

Hornsea 2 Offshore Wind Farm

WEEKLY STATUS REPORT

The Orsted logo is located in the bottom left corner. It consists of a white circular icon with a vertical line through the center, resembling a power symbol, followed by the word "Orsted" in a bold, white, sans-serif font.

Week Commencing: 29/11/2021 WK 48
Notice no: 084
Issued on the 26th November 2021

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1. Ørsted Marine and Helicopter Co-ordination Centre (MHCC)

MHCC Routine Enquiries (24 hours)	+44 (0) 207 811 1171
MHCC Emergency Number (24 hours)	+44 (0) 207 811 1170
Email	MHCC_HOW02_ADM@orsted.co.uk

Safety Information

All vessel not involved in construction activities are requested to keep a 500m safety distance from construction and dive support vessels whilst transiting the area

During Construction

- 'Rolling' 500m Safety Zones (SZs) around each wind farm structure and / or their foundations when a construction vessel **is** present
- Pre-commissioning 50m SZs around any wind farm structure which is either partially constructed but not yet commissioned where a construction vessel **is not** present.

Discrepancies identified between coordinates should be questioned immediately to Ørsted. Information is supplied on a 'not for navigation' basis. All coordinated are WGS84 unless stated otherwise

2. HOW02 Guard Vessel Details



EMSWIND

Bridge: +31 255 787 008

Iridium: +8 816 777 626

Mobile: +34 697676216

emswind@DBconnect.nl

IMO No: 9824540

Call sign: C6DX8

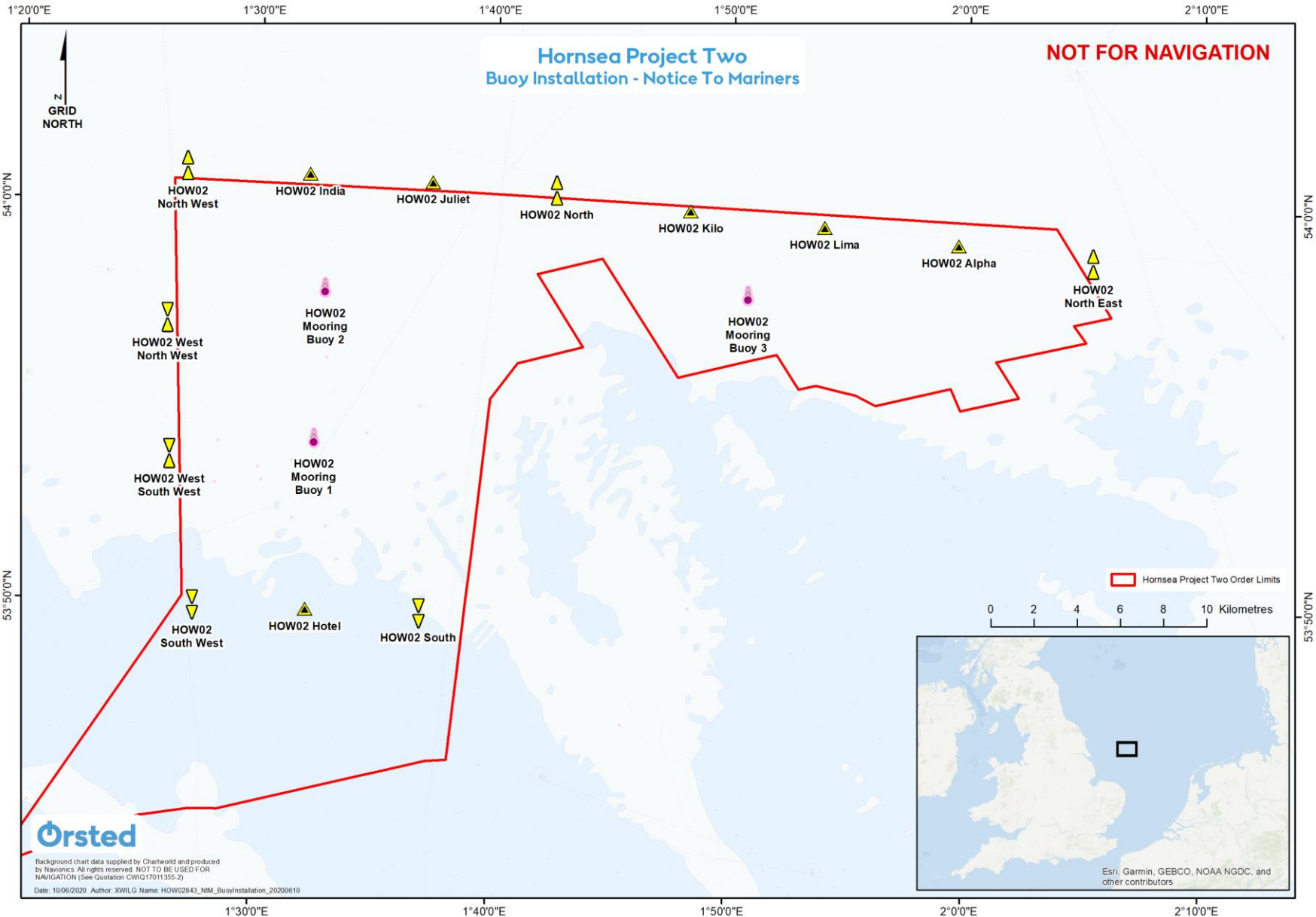
MMSI: 311000812

3. HOW02 Deployed navigation aids and buoys

Buoy Name	Longitude (WGS84)	Latitude (WGS84)	Buoy Name	Longitude (WGS84)	Latitude (WGS84)
HOW02 Alpha	1° 59.629' E	53° 59.161' N	HOW02 West South West	1° 26.344' E	53° 53.645' N
HOW02 Hotel	1° 32.225' E	53° 49.820' N	HOW02 West North West	1° 26.152' E	53° 57.041' N
HOW02 India	1° 32.092' E	54° 0.692' N	HOW02 Kilo	1° 48.240' E	53° 59.930' N
HOW02 Juliet	1° 37.306' E	54° 0.542' N	HOW02 Lima	1° 53.935' E	53° 59.573' N
Mooring Buoy 1	1° 32.447' E	53° 53.993' N	HOW02 North East	2° 5.322' E	53° 58.750' N
Mooring Buoy 2	1° 32.808' E	53° 57.757' N	HOW02 North West	1° 26.877' E	54° 0.842' N
Mooring Buoy 3	1° 50.716' E	53° 57.735' N	HOW02 South	1° 37.014' E	53° 49.769' N
HOW02 North	1° 42.544' E	54° 0.395' N	HOW02 South West	1° 27.442' E	53° 49.872' N

Buoy Name	Longitude (WGS84)	Latitude (WGS84)
HOW02 RCS North	0° 55.929' E	53° 38.431' N
HOW02 RCS East	0° 56.628' E	53° 37.929' N
HOW02 RCS West	0° 55.291' E	53° 37.772' N

HOW02 Demarcation Buoys



NOT FOR NAVIGATION

Hornsea Project Two RCS Deployed Buoy Position

N
GRID
NORTH

0° 55,928' E,
53° 38,431' N

0° 56,628' E,
53° 37,929' N

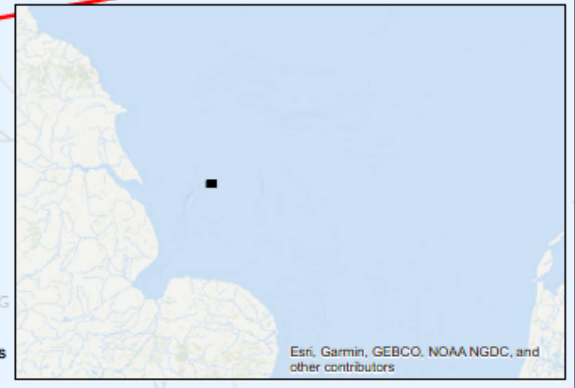
0° 55,291' E,
53° 37,771' N

- Deployed Buoy Position
- Hornsea Project Two Reactive Compensation Station
- Hornsea Project Two Order Limits

Orsted

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C-Maps. Licence No. DC22646. All rights reserved. NOT TO BE
USED FOR NAVIGATION (See Quotation C/NQ117011356-2)
Date: 19/09/2021 Author: WJG Name: HGW2071_RCS_NavigationBuoyRelocation_20210919

0 200 400 600 800 Metres











Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

4. HOW02 Vessels Operations and Activities

Operations / Package	Vessel(s)	Comments
Construction	MHO Grimsby MHO Esbjerg M/V Doer MHO Apollo MHO Asgard Emswind Deep Cygnus GMS Endeavour Seafox 7	Personnel Transfer / Survey Personnel Transfer Personnel Transfer Personnel Transfer Personnel Transfer Guard Vessel W2W SOV Jack-up Accommodation Jack-up Accommodation
Export Cable Installation	Resilient Adventure Blue Norther Ivero	Guard Vessel Guard Vessel CTV Survey Vessel
Array Cable Installation	Simar Esperanca Normand Cutter	Trenching vessel Trenching vessel
WTG Installation	Sea Challenger Sea Installer	WTG Installation Jack Up WTG Installation Jack Up
WTG Commissioning	Acta Auriga WEM 3 Manor Endurance Island Crown Normand Fortress Fob Swath 9 Fob Swath 4	Commissioning SOV Refuelling CTV Refuelling CTV Commissioning SOV Refuelling SOV CTV CTV
Array Cable Terminations	Wind Innovation Normand Jarstein	W2W SOV W2W SOV

5. HOW02 Vessel Update

Vessels Currently On Site

Vessel Details			Vessel Communications				Work Schedule		VCC
Vessel Picture	Vessel Name	MMSI	Contact Number	Email	Type	Frequencies Monitored	Start / Arrival	Package	VCC Issued
GUARD VESSELS									
	Emswind	311000812	+31 255 787 008	emswind@DBconnect.nl	VHF	Ch. 16 & P1 @ 162.050 MHz	01.10.2020	Construction	30.09.2020
	Adventure	235109237	+44 7446 054 547	gvadventure@gmail.com	VHF	Ch. 16 & P1 @ 162.050 MHz	01.10.2021	Export Cable Installation	01.10.2021
	Resilient	232711000	+44 (0) 2841140788	gvresilient@gmail.com	VHF	Ch. 16 & P1 @ 162.050 MHz	27.10.2020	Export Cable Installation	28.10.2020
CREW TRANSFER VESSELS									
	MHO Grimsby	219025992	+45 53 65 46 45	Mho-Grimsby@mho-co.dk	VHF	Ch. 16 & P1 @ 162.050 MHz	01.04.2020	Construction	04.05.2020
	MHO Esbjerg	219023786	+44 7869 303 667	Mho-Esbjerg@mho-co.dk	VHF	Ch. 16 & P1 @ 162.050 MHz	28/07/2020	Construction	13.11.2020
	NOS Doer	219811000	+45 78 78 80 00	doer@n-o-s.eu	VHF	Ch. 16 & P1 @ 162.050 MHz	01.02.2021	Construction	13.11.2020
	MHO Apollo	219028351	+4553894645	mho-apollo@mho-co.dk	VHF	Ch. 16 & P1 @ 162.050 MHz	20.09.2021	Construction	17.09.2021
	MHO Asgard	219028352	+4553874645	mho-asgard@mho-co.dk	VHF	Ch. 16 & P1 @ 162.050 MHz	20.09.2021	Construction	17.09.2021







HOW02 Vessel Update

Vessels Currently On Site continued.....

Vessel Details			Vessel Communications				Work Schedule		VCC
Vessel Picture	Vessel Name	MMSI	Contact Number	Email	Type	Frequencies Monitored	Start / Arrival	Package	VCC Issued
	Wind Innovation	235113838	00870773262105	master.wi@c-bed.com	VHF	Ch. 16 & P1 @ 162.050 MHz	19.03.2021	Construction	13.03.2021
	Simar Esperanca	219027989	+44 1224 568827	SimarEsperanca.Bridge@Subsea7.com	VHF	Ch. 16 & P1 @ 162.050 MHz	07.06.2021	Array Cable Installation	24.03.2021
	Sea Installer	219456000	+45521 39519	bridge.seainstaller@de-me-group.com	VHF	Ch. 16 & P1 @ 162.050 MHz	07.06.2021	WTG Installation	07.06.2021
	Normand Jarstein	257001590	+4752858350	bridge@jarstein.solstad.com	VHF	Ch. 16 & P1 @ 162.050 MHz	26.09.2021	Array Cable Termination	01.10.2021
	Ivero	232013165	+44 7917 477 672	master@ivero.gardline.co.uk	VHF	Ch. 16 & P1 @ 162.050 MHz	10.06.2021	Export Cable Installation	03.03.2021

HOW02 Vessel Update

Vessels Currently On Site continued...

Vessel Details			Vessel Communications				Work Schedule		VCC
Vessel Picture	Vessel Name	MMSI	Contact Number	Email	Type	Frequencies Monitored	Start / Arrival	Package	VCC Issued
	MCS Blue Norther	235096374	TBC	TBC	VHF	Ch. 16 & P1 @ 162.050 MHz	13.05.2021	Export Cable Installation	09.05.2021
	Deep Cygnus	257205000	+870 773 945 452	master@deepcygnus.no	VHF	Ch. 16 & P1 @ 162.050 MHz	25.05.2021	Construction	28.05.2021
	Sea Challenger	219019002	+45 5213 95 80	bridge.seachallenger@eme-group.com	VHF	Ch. 16 & P1 @ 162.050 MHz	25.05.2021	WTG Installation	25.05.2021
	Acta Auriga	244090781	TBC	TBC	VHF	Ch. 16 & P1 @ 162.050 MHz	01.06.2021	WTG Commissioning	04.06.2021
	Manor Venture	232007444	+44 740 734854	venture@mreltd.co.uk	VHF	Ch. 16 & P1 @ 162.050 MHz	01.06.2021	WTG Commissioning	06.06.2021
	Normand Cutter	257961000	+47 993 82 585	Captain Cutter master@cutter.solstad.com	VHF	Ch. 16 & P1 @ 162.050 MHz	13/11/2021	WTG Commissioning	12.09.2021

HOW02 Vessel Update

Vessels Currently On Site continued...

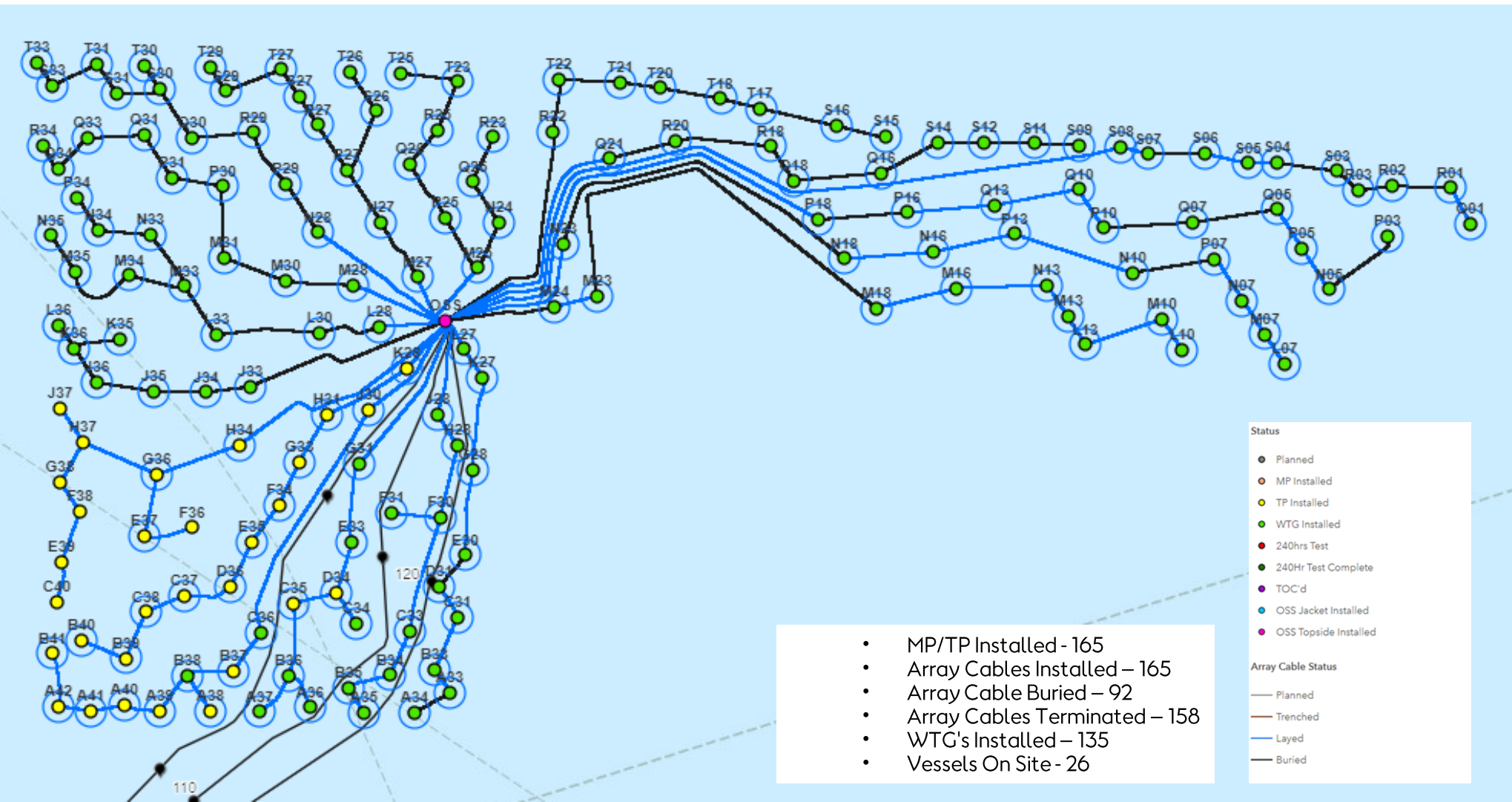
Vessel Details			Vessel Communications				Work Schedule		VCC
Vessel Picture	Vessel Name	MMSI	Contact Number	Email	Type	Frequencies Monitored	Start / Arrival	Package	VCC Issued
	WEM 3	2350035320	+441916220712	wem3@wemmarine.com	VHF	Ch. 16 & P1 @ 162.050 MHz	26.07/2021	WTG Commissioning	23.07.2021
	Manor Endurance	232030193	+447398 144840	endurance@mretld.co.uk	VHF	Ch. 16 & P1 @ 162.050 MHz	29.08.2021	WTG Commissioning	29.08.2021
	Seafox 7	235065812	+31 (0)23 7920420	radio.sf7@seafox.com	VHF	Ch. 16 & P1 @ 162.050 MHz	15.08.2021	Construction	14.08.2021
	GMS Endeavour	370582000	+442922402028	endeavour.6102@fleet.gmsplc.com	VHF	Ch. 16 & P1 @ 162.050 MHz	15.08.2021	Construction	14.08.2021
	Island Crown	257245000	TBC	bridge@crow.islandoffshore.com	VHF	Ch. 16 & P1 @ 162.050 MHz	01.09.2021	WTG Commissioning	04.09.2021
	Normand Fortress	258537000	TBC	bridge@fortress.solstad.com	VHF	Ch. 16 & P1 @ 162.050 MHz	08.10.2021	WTG Commissioning	07.10.2021
	FOB Swath 4	219463000	TBC	Fob4@outlook.dk	VHF	Ch. 16 & P1 @ 162.050 MHz	08.11.2021	WTG Commissioning	08.11.2021

6. HOW02 Vessel Update

Vessels Due On Site

Vessel Picture	Vessel Name	MMSI	Contact Number	Email	Type	Frequencies Monitored	Start / Arrival	Package

7. HOW02 Installation Status



- MP/TP Installed - 165
- Array Cables Installed – 165
- Array Cable Buried – 92
- Array Cables Terminated – 158
- WTG's Installed – 135
- Vessels On Site - 26

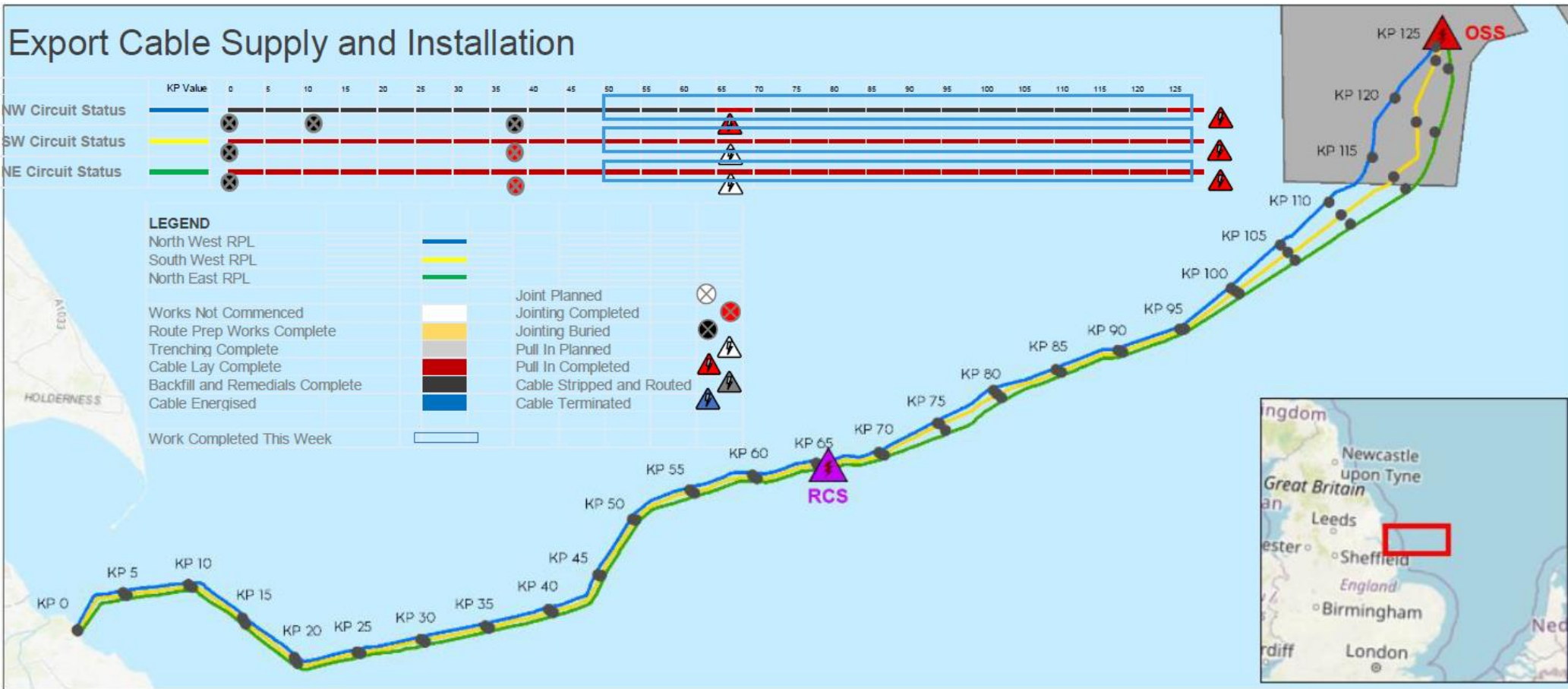
Status

- Planned
- MP Installed
- TP Installed
- WTG Installed
- 240hrs Test
- 240Hr Test Complete
- TOC'd
- OSS Jacket Installed
- OSS Topside Installed

Array Cable Status

- Planned
- Trenched
- Layed
- Buried

7. HOW02 Installation Status continued



NOTES / CHANGES:

1. Vessel (Spirit) has completed SWNSb cable pull in. Work on SWFS ongoing
2. Good progress this week for Boka Falcon with backfill operations completed on NENSb, 80% on NEFS. Currently working on 5km section to finish NWNSb

8. HOW02 Current Scope of Works

Export Cable Installation

- Resilient – Cable Guard Vessel
- Adventure – Cable Guard Vessel
- Blue Norther – CTV
- Ivero – Survey Vessel

Construction

- MHO Grimsby – Survey / Personnel Transfer
- MHO Esbjerg – Personnel Transfer
- M/V Doer – Personnel Transfer
- MHO Asgard – Personnel Transfer
- MHO Apollo – Personnel Transfer
- Emswind – HOW02 Guard Vessel
- Deep Cygnus – SOV W2W
- Seafox 7 – Jack-up accommodation RCS
- GMS Endeavour - Jack-up accommodation OSS

Array Cable Installations

- Simar Esperanca – Cable Trenching vessel
- Normand Cutter – Cable Trenching vessel

Array Cable terminations

- Wind Innovation – SOV
- Normand Jarstein – SOV

WTG Installation

- Sea Challenger – WTG Installation Vessel
- Sea Installer – WTG Installation Vessel

WTG Commissioning

- Island Crown - SOV
- Acta Auriga – SOV
- WEM 3 – Refuelling CTV
- Manor Endurance – Refuelling CTV
- Normand Fortress – Refuelling SOV
- Fob Swath 9
- Fob Swath 4

9. HOW02 Notice to Mariners currently open

NtM Title	Document No	Description
HOW02_OFF_EX_NtM Boulder Clearance and Trial Trenching	05970048_J	Notice of Boulder Clearance and Trial Trenching
HOW02_OFF_EX_NtM Notification of UXO	06063171_I	Notice of Further cUXO Identified
HOW02_OFF_EX_NtM Transponder and Metocean Buoy Deployment	06197107_I	Notice of measurement buoy deployment
HOW02_OFF_EX_NtM for beach works	06362764_I	Notice of Beach Works
HOW02_OFF_EX_NtM Commencement of Export Cable Works	06196988_A	Notice of Export Cable Installation
HOW02_OFF_EX_NtM Export Cable Installation Works	06239336_W	Notice of Export Cable Installation Activities
HOW02_OFF_EX_NtM Deployment of Construction Buoys	06230743_F	Construction Demarcation Buoy Deployment
HOW02_OFF_EX_NtM WTF Foundation Installation Works	06478167_E	Notice of Foundation Installation Works – Commencement of Scour protection Installation
HOW02_OFF_EX_NtM Array Cable Installation Works	06478166_G	Notice of Array Cable Installation Works – Commencement of PLGR
HOW02_OFF_EX_NtM OSS RCS Installation	06523452_G	Notice of Foundation Installation Activities – Commencement of OSS and RCS Jacket Installation
HOW02_OFF_EX_NtM Construction Activities	06833271_G	Notice of Construction Activities – Vessel Update
HOW02_OFF_EX_NtM WTG Installation Works	07035285_F	Notice of Wind Turbine Generator (WTG) Installation Works

10. HOW02 Safety Zones

If there are any questions regarding safety zones please contact MHCC or HOW02 Ops Support

– **During Construction**

- ‘Rolling’ 500m Safety Zones (SZs) around each wind farm structure and / or their foundations when a construction vessel **is** present
- Pre-commissioning 50m SZs around any wind farm structure which is either partially constructed but not yet commissioned where a construction vessel **is not** present.

Current HOW02 Active Safety Zones

Asset	Size	Duration	Asset	Size	Duration
HB Z11	50m	Until further notice	T18	50m	Until further notice
HB Z01	50m	Until further notice	T20	50m	Until further notice
Innovation	500m	Until further notice	S07	50m	Until further notice
S14	50m	Until further notice	T21	50m	Until further notice
S09	50m	Until further notice	T22	50m	Until further notice
P30	50m	Until further notice	S04	50m	Until further notice
R20	50m	Until further notice	S15	50m	Until further notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
J35	50m	Until further notice	T31	50m	Until further notice
S16	50m	Until further notice	S31	50m	Until further notice
L30	50m	Until further notice	R34	50m	Until further notice
M35	50m	Until further notice	T17	50m	Until further notice
J34	50m	Until further notice	R02	50m	Until further notice
M33	50m	Until further notice	P16	50m	Until further notice
M30	50m	Until further notice	T33	50m	Until further notice
Q16	50m	Until further notice	S11	50m	Until further notice
Q07	50m	Until further notice	T27	50m	Until further notice
S03	50m	Until further notice	S08	50m	Until further notice
S12	50m	Until further notice	S06	50m	Until further notice
S33	50m	Until further notice	S05	50m	Until further notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
S30	50m	Until further notice	R25	50m	Until further notice
S27	50m	Until further notice	P16	50m	Until further notice
R01	50m	Until further notice	N16	50m	Until further notice
Q13	50m	Until further notice	P10	50m	Until further notice
T29	50m	Until further notice	N10	50m	Until further notice
Q10	50m	Until further notice	R03	50m	Until further notice
S29	50m	Until further notice	T23	50m	Until further notice
S07	50m	Until further notice	Q25	50m	Until further notice
S04	50m	Until further notice	M16	50m	Until further notice
M25	50m	Until further notice	P13	50m	Until further notice
T30	50m	Until further notice	N13	50m	Until further notice
P25	50m	Until further notice	Q26	50m	Until further notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
R23	50m	Until further notice	S26	50m	Until further notice
R27	50m	Until further notice	N27	50m	Until further notice
P27	50m	Until further notice	M31	50m	Until further notice
N24	50m	Until further notice	Q30	50m	Until further notice
Q33	50m	Until further notice	R29	50m	Until further notice
T26	50m	Until further notice	P31	50m	Until further notice
R22	50m	Until further notice	Q31	50m	Until further notice
L28	50m	Until further notice	Q34	50m	Until further notice
M27	50m	Until further notice	L33	50m	Until Further Notice
N28	50m	Until further notice	N34	50m	Until Further Notice
N33	50m	Until further notice	M34	50m	Until Further Notice
P29	50m	Until further notice	N35	50m	Until Further Notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
J36	50m	Until Further Notice	P05	50m	Until Further Notice
P34	50m	Until Further Notice	N23	50m	Until Further Notice
J33	50m	Until Further Notice	P03	50m	Until Further Notice
K36	50m	Until Further Notice	P07	50m	Until Further Notice
L36	50m	Until Further Notice	M23	50m	Until Further Notice
K35	50m	Until Further Notice	N18	50m	Until Further Notice
Q21	50m	Until Further Notice	M07	50m	Until Further Notice
P18	50m	Until Further Notice	L07	50m	Until Further Notice
Q01	50m	Until Further Notice	M18	50m	Until Further Notice
R18	50m	Until Further Notice	M13	50m	Until Further Notice
Q05	50m	Until Further Notice	M24	50m	Until Further Notice
N05	50m	Until Further Notice	N07	50m	Until Further Notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
M10	50m	Until Further Notice	J28	50m	Until Further Notice
L10	50m	Until Further Notice	H28	50m	Until Further Notice
L13	50m	Until Further Notice	F30	50m	Until Further Notice
L27	50m	Until Further Notice	F31	50m	Until Further Notice
G28	50m	Until Further Notice	C33	50m	Until Further Notice
K27	50m	Until Further Notice	B34	50m	Until Further Notice
E30	50m	Until Further Notice	B35	50m	Until Further Notice
D31	50m	Until Further Notice	A35	50m	Until Further Notice
C31	50m	Until Further Notice	E33	50m	Until Further Notice
A33	50m	Until Further Notice	G31	50m	Until Further Notice
B33	50m	Until Further Notice	D34	50m	Until Further Notice
A34	50m	Until Further Notice	C34	50m	Until Further Notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
C35	50m	Until Further Notice	B41	50m	Until Further Notice
A37	50m	Until Further Notice	A42	50m	Until Further Notice
B36	50m	Until Further Notice	A38	50m	Until Further Notice
J30	50m	Until Further Notice	A41	50m	Until Further Notice
A36	50m	Until Further Notice	F34	50m	Until Further Notice
B37	50m	Until Further Notice	C38	50m	Until Further Notice
C36	50m	Until Further Notice	H32	50m	Until Further Notice
B38	50m	Until Further Notice	D36	50m	Until Further Notice
A39	50m	Until Further Notice	C33	50m	Until Further Notice
K28	50m	Until Further Notice	E35	50m	Until Further Notice
A40	50m	Until Further Notice	C37	50m	Until Further Notice
A41	50m	Until Further Notice	B39	50m	Until Further Notice

HOW02 Safety Zones Continued

Asset	Size	Duration	Asset	Size	Duration
B40	50m	Until Further Notice	F38	50m	Until Further Notice
B41	50m	Until Further Notice	E39	50m	Until Further Notice
H34	50m	Until Further Notice	Sea Challenger	50m	Until Further Notice
G36	50m	Until Further Notice	Sea Installer	50m	Until Further Notice
E37	50m	Until Further Notice			
F36	50m	Until Further Notice			
J37	50m	Until Further Notice			
H37	50m	Until Further Notice			
G38	50m	Until Further Notice			
F38	50m	Until Further Notice			
E39	50m	Until Further Notice			
C40	50m	Until Further Notice			