

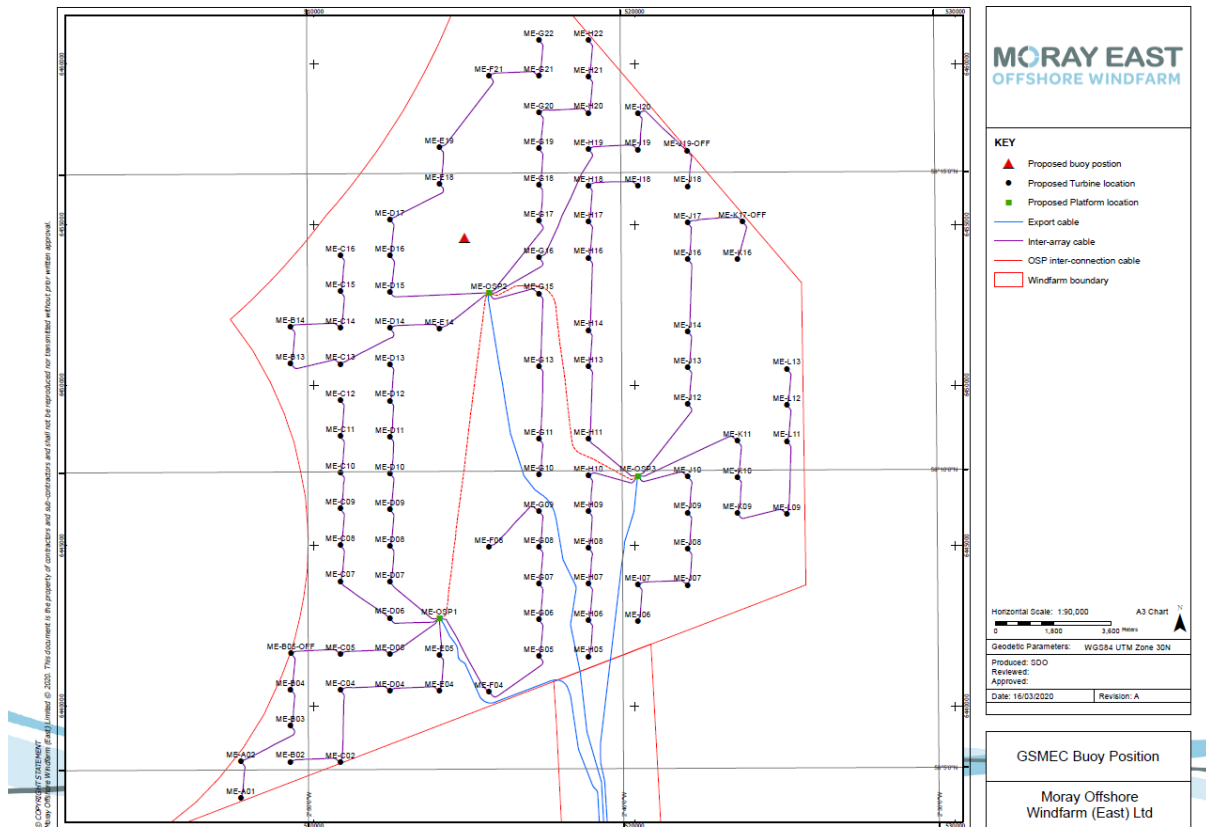
NOTICE TO MARINERS

Issue date: 25/04/2020

1. Deployed Directional Wave rider Buoy

Please be advised that Moray Offshore Windfarm (East) Limited (Moray East) have deployed a directional wave rider buoy within the bounds of Moray East Offshore Windfarm. Final position referenced in table 1.


Figure 1. Directional wave rider buoy location



ID	Latitude (DMS)	Longitude (DMS)	Latitude (DM)	Longitude (DM)
WR Buoy	<u>58 13'55.6" N</u>	<u>02 44'59.7" W</u>	<u>58 13'54.4" N</u>	<u>02 44'52.6" W</u>

Table 1. Final position of Wave rider Buoy

Figure 2. Directional Wave rider Specifications



Directional Waverider MkIII

Datawell - Oceanographic Instruments

The Directional Waverider DWR-MkIII: Over three years of continuous operation

The Directional Waverider hardly needs any introduction: it is the world's standard for measuring wave height and wave direction. Its success is due to the proprietary well-proven and accurate Datawell stabilized platform sensor, enabling wave height measurements by a single accelerometer. For the wave direction, direct pitch and roll measurements are performed needing no integration. In combination with horizontal accelerometers and a compass this forms the complete sensor unit, the heart of the instrument.


The highlights:

- **Real time** measurement of wave height with half-hourly heave and directional spectra updates.
- **HF link up to 50 km** over sea. The proprietary Datawell HF link module is easy replaceable if a different transmission frequency is required.
- **LED flashlight** integrated in the top of the antenna increasing the buoy's visibility.
- **GPS receiver** for buoy positioning has now become a standard feature of the DWR-MkIII, and facilitates its retrieval.
- **Integrated datalogger** based on the latest flash card technology.
- A **water temperature sensor** in the mooring eye providing sea surface temperature
- **High capacity primary cells** operating reliably and safely under all wave conditions and weather circumstances for **up to three years** without replacement.
- Built-in **energy meter** reports an accurate estimation of the remaining operating life.
- **Intelligent Test Box** enables sequential discharge of individual battery strings

The DWR-MkIII comes standard with the Datawell HF link for ranges up to 50 Km over sea. For larger ranges the HF link can be combined or replaced with Iridium or Argos satellite communication. For near shore applications, a GSM link is also available. The MkIII can be supplied in a 70 cm hull offering easier handling and a 90 cm hull.

Optional features:

- **HF link:** 25.5 MHz-35.5 MHz
- **Iridium:** global, two-way satellite link
- **Iridium SBD:** global, two-way satellite link
- **Argos:** global one-way satellite link
- **GSM:** near shore data link via SMS or Internet
- **Solar Power System:** solar panel combined with primary cells for extending operational life by at least 100%
- **Power Switch** On/Off
- **Hull painting:** yellow (no anti-fouling)
- **Radar reflectors** to increase visibility in busy waters



DWR-MkIII with optional solar panels, power switch and painted hull

2. General Safety Advice

Further updates and Weekly notice of operations can be accessed in the Moray East Website
<http://www.morayoffshore.com/moray-east/the-project/notices-to-mariners/>

3. Contact details

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