

Project Highclere Cable Lay and Operation

Application Number: **01018**Commencement Date: **07/04/2022**Status: **Locked**

1. About the project

1.1 Project details

Project title *

Project Highclere Cable Lay and Operation

Project industry type *

Telecommunications

Project industry sub-type

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Estimated start date *

1/12/2022

Estimated end date *

31/12/2050

1.2 Proposed Action details

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

Vocus is proposing to install and operate an offshore fibre optic cable and supporting components (Project Highclere). Project Highclere will form part of Vocus' fibre optic cable network connecting the existing North West Cable System (NWCS) and Australia Singapore Cable (ASC). The Proposed Action includes the installation and operation of the infrastructure only. The geophysical survey component of the Project was the subject of EPBC 2021/9023 which was deemed to be not a controlled action in August 2021 and has been completed without incident.

The Proposed Action includes:

- Installation of new cable to connect the existing NWCS to the existing ASC. This route will run from an existing stub cable of the NWCS (approximately 41 km north of Port Hedland) to an offshore existing branching unit of the ASC (approximately 450 km west of the Exmouth Peninsula).
- Installation of two branching units and two cables from the new cable to the edge of the petroleum safety zone of the proposed Scarborough Development, approximately 375km west of the Peninsula. The connection of the cable to the Scarborough infrastructure is not in the scope of this referral.
- Installation of two Cable Termination Assemblies (CTA) at the cable ends in close proximity to the Scarborough Development.
- Installation of a branching unit and 'stub' to allow for a future potential connection.
- Operation of the cable.

Att 1 - Location Map.pdf, shows the location of the proposed cable including the cable paths to the Scarborough Development.

The approximate cable route lengths are:

- Main Cable Route - approximately 1,025 km in length. Of this length approximately 340 km will be buried by ploughing, up to approximately 7 km will be buried by post lay burial, and the remainder will be laid directly on the seabed with no burial.
- Scarborough Connection - Two connection routes, totally approximately 69 km in length. These cable will be laid directly. These distances correspond to a disturbance area of approximately 218 hectare (based on a conservative 6 m wide disturbance footprint as a result of burial and a ~10 cm wide disturbance footprint in areas of direct lay).

This disturbance would occur within ~100 m of the proposed center line. This buffer has been nominated to account for the inherent cable lay accuracy due to water depths in which the cable will be laid. The cable will be laid as close as possible to the centre line of this buffer.

Schedule

Installation of the cable is currently planned to commence in late Q4 2022 and will take ~ 60 days. Commissioning and testing of the cable is expected to take up to 2 months. The design life for the cable is ~25 years. Another mobilisation will occur in ~18 months or later for the installation of the two CTAs.

Cable details and installation method

Att 2 - Cable Details and Installation Method.pdf, provides an overview of the cable details, installation details, vessel and plough specifications, and specifications of the CTA.

Commissioning, Operation and Maintenance

Commissioning of the new infrastructure including final network testing is expected to take 1-2 months post completion of installation. Operation of the cable will be managed remotely via the Proponent's existing operations centre in Melbourne. Once installed, it is not expected that the cable network will require any routine maintenance. In the event of damage or failure of the cable, relevant authorities and stakeholders will be consulted. In this case, it is likely that repairs will involve hauling the cable to the surface for repair.

Decommissioning

The life of the cable is a ~25 years and removal of the decommissioned cable is not considered feasible as:

- The potential environmental impacts of the retrieval and disposal of 1,094 km of buried cable are likely to significantly outweigh the impacts of leaving an inert cable in place.
- The commercial cost of retrieval and disposal of 1,094 km of cable are likely to significantly affect the commercial viability of the Project.
- Developing technology may extend the life of the cable or lead to recommissioning of the cable being a viable option.

Customer connections

The Proposed Action does not include connection to the Scarborough Development which would be via a 130 m cable from the CTA to the Development connected via ROV with little seabed disturbance. Requirements for this connections will be managed either by the Proponent or the Customer.

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

Yes

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

No

Related referral(s)

EPBC Number	Project Title
2021/9023	Project Highclere Geophysical Survey

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

The geophysical survey component of Project Highclere was the subject of EPBC 2021/9023 - Project Highclere Geophysical Survey which was deemed to be not a controlled action in August 2021. The Proposed Action has relied on the outputs of the completed survey in the route design and avoidance of seabed features. Given the difference in the survey activities and the activities proposed as part of the Proposed Action, and the timespan between the two actions, there is not considered to be cumulative impacts between the two actions.

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

The Proposed Action that is the subject of this referral only includes activities and potential impacts within Commonwealth waters therefore State and Local Government requirements do not apply.

EPBC Act - A Protected Matters Search (PMST) has been undertaken in relation to the Proposed Action. The PMST search identified the following MNES to be present in the proposal area:

- Threatened Species and Ecological Communities
- Migratory Species
- The Commonwealth Marine Environment

The PMST report is included as Att 5 - PMST Report

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.

Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGGS Act) - The Proposed Action is not considered a Petroleum Activity and as such, the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGGS Act) and associated regulations do not apply.

Australian Fisheries Management Authority (AFMA) - AFMA is the Australian Government agency responsible for the efficient management and sustainable use of Commonwealth fish resources on behalf of the Australian community. The proposed cable route crosses Commonwealth fisheries that under the jurisdiction of AFMA. Vocus will consult with AFMA as part of the planned stakeholder engagement.

Western Australian managed fisheries - WA Department of Fisheries (DoF) manages a number of fisheries in Commonwealth waters that are crossed by the proposed action. Vocus will consult with DoF as part of the planned stakeholder engagement.

Defence Regulations 2016 - A portion of the Scarborough Connection portion of the route enters a Defense Training Area. Vocus has consulted with the Department of Defence for permission to access this area in accordance with Defence Regulations 2016. The Department of Defence has agreed to this request.

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 cable route. As such there are no activities associated with this Proposed Action which will result in any interference with a shipwreck or underwater cultural heritage sites listed under the Underwater Cultural Heritage Act 2018.

Australian Heritage Council - No Commonwealth and/or National Heritage sites have been identified in close proximity to the cable route.

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. *

Vocus will consult with the following relevant stakeholders including:

- Australian Maritime Safety Authority (contact has commenced with meeting to be scheduled)
- Western Australia DoF
- Relevant fisheries bodies (AFMA/WAFIC/RECFISHWEST)
- WA Department of Mines, Industry Regulation and Safety
- Kariyarra Aboriginal Corporation (Kariyarra Native Title Claimant Group) (contact has commenced with meeting to be scheduled).

Consultation has commenced with Port Hedland Port Authority (PHPA) in relation to the cable route and protection of the cable from offshore anchoring activity. PHPA manages vessel traffic in waters adjacent to the cable route. PHPA does not administer offshore land along the route of the proposed cable, consequently approval of the route is beyond the scope of PHPA responsibilities.

A portion of the Scarborough Connection portion of the route enters a Defense Training Area. Vocus has consulted with the Department of Defence for permission to access this area in accordance with Defence Regulations 2016. The Department of Defence has agreed to this request.

1.3 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.

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Confirm that you have read and understand this Privacy Notice *

Is Referring party an organisation or business? *

Yes

Referring party organisation details	
ABN	78127842853
Organisation name	Vocus Pty Ltd
Organisation address	452 Flinders St, Melbourne, 3000, VIC, Australia
Referring party details	
Name	Simon Harriss
Job title	Project Manager
Phone	0386206481
Email	simon.harriss@vocus.com.au
Address	

1.3 Identity - Person proposing to take the action

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

Yes

Person proposing to take the action organisation details
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ABN	78127842853
Organisation name	Vocus Pty Ltd
Organisation address	452 Flinders St, Melbourne, 3000, VIC, Australia
Person proposing to take the action details	
Name	Simon Harriss
Job title	Project Manager
Phone	0386206481
Email	simon.harriss@vocus.com.au
Address	

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

No

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

No

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 project or installations over more than a decade of fibre deployment in all Australian mainland States and the 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 Proponents Corporate sustainability policy is included as Att 4 - Vocus Sustainability Principles.pdf.

1.3 Identity - Proposed designated proponent

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

Yes

Proposed designated proponent organisation details
78127842853

ABN

Organisation name Vocus Pty Ltd
Organisation address 452 Flinders St, Melbourne, 3000, VIC, Australia

Proposed designated proponent details

Name Simon Harriss
Job title Project Manager
Phone 0386206481
Email simon.harriss@vocus.com.au
Address

1.3 Identity - Summary of allocation

Confirmed Referring party's identity

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

ABN 78127842853
Organisation name Vocus Pty Ltd
Organisation address 452 Flinders St, Melbourne, 3000, VIC, Australia
Representative's name Simon Harriss
Representative's job title Project Manager
Phone 0386206481
Email simon.harriss@vocus.com.au
Address

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.

Same as Referring party information.

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

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

No

Has the department issued you with a credit note? *

No

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

No

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

No

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

No

1.4 Payment details - Payment allocation

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

Person proposing to take the action

2. Location

2.1 Project footprint



2.2 Footprint details

What is the address of the proposed action? *

Commonwealth waters off the northwest coast WA. The vessel will undertake customs clearance in Port Hedland and start

Where is the primary jurisdiction of the proposed action? *

Commonwealth Marine

Is there a secondary jurisdiction for this proposed action? *

No

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

Commonwealth Marine including various Commonwealth Offshore Petroleum License Areas.

3. Existing environment

3.1 Physical description

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

As a large linear cable route, the Proposed Action covers a diverse range of areas within the Commonwealth Marine Environment. The Proposed Action that is the subject of this referral only includes activities and potential impacts within Commonwealth waters. Given the significant distance of the Proposal from the coastline, the environment is considered to be typical of a pristine tropical offshore environment.

Describe any existing or proposed uses for the project area.

Existing uses of the proposal area include:

- State and Commonwealth managed fisheries
- Shipping
- Industry including petroleum exploration, development and production
- Tourism and Scientific research.

No impacts to any existing users within the proposal area are predicted to occur.

Potential future uses include continuation of the above including petroleum exploration, development and production within various Commonwealth Offshore Petroleum License Areas.

The proposed cable route will cross a flowline associated with the Scarborough Development using standard installation techniques. The route will also cross the proposed trunk line route associated with Woodside's proposed Browse to North-west Shelf Project.

Vocus is consulting with all relevant title holders.

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

The Ancient coastline at 125 m depth contour KEF is considered of conservation significance due to their unique seafloor features with ecological properties of regional significance (CoA, 2012). The proposed cable crosses this KEF (plough burial) for a distance of 8 km.

The Continental Slope Demersal Fish Communities KEF is considered of conservation significance due to the diversity of demersal fish assemblages on the continental slope in the Timor Province. The cable crosses this KEF (direct lay) for a distance of up to 4 km within this KEF.

The Exmouth Plateau KEF is considered of conservation significance due to their unique seafloor features with ecological properties of regional significance (CoA, 2012). The proposed cable crosses this KEF for a distance of 371 km.

These KEFs and the proposed cable route are shown in Att 1 - Location Map.pdf.

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

The Proposed Action covers a significant depth range, ranging from less than 100 m water depth to over 5000 m water depth.

3.2 Flora and fauna

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

The marine environment of the NWMR is typical of tropical marine ecosystems with diverse habitats including coral reef, soft sediments, canyons and limestone pavement. The NWMR boasts high species diversity (Director of National Parks, 2018).

Threatened and migratory fauna relevant to the Proposed Action and proposal area are detailed in Att 3 - PMST Report.pdf (listed threatened species - pages 3 -5, listed migratory species - pages 6 - 9). Threatened species that may be present in the proposal area include:

- Red Knot, Knot (*Calidris canutus*) - Endangered
- Curlew Sandpiper (*Calidris ferruginea*) - Critically Endangered
- Eastern Curlew, Far Eastern Curlew (*Numenius madagascariensis*) - Critically Endangered
- Southern Giant-Petrel, Southern Giant Petrel (*Macronectes giganteus*) - Endangered
- Soft-plumaged Petrel (*Pterodroma mollis*) - Vulnerable
- Australian Fairy Tern (*Sternula nereis nereis*) - Vulnerable
- Christmas Island White-tailed Tropicbird (*Phaethon lepturus fulvus*) - Endangered
- Indian Yellow-nosed Albatross (*Thalassarche carteri*) - Vulnerable
- Blue Whale (*Balaenoptera musculus*) - Endangered
- Humpback Whale (*Megaptera novaeangliae*) - Vulnerable (Vocus understands that Humpback whales are in the process of being delisted as a threatened species.
- Sei Whale (*Balaenoptera borealis*) - Vulnerable
- Fin Whale (*Balaenoptera physalus*) - Vulnerable
- Southern Right Whale (*Eubalaena australis*) - Endangered
- Whale Shark (*Rhincodon typus*) - Vulnerable
- Green Sawfish, (*Pristis zijsron*) - Vulnerable
- Grey Nurse Shark (*Carcharias taurus*) - Vulnerable

- Dwarf Sawfish (*Pristis clavata*) - Vulnerable
- Great White Shark (*Carcharodon carcharias*) - Vulnerable
- Loggerhead Turtle (*Caretta caretta*) - Endangered
- Green Turtle (*Chelonia mydas*)
- Leatherback Turtle (*Dermochelys coriacea*) - Endangered
- Hawksbill Turtle (*Eretmochelys imbricata*)
- Flatback Turtle (*Natator depressus*)
- Leaf-scaled Seasnake (*Aipysurus foliosquama*) - Critically Endangered
- Short-nosed Seasnake (*Aipysurus apraefrontalis*) - Critically Endangered

Benthic biota in the Proposed Action area is expected to be typical of an unpolluted tropical offshore environment.

Studies by Woodside (2020) in relation to the Scarborough Development and trunk line described the area as being predominantly flat and featureless, comprising thick, unconsolidated fine grained sands, supporting soft sediment benthic communities dominated by infauna (including molluscs, crustaceans and worms) with isolated larger fauna (free swimming cnidarian, demersal fish and benthic crustaceans). Woodside (2020) noted that extensive studies completed within the region indicate that benthic composition in deepwater habitats is generally lower in abundance than shallow water habitats (CoA 2008, Brewer et al. 2007). The Exmouth Plateau support patchy mobile epibenthos (CoA 2008) and sparse benthic filter feeders and epifauna (Brewer et al. 2007).

In 2007, CSIRO conducted benthic habitat mapping surveys and sampling in the deep waters (100 to 1000 m) within the NWMR. Survey sites located on the continental slope (approximately 400 m water depth) predominantly comprised soft muddy sediments with sparsely distributed epifauna and limited to isolated individual sessile biota and occasional non- sessile, mobile fauna (Williams et al., 2010).

Based on this, the benthic habitats and biota in the project area are considered to be of relatively low environmental sensitivity in terms of the broader NWMR.

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

Benthic biota in the Proposed Action area is expected to be typical of an unpolluted tropical offshore environment.

Seagrasses and macroalgae are mostly located shallow waters at depths of <10-50m. The Proposed Action is located in waters 100 – 5000m depth with the vast majority at depths in excess of 200 m. Given these depths and the absence of light at these depths, no vegetation is expected to occur.

This is supported by the above discussed studies including Woodside (2020) who described the area as being predominantly flat and featureless, comprising thick, unconsolidated fine grained sands, supporting soft sediment benthic communities dominated by infauna with isolated larger fauna, and CSIRO (2007) who found sites located on the continental slope (approximately 400 m water depth) predominantly comprised soft muddy sediments with sparsely distributed epifauna and limited to isolated individual sessile biota and occasional non- sessile, mobile fauna (Williams et al., 2010).

3.3 Heritage

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 proposal area. No other heritage sites have been identified in the proposal area. The PMST report is provided in Att 3 - PMST Report.pdf

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

No Indigenous heritage sites have been identified within the proposal area. 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. Significant impacts to the marine environment as a result of the Proposed Action are not expected. No impact on Indigenous cultural heritage values are predicted.

The cable route crosses an area of Native Title in the area close to Port Hedland. Native title exists in parts of the determination area in accordance with determination WCD2018/015 - Kariyarra. Vocus has initiated consultations with Kariyarra representatives and is in the process of confirming relevant procedural rights under the Native Title Act 1993 that apply to the Proposed Action.

3.4 Hydrology

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

Not relevant - The Proposed Action will be undertaken completely within the Commonwealth marine environment.

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

EPBC Act section	Controlling provision	Impacted	Reviewed
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

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.

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

No

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

The PMST did not identify any World Heritage Sites the Project Area

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.

—

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

No

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

The PMST did not identify any National Heritage sites the Project Area

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.

—

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

No

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

The PMST did not identify any RAMSAR wetlands in the Project Area

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
No	No	Aipysurus apraefrontalis
No	No	Aipysurus foliosquama
No	No	Balaena glacialis australis
No	No	Balaenoptera borealis
No	Yes	Balaenoptera musculus
No	No	Balaenoptera physalus
No	No	Calidris canutus
No	No	Calidris canutus

Direct impact	Indirect impact	Species
No	No	Calidris ferruginea
No	No	Carcharodon carcharias
No	No	Carcharias taurus (west coast population)
No	Yes	Caretta caretta
No	Yes	Chelonia mydas
No	No	Dermodochelyidae
No	No	Diomedea chlororhynchos carteri
No	Yes	Eretmochelys imbricata
No	No	Macronectes giganteus
No	Yes	Megaptera novaeangliae
No	Yes	Natator depressus
No	No	Numenius madagascariensis
No	No	Phaethon lepturus fulvus
No	No	Pristis clavata
No	No	Pristis pristis
No	No	Pristis zijsron
No	No	Pterodroma mollis
No	Yes	Rhincodon typus
No	No	Sternula nereis nereis
No	No	Thunnus maccoyii

Ecological communities

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

Yes

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

Potential impacts to threatened species from the Proposed Action may occur as a result of

- The light emissions from the cable lay vessel will be similar to that of standard marine construction vessels and are unavoidable due to safety and navigational requirements
- Interaction with installation vessel: Injury may occur to large marine fauna as a result of interaction with the cable lay or vessel strike). Given the short duration of the proposed activities; and the low speed at which the vessels will be travelling (2-5 knots), it is considered highly unlikely that any impacts will occur to marine fauna as a result of vessel strike.
- Disturbance by vessel noise: The installation vessel will operate using standard dynamic positioning to maintain heading during cable lay. This will result in localized and temporary noise emissions that may impact marine fauna in the area. Given any exposure will be minimal and of extremely short duration, these impacts would be limited to minor behavioural impacts (avoidance) and would not be significant.

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

No

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

An assessment on the significance of potential impacts on threatened species is presented in the following sections of Att 5 - Review of potential impacts to MNES.pdf:

- Section 2.2 - Birds (page 3)
- Section 2.3 - Marine mammals (pages 3 - 5)
- Section 2.4 - Fish (page 5)
- Section 2.5.1 - Marine turtles (pages 5 - 6)
- Section 2.5.2 - Sea snakes (page 6-7)
- Section 2.6 - Conclusion (page 7).

This assessment concluded that if any impact to threatened species occurs, this would be limited to a temporary (minutes) and minor behavioural impact (disturbance, avoidance behaviour) to a small number of individuals if present in the area and would have no lasting effect on individuals. These impacts are not significant in considerations of the Significant Impact Guidelines for threatened species.

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

No

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

The Proposed Action intersects the following important habitat for threatened species:

- Humpback whale migratory BIA
- Whale shark foraging BIA
- Pygmy blue whale migratory BIA
- Flatback turtle interesting BIA
- Flatback turtle nesting habitat that is critical to the survival of the species.

However, the Proposed Action will not impact this habitat beyond a temporary and localized increase in noise and light emission.

An assessment on the significance of potential impacts on migratory species is presented in Att 5 - Review of potential impacts to MNES.pdf (Section 2.6 Conclusion (page 7)). This assessment concluded that if any impact to threatened listed species occurs, this would be limited to a temporary (minutes) and minor behavioural impact (disturbance, avoidance behaviour) and would have no lasting effect on individuals.

Given this, the Proposed Action is not expected to:

- result in the long-term decrease in the size of a population of a listed species including important populations
- reduce the occupancy of a listed species
- fragment a population of a listed species
- adversely impact habitat critical to the survival of a species
- disrupt the breeding cycle of a listed species
- modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the listed species is likely to decline
- result in invasive species that are harmful to a listed species becoming established in a listed species' habitat
- introduce disease that may cause a listed species to decline, or
- interfere with the recovery of a listed species

Given this and the information presented above, the proposal is not inconsistent with the objectives of the:

- Conservation management plan for the blue whale: A recovery plan under the Environment Protection and Biodiversity Conservation Act 1999 2015–2025 (CoA, 2015).
- Recovery plan for marine turtles in Australia (DoEE, 2017)
- Relevant species conservation advice.

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

Vessel lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.

Invasive Marine Species

The Proponent will comply with Commonwealth biosecurity requirements to prevent the introduction of invasive marine species.

Impacts to Fauna

Interaction between cable lay vessel and cetaceans within the proposed area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:

- Cable lay vessels will not travel at greater than 6 knots within 300 m of a cetacean (caution zone) and minimise noise;
- Cable lay vessels will not approach closer than 50 m for a dolphin and/or 100 m for a whale (with the exception of animals bow riding).

Water quality

Vessels will have appropriate waste management procedures and emergency fuel/ oil spill plans in place.

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

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

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.

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

Yes

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

Refer to attached PMST report (Att 3 - PMST Report.pdf, pages 6-9) for summary of Migratory Species that may occur in the Project Area.

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

- The light emissions from the cable lay vessel will be similar to that of standard marine construction vessels and are unavoidable due to safety and navigational requirements
- Interaction with installation vessel: Injury may occur to large marine fauna as a result of interaction with the cable lay or vessel strike). Given the short duration of the proposed activities; and the low speed at which the vessels will be travelling (2-5 knots), it is considered highly unlikely that any impacts will occur to marine fauna as a result of vessel strike.
- Disturbance by vessel noise: The installation vessel will operate using standard dynamic positioning to maintain heading during cable lay. This will result in localized and temporary noise emissions that may impact marine mammals in the area. Given any exposure will be minimal and of extremely short duration, these impacts would be limited to minor behavioural impacts (avoidance) and would not be significant.

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

No

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

An assessment on the significance of potential impacts on migratory species is presented in the following sections of Att 5 -Review of potential impacts to MNES.pdf:

- Section 3.1 Humpback whales (page 8)
- Section 3.2 Other migratory species (page 8-9)
- Section 3.2 Conclusion (page 9).

This assessment concluded that if any impact to migratory species occurs, this would be limited to a temporary (minutes) and minor behavioural impact (disturbance, avoidance behaviour) to a small number of individuals if present in the area and would have no lasting affect on individuals. These impacts are not significant in considerations of the Significant Impact Guidelines for migratory species.

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

No

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

An assessment on the significance of potential impacts on migratory species is presented in Att 5 - Review of potential impacts to MNES.pdf (Section 3.3 Conclusion (page 9)).

The Proposed Action intersects the following important habitat for migratory species:

- Humpback whale migratory BIA
- Whale shark foraging BIA
- Pygmy blue whale migratory BIA
- Flatback turtle interesting BIA
- Flatback turtle nesting habitat that is critical to the survival of the species

However the Proposed Action will not impact this habitat beyond a temporary and localized increase in noise and light emission and as such will not substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate this important habitat.

Compliance with Commonwealth Biosecurity requirements will ensure that invasive species that is harmful to the migratory species do not becoming established in an area of important habitat as a result of the Proposal Action.

This assessment concluded that if any impact to threatened listed or migratory species occurs, this would be limited to a temporary (minutes) and minor behavioural impact (disturbance, avoidance behaviour) to a small number of individuals if present in the area and would have no lasting affect on individuals. As such, the Proposed Action will not seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.

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

Light Emissions

Vessel lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.

Invasive Marine Species

The Proponent will comply with Commonwealth biosecurity requirements to prevent the introduction of invasive marine species.

Impacts to Fauna

Interaction between cable lay vessel and cetaceans within the proposed area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:

- Cable lay vessels will not travel at greater than 6 knots within 300 m of a cetacean (caution zone) and minimise noise;
- Cable lay vessels will not approach closer than 50 m for a dolphin and/or 100 m for a whale (with the exception of animals bow riding).

Water quality

Vessels will have appropriate waste management procedures and emergency fuel/ oil spill plans in place.

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

No significant residual impacts are predicted to result to migratory species as a result of the Proposed Action. As such no offsets are proposed.

Nuclear

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

No

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

The Proposed Action is not a nuclear action.

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.

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

Yes

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

The Proposed Action is located with the Commonwealth marine area. No portion of the Proposed Action is located in an Australian Marine Park. The proposed cable route crosses over the Ancient coastline at 125 m depth contour, Continental Slope Demersal Fish Communities and Exmouth Plateau Key Ecological Features (KEFs) as shown in Att 1 - Location Map.pdf

The potential direct and indirect impacts to the Commonwealth Marine Environment from the Proposed Action are described in , Att 5 - Review of potential impacts to MNES.pdf:

- Section 4.1 Seabed disturbance (page 10)
- Section 4.2 Marine water quality (page 10 - 11)
- Section 4.3 Invasive marine species (page 11).

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

No

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

For a review of the significance of potential impacts to the Commonwealth Marine Environment, please refer to Att 5 - Review of potential impacts to MNES.pdf:

- Section 4.1 Seabed disturbance (page 10)
- Section 4.2 Marine water quality (page 10 - 11)
- Section 4.3 Invasive marine species (page 11).
- Section 4.4 Conclusion (page 11).

Significant impacts to Commonwealth marine environment are not predicted to occur given that seabed disturbance will only impact a small area in comparison with the entirety of the North-west bioregion and KEFs. Impacts to deepwater benthic habitat are as a result of this seabed disturbance are expected to be reversible, with benthic biota expected to re-colonise the area. No lasting impact to water quality will occur as a result of the Proposed Action.

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

No

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

For a review of the significance of potential impacts to the Commonwealth Marine Environment, please refer to Att 5 - Review of potential impacts to MNES.pdf (Section 4.4 Conclusion (page 11)).

Vocus do not think the Proposed Action is a Controlled Action as the assessment of impacts indicates that:

Threatened and Migratory Species

The Proposed Action will not:

- result in the long-term decrease in the size of a population of a listed species including important populations
- reduce the occupancy of a listed species
- fragment a population of a listed species
- adversely impact habitat critical to the survival of a species
- disrupt the breeding cycle of a listed species
- modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the listed species is likely to decline
- result in invasive species that are harmful to a listed species becoming established in a listed species' habitat
- introduce disease that may cause a listed species to decline, or
- interfere with the recovery of a listed species.

And the Proposed Action is not inconsistent with the objectives of the:

- Conservation management plan for the blue whale: A recovery plan under the Environment Protection and Biodiversity Conservation Act 1999 2015–2025 (CoA, 2015).
- Recovery plan for marine turtles in Australia (DoEE, 2017)
- Relevant species conservation advices.

Commonwealth Marine Environment

The Proposed Action will not be expected to:

- result in the establishment of a pest species.
- modify, destroy, fragment, isolate or disturb an important or substantial area of habitat such that an adverse impact on marine ecosystem functioning or integrity in a Commonwealth marine area results.
- have a substantial adverse effect on a population of a marine species or cetacean.
- result in a substantial change in air quality or water quality (including temperature).
- result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment.
- have any adverse impact on heritage values.

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

Light Emissions

Vessel lighting will be maintained at levels that allow safe operation of equipment i.e. no excess lighting.

Invasive Marine Species

The Proponent will comply with Commonwealth biosecurity requirements to prevent the introduction of invasive marine species.

Impacts to Fauna

Interaction between cable lay vessel and cetaceans within the proposed area will be consistent with EPBC Regulations 2000 – Part 8 Division 8.1 (Regulation 8.04 – Interacting with cetaceans) which are as follows:

- Cable lay vessels will not travel at greater than 6 knots within 300 m of a cetacean (caution zone) and minimise noise;
- Cable lay vessels will not approach closer than 50 m for a dolphin and/or 100 m for a whale (with the exception of animals bow riding).

Water quality

Vessels will have appropriate waste management procedures and emergency fuel/ oil spill plans in place.

Seabed disturbance

Survey data has been used to finalize the proposed cable route to avoid key seabed features and debris. The survey has not identified any shipwrecks along the cable route.

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

No significant residual impacts have been identified. As such no offsets are proposed.

Great Barrier Reef

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

No

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

The Proposed Action is not in close proximity to the Great Barrier Reef.

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

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

No

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

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

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.

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

No

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

The Proposed Action is not on Commonwealth Land.

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.

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

No

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

The Proposed Action will not impact a Commonwealth heritage places overseas.

Commonwealth or Commonwealth Agency**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

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

No

Describe why alternatives for your proposed action was not possible. *

The route location is driven by the location of the existing infrastructure and the location of the customer connections. Within these constraints, the route has been optimized to avoid significant seabed features.

The timing of the action is driven by vessel availability and customer requirements. Revising the schedule would not materially affect the overall environmental outcome.

The proposed activities are standard installation techniques.

5. Lodgement

5.1 Attachments

1.2 Overview of the proposed action

#1.	Att 1 - Location Map.pdf	Document	Location Map
#2.	Att 2 - Cable Details and Installation Method.pdf	Document	Description of cable and installation method

1.3 (Proposer's identity) Proposer's history of responsible environmental management

#1.	Att 4 - Vocus Sustainability Principles.pdf	Document	Vocus Sustainability Principles
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3.1 Natural features, important or unique values that applies to the project area

#1.	Att 1 - Location Map.pdf	Document	Location Map showing KEFs
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3.2 Flora and fauna within the affected area

#1.	Att 3 - PMST Report.pdf	Document	PMST Report
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3.3 Commonwealth heritage places overseas or other places that apply to the project area

#1.	Att 3 - PMST Report.pdf	Document	PMST Report showing heritage values
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4.1 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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4.1 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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4.1 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

#1.	Att 3 - PMST Report.pdf	Document	PMST Report
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4.1 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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4.1 (Migratory Species) Why you do not think your proposed action is a controlled action

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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4.1 (Commonwealth Marine Area) Why your action has a direct and/or indirect impact on the identified protected matters

#1.	Att 1 - Location Map.pdf	Document	Location Map showing KEFs
#2.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES

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

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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4.1 (Commonwealth Marine Area) Why you do not think your proposed action is a controlled action

#1.	Att 5 - Review of potential impacts to MNES.pdf	Document	Review of potential impacts to MNES
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5.2 Declarations

Completed Referring party's declaration

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

ABN	78127842853
Organisation name	Vocus Pty Ltd
Organisation address	452 Flinders St, Melbourne, 3000, VIC, Australia
Representative's name	Simon Harriss
Representative's job title	Project Manager
Phone	0386206481
Email	simon.harriss@vocus.com.au
Address	

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

I would like to receive notifications and track the referral progress through the EPBC portal. *

- By checking this box, I, **Simon Harriss of Vocus 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. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *

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.

Same as Referring party information.

- Check this box to indicate you have read the referral form. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *
- I, **Simon Harriss 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. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *

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. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *
- I, **Simon Harriss 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. *
- I would like to receive notifications and track the referral progress through the EPBC portal. *