropriate and meaningful way. The way that the EPA deals with a plan after it is submitted for acceptance will influence the effectiveness of this consultation. Section 100D of the EEZ Act includes minimum requirements for public consultation to be included in the regulations, and we here consider how the regulator will make sure the decommissioning plan is fit for public consultation before it is published, how it will deal with any sensitive information that might be included in a decommissioning plan, how long will be allowed for public consultation, and how the regulator will deal with revisions to a plan that has already been accepted.

4.1 making sure the plan is fit for public consultation. In order for public consultation on the plan to be meaningful, the regulator should be certain that the plan contains all the relevant information at the time of notification. It should also be certain that adequate engagement has taken place in the preparation of the draft plan. However, there is risk of duplicating or prejudging the decision (on whether to accept the plan) if the regulator is required to assess the completeness of the plan or its compliance with regulations at both stages. The policy could make sure that decommissioning plans are fit for public consultation by—

(a) **including no gateway step** (status quo). The regulator would publish any decommissioning plan submitted for acceptance, and the operator would bear the risk of consulting on an incomplete plan. This could be inefficient, and could undermine public trust in the consultation process if submitters prepare submissions on documents that do not contain adequate information for assessment.

(b) **including an administrative exercise such as a "concordance document"** to ensure that the plan contains the information prescribed by regulations. This is similar to the approach taken to safety cases submitted to WorkSafe. There is a risk that by accepting the plan as "complete" the EPA would be seen as supporting a plan before it has been assessed.

(c) **having the regulator perform a limited assessment of the plan** to ensure that the plan contains the information prescribed by regulations to a specified standard. This is similar to the approach taken to notifiable marine consent applications submitted to the EPA. This would give the regulator a degree of discretion to decide that there is sufficient information for the public to make informed submissions on the proposal, and evidence of adequate engagement with relevant iwi, agencies and existing interests. Again, there is a risk that the EPA would be seen as supporting a plan before it has been assessed. This process could become more onerous on the regulator as the assessment would be more prescriptive than (b). Given that the decommissioning plan is the first stage in a two-stage regulatory process, and that detailed information about the effects will not necessarily be included, it would not be appropriate to replicate the existing statutory test from the marine consent process.

(d) **having the regulator assess the plan before public consultation, and notify only plans it intends to accept.** The subsequent assessment (after consultation) would then consist of reviewing submissions and considering whether new information has come to light that would cause the regulator to refuse the plan. This is similar to the approach taken when DOC notifies the "intent to grant" a concession. There is a risk that the application would be perceived as being already decided, and having both an assessment and a reassessment makes the

process less efficient.

It is considered that options (b), (c) and (d) (including some kind of gateway step) would improve the value of consultation over the status quo, by ensuring that the decommissioning plan contains an appropriate level of information. However, there is also a risk that they could detract from consultation if it is perceived that the regulator has already come to a decision. The more prescriptive the gateway step is, the more confidence there will be that the decommissioning plan published for consultation includes all of the appropriate information for an informed consultation. However, more prescriptive options will also be more onerous, more likely to involve duplication (especially for option (d)), and more at risk of a perceived pre-judged outcome.

After considering the findings of the ERM review, we propose option (c), a limited assessment, as the preferred option, being most proportionate to the level of effects.

We intend to seek more information about these options, and preferences toward them, through public consultation on the proposed regulations. They will be considered further after consultation closes.

4.1	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	-	-	-
(b)	-	-	-	✓	✓
(c)	-	-	✓	✓	✓
(d)	-	-	x	✓	✓

4.2 dealing with sensitive information. Section 158 of the EEZ Act provides for the EPA to withhold information in relation to proceedings—

(a) to avoid causing serious offence to tikanga Māori or to avoid disclosing the location of wāhi tapu; or

(b) to avoid disclosing a trade secret or to avoid causing unreasonable prejudice to the commercial position of the person who supplied, or is the subject of, the information

These provisions apply in relation to proceedings under the Act, but not in relation to the processing of a decommissioning plan. Engagement with industry indicated that it would be appropriate for the decommissioning plan process to also provide for sensitive information to be withheld from the published plan.

The policy could provide for the EPA to—

(a) publish all parts of a plan (status quo)

(b) withhold information provided during engagement (e.g. culturally sensitive information) at the request of the consultee

(c) withhold commercially sensitive information at the request of the operator

We consider that it is important that the decommissioning plan published for consultation includes all of the relevant information to inform submissions, including technical information

and records of engagement, so that those involved in the development of the plan can see how their input has been taken into account. However, we consider that sensitive information will likely need to be protected in order for genuine and open engagement to take place, and in order for the regulator to be provided with sufficiently complete information to inform decision-making.

We intend to seek more information about these options, and preferences toward them, through public consultation, and have included a question in the discussion document to elicit information about the types of sensitive information that it might be appropriate to withhold. We will consider further how the protection of sensitive information can best be provided for after consultation closes.

4.2	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	-	-	-
(b)	-	-	-	-	✓
(c)	-	-	✓	-	-

4.3 Notification period. Section 100D of the act requires that regulations must provide for public consultation in relation to a decommissioning plan that has been submitted for acceptance, and sets out in subsection (3) that regulations are to be regarded as providing for public consultation in relation to a plan if the regulations—

(a) require the EPA to publicly notify the plan; and

(b) allow any person who wishes to make a submission about the plan a reasonable opportunity to do so; and

(c) require the owner or operator of the offshore installation, structure, submarine pipeline, or submarine cable to consider each submission and either—

(iii) amend the plan in response to the submission; or

(iv) explain to the EPA why it does not propose to amend the plan in response to the submission.

The regulations could—

(a) set the default period for consultation. This is the approach taken with marine consent applications, where consultation is set at 30 working days. If the time were specified, the EEZ Act allows, in sections 159 and 160, that the EPA may extend a time period specified in the Act or in regulations, whether or not the time period has expired, if it has taken into account—

- the interests of any person who, in the EPA's opinion, may be directly affected by the extension or waiver; and
- the interests of the community in being able to achieve an adequate assessment of the potential effects of a proposal.

(b) allow the EPA to set the consultation period. The complexity of decommissioning plans is likely to vary depending on the proposals in the plan,

and it would be appropriate to allow a longer period for consultation on particularly complex plans. The EPA could be allowed to set an appropriate period for consultation at the outset, taking into account the same matters described in s160 as if they refer to the consultation period:

- the interests of any person who, in the EPA's opinion, may be directly affected by the length of the consultation period; and
- the interests of the community in being able to achieve an adequate assessment of the potential effects of a proposal.

(c) in conjunction with option (a) or (b), **require a minimum consultation period of 30 working days.** This is consistent with the consultation period on marine consent applications for discretionary activities.

(d) in conjunction with option (a) or (b), **require a longer minimum period for consultation.**

At this stage, our preferred approach is that regulations allow the EPA to set the consultation period for each decommissioning plan, of no less than 30 working days—options (b) and (c). We consider that all of these options would meet the requirement to provide for public consultation on the plan. We consider that (b) would allow the greatest flexibility for the submission period to be set on a case-by-case basis for a period appropriate to the complexity of the proposals, and that it is more likely to allow for considerations proportionate to the level of effects. Setting the minimum consultation period at 30 working days would give greater scope for the EPA to adjust the period to be proportionate to the complexity of the proposal and scale of effects, compared with setting a longer minimum period. These considerations are reflected in the table below.

We intend to seek information about preferences during consultation, and will further analyse the options after consultation on the proposed regulations closes.

4.3	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	x	-	✓
(b)	-	-	✓	✓	✓
(c)	-	-	✓	-	✓
(d)	-	-	x	-	✓

4.4 Revised plans. The Act allows in section 100D that, in relation to revisions to an accepted plan ("current plan") regulations may provide for either or both of the following:

(a) that public consultation is required only in relation to the changes from the current plan to the revised plan.

(b) that public consultation is not required if the EPA is satisfied that the effect on the environment and existing interests of implementing the revised decommissioning plan would not be materially different from, or would be less than, the effect of implementing the current plan.

Our preferred option is to provide for both (a) and (b) in the regulations. Both of these options

would allow greater levels of flexibility for the regulator to run an efficient process, and would ensure that consultation is more meaningful, compared with the status quo (not including either provision). These considerations are indicated in the table below.

4.4	Purpose of Act	International obligations/practice	Efficient/ proportionate	Clear/ flexible	Consultation
(a)	-	-	✓	-	✓
(b)	-	-	✓	-	✓

3.2 Which of these options is the proposed approach?

The proposed policy approach is summarised in Appendix 1. Input on the proposed approach to regulations will be sought through public consultation.

We consider that the approach described in Appendix 1 best meets the project objectives listed on page 1 of this RIS. Progressing this approach will give effect to the decommissioning plan process created through the RLAA and fill the gaps identified in the legislative framework. It will provide more certainty to all parties about how decommissioning will progress, and ensure that decisions are made in a consistent way. It will give the opportunity for regulators to provide guidance to operators early in the planning process, and bring consultation with iwi and the public forward, to a point where they can be engaged in a meaningful way. While it will not address all of New Zealand's international obligations around decommissioning, it will ensure that decisions made under the EEZ Act are consistent with those obligations and reflect international good practice. The ERM review found that the proposed policy (as described in a draft Discussion Document) is not inconsistent with international approaches, and acknowledged that the focus in some regions on in-situ reefing has limited relevance for the deeper areas of the offshore Taranaki environment. The report noted similarities to regulations in Thailand and general consistency with the Decommissioning Guideines prepared by the ASEAN council on Petroleum and with UK guidance material.

Following public consultation and decisions by Ministers, evaluations would need to be made about how best to progress the agreed policy—international examples indicate that a combination of regulations and guidance would be appropriate. The ERM review recommends guidance to support the regulations in several areas.

Section 4: Impact Analysis (Proposed approach)

4.1 Summary table of costs and benefits

Affected parties *(identify)*	**Comment**: nature of cost or benefit (eg ongoing, one-off), evidence and assumption (eg compliance rates), risks	**Impact** *$m present value, for monetised impacts; high, medium or low for non-monetised impacts*
Additional costs of proposed approach, compared to taking no action		
Regulated parties	Will bear cost of preparing and consulting on decommissioning plan, including cost recovery of processing costs. If regulations lead to operators pursuing more complete removal than they would have otherwise, actual decommissioning costs will be increased.	Costs could range from approximately $200,000 to $500,000 to assess and accept a decommissioning plan. This estimate is based on indicative fees charged in the UK[4] for assessing decommissioning plans for a range of different facilities. It costs around $100,000 to $450,000 for the EPA to process non-notified discretionary marine consents (consent applications submitted in accordance with an accepted decommissioning plan will be non-notified). This compares with estimated costs for a notified marine consent for a discretionary activity, which may be between $250,000 to $1,500,000 per application.
Regulators	Resourcing for processing decommissioning plans—this is cost-recoverable from the operator. Resourcing for engaging with operators during the preparation of the plan—this is cost-recoverable from the operator.	The functions required of the regulator (EPA) will be significant, but will be cost-recoverable.
Wider government	Under current tax settings, the Crown may be liable for up to 48% of	It is uncertain to what degree the actual costs of

[4] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43418/5796-decomm-fees.pdf

	decommissioning costs. If regulations lead to operators pursuing more complete removal than they would have otherwise, actual decommissioning costs will be increased. There could be costs to related agencies associated with engaging with operators during the preparation of the plan.	decommissioning will be altered.
Other parties	Submitters—some additional cost from being involved in the new project-level plan but is more efficient than submitting several times on separate marine consents.	Unknown, but likely to be low.
Total Monetised Cost	The scale of monetised costs is uncertain, and will largely depend on the number and complexity of decommissioning plans processed.	Not able to be calculated at this time, as possible number and complexity of plan applications is unknown
Non-monetised costs		*Not known, but likely to be low.*

Expected benefits of proposed approach, compared to taking no action		
Regulated parties	Will have cost savings in relation to consultation on later marine consent applications, as consultation moved onto decommissioning plan. There are likely to be multiple consents/bundles of consents covered by each decommissioning plan.	As noted, non-notified discretionary marine consent processing costs are typically in the range of $100,000 to $450,000, while notified discretionary marine consent processing costs are typically in the range of $250,000 to $1,500,000. A key impact of the proposed policy would be to front-load the costs of consultation into the decommissioning-plan process (rather than the later marine consent).
Regulators	Front-ending process through a decommissioning plan provides for a more holistic view of the outcomes of a decommissioning work programme. It also better manages the risks around the approach to decommissioning projects being acceptable to the public.	Unknown, but likely to be low or medium.
Wider government	Reduced risk. If regulations result in operators removing more than they would have otherwise, the risk of costs arising from abandoned infrastructure will be decreased.	Unknown.

Other parties	Submitters—moving consultation to the project-level plan should enable submitters to direct resource more efficiently and effectively, rather than submitting several times on different pieces of the project. Improved environmental outcomes—the proposed policy would ensure that decommissioning proposals are carefully considered, and incomplete removal is only allowed where it is the best option.	Submitters are expected to gain a medium level of benefit.
Total Monetised Benefit	The scale of monetised benefits is uncertain, and will largely depend on the number of decommissioning plans and related marine consent applications.	Not able to be calculated at this time, as possible number of plan and consent applications is unknown.
Non-monetised benefits		

4.2 What other impacts is this approach likely to have?
There is significant uncertainty about the scale of the costs and benefits of the proposed policy. However, broadly speaking, the policy is likely to— • bring costs associated with consultation forward (on the decommissioning plan rather than the later consents). • encourage more complete removal than the status quo, resulting in more certain environmental outcomes, and also higher costs to operators and the Crown. This could also result in increased economic activity for a period of time. • improve clarity for all parties. This could include more certainty for owners of infrastructure and future investors, as well as for government and communities. We anticipate that public consultation on the proposed policy will elicit more information on the scale of potential costs and benefits.

Section 5: Stakeholder views

5.1 What do stakeholders think about the problem and the proposed solution?

Consultation has been undertaken with the following parties:

- Iwi in Taranaki have existing interests in the coastal marine area and wider cultural interests in the region, and have a history of engagement with operators. We invited the eight iwi in the Taranaki region to discuss early thinking on policy for regulations for decommissioning offshore oil and gas infrastructure. Representatives of six organisations (Ngāti Tama o Taranaki; Te Kotahitanga o Te Atiawa Trust; Te Kāhui o Taranaki Trust; Te Kaahui o Rauru; Te Korowai o Ngāruahine Trust; and Te Rūnanga o Ngāti Ruanui Trust) engaged in discussions and contributed perspectives. We addressed some of the points they raised in the policy development as follows:
    - Consideration and weighting of cultural values was incorporated in comparative assessment
    - Presumption for complete removal was endorsed
    - Requirements to describe engagement with relevant iwi were incorporated
    - EPA assessment of the adequacy of early engagement was proposed
    - Some concerns were raised about the wider regime that could not be addressed through these regulations but have been retained for consideration in future policy work.

  We provided an embargoed copy of a draft discussion document to the iwi organisations listed above, and received comments from Te Runanga o Ngāti Ruanui Trust, Te Korowai o Ngāruahine Trust and Te Kaahui o Rauru. As a result, the policy proposals were revised to include a requirement for operators to describe engagement during and after decommissioning, clarifications were made to the discussion document, and other in-scope comments have been retained for further consideration in the context of any views expressed during public consultation.

- The Petroleum Exploration and Production Association of New Zealand (PEPANZ) is the industry body representing regulated parties. Representatives from PEPANZ

participated in a workshop early in policy development. Some of the perspectives shared have been incorporated in policy development, in particular:

- Flexibility for treatment of well P&A activities in or out of decommissioning plan.
- Indicative timing to be non-binding to allow for flexible planning.
- Criteria to be incorporated directly into regulations (rather than by reference to an international standard) to avoid potentially conflicting criteria.

We intend to consult with PEPANZ further throughout the policy process.

- Taranaki Regional Council (TRC) is the regulator concerned with petroleum infrastructure onshore and in the territorial sea in the region where current installations are operating. Representatives from TRC have been consulted during policy development, especially regarding cross-boundary issues between the EEZ and territorial sea.

- Staff from EPA, MBIE and MfE have been involved in the working group developing this policy. These agencies, as well as IRD, WorkSafe, and TRC, are represented in a governance group overseeing the project, chaired by MBIE.

- We also consulted with MPI, TPK, DOC, and MFAT on the policy proposals.

- An environmental consultant, ERM, reviewed a draft discussion document, and the findings of that review have informed both the final discussion document and this RIS.

It is intended to release the discussion document for public consultation in early 2018 and an exposure draft later in 2018.

The discussion document contains a description of the policy proposals discussed in this RIS and background information to the proposed policy. Release of the discussion document will include direct notification to iwi authorities, regional councils, relevant industry organisations, permit holders and NGOs. Submissions received during consultation will be taken into account in the further development of the policy.

Section 6: Implementation and operation

6.1 How will the new arrangements be given effect?

The proposed approach would be given effect through regulations made under Section 29E of the Act, and potentially supporting guidance. The industry organisation representing the regulated parties (PEPANZ) has been involved in the development of the regulations, and we would continue to communicate through that body. Since decommissioning of current facilities has not yet begun, there would be no transitional arrangements.

Responsibilities for the EEZ Act are largely split between the Ministry and the EPA. The Ministry largely administers the EEZ Act and its implementing regulations and policies.
The EPA is responsible for processing and/or considering applications for marine consents, monitoring compliance with the EEZ Act and any conditions on marine consents, carrying out enforcement, and promoting public awareness of the requirements of the EEZ Act and associated regulations. The EPA would be responsible for ongoing operation and enforcement of the new arrangements, as the decision-maker on decommissioning plans submitted for acceptance, and as the agency most involved in advance planning discussions with operators.

EPA has been involved in the development of the regulations. They have expressed concern that existing cost-recovery arrangements could disincentivise early engagement on the part of the operator. We consider that this is mitigated through the proposed policy that would require the decommissioning plan to be informed by engagement.

The new arrangements would come into effect as soon as regulations were made – likely mid-2018. We understand that regulated parties would prefer to have certainty about the requirements as soon as possible.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

The Ministry has a responsibility in its regulatory stewardship role to monitor, review and report on regulatory systems.

Any functions relating to decommissioning would be monitored, evaluated and reviewed as part of the wider EEZ Act framework. This includes monitoring the ongoing performance of the system and reviewing it at appropriate intervals to determine whether it is still fit for purpose.

Further consideration will be given to appropriate measures for monitoring decommissioning arrangements when regulations and guidance are developed to implement the proposed policy.

7.2 When and how will the new arrangements be reviewed?

The Ministry for the Environment would carry out any monitoring, evaluation or review as the responsible agency, which may include:

- evaluation of costs and the effectiveness of all EEZ functions including those related to decommissioning activities
- evaluation of how effective the EPA and other management agencies are in meeting the purpose of the Act.

Appendix 1: proposed policy

At this stage, the proposed approach is that the regulations, together with any guidance issued,—

GENERAL APPROACH

- capture in the scope of the decommissioning plan requirement all activities that must be undertaken to an offshore petroleum installation and its associated structures and pipelines to take them permanently out of service after the installation has ceased to be used for petroleum production purposes. [1, interpretation of existing provision of primary legislation]
- allow flexibility for discretionary P&A activities to be progressed either under an accepted decommissioning plan and subsequent non-notified consent(s), or under fully notified marine consent(s). [1.1(c)]
- provide for consideration of the effects of disturbing cuttings piles in relation to proposals for site remediation or dealing with other infrastructure (but not require a plan to deal with consented cuttings piles otherwise). [1.2(b)]
- exclude re-use activities from the scope of decommissioning. [1.3(b)]
- presume the complete removal of installations and structures, and require that proposals for an approach other than removal are supported by a comparative assessment. [2.1(a)]
- make no presumption about the approach to decommissioning pipelines, and require that all pipeline proposals are supported by a comparative assessment of available options. [2.1(c)]
- have regard to the IMO Guidelines and Standards, and tailor the content to be specific to the New Zealand context. [2.2(c)]
- give effect to relevant provisions of specific guidance under the London Convention and Protocol. [2.2(d)]
- restrict the operator to apply for marine consents under the plan that implement the high level outcomes accepted (what will be taken away and what, if anything, will be left behind). [existing provision of the primary legislation]
- allow description of anticipated methods and activities to be considered as context but not restrict the operator to a particular programme of activities or to particular timing. [3.2(d)]

INFORMATION IN A DECOMMISSIONING PLAN

- require the plan to adequately describe:
  - the material (installations, structures, pipelines) to be decommissioned including the amount, type, location, surveyed depth, size, stability, age and condition of the material. [3.1(a)]
  - the existing environment. [3.1(b)]
  - the proposed approach, including a description of anticipated methods for undertaking decommissioning of material and a description of activities associated with preparation of the site for decommissioning and/or following from decommissioning (such as seabed sampling surveys to monitor levels of hydrocarbons, heavy metals and other contaminants in sediments and biota). [3.2(a,b)]
  - an indicative schedule. [3.2(a)]
  - consultation that has been undertaken with relevant iwi, agencies and existing interests. [3.7(a)]

    - any engagement activities to be undertaken during and post-decommissioning. [3.7(a)]
- further, if the proposed approach is other than complete removal, require the plan to adequately describe:
    - any potential and future impact on cultural values. [3.4(b)]
    - any potential effect on the safety of surface or subsurface navigation, or of other users of the sea. [2.2(c)]
    - the rate of deterioration of any material left on the seabed and its present and possible future effects on the environment. [2.2(c)]
    - the potential effect on the marine environment, including living resources. [2.2(c)]
    - the risk that material will shift from its position in the future. [2.2(c)]
    - the costs, technical feasibility and risks of injury to personnel associated with removal. [2.2(c)]
    - the determination of a new use or other reasonable justification for allowing the installation or structure or parts thereof to remain on the seabed. [2.2(c)]
    - any exclusion of future uses. [2.2(d)]
    - any destruction of hazardous constituents. [2.2(d)]
    - any treatment to reduce or remove hazardous constituents. [2.2(d)]
    - opportunities for offsite recycling. [2.2(d)]
    - any effects on human health. [2.2(d)]
- require the plan to demonstrate that disposal of any waste associated with the proposed approach can technically and legally be accomplished. [3.6(c)]

INFORMATION IN A DECOMMISSIONING PLAN – COMPARATIVE ASSESSMENT

- set out a robust methodology for preparing a comparative assessment. [3.3(c)]
- require comparative assessments of decommissioning options to
    - provide a robust and transparent evaluation of all the available options. [2.1(a), 3.3]
    - take into account the full range of environmental, cultural, technical (including safety) and economic factors. [3.3, 3.4(b), 3.5(b)]
    - identify the option that has the best environmental outcome and considers cultural values, that is technically feasible and does not involve unreasonable cost. [3.3]
    - clearly demonstrate how the decision on the preferred option has been reached. [2.1(a)]
    - involve appropriate engagement and consultation with relevant iwi, agencies, existing interests and the public, and demonstrate that the operator has assessed the merits of feedback from consultation and has taken it into account in the identification of the preferred option. [3.7(a,b)]

PROCESS FOR DEALING WITH A PLAN

- include provision to make sure that plans released for public consultation are fit for purpose and contain sufficient information for the public to make informed submissions on the proposal—*consultation on the proposed regulations will seek input about options for achieving this.* [4.1]
- provide that the decommissioning plan is published for public consultation—*consultation on the proposed regulations will seek input about whether there is a need for provision to withhold sensitive information.* [4.2]

- provide that the regulator notifies the draft plan for public submission, and accepts submissions for a period that it decides, with a minimum of 30 working days. [4.3(b,c)]
- provide that, in deciding the consultation period, the regulator must consider:
    - the interests of any person who, in the regulator's opinion, may be directly affected by the length of the consultation period; and
    - the interests of the community in being able to achieve an adequate assessment of the potential effects of a proposal. [4.3(b)]
- require the operator to take into account matters raised during public consultation, to the satisfaction of the regulator. [3.7(b)]
- provide that, with respect to revisions to an accepted plan ("current plan"),
    - public consultation is required only in relation to the changes from the current plan to the revised plan. [4.4(a)]
    - public consultation is not required if the EPA is satisfied that the effect on the environment and existing interests of implementing the revised decommissioning plan would not be materially different from, or would be less than, the effect of implementing the current plan. [4.4(b)]

CRITERIA FOR ASSESSING A PLAN

- allow the regulator to accept a decommissioning plan with a proposed approach of **complete removal** of installations and structures if it meets all the requirements related to contents and consultation (including comparative assessment of options for pipeline decommissioning if the plan relates to a pipeline).
- allow the regulator to accept a decommissioning plan for a proposed approach **other than complete removal** only if the plan meets all the requirements related to contents and consultation (including comparative assessment), and the regulator considers that all of the following apply:
    - the abandonment or dumping of material would not cause unjustifiable interference with existing interests. [2.2(c)]
    - any installation or structure that projects above the surface of the sea would be adequately maintained to prevent structural failure. [2.2(c)]
    - entire removal would not be technically feasible or would involve unreasonable cost. [2.2(c)]
    - with respect to partially removed installations or structures, an unobstructed water column is provided above the material, sufficient to ensure safety of navigation, but not less than 55 m. [2.2(c)]
    - the materials would remain in location on the seabed and not move under the influence of waves, tides, currents, storms or other foreseeable natural causes so as not to cause a hazard to navigation. [2.2(c)]
    - there are no other opportunities to reuse, recycle or treat the material without undue risks to human health or the environment or involving disproportionate costs. [2.2(e)]