

New Zealand Government

New Zealand Submission to the International Seabed Authority (ISA) on the Standards and Guidelines released for Stakeholder Consultation on 6 May 2021.

02 July 2021

Introduction

1. New Zealand is pleased to provide comments on the seven draft Standards and Guidelines released by the International Seabed Authority's (ISA's) Legal and Technical Commission (LTC) on 6 May 2021. Specific comments related to each Standard and Guideline are set out below in the prescribed template. Here, New Zealand makes some overarching comments on the process and content of the developing regulatory framework for exploitation of mineral resources in the Area (the Mining Code).
2. A central component of the United Nations Convention on the Law of the Sea (UNCLOS) is the duty on all Parties to protect and preserve the marine environment. In the specific context of the Area, the ISA is required to produce rules, regulations and procedures to prevent, reduce and control pollution and other hazards to the marine environment and to prevent, reduce and control interference with the ecological balance of the marine environment. In addition, the rules, regulations and procedures must ensure the protection and conservation of the natural resources of the Area, and the prevention of damage to the flora and fauna of the marine environment. New Zealand is committed to ensuring that the developing Mining Code meets these obligations, and is consistent with the achievement of Sustainable Development Goal 14.2 and the commitments made in the Leaders Pledge for Nature.
3. New Zealand is encouraged that, despite the unprecedented circumstances of the past 16 months, the LTC continues to make progress on the development of the Mining Code for exploitation of mineral resources in the Area. However, we have some overarching comments in relation to the consultation process underway and in relation to the substance of the developing Mining Code.

Overarching process comments

4. We note that the draft Regulations, Standards and Guidelines on which consultation has taken place have necessarily been considered in isolation of one another. The draft Regulations of 2019 have not yet been modified to reflect stakeholder comments, but

comments have been sought on the draft Standards and Guidelines that supplement those Regulations. We understand that some stakeholders encouraged this approach and we acknowledge that there is some rationale to developing the core Regulations, Standards and Guidelines as a package. However, the process adopted to date makes it difficult to comment on the developing framework as a package.

5. In particular, without seeing how the Regulations have been amended to respond to the previous round of consultation it is difficult to see what elements of the Mining Code, considered as a whole, will be mandatory or voluntary, and how the various documents will work together. Currently, the rationale for treating an issue as mandatory (and addressing it through Regulations or Standards) or recommendatory (and addressing it through Guidelines) is not always clear. But it will only be possible to make cogent comments on the choices made when the core Regulations, Standards and Guidelines can be read together, as updated by the LTC in light of consultation responses to date.
6. Further, at least some aspects of the draft Standards and Guidelines appear to have been drafted on the assumption that the Regulations will not change as a result of consultation – so, for instance, the EIA Standard and Guideline does not include mandatory consultation because that would be inconsistent with the draft Regulations. However, many stakeholders – including New Zealand – have advocated for mandatory consultation requirements in the EIA process.
7. As a result, New Zealand considers that the LTC should ensure that, once the draft Regulations and Standards and Guidelines are revised in response to stakeholder comments, there is a further round of stakeholder consultation on the package of documents that have been released to date. That will allow meaningful consultation on the core Mining Code as a complete package and will allow states and other stakeholders to assess the adequacy of the package in ensuring the protection and preservation of the marine environment.

Overarching substance comments

Precautionary approach

8. New Zealand considers that the precautionary approach, as established in the Rio Declaration and subsequently reflected in multiple international environmental agreements and in custom, should be incorporated into the framework of Regulations, Standards and Guidelines in a more considered, deliberate way. This is particularly important in the EIA, EIS and EMMP stages where areas of uncertainty relating to the protection and preservation of the marine environment may be identified.

9. In applying the precautionary approach, the Mining Code should, among other things:
 - a. Require the assessment of alternatives to include the option of 'not mining' (at present, alternatives focus on alternate equipment, differing location or the use of mitigation measures).
 - b. Emphasise the use of adaptive management as *part of* a precautionary approach. Adaptive management should not be used if it does not reduce uncertainty or sufficiently reduce risk. In *Sustain our Sounds Incorporated v The New Zealand King Salmon Company & Others* [2014] NZSC 40, New Zealand's Supreme Court affirmed that adaptive management would only be appropriate if consistent with a precautionary approach. That would turn on a number of factors including:
 - i. the extent of the environmental risk (including the gravity of the consequences if the risk is realised);
 - ii. the importance of the activity (which could in some circumstances be an activity it is hoped will protect the environment);
 - iii. the degree of uncertainty; and
 - iv. the extent to which an adaptive management approach will sufficiently diminish the risk and the uncertainty.

Public participation and consultation

10. Consultation and public participation in environmental decision making makes for better decision making and increased levels of public confidence. New Zealand considers that the Mining Code should include a greater degree of *mandatory* public participation and consultation throughout the screening/scoping, EIA, EIS and EMMP process, and greater detail on what constitutes an effective consultation. Public consultation should be conducted in a transparent manner and ensure that stakeholders have sufficient information to allow intelligible responses and optimal engagement.
11. Further, there are currently substantial differences between documents in how consultation processes are described. Standardisation across documents would be preferred, particularly if consultation is to be made mandatory at each stage.
12. A greater degree of stakeholder engagement, with consistent consultation requirements, would result in the EIA, EIS, EMMP developing in an iterative process, and benefitting from a wider range of inputs.

Review processes for scoping, EIS and EMMP

13. The Regulations, Standards and Guidelines are currently unclear on the mechanism and process by which the LTC will review the adequacy of scoping, EISs and EMMPs and provide recommendations for improvement to contractors. New Zealand recommends a more explicit articulation of how the LTC will review relevant documents, taking into account stakeholder consultation responses. The process should allow for the possibility of testing evidence, requesting further evidence, and making recommendations to contractors for improvement/remediation.

Cross-sectoral cumulative impacts

14. The definition of 'Environmental Effects' in the draft Regulations refers to 'consequences in the Marine Environment arising from the conduct of Exploitation activities, whether positive, negative, direct, indirect, temporary or permanent, or cumulative effect arising over time or in combination with other mining impacts.' This definition is significant as it is carried through all the Standards and Guidelines
15. New Zealand considers that 'environmental effects' needs to include consideration of the cumulative effects of ALL activity being undertaken in the region (not just all mining activity). The consideration of cross-sectoral cumulative effects is currently not well reflected in the Regulations, Standards and Guidelines and we suggest the definition is amended to include all cross-sectoral cumulative environmental effects. In addition, there are several places in the Standards and Guidelines that should refer explicitly to cumulative cross-sectoral effects– these are laid out in our specific comments below.

UN Treaty for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction

16. While yet to be agreed, we note the importance of the Mining Code being capable of giving effect to whatever is agreed under current negotiations for a UN Treaty for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction (the BBNJ).

New Zealand comments on draft standards and guidelines:

<i>Document reviewed</i>		
Title of the draft being reviewed:	<i>Draft guidelines for the establishment of baseline environmental data</i>	
<i>Contact information</i>		
Surname:		
Given Name:		
Government (if applicable):	New Zealand	
Organization (if applicable):	Ministry of Foreign Affairs and Trade	
Country:	New Zealand	
E-mail:		
<i>General Comments</i>		
<p>We consider that this document, or elements of it, should be captured in a binding Standard rather than in a Guideline. One of the key issues of concern in relation to deep sea mining is the lack of generally available comprehensive baseline data that renders it difficult to assess the impacts of mining on the marine environment. This document should prescribe binding minimum baseline data required to enable a meaningful assessment of the environmental impacts of exploitation activity. That minimum baseline data should include general data on species and ecosystems, their characteristics (e.g. rarity, endemism) and dynamics (e.g. structure, connectivity, ecosystem services). Providing this contextual information will enable decision makers to understand the significance of the effects of exploitation activity not only at a project site but in the context of the wider region (i.e. are the environments unique? can exploited areas be repopulated by fauna from neighboring regions?)</p>		
<i>Specific Comments</i>		
Page	Line	Comment

4	93	The Standard/Guideline should not be limited to baseline data in “the Area”. Instead, it should be expanded to cover the wider “marine environment” that might be impacted by exploitation activities.
10	296	“The information contained in these Guidelines concerns the minimum requirements.” As set out in our General Comments, minimum requirements should be set out in a binding standard not a guideline.

Title of the draft being reviewed:	<i>Draft standard and guidelines for environmental impact assessments</i>
Contact information	
Surname:	
Given Name:	
Government (if applicable):	New Zealand
Organization (if applicable):	Ministry of Foreign Affairs and Trade
Country:	New Zealand
E-mail:	
General Comments	
<p>Stakeholder consultation and public participation in the EIA process should be a mandatory requirement of the Standard. Public participation should begin during screening/scoping and continue through each stage of the EIA process, into the development and review of the EIS and EMMP. All elements of the process should be conducted in a transparent manner and include sufficient information to enable stakeholders to comment intelligibly on all aspects of the scoping report, EIS and EMMP.</p> <p>In addition to enabling contractors to take into account stakeholder comments in the development of a scoping report, EIS and EMMP, a process needs to be established for the LTC to receive and consider submissions from stakeholders on the adequacy and accuracy of the contractor's scoping report, EIS and EMMP, including the adequacy of the public participation process. The LTC should be empowered to recommend additions and improvements to each element.</p> <p>The Standard and Guidelines fail to set out adequate review and decision-making processes. The Standard should make clear that the LTC is responsible for reviewing the adequacy of scoping reports, EISs and EMMPs, and making recommendations for improvement to contractors. Such review should take into account stakeholder consultation.</p> <p>The EIA must consider the environmental effects of exploitation activity in the context of the broader region beyond a project's footprint. Providing this contextual information within the resulting environmental impact statement will enable decision makers to understand the significance of the effects not only at a project site but in the context of the wider region (i.e. are the environments unique? can exploited areas be repopulated by fauna from neighboring</p>	

regions?). Providing this contextual information has been a challenge for seabed mining applications in New Zealand and for decision makers but is an essential element of a process that ensures effective protection for the marine environment from the harmful effects of seabed mining.

In relation to the mitigation hierarchy, rehabilitation or offsetting should only be considered as a last resort. Moreover, it is not clear how offsetting can be achieved in the context of seabed mining. Offsetting should result in a net positive gain for the environment; that is, offsetting requires something to be done elsewhere (e.g. a biodiversity gain) that would not be done in the absence of the activity. For that reason, New Zealand does not consider that spatial management and the protection of certain areas from exploitation activities constitutes 'offsetting' as described in line 1084-1086.

Uncertainty needs to be considered and communicated well through an environmental impact assessment (EIA) process and the resulting environmental impact statement. While it makes sense to focus on the 'high risk' impacts in the impact assessment, the threshold for inclusion of impacts should be lower where there is uncertain information. The precautionary principle should apply to the assessment and to the development of management measures where information about effects is uncertain.

A significant amount of editing and restructuring of this document is required before it is in a usable format. This is particularly the case with Appendix II 'Draft Guidelines for environmental impact assessment process', which could be streamlined without losing important content.

Simple improvements include:

- Changing the title and sub-title font size or indents/number formatting to make the hierarchy clear.
- Placing key definitions at the start of the document e.g. best available techniques, best available information, precautionary approach etc.

There is some inconsistency of terms across the document. For example:

- 'impact' and 'effect' appear to be used interchangeably. Definitions are noted, but difference in use is not clear.
- The terms "EIA" and "Impact Assessment" are not used consistently. The EIA consists of Screening, Scoping, Impact Assessment and Review phases (with the EIS and EMMP being the deliverables of the IA phase).

In the guidelines, the scoping and impact assessment sections both contain a lot of detail on how to carry out an impact assessment. This should be streamlined to avoid duplication.		
<i>Specific Comments</i>		
Page	Line	Comment
1	43	<p>‘protect and preserve the marine environment’.</p> <p>Also add:</p> <ul style="list-style-type: none"> - ‘prevent serious harm to the marine environment arising out of exploitation activities’ - ‘ensure that activities in the Area are carried out with reasonable regard for other activities in the marine environment’ <p>These are the obligations arising from Arts 147, 149 and 158 UNCLOS.</p>
1	44	Should read ‘anticipate, avoid, minimize <u>or remedy</u> harmful environmental effects ...’
2	59	There will always be residual effect of activities that cannot be avoided but an attempt to remedy the effects should be made in this case. We suggest making clear that the EIS includes measures taken to ‘remedy the effects where possible’.
	66	<p>The flow diagram should include some feedback loops arising from the EIA AUDIT box, specifically back to the SCREENING, IMPACT ASSESSMENT and MITIGATION boxes. This modification of the diagram would be consistent with the last sentence of para 7, whereby an approved project that has undergone change may be subject to screening that could determine that a new EIS is needed. This would also facilitate adaptive management when new information becomes available or the understanding of the magnitude of impacts arising from the activity changes.</p> <p>Also suggest including the iterative arrows referred to in the comment for page 7 line 277.</p>
3	96	The scoping stage should require public participation/consultation. At an absolute minimum, other stakeholders undertaking activities in or around the project area must be consulted. This is necessary to

		understand the potential for cumulative effects and to understand the broader pressures on the environment. But wider stakeholder consultation should also be mandated to understand how the Contractor's activities may adversely affect other users of the marine environment.
	101	Cumulative and combined impacts are identified in para 11, but they may not be included in the EIA itself if they are not identified during the scoping phase. Para 8 should explicitly require scoping to include consideration of other activities occurring within or near the proposed activity area so that it can be determined if cross-sectorial cumulative impacts need to be considered as part of the EIA. We suggest adding a bullet point to this effect.
	125	Although the standard requires the Contractor to produce a scoping report, there is no indication of what then happens to the scoping report. The Standard should require publication and public consultation on the scoping report. On the basis of any public comments and any response from the Contractor, the standard should empower the LTC to make recommendations on the scoping report or proposed terms of reference for the EIA.
	127-130	Assessment of baseline environment should also establish the other activities that are occurring in the project area and the region. This is necessary to ensure an assessment of cumulative effects can be undertaken.
4	131	It is not clear what is meant by an "enhanced" ERA
	144-146	Agree that the Contractor should focus on high risks, but the impact assessment should also focus on risks where the information is 'uncertain' and there is the <u>potential</u> for a significant impact. Suggest adding wording to that effect in para 12.
	160	Should read 'when evaluating <u>management</u> measures' Significance of the impact is to be assessed before mitigation, and then again after mitigation to determine residual effects (and whether these are acceptable or not).
	161	Should alternatives (for achieving project objectives) be assessed when determining mitigation, or under D (Impact Assessment)?

	164	<p>'F. Reporting' - we suggest this title be replaced with '<i>Environmental Impact Statement Report</i>' as 'Reporting' could be confused to mean reporting on project performance or effectiveness of environmental management measures.</p> <p>The section should reference the relevant Regulation for EIS reporting and we reiterate our comments on that draft Regulation.</p>
	172	We refer to our previous comments on Part II, sections 2 and 3 of the Regulations.
	182	Suggest a new section setting out the minimum requirements for consultation and public participation in EIA process is included here.
7	277	<p>If steps between impact assessment and review are iterative, double arrow heads should be used between those phases in the diagram.</p> <p>Stakeholder involvement should also include the decision-making, monitoring and audit steps so that the whole EIA process is transparent. Stakeholders may not have any decision-making powers, but they should have visibility of the decision-making process and how any decision has been arrived at.</p> <p>Also suggest adding the feedback loops mentioned in the comment referring to page 2 line 66.</p>
8	287	The scoping report should, after stakeholder consultation, be subject to review and formal comment/recommendation by the LTC.
	302	Define "management and monitoring commitments" and explain use (i.e. for Exploitation Contract?) (see line 1126 page 33).
	316	We suggest explicitly referring to cross-sectorial cumulative impacts.
10	378	<p>Suggest including an additional bullet point requiring a: "<i>Description of other activities occurring in the project area and wider region and the potential impacts arising from those activities.</i>"</p> <p>This will provide context for determining if cross-sectorial cumulative impacts need to be considered within the EIA.</p>
	394	Include an additional bullet point to include a: " <i>Review of the impacts of other activities occurring in the project area and wider region</i> "

		To support consideration of cumulative impacts arising between the proposed activity and other activities occurring in the area.
	400	Add an additional bullet point to para 18 allowing risk to also include: <i>"A review of additive, multiplicative or mitigative impacts arising from the proposed activity and other activities occurring in the area"</i>
11	442	Suggest rewording to <i>"... proposed technology and equipment characteristics, <u>other activities occurring in the area</u> etc."</i>
12	455	Suggest rewording to <i>"...activities within the scope of the EIA, <u>the potential for cross-sectorial cumulative impacts, the impacts the...</u>"</i>
	485	The EIA includes a Scoping phase. The Scoping phase includes an Environmental Risk Assessment. The Impact Assessment is a subsequent phase in the EIA (after Scoping). Line 485 should refer to Impact Assessment and not EIA.
13	495	In New Zealand we usually use the risk assessment methodology referred to in the Impact Assessment phase, and it is not usually undertaken in the Scoping phase. Will sufficient specialist studies have been undertaken before the Impact Assessment phase to complete the ERA proposed?
18	564	Should be IA scope not EIA (see general comments).
	569	Should be scope of IA not EIA (see general comments).
	586	Not clear how experts will be involved in ERA in the scoping phase. Is this where specialist studies will be commissioned (see comment for line 495).
19	594	Consultation should be required under the standard (thus compulsory).
	599-602	Swap points 1 and 2. Scoping is one phase of the EIA.
20	648 and 669	Duplication of what a scoping report may include.
21	703	Suggest rewording to: <i>"The Impact Assessment stage should predict <u>the indirect, direct and cross-sectorial cumulative</u> impacts that may result from the project, and..."</i>
22	732-739	The example hypotheses are all highly supportive of potential exploitation occurring and imply no significant adverse effects. For the sake of balance, we suggest including some downside example

		hypotheses or ones that explicitly relate to the success of specific mitigation strategies.																
23	760	The bullet points for para 56 should also include: <i>(i) Model validation methods used; and (ii) where applicable spatial estimates of model uncertainty</i>																
	774	The encouragement to have predictive models reviewed by independent scientific experts should be a mandatory requirement captured in a standard. This is the only reference to the involvement of independent scientific experts. Their involvement in the process should be better incorporated throughout the EIA, EMMP and EIS process.																
	795	Include an additional bullet point: <i>“Do the biological communities within the affected area display high levels of endemism?”</i>																
29	968	<p>It is unclear where the qualitative scale used here comes from, it’s very coarse to the point where it is almost a binary scale pivoting on 50% unless you are at the extremes of the upper or lower ends, and there is no acknowledgement that certainty can be about as likely as not. There are numerous published confidence scales that could be used here that provide more qualitative categories. For example, see <i>Mastrandrea MD, Field CB, Stocker TF, Edenhofer O, Ebi KL, Frame DJ, Held H, Kriegler E, Mach KJ, Matschoss PR, Plattner G-K, Yohe GW, Zwiers FW (2010) Guidance note for lead authors of the IPCC fifth assessment report on consistent treatment of uncertainties. Technical report, Intergovernmental Panel on Climate Change (IPCC). Available at http://www.ipcc.ch</i></p> <table border="0"> <thead> <tr> <th>Term</th> <th>Likelihood of the Outcome</th> </tr> </thead> <tbody> <tr> <td>Virtually certain</td> <td>99-100% probability</td> </tr> <tr> <td>Very likely</td> <td>90-100% probability</td> </tr> <tr> <td>Likely</td> <td>66-100% probability</td> </tr> <tr> <td>About as likely as not</td> <td>33 to 66% probability</td> </tr> <tr> <td>Unlikely</td> <td>0-33% probability</td> </tr> <tr> <td>Very unlikely</td> <td>0-10% probability</td> </tr> <tr> <td>Exceptionally unlikely</td> <td>0-1% probability</td> </tr> </tbody> </table>	Term	Likelihood of the Outcome	Virtually certain	99-100% probability	Very likely	90-100% probability	Likely	66-100% probability	About as likely as not	33 to 66% probability	Unlikely	0-33% probability	Very unlikely	0-10% probability	Exceptionally unlikely	0-1% probability
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30	1019	Alternatives should be assessed at increasing levels of detail in Screening, Scoping and Impact Assessment phases of the EIA, and documented in the EIS. The EMMP should only cover how to manage, by means of mitigation, and monitor the effects of the preferred/approved alternative.
	1029	Terms “alternatives” and “options” are used interchangeably throughout the guideline. This should be streamlined.
30-32	1033 -	Offsetting should be considered as a very last resort. It is likely to be inappropriate in the seabed mining context.
32	1087	Define IRZ, PRZ and APEI. Suggest there is a List of Abbreviations and Acronyms included in the Standard and Guideline similar to the one included in the Draft Guidelines for the preparation of environmental management and monitoring plans.
	1103	“...mitigation to be undertaken.” - residual impacts are left over after mitigation has been applied. If these can be further mitigated, then are they residual yet?
33	1120	“Standard and Guideline on the EIS” – There is no current Standard for the EIS, does this suggest that there will be?

Title of the draft being reviewed:	<i>Draft guidelines for the preparation of an environmental impact statement</i>
<i>Contact information</i>	
Surname:	
Given Name:	
Government (if applicable):	New Zealand
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Country:	New Zealand
E-mail:	
<i>General Comments</i>	
<p>Stakeholder consultation and public participation in the EIA process should be a mandatory requirement. Public participation should begin during screening/scoping and continue through each stage of the EIA process, into the development and review of the EIS and EMMP. All elements of the process should be conducted in a transparent manner and include sufficient information to enable stakeholders to comment intelligibly on all aspects of the scoping report, EIS and EMMP.</p> <p>In addition to enabling contractors to take into account stakeholder comments in the development of a scoping report, EIS and EMMP, a process needs to be established for the LTC to receive and consider submissions from stakeholders on the adequacy and accuracy of the contractor's scoping report, EIS and EMMP, including the adequacy of the public participation process. Where necessary, the LTC should be empowered to recommend additions and improvements to each element.</p> <p>There is significant overlap between the content of this document and Annex IV of the draft regulations. That may lead to confusion insofar as Annex IV is intended to contain binding requirements whereas the guideline is supposed to be recommendatory.</p> <p>There potential for confusion is exacerbated through the occasional use of binding language in the Guideline. Where binding language is used, and does not reflect a mandatory requirement of the Regulation, the obligation should be reflected in a binding Standard.</p>	

This document should (and much of it does) focus on process without being overly prescriptive or performance-oriented. That is appropriate in that it provides flexibility as the level of required detail will likely be project-and-impact-specific.

How the document refers to the management of environmental effects is inconsistent. For example, parts of the document refer just to mitigation, while others refer to avoidance, minimization and reduction. The document should primarily refer to mitigation, as this is the umbrella term used in the draft regulations.

Specific Comments

Page	Line	Comment
1	57 and 61	Are 'Guidelines on the Expected Scope and Standard of Baseline Data Collection' the same as the 'Guidelines for the establishment of baseline environmental data?'
2	93 – 105	This template is very similar to that in Annex IV of the draft regulations. Presently the template is not mandatory but recommended. We suggest it is a mandatory template that ensures consistency of approach.
4	140	In addition to considering the size of the project footprint and the significance of the impact, prioritization of impacts in the Executive Summary should also consider the level of uncertainty in the impact assessment. For example, it may be useful to highlight impacts that are assessed as being <i>moderate</i> , but whose assessment is highly uncertain, meaning the impact could be substantially greater than estimated.
4	154 – 159 and 176	Both the background and project history sections require a summarization of work conducted prior to the EIA. This duplication should be avoided.
	167	The words "to mankind" should appear after "benefits".
	176	A summary of any consultation that occurred prior to the EIA should be added to the list of elements that could be described in the Project History.
	211 – 219	The scoping report should be mentioned as a mandatory part of the EIA and attached as an appendix to the EIS.

6	257	Add: "The Convention on Biological Diversity, and the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter."
7	318-321	In the final section, the Contractor should provide an alternatives analysis demonstrating that reasonable alternatives to the proposed project were rigorously explored and objectively evaluated, this should include an evaluation of <u>not</u> carrying out the mining activity (i.e. doing nothing).
9	394-395	To accurately assess potential carbon emissions from seabed disturbance, the EIS should also discuss the level of carbon sequestration. " <i>Seabed substrate characteristics (substrate composition including pore-water profiles, grains size, sediment mechanics, <u>carbon sequestration</u> and sediment composition);</i> "
9	398-400	Consideration should also be given to noise and light generated from non-mining related anthropogenic sources: <i>Noise and light (ambient levels, and influence of existing maritime, exploration, and exploitation <u>human</u> activity in and around the proposed Contract Areas); and</i>
11	496-509	<p>Suggest that point (c) is expanded to explicitly include discussion of impacts to areas of cultural significance. It is important that in describing the socioeconomic environment, a description of cultural values relating to use of seabed resources and marine ecosystems is considered. Including, where relevant, indigenous perspectives.</p> <p>Add the following to the current list:</p> <ul style="list-style-type: none"> • <u>Cultural values ascribed to seabed resources and ecosystems, including indigenous perspectives.</u> <p>Also add this to the review form in Appendix IV on page 34</p>
12	550	Suggest inserting an additional bullet point after the first bullet point on the nature and extent of any impact that requires "A <i>specific discussion of the uncertainty associated with the assessment of any actual or potential impact, including sources of</i>

		<i>the uncertainty</i> ". Assessment of uncertainty should also be added to the review form in Appendix IV for each Assessment Section (e.g., 7.1-7.15; 8.1-8.8; 9.1-9.5)
14	617-651	We suggest formatting the potential effects as a table.
	621	Potential surface impacts (0-200 m) should also include a bullet point referring to more general lighting and noise effects on surface/deep-diving seabirds etc.
15	659	Suggest adding " <i>Cultural value/significance</i> " to the list of bullet points in para 65.
16	725-730	The description of the use of mineral bearing ore should explicitly include a description of how it will be refined and the effects of this. "The EIS should contain a description of the intended use of the mineral-bearing ore, <u>including its refining.</u> "
17	758	Include an additional paragraph between paras 76 and 77: " <i>The Contractor should list any substantive issues identified during stakeholder consultation and how they have been incorporated into the document (or otherwise).</i> " Also add to review form in Appendix IV for section 13.1-13.4 on page 43.

Title of the draft being reviewed:	<i>Draft guidelines for the preparation of an environmental management and monitoring plan</i>
<i>Contact information</i>	
Surname:	
Given Name:	
Government (if applicable):	New Zealand
Organization (if applicable):	Ministry of Foreign Affairs and Trade
Country:	New Zealand
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General Comments

Stakeholder consultation and public participation in the EIA process should be a mandatory requirement. Public participation should begin during screening/scoping and continue through each stage of the EIA process, into the development and review of the EIS and EMMP. All elements of the process should be conducted in a transparent manner and include sufficient information to enable stakeholders to comment intelligibly on all aspects of the scoping report, EIS and EMMP.

In addition to enabling contractors to take into account stakeholder comments in the development of a scoping report, EIS and EMMP, a process needs to be established for the LTC to receive and consider submissions from stakeholders on the adequacy and accuracy of the contractor's scoping report, EIS and EMMP, including the adequacy of the public participation process. Where necessary, the LTC should be empowered to recommend additions and improvements to each element.

The draft regulations require an EMMP. There should be an EMMP Standard which sets out the mandatory elements of an EMMP which is then supplemented by these guidelines. In the absence of a Standard setting mandatory elements for an EMMP, the LTC will find it difficult to assess the adequacy of a EMMP.

The primary role of an Environmental Management and Monitoring Plan is to confirm that a mining operation is meeting agreed environmental performance standards. To do so, we require a degree of confidence that the environmental standards are set at the right level (EIA should help confirm this), that monitoring is sufficient to detect any breaches of standards, and that an operation can respond accordingly to any breaches of standards. The EMMP guidelines could be improved to reflect this fundamental purpose throughout the document.

The Guideline places reliance on adaptive management. The Guideline should emphasize that adaptive management should not be used as justification for approving activities that carry inherent environmental risk. Instead, adaptive management should enhance a precautionary approach.

Note that an EMMP may need to be reviewed and resubmitted if there are any conditions, amendments or modifications that have been approved during the application approval process.

Specific Comments

Page	Line	Comment
	56	Cumulative effects, as described under the definition of environmental effects, should be wider than just "cumulative

		effect arising over time or in combination with other mining impacts.” Should read: “...cumulative effect arising over time or in combination with other effects.”
	79	The precautionary approach is introduced here but it does not appear anywhere else in the Guidelines. We think it is important that a precautionary approach is applied to the development of an Environmental Management and Monitoring Plan and specifically where the adequacy of management measures or the ability to detect change is uncertain.
3	128	Amend to <i>‘Identify scientific uncertainties, include adaptive management strategies <u>and apply the precautionary approach for managing uncertainty, where appropriate</u>’</i>
	130	EMMP also needs to describe how a Contractor will respond if there are unanticipated adverse effects on the environment as a result of the mining operation. Suggest the addition of an extra bullet to reflect this along the lines of: <i>“Outline the actions a Contractor will take in the event that operations result in unanticipated environmental effects or EMMP performance objectives are not met.”</i>
4	214	Taking into account our general comment set out above, this section on adaptive management could be improved. The primary purpose of adaptive management is about conducting activities in a manner that protects the environment from irreversible damage. Adaptive management does this by ensuring a robust management and monitoring framework is in place that is able to detect change before irreversible damage occurs. An operator is then able to respond and adjust operations accordingly. This should be reflected under the bulleted list in para 26.
	216-217	The description of adaptive management should also explain that activity scale should also change as new information accumulates. For example, the scale of exploitation may start

		<p>small while an adaptive management approach collects enough data to justify expanding the activity.</p> <ul style="list-style-type: none"> • <i>Is an iterative process of decision-making in which management actions <u>and activity scale</u> are modified as needed as information accumulates or conditions change in the managed system;</i>
5	225	<p>The description of adaptive management should also make clear that the activity will be stopped if it is discovered that unmitigatable harm is occurring.</p> <p>Add the following bullet point to paragraph 26: <i>“Provides for the ceasing of activities if previously unknown risks are discovered until suitable mitigation measures are put in place.”</i></p>
7	298 – 302	<p>The terms “significant” and “non-significant” need to be clarified/defined to enable a clear decision making process.</p>
7	310-315	<p>What happens if validation monitoring doesn’t confirm the environment is as anticipated? It should make clear the process that will be followed in this case, in terms of: response actions, changes to the EMMP, or authorization to conduct the work.</p>
	334-340	<p>Monitoring methodology/results should give a sufficient degree of confidence that environmental effects are as anticipated and agreed performance standards are being met (i.e. monitoring must have the statistical power to detect changes in environmental state). This should be reflected in para 39.</p>
10	436-437	<p>Should specify that ‘corrective actions’ mean management actions or changes to the way the operation is conducted to ensure environmental performance is met, <u>not</u> changes to the environmental objectives that enable a Contractor to comply with the EMMP.</p>
	440	<p>Unclear what is meant by paragraph 50. What ‘specifications’ may be revised by the Authority? This should be clarified.</p>
	455-470	<p>Section 5 would benefit from examples of corrective action that could be outlined in an EMMP. Actions could include changes to the way an operation is conducted by mining different areas,</p>

		mining at different rates, using different technology or ceasing operations altogether.
11	488	Specify what is meant by 'regulatory authorities' – does this refer to regulatory authorities from the Contractor's sponsoring state?
12	532 onwards	Waste assessment and prevention audit should also consider water generated on board a vessel (in addition to operational/mining waste) by crew such as garbage, personal care products, and cleaning products etc....
	563	"Any relevant conventions, standards, legislation or instruments" – these should be specified.
12-13	561-569	The guidelines treatment of the planned management of mining discharged and waste is inadequate considering the importance of this environmental effect. This section should be appropriately expanded, at the very least to provide better guidance on how to comply with the conventions covered in paragraph 67.
	581	What is Guideline 5?
16	677	Requiring Contractors to "discuss with the Authority" is too vague. Reporting on long term effects should be mandatory and timing should be specified.

Title of the draft being reviewed:	<i>Draft guidelines on tools and techniques for hazard identification and risk assessment</i>
<i>Contact information</i>	
Surname:	
Given Name:	
Government (if applicable):	New Zealand
Organization (if applicable):	Ministry of Foreign Affairs and Trade
Country:	New Zealand
E-mail:	
<i>General Comments</i>	

Organization (if applicable):	Ministry of Foreign Affairs and Trade	
Country:	New Zealand	
E-mail:		
General Comments		
The intent and purpose of this document is not very clear. We suggest adding in headings to the Standard (scope, purpose, outcome etc.) for clarity.		
Both the Standard and Guidelines are vague. They refer to compliance and outcomes (ALARP – “as low as reasonably practicable”) but do not really clarify or state what the contractor needs to comply with or what level of risk management they are trying to achieve (or how to assess this themselves). A greater level of detail is required.		
It would be useful to clarify in the Standard that ‘mining vessels and installations’ includes all equipment used by a Contractor in the Area in relation to the completion of the contract.		
It would be helpful to identify what international standards, rules and regulations apply throughout this document.		
Specific Comments		
Page	Line	Comment
	11-12	We suggest specifying or giving some examples of what applicable standards, rules and regulations apply in this case (as is done in the standard for emergency response and contingency plans).
	16-17	We suggest adding in an outcome to be met or a way to measure success.
	20	We suggest specifying what kind of risk (health and safety risk?)
	48	The definition of installations used in this paragraph differs to the definition used in the draft regulations. We suggest streamlining this.
	48-55	This paragraph is meant to be defining what vessels and installations are but it is a little difficult to follow. We suggest adding a definitions section to the document.
	70-72	We suggest bullet pointing the aspects of safe management and operation identified in this paragraph.
	86-87	We suggest replacing “comply with the same level of safety during operations” with “ <i>manage health and safety risks to an acceptable level.</i> ”

		By saying “comply with the same level of safety”, it implies a bar or outcome has been set by the standard, which it has not.
2	89-92	This is a confusing paragraph. We suggest re-wording. To the extent it imposes a requirement, it should be moved to the Standard.
	93	The reference to ‘management system’ here is confusing. Does it mean safety management or environment management? This should be clarified.
	96-97	Management System: ALARP is essentially an outcome to be met, which is not mentioned in the standard or anywhere else in this document. Suggest defining what ALARP means so they have something to aim for, or giving some criteria so they can determine this.
3	100-101	We suggest providing some examples of applicable rules, regulations and procedures.
	108-109	It is hard for contractors to know if they are capable of complying, or how to comply based on this document. It does not specify what they need to do or what the outcome is that they are trying to achieve.
4	162-163	Need to specify what rules and regulations are applicable.
	167	We suggest clarifying what is meant by “marine systems” and giving some examples of what ‘gaps’ exist.
5	178	We suggest providing a link to the Hazard ID and Risk Assessment.

Title of the draft being reviewed:	<i>Draft standard and guidelines for the preparation and implementation of emergency response and contingency plans</i>
<i>Contact information</i>	
Surname:	
Given Name:	
Government (if applicable):	New Zealand
Organization (if applicable):	Ministry of Foreign Affairs and Trade
Country:	New Zealand

E-mail:		
General Comments		
Overall, this is an easy document to understand. However, it mentions that plans should be 'outcome based', but the outcome to be met is not clear or specified. We suggest introducing an outcome statement to clarify.		
Specific Comments		
Page	Line	Comment
3	52-54	Suggest swapping with the second paragraph, so paragraph 6 comes before paragraph 5.
	64-65	Re-word: The hazard identification process shall be appropriate as regards providing support for supporting decisions related to the upcoming processes , operations, processes or phases.
	67	We suggest adding responsibility: "The contractor shall carry out risk analyses to identify and assess ..."
4	76	We suggest a new heading for this section/process so that it is easy to locate.
	86-89	We suggest swapping paragraph 12 with paragraph 11.
	95-101	We suggest bullet pointing these to make it clearer for the reader.
5	106	We suggest defining "systems" somewhere in the document – this could be by adding a definition section or clarifying what is meant by "systems" here specifically.
	126-127	(c) identify relevant regulations, possible requirements, specifications and classification society rules; requirements and specifications
6	156-157	"All methods, models and tools that are used shall be tailored to the needs of the 156 decision support, the objectives and scope of the individual analysis." – We are unsure what is meant by this. Are there methods, models and tools provided that contractors should be using? We suggest making this more specific.
	178-181	Break into two paragraphs: The Contractor shall establish a plan for the execution of the EPA. The plan shall include the expected deliveries, schedule, decision milestones, target group for assessment etc.

		Responsibilities for executing, follow-up, and management of deviations from the plan shall be established and the plan, including the follow-up to the plan, shall be documented
	187	In any case, the need to update analyses should be conducted updating needs shall be assessed periodically
	208-210	This sentence is confusing. We suggest re-wording.
	254-255	We suggest re-wording this sentence. The key functions shall participate in drills and exercises from time to time periodically and the participation shall be recorded (Where? Specify).
	281	We suggest adding something about documentation and recording of the drills, especially if audits are being conducted. The results of the audits should be public.
	382-384	The objective of such an this analysis is to provide the necessary basis for the emergency preparedness plan and the exercise and training plans in accordance with the standard.