

**GUIDELINES FOR THE CONTENT OF A DRAFT  
ENVIRONMENTAL IMPACT STATEMENT**  
*Environment Protection and Biodiversity Conservation Act  
1999*

**Marinus Link underground and subsea electricity  
interconnector cable  
(EPBC 2021/9053)**

## **Contents**

### **1. Preamble**

- 1.1. Environmental Referrals
- 1.2. Assessment Process
- 1.3. Components of the Action Relevant to the Assessment

### **2. General Advice on Guidelines**

- 2.1. General Content
- 2.2. Format and Style

### **3. Specific Content**

- 3.1. General Information

### **4. Description of the Action**

- 4.1. Feasible Alternatives
- 4.2. Description of the Existing Environment
- 4.3. Description of the Protected Matters

### **5. Relevant Impacts**

- 5.1. General impacts
- 5.2. Physical seabed disturbance impacts
- 5.3. Underwater disturbance impacts
- 5.4. Vessel disturbance impacts
- 5.5. Terrestrial impacts
- 5.6. Impacts on underwater cultural heritage
- 5.7. Impacts on users of the marine environment
- 5.8. Routine vessel discharge and unplanned spills impacts
- 5.9. Introduced invasive species impacts
- 5.10. Consequential and facilitated impacts
- 5.11. Cumulative impacts

### **6. Proposed Avoidance and Mitigation Measures**

### **7. Offsets**

### **8. Other Approvals and Conditions**

### **9. Economic and Social Matters**

### **10. Consultation**

- 10.1. Indigenous Engagement

### **11. Environmental Record of Person(S) Proposing to take the Action**

### **12. Information Sources Provided in the EIS**

### **13. Conclusion**

**Attachment 1 - The Objects and Principles of the Environment Protection and Biodiversity Conservation Act 1999 Sections 3 and 3a**

**Attachment 2 - Matters That Must Be Addressed In A PER And EIS (Schedule 4 Of The EPBC Regulations 2000)**

**Attachment 3 – The Definition of Environment under the Environment Protection and Biodiversity Conservation Act 1999 Section 528**

# **GUIDELINES FOR A DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR Marinus Link underground and subsea electricity interconnector cable (Marinus Link)**

**Marinus Link Pty Ltd (ACN: 630 194 562)**

## **1. Preamble**

Marinus Link Pty Ltd proposes to construct a high voltage direct current (HVDC) electricity interconnector (comprised of dual transmission lines) between Tasmania and Victoria, including a subsea cable and onshore cable and converter facilities.

### **1.1 Environmental referrals**

On the 5 October 2021, a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) to the Minister for the Environment (the Minister) was received. On 4 November 2021, a delegate of the Minister determined that the proposed action has the potential to have a significant impact on the environment and requires assessment and approval under the EPBC Act before it can proceed.

The action has the potential to have a significant impact on the following matters of national environmental significance (MNES) that are protected under Part 3 of the EPBC Act:

- Listed threatened species and communities (sections 18 & 18A)
- Listed migratory species (sections 20 & 20A)
- The environment of the Commonwealth marine area (sections 23 & 24A)

Listed matters relevant to the assessment, are those that were listed at the time that the controlled action decision was made, on 4 November 2021.

The proposed action will be assessed by an Environmental Impact Statement (EIS).

The EIS is to provide information about the action and its relevant impacts. This information must be sufficient to allow the Minister to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision and inform any conditions that may be required for the protection of MNES.

The component of the action within Victorian land and waters was also referred to the Victorian Minister for Planning under the *Environment Effects Act 1978* (EE Act). On 12 December 2021, the former Victorian Minister for Planning determined that the referred project requires an environment effects statement (EES) under the EE Act, to describe the project's effects on the environment to inform statutory decision making.

The two components of the action within Tasmania, the converter station and shore crossing at Heybridge, were both referred to the Tasmanian Environmental Protection Authority (EPA) under the *Environmental Management and Pollution Control Act 1994* (EMPC Act). The converter station is subject to a planning application under the *Land Use Planning and Approvals Act 1993* (LUPA Act). Each component will be subject to a separate assessment under EMPCA by the Board of the EPA (the Board). In late July 2022, the Board determined the class of assessment, and assessment process for both components.

## 1.2 Assessment Process

The Victorian Department of Environment, Land, Water and Planning (DELWP), The Tasmanian EPA and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) have agreed to coordinate and, where possible, integrate the three assessment processes. This will be done through administrative means to align steps and requirements of the processes, enabling the proponent to prepare one set of documentation to fulfill the assessment requirements of each jurisdiction.

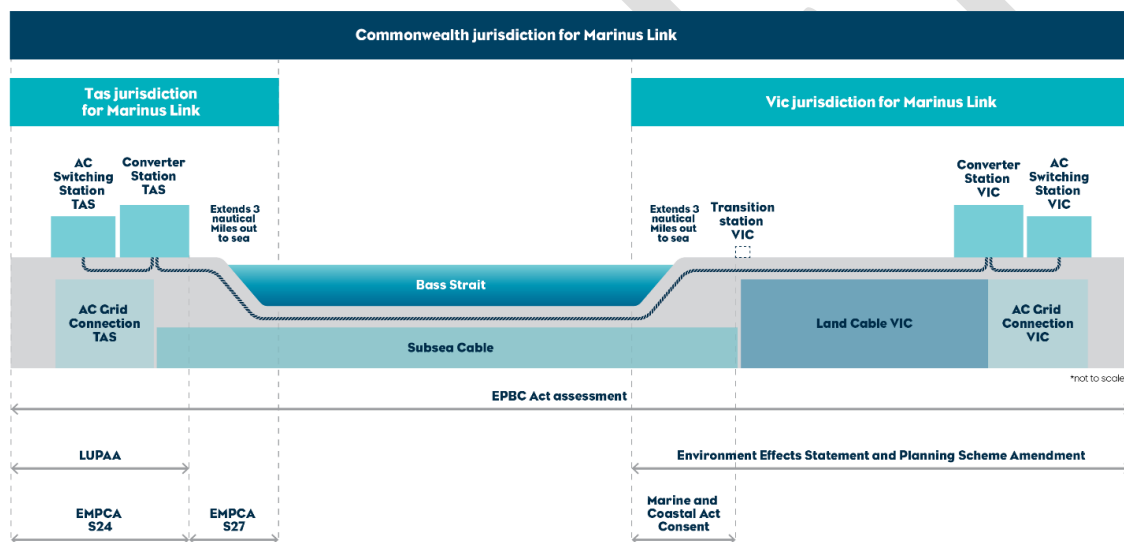


Figure 1. Jurisdictions undertaking assessment of the Marinus Link project, and the relevant legislation that applies for each component of the project.

The coordination and alignment of the Victorian, Tasmanian and Commonwealth assessment processes will entail integration of some specific aspects/stages to remove duplication, including exhibiting combined assessment documentation for public comment.

DCCEEW has developed these EIS Guidelines for the preparation of a draft environmental impact statement in relation to the relevant impacts of the action on nationally protected matters, including guidance on the extent of studies and investigations required to adequately assess the impacts of the proposed action. The EIS must contain enough information to allow the Commonwealth Minister for the

Environment to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

For projects in Victoria that require an EES, there is a final assessment of the effects of a proposal undertaken by the Victorian Minister for Planning to conclude the EES process. This assessment is provided to relevant decision-makers as authoritative statutory advice on the acceptability of the proposal's environmental effects and recommendations on appropriate modifications and/or mitigations.

For projects in Tasmania that are being assessed by the Board under the EMPC Act, an Environmental Impact Statement is required to be provided by the proponent in accordance with issued Guidelines, on which the Board then bases its assessment and determination.

For Marinus Link, the Board is undertaking two assessments:

- the Converter Station component of the proposal which is subject to a planning permit from Burnie City Council;
- the shore crossing and cabling works in Tasmanian waters which is not subject to a planning permit.

Therefore, the Board will produce a separate determination of each component.

Preparation of an EIS under the EPBC Act and EMPC Act, and EES under the EE Act is planned to be undertaken as a coordinated assessment between DCCEEW, the Tasmanian EPA and DELWP. This approach includes the following:

- The coordinated development of separate EIS Guidelines and EES scoping requirements documents which describes the proposed content of the impact assessment and associated documentation.
- The proponent's development of a single draft impact assessment document that is issued to DCCEEW, the Tasmanian EPA and DELWP for authorisation for release for public comment.
- Decision on the proposed action by the Commonwealth Environment Minister and Tasmanian EPA Board, and assessment of the environmental effects by the Victorian Planning Minister.

The proponent's technical studies and development of the impact assessment documents will be integrated, preparing a single package of documents to address EES and EIS requirements. The formal statutory environmental assessment required under the state and commonwealth legislation will need to meet respective requirements, including public exhibition of documentation.

Concurrently exhibiting a combined package of impact assessment documents will help with consistent and clear information for interested parties and the community to access during public exhibition. The potential impacts of the project need to be presented with

limited duplication. Interested stakeholders will have the opportunity to make submissions on the project and its effects, with respect to the proponent's obligations under the EE Act, EMPC Act and EPBC Act, during the public exhibition period.

DELWP and the Tasmanian EPA have invited comments on the draft scoping requirements and EIS guidelines in relation to matters that should be investigated and documented as part of their relevant process for the proposed Marinus Link project.

- You can view the draft scoping requirements and make a submission on the Engage Victoria website: <https://engage.vic.gov.au/marinus-link-project-environment-effects-statement-draft-scoping-requirements>
- The Tasmanian project specific guidelines can be viewed at: <https://epa.tas.gov.au/working-together/public-consultations>

The scope of the impact assessment documents will cover the construction, commissioning, operation, and decommissioning components of the proposed action. A combined set of assessment documents is proposed to meet Commonwealth and State requirements, respectively. However, with respect to the assessments of the project required by the Tasmanian EPA and DELWP to support decisions made under the Tasmanian and Victorian legislation, the scope of the proposed action is mainly focused on activities within Tasmanian and Victorian land and waters respectively.

### 1.3. Components of the action relevant to the assessment

The components of the proposed action to be assessed under the EIS comprises both offshore and onshore components.



Figure 2. Location of the Marinus Link project

The offshore infrastructure components are located in Commonwealth, Victorian and Tasmanian waters. The only major offshore infrastructure component is the subsea interconnector cable.

The onshore components would be located near Heybridge in Tasmania, and in Victoria, from Waratah Bay to the Latrobe Valley. These components are converter stations with a switching station, a possible transition station, and underground cables.

The development envelope provides flexibility in the project design, the final layout of infrastructure will be determined in response to environmental constraints.

## **2. General Advice on Guidelines**

### **2.1 General content**

The EIS should be a stand-alone document that contains sufficient information to avoid the need to search external reports.

The EIS should enable interested stakeholders and the Minister to understand the environmental consequences of the proposed action. Information provided in the EIS should be objective, clear, and succinct and, where appropriate, be supported by maps, plans, diagrams or other descriptive detail. The main volume of the EIS is to be written in a clear and concise style that is easily understood by the general reader. Technical jargon should be avoided wherever possible. Cross-referencing should be used to avoid unnecessary duplication of text.

Detailed technical information, studies, or investigations necessary to support the main volume should be included as appendices to the EIS. It is recommended that any additional supporting documentation and studies, reports, or literature not normally available to the public from which information has been extracted be made available at appropriate locations during the period of public display of the EIS.

After receiving the Ministers approval to publish the report, the Proponent is required to make the draft EIS available for a period of public comment. Specific instructions regarding publication requirements will be provided as part of the Minister's direction to publish.

If it is necessary to make use of material that is considered to be of a confidential nature, the Proponent should consult with the Department on the preferred presentation of that material, before submitting it to the Minister for approval for publication.

The level of analysis and detail in the EIS should reflect the level of significance of the potential impacts on the environment. All unknown variables or assumptions made in the assessment must be clearly stated and discussed. Further, any claims made (e.g., regarding the presence/absence of protected matters) need to be adequately justified and supported with evidence. The extent to which the limitations, if any, of available

information may influence the conclusions of the environmental assessment should be discussed.

## **2.2 Relevant legislative and policy context**

The EIS should take into consideration the [Significant Impact Guidelines 1.1: Environment Protection and Biodiversity Conservation Act 1999](#), [Significant Impact Guidelines 1.2: Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies](#) and other relevant EPBC Act policy statements and guidelines that can be downloaded from the following website: <https://www.awe.gov.au/environment/epbc/policy-statements>.

Additionally, all relevant guidance documents should be considered in determining and managing likely impacts for relevant species. For decisions about threatened species and endangered communities, in accordance with section 139 of the EPBC Act, the commonwealth minister must not act inconsistently with a recovery plan or threat abatement plan. The commonwealth minister must also have regard to any approved conservation advice. Departmental documents relevant for each listed threatened and migratory species can be found by viewing the species profile at: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.

The Proponent should ensure that the EIS assesses compliance of the action with principles of Ecological Sustainable Development (ESD) as set out in the EPBC Act, and the objects of the Act at Attachment 1. A copy of Schedule 4 of the EPBC Regulations, *'Matters to be addressed by draft public environment report and environmental impact statement'* is at Attachment 2.

## **2.2 Format and style**

The EIS may comprise three elements, namely:

- the executive summary;
- the main volume of the document, and
- appendices containing detailed technical information and other information that can be made publicly available.

The guidelines have been set out in a manner that may be adopted as the format for the EIS. This format need not be followed where the required information can be more effectively presented in an alternative way. However, each of the elements must be addressed to meet the requirements of the EPBC Act and Regulations.

The EIS should be written so that any conclusions reached can be independently assessed. To this end all sources must be appropriately referenced using the Harvard standard. The reference list must include the address of any web pages used as data sources.



The main text of the EIS should include a list of abbreviations, a glossary of terms and appendices containing:

- a copy of these guidelines;
- a list of persons and agencies consulted during the EIS;
- contact details for the Proponent; and
- the names of the persons involved in preparing the EIS and work done by each of these persons.

Maps, diagrams, and other illustrative material must be included in the EIS, including clear legends, scale and delineation of key environmental features relative to the action area. The EIS should be produced on A4 size paper capable of being photocopied, with maps and diagrams on A4 or A3 size and in colour where possible.

The Proponent should consider the format and style of the document appropriate for publication on the Internet. The capacity of the website to store data and display the material may have some bearing on how the document is constructed.

### **3. Specific Content**

#### **3.1 General information**

This should provide the background and context of the action including:

- the title of the action;
- the full name and postal address of the designated Proponent;
- a clear outline of the objective of the action;
- the location of the action, including confirmation of:
  - the proposed corridor for the subsea electricity interconnector cable
  - the proposed locations of converter and transition station sites in Victoria and Tasmania
  - the proposed onshore cable corridor position, including any laydown and construction areas associated with horizontal directional drilling (HDD).
  - the position and design of proposed HDD shore crossings.
  - any ancillary components likely to be required to support the Project
- the background to the development of the action;
- how the action relates to any other relevant actions (of which the Proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;

- the current status of the action;
- the consequences of not proceeding with the action;
- a brief explanation of the scope, structure, and legislative basis of the EIS; and
- the specific EPBC Act MNES affected by the action

#### **4. Description of the action**

This section must describe the proposed action in sufficient detail to allow an understanding of all relevant stages (including interdependencies between stages) and components, and to determine potential associated environmental impacts.

All construction, commissioning, operational and decommissioning components of the action must be described in sufficient detail to understand the proposed action and assist in determining the associated potential environmental impacts. This should include the location (including coordinates of the project corridor envelope) of all works to be undertaken, structures to be built or elements of the action that may have impacts on relevant controlling provisions for the action.

The description of the action must also include details on how the works are to be undertaken (including stages of development and their timing) and design parameters for those aspects of the structures or elements of the action that may have relevant impacts. For example, this may include design parameters that influence the intensity of light and noise emissions, or the footprint of seabed disturbance associated with cable deployment and installation.

Provide the location, boundaries, and total size (in hectares) of the proposed action area and the total size (in hectares) of the disturbance footprint in both marine and terrestrial environments within the project corridor. This should also include any adjoining areas which may be indirectly impacted by the proposed action. If the disturbance footprint is the same as the project site this should be clearly stated.

The various elements of the project must be described in the text and illustrated with maps, diagrams, plans (at a suitable scale) and other information as required to provide sufficient context and basis for the identification and assessment of impacts.

The expected maximum life of the action, and expected timeframes for all stages including construction, commissioning, operation, and decommissioning; must be included as part of the EIS.

Details of all associated works/activities, including but not limited to vessel movements, maintenance activities, and transport requirements and access routes throughout different stages of development, commissioning, and operation.

Details of decommissioning should also be provided, including the likely outcomes, and principles for planning and implementation (noting that full details of decommissioning activities may not be available to the same extent).

#### **4.1 Feasible alternatives**

Provide discussion on any feasible alternatives to the action or its components to the extent reasonably practicable, including:

- if relevant, the alternative of taking no action;
- a comparative description of the impacts of each alternative on the MNES protected by controlling provisions of Part 3 of the EPBC Act for the action; and
- where there are likely different environmental impacts associated with the alternatives, sufficient detail to make clear why any alternative is preferred to another; and
- how the choice of alternatives ensures impacts to MNES are appropriately minimised and managed to an acceptable level.

Short, medium, and long-term advantages and disadvantages of the options should be discussed.

#### **4.2 Description of the existing environment**

The EIS must include a description of the environment of the proposed site and the surrounding areas that may be impacted by the action. The description should also include information on the importance and value of potentially impacted environmental features at the local and regional scale. The description must be sufficiently detailed to inform the assessment of impacts with greater detail provided for the species, habitats, and environmental features with greatest potential for impact. At a minimum, this section must include details of:

- Terrestrial and aquatic ecosystems, including key vegetation communities and relevant watercourses;
- Estuarine and coastal environments, including inshore coastal areas, vegetation, marine ecological features and key habitats;
- Surface water and groundwater hydrology and quality where relevant;
- Native flora and fauna, both terrestrial, aquatic and aerial;
- Aquatic and terrestrial pest species and weeds;
- Existing anthropogenic uses of the Bass Strait including those related to commercial and recreational fisheries, shipping, and defence.

### **4.3 Description of the protected matters**

The EIS must provide a description of the protected matters that are likely to be impacted by the proposed action.

Protected matters must be described at an ecologically relevant scale (local, regional) so that the relative value / importance of the area that will be affected (directly and indirectly) is understood.

Appropriate resources and published literature should be reviewed and cited throughout, including all relevant government issued conservation advice and recovery plans, management plans and relevant ecological studies where available.

#### **4.3.1 Listed migratory species and threatened species and ecological communities**

A description of listed species, which includes listed threatened species and ecological communities (EPBC Act sections 18 and 18A) and listed migratory species (EPBC Act sections 20 and 20A) at the proposed development site and in areas that may be impacted by the action. These matters should be described at the local and regional level, including the following details:

- details of studies or surveys, including the scope, duration and timing (survey seasons), and robust methodology, used to provide information on the listed species/community/habitat at the proposed development site and in areas that may be impacted by the development;
- how the studies or surveys are consistent with (or a justification of divergence from) relevant departmental guidelines or policy statements, or are in accordance with best practice studies or surveys, and include a description of any uncertainties/ limitations, including but not limited to timing, conditions and technology;
- a habitat assessment for each listed marine, migratory and threatened species and community likely to be impacted. The habitat assessment must include, but not be limited to:
  - a) the habitat area (in hectares), quality, location;
  - b) use specifications of known and potential suitable habitat in relation to the project disturbance area.
- details related to migratory species and threatened species and ecological communities' abundances and distribution at the proposed development site and in areas that may be impacted by the development, and known habitat utilisation or requirements, including Biologically Important Areas (BIAs) and habitat critical to the survival of the species;

- usage of the project area by listed species in regional context including, but not limited to migratory pathways, breeding and foraging behaviours;
- predicted temporal and spatial variability in occurrence of listed species, with details of the timing and duration of important behaviours and life stages of listed species relevant to the potential impacts of proposed action
- relevant identified threats to the survival, habitat utilisation, site fidelity and essential life functions of listed species, including foraging, breeding or migratory behaviours, and past and projected trends and existing threats to the condition of habitat.

#### **4.3.2 Commonwealth Marine Area**

The Commonwealth marine area relevant to the action falls within the area of the *South-east marine region profile* (2015). The whole of the environment must be considered in the assessment of the impacts of the action on the Commonwealth marine area. In accordance with the definition of the environment in section 528 of the EPBC Act, this includes social, economic and cultural aspects of the environment (Attachment 3).

The description of the Commonwealth Marine Area in the description of protected matters section must describe the environment of the commonwealth marine area at the local and regional level and should address the following:

- a) a desktop analysis conducted to develop an understanding of the existing environment that may be affected, including to inform field investigations and environmental impact assessments;
- b) surveys to understand the values and sensitivities of the marine environment that may be affected by the action and how these fit within local, regional, and national contexts. In describing the surveys conducted, discuss why these are considered to be of an appropriate standard, considering factors including scope, design features, timing, methodologies, and training and competency of personnel conducting surveys, to be able to detect and describe ecosystems, habitats, biological communities and species relevant to the impact assessment for the proposed action; and
- c) findings and outcomes of desktop analysis and field investigations, setting out current knowledge about the condition of the existing environment that may be affected by the action.
- d) Locations and descriptions of underwater cultural heritage sites, determined using an appropriate resolution for underwater surveys, by a suitably qualified expert with a background in Australian underwater cultural heritage.

- e) Current condition of the seabed, including sediment quality and the extent and distribution of relevant benthic biota along the cable route and adjacent disturbance footprint;
- f) Existing anthropogenic uses of the Bass Strait including those related to commercial and recreational fisheries, shipping, and defence. For commercial fisheries information should be provided on fishing methods, target species and historical areas of effort;
- g) baseline monitoring of commercially important species during the pre-construction period, to gather sufficient data to provide a baseline for comparison with later studies or monitoring during the construction and operations period, as required (including in relevant plans) to verify that environment outcomes have been met.

## **5 Relevant Impacts**

The EIS must include a description of all the relevant impacts of the action. Relevant impacts are impacts that the action will have or is likely to have on a matter protected by a controlling provision.

The EIS must provide a detailed assessment of any likely impact that this proposed action may facilitate on the following (as described in section 4.3) at the local, regional, state and national scale:

- Listed threatened species and ecological communities;
- Listed migratory species;
- The Commonwealth marine environment;

The EIS must identify and establish measurable environmental outcomes for listed threatened species and ecological communities, listed migratory species and relevant values of the Commonwealth marine environment that represent an acceptable level of impact (with regards to the matter being impacted) and evaluate impacts against this level.

The assessment of impacts should address impacts from activities within construction, commissioning, operational, and decommissioning stages including but not limited to vessel movement, maintenance activities, and access routes through different stages of development.

The impact assessment should provide the following information:

- a detailed assessment of the nature, extent, severity and duration of the likely short-term and long-term impacts;

- a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
- analysis of the significance of the relevant impacts taking into account relevant context such as species recovery plans and plans of management; and
- any technical data and other information used or needed to make a detailed assessment of the relevant impacts, including but not limited to:
  - baseline data to assess sediment suspension and deposition during the construction stages of the action. Data should be relevant to the project area and installation methods and consider the specific substrate present;
  - baseline data on marine benthic habitats and communities and the biota they support; sufficient to inform an evaluation of how benthic disturbance impacts may affect marine ecological integrity and functioning, for the Commonwealth Marine Area;
  - modelling (or other scientifically sound method for making predictions) of underwater noise, vibrations and electromagnetic disturbance during the construction and operation stages of the action, as relevant. Modelling should be relevant to the project area, installation methods and noise sources;
  - baseline data related to substrate and bathymetry to ensure appropriate noise propagation and sediment suspension, transport and deposition modelling (if required); baseline data related to sediment quality to inform predictions of the potential for the release of contaminants into the receiving environment from the disturbance of sediments during the construction stages of the action;
  - prediction of the extent of light pollution from relevant parts of the action on the marine environment;
  - the presence, extent, and nature of any underwater cultural heritage (European and indigenous) that may be disturbed by the proposed action and;
  - baseline information on the timing, intensity and location of existing marine users and uses of the marine environment sufficient to understand how they may be affected by the proposed action.

The EIS should identify and address cumulative impacts, where potential project impacts are in addition to existing or potential impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the region and vicinity).

Scientific uncertainty in predictions of impacts and the effectiveness of management must be addressed through appropriate monitoring and management measures during implementation.

## 5.1 General Impacts

Likely impacts, including direct, indirect, and facilitated, to be addressed in the EIS include but should not be limited to:

- identify the source of potential impacts (e.g., cable-installation, ship-movements, noise, light) and consider potential impacts throughout the life of the project.
- discuss the effects of the overall action on the functioning of the environment, including effects to the marine environment surrounding the proposed infrastructure;
- discuss potential impacts which may arise through the transportation, storage and use of dangerous goods (if any), fuels and chemicals, such as accidental spills;
- consider the application of a waste management hierarchy (e.g., reduce, reuse, recycle, treat, dispose) and potential impacts caused by the need for waste disposal and management of emissions, refuse, effluent and hazardous waste (if any) and;
- in discussing potential impacts, consider how the interaction of extreme environmental events and any related safety response may impact on the environment.

## 5.2 Physical seabed disturbance impacts

The EIS must include an assessment of the potential direct and indirect impacts to listed marine, migratory, and threatened species and communities, including impacts to prey species, arising from physical disturbance to the seabed as a result of the proposed action. The following will be required:

- assessment of potential changes to water quality as a result of sediment dispersal from seabed disturbance during construction (including cable installation, including wet jetting, emplacement and burial operations) and ongoing operations;
- assessment of potential direct and indirect impacts to benthic organisms and communities from changes in water quality as a result of sediment dispersal (including potential for release of historical contaminants from sediments), and how this may affect marine ecological integrity and functioning;
- assessment of potential physical seabed disturbance impacts, associated with the construction, ongoing operations, and decommissioning of the action on all MNES, including:
  - a) an assessment of short-term, long-term and cumulative impacts, compared with regular environmental conditions;



- b) the consequences for the disruption of migration, resting, breeding (including calving and nursing), or foraging behaviours of listed species, as a result of seabed disturbance including consideration of requirements in relevant statutory documents; and
  - c) the potential for the activity to impede the recovery of a listed species;
- the intensity, duration, frequency, and extent of the disturbance period;
- describe and assess the potential impacts of any waste expected to be generated from physical disturbance of the seabed (including dredge spoil), and;
- describe any waste minimisation or management techniques proposed.

### **5.3 Underwater disturbance (noise, heat, vibrations, and electromagnetic fields) impacts**

The EIS must include an assessment of the potential direct and indirect impacts to listed marine, migratory, and threatened species and communities, and including impacts to prey species arising from underwater noise, heat, vibrations, and electromagnetic fields generated during the construction, commissioning, operation, and decommissioning of the subsea cable. The following will be required:

- details of the noise, vibrations, and electromagnetic fields to be generated during all stages of the action including:
  - (a) The intensity and frequency of any underwater disturbance generated from all relevant activities associated with the proposed action;
  - (b) the expected geographic extent of disturbance, and the length of the disturbance period;
- details of heat generation from the operation of the subsea cable, on the surface of the cable and to the surrounding ambient environment of the water;
- details of the results of baseline monitoring (or existing data sources utilised, if sufficient) to characterise noise and vibration in the proposed vicinity of the action;
- the locations of sites or habitats sensitive to noise disturbance must be identified (e.g., biologically important areas for cetaceans) on a map at a suitable scale;
- the impacts of noise, heat, vibrations, and electromagnetic fields associated with the construction and ongoing operations of the action on all MNES, including:
  - a) an assessment of short-term, long-term and cumulative impacts, compared with baseline environmental conditions;

- b) the consequences for the disruption of migration, resting, breeding (including calving and nursing), or foraging behaviours of listed species, as a result of underwater disturbance including consideration of requirements in relevant statutory documents; and
- c) the potential for the action to impede the recovery of a listed species.
- d) The potential for impacts to commercially important species of the Commonwealth Marine Area.

#### **5.4 Vessel disturbance impacts**

The EIS must include an assessment of the potential direct and indirect impacts to listed marine, migratory, and threatened species and communities, and including impacts to prey species as a result of vessel disturbance and collision during construction, commissioning, operation and decommissioning of the subsea cable. The following will be required:

- identify the listed threatened and migratory marine mammals, that utilise the area, taking into account potential variation in occurrence;
- identify listed threatened and migratory marine mammals and if they are at risk of vessel collision, noting that the assumptions, calibration, validation, and related uncertainty of any predictions must be provided; and
- assessment of the significance of the impact on listed marine mammals from collision with vessels, which must address:
  - a) disruption of migration, breeding, or foraging behaviours of listed species as a result of the collision impact; and
  - b) long-term decreases in population.

#### **5.5 Terrestrial impacts**

The EIS must include an assessment of the potential direct and indirect impacts to listed and threatened species and communities arising from the terrestrial components of the project, particularly native vegetation clearance for the onshore converter station. The following will be required:

- identify and characterise threatened species and ecological communities present within terrestrial environments of the project, supported by maps and survey work;
- determine the total amount of vegetation likely to be removed during construction and the potential impacts on protected matters, including the presence of hollow bearing trees, Strzelecki Gum populations, and other critical habitat features within vegetation proposed for removal; and

- details of the extent, intensity, and duration of potential impacts of the action on the identified threatened species and/or ecological communities.

## **5.6 Impacts on underwater cultural heritage**

The EIS must include an assessment of the potential direct and indirect impacts to underwater cultural heritage within the CMA, as a result of construction, commissioning, operation and decommissioning of the subsea cable. The following will be required:

- consider all relevant legislation, including (but not limited to) the *Underwater Cultural Heritage Act (2018)* (UCH Act). Demonstrate how the proposed action will meet the requirements of relevant legislation and the environmental outcomes this achieves;
- identify any known or potential underwater cultural heritage, supported by maps (including the finalised route of the subsea cable) and appropriately detailed survey work and consultation;
- details of the extent, severity and persistence of potential impacts to underwater cultural heritage both tangible and intangible (Indigenous and non-Indigenous) and;
- details of any measures for ensuring effective management to address any potential impacts identified.

## **5.7 Impacts on users of the marine environment**

The EIS must explore the social and economic values of the Commonwealth marine area that may be potentially impacted by the proposed action. The following will be required:

- identify relevant commercial and recreational users and associated uses of the marine environment (including but not limited to; commercial and recreational fishers, marine tourism, shipping and navigation, and commercial and defence aircrafts);
- details of the extent, intensity, and duration of potential impacts of the action on these identified users and uses of the marine environment; and
- details of any measures for ensuring effective management of multiple users and uses within the marine environment.

## **5.8 Routine vessel discharges and unplanned spills impacts**

The EIS must identify and evaluate the potential impact of routine vessel discharges and spills on MNES, including listed marine, migratory and threatened species and ecological communities and the marine environment. The following will be required:

- identify the risk to MNES associated with potential impacts to water quality from vessel discharges and spills;
- outline the effectiveness of control measures which will be implemented to ensure significant impacts to MNES as a result of routine vessel discharges and spills are either avoided or reduced to an acceptable level.

### 5.9 Introduced invasive species impacts

The EIS must identify and evaluate the potential impacts of introduced invasive species, including marine species, on MNES, including listed marine, migratory and threatened species and ecological communities and the marine environment. The following will be required to be characterised:

- the project associated vectors for introduction of invasive species;
- the risk to MNES associated with introducing invasive species to the proposed action site;
- the effectiveness of a suite of control measures which will be implemented to manage the risk of invasive marine species to MNES to an acceptable level; and
- Consider all relevant legislation, including (but not limited to) the *Australian Biofouling Management Requirements* and the *Australian Ballast Water Management Requirements*.

### 5.10 Consequential and facilitated impacts

The EIS must provide a detailed assessment of any likely impacts that the development may facilitate on MNES at the local, regional, state or national scale. Assessment of consequential and facilitated impacts must include consideration of:

- any other known development proposals, which can include approved developments or where development applications have been submitted, which may be facilitated by the development;
- whether the development will result in an intensification of development or proposals in the region, or an increase in workforce or in local and regional community changes; and
- any requirements for further reasonably foreseeable or consequential proposals to allow the marinus link project to go ahead.

### 5.11 Cumulative impacts

The EIS should identify and address cumulative impacts, where potential project impacts are in addition to existing impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the region and vicinity that are approved or where development applications have been

submitted). Cumulative impacts must be considered in terms of the potential overall consequence or magnitude of impacts on each of the MNES. The assessment of cumulative impacts must include:

- review and analysis of residual impacts of the proposed development and of other known proposals where there may be a spatial or temporal overlap;
- consideration of the potential for cumulative impacts on the resilience of any important populations of listed marine species, migratory species, threatened species and ecological communities and on overall habitat quality and availability; and
- discussion of the potential for existing pressures and threats to be exacerbated by the proposed development.

The EIS should also address the potential cumulative impact of the proposed action on ecosystem resilience. The cumulative effects of climate change impacts on the environment must also be considered in the assessment of ecosystem resilience and listed species attributes only where scientific information on the effects of climate change on ecosystem resilience is available.

The discussion must include an evaluation of the likely short term and long-term cumulative impacts on the general environment and ecosystem function where relevant to MNES. In this regard consideration must be given to the potential magnitude of effects and the duration and reversibility of effects.

## **6 Proposed Avoidance and Mitigation Measures**

The EIS must provide information on proposed environmental performance requirements (EPRs), and any specific avoidance, management, and mitigation measures to deal with the relevant impacts of the proposed action on MNES, including those required by other Commonwealth, State, and local government approvals. Committed language (e.g., 'will') rather than non-committed language (e.g., 'may', 'where possible', 'if required', etc.) must be used.

Specific and detailed descriptions of proposed measures must be provided and substantiated, based on best available practices, appropriate standards and supported by scientific evidence, and must include the following elements:

- (a) A consolidated list of EPRs, mitigation measures proposed to be undertaken to prevent, minimise or compensate for the relevant impacts of the action, including:
  - a description of each of the proposed safeguards and mitigation measures to be undertaken by the proponent to deal with relevant impacts including those required by Commonwealth, State and local government approvals;
  - a description of the environmental outcomes the measures are expected to achieve including details of any baseline data and proposed monitoring to

demonstrate that these outcomes are continuing to be met during implementation of the action;

- assessment of the expected or predicted effectiveness of the mitigation measures;
  - An evaluation of whether residual impacts (following the application of mitigation measures) are consistent with the defined acceptable levels of impact relevant to the action; and
  - any statutory, policy or scientific basis for the mitigation measures.
- (b) Avoidance measures must include an assessment of marine fauna utilisation and timing of construction activities that will generate underwater noise operations to avoid impacts to the most sensitive marine fauna.
- (c) A detailed outline of an Environmental Management Framework (EMF) that sets out the framework for management, mitigation, and monitoring of relevant impacts of the action, including any provisions for environmental auditing as it applies to the EPBC Act:
- a. The EMF needs to address all project phases (construction and operation). It must outline the requirements for the EPRs and associated documentation, roles and responsibilities, requirements for monitoring and auditing to determine if performance requirements are being met, reporting, and associated timing;
  - b. The EMF must also describe the approach for developing contingencies for unexpected events such as heavy or prolonged rainfall, saltwater intrusion into ground water or material differences between predictions of impact and results of ongoing monitoring of these impacts, where relevant; and
  - c. The EMF must include the name of the agency responsible for endorsing or approving each plan documenting the mitigation measures or monitoring programs to address the EPRs.
- (d) A proposed approach for how end-of-life decommissioning of the Marinus Link infrastructure may be managed.

## **7 Offsets**

Environmental offsets are broadly understood to mean actions taken outside a development site that compensate for the significant residual impacts of that development. Offsets are not intended to replace avoidance and mitigation which are expected to be the primary strategies for managing the potential impacts of development proposals. The EIS must provide details of:

- residual significant impacts on MNES that are likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account; and
- where residual significant impacts are likely to occur, the reasons why the avoidance or mitigation of these significant impacts is not expected to be achieved.

The EIS must include details of an offset strategy proposed to be implemented to compensate for the residual significant impacts of the project if these are determined likely, as well as an analysis about how the offset(s) meets the requirements in the Department's *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy October 2012* (EPBC Act Offset Policy).

Offsets must directly contribute to the ongoing viability of the MNES impacted by the project, be based on scientifically robust information and deliver an overall conservation outcome that improves or maintains the viability of the MNES as compared to what is likely to have occurred under the status quo, that is, if neither the action nor the offset had taken place.

The outcomes of the offset strategy need to be specific, measurable, and achievable, based on robust baseline data and demonstrate with a high degree of certainty that predicted outcomes will be achieved.

Where offset area/s have been nominated, include an offset strategy as an appendix to the EIS which includes information to demonstrate how the environmental offset/s compensate for residual significant impacts of the action on relevant MNES, and/or their habitat, in accordance with the principles of the Offsets Policy.

The offsets strategy must include:

- quantity of impacts which are being offset and details of the environmental offset/s (in hectares) for residual significant impacts of the action on relevant MNES, and/or their habitat;
- the availability and suitability of available offsets and evidence that the relevant MNES, and/or their habitat, is present in the potential offset area/s;
- information about how the proposed offset/s area provide a conservation benefit for the protected matter;
- specific environmental outcomes to be achieved through the offset, and reasoning for these in reference to relevant statutory recovery plans, conservation advices and threat abatement plans;
- details of the proposed mechanism to legally secure the environmental offset/s (under Victorian legislation or equivalent) to provide protection for the offset area/s against development incompatible with conservation;

- how any proposed staging of the overall development will impact the delivery of offsets;
- roles and responsibilities (clearly stating who is responsible for activities);
- auditing and review mechanisms; and
- an analysis of how the offset package meets the requirements of the EPBC Act Offsets Policy.

## **8 Other Approvals and Conditions**

The EIS must include information on any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. This must include:

- details of any local or State Government planning scheme, or plan or policy under any local or State Government planning system that deals with the proposed action, including:
  - a) what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and
  - b) how the scheme provides for the prevention, minimisation and management of any relevant impacts;
- a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;
- a statement identifying any additional approval that is required including under the *Offshore Electricity Infrastructure Act 2021*; and
- a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

## **9 Economic and Social Matters**

The economic and social impacts of the proposed action, both positive and negative, must be analysed and provided in the EIS. Matters of interest may include:

- details of any public consultation activities undertaken, or that will be undertaken, and their outcomes (including identification of affected parties and their views);
- overview of the economic costs and benefits of the project; and
- employment opportunities expected to be generated by the project (including construction and operational phases).



Details of the relevant cost and benefits of alternative options to the proposed action, as identified in section 2.1 above, should also be included.

## **10 Consultation**

Any consultation about the action, including:

- consultation that has taken place;
- proposed consultation about relevant impacts of the action;
- if there has been consultation about the proposed action, any documented response to, or result of, the consultation; and
- identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

Identify existing or potential native title rights and interests, including any areas and objects that are of particular significance to Indigenous peoples and communities, possibly impacted by the proposed action and the potential for managing those impacts.

Describe any Indigenous consultation that has been undertaken, or will be undertaken, in relation to the proposed action and their outcomes.

The department considers that best practice consultation, in accordance with the [Guidance for proponents on best practice Indigenous engagement for environmental assessments under the EPBC Act](#) (2016) includes:

- identifying and acknowledging all relevant affected Indigenous peoples and communities;
- committing to early engagement;
- building trust through early and ongoing communication for the duration of the project, including approvals, implementation and future management;
- setting appropriate timeframes for consultation; and
- demonstrating cultural awareness.

Describe any state requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action with regards to Indigenous peoples and communities.

## **11 Environmental Record of Person Proposing to take the Action**

The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and
- (b) for an action for which a person has applied for a permit, the person making the application.

If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be included.

## **12 Information Sources Provided in the EIS**

For information given in a draft Environmental Impact Statement, the draft must state:

- (a) the source of the information;
- (b) how recent the information is;
- (c) how the reliability of the information was tested; and
- (d) what uncertainties (if any) are in the information.

## **13 Conclusion**

An overall conclusion as to the environmental acceptability of the proposal must be provided, including discussion on compliance with principles of ESD and the objects and requirements of the EPBC Act. Reasons justifying undertaking the proposal in the manner proposed must also be outlined.

Measures proposed or required by way of offset for any unavoidable impacts on MNES, and the relative degree of compensation, should be restated here.

## **ATTACHMENT 1**

### **THE OBJECTS AND PRINCIPLES OF THE *ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999* SECTIONS 3 AND 3A**

#### **3 Objects of the Act**

- (a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance;
- (b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;
- (c) to promote the conservation of biodiversity;
- (d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples;
- (e) to assist in the co-operative implementation of Australia's international environmental responsibilities;
- (f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and
- (g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

#### **3A Principles of Ecologically Sustainable Development**

The following principles are principles of ecologically sustainable development.

- (a) Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.
- (b) If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- (c) The principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

- (d) The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.
- (e) Improved valuation, pricing and incentive mechanisms should be promoted.

DRAFT

## **ATTACHMENT 2**

### **MATTERS THAT MUST BE ADDRESSED IN A PER AND EIS (SCHEDULE 4 OF THE EPBC REGULATIONS 2000)**

#### **1 General information**

1.01 The background of the action including:

- (a) the title of the action;
- (b) the full name and postal address of the designated Proponent;
- (c) a clear outline of the objective of the action;
- (d) the location of the action;
- (e) the background to the development of the action;
- (f) how the action relates to any other actions (of which the Proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
- (g) the current status of the action; and
- (h) the consequences of not proceeding with the action.

#### **2 Description**

2.01 A description of the action, including:

- (a) all the components of the action;
- (b) the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;
- (c) how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;
- (d) relevant impacts of the action;
- (e) proposed safeguards and mitigation measures to deal with relevant impacts of the action;
- (f) any other requirements for approval or conditions that apply, or that the Proponent reasonably believes are likely to apply, to the proposed action;

(g) to the extent reasonably practicable, any feasible alternatives to the action, including:

- (i) if relevant, the alternative of taking no action;
- (ii) a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action; and
- (iii) sufficient detail to make clear why any alternative is preferred to another;

(h) any consultation about the action, including:

- (i) any consultation that has already taken place;
- (ii) proposed consultation about relevant impacts of the action; and
- (iii) if there has been consultation about the proposed action — any documented response to, or result of, the consultation; and

(i) identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

### **3 Relevant impacts**

3.01 Information given under paragraph 2.01(d) must include

- (a) a description of the relevant impacts of the action;
- (b) a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;
- (c) a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
- (d) analysis of the significance of the relevant impacts; and
- (e) any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

### **4 Proposed safeguards and mitigation measures**

4.01 Information given under paragraph 2.01(e) must include:

- (a) a description, and an assessment of the expected or predicted effectiveness of, the mitigation measures;
- (b) any statutory or policy basis for the mitigation measures;
- (c) the cost of the mitigation measures;

- (d) an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;
- (e) the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program; and
- (f) a consolidated list of mitigation measures proposed to be undertaken to prevent, minimise or compensate for the relevant impacts of the action, including mitigation measures proposed to be taken by State governments, local governments or the Proponent.

## **5 Other Approvals and Conditions**

5.01 Information given under paragraph 2.01(f) must include:

- (a) details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:
  - (i) what environmental assessment of the proposed action has been, or is being carried out under the scheme, plan or policy; and
  - (ii) how the scheme provides for the prevention, minimisation and management of any relevant impacts;
- (b) a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;
- (c) a statement identifying any additional approval that is required; and
- (d) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

## **6 Environmental record of person proposing to take the action**

6.01 Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and
- (b) for an action for which a person has applied for a permit, the person making the application.

6.02 If the person proposing to take the action is a corporation — details of the corporation's environmental policy and planning framework.

## **7 Information sources**

7.01 For information given the PER/EIS must state:

- (a) the source of the information; and
- (b) how recent the information is; and
- (c) how the reliability of the information was tested; and
- (d) what uncertainties (if any) are in the information.



## ATTACHMENT 3

### THE DEFINITION OF ENVIRONMENT *UNDER THE ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999*

#### SECTION 528

***environment*** includes:

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) natural and physical resources; and
- (c) the qualities and characteristics of locations, places and areas; and
- (d) heritage values of places; and
- (e) the social, economic and cultural aspects of a thing mentioned in paragraph (a), (b), (c) or (d).