Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 41 to Deadline 3 Submission: Fisheries Liaison and Co-Existence Plan

Relevant Examination Deadline: 3

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Drafted By:	Vattenfall Wind Power Ltd
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Thanet Extension Offshore Wind Farm

Fisheries Liaison and Co-Existence Plan

March 2018, rev B

Contents

1 The Fisheries Liaison and Co-Existence Plan

1.1 Purpose of the Plan

The purpose of this Fisheries Liaison and Co-Existence Plan (FLCP) is to set out the procedures to facilitate co-existence between the proposed development and local commercial fishing interests during the construction, operational, maintenance and decommissioning phases of the project. This document provides the local commercial fishing interests with confidence in the mechanisms of fisheries liaison for the proposed development.

1.2 Structure of the Plan

This plan includes a number of sections which provide details on future liaison and coexistence strategies. Section 2 describes an overview of the Environmental Impact Assessment (EIA) methodology as requested by Thanet Fishermen's Association (TFA). Section 3 outlines fisheries liaison information, methodology and mechanisms for information exchange, Section 4 discusses co-existence strategies and the operational maintenance plan and Section 5 outlines codes of good practice.

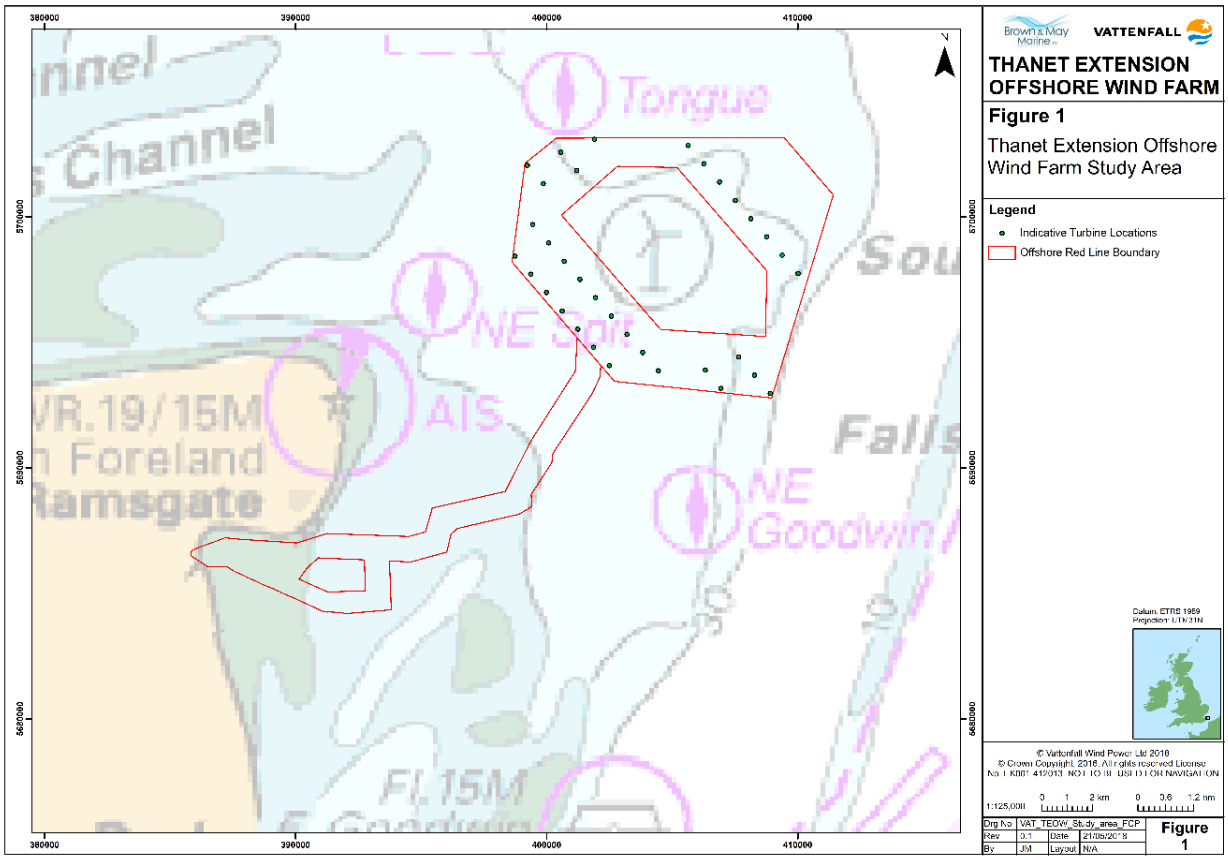

Figure 1. Thanet Extension Offshore Wind Farm (indicative layout).

2 Environmental Impact Assessment

An Environmental Impact Assessment (EIA) of the significance of impacts to commercial fisheries receptors is carried out using the criteria present in Offshore Wind Farm (OWF) assessment guidelines published by CEFAS and MCEU (2004), and as required by the Secretary of State scoping opinion (PINS, 2017). It is assumed that the impacts of decommissioning and maintenance phases are not of greater significance to commercial fisheries than the construction and operational phases. The criteria outlined in the above guidelines are as follows:

- Temporary loss or restricted access to fishing grounds;
- Safety issues for fishing vessels;
- Increased steaming times to fishing grounds;
- Interference with fishing activities;
- Displacement of fishing activity into other areas; and
- Obstacles on the seabed.

The impacts of OWF developments are not easily categorised due to the spatial limitation of fisheries data and constant changes in legislation, landings and fishing practices. Professional judgement and experience support the official fisheries data collected in assigning receptor sensitivity and impact magnitude, but some qualitative assessment is required.

Assessments take into account the existing baseline and the limitation that the baseline can change over time. Current methods rely on MMO data down to the lowest spatial extent available, and ICES rectangle data which has spatial limitations. Therefore, other datasets are included in the assessment, including ‘paper chart’ consultation exercises, MMO local office data, consultation with the IFCA, MMO overflight data, and collation of AIS data (for the purposes of conducting a Navigation Risk Assessment specifically for the proposed development). A collation of Succorfish data which commenced in April 2017 for some specific local vessels is also included.

Succorfish is a system that provides a spatial record of fishing activity, specifically able to distinguish when gear has been deployed and when vessels are steaming. The initial set up of Succorfish with TFA was funded by Vattenfall, the ongoing costs are now paid by TFA. This provides a good example of ongoing coexistence and basis for future engagement between the parties.

In accordance with the guidelines and best practice the relevant receptors are identified by fleet and sensitivity is assigned.

Sensitivity (Table 1) takes into account operational range and method versatility, along with dependence of a particular fishery. While it is understood that the value for individual vessels

of fishing grounds covered by the location of the cable and windfarm differs, it is not possible to assess the impacts per vessel and therefore a fleet overview is used.

Table 1. Definitions of Sensitivity Levels for Commercial Fisheries Receptors

Sensitivity	Definition
High	Low spatial adaptability due to limited operational range and ability to deploy only one gear type. Limited spatial tolerance due to dependence upon a single fishing ground. Low recoverability due to inability to mitigate loss of fishing area by operating in alternative areas.
Medium	Some spatial adaptability due to extent of operational range and / or ability to deploy an alternative gear type. Moderate spatial tolerance due to dependence upon a limited number of fishing grounds. Limited recoverability with some ability to mitigate loss of fishing area by operating in alternative areas.
Low	High spatial adaptability due to extensive operational range and / or ability to deploy a number of gear types. High spatial tolerance due to ability to fish a number of fishing grounds. High recoverability due to ability to mitigate loss of fishing area by operating in range of alternative areas of the North Sea.
Negligible	Category of fishing receptor with an extensive operational range and very high method versatility. Vessels are able to exploit a large number of fisheries.

Magnitude is primarily a function of a fleet's dependence on the area of the proposed development. Each predicted impact is defined spatially, temporally and proportionally. Magnitude examples are outlined in Table 2.

Table 2. Example Definitions of the Magnitude Levels for a Generic Receptor

Magnitude	Definition
High	The area affected by the impact sustains high levels of activity by the fleet and covers a large or moderate extent of its grounds; and/or The effect is permanent.
Medium	The area affected by the impact sustains moderate/high levels of activity by the fleet and covers a small/moderate extent of its grounds; and/or The effect is long term.
Low	The area affected by the impact sustains low/moderate levels of activity by the fleet and covers a small extent of its grounds; and/or The effect is short to medium term.
Negligible	The area affected by the impact sustains low/ negligible activity by the fleet and covers a small/negligible extent of its grounds; and/or The effect is short term.

Impact significance is a calculation based on sensitivity and magnitude, defined the matrix detailed in Table 3. This matrix aids the understanding for how the assessment was reached and identifying the relationship between sensitivity and magnitude in the formulation.

Table 3. Impact significance matrix

		Negative Magnitude				Beneficial Magnitude			
		High	Medium	Low	Negligible	Negligible	Low	Medium	High
Sensitivity	High	*Major*	*Major*	*Moderate*	*Minor*	*Minor*	*Moderate*	*Major*	*Major*
	Medium	*Major*	*Moderate*	*Minor*	*Minor*	*Minor*	*Minor*	*Moderate*	*Major*
	Low	*Moderate*	*Minor*	*Minor*	*Negligible*	*Negligible*	*Minor*	*Minor*	*Moderate*
	Negligible	*Minor*	*Negligible*	*Negligible*	*Negligible*	*Negligible*	*Negligible*	*Negligible*	*Minor*

Detailed EIA methodology is presented in the Offshore Project Description Chapter (Document Ref: 6.2.1), and Commercial Fisheries Chapter (Document Ref: 6.2.9).

3 Fisheries Liaison

3.1 Guidance and Information

The fisheries liaison strategy as detailed in this document, is primarily based on the following:

- Best Practice Guidance for Offshore Renewable Developers. Fisheries Liaison with Offshore Wind and Wet Renewables Group (FLOWW). Department for Business Enterprise & Regulatory Reform (URN 08/935) (FLOWW, 2014).
- Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds. (FLOWW, 2015).
- Meetings between the proposed development and TFA.
- Direct Liaison undertaken to date with individual fishermen, vessel owners and landing agents via TFA.
- Consultation with the MMO, Kent & Essex IFCA and other relevant statutory bodies.

As Vattenfall are members of the FLOWW committee, adherence to FLOWW guidance is considered standard.

It is anticipated that FLOWW will publish, in the near future, new guidance notes on the compiling and issuing of Notice to Mariners and this will be used to formulate further publications of this nature.

3.2 Fishing Liaison Background and Methodology

The benefits of early and ongoing consultation between developers and the local fishing industry have been agreed by both parties and demonstrated with Thanet Offshore Wind Farm (TOWF). During the planning phase there were opportunities for fishermen to provide their views on the development. This was both informally through liaison meetings and formally through the provision of representations and attendance at hearings, as well as providing data to support the impact assessment. Early engagement has also enabled the identification of key issues and proposed mitigation measures. It is this engagement that has drawn out the need for, and contents of, this FLCP including proposed mitigation measures.

The main forum for discussing concerns related to the proposed development is direct communication between the Thanet Fishermen's Association (TFA) and the proposed development. The TFA membership comprises of fishermen from the main fishing ports: Whitstable, Margate, Broadstairs and Ramsgate. The TFA and Thanet Extension Offshore Wind Farm (Thanet Extension) have met on several occasions during the pre-consent phase and it is expected that the TFA will continue to be updated by the proposed development, with the scheduling of meetings based upon need.

TFA members will receive regular updates regarding the project via the Fishing Liaison Officer (FLO). Details of the role are listed below prior to any meeting between TFA and the proposed development, the FLO will communicate with the TFA to determine if a meeting is required to discuss matters regarding the proposed development. The TFA will be consulted regarding the appointment of an FLO, and as far as reasonably practical an appointment made in agreement with both partiesDay to day contact between the proposed development and the local fishing industry will be primarily via the FLO.

An appointed experienced fisherman may also act as an Offshore Fisheries Liaison Officer (OFLO), on major survey, construction and maintenance work vessels to ensure 24-hour contact with fishermen during these operations. The TFA will be consulted regarding the appointment of an OFLO, and as far as reasonably practical an appointment made in agreement with both parties

Below are details of the objectives of each of the fisheries liaison roles: FLO in section 3.3, and OFLO in Section 3.4.

3.3 Fishing Liaison Officer (FLO): Example Scope of Work

The FLO is a position that is paid for and reports to Vattenfall. It is understood that local fishermen's knowledge of other fishing vessel owners and fishing practices in the area should facilitate the agreement of acceptable working practices. This should avoid or reduce unnecessary interruptions to both fishermen and the proposed development during construction works. A local fisherman, a member of TFA, has been assigned to the role of FLO and is actively engaged with the proposed development and TFA. The primary responsibilities of the FLO are:

- To establish and maintain a strong positive working relationship with the local fishing industry.
- To have a detailed understanding and awareness of the local fishing industry.
- To understand the potential impact on fishing of the proposed development.
- To communicate with the fishing industry, government agencies and other developers.

To this end, the FLO's duties are:

- To maintain the fisheries stakeholder database which contains the following details of fishing vessel operations within the area of the project:
    - The vessel's name, registration and base port
    - Skipper & crew details
    - Vessel radio call sign

- Vessel/skipper mobile phone number
- Method(s) of fishing and static gear surface marker details
- Target species
- Fishing grounds relevant to the project
- Fishing periods and operating practices
- Skipper concerns

- To organise and minute TFA meetings.

- To maintain regular liaison with the TFA. To prepare and distribute the required information and notices of all project related activities which could potentially interact with fisheries stakeholders. This will include:
  - A description of the works to be undertaken
  - The schedule of works
  - Details of the vessels involved in the works including the vessels contact details
  - Expected transit routes of installation vessels
  - The locations and timings of safety exclusion zones to be imposed around installation activities
  - Environmental standards
  - Contractor obligations
  - Conflict avoidance, gear-loss and damage response procedures

- To ensure the vessel Code of Good Practice is followed (see Section 5)
- To obtain and transmit to the developer all relevant fishermen's concerns in respect of the various activities associated with the project (although the primary means of this will be via the TFA).
- To advise fishermen of any changes in project design, scheduling, policies or relevant legislation.
- To assess the need for and to organise guard vessels, scout vessels and offshore fisheries liaison officers.
- To monitor fishing activities along the export cable route.
  To instruct contractors as to the fishing activities in the areas of works and provide details of vessel and gear types which could be present, any relevant fishermen's

sensitivities and channels and contact details for communicating with fishing vessels at sea.

The details of the FLO will be provided as part of the Project Environmental Management Plan in accordance with the requirements of the deemed Marine Licences.

3.4 Offshore Fisheries Liaison Officer (OFLO): Example Scope of Work

An OFLO would be maintained on board survey and construction vessels as required. The primary responsibilities of the OFLO would be:

- To regularly broadcast survey and construction vessel locations, operations, schedules, safety zones and H&S requirements on relevant VHF and MF frequencies during operations.
- To maintain daily contact with fishing vessels observed to be within the vicinity of the work areas of survey and construction vessels and provide sufficient notice to enable the relocation of any static fishing gears present within the project vessels defined safety zones.
- To keep the masters and watch officers of survey and construction vessels informed of fishing vessels in the vicinity of their vessels working area and the gears and modes of operation of such vessels.

3.5 Appointment of Guard Vessels

During consultation, local fishermen have stated that they would like local vessels to be considered when contracting for guard and survey work. This is in line with the proposed development's commitment to utilising local businesses where possible; inclusion in the tender process would depend on the suitability of vessels and crew.

Suitable local vessels would be included in the prequalification process and those that qualify will be invited to tender under standard competitive procedures. The prequalification requirements will include, but may not be limited to:

- To be of sufficient size, power, design, and equipped to maintain 24hr at sea station for the periods required.
- To be certified to the required standards to undertake the work.
- To be capable of passing the third-party audits as required by the proposed development.
- To be commanded and crewed by sufficient personnel of appropriate qualification and experience to undertake the work.
- To be equipped with GPS navigator, radar, echo sounder, VHF radio and a suitable telephone as a minimum.

- To have the required insurance policies in place for vessels and personnel.
- To have demonstrated the required standards of maintenance and record keeping.
- To have all appropriate lifesaving and health and safety equipment in line with the proposed development H&S regulations.
- To have the appropriate H&S policies and training in place.

3.6 Information Exchange and Mutual Obligations

It is appreciated that information dissemination and communication, (including the provision of such prior to works) are key to fostering an ongoing productive working relationship with fisheries stakeholders. The guidelines for timing of communication are given in Table 2. Communication guidelines are outlined below.

- Relevant information regarding the progress and planned progress of the project will be disseminated to all relevant stakeholders as early as possible and ensuring that effective lines of communication are maintained.
- During offshore project works, communication will be provided through methods such as emails, letters, Notices to Mariners (NtMs) with information on the position of offshore construction activities, infrastructure positions, submarine cable routes and vessel movements associated with the proposed development.
- NtMs will be issued to TFA a minimum of 10 days prior to the commencement in accordance with the deemed Marine Licence.
- Daily progress reports will be disseminated to the FLO during offshore works.
- NtM, Kingfisher and other navigational warnings (of the position and nature of the works including offshore cable corridor crossings) will be issued to the fishing industry as well as recreational mariners prior to the start date of any works.
- The UK Hydrographic Office will be informed of both the progress and completion of the proposed development.
- Transit routes and standby zones for construction vessels will be defined in discussion with TFA and communicated to fisheries stakeholders. Where required, standby zones will be identified for construction vessels that are unable to enter the proposed development site due to reasons such as bad weather or delays in the construction programme.
- Detailed charts and coordinates of offshore survey routes, the red line boundary, and offshore infrastructure will be distributed to fishermen via the FLO, in coordinate system WGS84 decimal minutes.
- Vessels involved in works for the proposed development (including crew transfer vessels and construction vessels) and fishing vessels will comply with standard navigation practices and safety zones established throughout the construction period.
- Optional issues can also be raised via the Ramsgate Harbour interface group which is attended by multiple local stakeholders, including Vattenfall and TFA.
- A dedicated International Maritime Mobile VHF working channel will be used for the exchange of relevant information between works contractors and other vessels in the area.
- Prior to any works, the FLO will confirm contacts with local fishermen either directly or via the TFA and it will be their responsibility to provide regular updates to fishermen.
- Cable exposures will be reported via Kingfisher and KIS Orca.
- Details of proposed operations will be supplied to the local Coastguard, the MMO District Fisheries Officer, the MCA and relevant Harbour Masters.

Timings and circumstances for information distribution are provided in the table below.

Table 4. timings and circumstances for information distribution

Activity	Timing
Construction plan	Notices and information distribution, not less than 14 days prior to the commencement of construction activities
Pre- and post-construction surveys	Notices and information distribution not less than 10 days prior to survey mobilisation
Specific construction activities	Notices and information distribution not less than 14 days prior to the commencement of specific construction phases
Thanet Fishermen's Association Meetings	Subject to requirement, meetings can be held during the pre-construction and construction phases and the operational phase.
Unscheduled liaison	Additional unscheduled liaison and consultation will be undertaken by the FLO as required to address issues or fishermen's concerns as they arise.
Daily Progress Reports	Distributed daily during periods of active offshore works to the FLO

4 Co-Existence

A highly positive relationship currently exists with Vattenfall and the TFA and wider fishing community as evidenced during the construction and operation of the existing Thanet OWF. This relationship will be continued during all phases of the proposed development.

The following strategies for ensuring continued positive co-existence between the proposed development and local Thanet fishermen are presented here for consultation and agreement with the TFA.

4.1 Co-Existence Strategies

The co-existence strategies are as follows:

- Recognition that local fishing operations represent many businesses and that offshore renewable developments and sustainable fishing opportunities are not mutually exclusive activities (further details in Section 3.4).
- Continued constructive engagement with local fishermen through the TFA and broader community meetings will be held as required (further details in Section 3.4).
- Early provision of route engineering and cable laying plans to fishermen, including the use of cable protection measures (Section 4.7).
- Maintaining a FLO as the main point of contact for the proposed development throughout the project, the selection of whom has been managed by the proposed development in consultation with TFA (further details in Section 3.3).

- Engaging experienced local Thanet fishermen to fulfil the OFLO roles where appropriate (Section 3.3).
- Ensure TFA vessels can access the proposed development site during construction if safety zones are observed (Section 3.4).
- Endeavouring to minimise the exclusion of fishing during construction of the proposed development and export cables where safe and practicable (Section 3.4).
- Providing emergency good practice response plan in the event of fishing vessels snagging gear on foundations or cables and/or losing power and steerage. An example of this procedure is found below in Section 4.3.
- Provision of a suitable auditable procedure and methodology for quantifying attributable gear losses in line with standard procedures outlines in FLOWW guidelines (2014) (see Section 5.2).
- Observation by all vessels of the relevant requirements of The International Regulations for Preventing Collisions at Sea 1972 (COLREGs), including displaying relevant lights and shapes and transmitting appropriate sound signals as required.

4.2 Development of an Offshore Operation and Maintenance Plan

Following the completion of construction, the coexistence strategy will be applied to the operation and maintenance phases. The strategy during these phases will encompass potential problems that may reasonably arise.

These issues include but are not limited to:

- Damage to the offshore cable
- Damage to the protection of the offshore cable
- Maintenance resulting in closures of some or all of the proposed development site

In the event of these or any other problems the FLO will be informed as soon as reasonably practical and will subsequently inform the TFA and any other stakeholders of any required works and access changes.

5 Code of Good Practice

A Code of Good Practice will be provided to all vessels undertaking work directly related to the development (e.g. guard vessels, surveys vessels, construction and maintenance vessels). This will include the requirement to only undertake activities prescribed in their line of work.

5.1 Example of Advised Procedures in the Event of a Fastening Incident

Fishermen should not engage in any activity which should put their vessel, crew or the proposed development infrastructure at risk. The following outline procedure replicates that which has been in place in respect of the UK offshore oil & gas industry.

- If the fastened gear is not easily retrieved, do not apply any excessive winch or engine power which might endanger the safety of the vessel and its crew.
- Advise the coastguard or the proposed development marine coordinator immediately, giving an accurate position of the vessel.
- If the coastguard or the proposed development representative confirms that the vessel is in the immediate vicinity of a cable, serious consideration should be given to slipping the gear. If gear is slipped, it is important to buoy its location.
- After buoying off the gear, the position should be confirmed with the coastguard or the proposed development representative.
- On return to port, contact the local Fishery Office and register the incident in the normal manner.
- Complete a gear loss record form and forward to FLO and the proposed development marine coordinator.
- On no account should skippers grapple in an attempt to recover fishing gear lost or cut away in the vicinity of the inter-array or export cables.

5.2 Example Procedure for Claims for Loss or Damage of Gear

The proposed development would inform fishermen of any ongoing maintenance works, exposed cables, or marine hazards within the vicinity of the proposed export cable. Therefore, claims for loss or damage to fishing gear will not be considered where a skipper of a vessel has:

- Ignored notices, guard vessel communications, NtM, OFLO communications,
- Infringed construction exclusion zones
- Purposefully undertaken actions with the deliberate purpose of damaging or losing gear in order to submit a claim.

In the event where legitimate loss or damage to fishing gear has occurred, the following action should take place:

- Following the incident, all details should be recorded in the vessels logbook. Date, time and location of the occurrence and description of the gear lost or the damages sustained.
- As the vessel is returning to port, the FLO and the marine coordinator should be notified of the incident so that the FLO or marine coordinator can be at the dockside to inspect damaged fishing gear should it be deemed necessary.

- Upon return to port the skipper should report the incident to either an MMO or Kent & Essex IFCA Fishery Officer and request the damaged gear be inspected.
- A completed claim form should be sent to the FLO and the proposed development marine coordinator within 14 days of the vessel's return to port following the incident. This should be supported with:
    - Photographs of the damaged gear
    - A written quotation for either repair of the gear by a third party or costs of labour and materials should the skipper and crew undertake replacement of gear themselves.

A final procedure for claims for loss or damage to gear including a claims form will be sent via the FLO prior to the start of construction.

6 Drift Net survey

In recognition of the extensive use of the parts of the array area for bottom drift fishing activies, a pre and post construction drift net survey will be undertaken. A similar survey for Nemo Link Interconnector has been undertaken.

The purpose of this study will be:

- To demonstrate the viability of identified drift net runs pre-construction and identify any potential snagging hazards in the area of the proposed cable installation and turbine array.
- To assess effects of construction on those runs assessed during pre-construction and see whether similar results are obtainable

The study will be undertaken:

- In discussion with TFA
- Using, a far as is possible, skippers and vessels from within TFA.
- A suitably qualified consultant will be appointed, in discussion with TFA, who will accompany vessels on pre-agreed bottom drifts.
- The records of the bottom drifts will be recorded and provided to TFA and the project and will include:
    - Details of the vessels
    - Time series of the bottom drift recording location, vessel heading, water depth and length of drift.
    - Mapping showing the location of the bottom drifts
    - Identification of any snagging or snag related damage
    - Conclusions on the success of the drifts.
- The post-construction survey will also include a conclusion on any differences between the surveys and, if possible, likely causes of this.

The survey results will help identify any specific bottom drift grounds affected by the construction of Thanet Extension.

7 References

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