HYDROGRAPHY GUIDELINES FOR OFFSHORE RENEWABLE ENERGY DEVELOPERS

Maritime & Coastguard Agency

The following guidelines are intended to aid developers when submitting development consent applications which impact hydrography and when performing post-construction hydrographic surveys. These guidelines form part of MGN 654 Annex 4. They represent the MCA requirements and shall be complementary to the hydrographic requirements outlined in any marine licence conditions.

Survey Requirements

All hydrographic surveys should provide full seafloor coverage that meets the requirements of IHO S44 ed6 Order 1a. Particular attention should be given to horizontal and vertical sounding accuracy, together with target detection requirements.

When to Survey

In order to establish a baseline, confirm safe navigable depth, monitor seabed mobility and to identify underwater hazards, detailed and accurate hydrographic surveys are required of the development at the following stages:

- Pre-construction: the proposed generating assets area and proposed cable route(s).
- On a pre-established periodicity during the life of the development as outlined in any marine licence condition.
- Post-construction: the cable route(s).
- Post-decommissioning of all or part of the development: the installed generating assets area and the cable route(s).

The development may result in an alteration of maritime traffic patterns as vessels seek alternative passage around the installed generating assets area. Where this is the case, the MCA may consider it necessary that a hydrographic survey of these alternate passages and their immediate environs be undertaken. MCA shall provide guidance here if required. Where shipping corridors are formed within or adjacent to the consented generating assets area, the requirement for hydrographic surveys shall be referred to the MCA and undertaken on a case-by-case basis.

What to deliver

It is requested that the hydrographic data be delivered in the following formats:

- All data should be rendered in digital form, in one of the following formats: CARIS Project Directory or GSF (Generic Sensor Format).
- Spurious data should be cleaned from the final, delivered dataset. Digital data should have rejected soundings included but flagged as deleted. The method used in any data cleaning (e.g. Shoal or Median Biased) should be clearly stated.
- Digital data should be full density i.e. prior to any gridding, binning or tinning being applied.

- If gridded datasets have been created, then these should also be included.
- The soundings should be reduced using observed tides, not predicted tides from tide tables.
- Depths should be referenced to UK Chart Datum for the area.

A Report of Survey should be submitted with the survey data that describes how the data was gathered and processed and should include:

- A list of the equipment and software use and the personnel used.
- How the echosounder transducer and positioning equipment were set up, calibrated and used, together with all sensor offsets.
- Details of the horizontal datum to which the positions are referenced (or the grid, if appropriate)
- How the tides were measured, tide gauge was levelled, and how the depths were reduced to Chart Datum.

The hydrographic data and Report of Survey shall be delivered to the MCA within three months after completion of the survey. On completion of the review of these deliverables, the MCA shall collate and supply the provided data to the UKHO in order that nautical charts and publications can be updated for the purposes of navigation safety. Any commercial sensitivity of your data will always be respected.

Developers are reminded of the requirement to report significant changes in depths from charted depths that become a navigation hazard to UKHO so Navigational Warnings and Notice to Mariners can be issued, if necessary.

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If you require any further assistance with the above guidelines, please contact the MCA at: hydrography@mcga.gov.uk