

PENTLAND EAST CABLE REPLACEMENT

Construction Marine Licence Application

Global Offshore Ref No : 2742-GO-G-FO-0001

REVISION	DATE	ISSUE DETAILS	PREPARED	CHECKED	APPROVED
01	15-11-2019	Issue for Review	Intertek	GMSL	GMSL
02	22-11-2019	Issued for Use	Intertek	GMSL	GMSL
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REVISION	SECTION	PAGES	BRIEF DESCRIPTION OF CHANGES	AUTHOR/S OF CHANGE

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Marine Licence Application for Construction Projects

Version 1.0

Marine (Scotland) Act 2010

Acronyms

Please note the following acronyms referred to in this application form:

BPEO	Best Practicable Environmental Option
EIA	Environmental Impact Assessment
ES	Environmental Statement
MHWS	Mean High Water Springs
MMO	Marine Mammal Observer
MPA	Marine Protected Area
MS-LOT	Marine Scotland – Licensing Operations Team
PAM	Passive Acoustic Monitoring
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WGS84	World Geodetic System 1984

Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

1. Applicant Details

The person making the application who will be named as the licensee.

2. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

3. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

4. Application Type

Indicate if the application is for a new construction site or an existing construction site. Provide the existing or previous consent/licence number and expiry date if applicable.

5. Project Details

- (a) Give a brief description of the project (e.g. construction of a new sea outfall).
- (b) Provide the total area of proposed works in square metres.
- (c) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (d) Provide the proposed completion date of the project.
- (e) Provide the cost of the works seawards of the tidal limit of MHWS. This estimate should only cover

work taking place below the tidal level of MHWS and must take into consideration the cost of materials, labour fees etc.

- (f) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the proposed project. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84. In a few cases, (e.g. laying of long pipelines) it may only be practicable to supply co-ordinates for the start and end points.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide photographs of the project location and submit these with your application. Please also provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

Sewer outfalls, discharge pipes for industrial waste etc. The size and description of the pipe must be shown on the longitudinal sections and also details of its supports, foundations, methods of jointing and details of any tidal flaps.

Bridges over tidal waters: An elevation with longitudinal and cross-sections of the bridge to a suitable scale must show the dimensions of the spans and width of piers, etc. above and below MHWS and the maximum and minimum heights of the undersides of the superstructures above MHWS. The headroom above MHWS and the width of span of the nearest bridges, if any, above and below the site must be stated.

Tunnels under tidal waters: The longitudinal section of the tunnel must show the distances between the bed of the river or estuary and the top of the tunnels. Cross-sections must show the internal and external dimensions of the tunnel and particulars of construction. When a proposed future dredging level is known this must also be shown on all sections.

Overhead cables: Catenary must be supplied in addition to the site plan showing the minimum clearance of the cable at MHWS and the electrical clearance allowed.

- (g) Indicate if the project is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (h) Provide a full method statement, including schedule of works and the ultimate fate of the structure.
- (i) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website:

<http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Any application for beach replenishment works must be cross checked as to whether the proposed site is a designated bathing water site. If so, all physical works should ideally be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from <http://apps.sepa.org.uk/bathingwaters/>.

Where there are potential impacts from the works, please provide details of proposed mitigation, such as use of MMOs or PAM, in response to potential impacts.

6. Deposits and/or Removals

- (a) Complete the table to indicate all permanent substances or objects to be deposited and/or removed from below MHWS. If you propose using types of substances or objects for which a specific box is not provided in the table, please describe the nature of such substances or objects in the box marked "other".
- (b) Please indicate the method of delivery of any substance(s) or object(s) to be placed below MHWS.
- (c) Where the proposed work involves salt marsh feeding, beach replenishment or land reclamation the description of the substances or objects must include details of its chemical quality. Where the substances or objects have not been chemically analysed, MS-LOT may request representative samples for analysis or require the applicant to arrange for analyses to be undertaken before the marine licence application can be determined.
- (d) If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (Latitude and Longitude WGS84) must be added to the form, and the period of time the site will be used must be provided. If granting a licence, MS-LOT will include on the document details of any area that has been approved as a temporary deposit site.

7. Disposal of Dredged Substance(s) or Object(s) at Sea

- (a) If you are proposing to dispose of any excess substance(s) or object(s) arising from the project at sea, a separate marine licence will be required (see Dredging and Sea Disposal application form). The granting of a marine licence for construction projects does not imply that a marine licence for sea disposal will also be granted as different assessment criteria are used to determine each type of application. If a separate application is being submitted for dredging and sea disposal then this must be accompanied with a BPEO report.
- (b) Provide the quantity of dredged substance(s) or object(s) for sea disposal in wet tonnes.

8. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

9. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

10. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

11. Pre-Application Consultation

Certain activities will be subject to public pre-application consultation. Activities affected will be large projects with the potential for significant impacts on the environment, local communities and other legitimate uses of the sea. The new requirement will allow those local communities, environmental groups and other interested parties to comment on a proposed development in its early stages – before an application for a marine licence is submitted. Further information can be obtained from: <http://www.scotland.gov.uk/Resource/0043/00439649.pdf>

If applicable, please provide your pre-application consultation report with your application.

12. Consultation (other than carried out under pre-application consultation)

Provide details of all bodies consulted and give details of any consents issued including date of issue.

13. Environmental Assessment

- (a) Under the Marine Works Environmental Impact Assessment (EIA) Regulations 2007, there may be a requirement for certain projects to undergo an EIA and produce an ES. If EIA is required, MS-LOT will not determine a marine licence application until the EIA consent decision in respect of the marine licence application has been reached. Please confirm if the project falls under Annex I or II of Directive 85/337/EEC: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0092&from=EN> in relation to the Marine Works (EIA) Regulations 2007.

Marine licence applications for proposals which fall under the regulations will not be accepted unless a screening opinion has been issued in relation to this.

- (b) Please indicate if an EIA has been undertaken and whether it was for the marine licence application to which this application relates or for any other EIA regulator (e.g local authority). Please attach any previous ES to the application.

MS-LOT will not determine a marine licence application until the EIA consent decision in respect of any regulated activity associated with the marine licence application has been reached.

14. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, marine/harbour construction works, dredging and sea disposal etc). If this is the case, provide reference/licence number for the related marine projects.

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It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act.

Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

- (a) for reasons of national security; YES NO
- (b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES NO

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature [Redacted]

Date 23/12/2109

Name in BLOCK LETTERS

John Buchan on behalf of Scottish Hydro Electric Power Distribution plc

Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- | | |
|--|-------------------------------------|
| • Completed and signed application form | <input checked="" type="checkbox"/> |
| • Project Drawings | <input checked="" type="checkbox"/> |
| • Maps/Charts | <input checked="" type="checkbox"/> |
| • Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority) | <input checked="" type="checkbox"/> |
| • Method Statement | <input checked="" type="checkbox"/> |
| • Photographs of the location of the project | <input checked="" type="checkbox"/> |
| • Additional information e.g. consultation correspondence (if applicable) | <input checked="" type="checkbox"/> |
| • Noise Registry – Initial Registration Form (if applicable) | <input type="checkbox"/> |
| • Pre-application Report (if applicable) | <input checked="" type="checkbox"/> |
| • Environmental Statement (if applicable) | <input checked="" type="checkbox"/> |
| • Payment (if paying by cheque) | <input type="checkbox"/> |



1. Applicant Details

Title: **Mr** Initials: **J** Surname: **Buchan**

Trading Title (if appropriate): **Scottish Hydro Electric Power Distribution plc**

Address: **Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ**

Name of contact (if different):

Telephone No. (inc. dialing code): **01738 516987**

Email: **submarinecablesproject@sse.com**

Statutory Harbour Authority? YES NO

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

2. Agent Details (if any)

Title: **Mr** Initials: **G** Surname: **Munachen**

Trading Title (if appropriate):

Address: : **Fugro House, Denmore Road, Bridge of Don, Aberdeen, AB23 8JW**

Name of contact (if different):

Telephone No. (inc. dialing code): **+44 1224 519863**

Email: **Glenn.Munachen@globalmarine.group**

3. Payment

Enclosed Cheque Invoice

Contact and address to send invoice to:

Applicant Agent Other

If **OTHER**, please provide contact details:

Title: Initials: Surname:

Address:

Email:

4. Application Type

Is this application for a new construction site or an existing construction site:

New Site Existing Site

If an **EXISTING SITE**, please provide the consent/licence number and expiry date:

Consent/Licence Number	Expiry Date

5. Project Details

(a) Brief description of the project (e.g. construction of a new sea outfall):

Replacement of a 33kv distribution submarine electricity cable across the Pentland Firth, landing at Rackwick Bay on the island of Hoy and Murkle Bay on the Scottish mainland.

(b) Total area of the proposed works (in square metres):

17,897,500 m²

(c) Proposed start date (**Target duration for determination of a marine licence application is 14 weeks**):

23rd March 2020

(d) Proposed completion date:

30th September 2021

(e) Cost of the works seawards of the tidal limit of MHWS:

£7,000,000

(f) Location:

Pentland Firth, Scotland. See Figure 1-1 "Overview of the proposed replacement cable route" within the supporting ESI Report document (2742-GO-G-RD-0017).

Latitude and Longitude co-ordinates (WGS84) defining the extent of the project (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude								Longitude							
See		°			.		' N			°			.		' W
		°			.		' N			°			.		' W
		°			.		' N			°			.		' W
		°			.		' N			°			.		' W
		°			.		' N			°			.		' W
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		°			.		' N			°			.		' W
		°			.		' N			°			.		' W

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

YES NO

If **YES**, please specify statutory harbour authority:

Scrabster Harbour

(h) Method statement including schedule of work (continue on separate sheet if necessary):

Beginning at the Rackwick Bay landfall site, the cable will connect into the Rackwick Transition Joint Pit (TJP) found at the northern end of Rackwick Bay. The Pentland Firth East cable is planned to be installed between the two existing cables at each landfall, with excavation of the cable route and TJB taking place prior to the cable pull in. Once all preparations are complete and the Cable Lay Vessel (CLV) is in position at the 1st end pull in site at Rackwick Bay, a support craft will retrieve the pull in winch wire from the shore and take it back to the CLV where it will be connected to the cable end. The shore end winch will commence pulling in the cable with buoyancy units being attached onto the cable as it leaves the vessel in order to 'float' the cable ashore. When the cable has been pulled into position, the buoyancy units will be gradually removed to allow the cable to slowly sink and rest on the seafloor. Once all buoyancy units are removed, the CLV will start to lay the cable along the proposed route to the 2nd end landing point at Murkle Bay. Between the 1st and 2nd end pull-in sites at Rackwick Bay and Murkle Bay respectively, the CLV will lay the cable along the consented installation corridor, with the vessel crew ensuring the mechanical parameters of the cable are adhered to, with expected lay tensions being between 10 and 20kN. The cable will be monitored for touchdown on the seafloor by the vessels remotely operated vehicle (ROV) and/or subsea sonar equipment.

An estimated installation schedule is presented in the ESI Report (2742-GO-G-RD-0017) and supporting Project Description Appendix A – Project Description (Document reference 2742-GO-S-SW-0001)

(i) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

An EIA is not required for submarine cables. However, environmental assessment of potential impacts and proposed mitigation is detailed in the supporting ESI Report (2742-GO-G-RD-0017)

6. Deposits and/or Removals

(a) **Permanent** substance(s) or object(s) to be deposited and/or removed from below MHWS (continue on a separate sheet if necessary):

Type of Deposit/Removal	Deposits		Removals	
	Description	Quantity & Dimensions (metric)	Description	Quantity & Dimensions (metric)
Steel/Iron	Cast iron pipe (2,069m)	No.	-	No.
		Dimensions <small>263mm diameter x 390mm length</small>		Dimensions
		125 Te Weight (kg/tonnes)		Weight (kg/tonnes)
Timber	-	No.	-	No.
		Dimensions		Dimensions
		Weight (kg/tonnes)		Weight (kg/tonnes)
Concrete	Concrete matting	84 No.	-	No.
		Dimensions 6m x 3m		Dimensions
		735 Te Weight (kg/tonnes)		Weight (kg/tonnes)
Plastic/Synthetic	Urduct (Worst case)	566 m ²	-	m ²
Clay (< 0.004 mm)	-	Volume (m ³)	-	Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Silt (0.004 ≤ Silt < 0.063 mm)	-	Volume (m ³)	-	Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Sand (0.063 ≤ Sand < 2.0 mm)	-	Volume (m ³)	-	Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Gravel (2.00 ≤ Gravel < 64.0 mm)	-	Volume (m ³)	-	Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Cobbles (64.0 ≤ Cobbles < 256.0 mm)	-	Volume (m ³)	-	Volume (m ³)
		Weight (kg/tonnes)		Weight (kg/tonnes)
Boulders (≥ 256.0 mm)	Rock bags (x1375)	Volume (m ³)	-	Volume (m ³)
		5500 Te Weight (kg/tonnes)		Weight (kg/tonnes)

Pipe		Length (m)		Length (m)
		External Diameter (cm/m)		External Diameter (cm/m)
Other (please describe below):				
Cable	-	35.795km x 154.7mm	-	
1 tonne grout bags	20 No.	0.9m x 0.9m x 0.9m	each bag contains 40x25kg bags	

(b) Method of delivery of substance(s) or object(s):

Deposits will be stored on the vessel and positioned either using the vessel's crane, or by divers. Full details are available in the Project description (Appendix I – Project Description (Document reference 2742-GO-S-SW-0001)).

(c) For work involving salt marsh feeding, beach replenishment or land reclamation please provide the following information relating to the substance(s) or object(s) to be deposited:

Quantity (tonnes):

- tonnes

Nature of substance(s) or object(s) (e.g. sand, silt, gravel etc.):

-

Source (if sea dredged state location of origin)

-

Particle size:

-

**Have the substance(s) or object(s) been chemically analysed?
If YES, please include the analysis data with your application**

YES NO

(d) **Temporary** substance(s) or object(s) to be deposited below MHWS (continue on a separate sheet if necessary):

Type of Deposit	Description	Quantity & Dimensions (metric)
Steel/Iron		No.
		Dimensions
		Weight (kg/tonnes)
Timber		No.
		Dimensions
		Weight (kg/tonnes)

Concrete		No.
		Dimensions
		Weight (kg/tonnes)
Plastic/Synthetic		m ²
Clay (< 0.004 mm)		Volume (m ³)
		Weight (kg/tonnes)
Silt ($0.004 \leq \text{Silt} < 0.063$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Sand ($0.063 \leq \text{Sand} < 2.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Gravel ($2.00 \leq \text{Gravel} < 64.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Cobbles ($64.0 \leq \text{Cobbles} < 256.0$ mm)		Volume (m ³)
		Weight (kg/tonnes)
Boulders (≥ 256.0 mm)		Volume (m ³)
		Weight (kg/tonnes)
Pipe		Length (m)
		External Diameter (cm/m)
Other (please describe below):		

7. Disposal of Dredged Substance(s) or Object(s) at Sea

(a) Do you intend to apply for a marine licence for sea disposal of dredged substance(s) or object(s) as part of the project?

YES NO

If **YES**, please specify nature of substance(s) or object(s) (e.g sand, gravel, silt, clay, rock etc.):

(b) Quantity of substance(s) or object(s) (wet tonnes):

wet tonnes

A separate marine licence application will be required to be submitted for sea disposal.

8. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project? YES NO

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	
Use of Acoustic Deterrent Devices	
Piling	
Other (please describe below):	

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: <http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

9. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

Yes. Permitted development rights for land cable installation and some elements of overhead line works.

10. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan? YES NO

If **YES**, provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered:

SHEPD has considered all the relevant policies within the NMP when developing the Pentland Firth East replacement cable project.

The Project ESI Report (2742-GO-G-RD-0017 02) has considered all policies relating primarily to Submarine Cables and Sea Fisheries.

Relevant policies to this Project include, but are not limited to: GEN 1, GEN 2, GEN 4, GEN 13, GEN 15, GEN 18 and GEN 12. With reference to GEN 7 and 13:

- GEN7 – The Project has not considered GEN 7 as the works are transient in nature and fully submerged when operational; and
- GEN13 – The project has considered GEN13 EPS and Basking Shark licences are being sought prior to any installation works being undertaken. From an operational perspective this need not be considered.

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

11. Pre-Application Consultation

Is the application subject to pre-application consultation, under The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013?

YES NO

If **YES**, please indicate the date of the public notice for the pre-application consultation event and the type of consultation event held (a copy of the public notice must be supplied with this application):

Event Type	Date
Three open door events were held during September 2019 within the vicinity of the proposed subsea cable development, plus one additional event at the request of the local community. The events consisted of several information boards, presented within Appendix C of the supporting PAC Report. Feedback forms were provided to garner comments and feedback. Copies of the public consultation notices are provided in Appendix A of the PAC Report.	26/7/19 to 01/08/19

12. Consultation

List all bodies you have consulted and provide copies of correspondence:

Scottish Natural Heritage on 21st October 2019
 Pre-Application Consultation (PAC) Events on 10th September 2019 (Hoy), 12th September 2019 (Orkney) and 17th September 2019 (Caithness)
 Orkney Islands Council on 30th April 2019
 Navigational Risk Assessment Workshops on 19th February 2019 (Kirkwall) and 26th March 2019 (Thurso) - NRA provided as Appendix to PAC report.
 RSPB on 12th February 2019

13. Environmental Assessment

(a) Does the project fall under Annex I or II of the EIA Directive?

Annex I Annex II Neither

If **ANNEX I or ANNEX II**, please provide the screening opinion issued to you in relation to the project.

(b) Has an EIA been undertaken:

for the marine licence application to which this application relates
 for any other EIA regulator (e.g local authority)

YES NO
 YES NO

14. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):

Pre-application baseline geophysical and geo-technical surveys carried out.
 EPS licence MS EPS 07 2019 1
 Basking Shark licence MS BS 01 2019 1

ID No.	Cable Route	WGS84 Latitude			WGS84 Longitude		
		Deg	Min		Deg	Min	
1	Rackwick Bay to Murkle Bay	58°	52.299'	N	03°	23.559'	W
2	Rackwick Bay to Murkle Bay	58°	52.224'	N	03°	23.059'	W
3	Rackwick Bay to Murkle Bay	58°	52.063'	N	03°	23.162'	W
4	Rackwick Bay to Murkle Bay	58°	51.999'	N	03°	23.204'	W
5	Rackwick Bay to Murkle Bay	58°	51.999'	N	03°	23.204'	W
6	Rackwick Bay to Murkle Bay	58°	51.908'	N	03°	23.263'	W
7	Rackwick Bay to Murkle Bay	58°	51.854'	N	03°	23.298'	W
8	Rackwick Bay to Murkle Bay	58°	51.844'	N	03°	23.305'	W
9	Rackwick Bay to Murkle Bay	58°	51.835'	N	03°	23.313'	W
10	Rackwick Bay to Murkle Bay	58°	51.826'	N	03°	23.323'	W
11	Rackwick Bay to Murkle Bay	58°	51.818'	N	03°	23.334'	W
12	Rackwick Bay to Murkle Bay	58°	51.810'	N	03°	23.346'	W
13	Rackwick Bay to Murkle Bay	58°	51.803'	N	03°	23.359'	W
14	Rackwick Bay to Murkle Bay	58°	51.788'	N	03°	23.387'	W
15	Rackwick Bay to Murkle Bay	58°	51.714'	N	03°	23.526'	W
16	Rackwick Bay to Murkle Bay	58°	51.706'	N	03°	23.541'	W
17	Rackwick Bay to Murkle Bay	58°	51.698'	N	03°	23.556'	W
18	Rackwick Bay to Murkle Bay	58°	51.691'	N	03°	23.573'	W
19	Rackwick Bay to Murkle Bay	58°	51.685'	N	03°	23.590'	W
20	Rackwick Bay to Murkle Bay	58°	51.518'	N	03°	24.109'	W
21	Rackwick Bay to Murkle Bay	58°	51.285'	N	03°	24.828'	W
22	Rackwick Bay to Murkle Bay	58°	51.202'	N	03°	25.015'	W
23	Rackwick Bay to Murkle Bay	58°	51.200'	N	03°	25.017'	W
24	Rackwick Bay to Murkle Bay	58°	51.200'	N	03°	25.017'	W
25	Rackwick Bay to Murkle Bay	58°	51.102'	N	03°	25.124'	W
26	Rackwick Bay to Murkle Bay	58°	51.095'	N	03°	25.132'	W
27	Rackwick Bay to Murkle Bay	58°	51.087'	N	03°	25.142'	W

28	Rackwick Bay to Murkle Bay	58°	50.975'	N	03°	25.304'	W
29	Rackwick Bay to Murkle Bay	58°	50.966'	N	03°	25.318'	W
30	Rackwick Bay to Murkle Bay	58°	50.958'	N	03°	25.332'	W
31	Rackwick Bay to Murkle Bay	58°	50.951'	N	03°	25.349'	W
32	Rackwick Bay to Murkle Bay	58°	50.786'	N	03°	25.741'	W
33	Rackwick Bay to Murkle Bay	58°	50.781'	N	03°	25.753'	W
34	Rackwick Bay to Murkle Bay	58°	50.777'	N	03°	25.766'	W
35	Rackwick Bay to Murkle Bay	58°	50.773'	N	03°	25.779'	W
36	Rackwick Bay to Murkle Bay	58°	50.652'	N	03°	26.204'	W
37	Rackwick Bay to Murkle Bay	58°	50.647'	N	03°	26.225'	W
38	Rackwick Bay to Murkle Bay	58°	50.643'	N	03°	26.246'	W
39	Rackwick Bay to Murkle Bay	58°	50.640'	N	03°	26.267'	W
40	Rackwick Bay to Murkle Bay	58°	50.637'	N	03°	26.290'	W
41	Rackwick Bay to Murkle Bay	58°	50.609'	N	03°	26.649'	W
42	Rackwick Bay to Murkle Bay	58°	50.168'	N	03°	28.075'	W
43	Rackwick Bay to Murkle Bay	58°	49.974'	N	03°	28.652'	W
44	Rackwick Bay to Murkle Bay	58°	49.835'	N	03°	28.934'	W
45	Rackwick Bay to Murkle Bay	58°	49.758'	N	03°	29.037'	W
46	Rackwick Bay to Murkle Bay	58°	49.594'	N	03°	29.097'	W
47	Rackwick Bay to Murkle Bay	58°	49.583'	N	03°	29.102'	W
48	Rackwick Bay to Murkle Bay	58°	49.573'	N	03°	29.109'	W
49	Rackwick Bay to Murkle Bay	58°	49.562'	N	03°	29.117'	W
50	Rackwick Bay to Murkle Bay	58°	49.552'	N	03°	29.128'	W
51	Rackwick Bay to Murkle Bay	58°	49.543'	N	03°	29.139'	W
52	Rackwick Bay to Murkle Bay	58°	49.463'	N	03°	29.247'	W
53	Rackwick Bay to Murkle Bay	58°	49.455'	N	03°	29.258'	W
54	Rackwick Bay to Murkle Bay	58°	49.448'	N	03°	29.271'	W
55	Rackwick Bay to Murkle Bay	58°	49.441'	N	03°	29.284'	W
56	Rackwick Bay to Murkle Bay	58°	49.435'	N	03°	29.298'	W

57	Rackwick Bay to Murkle Bay	58°	49.333'	N	03°	29.542'	W
58	Rackwick Bay to Murkle Bay	58°	49.090'	N	03°	29.903'	W
59	Rackwick Bay to Murkle Bay	58°	49.083'	N	03°	29.915'	W
60	Rackwick Bay to Murkle Bay	58°	49.076'	N	03°	29.928'	W
61	Rackwick Bay to Murkle Bay	58°	48.936'	N	03°	30.207'	W
62	Rackwick Bay to Murkle Bay	58°	48.624'	N	03°	30.611'	W
63	Rackwick Bay to Murkle Bay	58°	48.272'	N	03°	30.982'	W
64	Rackwick Bay to Murkle Bay	58°	47.941'	N	03°	31.265'	W
65	Rackwick Bay to Murkle Bay	58°	47.613'	N	03°	31.468'	W
66	Rackwick Bay to Murkle Bay	58°	46.681'	N	03°	31.590'	W
67	Rackwick Bay to Murkle Bay	58°	45.749'	N	03°	31.329'	W
68	Rackwick Bay to Murkle Bay	58°	45.739'	N	03°	31.327'	W
69	Rackwick Bay to Murkle Bay	58°	45.729'	N	03°	31.326'	W
70	Rackwick Bay to Murkle Bay	58°	45.446'	N	03°	31.329'	W
71	Rackwick Bay to Murkle Bay	58°	45.008'	N	03°	31.235'	W
72	Rackwick Bay to Murkle Bay	58°	43.013'	N	03°	30.807'	W
73	Rackwick Bay to Murkle Bay	58°	42.049'	N	03°	30.601'	W
74	Rackwick Bay to Murkle Bay	58°	42.042'	N	03°	30.599'	W
75	Rackwick Bay to Murkle Bay	58°	41.990'	N	03°	30.594'	W
76	Rackwick Bay to Murkle Bay	58°	41.738'	N	03°	30.532'	W
77	Rackwick Bay to Murkle Bay	58°	41.735'	N	03°	30.531'	W
78	Rackwick Bay to Murkle Bay	58°	41.578'	N	03°	30.500'	W
79	Rackwick Bay to Murkle Bay	58°	41.297'	N	03°	30.418'	W
80	Rackwick Bay to Murkle Bay	58°	40.910'	N	03°	30.225'	W
81	Rackwick Bay to Murkle Bay	58°	40.898'	N	03°	30.220'	W
82	Rackwick Bay to Murkle Bay	58°	40.717'	N	03°	30.162'	W
83	Rackwick Bay to Murkle Bay	58°	40.620'	N	03°	30.115'	W
84	Rackwick Bay to Murkle Bay	58°	40.460'	N	03°	29.992'	W
85	Rackwick Bay to Murkle Bay	58°	40.392'	N	03°	29.932'	W

86	Rackwick Bay to Murkle Bay	58°	40.382'	N	03°	29.924'	W
87	Rackwick Bay to Murkle Bay	58°	40.371'	N	03°	29.917'	W
88	Rackwick Bay to Murkle Bay	58°	40.359'	N	03°	29.913'	W
89	Rackwick Bay to Murkle Bay	58°	40.348'	N	03°	29.910'	W
90	Rackwick Bay to Murkle Bay	58°	40.225'	N	03°	29.890'	W
91	Rackwick Bay to Murkle Bay	58°	40.043'	N	03°	29.796'	W
92	Rackwick Bay to Murkle Bay	58°	40.037'	N	03°	29.793'	W
93	Rackwick Bay to Murkle Bay	58°	40.031'	N	03°	29.791'	W
94	Rackwick Bay to Murkle Bay	58°	39.779'	N	03°	29.709'	W
95	Rackwick Bay to Murkle Bay	58°	39.775'	N	03°	29.708'	W
96	Rackwick Bay to Murkle Bay	58°	39.612'	N	03°	29.664'	W
97	Rackwick Bay to Murkle Bay	58°	39.505'	N	03°	29.608'	W
98	Rackwick Bay to Murkle Bay	58°	39.402'	N	03°	29.497'	W
99	Rackwick Bay to Murkle Bay	58°	39.402'	N	03°	29.497'	W
100	Rackwick Bay to Murkle Bay	58°	39.299'	N	03°	29.387'	W
101	Rackwick Bay to Murkle Bay	58°	39.263'	N	03°	29.348'	W
102	Rackwick Bay to Murkle Bay	58°	38.835'	N	03°	28.413'	W
103	Rackwick Bay to Murkle Bay	58°	38.827'	N	03°	28.397'	W
104	Rackwick Bay to Murkle Bay	58°	38.818'	N	03°	28.382'	W
105	Rackwick Bay to Murkle Bay	58°	38.808'	N	03°	28.369'	W
106	Rackwick Bay to Murkle Bay	58°	38.798'	N	03°	28.357'	W
107	Rackwick Bay to Murkle Bay	58°	38.747'	N	03°	28.303'	W
108	Rackwick Bay to Murkle Bay	58°	38.599'	N	03°	28.147'	W
109	Rackwick Bay to Murkle Bay	58°	38.546'	N	03°	28.092'	W
110	Rackwick Bay to Murkle Bay	58°	38.546'	N	03°	28.092'	W
111	Rackwick Bay to Murkle Bay	58°	38.471'	N	03°	28.012'	W
112	Rackwick Bay to Murkle Bay	58°	38.417'	N	03°	27.906'	W
113	Rackwick Bay to Murkle Bay	58°	38.325'	N	03°	27.634'	W
114	Rackwick Bay to Murkle Bay	58°	38.323'	N	03°	27.629'	W

115	Rackwick Bay to Murkle Bay	58°	38.240'	N	03°	27.396'	W
116	Rackwick Bay to Murkle Bay	58°	38.097'	N	03°	26.955'	W
117	Rackwick Bay to Murkle Bay	58°	38.091'	N	03°	26.939'	W
118	Rackwick Bay to Murkle Bay	58°	38.084'	N	03°	26.923'	W
119	Rackwick Bay to Murkle Bay	58°	38.077'	N	03°	26.908'	W
120	Rackwick Bay to Murkle Bay	58°	38.069'	N	03°	26.895'	W
121	Rackwick Bay to Murkle Bay	58°	38.061'	N	03°	26.882'	W
122	Rackwick Bay to Murkle Bay	58°	38.042'	N	03°	26.856'	W
123	Rackwick Bay to Murkle Bay	58°	37.888'	N	03°	26.645'	W
124	Rackwick Bay to Murkle Bay	58°	37.691'	N	03°	26.202'	W
125	Rackwick Bay to Murkle Bay	58°	37.685'	N	03°	26.190'	W
126	Rackwick Bay to Murkle Bay	58°	37.679'	N	03°	26.179'	W
127	Rackwick Bay to Murkle Bay	58°	37.673'	N	03°	26.169'	W
128	Rackwick Bay to Murkle Bay	58°	37.464'	N	03°	25.845'	W
129	Rackwick Bay to Murkle Bay	58°	37.351'	N	03°	25.642'	W
130	Rackwick Bay to Murkle Bay	58°	37.344'	N	03°	25.631'	W
131	Rackwick Bay to Murkle Bay	58°	37.337'	N	03°	25.620'	W
132	Rackwick Bay to Murkle Bay	58°	37.330'	N	03°	25.611'	W
133	Rackwick Bay to Murkle Bay	58°	37.203'	N	03°	25.461'	W
134	Rackwick Bay to Murkle Bay	58°	37.195'	N	03°	25.452'	W
135	Rackwick Bay to Murkle Bay	58°	37.187'	N	03°	25.444'	W
136	Rackwick Bay to Murkle Bay	58°	37.178'	N	03°	25.437'	W
137	Rackwick Bay to Murkle Bay	58°	37.169'	N	03°	25.432'	W
138	Rackwick Bay to Murkle Bay	58°	36.991'	N	03°	25.335'	W
139	Rackwick Bay to Murkle Bay	58°	36.983'	N	03°	25.331'	W
140	Rackwick Bay to Murkle Bay	58°	36.974'	N	03°	25.328'	W
141	Rackwick Bay to Murkle Bay	58°	36.928'	N	03°	25.315'	W
142	Rackwick Bay to Murkle Bay	58°	36.910'	N	03°	25.302'	W
143	Rackwick Bay to Murkle Bay	58°	36.901'	N	03°	25.296'	W

144	Rackwick Bay to Murkle Bay	58°	36.891'	N	03°	25.291'	W
145	Rackwick Bay to Murkle Bay	58°	36.881'	N	03°	25.288'	W
146	Rackwick Bay to Murkle Bay	58°	36.823'	N	03°	25.272'	W
147	Rackwick Bay to Murkle Bay	58°	36.806'	N	03°	25.262'	W
148	Rackwick Bay to Murkle Bay	58°	36.795'	N	03°	25.257'	W
149	Rackwick Bay to Murkle Bay	58°	36.782'	N	03°	25.252'	W
150	Rackwick Bay to Murkle Bay	58°	36.775'	N	03°	25.249'	W
151	Rackwick Bay to Murkle Bay	58°	36.758'	N	03°	25.238'	W
152	Rackwick Bay to Murkle Bay	58°	36.741'	N	03°	25.226'	W
153	Rackwick Bay to Murkle Bay	58°	36.711'	N	03°	25.199'	W
154	Rackwick Bay to Murkle Bay	58°	36.702'	N	03°	25.192'	W
155	Rackwick Bay to Murkle Bay	58°	36.632'	N	03°	25.141'	W
156	Rackwick Bay to Murkle Bay	58°	36.607'	N	03°	25.117'	W
157	Rackwick Bay to Murkle Bay	58°	36.596'	N	03°	25.108'	W
158	Rackwick Bay to Murkle Bay	58°	36.585'	N	03°	25.100'	W
159	Rackwick Bay to Murkle Bay	58°	36.574'	N	03°	25.095'	W
160	Rackwick Bay to Murkle Bay	58°	36.563'	N	03°	25.091'	W
161	Rackwick Bay to Murkle Bay	58°	36.551'	N	03°	25.089'	W
162	Rackwick Bay to Murkle Bay	58°	36.529'	N	03°	25.088'	W
163	Rackwick Bay to Murkle Bay	58°	36.517'	N	03°	25.088'	W
164	Rackwick Bay to Murkle Bay	58°	36.505'	N	03°	25.090'	W
165	Rackwick Bay to Murkle Bay	58°	36.494'	N	03°	25.095'	W
166	Rackwick Bay to Murkle Bay	58°	36.483'	N	03°	25.101'	W
167	Rackwick Bay to Murkle Bay	58°	36.472'	N	03°	25.109'	W
168	Rackwick Bay to Murkle Bay	58°	36.450'	N	03°	25.126'	W
169	Rackwick Bay to Murkle Bay	58°	36.440'	N	03°	25.136'	W
170	Rackwick Bay to Murkle Bay	58°	36.430'	N	03°	25.146'	W
171	Rackwick Bay to Murkle Bay	58°	36.421'	N	03°	25.158'	W
172	Rackwick Bay to Murkle Bay	58°	36.413'	N	03°	25.172'	W

173	Rackwick Bay to Murkle Bay	58°	36.405'	N	03°	25.187'	W
174	Rackwick Bay to Murkle Bay	58°	36.397'	N	03°	25.202'	W
175	Rackwick Bay to Murkle Bay	58°	36.397'	N	03°	25.202'	W
176	Rackwick Bay to Murkle Bay	58°	36.366'	N	03°	25.266'	W
177	Rackwick Bay to Murkle Bay	58°	36.148'	N	03°	25.714'	W
178	Rackwick Bay to Murkle Bay	58°	36.148'	N	03°	25.714'	W
179	Rackwick Bay to Murkle Bay	58°	36.089'	N	03°	25.835'	W
180	Rackwick Bay to Murkle Bay	58°	36.077'	N	03°	25.860'	W
181	Rackwick Bay to Murkle Bay	58°	36.258'	N	03°	26.237'	W
182	Rackwick Bay to Murkle Bay	58°	36.260'	N	03°	26.234'	W
183	Rackwick Bay to Murkle Bay	58°	36.269'	N	03°	26.220'	W
184	Rackwick Bay to Murkle Bay	58°	36.277'	N	03°	26.204'	W
185	Rackwick Bay to Murkle Bay	58°	36.345'	N	03°	26.066'	W
186	Rackwick Bay to Murkle Bay	58°	36.415'	N	03°	25.923'	W
187	Rackwick Bay to Murkle Bay	58°	36.554'	N	03°	25.636'	W
188	Rackwick Bay to Murkle Bay	58°	36.601'	N	03°	25.671'	W
189	Rackwick Bay to Murkle Bay	58°	36.633'	N	03°	25.700'	W
190	Rackwick Bay to Murkle Bay	58°	36.639'	N	03°	25.705'	W
191	Rackwick Bay to Murkle Bay	58°	36.646'	N	03°	25.710'	W
192	Rackwick Bay to Murkle Bay	58°	36.694'	N	03°	25.742'	W
193	Rackwick Bay to Murkle Bay	58°	36.702'	N	03°	25.747'	W
194	Rackwick Bay to Murkle Bay	58°	36.711'	N	03°	25.751'	W
195	Rackwick Bay to Murkle Bay	58°	36.727'	N	03°	25.757'	W
196	Rackwick Bay to Murkle Bay	58°	36.728'	N	03°	25.757'	W
197	Rackwick Bay to Murkle Bay	58°	36.735'	N	03°	25.761'	W
198	Rackwick Bay to Murkle Bay	58°	36.758'	N	03°	25.773'	W
199	Rackwick Bay to Murkle Bay	58°	36.767'	N	03°	25.777'	W
200	Rackwick Bay to Murkle Bay	58°	36.776'	N	03°	25.781'	W
201	Rackwick Bay to Murkle Bay	58°	36.829'	N	03°	25.795'	W

202	Rackwick Bay to Murkle Bay	58°	36.847'	N	03°	25.808'	W
203	Rackwick Bay to Murkle Bay	58°	36.856'	N	03°	25.814'	W
204	Rackwick Bay to Murkle Bay	58°	36.865'	N	03°	25.818'	W
205	Rackwick Bay to Murkle Bay	58°	36.875'	N	03°	25.822'	W
206	Rackwick Bay to Murkle Bay	58°	36.926'	N	03°	25.836'	W
207	Rackwick Bay to Murkle Bay	58°	37.078'	N	03°	25.918'	W
208	Rackwick Bay to Murkle Bay	58°	37.177'	N	03°	26.036'	W
209	Rackwick Bay to Murkle Bay	58°	37.283'	N	03°	26.228'	W
210	Rackwick Bay to Murkle Bay	58°	37.291'	N	03°	26.241'	W
211	Rackwick Bay to Murkle Bay	58°	37.494'	N	03°	26.555'	W
212	Rackwick Bay to Murkle Bay	58°	37.694'	N	03°	27.004'	W
213	Rackwick Bay to Murkle Bay	58°	37.701'	N	03°	27.020'	W
214	Rackwick Bay to Murkle Bay	58°	37.710'	N	03°	27.034'	W
215	Rackwick Bay to Murkle Bay	58°	37.718'	N	03°	27.047'	W
216	Rackwick Bay to Murkle Bay	58°	37.883'	N	03°	27.272'	W
217	Rackwick Bay to Murkle Bay	58°	38.013'	N	03°	27.674'	W
218	Rackwick Bay to Murkle Bay	58°	38.016'	N	03°	27.683'	W
219	Rackwick Bay to Murkle Bay	58°	38.100'	N	03°	27.917'	W
220	Rackwick Bay to Murkle Bay	58°	38.198'	N	03°	28.208'	W
221	Rackwick Bay to Murkle Bay	58°	38.203'	N	03°	28.223'	W
222	Rackwick Bay to Murkle Bay	58°	38.209'	N	03°	28.236'	W
223	Rackwick Bay to Murkle Bay	58°	38.215'	N	03°	28.249'	W
224	Rackwick Bay to Murkle Bay	58°	38.292'	N	03°	28.401'	W
225	Rackwick Bay to Murkle Bay	58°	38.300'	N	03°	28.414'	W
226	Rackwick Bay to Murkle Bay	58°	38.307'	N	03°	28.426'	W
227	Rackwick Bay to Murkle Bay	58°	38.315'	N	03°	28.437'	W
228	Rackwick Bay to Murkle Bay	58°	38.324'	N	03°	28.447'	W
229	Rackwick Bay to Murkle Bay	58°	38.417'	N	03°	28.545'	W
230	Rackwick Bay to Murkle Bay	58°	38.470'	N	03°	28.600'	W

231	Rackwick Bay to Murkle Bay	58°	38.470'	N	03°	28.600'	W
232	Rackwick Bay to Murkle Bay	58°	38.618'	N	03°	28.756'	W
233	Rackwick Bay to Murkle Bay	58°	38.648'	N	03°	28.788'	W
234	Rackwick Bay to Murkle Bay	58°	39.075'	N	03°	29.722'	W
235	Rackwick Bay to Murkle Bay	58°	39.083'	N	03°	29.737'	W
236	Rackwick Bay to Murkle Bay	58°	39.092'	N	03°	29.752'	W
237	Rackwick Bay to Murkle Bay	58°	39.101'	N	03°	29.765'	W
238	Rackwick Bay to Murkle Bay	58°	39.111'	N	03°	29.777'	W
239	Rackwick Bay to Murkle Bay	58°	39.270'	N	03°	29.948'	W
240	Rackwick Bay to Murkle Bay	58°	39.387'	N	03°	30.075'	W
241	Rackwick Bay to Murkle Bay	58°	39.397'	N	03°	30.084'	W
242	Rackwick Bay to Murkle Bay	58°	39.408'	N	03°	30.092'	W
243	Rackwick Bay to Murkle Bay	58°	39.418'	N	03°	30.099'	W
244	Rackwick Bay to Murkle Bay	58°	39.550'	N	03°	30.167'	W
245	Rackwick Bay to Murkle Bay	58°	39.558'	N	03°	30.171'	W
246	Rackwick Bay to Murkle Bay	58°	39.566'	N	03°	30.173'	W
247	Rackwick Bay to Murkle Bay	58°	39.736'	N	03°	30.220'	W
248	Rackwick Bay to Murkle Bay	58°	39.979'	N	03°	30.299'	W
249	Rackwick Bay to Murkle Bay	58°	40.117'	N	03°	30.370'	W
250	Rackwick Bay to Murkle Bay	58°	40.166'	N	03°	30.395'	W
251	Rackwick Bay to Murkle Bay	58°	40.174'	N	03°	30.399'	W
252	Rackwick Bay to Murkle Bay	58°	40.182'	N	03°	30.402'	W
253	Rackwick Bay to Murkle Bay	58°	40.190'	N	03°	30.403'	W
254	Rackwick Bay to Murkle Bay	58°	40.302'	N	03°	30.421'	W
255	Rackwick Bay to Murkle Bay	58°	40.351'	N	03°	30.464'	W
256	Rackwick Bay to Murkle Bay	58°	40.356'	N	03°	30.469'	W
257	Rackwick Bay to Murkle Bay	58°	40.528'	N	03°	30.602'	W
258	Rackwick Bay to Murkle Bay	58°	40.537'	N	03°	30.608'	W
259	Rackwick Bay to Murkle Bay	58°	40.546'	N	03°	30.613'	W

260	Rackwick Bay to Murkle Bay	58°	40.657'	N	03°	30.666'	W
261	Rackwick Bay to Murkle Bay	58°	40.667'	N	03°	30.670'	W
262	Rackwick Bay to Murkle Bay	58°	40.848'	N	03°	30.729'	W
263	Rackwick Bay to Murkle Bay	58°	41.237'	N	03°	30.922'	W
264	Rackwick Bay to Murkle Bay	58°	41.243'	N	03°	30.925'	W
265	Rackwick Bay to Murkle Bay	58°	41.250'	N	03°	30.928'	W
266	Rackwick Bay to Murkle Bay	58°	41.541'	N	03°	31.012'	W
267	Rackwick Bay to Murkle Bay	58°	41.547'	N	03°	31.014'	W
268	Rackwick Bay to Murkle Bay	58°	41.706'	N	03°	31.045'	W
269	Rackwick Bay to Murkle Bay	58°	41.960'	N	03°	31.108'	W
270	Rackwick Bay to Murkle Bay	58°	41.970'	N	03°	31.110'	W
271	Rackwick Bay to Murkle Bay	58°	42.023'	N	03°	31.116'	W
272	Rackwick Bay to Murkle Bay	58°	42.983'	N	03°	31.322'	W
273	Rackwick Bay to Murkle Bay	58°	44.978'	N	03°	31.750'	W
274	Rackwick Bay to Murkle Bay	58°	45.424'	N	03°	31.845'	W
275	Rackwick Bay to Murkle Bay	58°	45.432'	N	03°	31.847'	W
276	Rackwick Bay to Murkle Bay	58°	45.439'	N	03°	31.847'	W
277	Rackwick Bay to Murkle Bay	58°	45.580'	N	03°	31.846'	W
278	Rackwick Bay to Murkle Bay	58°	45.720'	N	03°	31.844'	W
279	Rackwick Bay to Murkle Bay	58°	46.656'	N	03°	32.107'	W
280	Rackwick Bay to Murkle Bay	58°	46.666'	N	03°	32.109'	W
281	Rackwick Bay to Murkle Bay	58°	46.675'	N	03°	32.110'	W
282	Rackwick Bay to Murkle Bay	58°	46.685'	N	03°	32.109'	W
283	Rackwick Bay to Murkle Bay	58°	47.647'	N	03°	31.984'	W
284	Rackwick Bay to Murkle Bay	58°	47.658'	N	03°	31.982'	W
285	Rackwick Bay to Murkle Bay	58°	47.669'	N	03°	31.978'	W
286	Rackwick Bay to Murkle Bay	58°	47.679'	N	03°	31.972'	W
287	Rackwick Bay to Murkle Bay	58°	48.030'	N	03°	31.755'	W
288	Rackwick Bay to Murkle Bay	58°	48.037'	N	03°	31.751'	W

289	Rackwick Bay to Murkle Bay	58°	48.043'	N	03°	31.745'	W
290	Rackwick Bay to Murkle Bay	58°	48.387'	N	03°	31.453'	W
291	Rackwick Bay to Murkle Bay	58°	48.397'	N	03°	31.443'	W
292	Rackwick Bay to Murkle Bay	58°	48.758'	N	03°	31.061'	W
293	Rackwick Bay to Murkle Bay	58°	48.769'	N	03°	31.049'	W
294	Rackwick Bay to Murkle Bay	58°	49.098'	N	03°	30.622'	W
295	Rackwick Bay to Murkle Bay	58°	49.106'	N	03°	30.612'	W
296	Rackwick Bay to Murkle Bay	58°	49.113'	N	03°	30.600'	W
297	Rackwick Bay to Murkle Bay	58°	49.120'	N	03°	30.587'	W
298	Rackwick Bay to Murkle Bay	58°	49.263'	N	03°	30.302'	W
299	Rackwick Bay to Murkle Bay	58°	49.510'	N	03°	29.934'	W
300	Rackwick Bay to Murkle Bay	58°	49.518'	N	03°	29.921'	W
301	Rackwick Bay to Murkle Bay	58°	49.526'	N	03°	29.907'	W
302	Rackwick Bay to Murkle Bay	58°	49.533'	N	03°	29.891'	W
303	Rackwick Bay to Murkle Bay	58°	49.633'	N	03°	29.652'	W
304	Rackwick Bay to Murkle Bay	58°	49.673'	N	03°	29.597'	W
305	Rackwick Bay to Murkle Bay	58°	49.837'	N	03°	29.536'	W
306	Rackwick Bay to Murkle Bay	58°	49.848'	N	03°	29.532'	W
307	Rackwick Bay to Murkle Bay	58°	49.858'	N	03°	29.525'	W
308	Rackwick Bay to Murkle Bay	58°	49.869'	N	03°	29.516'	W
309	Rackwick Bay to Murkle Bay	58°	49.879'	N	03°	29.506'	W
310	Rackwick Bay to Murkle Bay	58°	49.888'	N	03°	29.495'	W
311	Rackwick Bay to Murkle Bay	58°	50.000'	N	03°	29.345'	W
312	Rackwick Bay to Murkle Bay	58°	50.007'	N	03°	29.335'	W
313	Rackwick Bay to Murkle Bay	58°	50.014'	N	03°	29.323'	W
314	Rackwick Bay to Murkle Bay	58°	50.021'	N	03°	29.310'	W
315	Rackwick Bay to Murkle Bay	58°	50.177'	N	03°	28.992'	W
316	Rackwick Bay to Murkle Bay	58°	50.183'	N	03°	28.980'	W
317	Rackwick Bay to Murkle Bay	58°	50.188'	N	03°	28.968'	W

318	Rackwick Bay to Murkle Bay	58°	50.193'	N	03°	28.955'	W
319	Rackwick Bay to Murkle Bay	58°	50.395'	N	03°	28.354'	W
320	Rackwick Bay to Murkle Bay	58°	50.398'	N	03°	28.345'	W
321	Rackwick Bay to Murkle Bay	58°	50.853'	N	03°	26.871'	W
322	Rackwick Bay to Murkle Bay	58°	50.858'	N	03°	26.854'	W
323	Rackwick Bay to Murkle Bay	58°	50.862'	N	03°	26.836'	W
324	Rackwick Bay to Murkle Bay	58°	50.866'	N	03°	26.817'	W
325	Rackwick Bay to Murkle Bay	58°	50.869'	N	03°	26.798'	W
326	Rackwick Bay to Murkle Bay	58°	50.871'	N	03°	26.778'	W
327	Rackwick Bay to Murkle Bay	58°	50.900'	N	03°	26.414'	W
328	Rackwick Bay to Murkle Bay	58°	51.003'	N	03°	26.050'	W
329	Rackwick Bay to Murkle Bay	58°	51.150'	N	03°	25.701'	W
330	Rackwick Bay to Murkle Bay	58°	51.242'	N	03°	25.568'	W
331	Rackwick Bay to Murkle Bay	58°	51.332'	N	03°	25.470'	W
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333	Rackwick Bay to Murkle Bay	58°	51.364'	N	03°	25.434'	W
334	Rackwick Bay to Murkle Bay	58°	51.374'	N	03°	25.421'	W
335	Rackwick Bay to Murkle Bay	58°	51.382'	N	03°	25.405'	W
336	Rackwick Bay to Murkle Bay	58°	51.390'	N	03°	25.389'	W
337	Rackwick Bay to Murkle Bay	58°	51.496'	N	03°	25.152'	W
338	Rackwick Bay to Murkle Bay	58°	51.502'	N	03°	25.137'	W
339	Rackwick Bay to Murkle Bay	58°	51.508'	N	03°	25.120'	W
340	Rackwick Bay to Murkle Bay	58°	51.579'	N	03°	24.900'	W
341	Rackwick Bay to Murkle Bay	58°	51.746'	N	03°	24.384'	W
342	Rackwick Bay to Murkle Bay	58°	51.905'	N	03°	23.892'	W
343	Rackwick Bay to Murkle Bay	58°	51.909'	N	03°	23.884'	W
344	Rackwick Bay to Murkle Bay	58°	51.969'	N	03°	23.772'	W
345	Rackwick Bay to Murkle Bay	58°	51.994'	N	03°	23.756'	W
346	Rackwick Bay to Murkle Bay	58°	51.994'	N	03°	23.756'	W

347	Rackwick Bay to Murkle Bay	58°	52.085'	N	03°	23.697'	W
348	Rackwick Bay to Murkle Bay	58°	52.219'	N	03°	23.610'	W
349	Rackwick Bay to Murkle Bay	58°	52.219'	N	03°	23.610'	W
350	Rackwick Bay to Murkle Bay	58°	52.276'	N	03°	23.573'	W
351	Rackwick Bay to Murkle Bay	58°	52.295'	N	03°	23.561'	W

Co-ordinates of the boundary points of the area of harbour jurisdiction

ID No.	WGS84 Latitude			WGS84 Longitude		
	Deg	Min		Deg	Min	
1	58°	38.287'	N	03°	27.523'	W
2	58°	38.279'	N	03°	27.504'	W
3	58°	38.240'	N	03°	27.396'	W
4	58°	38.097'	N	03°	26.955'	W
5	58°	38.091'	N	03°	26.939'	W
6	58°	38.084'	N	03°	26.923'	W
7	58°	38.077'	N	03°	26.908'	W
8	58°	38.069'	N	03°	26.895'	W
9	58°	38.061'	N	03°	26.882'	W
10	58°	38.042'	N	03°	26.856'	W
11	58°	37.888'	N	03°	26.645'	W
12	58°	37.691'	N	03°	26.202'	W
13	58°	37.685'	N	03°	26.190'	W
14	58°	37.679'	N	03°	26.179'	W
15	58°	37.673'	N	03°	26.169'	W
16	58°	37.464'	N	03°	25.845'	W
17	58°	37.351'	N	03°	25.642'	W
18	58°	37.344'	N	03°	25.631'	W
19	58°	37.337'	N	03°	25.620'	W
20	58°	37.330'	N	03°	25.611'	W
21	58°	37.203'	N	03°	25.461'	W
22	58°	37.195'	N	03°	25.452'	W
23	58°	37.187'	N	03°	25.444'	W
24	58°	37.178'	N	03°	25.437'	W
25	58°	37.169'	N	03°	25.432'	W
26	58°	36.991'	N	03°	25.335'	W
27	58°	36.983'	N	03°	25.331'	W
28	58°	36.974'	N	03°	25.328'	W
29	58°	36.928'	N	03°	25.315'	W
30	58°	36.910'	N	03°	25.302'	W
31	58°	36.901'	N	03°	25.296'	W
32	58°	36.891'	N	03°	25.291'	W
33	58°	36.881'	N	03°	25.288'	W
34	58°	36.823'	N	03°	25.272'	W
35	58°	36.806'	N	03°	25.262'	W
36	58°	36.795'	N	03°	25.257'	W
37	58°	36.789'	N	03°	25.255'	W
38	58°	36.782'	N	03°	25.252'	W
39	58°	36.775'	N	03°	25.249'	W
40	58°	36.758'	N	03°	25.238'	W
41	58°	36.741'	N	03°	25.226'	W

Co-ordinates of the boundary points of the area of harbour jurisdiction

42	58°	36.711'	N	03°	25.199'	W
43	58°	36.702'	N	03°	25.192'	W
44	58°	36.632'	N	03°	25.141'	W
45	58°	36.607'	N	03°	25.117'	W
46	58°	36.596'	N	03°	25.108'	W
47	58°	36.585'	N	03°	25.100'	W
48	58°	36.574'	N	03°	25.095'	W
49	58°	36.563'	N	03°	25.091'	W
50	58°	36.551'	N	03°	25.089'	W
51	58°	36.529'	N	03°	25.088'	W
52	58°	36.517'	N	03°	25.088'	W
53	58°	36.505'	N	03°	25.090'	W
54	58°	36.494'	N	03°	25.095'	W
55	58°	36.483'	N	03°	25.101'	W
56	58°	36.472'	N	03°	25.109'	W
57	58°	36.450'	N	03°	25.126'	W
58	58°	36.440'	N	03°	25.136'	W
59	58°	36.430'	N	03°	25.146'	W
60	58°	36.421'	N	03°	25.158'	W
61	58°	36.413'	N	03°	25.172'	W
62	58°	36.405'	N	03°	25.187'	W
63	58°	36.397'	N	03°	25.202'	W
64	58°	36.397'	N	03°	25.202'	W
65	58°	36.366'	N	03°	25.266'	W
66	58°	36.148'	N	03°	25.714'	W
67	58°	36.148'	N	03°	25.714'	W
68	58°	36.089'	N	03°	25.835'	W
69	58°	36.077'	N	03°	25.860'	W
70	58°	36.258'	N	03°	26.237'	W
71	58°	36.260'	N	03°	26.234'	W
72	58°	36.269'	N	03°	26.220'	W
73	58°	36.277'	N	03°	26.204'	W
74	58°	36.345'	N	03°	26.066'	W
75	58°	36.415'	N	03°	25.923'	W
76	58°	36.554'	N	03°	25.636'	W
77	58°	36.601'	N	03°	25.671'	W
78	58°	36.633'	N	03°	25.700'	W
79	58°	36.639'	N	03°	25.705'	W
80	58°	36.646'	N	03°	25.710'	W
81	58°	36.694'	N	03°	25.742'	W
82	58°	36.702'	N	03°	25.747'	W
83	58°	36.711'	N	03°	25.751'	W
84	58°	36.727'	N	03°	25.757'	W
85	58°	36.728'	N	03°	25.757'	W
86	58°	36.735'	N	03°	25.761'	W

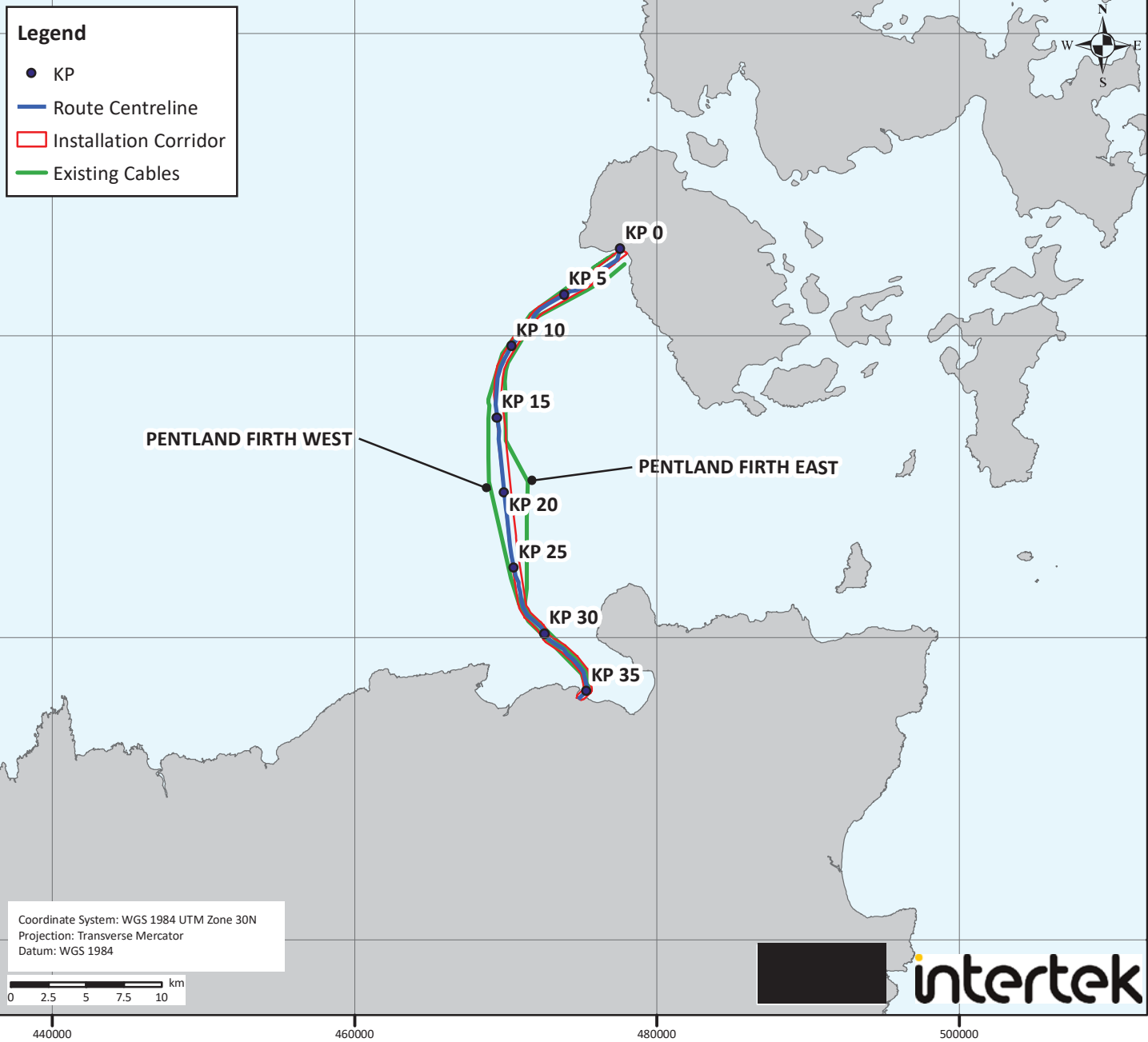
Co-ordinates of the boundary points of the area of harbour jurisdiction

87	58°	36.758'	N	03°	25.773'	W
88	58°	36.767'	N	03°	25.777'	W
89	58°	36.776'	N	03°	25.781'	W
90	58°	36.829'	N	03°	25.795'	W
91	58°	36.847'	N	03°	25.808'	W
92	58°	36.856'	N	03°	25.814'	W
93	58°	36.865'	N	03°	25.818'	W
94	58°	36.875'	N	03°	25.822'	W
95	58°	36.926'	N	03°	25.836'	W
96	58°	37.078'	N	03°	25.918'	W
97	58°	37.177'	N	03°	26.036'	W
98	58°	37.283'	N	03°	26.228'	W
99	58°	37.291'	N	03°	26.241'	W
100	58°	37.494'	N	03°	26.555'	W
101	58°	37.694'	N	03°	27.004'	W
102	58°	37.701'	N	03°	27.020'	W
103	58°	37.710'	N	03°	27.034'	W
104	58°	37.718'	N	03°	27.047'	W
105	58°	37.883'	N	03°	27.272'	W
106	58°	38.013'	N	03°	27.674'	W
107	58°	38.016'	N	03°	27.683'	W
108	58°	38.100'	N	03°	27.917'	W
109	58°	38.198'	N	03°	28.208'	W
110	58°	38.203'	N	03°	28.223'	W
111	58°	38.209'	N	03°	28.236'	W
112	58°	38.215'	N	03°	28.249'	W
113	58°	38.282'	N	03°	28.380'	W

PENTLAND FIRTH CABLE REPLACEMENT MARINE LICENCE SUPPORT

LOCATION OVERVIEW - Existing Pentland Firth Cables

Drawing No: P2291-LOC-002 | B



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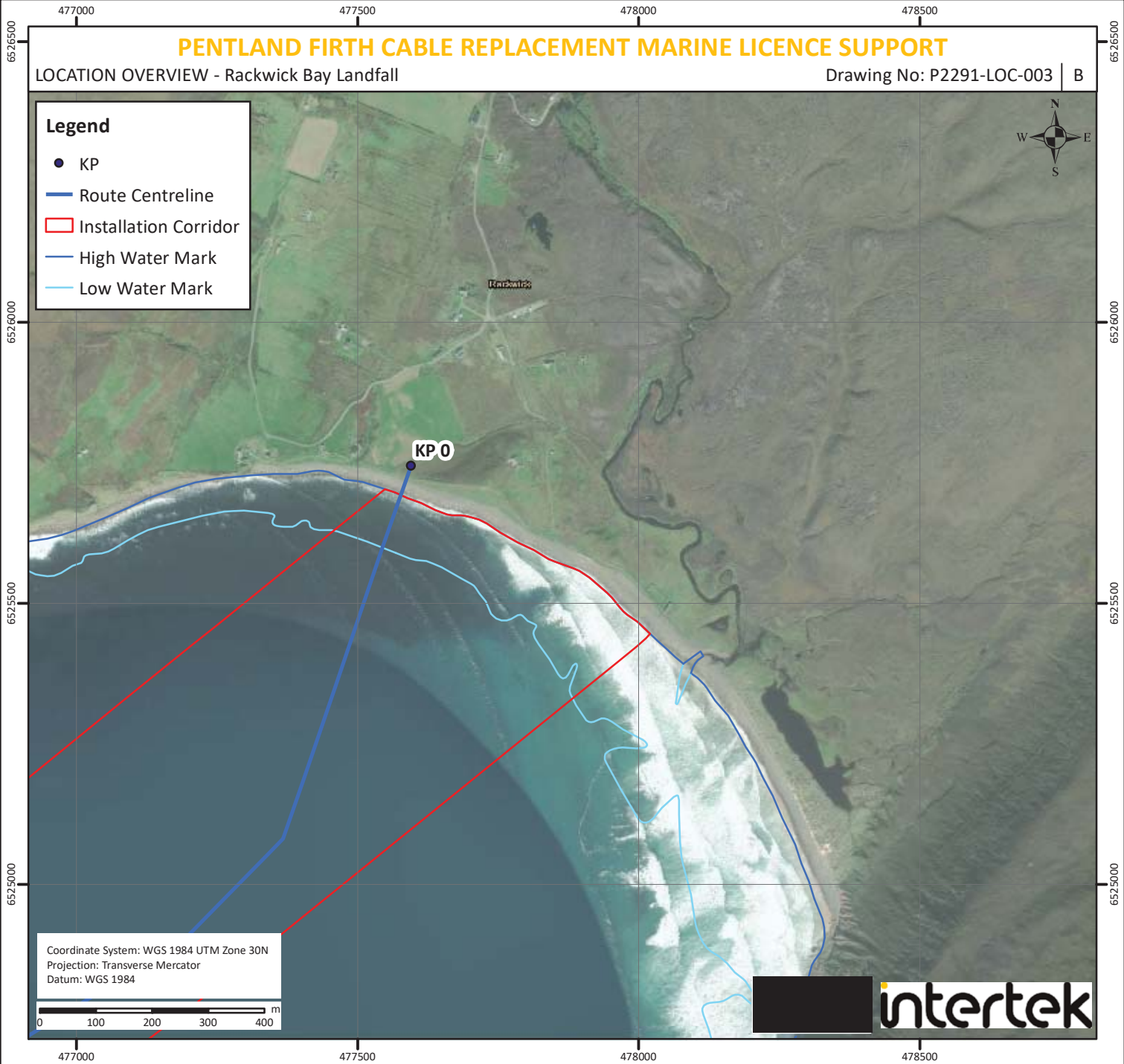
PENTLAND FIRTH CABLE REPLACEMENT MARINE LICENCE SUPPORT

LOCATION OVERVIEW - Rackwick Bay Landfall

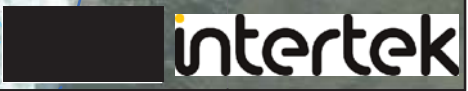
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Legend

- KP
- Route Centreline
- ▭ Installation Corridor
- High Water Mark
- Low Water Mark



Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984



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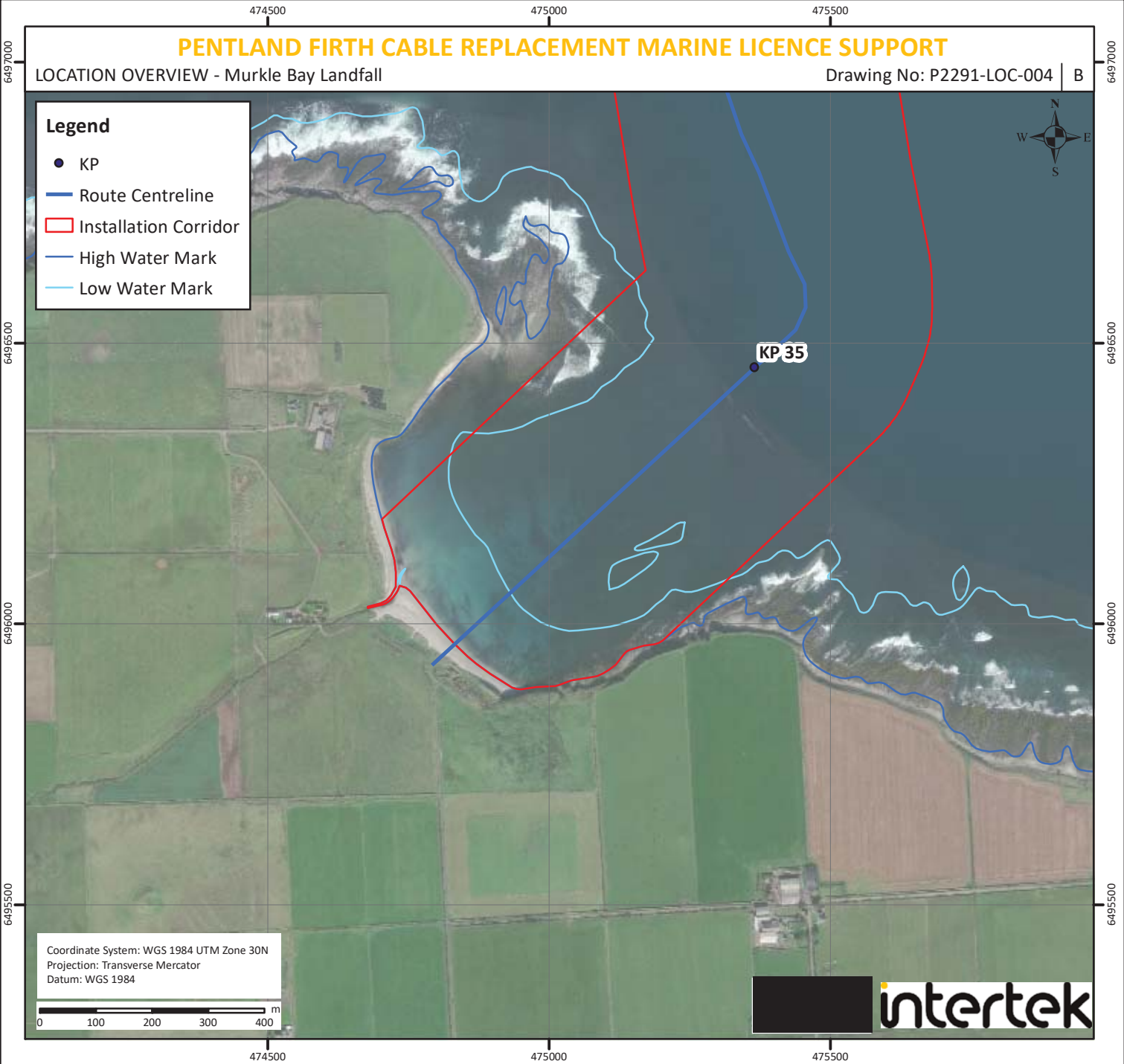
PENTLAND FIRTH CABLE REPLACEMENT MARINE LICENCE SUPPORT

LOCATION OVERVIEW - Murkle Bay Landfall

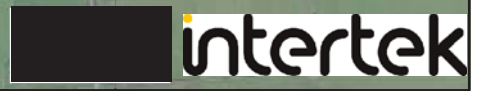
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Legend

- KP
- Route Centreline
- ▭ Installation Corridor
- High Water Mark
- Low Water Mark



Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984



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Meeting Minutes

Date: 30/04/2019

Time: 12 noon

Meeting Title - OIC meeting Pentland East Cable Location: OIC offices, Kirkwall, Orkney

Meeting called by: SSEN **Type of meeting:** Pre application consultation for Pentland East Install

Facilitator: Kevin Galbraith **Note taker:** Keith Grant

Attendees: OIC Paul Turner -EHO, David Barclay -Senior Planner, David Wilson- Roads Authority Officer, Jamie Macvie- Planning Manager, Eileen Summers-Environment Officer, Margaret Gillon-Senior Planner, James Green-Senior Policy Planner.

SSEN Kevin Galbraith-Project Manager, Beverley Walker- Integrated Consents Manager, Alda Forbes-Stakeholder Engagement Manager, Kirstine Wood – Lead Policy Manager.

ERM Keith Grant Environment Consultant, Peter

Minutes

Agenda item: **Presenter:** Kevin Galbraith/Beverley Walker/Alda Forbes

The purpose of the meeting was to provide an update to the Council on the proposed Pentland Firth East submarine cable replacement project, the different options currently being considered for the onshore connection, and to seek advice on the planning/consenting route to be undertaken.

SHEPD provided a presentation which included:

- The location of the submarine cable corridor within which surveys and installation are proposed
- Advice that SHEPD has submitted a European Protected Species (ESP) Risk Assessment, and an application for an EPS licence to disturb, for both the marine survey and submarine cable installation phases. Although normally focussing on marine species, this risk assessment and application also included the implications of vessels in the vicinity of the breeding birds of the Hoy SPA, due to its extension into the marine environment. This application is still to be determined by Marine Scotland.
- SHEPD recognition of the environmental sensitivity of Hoy, and advice that the bird breeding season has been taken into account as a constraint in any forthcoming programmes of work;
- Presentation of the five route options originally considered for the onshore connection, which included: two new overhead line routes through the Hoy SAC; one underground route through the Hoy SAC; two underground routes near the beach connecting to the overhead poles. Environmental appraisal has effectively ruled out all three of the inland SAC options due to impacts on blanket bog, as well as bird collision risk and landscape and visual impacts.
- The outcome of consultation with SNH and RSPB, resulting in the relocation of the existing Pentland East cable route, use of extensive undergrounding and removal of overhead lines as the current preferred option.

Meeting Minutes

- An indicative programme of works, as well as an accelerated programme, which maybe likely in view of the recent need for emergency repairs to the cable.

Discussion

- OIC stated that the road into Rackwick Bay is of rapidly deteriorating quality and sits directly on peat bog. The road would be susceptible to damage from heavy vehicles and any increase in vehicle numbers.
 - SHEPD asked whether OIC would prefer two separate applications for the cable and dismantling works. OIC would prefer one application to ensure a section of the existing line is removed and that this can be considered as planning gain.
 - OIC advised the best season to remove the OHL is summer due to drier ground which would result in less ground disturbance.
 - OIC advised that the carpark is very busy in summer and may not be suitable for the works compound. An alternative is an area previously used by fish farm hatching facility, now managed by the Hoy Trust.
 - OIC advised that an EIA Screening report is required and should refer to proposed mitigation and provide survey results.
 - OIC advised that the road verge is species rich on the approach to Rackwick Bay. OIC to provide a species list.
 - SHEPD stated that an HRA screening request will be prepared for the main works.
 - All agreed that the planning authority would consider works down to MLWS.
 - OIC advised that the cable and dismantling works are likely to be considered permitted development, subject to confirmation of no likely significant effect on the SPA/SAC.
 - OIC advised that the best location for the PAC events are Hoy Kirk and the library in Stromness in the John Rae Room. OIC communications team should be advised once dates are decided.
 - OIC stated that they would appreciate regular updates on the project as it progresses.
-
- Discussions then focussed on recent Pentland East Fault. OIC commented that use of the Kirkwall Power station is noisy and causes the ground to shake and asked to be notified if Power Station were to be used during repairs. SHEPD advised a statement could be issued if power station is required for back up during the cable repair works.
 - All discussed the possibility of enabling fast decision making should future emergency works be required. Agreed that as method statements would be specific the only thing that would improve the situation would be to share baseline environmental studies as they become available.
-
- OIC provided a summary of proposed enhanced local decision making out to 12 nm with the Crown Estate Scotland pilot scheme starting in July 2019 and running to spring 2020 (<https://www.crownestatescotland.com/what-we-do/local-pilot-scheme>). However subsea cables are likely to be exempt from the pilot scheme.

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AOB

Conclusions:

OIC generally welcomed our approach and stated that they would appreciate regular updates on the project as it progresses.

Action items	Person responsible	Deadline
OIC to provide species list relating approach road to Rackwick Bay	Eileen Summers (OIC)	ASAP

Meeting closed at 13.30

<i>Subject/Ref</i>	Pentland East Project
<i>Venue</i>	RSPB Edinburgh
<i>Date of Meeting</i>	12 February 2019
<i>Present</i>	Thomas Barrett (RSPB), Bea Ayling (RSPB), Lee Shields (RSPB), Beverley Walker (SHEPD), Gary Knox (SHEPD), Kevin Galbraith (SHEPD), Peter Wright (ERM), Keith Grant (ERM)
<i>Distribution</i>	As above
<i>Date</i>	19 February 2019



SHEPD provided an overview of the project and timeline

RSPB enquired why it was necessary to replace the Pentland East subsea cable in broadly its current position (i.e. making landfall at Rackwick Bay) rather than choosing a route that completely avoids all designated nature conservation sites. RSPB also enquired about the feasibility of providing a total underground cable from Rackwick to the east coast (instead of connecting to the existing overhead line). SHEPD indicated that the current programme was to upgrade and replace one of the two submarine cables and any part of the existing eastern onshore infrastructure as required. As the remaining distribution system is in good working order, there is no intention to replace this at this time. It was noted by SHEPD that all costs associated with repair and maintenance of distribution infrastructure would be eventually passed on to customers, and that this option would score poorly for technical and economic reasons given the existing overhead line infrastructure and cost differential¹.

RSPB enquired about connecting the replacement eastern cable into the existing overhead route (to the west). SHEPD discussed the existence of a disused 11 kV cable from Rackwick, but that the cable does not have sufficient capacity and that when operational the cable was subject to frequent faulting. In order to be used for the project, the cable would need to be replaced with a 33 kV cable. SHEPD agreed to consider this option in their options appraisal, however noted that the implied removal of the eastern overhead line infrastructure would need to be factored to any appraisal.

RSPB stated that overhead line ~~would~~ likely increase bird collision risk when compared with underground cable. Key species identified in the area by RSPB include hen harrier, peregrine, Arctic skua, great skua, white-tailed eagle and red-throated diver. RSPB asked for bird surveys to be undertaken if an overhead line option is being seriously considered.

RSPB highlighted the extent of blanket bog habitat in the area, and that undergrounding could therefore cause considerable habitat degradation.

RSPB asked if Horizontal Directional Drilling (HDD) had been considered as an option for any undergrounding in the area of blanket bog, as this could reduce potential impact on

¹ Post meeting note: The costs-benefit appraisal is required by OFGEM, who regulate SHEPD.

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habitat. Discussion about the large areas required for the construction area to support HDD and the additional cost. RSPB requested that HDD option be considered.

RSPB acknowledged that cost is a consideration for SHEPD, but emphasised that the key requirement in relation to the designated sites would be to demonstrate that the chosen option would not result in an adverse effect on the integrity of any designated site. In the absence of more detailed information, RSPB was unable to express a definite preference for any option at this stage.

RSPB highlighted the challenges of successful restoration in bog and peat habitat and requested examples of where this had been achieved successfully. RSPB noted that impacts on peat would most likely be an issue for Options 1 and 2.

RSPB highlighted that Option 3, south option would pass through sensitive dune habitat susceptible to erosion and also passes through SAC. Data is available through the Orkney Records Centre for sensitive plant species.

RSPB asked what public consultation would be undertaken and SHEPD answered that this would depend on the consenting route which in turn depends on the technology selected and further consultation with stakeholders. Pre application consultation is required to support the marine licence application.

RSPB asked if construction during bird breeding season could be avoided. SHEPD answered that the construction programme is likely to stretch over winter 2019/20 and there would be the potential to reduce disturbance during breeding season.

RSPB flagged the presence of otter at Rackwick Bay.

RSPB highlighted the popularity of the beach especially during July and August.

ERM asked if there was much bird breeding activity on the beach and RSPB answered that this was limited and that there were occasional arctic terns and there is often breeding arctic skua nest near the carpark.

RSPB noted that for marine works, the cliffs around Rackwick bay do not support large colonies of auks, but that fulmar are relatively common and widespread.

RSPB agreed it would be helpful to see detailed habitat mapping across all areas where works are being considered and SHEPD agreed to share this once surveys are complete.

RSPB mentioned that cliff counts were completed last year and the data is available through JNCC. RSPB hold data on other bird species, which is available through a data request. ERM noted that they have submitted a data request.

ED1 Future Years Programme – Regional EPS Discussion - SNH

Date:	21 st October 2019	Venue:	SSE Perth Training Centre
Participants	<p>Fiona Manson (FM) – Marine Policy and Advice (SNH) Catriona Gall (CG) – Marine Renewables Casework Officer (SNH) Eric Houston (EH) - Intertek Patricia Clarke (PC) - Intertek Robin Burnett (RB) – Marine Consents Manager (SSEN)</p> <p>By telcon/ Skype: Beverley Walker (BW) – Pentland Firth East Consents Manager (SSEN) Stuart Wilson (SW) – (Global) Stuart Maccoinneach (SMac) – (Global) John Wrottesley (JW) – (Global) Glenn Munachen (GM) – (Global) Patrick Clark (PC) – (Hydrofix)</p>		
Apologies			
Minutes Distribution	All attendees		

Item	Description	Action
Background		
1.	<p>Project Description:</p> <ul style="list-style-type: none"> EH provided an overview of the project description. See attached slide pack. 	
2.	<p>Project Overview:</p> <ul style="list-style-type: none"> SW provided commentary on the project overview. See attached slide pack with additional comments noted as: Cable lay speed assumed to be 300 – 400m per hour; Cable lay vessel restricted to water depths >10m; Rackwick proposed at present as 1st end; Murkle Bay proposed as 2nd end due to it's more sheltered location; Support craft sea state limit of ~1.0m Hs; Deep water vessel sea state limit of ~4.0m Hs; ROV limit of ~1.5knts launch / recovery; ~3.0 knots operational; Potential for tidal stream strength to affect operational windows; Operations therefore best carried out over neap tides. This will extend the nominal 3.5-4 days installation period required over the <i>circa</i> 36km cable route Protection requirements (cast iron split pipe, uraduct and rock bags) presently being evaluated; 	TBC TBC

	<ul style="list-style-type: none"> Due to increased diameter created by Uraduct there are potential stability issues and need for increased cable stability measures (eg rock bag placement); 	
3.	<p>Marine Survey:</p> <ul style="list-style-type: none"> PC provided commentary on the recent marine surveys – see separate slide pack; 500m corridor centred on draft RPL; Survey carried out in 3 sections: <ul style="list-style-type: none"> >15m water depth – Havila Subsea offshore vessel with Survey ROV and Workclass ROV, 18 vibrocores, 16 CPT locations; <15m AUV Harry and Delta RIB in nearshore zone (MBES, SBP, Mag); Landfall covered by UAV (DTM & Photogrammetry), trail pits and hand auger to inform burial assessment. Stony reef at KP3 (offshore Rackwick) identified and classified by MMT as of Medium grade; <ul style="list-style-type: none"> Additional surveys were conducted to determine the extent of the reef Reef located where shelf drops from 30 to 60m WD; Best environmental option appraisal has resulted in proposed cable route being altered to cross reef where it is at lowest relief (~2-3m height, ~35m width); EH advised that Intertek will provide supporting document covering reef classification assessment to SNH; FM advised that based on the information presented thus far that it would appear all reasonable actions were being taken to minimise impacts on the reef; 	EH
4.	<p>Timescale:</p> <ul style="list-style-type: none"> Installation window of March/ April 2020 being targeted based on avoiding breeding bird season; FM queried bird breeding season dates – BW advised that is recognised that migratory bird arrival on Hoy is up to a month later than standard guidance (ie of end April/ May), which was confirmed by 2019 surveys; Should there be a need to undertake landfall operations after this date in 2020 (due to programme delays), consultation with RSPB, additional ornithological surveys and the appointment of an OCOW will occur, as required 	
5.	<p>Cable Burial:</p> <ul style="list-style-type: none"> Where sediment depth permits options included water jetting, mechanical excavation or a tool combining both; Corridor width of 6 – 7m typically required for tracked cable burial tractor with cable being pushed into the excavated trench; Post-lay pass to push excavated material back on top of cable not proposed; 	

	<ul style="list-style-type: none"> • Cable to be surface laid on hard substrate with additional protection by rock bags to prevent movement where required; • Uraduct being considered for routing over Annex 1 reef although further study required to determine if this is considered beneficial or not; 	
6.	<p>EPS/ BS Licence</p> <ul style="list-style-type: none"> • Intertek and Global will review existing EPS and Protected Site and Species Risk Assessment, to determine if an update is required, prior to submitting an application to vary/extend the existing EPS and BS licences (expire 31st Dec 2019) to cover the installation activities; • With regard to future ongoing inspections of the cable once installation is completed, RB advised that SSEN are in the process of applying for a regional EPS and BS licence for the North Coast and Orkney Marine Region which would cover all cable inspection activities out to March 2023. 	
7.	<p>ESI Content</p> <ul style="list-style-type: none"> • EH provided commentary on the proposed structure of the ESI; • FM queried lack of Birds chapter – EH/ BW advised that HRA Test of Likely Significant effect assessments on birds was captured within the EPS and protected sites and species risk assessment. BW agreed that a separate chapter relating to Birds would be useful given their high importance as qualifying features to the SPAs in the area • BW advised that presence of otters had been noted at both landfalls with surveys proposed ~6 weeks prior to construction activity commencing; to ensure relevant mitigation was included within the contractor CEMPS and that EPS licences to disturb could be applied for, if relevant • FM queried where seals would be considered – EH to confirm where these would be dealt with noting that the EPS and protected sites and species risk assessment covered these with regard to seal haul outs. • Intertek to circulate summary table for impacts ‘screened’ in/ out to SNH for comment. 	<p>EH</p> <p>EH</p>
8.	<p>Onshore</p> <ul style="list-style-type: none"> • BW provided an overview of the rationale behind the proposed landfall/TJP location at Rackwick Bay 	

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