Notice to Mariners - update

Scottish Hydro Electric Power Distribution (SHEPD) - Carradale - Arran & Mull - Coll
Date of Issue: 12th January 2021

Overview

Please be advised that Fugro (on behalf of SHEPD) will be undertaking a geophysical and geotechnical survey of the proposed Carradale to Arran and the Mull to Coll submarine electricity cable routes. The purpose of this update is to outline the working area for the vessels at each location and amend dates for some survey operations from those previously provided. The survey will utilise three different vessels to complete survey operations:

- Fugro Frontier (offshore vessel)
- MV Valkyrie (nearshore vessel)
- Fugro Seeker (nearshore vessel)

An overview of the cable routes are shown below in Figures 1 and 2.

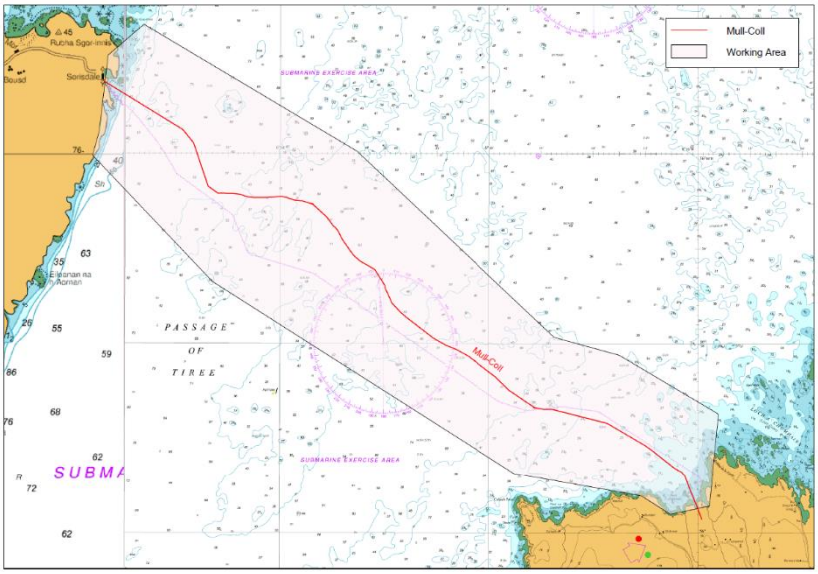


Figure 1: Mull - Coll

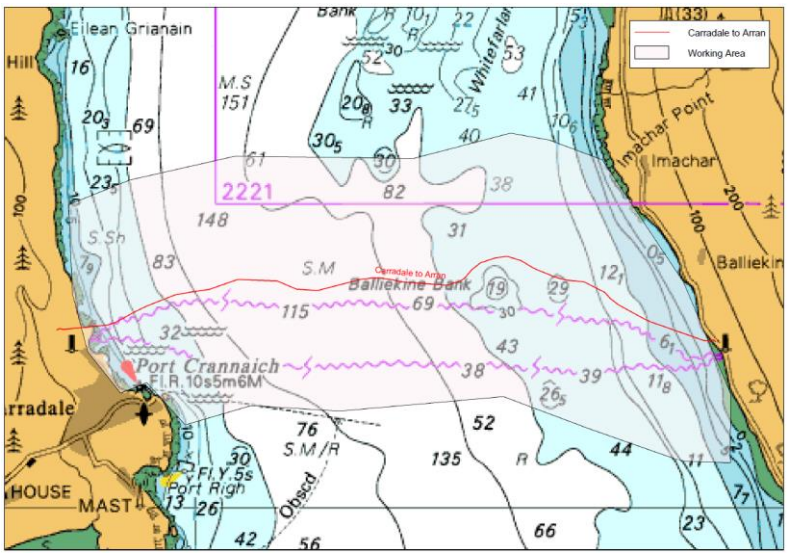


Figure 2: Carradale - Arran Route Overview

Mull-Coll Boundary Area of Operations

Point	Easting	Northing	Longitude	Latitude	Longitude	Latitude
1	668111.61	6278555.13	56°37'15.56"N	6°15'36.04"W	56° 37.25940'N	006° 15.60060'W
2	668005.46	6276743.17	56°36'17.16"N	6°15'46.50"W	56° 36.28620'N	006° 15.77520'W
3	667250.21	6276550.26	56°36'11.90"N	6°16'31.19"W	56° 36.19860'N	006° 16.51980'W
4	666666.59	6276892.37	56°36'23.70"N	6°17'04.58"W	56° 36.39480'N	006° 17.07660'W
5	664166.30	6277234.14	56°36'37.92"N	6°19'30.26"W	56° 36.63180'N	006° 19.50420'W
6	658124.07	6280763.38	56°38'39.42"N	6°25'16.50"W	56° 38.65680'N	006° 25.27500'W
7	655693.65	6283139.82	56°39'59.14"N	6°27'33.86"W	56° 39.98580'N	006° 27.56460'W
8	655807.27	6283616.46	56°40'14.40"N	6°27'26.16"W	56° 40.24020'N	006° 27.43620'W
9	655924.91	6285100.85	56°41'02.22"N	6°27'16.02"W	56° 41.03700'N	006° 27.26700'W
10	656600.51	6285728.01	56°41'21.67"N	6°26'34.98"W	56° 41.36100'N	006° 26.58300'W
11	660847.60	6283413.07	56°40'01.69"N	6°22'30.84"W	56° 40.02840'N	006° 22.51380'W
12	664842.45	6279928.89	56°38'04.12"N	6°18'44.46"W	56° 38.06880'N	006° 18.74100'W
13	666131.61	6279630.07	56°37'52.83"N	6°17'29.58"W	56° 37.88040'N	006° 17.49300'W
14	668047.28	6278594.20	56°37'16.90"N	6°15'39.72"W	56° 37.28160'N	006° 15.66180'W
15	668111.61	6278555.13	56°37'15.56"N	6°15'36.04"W	56° 37.25940'N	006° 15.60060'W

Table 1: General Operational Area

Carradale-Arran Boundary Area of Operations

Point	Easting	Northing	Longitude	Latitude	Longitude	Latitude
1	344177.41	6164439.92	55°36'03.30"N	5°28'23.88"W	55° 36.05520'N	005° 28.39800'W
2	344170.24	6165255.04	55°36'29.63"N	5°28'25.95"W	55° 36.49380'N	005° 28.43280'W
3	344733.54	6165460.39	55°36'36.92"N	5°27'54.20"W	55° 36.61560'N	005° 27.90360'W
4	345702.70	6165645.07	55°36'44.00"N	5°26'59.24"W	55° 36.73320'N	005° 26.98740'W
5	347325.98	6165565.44	55°36'43.27"N	5°25'26.39"W	55° 36.72120'N	005° 25.44000'W
6	348227.05	6165765.89	55°36'50.76"N	5°24'35.34"W	55° 36.84600'N	005° 24.58920'W
7	348578.16	6165689.66	55°36'48.69"N	5°24'15.14"W	55° 36.81180'N	005° 24.25260'W
8	349053.10	6165494.61	55°36'42.92"N	5°23'47.63"W	55° 36.71520'N	005° 23.79360'W
9	349754.66	6164356.09	55°36'06.90"N	5°23'05.34"W	55° 36.11520'N	005° 23.08920'W
10	350150.14	6163323.70	55°35'33.97"N	5°22'40.74"W	55° 35.56620'N	005° 22.67880'W
11	350123.82	6162689.28	55°35'13.44"N	5°22'41.01"W	55° 35.22420'N	005° 22.68360'W
12	349702.50	6162717.16	55°35'13.87"N	5°23'05.10"W	55° 35.23140'N	005° 23.08500'W
13	348844.91	6163050.92	55°35'23.70"N	5°23'54.70"W	55° 35.39520'N	005° 23.91180'W
14	348077.65	6163369.54	55°35'33.14"N	5°24'39.12"W	55° 35.55240'N	005° 24.65220'W
15	346572.04	6163289.05	55°35'28.84"N	5°26'04.88"W	55° 35.48040'N	005° 26.08140'W
16	345769.46	6163368.53	55°35'30.50"N	5°26'50.85"W	55° 35.50860'N	005° 26.84760'W
17	345161.96	6163211.95	55°35'24.74"N	5°27'25.20"W	55° 35.41260'N	005° 27.42000'W
18	344826.00	6163609.71	55°35'37.22"N	5°27'45.18"W	55° 35.62020'N	005° 27.75300'W
19	344583.15	6163523.19	55°35'34.14"N	5°27'58.86"W	55° 35.56920'N	005° 27.98100'W
20	344297.30	6163910.24	55°35'46.32"N	5°28'15.96"W	55° 35.77200'N	005° 28.26600'W
21	344194.31	6164365.25	55°36'00.91"N	5°28'22.76"W	55° 36.01500'N	005° 28.37940'W
22	344177.41	6164439.92	55°36'03.30"N	5°28'23.88"W	55° 36.05520'N	005° 28.39800'W

Table 2: General Operational Area

Schedule of Operations

The planned geophysical and geotechnical survey operations are shown below in Table 3 and Table 4.

Table 3: Schedule of Operations (Mull - Coll)

Dates	Operation	Vessel(s)
05/01/21 - 03/02/21	Nearshore survey	Fugro Seeker
18/01/21 - 04/02/21	Nearshore Survey	Fugro Valkyrie
15/01/21 - 02/03/21	Offshore survey	Fugro Frontier

Table 4: Schedule of Operations (Carradale - Arran)

Dates	Operation	Vessel(s)
19/12/20 - 13/01/21	Nearshore survey	Fugro Seeker
14/02/21 - 26/02/21	Offshore survey	Fugro Frontier

Vessel and Equipment Details

The vessels that will carry out the survey activities are shown below.



Figure 3: Fugro Frontier



Figure 4: MV Valkyrie



Figure 5: Fugro Seeker

Survey Description

The survey will involve the full coverage of dedicated survey lines with a full suite of geophysical survey systems including Multibeam Echo Sounder, Side Scan Sonar, Sub-bottom profiler and magnetometers mounted on the vessel or towed from the stern of the vessel.

Other vessels should maintain an appropriate and safe distance of 500m when passing the survey vessels whilst undertaking survey operations and should pass at the lowest speed to avoid vessel wash effects. The Fugro Frontier will be working 24 hour operations and will display appropriate day shapes and lights during reduced visibility and night operations. The MV Valkyrie and Fugro Seeker will be working during the hours of daylight (approx. 8 hours).

Fugro Frontier

Primary equipment	Towed/ Hull mounted/ Sampling	Approx. tow length (m)
Multibeam Echo Sounder	Hull mounted	N/A
Side Scan Sonar	Towed	50-80m from stern
Sub-bottom Profiler	Hull mounted	N/A
Magnetometer single	Towed	Attached to SSS, 70 - 100m from stern
2 x scanfish plus 8 x mag	Towed	110 - 180m from stern
CPT	Sampling	N/A
Vibrocore	Sampling	N/A

MV Valkyrie and Fugro Seeker

Primary equipment	Towed/ Hull mounted/ Sampling	Approx. tow length (m)
Multibeam Echo Sounder	Hull mounted	N/A
Side Scan Sonar	Towed	10-20m from stern
Sub-bottom Profiler	Hull mounted	N/A
Magnetometers (x2)	Towed	Attached to SSS, 70 - 100m from stern
2 x scanfish plus 8 x mag	Towed	40m from stern
Grab sample	Sampling	N/A

Contact Details

The vessel contact details are given below:

Fugro Frontier	
Call sign	C6BH4
Bridge telephone	+31107130936
Bridge email	bridge@fro.fugro.com
Party Chief telephone	+31107130938
Email	pc@fro.fugro.com
Onshore Site Manager	Kate Jackson k.jackson@fugro.com

MV Valkyrie	
Call sign	2BWA9
Bridge	Nick Praed +44 7980 971 245 Giles Simmons +44 7557 607 751
Offshore Manager / Party Chief	Khash Long +44 7980 987 725 Craig Dyer +44 7411 168 716
Email	Master.valkyrie@fugro.com
Onshore Site Manager	Andrew Eastmond a.eastmond@fugro.com

Fugro Seeker	
Call sign	2HCS2
Bridge	Will Rand +44 7585 992459 Mark Shelley +44 7766 000208
Offshore Manager / Party Chief	Alli Hartley +44 7766 448 697 Dan Goodall +44 7961 046376
Email	master.fugroseeker@fugro.com
Onshore Site Manager	Daniel Ferguson d.ferguson@fugro.com

Fishing Liaison Officers

Fishing liaison for the cable surveys will be co-ordinated by Brown and May Marine (BMM). For any commercial fishery queries please contact the Company Fishing Liaison Officers (CFLOs):

Alex Winrow-Giffin 07760 160039, alex@brownmay.com, or
Meg Kalafat 07702 710176, meg.kalafat@brownmay.com

Also in place to liaise with the vessels and fishing operations in the area will be the local Fishing Industries Representative (FIR):

George White 07761 873965, georgewhite0@gmail.com