

Seabed Minerals Authority Runanga Takere Moana cook ISLANDS



G06: Environmental Impact Statement

Table of Contents

1.	Purpose	2
2.	Legislative context	2
3.	Scope	3
4.	Environmental Impact Statement	3
5.	Other References	3
6.	Version Control	4
Anr	nex A: Structure and Summary Content of an EIS	5

1. Purpose

A key function of the Seabed Minerals Authority (**Authority**) is to regulate seabed minerals activities in the Cook Islands jurisdiction through monitoring the performance of title holders and taking enforcement action as required under the Seabed Minerals Act 2019 (**SBM Act**). A key function of the National Environment Service (**Service**) is to permit or consent (or not) activities after environmental impact assessment and review as required by the Environmental Act 2003 (**Environment Act**).

This Guideline is to assist applicants and other stakeholders with the content of an Environmental Impact Statement (**EIS**) for Tier 3 activities under the Environment (**Seabed Minerals Activities**) Regulations 2023 (**Environment Regulations**).

This Guideline should be read in conjunction with the Authority's and Service's publication, "Information Note: An Operating Framework for Standards and Guidelines relating to Seabed Minerals Activities."

2. Legislative context

This Guideline is issued by the Authority and the Service pursuant to section 11(e) of the SBM Act: *Functions of Authority*, section 13A of the SBM Act: *Authority may standards and guidelines;* Part 9 of the Environment Regulations: *applicable standards and applicable guidelines*, to assist licence holders with meeting obligations in relation to:

- a) part 5 of the Environment Act 2003: Environmental Impact Assessment
- b) part 5, schedule 7 of the Environment Regulations: Environmental impact statement

The contents of this document are for guidance only, and do not constitute formal legal requirements. Licence Holders remain subject to the applicable legal requirements under the SBM Act, Exploration Regulations, Licence conditions, Environment Act and Environment Regulations. If a Licence Holder chooses not to follow any particular part of this Guideline, the Authority may

request an adequate written explanation as to why this is the case, to help assess whether the statutory requirements have been met.

Any information the Licence Holder supplies to the Authority will be managed in accordance with section 17 and 18 of the SBM Act.

3. Scope

This Guideline applies to all Licence Holders, including any associates and affiliates, conducting exploration, mining (which includes minerals harvesting) activities within the Cook Islands Exclusive Economic Zone or Continental Shelf under an Exploration Licence granted by the Cook Islands Government.

This Guideline advises Licence Holders of the information required for an Environmental Impact Statement, including:

- a) Guidance and requirements on content of an Environmental Impact Statement (EIS).
- b) Suggested structure of an EIS (Annex A).

4. Environmental Impact Statement

Service and Authority expect that an EIS will:

- include an electronic copy (in accordance with clause 107 of Environment (Seabed Minerals Activities) Regulations 2023) of sufficient quality that all images and charts are legible;
- b) be consistent with the accompanying selected option in the prefeasibility study or design case in the feasibility study per S06 Scoping, Pre-feasibility, and Feasibility Studies;
- c) summarise the environmental pressures and effects of the other options not selected in the project pre-feasibility study per S06;
- d) include an Environmental Risk Assessment (ERA) with detailed and structured assessment of material pressures, effects, mitigation measures severity and extent with guidance per G17 Environmental Risk Assessment;
- e) Include a public review process.

An EIS may also be completed to the report structure in Annex A.

5. Other References

None

Disclaimer: This Guideline, developed by the Seabed Minerals Authority in conjunction with the National Environment Service, does not replace, or amend the requirements of the SBM Act, Environment Act, Explorations Regulations, Environment Regulations, or Exploration Licence obligations, which should be read in conjunction with the Guideline.

This Guideline is made available on the understanding that the Cook Islands Government is not thereby engaged in rendering legal or other professional advice. Before relying on this material in any important matter, users should carefully evaluate its accuracy, currency, completeness, and relevance for their purposes, and obtain appropriate legal or other professional advice relevant to their particular circumstances.

It is anticipated the Guideline will be amended from time to time. The most up-to-date version of the Guideline is available at www.sbma.gov.ck.

6. Version Control

Version	Date
Version 1	12 April 2024





Annex A: Structure and Summary Content of an EIS

The content of this guidance is taken, summarised, and restructured from clause 67 and Schedule 7 of Environment Regulations as well as parts of ISBA/28/C/IWG/ENV/CRP.2 (annex IV)

1. Short Summary

A short summary of the information and conclusions presented in the statement.

Emphasis on key environmental effects and proposed mitigations

Will be part of the main report but may be drafted so as to also be able to act as a separate document as a type of information note.

A Cook Islands Maori version would be expected.

2. Executive Summary

A more comprehensive summary of the information and conclusions presented in the statement.

This may be structured by the headings below.

Will be part of the main report but may be drafted so as to also be able to act as a separate document as a type of information note.

Emphasis on key environmental effects (may be tabulated).

A Cook Islands Maori version would be expected.

3. Table of Contents

As well as table of figures and tables and lists of acronyms and abbreviations.

4. Introduction

Background to and rationale for the project.

EIS Scope - Specify what aspects and subjects are included and excluded.

G06 Environmental Impact Statement

Project proponent - short summary of project owners, developer, and lead contractors

5. Project History and Justification

Prior relevant studies including Environmental Scoping Exercise (ESE), relevant Marine Scientific Research etc.

Linkages to other key reports such as Project Feasibility Study (PFS), Mineral Resource and Ore Reserve, Transport Permits, etc.

History of exploration in the area studied, including past project(s) and this exploration licence's Environmental Management Programme, with a specific emphasis on environmental studies (usually in annex).

A description of the intended use of the mineral-bearing ore.

Life cycle analysis of the commodities concerned.

6. Legal and Regulatory Framework, Policy, Standards and Guidelines

Summary and discussion on applicable legislative requirements and policy frameworks at the level:

- a) Cook Islands Government. (including Schedule 1 of the Environmental (Seabed Minerals) Regulations).
- b) Relevant international agreements.
- c) Company Level (excluding any polices or standards without material bearing on the EIS)..

These may be simply cited, summarised, or appended.

A specific summary as to how the applicant has addressed the principles of Marae Moana including the precautionary approach and will continue to integrate these into its activities.

7. Stakeholder Consultation and Disclosure

For both prior ESE and this EIS (may be in separate annexes), details of:

- a) a suitably detailed list of the stakeholders consulted by the applicant.
- b) details of all consultation processes carried out, including those required by the Regulations, including public review periods (including dates and how and where advertised), dates, locations and participant lists of all public meetings and specific stakeholder meetings.
- c) a suitably detailed summary of comments received from stakeholders; and
- d) details of how comments received have been taken into account, including any changes made as a result of the stakeholder consultation process: and
- e) consultation methods.

8. Project Description

A description of the project and activity, including the following:

- a) the location or locations of the activity; and
- b) an outline of the technology to be used, with supporting diagrams (part in annex if necessary)

A description of the operational details of the activity and proposed phasing and timing as understood at the time of EIS preparation. These can be part in annex if necessary, including timing of:

- c) the construction, commissioning, operational (recovery and any shipboard processing) phases; and
- d) the decommissioning (closure) phases

Mine Plan: essentially the area-based schedule for mining or minerals harvesting of the seabed.

- e) Summary of what was used in the pre-feasibility study (PFS) or feasibility study (FS), usually indicative or preliminary.
- f) Both short (~3-12 month) and long (5-30 year) term mine plans. Including a summary of expected recoveries.

Via example mine plan, quantified estimates of the activity's environmental footprint, including:

- g) an accurate estimation of the volume of material to be removed from the seabed; and
- h) an accurate estimation of the areas of seabed, water column and if relevant to the proposed operation, on-island environments likely to be affected (directly or indirectly) by each component of the activity (km²).

9. Project Options and Consideration of Alternatives

A description of reasonable design options that are relevant to the activity and an indication of the main reasons for the option chosen, including a comparison of the effects.

Results of assessment of mining or minerals harvesting options, ideally per the PFS, with a strong focus on environmental trade-offs.

Above description of the alternatives is unlikely to be as detailed as the subsequent assessment of the 'go-forward' case and will likely be qualitative in nature.

Financial and other benefits - Summarise from pre-feasibility or feasibility study as appropriate. Also, to include implications of not proceeding with project. Linkages to the Socio-Economic Effects section below.

Include a discussion of a 'no-mining' alternative.

10. Effect Assessment Methods

Includes Environment and Socio-Economic effect assessment methods used. Sufficient so that their suitability, relevance, adequacy, reliability, and rigor can be assessed.

11. Existing Environment

Existing state, and natural variability, of the marine environment if relevant to the proposed operation, on-island environments (especially physiochemical and geological oceanography, biological factors) and relevant environmental factors that will be affected by the activity, part in annex.

Summary of other existing ecosystem services.

Description of proposed impact reference zones and preservation reference zones, and their rationale. Cross-reference down to impact assessment chapter for more justification of location(s), size(s) and type(s).

12. Socio-Economic & Cultural Environment

Analysis of current and past social factors of relevance to the activities (part in annex) including:

- a) Fisheries
- b) Marine traffic
- c) Submarine cables
- d) Land infrastructure
- e) Tourism
- f) Marine scientific research
- g) Other deep sea mineral activities
- h) Archaeological or historical sites

13. Environmental Effects and Mitigations

With specific reference to Environment Regulations 76(4)(e)(i).

With specific reference to the Terms of Reference document (Environment Act).

With reference to ERA guidance in G17 a list of activities and resultant effects related to the activity seeking permit.

Note that as a minimum, all of the pressures/activities and effects/impacts in the regulations need to be considered in this statement. Cumulative effects may be addressed in this section or in a separate section as included below.

Details of modelling and forecasting methods including validation, calibration, and limitations (may be part in annex or referenced in modelling section).

Full conclusions of the effect assessment, which may be tabulated.

14. Socio-Economic Effects and Mitigations

Via example forecast cash flows and labour plans, quantified estimates of the activity's social, economic, and cultural impacts and footprint, including other uses and users that could potentially be impacted (including but not limited to fisheries, shipping, and tourism sectors).

An assessment of the positive and negative impacts of the activity on the existing economic activity of the Cook Islands and the social and community impacts of the activity on the well-being of individual communities, cultural practices, and other socioeconomic sectors of the Cook Islands.

Details of actions to avoid, minimise and mitigate identified effects to existing users of the marine environment.

Residual impacts and effects.

15. Cumulative Impact Assessment

A structured probabilistic assessment of the additive impact of the primary activity (i.e., the current Project), previous activities, third party activities and natural pressures.

Intends to look beyond the scope of this individual project-based environmental and social impact assessment. Can reference or align with any current Strategic Environmental Assessment – Cumulative Impact Assessment.

Depending on the level of information available may be qualitative rather than quantitative in nature.

16. Major Hazards, Mitigations and Emergency Response Plan

Linkage back to the pre-feasibility study, with a focus on environmental and social disasters.

Includes a short summary (may be tabulated).

With reference to G02 Hazard and Risk Identification.

17. Environmental Management, Monitoring and Reporting

High level detail, drafted per G09 Environmental Management and Monitoring Plan. Cover all key topics and sections including but is not expected to be as complete as the full EMMP itself.

Includes outline of Environmental Management System (EMS) per G08 Environmental Management System.

A statement as to how the applicant has and will continue to integrate the precautionary approach into its activities.

High level plan of what is to be measured during operations, what thresholds or estimates of effect apply to that monitoring indicator, and what management response there will be to any measurement that exceed thresholds.

For trial minerals harvesting may deal with the monitoring program for the trial.

18. Draft Closure Plan

Drafted per S08 Closure Plan and Financial Guarantees. Would cover all key topics and sections but is not expected to be as complete as the definitive closure plan. Outline outstanding details and expectations for filling gaps. Financial guarantees do not need to be discussed in the draft.

For proposed trials/tests of equipment and processes ensure full closure details are discussed considering the possibility of end of project if the trial results or other external factors stop further development.

Conclusions and Recommendations

Conclusions and recommendations in separate lists.

Include a summary statement specifically addressing appropriate ESG criteria (Environment Social Governance), in line with good industry practice.

20. References

List of cited references.

21. Glossary

Technical Terms.

22. Study Team

Statement of team that compiled the report.

May include relevant experience and qualifications.

May be part in annex.

23. Annex of sections versus regulations

Table explaining where each requirement per the Environment Act and Environment Regulations, especially Schedule 7, may be found in the report.