

Project summary

Application type

Please select the type(s) of application you are applying for.

If you wish to apply for a section 36 or 36A consent or a safety zone in addition to your marine licence application please tick the relevant box.

If you wish to also apply for consent under a local Act or Order please tick the Local Act consent box. Please explain which local Act or Order consent you are applying when giving details of the project background below. You should also upload a copy of the local Act or Order there too.

Application type

Marine licence

Please tick all additional application types that are relevant.

Additional application types

- Section 36
- Section 36A
- Local Act consent
- Safety zone

Project details

Project title

FAB Link

Project background

FAB Link is a 220km proposed underground and subsea interconnector which will allow exchange and trading of up to 1400MW of electricity between France and Britain via Alderney. The cable will cross the channel island of Alderney in order to connect future renewable tidal stream generation in the seas around Alderney.

The project is designated as a European Project of Common Interest (PCI project no. 1.7.1) under the provisions of EU TEN-E Regulations and can access funding through the Connecting Europe Facility (CEF). It has been granted an Interconnector Licence by the UK Gas and Electricity Markets Authority and has been granted Interim Project approval under the Interconnector "cap and floor" regime by OFGEM.

The marine cables cross the jurisdictions of four competent authorities: UK territorial waters and EEZ; France EEZ; and States of Guernsey and States of Alderney territorial waters.

A Marine Licence is required for laying and burial of a cable within 12 nautical miles of the coastline (i.e. territorial waters) and the deposition of cable protection material and seabed preparation within the offshore marine area (outside of 12 nautical miles, EEZ). In response to a request for a screening opinion from FAB Link Ltd, the MMO has confirmed that the installation of cables does not constitute 'Environmental Impact Assessment (EIA) Development as defined under the Marine Works (Environmental Impact Assessment) Regulations 2007. They have confirmed that a statutory EIA is not required to support the Marine Licence application. However, under Schedule 9 of the Electricity Act 1989, FAB Link Ltd, as the interconnector licence holder, has a "duty to preserve amenity" and to meet its obligations have undertaken a non-statutory Environmental Appraisal. The attached Environmental Report (Rev1) reports on the environmental appraisal process, its findings and conclusions for the marine components of the project. The need for the project is described in Section 1.3

FAB LINK Offshore Environmental Report (P2024_R4010_Rev1) Report only.pdf

Created By:Mrs Anna Farley

07-DEC-2016 12:42:58

FAB LINK Offshore Environmental Report (P2024_R4010_Rev1) Appendices only.pdf

Created By:Mrs Anna Farley

07-DEC-2016 12:43:35

Programme of works

An indicative project programme is provided in Section 4.3 of the accompanying FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

The project is expected to take between 3 and 4 years to implement. Installation of the marine cables is scheduled to take place from Q2 2018 until 2021. Installation operations are likely to occur during 2019 and 2020 within UK waters (subject to confirmation by installation contractor). The availability of capacity for cable manufacture will ultimately determine the overall schedule of the project.

The project will use four high voltage direct current (HVDC) marine cables. The cable installation configuration is to be finalised by the installation contractor. It is most likely to be installed as two bundled pairs of cables. It is likely that one bundle will be installed during 2019 and the other bundle during 2020.

Although detailed engineering surveys have been completed for the marine cable routes further surveys will be completed by the cable installation contractor prior to commencement of cable installation. This typically takes place 3-6 months ahead of installation.

To limit disturbance to residents from the onshore components of the project, works will not place at the Kiln Lane car park Budleigh Salterton, Devon between July and August.

Related consents and applications

Have any other applications been made to the MMO in relation to this project?

Yes No

Has there been any other contact with the MMO in relation to this project?

Yes No

Please give details

Meetings :

6th November 2014 - Progress Meeting

18th June 2015 - Brixham Office

16th December 2015 - Project Development

26th January 2016 - Progress Meeting

Feb 2016 - Screening opinion received from MMO (screening opinion letter and document attached)

10th March 2016 - Telephone Conference Notes

April 2016 - TEN-E Roles, Responsibilities and Requirements Letter received (attached)

4th May 2016 - Project update meeting

22nd June 2016 - MMO / East Devon District Council

14th July 2016 - MMO Progress

August 2016 - Review of Draft application file (attached)

25th October 2016 - Meeting with MMO in Newcastle

26_MMO Screening Opinion Decision Letter 01-02-2016.pdf

Created By:Mrs Anna Farley

01-SEP-2016 09:19:27

28_MMO Response Schedule (2) 01-02-2016.pdf

Created By:Mrs Anna Farley

01-SEP-2016 09:21:37

20160411 - FAB Link Ten-E Roles Responsibilities and Requirements Final.pdf

Created By:Mrs Anna Farley

01-SEP-2016 09:28:42

MMO 20160825 FAB Link Draft Application File Review.pdf

Created By:Mrs Anna Farley

10-NOV-2016 12:05:26

Have any applications been made to or consents issued by other authorities in relation to this project?

Yes

No

Please give details (including the authority name, dates, application reference numbers and the status of the application or consent where possible)

States of Guernsey - Health and Environmental Services
- Office of Environmental Health and Pollution Regulation: Food and Environment Protection Act 1985 (Guernsey) Order 1987, Deposits in the Sea, Application for a FEPA Licence

East Devon District Council - Draft Certificate of Lawful Development application for a Proposed Use or Development (CLPUD) under the Town and Country Planning Act 1990: Section 192 as amended and the Town and Country Planning (Development Management Procedure) (England) Order 2015 - attached

France - Application for DUP (Declaration of Public Utility), CUDPM (Concession for Use of Public Maritime Domain), Water Act Authorisation, Urban Planning Compatibility.

2010 03 Application to Undertake Marine Works Guernsey Waters Rev1.pdf
Created By:Mrs Anna Farley
07-DEC-2016 15:20:58

Do you have statutory powers to consent or undertake without consent any aspect of this project?

Yes No

Please give details

The applicant, FAB Link Ltd, is a licence holder within the meaning of section 64(1) of the Electricity Act 1989, and so for the purpose of Class G, Part 17 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 2015 (as amended) is a statutory undertaker in the UK.

Is the project located within the jurisdiction of a statutory harbour authority?

Yes No

Applicant details

This is the person, company or organisation that will hold the licence.

Contact type

- Individual
 Organisation

Trading title (if applicable)

FAB Link Limited

Title

None

Forename

Chris

Surname

Jenner

Organisation name

FAB Link

Reg number

Position in organisation

Contact within company

Postcode

EC2V 7DA

Postal address

88 Wood Street
London
EC2V 7DA

Telephone number

02036686696

Fax number

Email address

chris.jenner@transmissi
oninvestment.com

Sustainable development

The MMO strongly advise that a strategic appraisal is completed. Issues that should be considered include:

1. Identification of any conflicts between the project and the relevant marine plan.
2. Identification of alignment of the project with the Marine Policy Statement and any

relevant National Policy Statement.

3. Identification of the environmental, social and economic drivers for a project that have been identified through existing feasibility studies or discussions with other public bodies (e.g. Local Authorities or Local Economic Partnerships).
4. Identification of any potential issues that may arise due to EU legislation (e.g. Water Framework Directive, Marine Strategy Framework Directive, Habitats Directive), and how these can potentially be avoided, or mitigated, at the strategic level.
5. Identification of any priority issues that may need addressing with regard to cumulative effects.
6. Options appraisal undertaken by the applicant, and the social, economic and environmental reasoning behind why the preferred option has been chosen.

Please provide your Strategic Appraisal (if completed) by clicking the link below

Marine policy and plans

Have you assessed whether this project is in accordance with the Marine Policy Statement and any relevant marine plans?

Yes No

Please give details

Please refer to Chapter 2 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

If possible, please provide a copy of the assessments done

Have you assessed this project with regard to other policy statements and spatial plans?

Yes No

Please give details

Please refer to Section 2.2 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

If possible, please provide a copy of the assessments done

Environmental impact assessment

Has an environmental statement been produced to support this project?

Yes No

Habitats regulations assessment

Have the effects of the project on European sites been considered?

Yes No

Please give details

Please refer to Chapter 10 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1). Natura 2000 sites within 10km of the marine cable corridor were assessed. In addition, sites within 100km with mobile species that are likely to travel into the marine cable corridor (e.g. fish, birds and/or marine mammals) were also included in the assessment. The appraisal concluded that the project will not adversely effect the integrity of any protected site and therefore a separate HRA has not been undertaken.

If possible, please provide a copy of the assessments done

Marine conservation zone assessment

Have the effects of the project on marine conservation zones been considered?

Yes No

Please give details

Please refer to Chapter 10 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1). MCZ sites within 10km of the marine cable corridor were assessed. In addition, sites within 100km with mobile species that are likely to travel into the marine cable corridor (e.g. fish, birds and/or marine mammals) were also included in the assessment. The appraisal concluded that the project will not adversely effect the integrity of any protected site and therefore a separate MCZ assessment has not been undertaken.

If possible, please provide a copy of the assessments done

Sites of special scientific interest

Have the effects of the project on sites of special scientific interest (SSSI) been considered?

Yes No

Please give details

Please refer to Chapter 10 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1). SSSI within 10km of the marine cable corridor were assessed. In addition, sites within 100km with mobile species that are likely to travel into the marine cable corridor (e.g. fish, birds and/or marine mammals) were also included in the assessment. The appraisal concluded that the project will not adversely effect the integrity of any protected site.

If possible, please provide a copy of the assessments done

Water Framework Directive compliance assessment

Have the effects of the project been considered in accordance with the Water Framework Directive?

Yes No

Please give details

Please refer to Chapter 6 of the attached FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

If possible, please provide a copy of the assessments done

Consultation and advertising

Has public consultation taken place and/or has the project been advertised?

Yes No

Please give details

Public consultations on the FAB project were held in Britain and Alderney from Monday 25 July 2016 until Monday 5 September 2016. Public meetings were held at:

- *Budleigh Salterton, Methodist Church Hall - 26 July (UK landfall)
- *Younghayes Centre, Cranbrook - 27 July (mid point along land cable route)
- *Woodbury Park Hotel, Woodbury - 28 July (converter station location)
- *States of Alderney Government offices - 10 August (Alderney landfalls)

Consultation documentation were available to view on the project website (www.fablink.net) from 25 July, along with an opportunity to provide feedback on the proposals.

Has consultation about the project with any other statutory body taken place?

Yes No

Please give details

FAB Link Ltd commenced early consultation on the project in June 2015. To date meetings have been held with a large number of organisations in the UK, States of Alderney and States of Guernsey. Full details of the consultation will be provided in the projects Consultation Feedback Report which will be submitted with the FINAL Marine licence application. Of particular note, FAB Link Ltd has consulted with the following statutory bodies:

- *States of Guernsey
- *Environment Agency
- *JNCC
- *Historic England
- *Natural England
- *MCA
- *Trinity House

FAB Consultation Report December 2016.pdf
Created By:Mr Chris Jenner
02-DEC-2016 13:44:20

Licence summary

Do you consider this application to be for emergency activities?

Yes No

Do you consider this application to be for activities which fall within the fast track process?

Yes No

Do you consider this application would qualify for the accelerated licensing process for dredging?

Yes No

Proposed licence start date

01-JUL-2018

Proposed licence end date

31-DEC-2071

Site summary

Please provide the location of your proposed activities. Note that the responsibility for determining whether your proposed activities are below Mean High Water Springs (MHWS) rests with the applicant. If there is any doubt as to whether a site lies below MHWS you can undertake an independent survey to determine its location.

Use the 'Add/edit site(s)' button below to add one or more more locations to your application.

Next use the 'Add activity' button to add activities to your locations. (NB this option only appears once a location is created).

Basic examples:

Dredging at RiverA. Create one site for RiverA and add dredging as an activity.
 Dredging and quay wall improvements at RiverA. Create 2 locations: one for the dredging in front of the new quay area and one for the quay wall improvements.
 Dredging at RiverA and removal of large concrete block within the dredge area. Create 1 location and add two activities: 1 activity for removal and 1 activity for dredging.

Additional functions:

Subsites, Holes and Exclusion Zones can also be used more guidance is available in the 'Help' guide.

Activities:

When an activity is added to a site it is listed in a table. Click on the activity name in the table or use the links on the left hand side of this screen to navigate to the activity screen where you can provide your method statement and other information.

If you delete a site, the activities linked to it will still be visible on this screen. You must delete these activities or move them to a valid site.

If you would like any advice on using this form or structuring your application please contact us.

Sites

Please see included locations.kml file for detailed site locations.

Corridor_UK

Site sensitivities

Landfall at Budleigh Salterton is within the Dorset and East Devon Coast World Heritage Site and East Devon Area of Outstanding Natural Beauty. The Otter Estuary SSSI and Otter estuary rMCZ are 100m from the marine cable corridor at their closest approach. The Exe Estuary SPA, Ramsar & SSSI and Dawlish Warren SSSI are within 10km of the marine cable corridor. The proximity of other protected sites is detailed in Chapter 10 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

All features of social, economic or environmental value along the marine cable corridor are described in the appropriate topic Chapters within the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1). In summary, features of note along the marine cable corridor include:

- * EC Habitats Directive Annex I Maerl beds
- * EC Habitats Directive bedrock reef and low grade stone reef
- * Commercial mussel cultivation site (1km to east of corridor)
- * Commercial fishing grounds
- * Military practice areas
- * Casquets Traffic Separation Scheme (northern lane in UK waters)

List of activities at this site

Activity	Site	Activity type	Actions
Corridor_UK - FAB Link - Installation - Deposit of materials for the purposes of cable protection	Corridor_UK	Other deposits	
Corridor_UK- FAB Link - Cable repair & maintenance - Deposit of material for the purposes of cable repair or maintenance	Corridor_UK	Other deposits	
FAB Link - Unexploded Ordnance (UXO) - detonation during installation	Corridor_UK	Incineration of any substance or object at sea	
Corridor_UK - FAB Link - Operation and Maintenance Works	Corridor_UK	Maintenance of existing works	
Corridor_UK - FAB Link - Cable installation within UK territorial waters (up to 12 nm)	Corridor_UK	Other deposits	
		Other removals	

FAB Link - Unexploded ordnance (UXO) - removal during cable installation	Corridor_UK	
FAB Link - Unexploded Ordnance (UXO) - detonation during maintenance & repair	Corridor_UK	Incineration of any substance or object at sea
FAB Link - Unexploded Ordnance (UXO) - removal during maintenance & repair	Corridor_UK	Other removals

Corridor_UK - Corridor_UK - FAB Link - Installation - Deposit of materials for the purposes of cable protection

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Deposit of any substance or object

Activity subtype

Other deposits

General

Activity title

Corridor_UK - FAB Link - Installation - Deposit of materials for the purposes of cable protection

Activity description

Rock placement is used to protect subsea cables by covering them in a continuous profiled berm of graded rock. The berm provides a strong protective cover to prevent potential impact and snagging, and also ensures stability by shielding the cable from the current flow. The size of the berm and grade of rock required will depend on the current and wave loading conditions.

Cable burial assessment has identified that the total length of rock protection in UK waters is 100km. It is not economically feasible to rock protect four separate cables and therefore it is assumed that in areas where rock protection is required cables will be laid bundled (i.e. two cables per trench).

In addition it is estimated that 700 concrete mattresses may be required in UK waters. The exact positions will be determined by the installation contractor but will be within the marine licence application area.

Activity methodology

Please see Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for detailed description of methodology.

Delivery of all materials for deposit on the seabed will be via vessel. Rock placement vessels will be used to deploy rock on site. Of the three mechanisms that can be used (side dumping, split hopper and flexible fall pipe) fall pipe vessels have a big advantage in regions of strong currents, as rock can be more accurately placed.

Concrete mattresses are laid by crane from a general marine installation vessel.

The exact details of vessels deployed and routes used will be defined once an installation contractor has been appointed.

See activity programme below for proposed timings

Activity start date	Activity end date
01-JUL-2018	01-JUL-2021

Activity programme

An indicative project programme is provided in Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

The project is expected to take between 3 and 4 years to implement. Installation of the marine cables is scheduled to take place from Q2 2018 until 2021. Deposits on the seabed for the purposes of cable protection e.g. rock and concrete mattressing, will occur in the same time period. Installation operations are likely to occur during two separate years within UK territorial and EEZ waters (subject to confirmation by installation contractor). The availability of capacity for cable manufacture will ultimately determine the overall schedule of the project.

Potential impacts

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Proposed mitigation

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts.

An Environmental Mitigation Schedule is provided in Chapter 16 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1). This presents the package of mitigation measures to be incorporated into the design, installation and operation of FAB Link to minimise the risks to the environment. Those pertinent to seabed deposits are listed below:

- Rock and mattresses will only be deployed where adequate burial cannot be adequately achieved.
- Preference for the cables to be installed as bundled cables as far as reasonably practicable.

Measures have also been proposed which minimise the effects on commercial fisheries.

*FAB Link will ensure that berm heights will not exceed 1.5m thereby ensuring that chart datum is reduced by no more than 5% to 15% depending on water depth, but under no circumstances will depth reductions compromise safe navigation.

*The position and height of rock berms that reduce chart datum by more than 5% will be communicated to the UKHO and KIS-ORCA for inclusion on Admiralty Charts and fishermen’s awareness charts (paper and electronic format) so that mariners are aware of the location.

Residual risks

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

The report concluded that there will potentially be residual effects of minor significance on benthic habitats as a consequence of seabed deposits and negligible residual effects on the commercial fishing industry. These are discussed in detail in Chapters 7 and 11 respectively.

Additional supporting information

Other deposits

Material details

Start date	End date	Description	Amount to be
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			deposited (kg)
01-JUL-2018	01-JUL-2021	Rock for the purposes of cable protection. Berms will be approximately 9m wide by 1.5m tall. Rock weight per length = maximum 5 Te/m. Maximum 2 trenches for 90km of route will need protection	515740000
01-JUL-2018	01-JUL-2021	700 x concrete mattresses. 6m long x 3m wide x maximum 0.45m deep. Maximum weight 20 tonnes per mattress.	14000000
01-JUL-2018	01-JUL-2021	cast iron shells (contingency - would be used instead of rock) 100km x 42.8kg/m x 4 cables	17120

Further details

Additional information

Supporting documents

Corridor_UK - Corridor_UK- FAB Link - Cable repair & maintenance - Deposit of material

for the purposes of cable repair or maintenance

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Deposit of any substance or object

Activity subtype

Other deposits

General

Activity title

Corridor_UK- FAB Link - Cable repair & maintenance - Deposit of material for the purposes of cable repair or maintenance

Activity description

Cable repairs to correctly installed and protected marine cables are infrequent but require seabed deposits similar to that used during installation. Please refer to Section 4.8.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for the activity description and methodology. FAB Link requires a marine licence to cover discrete incidents of repairs or replacement over the operational lifetime of the cable (50 years) limited to a maximum single cable length of 1km; 1km x 2 for bundled cable and 1km x 3 for bundled cable including the fibre optic.

Activity methodology

Please refer to Section 4.8.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Activity start date	Activity end date
01-JUL-2021	31-DEC-2071

Activity programme

A cable repair operation might be expected to have a duration of between two and six weeks.

Potential impacts

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Repair and maintenance activities will have a similar impact to the installation activities

Proposed mitigation

An Environmental Mitigation Schedule is provided in Chapter 16 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1). This presents the package of mitigation measures to be incorporated into the design, installation and operation of FAB Link to minimise the risks to the environment. Those pertinent to seabed deposits are listed below:

- Rock and mattresses will only be deployed where adequate burial cannot be adequately achieved.
- Preference for the cables to be installed as bundled cables as far as reasonably practicable.

*FAB Link will ensure that berm heights will not exceed 1.5m thereby ensuring that chart datum is reduced by no more than 5% to 15% depending on water depth, but under no circumstances will depth reductions compromise safe navigation.

*The position and height of rock berms that reduce chart datum by more than 5% will be communicated to the UKHO and KIS-ORCA for inclusion on Admiralty Charts and fishermen's awareness charts (paper and electronic format) so that mariners are aware of the location.

Measures have also been proposed which minimise the effects on commercial fisheries.

Residual risks

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

The report (P2024_R4010_Rev1) concluded that there will potentially be residual effects of minor significance on benthic habitats as a consequence of seabed deposits and negligible residual effects on the commercial fishing industry. These are discussed in detail in Chapters 7 and 11 respectively. This conclusion was based on seabed deposits during initial installation. Seabed deposits for cable repairs will be on a smaller extremely localised scale, and as such not expected to have any significant impacts. Any impacts will be less than those identified for installation operations by the environmental appraisal.

Additional supporting information

Other deposits

Material details

Start date	End date	Description	Amount to be deposited (kg)
01-JUL-2021	31-DEC-2071	Per discrete repair event. Rock for the purposes of cable protection after each discrete repair event. Assumes maximum of 1km of cable needs protection per event. Rock berm will be approximately 9m wide by 1.5m tall. Rock weight per length = maximum 5 Te/m.	5000000
01-JUL-2021	01-JUL-2071	Per discrete event - concrete mattresses. Contingency to be used instead of rock. Maximum 170 mattresses. Dimensions 3m x 6m x 0.45m. Maximum weight 20 tonnes per mattress	3400000

01-JUL-2021	01-JUL-2071	Per discrete event - 2 x cable. Assumes two new 1km sections of cable will be required (i.e. bundled cable). Cable weight will be dependent on choice of installation contractor but a maximum of 45kg/m is assumed.	90000
01-JUL-2021	01-JUL-2071	Per discrete event - 1 x fibre optic cable. Assumes a new 1km section of fibre optic cable will be required at a weight of 2kg/m.	2000

Further details

Additional information

Supporting documents

Corridor_UK - FAB Link - Unexploded Ordnance (UXO) - detonation during installation

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Incineration of any substance or object

Activity subtype

Incineration of any substance or object at sea

General**Activity title**

FAB Link - Unexploded Ordnance (UXO) - detonation during installation

Activity description

Please refer to Appendix D of the appended report 05-4509-A-EN-REP-001 WP A Report - Rev 02.pdf and Section 4.4.4 of the FAB Link Offshore Environmental Report.

Various types of UXO may be encountered along the entire cable route. These items are likely to be present on the seabed or in a state of partial or complete burial, depending on the size / density of the item and the seabed sediment.

Smaller items such as small air-delivered bombs, projectiles, grenades, mortars, etc may have the potential to become shallow-buried or partially buried in some areas, particularly the shallow, coastal extents of the route and the locations of mobile sediments, where currents and wave action affects / reworks seabed sediment.

Therefore if such items are present in the path of the plough, they are likely to be encountered and could therefore be a potential threat to equipment, environment and personnel.

05-4509-A-EN-REP-001 WP A Report - Rev 02.pdf

Created By:Mrs Anna Farley

01-SEP-2016 16:00:11

Activity methodology

Please refer to Section 4.4.4 of the FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Activity start date	Activity end date
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01-JUL-2018	01-JUL-2021
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Activity programme

Please refer to Section 4.4.4 of the FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Potential impacts

The potential impact of UXO detonation on fish and marine mammals has been assessed in Section 8.5.6 and Section 9.7.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Proposed mitigation

A UXO survey will be undertaken within 6 months of installation works. If any significant UXO are identified the following decision making process will be followed:

1. Avoid by micro-routing the marine cables.
2. If it cannot be avoided, consider whether it is safe to move.
3. If it cannot be moved, detonate on site.

FAB Link Ltd will require the appointed UXO contractor follows the "JNCC guidelines for minimising the risk of injury to marine mammals from using explosives" (JNCC 2010b) including:

- Establishing a default 1km mitigation zone for marine mammal observation, measured from the explosive source and with a circular coverage of 360 degrees.
- Providing a trained Marine Mammal Observer to implement the guidelines outlined in Section 2.1 to 2.4 e.g. pre-detonation search of mitigation zone.
- Only commence explosive detonations during daylight hours and good visibility.
- Accurately determine the amount of explosive required for the operation, so that the amount is proportionate to the activity and not excessive.
- If necessary, plan the sequence of multiple explosive discharges so that, wherever possible, the smaller charges are detonated first to maximise the 'soft-start' effect.

If UXO is identified that requires detonation, FAB Link Ltd will conduct noise modelling to ensure that the default 1km mitigation zone is sufficient for the weight of charge identified. Natural England, JNCC or the States of Guernsey Office of Environmental Health and Pollution will be consulted as applicable.

Residual risks

The potential impact of UXO detonation on fish and marine mammals has been assessed in Section 8.5.6 and Section 9.7.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Additional supporting information

Corridor_UK - Corridor_UK - FAB Link - Operation and Maintenance Works

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Construction, alteration or improvement of any works

Activity subtype

Maintenance of existing works

General

Activity title

Corridor_UK - FAB Link - Operation and Maintenance Works

Activity description

Please see Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for detailed description of activity.

It is likely that routine surveys using standard geophysical survey equipment and/or remotely operated vehicles to monitor buried depth and integrity of rock berms will be undertaken.

Once installed, marine cables are not expected to require routine maintenance. If a cable fault is detected, usually as a consequence of damage cause by external interaction e.g. trawlers and commercial ship anchors, the relevant section of the cable will be located and retrieved to surface for inspection and replacement. It may be necessary to de-bury the cable prior to cable recovery.

Activity methodology

Please see Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for detailed description of methodology.

Activity start date	Activity end date
01-JUL-2018	31-DEC-2071

Activity programme

A cable repair operation might be expected to have a duration of two to six weeks.

Potential impacts

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Repair and maintenance activities will have a similar impact to the installation activities

Proposed mitigation

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Additionally an Environmental Mitigation Schedule is provided in Chapter 16 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1). This presents the package of mitigation measures to be incorporated into the design, installation and operation of FAB Link to minimise the risks to the environment.

Residual risks

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Additional supporting information

Maintenance of existing works

Use intended to be made of the works

Repair of installed marine cables for the purposes of exporting and importing electricity.

Corridor_UK - Corridor UK - FAB Link - Cable installation within UK territorial waters (up to 12 nm)

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add

another activity.

Activity type

Deposit of any substance or object

Activity subtype

Other deposits

General

Activity title

Corridor UK - FAB Link - Cable installation within UK territorial waters (up to 12 nm)

Activity description

Please see Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for detailed description of activity.

Activity methodology

Please see Chapter 4 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) for detailed description of methodology.

Activity start date	Activity end date
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01-JUL-2018	01-JUL-2021
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Activity programme

The project is expected to take between 3 and 4 years to implement. Installation of the marine cables is scheduled to take place from Q2 2018 until 2021. Installation operations are likely to occur during 2019 and 2020 within UK waters (subject to confirmation by installation contractor). The availability of capacity for cable manufacture will ultimately determine the overall schedule of the project.

Potential impacts

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Proposed mitigation

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Residual risks

The appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1) identifies impacts FAB Link is likely to have on receptors, presents the findings of the impact assessment, describes how impacts (if any) will be mitigated and assess the significance of the residual impacts. These are summarised in risk assessment tables in each relevant chapter.

Additional supporting information

Other deposits

Material details

Start date	End date	Description	Amount to be deposited (kg)
01-JUL-2018	01-JUL-2021	Four 320kV submarine cables from landfall up to 12nm (approx 30km). Weight of cables dependent on selection of installation contractor but assumed to be 45kg/m.	5400000
01-JUL-2018	01-JUL-2021	Two fibre optic cables from landfall up to 12nm (approx 30km). Weight of cables dependent on selection of installation contractor but assumed	60000

to be up to
2kg/m.

Further details

Additional information

Supporting documents

Corridor_UK - FAB Link - Unexploded ordnance (UXO) - removal during cable installation

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Removal of any substance or object

Activity subtype

Other removals

General

Activity title

FAB Link - Unexploded ordnance (UXO) - removal during cable installation

Activity description

Removal of UXO from the seabed during installation. These items are likely to be present on the seabed or in a state of partial or complete burial, depending on the size / density of the item and the seabed sediment.

Smaller items such as small air-delivered bombs, projectiles, grenades, mortars, etc may have the potential to become shallow-buried or partially buried in some areas, particularly the shallow, coastal extents of the route and the locations of mobile sediments, where currents and wave action affects / reworks seabed sediment. Therefore if such items are present in the path of the plough, they are likely to be encountered and could therefore be a potential threat to equipment, environment and personnel.

Please refer to Appendix D of the appended report 05-4509-A-EN-REP-001 WP A Report - Rev 02.pdf.

05-4509-A-EN-REP-001 WP A Report - Rev 02.pdf
 Created By: Mrs Anna Farley
 02-SEP-2016 10:07:41

Activity methodology

Please refer to Section 4.4.4 of the FAB Link Offshore Environmental Report

Activity start date	Activity end date
01-JUL-2018	01-JUL-2021

Activity programme

Removal of UXO could take place any time during installation of the marine cables. Installation of the marine cables is scheduled to take place from Q2 2018 until 2021. Installation operations are likely to occur during 2019 and 2020 within UK waters (subject to confirmation by installation contractor). The availability of capacity for cable manufacture will ultimately determine the overall schedule of the project.

Potential impacts

Removal of objects is not expected to have any environmental impacts.

Proposed mitigation

None proposed.

Residual risks

None

Additional supporting information

Corridor_UK - FAB Link - Unexploded Ordnance (UXO) - detonation during maintenance & repair

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Incineration of any substance or object

Activity subtype

Incineration of any substance or object at sea

General

Activity title

FAB Link - Unexploded Ordnance (UXO) - detonation during maintenance & repair

Activity description

Detonation of UXO during cable maintenance and repair operations. Please refer to Section 4.4.4 of the FAB Link Offshore Environmental Report (P2024_R4010_Rev1). Various types of UXO may be encountered along the entire cable route. These items are likely to be present on the seabed or in a state of partial or complete burial, depending on the size / density of the item and the seabed sediment. Smaller items such as small air-delivered bombs, projectiles, grenades, mortars, etc may have the potential to become shallow-buried or partially buried in some areas, particularly the shallow, coastal extents of the route and the locations of mobile sediments, where currents and wave action affects / reworks seabed sediment. Therefore if such items are present in the path of the plough, they are likely to be encountered and could therefore be a potential threat to equipment, environment and personnel.

05-4509-A-EN-REP-001 WP A Report - Rev 02.pdf

Created By:Mrs Anna Farley

02-SEP-2016 10:17:12

Activity methodology

Please refer to Section 4.4.4 of the FAB Link Offshore Environmental Report (P2024_R4010_Rev1)

Activity start date	Activity end date
01-JUL-2021	31-DEC-2071

Activity programme

A cable repair operation might be expected to have a duration of between two to six weeks.

Potential impacts

The potential impact of UXO detonation on fish and marine mammals has been assessed in Section 8.5.6 and Section 9.7.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Proposed mitigation

If any significant UXO are identified the following decision making process will be followed:

1. Avoid by micro-routing the marine cables.
2. If it cannot be avoided, consider whether it is safe to move.
3. If it cannot be moved, detonate on site.

FAB Link Ltd will require the appointed UXO contractor follows the "JNCC guidelines for minimising the risk of injury to marine mammals from using explosives" (JNCC 2010b) including:

- Establishing a default 1km mitigation zone for marine mammal observation, measured from the explosive source and with a circular coverage of 360 degrees.
- Providing a trained Marine Mammal Observer to implement the guidelines outlined in Section 2.1 to 2.4 e.g. pre-detonation search of mitigation zone.
- Only commence explosive detonations during daylight hours and good visibility.
- Accurately determine the amount of explosive required for the operation, so that the amount is proportionate to the activity and not excessive.
- If necessary, plan the sequence of multiple explosive discharges so that, wherever possible, the smaller charges are detonated first to maximise the 'soft-start' effect.

If UXO is identified that requires detonation, FAB Link Ltd will conduct noise modelling to ensure that the default 1km mitigation zone is sufficient for the weight of charge identified. Natural England, JNCC or the States of Guernsey Office of Environmental Health and Pollution will be consulted as applicable.

Residual risks

The potential impact of UXO detonation on fish and marine mammals has been assessed in Section 8.5.6 and Section 9.7.2 of the appended FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Additional supporting information

Corridor_UK - FAB Link - Unexploded Ordnance (UXO) - removal during maintenance & repair

Site

Please see included locations.kml file for detailed site locations.

Activity details

Activity type

Please select the type of activity that would take place. If more than one activity would take place you should enter the details of one activity here and then add another activity.

Activity type

Removal of any substance or object

Activity subtype

Other removals

General

Activity title

FAB Link - Unexploded Ordnance (UXO) - removal during maintenance & repair

Activity description

Removal of UXO during cable maintenance and repair operations.
Please refer to Section 4.4.4 of FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Various types of UXO may be encountered along the entire cable route. These items are likely to be present on the seabed or in a state of partial or complete burial, depending on the size / density of the item and the seabed sediment.

Smaller items such as small air-delivered bombs, projectiles, grenades, mortars, etc may have the potential to become shallow-buried or partially buried in some areas, particularly the shallow, coastal extents of the route and the locations of mobile sediments, where currents and wave action affects / reworks seabed sediment.

Therefore if such items are present in the path of the plough, they are likely to be encountered and could therefore be a potential threat to equipment, environment and personnel.

Activity methodology

Please refer to Section 4.4.4 of FAB Link Offshore Environmental Report (P2024_R4010_Rev1).

Activity start date	Activity end date
01-JUL-2021	31-DEC-2071

Activity programme

A cable repair operation might be expected to have a duration of between two and six weeks

Potential impacts

Removal of objects is not expected to have any environmental impacts.

Proposed mitigation

None proposed.

Residual risks

None.

Additional supporting information

Licence conditions

Are there any conditions you consider should be added to the marine licence?

Yes No

Online contacts

Name

MMO Application Contacts

Description

MMO Application Contacts

Central Contact Details	Team Coordinator	Edit/Prep are Application	Submit Application	Applicant	Co-applicant	Copy Recipient	Invoice Address
Anna Farley	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Role

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Role

Other details

Fees and charges

Cost of project seaward of mean high water springs (£)

500000

Public register

Permission to add your data to the MMO evidence base:

The Marine Management Organisation (MMO) has gathered information from a number of existing sources to support marine planning, marine licensing and associated functions of the MMO. The MMO is continuously adding to the evidence base to support future decision making, with the aim to ensure a sustainable future for our coastal and offshore waters.

A new marine plan led system of marine management will set the direction for decision making on marine use and will:

- guide marine users to the most suitable locations for different activities;
- manage the use of marine resources to ensure sustainable levels; and
- consider all the benefits and impacts of current and future activities that occur in the marine environment.

1.The MMO would like your permission to use any of the data you submit in a digital format that can be entered into a geographical information system. This data may be used to inform MMO functions.

Can we use your data to inform MMO functions?

- Yes No

2.Under section 101 of the Marine and Coastal Access Act 2009 the MMO must maintain a register of activities where it is the appropriate licensing authority. Information contained within or provided in support of this application will be placed on the MMO's Public Register unless:

- The Secretary of State determines that its disclosure would be contrary to the interests of national security; or
- The MMO determines that its disclosure would adversely affect confidentiality of commercial or industrial information where such confidentiality is provided by law to protect legitimate commercial interest.

Is there any information in your application (including any supporting documents) that you believe should be withheld from the Public Register?

- Yes No