

Marine Scotland Science

NOTICE TO MARINERS UPDATE

PrePARED Fish Tracking Array (Vessel and AIS update)

Issue date: Friday 10th November 2023

Marine Scotland Science (MSS) intend to Service all acoustic fish tracking moorings in the Beatrice and Moray East Offshore Windfarms areas (BOWL (38 moorings) and Moray East (49 moorings)) as part of the PrePARED programme of works (figure 1 & 2). PrePARED is a collaborative research project coordinated by Marine Scotland Science which aims to concurrently study predator (seabird and marine mammal) and prey (fish) distribution and behaviour in and around offshore wind farms. The moorings hold research equipment that support hydrophone receivers. These receivers log the presence of fish, such as Cod, Haddock and Whiting which will be tagged with acoustic ID transmitter tags (they will also record tagged salmon and seatrout smolts migrating from Moray Firth Rivers should they pass within range).

The locations of the fish tracking moorings are shown (Figure 1); the positions of the moorings are given in WGS84 (Table 1). The moorings will be serviced (removed and redeployed) from the 17th of November 2023 by a the Waterfall operated by Moray First Marine (figure 3). The moorings will be removed permanently by the 30th of August 2026.

Acoustic fish tracking moorings will not be surface marked and will be located on the seabed. The array moorings will extend vertically no more than 4 metres. The moorings will be serviced by boat, using the inbuilt acoustic recovery system. In the unlikely event of failure in the acoustic release system an ROV will be used from the same boat to service the mooring. Please note the acoustic fish tracking moorings are being deployed as close to the wind turbine generators as possible to minimise interference with fishing operations (50m), should these be accidentally caught only the instruments are required to be returned and the location of the discarded weight should be supplied to MSS for recovery later.

Contact details

All enquiries should be made to the Marine Scotland acoustics mailbox (acoustics@scotland.gsi.gov.uk) marked for the attention of Robert Main. Switch Board
Tel: 0131 244 2500

Figure 1: Indicative location of PrePARED fish tracking acoustic receiver array

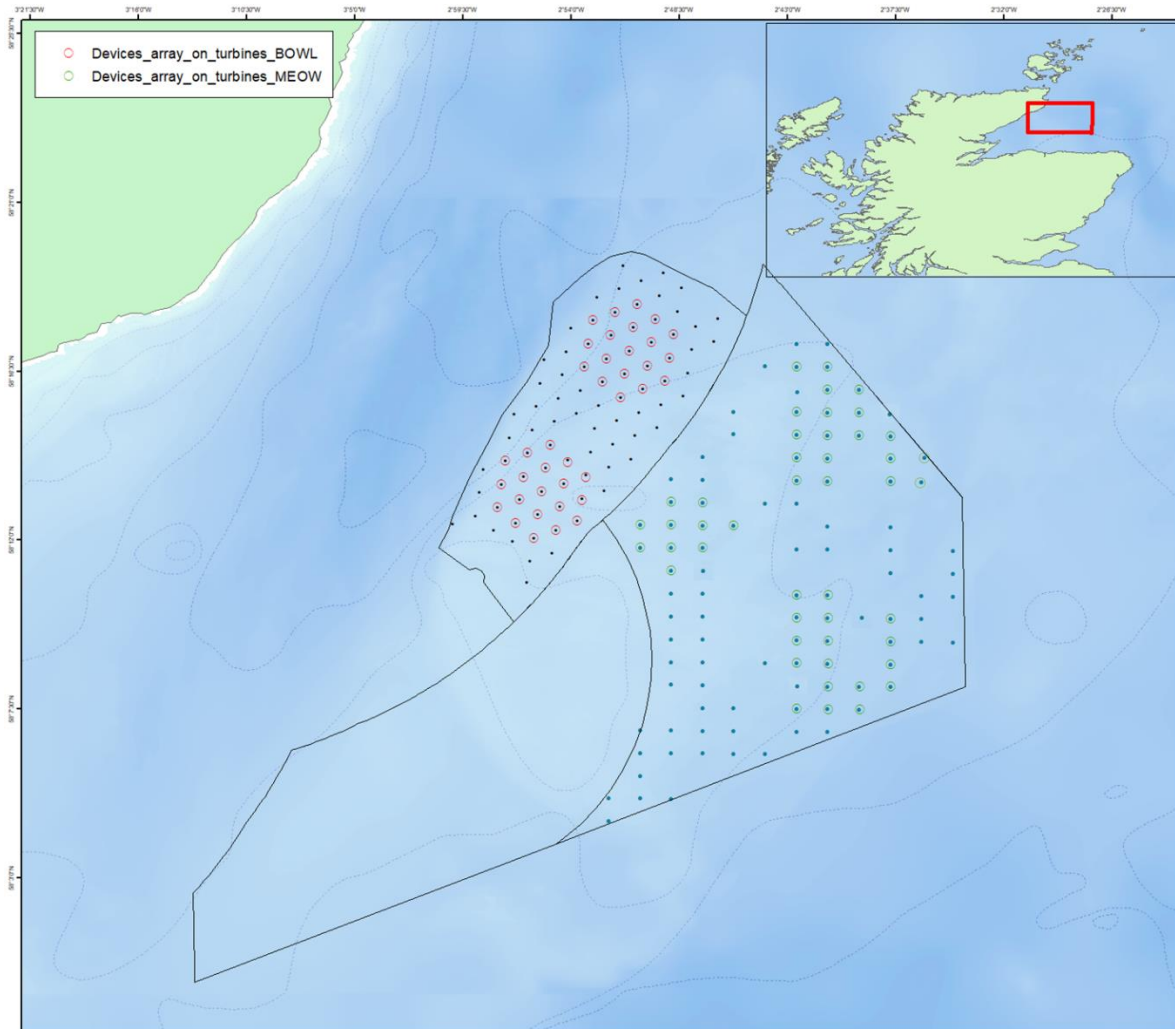


Table 1: Mooring number and position

Mooring ID	Latitude (Decimal degrees)	Longitude (Decimal degrees)	Latitude (degrees decimal minute)	Longitude (degrees decimal minute)
MEO1W1	58.15546	-2.68437	58° 09.3270' N	002° 41.011' W
MEO1W2	58.16559	-2.68428	58° 09.9348' N	002° 41.006' W
MEO1W3	58.17573	-2.68419	58° 10.5432' N	002° 41.000' W
MEO1W4	58.17594	-2.7105	58° 10.5558' N	002° 42.579' W
MEO1W5	58.16581	-2.71058	58° 09.9480' N	002° 42.584' W
MEO1W6	58.15567	-2.71066	58° 09.3396' N	002° 42.588' W
MEO1W7	58.14553	-2.71074	58° 08.7312' N	002° 42.593' W
MEO1W8	58.14532	-2.68446	58° 08.7186' N	002° 41.016' W
MEO1W9	58.13483	-2.63238	58° 08.0892' N	002° 37.892' W
MEO1W11	58.13518	-2.68455	58° 08.1102' N	002° 41.022' W
MEO1W12	58.13496	-2.65827	58° 08.0970' N	002° 39.445' W
MEO1W13	58.14488	-2.63189	58° 08.6922' N	002° 37.862' W
MEO1W14	58.15501	-2.63178	58° 09.3000' N	002° 37.856' W
MEO1W15	58.16515	-2.63168	58° 09.9084' N	002° 37.850' W
MEO1W17	58.12526	-2.71091	58° 07.5150' N	002° 42.603' W
MEO1W18	58.12505	-2.68464	58° 07.5024' N	002° 41.027' W
MEO1W19	58.12483	-2.65837	58° 07.4892' N	002° 39.451' W
MEO1W20	58.27718	-2.68368	58° 16.6302' N	002° 40.969' W
MEO1W21	58.2774	-2.71007	58° 16.6434' N	002° 42.553' W
MEO1W22	58.236483	-2.602215	58° 14.1890' N	002° 36.133' W
MEO1W23	58.26705	-2.68377	58° 16.0224' N	002° 40.975' W
MEO1W24	58.26683	-2.6574	58° 16.0092' N	002° 39.393' W
MEO1W25	58.25713	-2.71023	58° 15.4272' N	002° 42.562' W
MEO1W26	58.25692	-2.68387	58° 15.4146' N	002° 40.981' W
MEO1W27	58.25668	-2.6575	58° 15.4002' N	002° 39.399' W
MEO1W28	58.22582	-2.605112	58° 13.5495 ' N	002° 36.307' W
MEO1W29	58.24698	-2.71032	58° 14.8182' N	002° 42.568' W
MEO1W30	58.24677	-2.68395	58° 14.8056' N	002° 40.986' W
MEO1W31	58.24655	-2.65758	58° 14.7924' N	002° 39.403' W
MEO1W32	58.24633	-2.63123	58° 14.7792' N	002° 37.822' W
MEO1W33	58.23685	-2.7104	58° 14.2104' N	002° 42.573' W
MEO1W34	58.23663	-2.68403	58° 14.1972' N	002° 40.990' W
MEO1W35	58.22672	-2.71048	58° 13.6026' N	002° 42.578' W
MEO1W36	58.2265	-2.68413	58° 13.5894' N	002° 40.997' W
MEO1W37	58.2362	-2.63133	58° 14.1714' N	002° 37.828' W

MEO38	58.22605	-2.63143	58° 13.5624' N	002° 37.835' W
MEO39	58.20743	-2.84229	58° 12.4453' N	002° 50.486' W
MEO40	58.19729	-2.84234	58° 11.8369' N	002° 50.489' W
MEO41	58.19711	-2.81601	58° 11.8261' N	002° 48.909' W
MEO42	58.18697	-2.81607	58° 11.2177' N	002° 48.913' W
MEO44	58.19691	-2.78969	58° 11.8141' N	002° 47.330' W
MEO45	58.20705	-2.78963	58° 12.4225' N	002° 47.327' W
MEO46	58.20685	-2.7633	58° 12.4105' N	002° 45.747' W
MEO47	58.20724	-2.81596	58° 12.4339' N	002° 48.906' W
MEO48	58.21738	-2.81591	58° 13.0423' N	002° 48.903' W
MEO49	58.21719	-2.78957	58° 13.0309' N	002° 47.323' W
BOWL1	58.2847	-2.85132	58° 17.0815' N	002° 51.028' W
BOWL2	58.28827	-2.83255	58° 17.2957' N	002° 49.902' W
BOWL3	58.29505	-2.84781	58° 17.7025' N	002° 50.817' W
BOWL4	58.2915	-2.86666	58° 17.4895' N	002° 51.948' W
BOWL5	58.28115	-2.8701	58° 16.8685' N	002° 52.155' W
BOWL6	58.2744	-2.85481	58° 16.4635' N	002° 51.237' W
BOWL7	58.27793	-2.83605	58° 16.6753' N	002° 50.112' W
BOWL8	58.28149	-2.81728	58° 16.8889' N	002° 48.985' W
BOWL9	58.29185	-2.81377	58° 17.5105' N	002° 48.775' W
BOWL10	58.29862	-2.82903	58° 17.9167' N	002° 49.690' W
BOWL11	58.30539	-2.84429	58° 18.3229' N	002° 50.606' W
BOWL12	58.30182	-2.86307	58° 18.1087' N	002° 51.733' W
BOWL13	58.29825	-2.88185	58° 17.8945' N	002° 52.860' W
BOWL14	58.2879	-2.88535	58° 17.2735' N	002° 53.070' W
BOWL15	58.27754	-2.88884	58° 16.6519' N	002° 53.279' W
BOWL16	58.27078	-2.87359	58° 16.2463' N	002° 52.364' W
BOWL17	58.26401	-2.85833	58° 15.8401' N	002° 51.448' W
BOWL18	58.26758	-2.83958	58° 16.0543' N	002° 50.323' W
BOWL19	58.27114	-2.82081	58° 16.2679' N	002° 49.197' W
BOWL20	58.22222	-2.92503	58° 13.3327' N	002° 55.451' W
BOWL21	58.21544	-2.90979	58° 12.9259' N	002° 54.536' W
BOWL22	58.2258	-2.90629	58° 13.5475' N	002° 54.326' W
BOWL23	58.23256	-2.92155	58° 13.9531' N	002° 55.242' W
BOWL24	58.22855	-2.94061	58° 13.7125' N	002° 56.385' W
BOWL25	58.22539	-2.95902	58° 13.5229' N	002° 57.490' W
BOWL26	58.21862	-2.94376	58° 13.1167' N	002° 56.574' W
BOWL27	58.21186	-2.92851	58° 12.7111' N	002° 55.659' W
BOWL28	58.2051	-2.91327	58° 12.3055' N	002° 54.745' W
BOWL29	58.20907	-2.89544	58° 12.5437' N	002° 53.675' W

BOWL30	58.21815	-2.89111	58° 13.0885' N	002° 53.415' W
BOWL31	58.22852	-2.88805	58° 13.7107' N	002° 53.232' W
BOWL32	58.23524	-2.90296	58° 14.1139' N	002° 54.126' W
BOWL33	58.21504	-2.96249	58° 12.9019' N	002° 57.698' W
BOWL34	58.20828	-2.94723	58° 12.4963' N	002° 56.783' W
BOWL35	58.20151	-2.932	58° 12.0900' N	002° 55.865' W
BOWL36	58.23574	-2.95554	58° 14.1439' N	002° 57.281' W
BOWL37	58.23932	-2.93681	58° 14.3587' N	002° 56.157' W
BOWL38	58.24291	-2.91807	58° 14.5741' N	002° 55.033' W

Figure 2: Pop-Up array mooring design

Acoustic receiver with rope canister and floatation. AR type mooring.



70kg clump weight attached to bottom thimble

2 meters of Polysteel rope

Figure 3: Vessel to be used Waterfall operated by Moray First Marine

WATERFALL	
Call Sign:	2CBT4
MMSI:	235071392
On Board Contact:	Master bill@moraymarine.com
Offshore Manager / Party Chief:	07775802963
Onshore Representative:	acoustics@scotland.gsi.gov.uk marked for the attention of Robert Main

