

Project Wyasa Geophysical Survey

Application Number: **03259**

Commencement Date:
05/12/2025

Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Project Wyasa Geophysical Survey

1.1.2 Project industry type *

Telecommunications

1.1.3 Project industry sub-type

—

1.1.4 Estimated start date *

15/03/2026

1.1.4 Estimated end date *

01/07/2026

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The Proposed Action involves the undertaking of the geophysical survey of the Project Wyasa fibre optic cable route with the objective of acquiring detailed bathymetry together with an understanding of the seabed type and sediment layer thickness.

The survey will incorporate survey methods and procedures similar to other hydrographic and geophysical surveys with no unique or unusual equipment or operations proposed. This survey utilises methods that are of low intensity and relatively high frequency and does not involve the use of air gun arrays or boomer style acoustic equipment associated with offshore exploration seismic surveys.

Location

The Proposed Action is located entirely offshore in Northern Territory waters, Commonwealth waters in the North-West and North Marine Bioregions, and the Commonwealth waters surrounding Christmas Island (Att 1 – Project Area.pdf).

Project Area

The survey route is subject to ongoing refinement in consideration of existing seabed information, existing and proposed third party infrastructure, future fibre optic cable operational considerations, and stakeholder consultation including in relation to survey activities within the Oceanic Shoals Marine Park.

To accommodate potential further refinement of the survey route, a survey corridor (referred herein as the 'Project Area') has been developed. The Project Area represents the maximum area within which the survey will take place. The Project Area is shown in Att 1 – Project Area.pdf.

The Project Area within the EEZ is 5,989,143 ha. As the survey could occur anywhere in this Project Area, the entire Project Area has been included as the Disturbance Area, although it is important to note that any disturbance (as a result of the underwater noise from the survey equipment) will be minor and temporary, with no ongoing disturbance. Due to the linear nature of the survey, disturbance will only occur within a small portion of the Project Area at any one time.

Indicative Survey Routes

Att 1 – Project Area Location.pdf includes two indicative survey routes (Route A and Route B) with the key difference between the two indicative routes being that Route A enters the Oceanic Shoals Marine Park whereas Route B traverses to the south of the marine park. A final decision on the survey route will be made prior to the survey commencing, noting that with respect to the future cable installation and operations, Route B presents additional operational challenges compared to Route A including additional crossings of existing infrastructure. The environmental aspects of both the northern route (Route A) and southern route (Route B) options is largely the same with the only material difference being the northern route enters the marine park. As such the significant impact assessment undertaken for the Proposed Action is based on Route A, with equal or less potential for impacts (both in terms of likelihood and consequence) predicted for Route B.

Vessel

The survey will be undertaken using the Survey Vessel "EGS Shark 1", "PMG Emerald", "EGS Ocean Vanguard" or similar. In very shallow waters (typically <20 m) it may not be practicable to operate the main survey vessel. In this case a small local vessel may be mobilised with portable survey equipment to complete the survey. Multiple vessels may operate at one time during the Proposed Action, however vessels won't operate in close proximity to each other (i.e. no cumulative impact).

Survey Equipment

The survey equipment that will be used to obtain the required data will include:

- Multi-beam echo sounder - used to measure the depth of the water
- Echo sounder - used to measure the depth of the water

- Side scan sonar - used to determine the composition of the seafloor in water depths from 0-1000 m
- Sub-bottom profilers - used for determining the structure of the upper few metres of seabed
- A range of other equipment (non-acoustic) will be used for ground truthing the measurements of the acoustic equipment including, grab samplers and gravity corers, magnetometers and possibly a Cone Penetrometer.

The frequency and sound source levels for the proposed acoustic equipment are provided in Table 1.1 (Page 2) of Att 2 - SIA.pdf. A comparison of the radiated power vs sound level between the proposed low power geophysical survey and a typical seismic survey used for offshore exploration is provided in Figure 1.1 (Page 3) of Att 2 - SIA.pdf.

Survey Method

Acoustic measurements will be acquired as the vessel traverses the survey route. During survey operations, the vessel will operate at between 4 – 7 knots depending on water depth and sea state. In deep waters, information is likely to be acquired via a single pass; however, within shallower waters, multiple passes may be required to achieve the required 'swathe' coverage.

In addition, physical samples of the seabed will be collected approximately every 10 km along the survey route. Sample locations will be selected by on board geophysicists based on observed survey data. Where the along track seabed profile is consistent, the frequency of sampling will be limited.

Two types of seabed sampling equipment are typically available; a conventional Van Veen or Shipek type grab sampler for obtaining surface samples and a 3 m gravity corer. Standard sampling procedure is to deploy the gravity corer and if it fails to obtain a sample >1 m (or as expected following geophysical data review) a second attempt is required. If no recovery is achieved the grab sampler is then deployed.

A range of other equipment (non-acoustic) may be used for ground truthing the measurements of the acoustic equipment including magnetometers; a Cone Penetrometer. Magnetometers and Cone Penetrometer testing will typically be specified on an 'as need' basis. Magnetometer will be deployed for assessing other infrastructure crossing locations while Cone Penetrometer testing will be used on the basis of sub-bottom and coring data, to further concentrate soils testing in areas of variability.

Schedule and timing

The survey is planned to commence in the second half of March 2026 and is likely to take up to approximately 4.5 months to complete. It should be noted however that the survey timing is subject to logistical and operational requirement including vessel availability and weather, and as such the schedule may change, meaning the survey could conceivably occur at any time during the year. The impact assessment has been undertaken assuming the survey could occur at any time during the year.

Survey operations would occur on a 24-hours a day 7 days a week basis.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

Yes

1.2.5 Provide information about the staged development (or relevant larger project).

Vocus is progressing the potential installation and operation of fibre optic cable from international water to Darwin including within Commonwealth waters surrounding Christmas Island.

To assess the feasibility of and progress the potential future cable installation and operation, a geophysical survey of the planned cable routes is required. The geophysical survey results will be used to confirm the final route based on environmental and social sensitivities, engineering feasibility, route length and route cost.

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

Commonwealth

Environmental Protection and Biodiversity Conservation Act 1999

A Protected Matters Search (PMST) has been undertaken in relation to the Proposed Action (Att 3 - PMST Report.pdf). The PMST search identified the following MNES to be present in the Proposed Action area:

- Listed Threatened Species
- Listed Migratory Species
- The Commonwealth Marine Area

This referral is submitted to commence the EPBC Act referral process, noting that significant impacts to Matters of National Environmental Significance are not predicted as a result of the Proposed Action.

Fisheries Administration Act 1991

Australian Fisheries Management Authority (AFMA) is responsible for the efficient management and sustainable use of Commonwealth fish resources on behalf of the Australian community. The Proposed Action overlaps three Commonwealth Fisheries, as described further in Section 3.1 of this referral form.

Defence Regulations 2016

No designated military/defence exercise areas exist in the Proposed Action Area and surrounds.

Underwater Cultural Heritage Act 2018

A search of the Australasian Underwater Cultural Heritage Database did not identify any underwater heritage sites in the vicinity of the Proposed Action area. As such, no activities associated with this Proposed Action will result in any interference with a shipwreck or underwater cultural heritage sites listed under the *Underwater Cultural Heritage Act 2018*.

Northern Territory

Environment Protection Act 2019 (NT)

Vocus has consulted with the NT EPA and undertaking a self assessment in accordance with the NT EP Act 2019. The outcome of this self assessment was that the activities in NT waters do not constitute and “Significant Project” under the Act, and no referral to the NT EPA is required.

Aboriginal Sacred Sites Act 1989 (NT) and Heritage Act 2011 (NT)

Vocus is continuing to consult with the NT Aboriginal Areas Protection Authority and the Larrakia Nation Aboriginal Corporation. No approvals under the *Aboriginal Sacred Sites Act 1989 (NT) and Heritage Act 2011 (NT)* are expected to be required.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

Public consultation in relation to the Proposed Action is being undertaken with the Tiwi Land Council as the traditional owner representatives of marine areas including the Oceanic Shoals Marine Park.

Other consultation that has occurred includes:

- NT EPA – September 2025
- DCCEEW Assessment Branch – September 2025
- Director of National Parks – September 2025
- Darwin Port Authority – September 2025, October 2025
- Darwin Harbour Master – September 2025, October 2025, November 2025
- Aboriginal Areas Protection Authority – multiple Request for Information, Access to Certificates and Applications for New Certificates re harbour and landing areas
- Department of Lands, Planning and Environment, September 2025
- Larrakia Nation Aboriginal Corporation, June 2025
- Australian Communications and Media Authority, October 2025

Vocus will consult other relevant stakeholders, including fisheries authorities, and relevant offshore parties in close proximity to the Proposed Action as and when potentially impacted stakeholders are identified.

The Proponents consultation log including the dates, participants, agenda and outcome of consultation that has occurred to date is provided in Att 5 - Consultation.pdf.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint.

Alternatively, email us at privacy@dcceew.gov.au.

Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN 37001024095
Organisation name JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address 2060 NSW

Referring party details

Name Arne De Vos
Job title Principal Environmental Consultant
Phone (08) 9469 4400
Email arne.devos@jacobs.com
Address Mia Yellagonga Tower 2, Level 5, 5 Spring Street, Perth WA 6000

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN 78127842853

Organisation name Vocus Pty Ltd

Organisation address 3000 VIC

Person proposing to take the action details

Name Greg Neylan

Job title Head of Land Access - Major Projects

Phone 0428 925 193

Email Greg.Neylan@vocus.com.au

Address 452 Flinders St, Melbourne, 3000, VIC, Australia

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including 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 the Person proposing to take the action. *

The Proponent has a strong record of responsible environmental management and has no prosecutions resulting from any of its projects or installations over more than a decade of fibre deployment in all Australian mainland States and Commonwealth marine environment.

There are no past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

The Proponent's Corporate sustainability policy is included as Att 4 – Vocus Sustainability Principles.pdf

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

Vocus operates under established sustainability principles which outline the ethics, integrity and governance that all employees and contractors are expected to adhere to. The principles also set out the minimum requirements with respect to preventing and minimising impact to the environment through the company's operations.

Vocus strives to operate in a manner which minimises waste and prevents pollution. Accordingly, at a minimum:

- The Company's operations are to comply with relevant statutory and regulatory requirements;
- The Company will regularly monitor its environmental performance, objectives and targets and enquire that support functions exist to effectively maintain and continually improve environmental standards;
- The Company must ensure that environmental care is of equal importance to every facet of the Company's management and operations;
- The Company is committed to returning sites to a state compatible with a healthy environment; and
- The Company will continue to promote individual commitment to safe and environmentally responsible behaviour through the training and education of, and dissemination of information to, all relevant team members.

Details of these principals and links to Vocus corporate governance policy's area provided in Att 4 – Vocus Sustainability Principles.pdf.

Vocus's approach is to set an Environmental Policy or Environmental Commitment on a project by project basis. This commitment for the Proposed Action is as follows.

Vocus recognises its moral and legal responsibility to minimise damage to the environment caused by work activities and practices. Vocus' aim is to actively work towards elimination and reduction of negative affects to the environment by ensuring the mitigation of potential environmental impacts and advocating best practice techniques where possible.

The key environmental objectives are to:

- Minimise our impact on the environment; and
- Ensure environmental impacts are managed to legislative requirements, licences, approval conditions and community expectations.

For the duration of the Proposed Action, and to ensure we meet our objectives, Vocus will ensure:

- Management of our operations in compliance with applicable laws;
- That environmental risks associated with the project are properly managed; and
- Clear communication with our subcontractors on environmental issues.

During project planning for offshore projects, Vocus engages suitably qualified and experienced environmental consultants to undertake a desktop environmental assessment to identify the key environmental sensitivities, project aspects, environmental impacts and potential risks associated with the Proposed Action. Consultation between the environmental consultants and project engineers is undertaken to optimise the route to avoid and minimise impacts to sensitive receptors as far as practicable.

The results of the desktop assessment, together with the final route selection are then used to determine regulatory approval requirements and management and mitigation measures to be implemented to avoid and minimise environmental impacts.

Prior to the commencement of activities, Vocus prepares a project specific Health, Safety and Environment Management Plan (HSEMP) which includes contractor specific requirements. The purpose of this HSEMP is to provide the framework for managing health, safety, and environmental compliance for the duration of the project.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN 78127842853

Organisation name Vocus Pty Ltd

Organisation address 3000 VIC

Proposed designated proponent details

Name Greg Neylan

Job title Head of Land Access - Major Projects

Phone 0428 925 193

Email Greg.Neylan@vocus.com.au

Address 452 Flinders St, Melbourne, 3000, VIC, Australia

1.3.4 Identity: Summary of allocation

✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	37001024095
Organisation name	JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address	2060 NSW
Representative's name	Arne De Vos
Representative's job title	Principal Environmental Consultant
Phone	(08) 9469 4400
Email	arne.devos@jacobs.com
Address	Mia Yellagonga Tower 2, Level 5, 5 Spring Street, Perth WA 6000

✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	78127842853
Organisation name	Vocus Pty Ltd
Organisation address	3000 VIC
Representative's name	Greg Neylan
Representative's job title	Head of Land Access - Major Projects
Phone	0428 925 193
Email	Greg.Neylan@vocus.com.au
Address	452 Flinders St, Melbourne, 3000, VIC, Australia

✔ Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

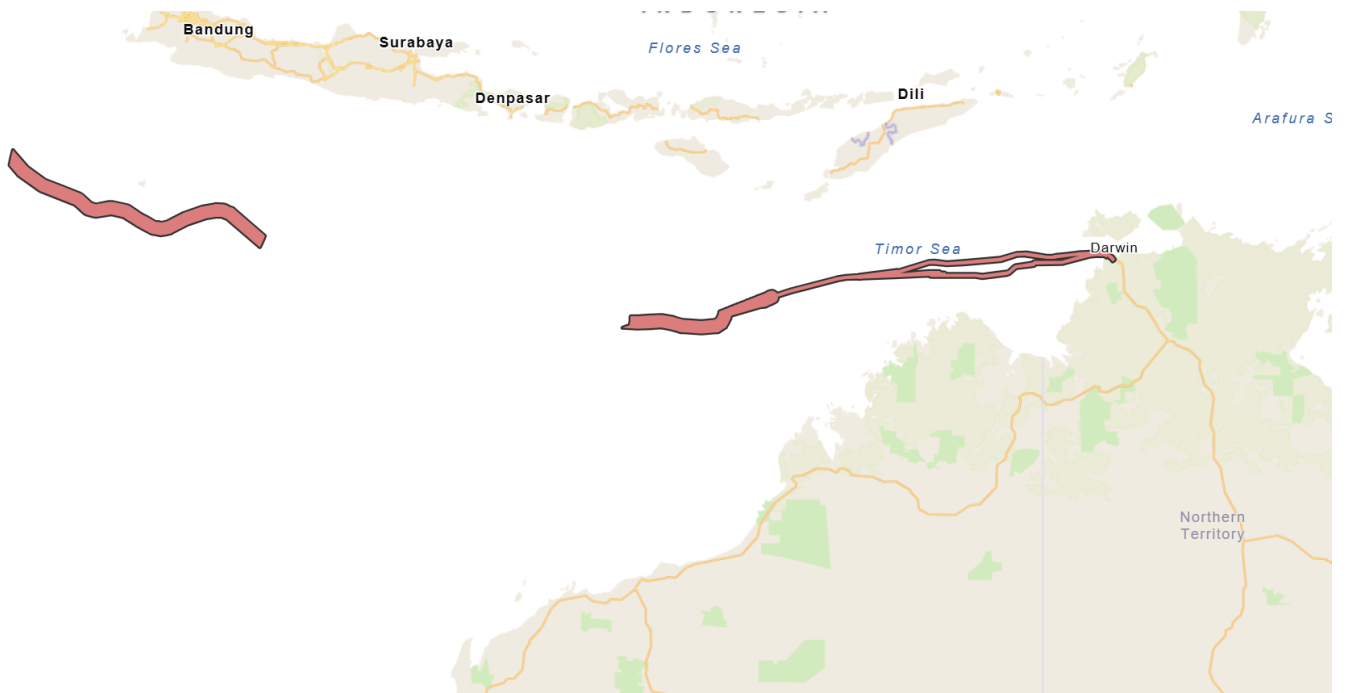
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint



Project Area: 5989142.74 Ha Disturbance Footprint: 5989142.74 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Northern Territory waters and Commonwealth waters off Western Australia, Northern Territory and

2.2.2 Where is the primary jurisdiction of the proposed action? *

Commonwealth Marine

2.2.3 Is there a secondary jurisdiction for this proposed action? *

Yes

2.2.4 Where is the secondary jurisdiction of the proposed action? *

Northern Territory

2.2.5 What is the tenure of the action area relevant to the project area? *

The Proposed Action is entirely marine based occurring in Commonwealth marine waters, within Australia's Economic Exclusive Zone area, Northern Territory coastal marine area and Commonwealth marine waters around Christmas Island.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

As a large linear survey, the Proposed Action covers a diverse range of areas within the North Marine Region (NMR), North West Marine Region (NWMR), Northern Territory Coastal Waters and Commonwealth Waters off Christmas Island.

Given the significant distance of the majority of the Proposed Action from the coast line, the environment is considered to be typical of a pristine tropical offshore environment.

A small portion of the Proposed Action will occur within and in proximity to Darwin Harbour. The Harbour endures anthropogenic pressures typical of a working harbour and large populated area. The area has light glow typical of urban areas. The Darwin Harbour region Report Card (Nt Government (2025) describes water quality in the Project Area as very good for the middle harbour and good for the outer harbour.

Nt Government, 2025, Darwin Harbour Region Report Card, available at <https://environment.nt.gov.au/water/darwin-harbour/darwin-harbour-region-report-cards>

3.1.2 Describe any existing or proposed uses for the project area.

Existing uses of the Proposed Action are:

- Commonwealth managed fisheries:
 - Northern Prawn Fishery
 - Western Tuna and Billfish Fishery
 - Northwest Slope Trawl Fishery
- General shipping: The Proposed Action will occur within areas of vessel activity including within Port of Darwin.
- Oil and Gas: The Project Area crosses the Ichthys Gas Pipeline and various oil and gas titles including:
 - G-7-AP
 - G-11-AP
 - WA-548-P
 - NT/P88
 - NT/RL1 (Petrel Field)
 - AC/P64
 - AC/P41
- Various existing and proposed subsea telecommunications cables including:
 - Vocus's North West Cable System
 - Proposed Hawaiki Nui Cable System
 - Proposed Project Waterworth Cable
 - Proposed Bosun Cable
 - Proposed Asia Connect Cable 1
 - Australia-Singapore Cable
 - Proposed Australia Connect Interlink
 - Indigo West Cable .

Australian Fisheries Management Authority (AFMA). 2025. Fisheries Maps. Available at: <
<https://www.afma.gov.au/commercial-fishers/management-arrangements/fisheries-maps>>. Accessed on
02/11/2025

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

The Project Area crosses four Key Ecological Features (KEF) being:

- Continental Slope Demersal Fish Communities KEF: High levels of endemism.
- Carbonate bank and terrace system of the Sahul Shelf KEF: Unique seafloor feature with ecological properties of regional significance.
- Pinnacles of the Bonaparte Basin KEF: Unique sea-floor feature with ecological properties of regional significance.
- Canyons linking the Argo Abyssal Plain with the Scott Plateau KEF: High productivity and aggregations of marine life.

These KEFs are further described in Table 5-1, page 61-62 of Att2 – SIA.pdf

The Project Area crosses 3 Australian Marine Parks (AMPs) being:

- Oceanic Shoals Marine Park Multiple Use Zone.
- Argo-Rowley Terrace Marine Park National Park Zone.
- Christmas Island Marine Park National Park Zone.

These AMPs are further described in Table 5-2, page 62-64 of Att2 – SIA.pdf

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The Proposed Action occurs in Northern Territory coastal waters, offshore waters in the Commonwealth Marine Area and waters around Christmas Island and occurs in depths between 5 m and 6000 m depth.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Marine Fauna

Threatened fauna relevant to the Proposed Action are detailed in Table 3-1, page 8-17 of Att 2 – SIA.pdf.

Migratory fauna relevant to the Proposed Action are detailed in Table 4-1, page 48-52 of Att 2 – SIA.pdf.

The Project Area overlaps habitat critical to the survival (nesting) of the Flatback Turtle as detailed in Table 3-2, page 18 of Att 2 – SIA.pdf.

The Project Area overlaps various Biologically Important Areas (BIAs) for threatened species as detailed in Table 3-3, page 18-19 of Att 2 – SIA.pdf.

The Project Area overlaps also BIAs for migratory species as detailed in Table 4-2, page 52-53 of Att 2 – SIA.pdf.

Benthic Communities and Habitats

The Project Area supports a range of benthic habitats, including hard substrate, invertebrate filter feeder communities, soft sediments, canyons and limestone pavement (CoA, 2012).

The KEFs located within the Proposed Action area, such as The Canyons linking the Cuvier Abyssal KEF, Exmouth Plateau KEF and Ancient Coastline KEF are recognised by its diverse benthic organisms, as corals, sponges, molluscs and echinoderms (COA, 2021).

DSEWPC - Department of Sustainability, Environment, Water, Population and Communities (2012a). Marine bioregional plan for the North-west Marine Region. Prepared under the Environment Protection and Biodiversity Conservation Act 1999. Available from: <http://www.environment.gov.au/topics/marine/marine-bioregional-plans/north-west>. In effect under the EPBC Act from 27-Aug-2012.

DEWHA - Department of the Environment, Water, Heritage and the Arts (2012b). Marine Bioregional Plan for the North Marine Region). Canberra: Department of the Environment, Water, Heritage and the Arts. Available from: <https://www.dcceew.gov.au/sites/default/files/env/pages/0fcb6106-b4e3-4f9f-8d06-f6f94bea196b/files/north-marine-plan.pdf>

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Within Commonwealth waters, the Proposed Action occurs at depths between 200 m and 6000 m. These depths are beyond the range of marine vegetation (e.g. seagrass or macroalgae) due to the needed for adequate light penetration for photosynthetic activity.

3.3 Heritage

3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

The PMST search did not identify any Commonwealth Heritage places within the Project Area. No other heritage sites have been identified in the Project Area within the Commonwealth Marine Area.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

No Indigenous heritage sites have been identified within the Project Area within Commonwealth waters. The survey may intersect a number of Aboriginal Area Protection Authority heritage sites in Northern Territory waters, however these are not MNES and do not occur within Commonwealth waters.

It is recognised that Indigenous people have an unbroken connection to sea country and have a deep spiritual connection to the sea. Cultural value includes staple foods of living saltwater fish, turtles, dugong, crabs and oysters, and access to sea country by families is important for cultural traditions, livelihoods and future economic development opportunities. No impact on Indigenous cultural heritage values are predicted.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

Not applicable. The Proposed Action is located within Commonwealth waters and Northern Territory coastal waters.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	Yes	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no World Heritage Properties in close proximity to the Proposed Action.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no National Heritage Places in close proximity to the Proposed Action.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no Ramsar Wetlands in close proximity to the Proposed Action.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
Yes	No	<i>Anous tenuirostris melanops</i>	Australian Lesser Noddy
Yes	No	<i>Arenaria interpres</i>	Ruddy Turnstone
Yes	No	<i>Balaenoptera borealis</i>	Sei Whale
Yes	No	<i>Balaenoptera musculus</i>	Blue Whale
Yes	No	<i>Balaenoptera physalus</i>	Fin Whale
Yes	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
Yes	No	<i>Calidris canutus</i>	Red Knot, Knot
Yes	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	No	<i>Calidris tenuirostris</i>	Great Knot
Yes	No	<i>Carcharodon carcharias</i>	White Shark, Great White Shark
Yes	No	<i>Caretta caretta</i>	Loggerhead Turtle
Yes	No	<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover
Yes	No	<i>Charadrius mongolus</i>	Lesser Sand Plover, Mongolian Plover
Yes	No	<i>Chelonia mydas</i>	Green Turtle
Yes	No	<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth
Yes	No	<i>Eretmochelys imbricata</i>	Hawksbill Turtle
Yes	No	<i>Fregata andrewsi</i>	Christmas Island Frigatebird, Andrew's Frigatebird
Yes	No	<i>Glyphis garricki</i>	Northern River Shark, New Guinea River Shark
Yes	No	<i>Lepidochelys olivacea</i>	Olive Ridley Turtle, Pacific Ridley Turtle
Yes	No	<i>Limnodromus semipalmatus</i>	Asian Dowitcher

Direct impact	Indirect impact	Species	Common name
Yes	No	<i>Limosa lapponica baueri</i>	Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit
Yes	No	<i>Limosa limosa</i>	Black-tailed Godwit
Yes	No	<i>Natator depressus</i>	Flatback Turtle
Yes	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
Yes	No	<i>Orcaella heinsohni</i>	Australian Snubfin Dolphin
Yes	No	<i>Papasula abbotti</i>	Abbott's Booby
Yes	No	<i>Phaethon lepturus fulvus</i>	Christmas Island White-tailed Tropicbird, Golden Bosunbird
Yes	No	<i>Phaethon rubricauda westralis</i>	Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird
Yes	No	<i>Pluvialis squatarola</i>	Grey Plover
Yes	No	<i>Pristis clavata</i>	Dwarf Sawfish, Queensland Sawfish
Yes	No	<i>Pristis pristis</i>	Largetooth Sawfish, Freshwater Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish
Yes	No	<i>Pristis zijsron</i>	Green Sawfish, Dindagubba, Narrowsnout Sawfish
Yes	No	<i>Rhincodon typus</i>	Whale Shark
Yes	No	<i>Rostratula australis</i>	Australian Painted Snipe
Yes	No	<i>Sousa sahalensis</i>	Australian Humpback Dolphin
Yes	No	<i>Sternula albifrons</i>	Little Tern
Yes	No	<i>Tringa nebularia</i>	Common Greenshank, Greenshank
Yes	No	<i>Xenus cinereus</i>	Terek Sandpiper

Ecological communities

—

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Potential impacts to listed Threatened species from the Proposed Action may occur as a result of the following:

- Planned underwater noise emissions from the survey equipment, use of dynamic positioning and standard vessel operations noise.
- Planned light emissions from survey vessel.
- Unplanned interactions between the survey vessel and large marine fauna (vessel strike or disturbance).

These potential impacts are further described in Section 3.14, page 25-30 of Att 2 – SIA.pdf.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

As described in Section 3.14, page 25-30 of Att2 – SIA.pdf, impacts to threatened fauna are predicted to be limited to minor temporary behavioural impacts resulting from noise and light emissions.

A significant impact assessment has been undertaken in Section 3.1.6, page 31-47 of Att 2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to threatened fauna.

An assessment of the Proposed Actions consistency with the relevant species conservation and recovery plans is presented in Section 6.1, page 69-71 of Att 2 – SIA.pdf. This assessment concluded that the Proposed Action is not inconsistent with any of the relevant species' conservation or recovery plans.

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action.

*

A significant impact assessment has been undertaken in Section 3.1.6, page 31-47 of Att 2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to threatened fauna.

An assessment of the Proposed Actions consistency with the relevant species conservation and recovery plans is presented in Section 6.1, page 69-71 of Att 2 – SIA.pdf. This assessment concluded that the Proposed Action is not inconsistent with any of the relevant species' conservation or recovery plans.

Therefore the Proposed Action does not meet the definition of a Controlled Action under the EPBC Act.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

The following mitigation measures will be applied to mitigate the risk of impacts occurring to threatened Fauna.

- **Underwater noise emissions** – Implementation of EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales (September 2008) including the following. This will be applied both for whales and Whale Sharks.
 - Pre-survey planning to avoid survey activities in areas where whales or Whale Sharks are likely to be breeding, calving, resting or feeding.
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or Whale Sharks.
 - Implementation of a:
 - 500 m shut down zone.
 - 1 km low power zone.
 - 3 km observation zone.
 - Implementation of the basic procedures outlined in Section A.3 of EPBC Act Policy Statement 2.1 including:
 - Pre-start up visual observation of a 3 km observation zone for at least 30 minutes.
 - Soft-start procedures.
 - Start-up delay procedures if a whale or Whale Shark is sighted within the low power or shut down zone.
 - Operations procedures including powering down to low power when not collecting data, and application of soft start procedures and start up delays when restarting data collection.
 - Stop work procedures including reducing to low power if a whale is sighted in the low power zone and completely shut off if a whale or Whale Shark is sighted in the shut off zone.
 - Night-time and low visibility procedures.
- **Light emissions** - Lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.
- **Fauna interactions** - Vessel Interactions between survey vessel and cetaceans within the Project Area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or whale sharks.
 - The survey vessel will not travel at greater than 6 knots within 300 m of a cetacean or Whale Shark (caution zone) and minimise noise.
 - The survey vessel will not approach closer than 50 m for a dolphin and/or 100 m for a whale or Whale Shark (with the exception of animals bow riding). (requirements do not apply to survey vessels operating under limited/constrained manoeuvrability including but not limited to vessels towing equipment and actively acquiring data, or in the event of an emergency).
- **Water quality and waste management** - The survey vessel has appropriate waste management procedures and emergency fuel/ oil spill plans in place in accordance with regulatory requirements.
- **Invasive Marine Species** - The Proponent will comply with State and Commonwealth biosecurity requirements to prevent the introduction and establishment of invasive marine species.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As there no residual significant impacts to threatened species predicted as a result of the Proposed Action, no offsets are proposed.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
Yes	No	<i>Acrocephalus orientalis</i>	Oriental Reed-Warbler
Yes	No	<i>Actitis hypoleucos</i>	Common Sandpiper
Yes	No	<i>Anous stolidus</i>	Common Noddy
Yes	No	<i>Anoxypristis cuspidata</i>	Narrow Sawfish, Knifetooth Sawfish
Yes	No	<i>Apus pacificus</i>	Fork-tailed Swift
Yes	No	<i>Arenaria interpres</i>	Ruddy Turnstone
Yes	No	<i>Balaenoptera borealis</i>	Sei Whale
Yes	No	<i>Balaenoptera edeni</i>	Bryde's Whale
Yes	No	<i>Balaenoptera musculus</i>	Blue Whale
Yes	No	<i>Balaenoptera omurai</i>	Omura's Whale
Yes	No	<i>Balaenoptera physalus</i>	Fin Whale
Yes	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
Yes	No	<i>Calidris alba</i>	Sanderling
Yes	No	<i>Calidris canutus</i>	Red Knot, Knot
Yes	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	No	<i>Calidris melanotos</i>	Pectoral Sandpiper
Yes	No	<i>Calidris ruficollis</i>	Red-necked Stint
Yes	No	<i>Calidris subminuta</i>	Long-toed Stint
Yes	No	<i>Calidris tenuirostris</i>	Great Knot
Yes	No	<i>Calonectris leucomelas</i>	Streaked Shearwater
Yes	No	<i>Carcharhinus longimanus</i>	Oceanic Whitetip Shark
Yes	No	<i>Carcharias taurus</i>	Grey Nurse Shark
Yes	No	<i>Carcharodon carcharias</i>	White Shark, Great White Shark

Direct impact	Indirect impact	Species	Common name
Yes	No	<i>Caretta caretta</i>	Loggerhead Turtle
Yes	No	<i>Cecropis daurica</i>	Red-rumped Swallow
Yes	No	<i>Charadrius dubius</i>	Little Ringed Plover
Yes	No	<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover
Yes	No	<i>Charadrius mongolus</i>	Lesser Sand Plover, Mongolian Plover
Yes	No	<i>Charadrius veredus</i>	Oriental Plover, Oriental Dotterel
Yes	No	<i>Chelonia mydas</i>	Green Turtle
Yes	No	<i>Crocodylus porosus</i>	Salt-water Crocodile, Estuarine Crocodile
Yes	No	<i>Cuculus optatus</i>	Oriental Cuckoo, Horsfield's Cuckoo
Yes	No	<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth
Yes	No	<i>Dugong dugon</i>	Dugong
Yes	No	<i>Eretmochelys imbricata</i>	Hawksbill Turtle
Yes	No	<i>Fregata andrewsi</i>	Christmas Island Frigatebird, Andrew's Frigatebird
Yes	No	<i>Fregata ariel</i>	Lesser Frigatebird, Least Frigatebird
Yes	No	<i>Fregata minor</i>	Great Frigatebird, Greater Frigatebird
Yes	No	<i>Gallinago megala</i>	Swinhoe's Snipe
Yes	No	<i>Gallinago stenura</i>	Pin-tailed Snipe
Yes	No	<i>Glareola maldivarum</i>	Oriental Pratincole
No	No	<i>Hirundo rustica</i>	Barn Swallow
Yes	No	<i>Isurus oxyrinchus</i>	Shortfin Mako, Mako Shark
Yes	No	<i>Isurus paucus</i>	Longfin Mako
Yes	No	<i>Lepidochelys olivacea</i>	Olive Ridley Turtle, Pacific Ridley Turtle
Yes	No	<i>Limicola falcinellus</i>	Broad-billed Sandpiper
Yes	No	<i>Limnodromus semipalmatus</i>	Asian Dowitcher
Yes	No	<i>Limosa lapponica</i>	Bar-tailed Godwit
Yes	No	<i>Limosa limosa</i>	Black-tailed Godwit

Direct impact	Indirect impact	Species	Common name
Yes	No	<i>Manta alfredi</i>	Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray
Yes	No	<i>Megaptera novaeangliae</i>	Humpback Whale
Yes	No	<i>Mobula birostris</i>	Giant Manta Ray
No	No	<i>Motacilla cinerea</i>	Grey Wagtail
No	No	<i>Motacilla flava</i>	Yellow Wagtail
Yes	No	<i>Natator depressus</i>	Flatback Turtle
Yes	No	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
Yes	No	<i>Numenius minutus</i>	Little Curlew, Little Whimbrel
Yes	No	<i>Numenius phaeopus</i>	Whimbrel
Yes	No	<i>Orcaella heinsohni</i>	Australian Snubfin Dolphin
Yes	No	<i>Orcinus orca</i>	Killer Whale, Orca
Yes	No	<i>Pandion haliaetus</i>	Osprey
Yes	No	<i>Phaethon lepturus</i>	White-tailed Tropicbird
Yes	No	<i>Phaethon rubricauda</i>	Red-tailed Tropicbird
Yes	No	<i>Physeter macrocephalus</i>	Sperm Whale
Yes	No	<i>Pluvialis fulva</i>	Pacific Golden Plover
Yes	No	<i>Pluvialis squatarola</i>	Grey Plover
Yes	No	<i>Pristis clavata</i>	Dwarf Sawfish, Queensland Sawfish
Yes	No	<i>Pristis pristis</i>	Large-tooth Sawfish, Freshwater Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish
Yes	No	<i>Pristis zijsron</i>	Green Sawfish, Dindagubba, Narrowsnout Sawfish
Yes	No	<i>Rhincodon typus</i>	Whale Shark
Yes	No	<i>Sousa chinensis</i>	Indo-Pacific Humpback Dolphin
Yes	No	<i>Sternula albifrons</i>	Little Tern
Yes	No	<i>Sula sula</i>	Red-footed Booby

Direct impact	Indirect impact	Species	Common name
Yes	No	Tringa brevipes	Grey-tailed Tattler
Yes	No	Tringa glareola	Wood Sandpiper
Yes	No	Tringa incana	Wandering Tattler
Yes	No	Tringa nebularia	Common Greenshank, Greenshank
Yes	No	Tringa stagnatilis	Marsh Sandpiper, Little Greenshank
Yes	No	Tursiops aduncus (Arafura/Timor Sea populations)	Spotted Bottlenose Dolphin (Arafura/Timor Sea populations)
Yes	No	Xenus cinereus	Terek Sandpiper

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Potential impacts to migratory species from the Proposed Action may occur as a result of the following:

- Planned underwater noise emissions from the survey equipment, use of dynamic positioning and standard vessel operations noise.
- Planned light emissions from survey vessel.
- Unplanned interactions between the survey vessel and large marine fauna (vessel strike or disturbance).

These potential impacts are the same as those described for threatened species which are further described in Section 3.14, page 25-30 of Att 2 – SIA.pdf.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.5.6 Describe why you do not consider this to be a Significant Impact. *

As described in Section 3.14, page 25-30 of Att 2 – SIA.pdf, impacts to marine fauna are predicted to be limited to minor temporary behavioural impacts resulting from noise and light emissions.

A significant impact assessment has been undertaken in Section 4.5, page 55-59 of Att2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to migratory fauna.

An assessment of the Proposed Actions consistency with the relevant species conservation and recovery plans is presented in Section 6.1, page 69-71 of Att 2 – SIA.pdf. This assessment concluded that the Proposed Action is not inconsistent with any of the relevant species' conservation or recovery plans.

4.1.5.7 Do you think your proposed action is a controlled action? *

No

4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action.

*

A significant impact assessment has been undertaken in Section 4.5, page 55-59 of Att 2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to migratory fauna.

An assessment of the Proposed Actions consistency with the relevant species conservation and recovery plans is presented in Section 6.1, page 69-71 of Att 2 – SIA.pdf. This assessment concluded that the Proposed Action is not inconsistent with any of the relevant species' conservation or recovery plans.

Therefore the Proposed Action does not meet the definition of a Controlled Action under the EPBC Act.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

The following mitigation measures will be applied to mitigate the risk of impacts occurring to Migratory Fauna.

- **Underwater noise emissions** – Implementation of EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales (September 2008) including the following. This will be applied both for whales and Whale Sharks.
 - Pre-survey planning to avoid survey activities in areas where whales or Whale Sharks are likely to be breeding, calving, resting or feeding.
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or Whale Sharks.
 - Implementation of a:
 - 500 m shut down zone.
 - 1 km low power zone.
 - 3 km observation zone.
 - Implementation of the basic procedures outlined in Section A.3 of EPBC Act Policy Statement 2.1 including:
 - Pre-start up visual observation of a 3 km observation zone for at least 30 minutes.
 - Soft-start procedures.
 - Start-up delay procedures if a whale or Whale Shark is sighted within the low power or shut down zone.
 - Operations procedures including powering down to low power when not collecting data, and application of soft start procedures and start up delays when restarting data collection.
 - Stop work procedures including reducing to low power if a whale is sighted in the low power zone and completely shut off if a whale or Whale Shark is sighted in the shut off zone.
 - Night-time and low visibility procedures.
- **Light emissions** - Lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.
- **Fauna interactions** - Vessel Interactions between survey vessel and cetaceans within the Project Area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or whale sharks.
 - The survey vessel will not travel at greater than 6 knots within 300 m of a cetacean or Whale Shark (caution zone) and minimise noise.
 - The survey vessel will not approach closer than 50 m for a dolphin and/or 100 m for a whale or Whale Shark (with the exception of animals bow riding). (requirements do not apply to survey vessels operating under limited/constrained manoeuvrability including but not limited to vessels towing equipment and actively acquiring data, or in the event of an emergency).
- **Water quality and waste management** - The survey vessel has appropriate waste management procedures and emergency fuel/ oil spill plans in place in accordance with regulatory requirements.
- **Invasive Marine Species** - The Proponent will comply with State and Commonwealth biosecurity requirements to prevent the introduction and establishment of invasive marine species.

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As there no residual significant impacts to Migratory species predicted as a result of the Proposed Action, no offsets are proposed.

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action is not a nuclear action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Commonwealth marine area
Yes	No	Christmas Island National Park
Yes	No	North Marine Region
Yes	No	North-west marine region

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.7.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Potential impacts to the Commonwealth Marine Area may occur as a result of:

- Planned underwater noise emissions from the survey equipment, use of dynamic positioning and standard vessel operations noise.
- Planned light emissions from survey vessel.
- Unplanned interactions between the survey vessel and large marine fauna (vessel strike or disturbance).
- Seabed Disturbance as a result of seabed sampling
- Routine marine discharges from the vessel

The potential impacts of underwater noise emissions, light emissions and interactions between the vessel and marine fauna are further described in Section 3.14, page 25-30 of Att 2 – SIA.pdf.

The potential impacts to marine environmental quality as a result of seabed disturbance and routine marine discharges are further discussed in Section 5.2, page 60 of Att 2 – SIA.pdf.

4.1.7.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.7.6 Describe why you do not consider this to be a Significant Impact. *

As described in Section 3.14, page 25-30 of Att 2 – SIA.pdf, impacts to marine fauna from underwater noise, light emissions and the risk of vessel strike or disturbance are predicted to be limited to minor temporary behavioural impacts resulting from noise and light emissions.

As described in Section 5.2.2, page 60 of Att 2 – SIA.pdf, seabed disturbance as a result of collection of the physical samples will be negligible given the disturbance at each site will be less than 1 square meter.

As described in Section 5.2.3, page 60 of Att 2 – SIA.pdf, any discharge to the marine environment from the survey vessel will be in accordance with the MARPOL discharge standards and the likelihood of an accidental waste, hydrocarbon or chemical discharge from the vessel is very low.

A significant impact assessment of potential impact to the Commonwealth Marine Environment has been undertaken in Section 5.7, page 67-68 of Att 2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to the Commonwealth Marine Environment.

4.1.7.7 Do you think your proposed action is a controlled action? *

No

4.1.7.9 Please elaborate why you do not think your proposed action is a controlled action.

*

A significant impact assessment of potential impact to the Commonwealth Marine Environment has been undertaken in Section 5.7, page 67-68 of Att 2 – SIA.pdf which concluded that it is not likely that significant impacts will occur to the Commonwealth Marine Environment. Therefore the Proposed Action does not meet the definition of a Controlled Action under the EPBC Act.

4.1.7.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

The following mitigation measures will be applied to mitigate the risk of impacts occurring to the Commonwealth Marine Area.

- **Underwater noise emissions** – Implementation of EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales (September 2008) including the following. This will be applied both for whales and Whale Sharks.
 - Pre-survey planning to avoid survey activities in areas where whales or Whale Sharks are likely to be breeding, calving, resting or feeding.
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or Whale Sharks.
 - Implementation of a:
 - 500 m shut down zone.
 - 1 km low power zone.
 - 3 km observation zone.
 - Implementation of the basic procedures outlined in Section A.3 of EPBC Act Policy Statement 2.1 including:
 - Pre-start up visual observation of a 3 km observation zone for at least 30 minutes.
 - Soft-start procedures.
 - Start-up delay procedures if a whale or Whale Shark is sighted within the low power or shut down zone.
 - Operations procedures including powering down to low power when not collecting data, and application of soft start procedures and start up delays when restarting data collection.
 - Stop work procedures including reducing to low power if a whale is sighted in the low power zone and completely shut off if a whale or Whale Shark is sighted in the shut off zone.
 - Night-time and low visibility procedures.
- **Light emissions** - Lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.
- **Fauna interactions** - Vessel Interactions between survey vessel and cetaceans within the Project Area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:
 - Use of a MFO where an MFO is defined as a dedicated and suitably trained crew member who must not have any other duties while engaging in visual observations for whales or whale sharks.
 - The survey vessel will not travel at greater than 6 knots within 300 m of a cetacean or Whale Shark (caution zone) and minimise noise.
 - The survey vessel will not approach closer than 50 m for a dolphin and/or 100 m for a whale or Whale Shark (with the exception of animals bow riding). (requirements do not apply to survey vessels operating under limited/constrained manoeuvrability including but not limited to vessels towing equipment and actively acquiring data, or in the event of an emergency).
- **Water quality and waste management** - The survey vessel has appropriate waste management procedures and emergency fuel/ oil spill plans in place in accordance with regulatory requirements.
- **Invasive Marine Species** - The Proponent will comply with State and Commonwealth biosecurity requirements to prevent the introduction and establishment of invasive marine species.

4.1.7.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As there are no residual significant impacts to the Commonwealth marine area predicted as a result of the Proposed Action, therefore no offsets are proposed.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action will be undertaken in the Commonwealth marine environment within the NWMR over 3,000 km from the Great Barrier Reef (GBR), therefore no direct or indirect impacts on the GBR are predicted.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action is not a large coal mining developments or coal seam gas activity.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The Proposed Action is not being undertaken on Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There is no credible impact pathway that may result in impacts to Commonwealth heritage places located overseas from the Proposed Action.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

The Proposed Action is a survey activity aimed at understanding the construction requirements and feasible alternatives for a potential cable route. The proposed survey method is the lowest impact feasible approach to achieving these objectives. Therefore, no other alternatives were considered.

The timing of the survey will be dictated by vessel availability and as such the impact assessment has considered the possibility that the survey could happen at any time during the year.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - Project Area.pdf Map of Project Area	01/12/2025	No	High
#2.	Document	Att 2 - SIA.pdf Significant Impact Assessment	03/12/2025	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 3 - PMST Report.pdf Protected Matters Search Tool Report	03/12/2025	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 5 - Consultation.pdf.pdf Stakeholder Consultation Log	05/01/2026	No	High

1.3.2.17 (Person proposing to take the action) Proposer's history of responsible environmental management

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 4 -Vocus Sustainability Principles.pdf Vocus Sustainability Principles	01/10/2020	No	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 4 -Vocus Sustainability Principles.pdf Vocus Sustainability Principles	30/09/2020		High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025		High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025		High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.4.6 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High
#2.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.4.9 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.5.9 (Migratory Species) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.7.2 (Commonwealth Marine Area) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025		High

4.1.7.6 (Commonwealth Marine Area) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

4.1.7.9 (Commonwealth Marine Area) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 - SIA.pdf Significant Impact Assessment	02/12/2025	No	High

5.2 Declarations

Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	37001024095
Organisation name	JACOBS GROUP (AUSTRALIA) PTY LTD
Organisation address	2060 NSW
Representative's name	Arne De Vos
Representative's job title	Principal Environmental Consultant
Phone	(08) 9469 4400
Email	arne.devos@jacobs.com
Address	Mia Yellagonga Tower 2, Level 5, 5 Spring Street, Perth WA 6000

Check this box to indicate you have read the referral form. *

Check this box to confirm these are the correct identification details. *

By checking this box, I, **Arne De Vos of JACOBS GROUP (AUSTRALIA) PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	78127842853
Organisation name	Vocus Pty Ltd
Organisation address	3000 VIC
Representative's name	Greg Neylan

Representative's job title	Head of Land Access - Major Projects
Phone	0428 925 193
Email	Greg.Neylan@vocus.com.au
Address	452 Flinders St, Melbourne, 3000, VIC, Australia

Check this box to indicate you have read the referral form. *

Check this box to confirm these are the correct identification details. *

I, **Greg Neylan of Vocus Pty Ltd**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.

Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

Check this box to indicate you have read the referral form. *

Check this box to confirm these are the correct identification details. *

I, **Greg Neylan of Vocus Pty Ltd**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

You may receive automated notifications that aim to assist you in tracking the progress of your project. You can opt out of these notifications by updating your communication preferences on your profile.