The Great Grid Upgrade

Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4)

Preliminary environmental information report (PEIR)

Volume 2, Part 3, Appendix 3.24.B Fisheries Liaison and Coexistence Plan (FLCP)
May 2025



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Glossary of terms

| Term | Definition | |
|---------------|---|--|
| CEMP | Construction Environmental Management Plan | |
| CLV | Cable Laying Vessel | |
| DCO | Development Consent Order | |
| DML | Deemed Marine Licence | |
| FLCP | Fisheries Liaison Coexistence Plan | |
| FLO | Fisheries Liaison Officer | |
| FLOWW | Fishing Liaison with Offshore Wind and Wet Renewables | |
| GW | Gigawatt | |
| HDD | Horizontal Drilling | |
| HDPE | High-density Polyethylene | |
| HDVC | High-voltage Direct Current | |
| ICPC | International Cable Protection Committee | |
| MBES | Multibeam Echo Sounder | |
| NETS | National Electricity Transmission System | |
| NGET | GET National Grid Electricity Transmission | |
| OFLO | Offshore Fisheries Liaison Officer | |
| oos | Out-Of-Service | |
| PLGR | Pre-lay grapnel run | |
| SBP | Sub Bottom Profiler | |
| SSS | Side Scan Sonar | |
| The Applicant | National Grid Electricity Transmission | |
| VHF | Very High Frequency | |

3.24.B. Outline Construction Fisheries Liaison and Coexistence Plan

3.24.B.1 The Objective of the Plan

- 3.24.B.1.1 This Outline Fisheries Liaison and Coexistence Plan (oFLCP) has been prepared by National Grid Electricity Transmission (NGET). The objective of this oFLCP for the English Offshore Schemes is to clearly set out how commercial fishing activity along the English Offshore Scheme can co-exist with the works required to survey and install the Eastern Green Link 3 (EGL 3) & Eastern Green Link 4 (EGL 4) cables.
- 3.24.B.1.2 This oFLCP builds on the existing relationship established through the consultation undertaken in developing EGL 3 & EGL 4 and provides the high-level objectives and principles to be taken in respect to the ongoing liaison and engagement with the local fishing industry post consent and through the construction phase.
- 3.24.B.1.3 This OFLCP also summarises the key areas of potential interaction between EGL 3 & EGL 4 and local fishing communities; outlines the project specific environmental measures proposed; and identifies how any issues that may arise would be managed and communicated. A more detailed FLCP would be produced post consent, once project details and construction schedules are further developed.
- 3.24.B.1.4 This oFLCP relates to the construction phase only, however, should it be required a further FLCP would be provided for the operational phase.

3.24.B.2 Guidance

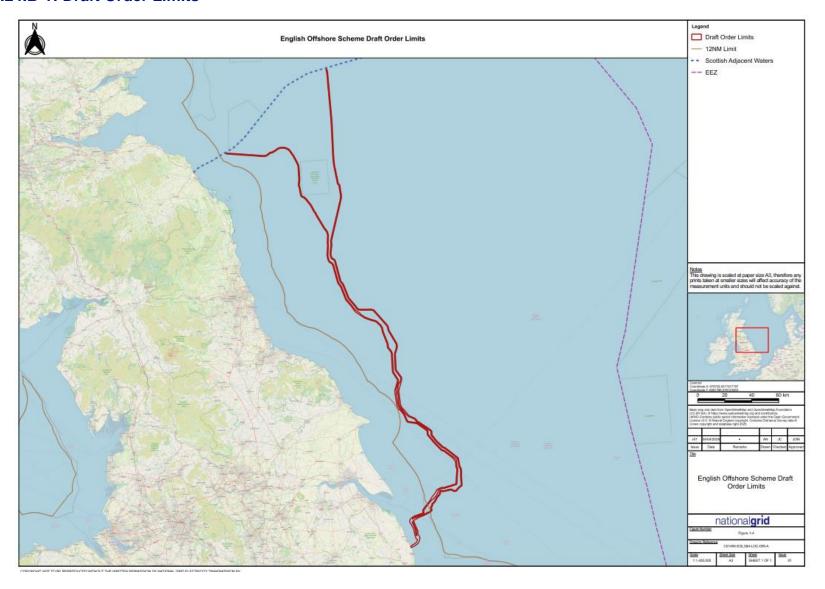
- 3.24.B.2.1 This oFLCP has been developed with reference to the EGL 3 & EGL 4 Preliminary Environmental Information Report (PEIR) which provides impact assessments relevant to commercial fisheries and associated environmental measures. This document is provided to establish overarching principles that would be adopted should the project secure consent. This document will be updated post PEIR to accompany the Environmental Statement (ES).
- 3.24.B.2.2 It follows key guidance and information from Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments. Recommendations for Fisheries Liaison. FLOWW 201.

3.24.B.3 Background

EGL 3 & EGL 4

- 3.24.B.3.1 EGL 3 comprises a 2-gigawatt (GW) High-voltage direct current (HVDC) link between Aberdeenshire in Scotland, and Lincolnshire, England. EGL 4 comprises a 2 GW HVDC link between Fife in Scotland and Lincolnshire, England.
- 3.24.B.3.2 English Offshore Scheme is sited within the English marine environment, through inshore and offshore waters, and up to Mean High Water Springs (MHWS) in England. The most northerly elements of the English Offshore Scheme would be located at the boundary of English waters where it meets Scottish waters, and the most southerly elements would be located at MHWS at Anderby Creek, along the Lincolnshire coastline, at landfall.
- 3.24.B.3.3 The key elements of the English Offshore Scheme are summarised below and shown in **Plate 3.24.B-1**:
 - EGL 3 Project
 - Approximately 436 km of subsea HVDC cable from the landfall at Anderby Creek, Lincolnshire, England to where it meets the marine boundary between English and Scottish waters. The submarine cable system would consist of two bundled HVDC cables and a fibre optic cable (up to the first offshore joint) for control and monitoring purposes.
 - EGL 4 Project
 - Approximately 425 km of subsea HVDC cable from the landfall at Anderby Creek, Lincolnshire, England to where it meets the marine boundary between English and Scottish waters. The submarine cable system would consist of two bundled HVDC cables and a fibre optic cable (up to the first offshore joint) for control and monitoring purposes.
- 3.24.B.3.4 The draft Order Limits comprise two cable route corridors. Where the separation between the EGL 3 & EGL 4 draft Order Limits is greater than 500 m, these are shown with separate corridors of 500 m minimum width. Where the separation of the draft Order Limits is less than 500 m, the corridor is shown as a single corridor. However, where the indicative cable route is within one combined corridor, a separation distance of approximately 1.5 km between the EGL 3 & EGL 4 cables has been allowed.
- 3.24.B.3.5 EGL 3 & EGL 4 are being jointly developed by NGET.

Plate 3.24.B-1: Draft Order Limits



Scope of works and programme

- 3.24.B.3.6 The construction programme for the English Offshore Scheme is expected to take approximately 55 months, commencing in 2028 / 2029 for both EGL 3 and EGL 4.
- 3.24.B.3.7 Works at the Anderby Creek Landfall may commence in 2029 with installation of the HDD and ducts ahead of the main works.
- 3.24.B.3.8 Flexibility is required in the construction programme in order to accommodate a range of uncertainties.
- 3.24.B.3.9 The exact timing of the submarine cable installation works would be dependent upon the date of the contract award for the works, time required for detailed design and cable manufacture, availability of cable installation and other vessels and any restrictions to mitigate potential effects on features of conservation interest, fisheries or other sensitive receptors. **Table 3.24.B-B-1** presents the main activities to be undertaken and provides an indicative schedule for each activity.

Table 3.24.B-B-1 - Scope and indicative schedule for offshore works

| Activity | Description | Indicative start date | |
|---|--|-----------------------|-------|
| | | EGL 3 | EGL 4 |
| Anderby Creek Landfa | II works | | |
| Site set up of HDD | Indicative zone for construction compounds and laydown area would be set up at the landfall to service the landfall HDD operation. This may also include preparation of the seabed at the location of the punch out. A small barge or workboat would be stationed in the nearshore to receive the drill at the location of the punch out. (further information in respect to the onshore site set up is provided in the Volume 2, Part 1, Appendix 1.5.B Outline Code of Construction Practice Appendix) Should exit pits be needed at the punch out location these would be excavated by either a backhoe excavator (barge mounted) or a | 2028 | 2028 |
| | controlled flow excavator. Up to two exit pits may be required per project measuring up to 75 m x 15 m each. | | |
| Horizontal Directional Drilling (HDD) and Duct Installation | Two cable ducts per project are to be created using a trenchless solution such as HDD. The purpose of the HDD is to create tunnel through which a High-Density Polyethylene (HDPE) conduit/duct containing the fibre optic cable and a HVDC cable can be passed. The cable ducts would exit in the nearshore (between 0 m and 8 m LAT). | | |
| | The HDD would be started on land and directed out to sea. They would reach 25 m at their maximum depth. For each bore, a pilot hole would be drilled and then widened to the full diameter required. During the HDD punch out, drilling fluid and cuttings would be released from the bore on to the seabed. Once the bore has been drilled the HDPE duct would be pushed or pulled through the bore, creating a lining and through which the marine cables would be installed at a later phase. | 2028 | 2028 |

| Activity | Description | | Indicative start date | |
|----------------------------|--|-------|-----------------------|--|
| | | EGL 3 | EGL 4 | |
| | Offshore support would likely be required as the duct is pushed or pulled through the bore. A support vessel with a crane would be needed to guide the duct during punch out at the exit point. | | | |
| | The primary HDD activity that interacts with the marine environment is when the HDD breaks through the sediment (or punches out) onto the seabed. | | | |
| Seabed Preparation | | | | |
| Pre-lay survey | A Pre-Lay Geophysical survey would be undertaken which could include the following techniques: Swathe and Multibeam Echo Sounder (MBES), Side Scan Sonar (SSS), Sub Bottom Profiler (SBP) and Magnetometer. Surveys may also include geotechnical sampling consisting of cone penetration tests (CPTs) and vibrocores (VCs) to take measurements and core samples to assess the geotechnical properties of the seabed. | 2028 | 2028 | |
| | Drop down video and grab sampling may also be undertaken to sample sediment composition and environmental parameters. | | | |
| UXO target investigation | An ROV or diver survey would be undertaken to investigate any potential UXO targets identified. This may involve small excavations around the potential UXO to confirm its identity. Note these works may be consented via separate marine licence | 2028 | 2028 | |
| | outside the DCO. | | | |
| Pre-lay grapnel run (PLGR) | The PLGR would be undertaken to clear any debris from the seabed priority. The PLGR may therefore be undertaken in one single phase prior to the first installation campaign or in separate phases prior to each project installation campaign to ensure the route is clear of debris. | 2029 | 2028 | |
| | A multi-cat or towing vessel would pull a grapnel train consisting of a series of different sized grapnels. The typical grapnel would penetrate | | | |

| Activity | Description | Indicative start date | |
|---|---|-----------------------|-------|
| | | EGL 3 | EGL 4 |
| | the seabed to a depth of 0.1 m to 0.3 m depending on the soil conditions and the grapnel configuration. | | |
| Sandwave removal | Where there are areas of mega ripples (wave heights <1.5 m) and sand waves (wave heights > 1.5 m) present along the English Offshore Scheme pre-sweeping may be conducted to level the seabed in preparation for cable installation. | | |
| | Prior to the installation of the submarine cables the cable route (10 m – 20 m width either side of the cable centreline) pre-sweeping would be used to reduce the height of seabed undulations or sandwaves along the cable route. pre-sweeping may be required to reduce the height of the seabed undulations or sandwaves along the cable route. Pre-sweeping would be used to create a flatter path for the installation equipment to move along. This would improve the chances for the cables to achieve the target burial depth and to be maintained during the operational lifecycle. Pre-sweeping may be undertaken by either a trailing suction hopper dredger (TSHD) or Controlled Flow excavator (CFE). The TSHD can be used as a dredger, or as a mass flow excavation platform. | 2029 | 2029 |
| Offshore Construction | | | |
| Cable pull-in and Cable Lay and Burial | Following the completion of preparation activities, the cable lay operations would commence. The cable lay vessel would stand off a short distance from the HDD exit point. A winch rope would be floated out to the cable lay vessel (CLV) from the HDD exit point. The rope would be attached to the cable and winched back in pulling the cable behind. Floats would be attached to the cable. When the cable reaches the HDD exit point, divers would start to remove the floats allowing the cable to enter the HDD. | 2029 | 2029 |

| Description | Indicative start date | |
|--|---|---|
| | EGL 3 | EGL 4 |
| The cable pull would continue until the cable enters the transition joint bay above MHWS. Once the cable is in position, the remaining floats would be removed and the cable would be allowed to sink to the seabed, monitored by divers. | | |
| Once the cables have been pulled through to shore the CLV would proceed to move away from the landfall along the cable route installing the cable to the required depth of lowering. | | |
| CLVs are limited in the length of cable they can carry in a single load therefore the cable would be installed in section connected by a cable joint. The cable system could require up to 10 joints within the English Offshore Scheme due to its length. | | |
| At the cable joint position, the end of the installed cable would be temporarily left on the seabed whilst the CLV returns to port to pick up a new cable length. | 2029 | 2029 |
| The cable joint would be made on board the CLV and would take up to two weeks per joint location. During this time the CLV would maintain position. Once the cable joint has been made, the CLV would continue to lay the next cable section. | | |
| If any part of the cables cannot be buried to the target depth, remedial rock protection may be installed. A fall pipe vessel would be used to position the rock over the cables to the desired berm profile. | 2029 | 2029 |
| Geophysical surveys would be undertaken periodically to monitor cable burial and the status of external cable protection e.g., remedial or at infrastructure crossings. | | 2029 |
| | The cable pull would continue until the cable enters the transition joint bay above MHWS. Once the cable is in position, the remaining floats would be removed and the cable would be allowed to sink to the seabed, monitored by divers. Once the cables have been pulled through to shore the CLV would proceed to move away from the landfall along the cable route installing the cable to the required depth of lowering. CLVs are limited in the length of cable they can carry in a single load therefore the cable would be installed in section connected by a cable joint. The cable system could require up to 10 joints within the English Offshore Scheme due to its length. At the cable joint position, the end of the installed cable would be temporarily left on the seabed whilst the CLV returns to port to pick up a new cable length. The cable joint would be made on board the CLV and would take up to two weeks per joint location. During this time the CLV would maintain position. Once the cable joint has been made, the CLV would continue to lay the next cable section. If any part of the cables cannot be buried to the target depth, remedial rock protection may be installed. A fall pipe vessel would be used to position the rock over the cables to the desired berm profile. Geophysical surveys would be undertaken periodically to monitor cable burial and the status of external cable protection e.g., remedial or at | The cable pull would continue until the cable enters the transition joint bay above MHWS. Once the cable is in position, the remaining floats would be removed and the cable would be allowed to sink to the seabed, monitored by divers. Once the cables have been pulled through to shore the CLV would proceed to move away from the landfall along the cable route installing the cable to the required depth of lowering. CLVs are limited in the length of cable they can carry in a single load therefore the cable would be installed in section connected by a cable joint. The cable system could require up to 10 joints within the English Offshore Scheme due to its length. At the cable joint position, the end of the installed cable would be temporarily left on the seabed whilst the CLV returns to port to pick up a new cable length. The cable joint would be made on board the CLV and would take up to two weeks per joint location. During this time the CLV would maintain position. Once the cable joint has been made, the CLV would continue to lay the next cable section. If any part of the cables cannot be buried to the target depth, remedial rock protection may be installed. A fall pipe vessel would be used to position the rock over the cables to the desired berm profile. Geophysical surveys would be undertaken periodically to monitor cable burial and the status of external cable protection e.g., remedial or at |

| Activity | Description | | Indicative start date | |
|----------|---|-------|-----------------------|--|
| | | EGL 3 | EGL 4 | |
| | In areas of high seabed mobility, or if post-installation changes in the natural or manmade environment are perceived to have occurred (for example through an increase in adjacent dredging activity), additional survey of specific areas of the cable system may be initiated. | | | |

Fishing Community

3.24.B.3.10The EGL 3 & EGL 4 draft Order Limits run through an area that supports a wide range of commercial fishing activities, with vessels from a number of ports all fishing throughout the year. The majority of fishing vessels are <10 m in length. The following list details the main fishing ports whose vessels may work along the English Offshore Scheme and are likely to receive landings from the 9 ICES rectangles along the study area. It is noted that there are vessels fishing from additional small harbours and rivers along the inshore part of the route, as well as nomadic and non-UK vessels:

Amble

- Beadnell
- Berwick
- Blyth
- Bridlington
- Craster
- Flamborough
- Grimscempby
- Hartlepool
- Holy Island
- Hornsea
- Hull
- North Shields
- Redcar
- Scarborough
- Seaham
- Seahouses
- South Shields
- Staithes
- Sunderland
- Whitby
- Withernsea

Plate 3.24.B-2: Main Fishing Ports



- 3.24.B.3.11 There are 353 active vessels associated with the main fishing ports, although not necessarily fishing within the study area. Among the target species of these vessels shellfish are primarily targeted, in particular Nephrops, and crabs through fishing method of pots and traps.
- 3.24.B.3.12Fishermen also target demersal and pelagic species including Haddock, Herring and Dab. Fishing methods include trawling, drift and fixed netting and gears using hooks.
- 3.24.B.3.13The cable routes are fished throughout the year and most under 10m vessels use multiple methods dependent on the season and availability of species. Table 3.24.B-B-2 shows the main species landed by the different gear types for the different UK vessels sizes.
- 3.24.B.3.14 **Plate 3.24.B-2** is compiled data from fishermen's consultations identifying gear type used and species targeted along sections of the cable route.

Table 3.24.B-B-2 - Main species landed by gear type for 10 m and under UK vessels and for over 10 m UK vessels (based on analysis of 2023 landings data for ICES rectangle)

| Gear | 10m and under | Over 10m |
|----------------------|------------------------------------|--|
| Beam Trawl | Shrimp and prawn, scallops, | Shrimp and prawn, sole, brill |
| Demersal Trawl | Nephrops, sole, herring, cod, bass | Nephrops, whiting, haddock, cod, herring |
| Dredge | Scallops | Scallops, shrimp and prawn, sole, plaice, turbot |
| Drift and fixed nets | Lobsters, bass | - |
| Gears using hooks | Cod, mackerel, bass | - |
| Other mobile gears | Cockles, shrimp and prawn | - |
| Pelagic Trawl | - | Herring, mackerel, sprats |
| Pots and Traps | Crabs, welks, lobsters | Crabs, whelks, lobsters |

3.24.B.4 Fisheries Liaison & Coexistence principles

Overarching principles

- 3.24.B.4.1 NGET are committed to providing effective liaison with local, regional, national and transboundary fisheries stakeholders relevant to the English Offshore Scheme. The overarching principles of the fisheries coexistence plan include (but are not limited to):
 - conducting construction activities relevant to the English Offshore Scheme whilst ensuring the health and safety of the project workforce and third parties (e.g. fishing vessels);
 - undertaking construction activities whilst minimising any disturbance to other activities as far as reasonably practicable;
 - and providing accurate information in relation to construction activities to local fishers in a timely manner in order to support coexistence.
- 3.24.B.4.2 Once the detailed sequence of activities for the construction period has been determined, advance communications, NtMs and Kingfisher Bulletin notifications would be issued to inform other sea users, including fishers. This would be updated throughout the construction period as required.

Fisheries Liaison Officer (FLO)

- 3.24.B.4.3 The benefits of early and ongoing consultation between NGET and the fishing community are recognised and NGET have engaged a Fisheries Liaison Officer (FLO) to communicate with the fishermen that work along the route. Fisheries liaison would continue pre and post construction and the project would endeavour to maintain good communication and the free flow of relevant information to all parties.
- 3.24.B.4.4 Additional fishing liaison roles may include an Offshore Fisheries Liaison Officer (OFLO) if the works necessitate it. In the appointment of an OFLO it is recognised that local fishermen's knowledge of fishing practices and vessels in the area can reduce interactions between fishing activity and construction works. An outline of the fishing liaison roles and responsibilities is given in the following sections.
- 3.24.B.4.5 The FLO would be the first point of contact for any queries/concerns regarding the English Offshore Scheme. The duties of the FLO representing EGL 3 & EGL 4 include:
 - Establishing and maintaining a strong positive working relationship with the local fishing industry acting as the day-to-day contact organising meetings as required and maintaining the flow of information between parties.
 - To monitor fishing activities along the English Offshore Scheme.
 - Maintaining an updated log /register of active fishermen, fishing associations along the cable route, including name of vessel, method of fishing, owner etc.
 - To distribute relevant information and Notices to Mariners of any EGL 3 & EGL 4 related activities that could potentially interact with fisheries stakeholders.
 - Having a detailed understanding and awareness of the local fishing industry advising EGL 3 & EGL 4 of potential impacts of proposed works, fishing activities along the cable route, relevant fishermen's concerns and any timing sensitivities.

- To be familiar with relevant conditions attached to all licences, permits, consents and agreements obtained by EGL 3 & EGL 4 (and its Contractors) e.g., Marine Licence, River Works Licences, Crown Estate Licence.
- 3.24.B.4.6 During the construction phase the FLO would be included on daily reports and would transmit any information to the fishermen if deemed relevant. The FLO would be required to liaise with the local fishing industry regarding any up and coming works which may impact on fisheries operations. The FLO would ensure that fishermen are made aware of all operations in progress; and are given early and adequate warning to enable such vessels to take action, wherever possible, in order that interference between fishing and EGL 3 & EGL 4 works are minimised. If works are delayed or over-run, then this would be communicated with the fishing industry at the earliest opportunity.

Offshore Fisheries Liaison Officer (OFLO) (if required)

- 3.24.B.4.7 Prior to the commencement of any major works EGL 3 & EGL 4 may also appoint an offshore FLO, who would be present on the works vessel or guard vessel during offshore activities. The role would be undertaken by someone who has a commercial fishing background and ideally is familiar with the EGL 3 & EGL 4 projects.
- 3.24.B.4.8 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 health and safety requirements on relevant very high frequencies (VHF) and medium 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 communicate upcoming plans and ideally work towards the relocation of any fishing gear present within the defined construction corridors, if required.
 - 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.
 - To maintain daily contact with the onshore EGL 3 & EGL 4 FLO.

3.24.B.5 Information Exchange

- 3.24.B.5.1 Disseminating information to all parties as early as possible and ensuring that effective lines of communication are maintained is key to an ongoing productive working relationship with fisheries stakeholders. The FLO would be responsible for establishing contact lists for the Fishermen's organisations and individuals, along the EGL 3 & EGL 4 cable routes.
- 3.24.B.5.2 Notices shall be given to sea users in the area of operations via Notice to Mariners, Kingfisher Bulletins, NAVTEX, NAVAREA warnings, email, telephone and text as appropriate.

Notices to Mariners

- 3.24.B.5.3 Notices to Mariners shall be issued and distributed in good time, prior to the start of works. Notices would be distributed by the FLO via email, letter and text where appropriate. Notices shall include as much information as possible, relevant to Fishing activities. This should include, but not be limited to:
 - A description of works due to be undertaken.
 - Vessel name and contact number.
 - A start date and proposed end date for the works.
 - Whether operations are 24-hour.
 - Whether buoys would be placed (e.g., at anchor positions) and if so, what are the lighting sequences etc.
 - Whether any equipment would be left on the seabed.
 - All work positions must be given in WGS84 Degrees and decimal minutes.
 - A Notice to Mariners would include an accompanying chart showing the work area.
- 3.24.B.5.4 All Notices to Mariners would also be published on the EGL 3 & EGL 4 Project website (https://www.nationalgrid.com/the-great-grid-upgrade/eastern-green-link-3-and-4)

Final Installation Coordinates

3.24.B.5.5 NGET would provide the coordinates for the following at the end of installation:

- Final installed position of cables
- Final positions (including dimensions) of crossings
- Final position of any remedial external cable protection (including dimensions and type of protection).
- 3.24.B.5.6 Final installation coordinates would be provided to KIS-ORCA and the UK Hydrographic Office for inclusion on Fishermen's Awareness Charts and Admiralty Charts.

3.24.B.6 **Safety**

COLREGS

3.24.B.6.1 Project vessels would comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs) (as amended) Marking and UK Standard Marking Schedule for Offshore Installations Marking, particularly with respect to the display of lights, shapes and signals.

Safety Zones

- 3.24.B.6.2 During all works NGET would aim to minimise the disruption to fishing activities along the route but for the safety of all mariners, would request a safety zone around any works vessels. This is a standard approach for all offshore works. Should a fishing vessel need to enter an area within proximity of a work vessel, this must be communicated, requested and discussed by VHF before approaching.
- 3.24.B.6.3 A guard vessel may be on site to inform fishing vessels of anchor positions or other hazards to navigation and fishing. Should a fishing vessel need to enter the area enclosed by the anchors, this must be communicated, requested and discussed by VHF before approaching.

Guard Vessels

- 3.24.B.6.4 NGET would secure the services of guard vessels to ensure that the cable installation proceeds smoothly and safely, and fishing disruption is minimised. NGET have committed to providing guard vessels to follow the installation spread where appropriate (e.g., where there is significant navigational traffic and risk assessment identifies a guard vessel is necessary) and be deployed where the cable is exposed on the seabed i.e., between lay and burial / protection, or the installation is making a crossing of a third-party asset (e.g., existing pipeline or cable).
- 3.24.B.6.5 No guard vessels have been contracted yet. Guard vessels employed by the English Offshore Scheme would be suitable for the role and have the ability to withstand the expected weather conditions and other operating requirements, and the captain(s) and crew(s) shall have suitable and sufficient knowledge and experience of the construction operations and cable protection roles. Guard vessels would be sourced locally wherever possible to do so.

3.24.B.7 Environmental Measures

3.24.B.7.1 Environmental measures for the English Offshore Scheme include the following, **Table 3.24.B-B-3**:

Table 3.24.B-B-3 - Summary of Environmental Measures

| Receptor | Potential changes and effects | Embedded measures | Compliance mechanism |
|-------------------|--|---|--|
| All gear types | General safety | For safety purposes, all vessels would be requested to maintain a minimum distance from construction vessels to prevent interactions. | CEMP and FLCP secured through dML |
| All gear types | General safety | As built locations of cable and external cable protection would be supplied to UKHO (Admiralty), The Crown Estate and Kingfisher (KIS-ORCA) | Secured through dML |
| Demersal gear | Risk of snagging (as assessed in Volume 1, Part 3, Chapter 23 Shipping and | Cut cable end locations and associated weights shall be accurately noted and charted and positions given to the FLO at the earliest opportunity for onward communication to the fishing industry | CEMP and FLCP secured through dML |
| | Navigation) | In the event that cable exposures are identified during routine surveys, the location of these would be shared with fisheries stakeholders and where necessary, additional temporary measures put in place (e.g., marker buoys, use of guard vessels, etc), until a repair or remediation can be implemented. | CEMP and FLCP secured through dML |
| | | Guard vessel(s), using RADAR with Automatic RADAR Plotting Aid (ARPA) to monitor vessel activity and predict possible interactions, would be employed to work alongside the installation vessel(s) during cable installation works and to protect any temporary cable exposures during installation. | CEMP and FLCP secured through dML |
| All gear types | Risk of snagging / Loss of grounds due to deposit of external cable protection | The intention is to bury the cables in the seabed, except in areas where trenching is not possible e.g. where ground conditions do not allow burial or at infrastructure crossings. | CEMP secured through dML |
| | | Cable protection features would only be installed where considered necessary for the safe operation of the English Offshore Scheme. This includes the repair of cables due to accidental damage, where depth of lowering is not achieved and at infrastructure crossings. | CEMP secured through dML |

| Receptor | Potential changes and effects | Embedded measures | Compliance mechanism |
|-------------------|---|--|--|
| | | Cable protection would be designed to prevent the risk of fishing gear snagging. | CEMP and FLCP secured through dML |
| | | A procedure for the claim of loss of/or damage to fishing gear would be developed and details included in the Construction Fisheries Liaison and Coexistence Plan | FLCP secured through dML |
| All gear types | Temporary restricted access to fishing ground (including required | Designated (and as minimal as possible) anchoring areas and protocols shall be employed during offshore operations to minimise physical disturbance of the seabed. | CEMP secured through dML |
| | fishing ground | During the course of cable route clearance, specific activities would be completed to remove items from the seabed. Out of Service cables would be removed as per industry guidelines, larger debris including lost fishing gear would be removed prior to cable installation and a pre-lay grapnel run would be completed to ensure smaller debris is removed. In the event that abandoned, lost or discarded fishing gear ('ALDFG') is encountered, it may be necessary in certain circumstances to bring ALDFG onto the vessel deck. In these instances, marked ALDFG would be returned to the MMO/local IFCA for onward retrieval by the owner of the marked gear, in line with existing best practice. Not all gear (particularly 'active' gear) is marked; if necessary to bring onto the vessel deck, unmarked gear would be disposed of via conventional onshore waste channels. | FLCP secured through dML |
| | | Timely and efficient communication would be given to sea users in the area via Notices to Mariners (NtM), Kingfisher Bulletins, Radio Navigation Warnings Navigational Telex (NAVTEX and Navigational Areas (NAVAREA) warnings and /or broadcast warnings. | Secured through dML |
| | | All Project vessels would display appropriate marks and lights and would always broadcast their status on AIS if appropriate. | |

| Receptor | Potential changes and effects | Embedded measures | Compliance mechanism |
|----------|-------------------------------|--|------------------------------------|
| | | A Fisheries Liaison Officer (FLO) and fisheries working group(s) would be maintained throughout installation to ensure project information is effectively disseminated, dialogue is maintained with the commercial fishing industry and access to home ports is maintained during the main fishing season. Details of the FLO would be included in the Construction Fisheries Liaison and Coexistence Plan | Secured through dML and FLCP |
| | | Timings of any temporary areas of exclusion from fishing grounds would be clearly communicated via a notice to mariners. | FLCP secured through dML |

3.24.B.7.2 Environmental Measures would continue to be developed in consultation with the local fishing industry. A preliminary list of design measures and mitigations is provided in **Volume 2 Part 1, Appendix 1.5.A Outline Register of Design Measures**. A final list of all design measures and mitigations will be provided with the final ES.

3.24.B.8 EGL 3 & EGL 4 Contact Details

3.24.B.8.1 A full list of contact details would be provided post consent.

Table 3.24.B-B-4 - Contacts

| Role | Contact Name | Email | Telephone |
|------|--------------|-------|-----------|
| | | | |

3.24.B.8.2 Other contacts to be confirmed once Contracts are awarded.

National Grid plc National Grid House, Warwick Technology Park, Gallows Hill, Warwick. CV34 6DA United Kingdom

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