



The Great Grid Upgrade

Sea Link

Sea Link

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Acronyms

Acronym	Meaning
AOI	Area of Interest
CD	Chart Datum
CEMP	Construction Environmental Management Plan
COLREGs	Convention on the International Regulations for Preventing Collisions at Sea
DCO	Development Consent Order
EMF	Electro Magnetic Field
ES	Environmental Statement
FSA	Formal Safety Assessment
HHA	Harwich Haven Authority
HVDC	High Voltage Direct Current
IMO	International Maritime Organisation
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
MMO	Marine Management Organisation
NM	Nautical Mile
NRA	Navigational Risk Assessment
NIP	Navigation and Installation Plan
PEIR	Preliminary Environmental Information Report
PLA	Port of London Authority
RAM	Restricted in Ability in Manoeuvre
SOLAS	International Convention for the Safety of Life at Sea
SWB	Shallow Water Barge

TDOL	Target Depth of Lowering
TSS	Traffic Separation Scheme
UKC	Under Keel Clearance
UK CoS	United Kingdom Chamber of Shipping
UKHO	United Kingdom Hydrographic Office
UXO	Unexploded Ordnance
VTs	Vessel Traffic Service

1. Introduction

1.1 Purpose of NIP

- 1.1.1 This Outline Navigation and Installation Plan (NIP) has been prepared to provide a mechanism for managing project vessel traffic during the construction phase of the Sea Link project, and communicating relevant information to key shipping and navigation stakeholders.
- 1.1.2 During consultation, the need for a plan to manage vessels and maintain communication with stakeholders during the construction and operation and maintenance phases was highlighted. The production of an NIP has been recommended by the Sea Link Navigational Risk Assessment (**Application Document 6.3.4.7.A ES Appendix 4.7.A Navigational Risk Assessment [APP-203]**) as a mitigation measure in order to manage and reduce potential shipping and navigation impacts, including vessel collision risk, disruption to established routes and areas, reductions in water depth, and reduced access to ports and harbours.
- 1.1.3 This NIP will maintain ongoing awareness of Sea Link offshore installation activities amongst relevant parties, set out planned protocols, and enable coordination with stakeholders as required. The requirement for any NIP during operations and maintenance will be discussed in due course.
- 1.1.4 As recommended by the Sea Link NRA, the NIP will pay particular attention to:
- The installation activities through the Sunk TSS;
 - Planned operations within Pegwell Bay;
 - Any expected or unexpected change in under-keel clearance or anticipated introduction of seabed hazards; and
 - Where necessary will identify areas of high potential magnetic compass deviation.
- 1.1.5 The NIP has a key focus on:
- Concurrent Restricted in their Ability to Manoeuvre (RAM) project vessel activities with other offshore projects within the Sunk region;
 - Pilotage and anchorage at key locations; and
 - Preserving access to approaches to ports and harbours (including Harwich Haven and Port of London) by safeguarding water depth in order to maintain under-keel clearances.
- 1.1.6 The spatial and temporal scope of this NIP is defined in the following Section 1.2.

1.2 Scope of NIP

Geographic Scope

- 1.2.1 This Navigation Installation Plan is specifically focussed on the following three Areas of Interest (AOI):

- Northern Offshore AOI – Sunk region;
- Southern Offshore AOI – NE Spit/Southern approaches; and
- Kent Landfall AOI – Pegwell Bay.

1.2.2 The three AOI are displayed in **Plate 1.1 Sea Link NIP Areas** of Interest.

1.2.3 For the avoidance of doubt, project activities outside of these three AOI are outside the scope of this NIP.

Northern Offshore AOI

1.2.4 The Northern Offshore AOI aligns with the Area of Interest established in the Five Estuaries and North Falls NIP documents (Five Estuaries Offshore Wind Farm, 2025) (North Falls Offshore Wind Farm, 2025), at the request of the Port of London Authority (PLA).

1.2.5 The Northern Offshore AOI is defined by the four coordinates shown in Table 1.1.

1.2.6 The Northern Offshore AOI encompasses the Sunk region. The Sunk coincides with an area of intense shipping vessel activity at the mouth of the Thames Estuary, which is managed by the implementation of International Maritime Organisation (IMO) Routing Measures, including a number of Traffic Separation Schemes (TSS). The TSS order manage vessel approaches to the Thames Estuary. Due to the level of shipping activity within this region as well as its navigational importance, the Sunk region has been identified through discussion with stakeholders as being an area of focus for this NIP, and therefore the Northern Offshore AOI has been established.

1.2.7 The Sunk Vessel Traffic Service (VTS), operated by the Dover Coastguard, monitors this region. The Sunk VTS covers the two Sunk Precautionary Areas and the TSSs and other routes which lead into them (UKHO, 2020).

Table 1.1 Northern Offshore AOI Coordinates (WGS84)

Point	Latitude	Longitude
A	51° 53' 03.03" N	001° 30' 47.85" E
B	51° 53' 03.03" N	001° 49' 19.81" E
C	51° 45' 52.56" N	001° 30' 47.85" E
D	51° 45' 52.56" N	001° 49' 19.81" E

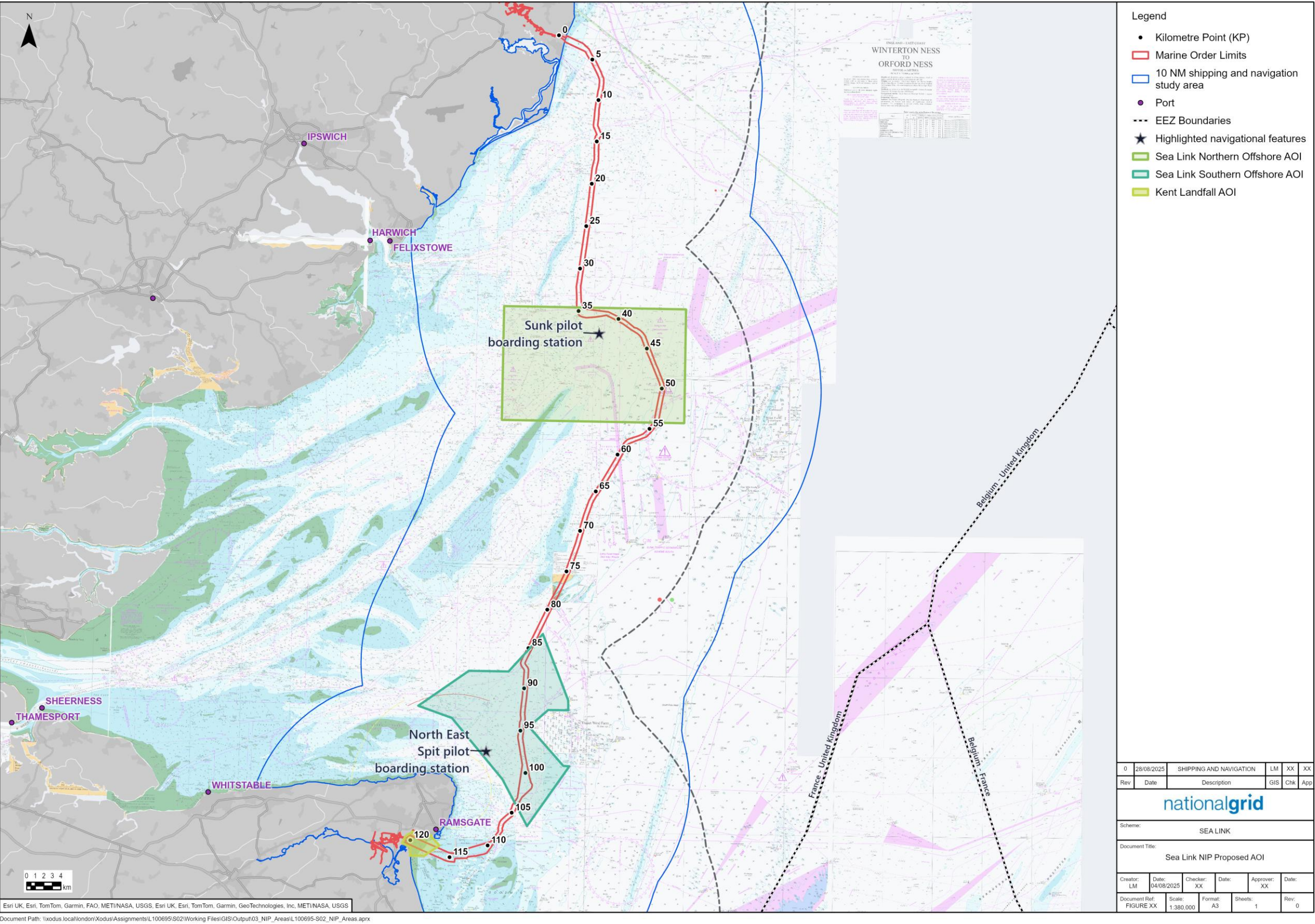


Plate 1.1 Sea Link NIP Areas of Interest

Southern Offshore AOI

- 1.2.8 The Southern Offshore AOI has been established after discussion between National Grid and the Port of London Authority, in order to address concerns around vessel management within the southern approaches to the Port of London, associated with the Princes Channel and the NE Spit boarding area.
- 1.2.9 The Southern Offshore AOI is defined by the coordinates shown in Table 1.2
- 1.2.10 The Southern Offshore AOI is partially covered (in its western half) by the London VTS area, operated by the Port of London Authority (PLA).

Table 1.2 Southern Offshore AOI Coordinates (WGS84)

Point	Latitude	Longitude
1	51° 30' 01.55" N	001° 27' 59.39" E
2	51° 30' 02.10" N	001° 31' 59.33" E
3	51° 32' 26.17" N	001° 35' 23.30" E
4	51° 28' 17.10" N	001° 38' 04.15" E
5	51° 27' 39.57" N	001° 38' 05.80" E
6	51° 27' 39.45" N	001° 36' 04.21" E
7	51° 26' 35.02" N	001° 34' 09.94" E
8	51° 24' 09.22" N	001° 37' 41.85" E
9	51° 24' 08.02" N	001° 38' 18.67" E
10	51° 20' 18.97" N	001° 34' 09.52" E
11	51° 23' 14.30" N	001° 31' 35.24" E
12	51° 27' 02.03" N	001° 26' 22.31" E
13	51° 27' 45.32" N	001° 22' 56.90" E
14	51° 30' 01.55" N	001° 27' 59.39" E

Kent Landfall AOI

- 1.2.11 The Kent Landfall AOI has been established to focus managing risks with installation and maintenance activities within Pegwell Bay, ensuring enhanced communication of activity details within this region. The AOI has been drawn to be inshore of the B2 and

West Quern buoys with these as easternmost vertices, in order to have easily recognisable boundary points.

1.2.12 The coordinates for the Kent Landfall AOI are displayed in Table 1.3.

Table 1.3 Kent Landfall AOI Coordinates (WGS84)

Point	Latitude	Longitude
1	51° 19' 05.49" N	001° 21' 37.23" E
2	51° 19' 30.501" N	001° 21' 56.59" E
3	51° 19' 48.82" N	001° 22' 40.31" E
4	51° 19' 33.93" N	001° 24' 05.29" E
5	51° 19' 36.76" N	001° 24' 32.41" E
6	51° 19' 26.09" N	001° 24' 41.18" E
7	51° 18' 58.97" N	001° 25' 23.65" E
8	51° 18' 18.30" N	001° 23' 52.50" E
9	51° 18' 17.58" N	001° 22' 28.43" E
10	51° 18' 50.40" N	001° 22' 25.80" E
11	51° 19' 05.49" N	001° 21' 37.23" E

Temporal Scope

- 1.2.13 The Outline Navigation Installation Plan applies to the construction phase of the Sea Link project and comes into force once Sea Link construction begins. It may also be utilised through the operation and maintenance phase, as appropriate.
- 1.2.14 This Outline NIP will also form the basis for discussions with key shipping and navigation stakeholders in the lead up to the start of the construction phase.
- 1.2.15 Construction works would be expected to start in 2026 and be functionally completed by 2031. Indicative timings are outlined below in Table 1.4.

Table 1.4 Sea Link Indicative Schedule

Phase	Task	Related activities	Potential Timeframe
Construction	Pre installation	UXO Surveys/Clearance Pre-sweeping Crossing preparation Cable Route clearance	Q2 2026 to Q1 2028
	Suffolk landfall installation	HDD operations	Q1 to Q3 2028
	Kent landfall installation	HDD operations	Q1 to Q3 2027
	2028 submarine cable installation (Pegwell Bay to the Sunk)	Cable lay Cable burial Post-lay rock	Q2 to Q4 2028
	2029 submarine cable installation (Aldeburgh to the Sunk)	Cable lay Cable burial Post-lay rock	Q2 2029 to Q1 2030
Operation and maintenance	TBC	TBC	TBC

Interested Parties

- 1.2.16 A number of interested parties have been identified for the Sea Link NIP through consultation undertaken through the scoping, Preliminary Environmental Information Report (PEIR) and Environmental Statement (ES) stages of the Sea Link DCO application, and through engagement as part of the production of the supporting NRA.
- 1.2.17 Some initial discussions surrounding the NIP specifically have also been conducted with the PLA and HHA.
- 1.2.18 The following interested parties have been identified:
- Harwich Haven Authority (HHA);
 - Port of London Authority (PLA);
 - Sandwich Port and Haven;
 - UK Chamber of Shipping (UK CoS);
 - Five Estuaries Offshore Wind Farm;

- North Falls Offshore Wind Farm;
- GridLink; and
- Sunk VTS.

1.3 Updating the NIP

- 1.3.1 The Outline Navigation Installation Plan is intended to be a ‘live’ document which is updated up to the start of the Sea Link construction phase, enabling additional input from and further engagement with interested parties. Updated versions will then be produced at regular intervals during Sea Link’s construction phase until the cable construction is complete.
- 1.3.2 The NIP will be promulgated to interested parties at regular intervals up to and during the construction phase.
- 1.3.3 Table 1.5 details the expected timeline for NIP updates.

Table 1.5 Timeline for NIP updates

Milestone	Indicative date	NIP updates
Pre-Examination phase	September 2025	Initial drafting of Outline NIP, after engagement with stakeholders and post-NRA production
Examination phase	TBC - Q4 2025 to Q1 2026	Further updates based on feedback from Examining Authority and shipping and navigation stakeholders received during Examination phase
Post consent	TBC	TBC
Construction phase	TBC	TBC
Operation and maintenance phase	TBC	TBC
Decommissioning phase	TBC	Superseded by Decommissioning Plan

2. Project Vessel Activities

2.1 Indicative offshore project parameters

- 2.1.1 The Sea Link Offshore Scheme consists of two HVDC cables (one bundled pair), with one fibre optic cable (bundled). Up to two HVDC joints, and one fibre optic joint, are expected. The main offshore route is expecting to have one cable trench, the size of which is dependent on final engineered cable and bundle dimensions as well as trenching methodology and sediment type, but is expected to be in the range of 0.3 m to 1.2 m in width.

2.2 Pre-Installation

Pre Cable-Lay Survey

- 2.2.1 Details of anticipated pre cable lay survey activities (which will be finalised in a future NIP draft) are provided in Table 2.1.

Table 2.1 Typical information for pre lay survey activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

UXO Clearance

- 2.2.2 Details of UXO clearance activities are provided in Table 2.2 (noting these will be subject to their own marine licensing process and mitigations and are provided here for information only).

- 2.2.3 UXO approach will be estimated after the planned UXO survey, which was anticipated to be 2025 in the DCO application however is now likely to be undertaken in 2026.

Table 2.2 Typical information for UXO clearance activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Cable route clearance activities

- 2.2.4 Details of anticipated cable route clearance activities are provided in Table 2.3.

Table 2.3 Typical information for cable route clearance activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Sandwave Clearance

2.2.5 Details of anticipated sandwave clearance activities are provided in Table 2.4.

Table 2.4 Typical information for sandwave clearance activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Cable crossing preparation

2.2.6 Details of anticipated cable crossing preparation activities are provided in Table 2.5.

Table 2.5 Typical information for cable crossing preparation activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

2.3 Installation

Kent landfall

- 2.3.1
- Details of anticipated installation activities at the Kent landfall are provided in Table 2.6, and include HDD operations.

Table 2.6 Typical information for Kent landfall activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern AOI (excluding adverse weather delays)	<i>N/A</i>
Duration of activity within Southern AOI (excluding adverse weather delays)	<i>N/A</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Cable Lay and Burial

2.3.2 Details of anticipated cable lay / burial activities are provided in Table 2.7 and Table 2.8.

Table 2.7 Typical information for cable lay/ burial activities for the 2028 submarine cable installation – Pegwell Bay to the Sunk

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Table 2.8 Typical information for cable lay/ burial activities for the 2029 submarine cable installation – Aldeburgh to the Sunk

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>N/A</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>N/A</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Cable Protection / Post-lay Rock

- 2.3.3 It is intended that the cable will be buried where practicable. However, where Target Depth of Lowering (TDOL) cannot be achieved, rock backfill may be installed.
- 2.3.4 Indicative details of cable protection activities are provided in Table 2.9.

Table 2.9 Typical information for cable protection activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Cable crossings

- 2.3.5 There are a number of known in-service and future cable crossings which fall within the Sea Link NIP AOIs.
- 2.3.6 These include Five Estuaries export corridors, NeuConnect cable, North Falls planned export corridor and GridLink planned cable.
- 2.3.7 No offshore pipeline crossings are expected.
- 2.3.8 Details of anticipated cable crossing activities are provided in Table 2.10.

Table 2.10 Typical information for cable crossing activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Post Lay Surveys

2.3.9 Details of anticipated post cable lay survey activities are provided in Table 2.11.

Table 2.11 Typical information for post-lay survey activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

Rock Placement

- 2.3.10 Indicative details of potential rock placement activities in the operation and maintenance phase are provided in Table 2.12.

Table 2.12 Typical information for remedial rock placement activities

Parameter	Indicative details
Vessel(s) required	<i>TBC</i>
Geographical extent covered	<i>TBC</i>
Duration of activity within Northern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Southern Offshore AOI (excluding adverse weather delays)	<i>TBC</i>
Duration of activity within Kent Landfall AOI (excluding adverse weather delays)	<i>TBC</i>
Speed when undertaking activity	<i>TBC</i>
Continuous or discontinuous activity	<i>TBC</i>

2.4 Third Party Vessel Movements

- 2.4.1 Movements by third-party vessels have been characterised and analysed in detail in the Sea Link NRA (**Application Document 6.3.4.7.A ES Appendix 4.7.A Navigational Risk Assessment [APP-203]**). Additionally, consideration has been given to the potential future baseline during the lifetime of Sea Link.
- 2.4.2 However, it is recognised that at the time of the construction phase commencing that vessel movements and routeing may have altered significantly and may not align with the scenarios estimated within the NRA, in which case it may be necessary to update the NRA document within the three NIP AOI post-consent.

3. Planned Protocols, Mitigation and Management

3.1 Introduction

- 3.1.1 This section provides details of planned protocols and mitigation which will be implemented for the Sea Link project vessel activities outlined in Section 2.

3.2 Key Project Protocols

- 3.2.1 As committed to in the **Application Document CEMP 7.5.3.1 Appendix A Outline Code of Construction Practice [APP-341]**:

- As-built locations of cable and external protection will be supplied to UKHO (Admiralty), The Crown Estate and Kingfisher (KIS-ORCA).
- All project vessels must comply with the International Regulations for Preventing Collisions at Sea (1972) (IMO, 2019), regulations relating to International Convention for the Prevention of Pollution from Ships (the MARPOL Convention 73/78) (IMO, 2019) with the aim of preventing and minimising pollution from ships and the International Convention for the Safety of Life at Sea (SOLAS, 1974).
- A risk based burial approach will be used where cables will be buried to a minimum DOL to the top of the cable of 0.5 m (in areas of bedrock), with a target DOL for the Proposed Project of approximately 1 m to 2.5 m, assessing cable protection risk factors such as sediment type, shallow geology, sediment mobility, fishing activity, shipping movements and anchor deployment along the route.
- Relevant information will be communicated to other sea users via Notices to Mariners (NtM), Radio Navigation Warnings Navigational Telex (NAVTEX) and/or broadcast warnings on VHF.
- All Project vessels will display appropriate marks and lights and will always broadcast their status on AIS.
- Temporary aids to navigation will be used as required to guide vessels around areas of installation activity.
- A compass deviation report will be produced prior to installation.
- Guard vessel(s), using RADAR with Automatic RADAR Plotting Aid (ARPA) and Automatic Identification System (AIS) to monitor vessel activity and predict possible interactions, will be employed to work alongside the installation vessel(s) during cable installation works.

- 3.2.2 Additionally, the following protocols apply:

- In addition to compliance with COLREGs and SOLAS, all project vessels will also be subject to inspection, classification and certification to ensure compliance with both local and international marine legislation. Additionally, all considerations to marine warranty for the project will also be included.

- Project vessels may also broadcast additional nav warnings on VHF.
- Relevant information may also be communicated to other sea users via local navigation warnings.

3.3 Areas of Reduction in Water Depth

- 3.3.1 When areas within the AOI where there will be a reduction in water depth during the construction or operation and maintenance phases are identified, and therefore may affect under-keel clearance and access to ports, these will be highlighted within this NIP.

3.4 Concurrent RAM Operations in the Sunk Region

- 3.4.1 Stakeholder engagement particularly with HHA has highlighted concerns surrounding Restricted in Ability to Manoeuvre (RAM) vessel works within the Sunk region running concurrently with other offshore projects.

Defining “concurrent RAM activities”

- 3.4.2 Concurrent activity restrictions detailed within the NIP relate to project vessels displaying RAM status and also meeting the requirements of the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs) Rule 3(g)i and 3(g)v as follows:
- 3.4.3 *3(g) The term "vessel restricted in her ability to manoeuvre" means a vessel which from the nature of her work is restricted in her ability to manoeuvre as required by the Rules [COLREGs] and is therefore unable to keep out of the way of another vessel. The term "vessels restricted in their ability to manoeuvre" shall include but not be limited to: (i) a vessel engaged in laying, servicing or picking up a navigation mark, submarine cable or pipeline; and (v) a vessel engaged in mine clearance operations.*
- 3.4.4 Navigational status of the project vessels involved in the activities may result in third-party vessels having operational priorities as per the requirements of COLREGs.
- 3.4.5 The concurrent RAM activity area is displayed in Plate 3.1.

Protocols

- 3.4.6 Simultaneous RAM operations with other offshore projects will be avoided where possible, and especially within the Sunk region. Non RAM operations may be undertaken simultaneously.
- 3.4.7 The Sea Link project has committed in the CEMP (**Application Document 7.5.2 Outline Offshore Construction Environmental Management Plan [APP-339]**) to the following:
- Coordination of planned operations within the Sunk region, to avoid concurrent Restricted Ability to Manoeuvre (RAM) operations (such as cable lay) with other projects in the Sunk area where possible, in particular regarding the North Falls and Five Estuaries Wind Farm projects.
 - Restricted Ability to Manoeuvre operations in the Sunk area should be avoided where practicable in visibilities of below 2 nautical miles.

- 3.4.8 Therefore, Sea Link will continue to engage with Five Estuaries and North Falls offshore wind farm projects regarding the Sunk region in order to:
- Keep up to date on project progress and developments;
 - Understand the potential for overlap in planned construction schedules as soon as this becomes apparent;
 - Seek agreement on how concurrent RAM activities within the Sunk region can be avoided; and
 - Align NIPs between the three projects, as appropriate.
- 3.4.9 Vessels meeting the requirements (Rule 3(g) i and v) detailed in Paragraph 3.4.3 and undertaking RAM project activities will be restricted from working concurrently (both in terms of Sea Link construction vessels, and those engaged in the construction of North Falls and Five Estuaries as far as reasonably foreseeable) in the Concurrent RAM Activity Area defined in section 3.4.5, while noting that Sea Link can only control its own vessels.
- 3.4.10 This NIP will be updated in due course in order to manage project vessels engaged in RAM operations within the Concurrent RAM Activity Area, and coordinate effectively with other projects, namely Five Estuaries and North Falls offshore wind farm projects.
- 3.4.11 Where concurrent RAM operations between these offshore projects do nonetheless occur, Sea Link will minimize disruption and potential risks via an Emergency Plan, which will be referenced in future versions of the NIP.

3.5 Notification of Planned Activities3.4

- 3.5.1 It has been highlighted through engagement with shipping and navigation stakeholders that notification of planned activities is a concern. The NIP will establish how necessary information will be promulgated to shipping and navigation stakeholders.
- 3.5.2 The following commitments are established in the Sea Link CEMP (**Application Document 7.5.2 Outline Offshore Construction Environmental Management Plan [APP-339]**):
- Notice(s) to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings will be issued prior to the commencement of installation works.
 - Notification of regular runners including ferry operators. Engagement with regular runners and specifically ferry operators ensures awareness of the installation details which minimises disruption.
 - UKHO Temporary/Preliminary Notices to be issued to ports, harbours and pilots, and any other appropriate parties prior to post-lay/as-built survey such that the basic positions of the cable are established and awareness among mariners can be raised immediately. As-built locations of cable and external protection will be supplied to the UK Hydrographic Office (UKHO) (Admiralty), The Crown Estate and Kingfisher (KIS-ORCA).
- 3.5.3 A process flowchart will be established and added to the NIP, in agreement with the Interested Parties, which will detail how activities within the three AOI will be notified in advance of project vessel activities.

3.6 Contingency Plans

- 3.6.1 Contingency plans are necessary to determine of the actions to be taken in an emergency situation. These also define the thresholds for which activities (including where the project vessel has restricted status) may need to be abandoned in such a situation.
- 3.6.2 Contingency plans will be established, and reference included in future versions of the NIP.

3.7 UXO Protocol

- 3.7.1 For operations identifying and/ or removing UXO within the AOI additional protocols will be required.
- 3.7.2 Micro-routeing around isolated UXO targets would be undertaken where possible, with a closest point of approach to the target, based on the eventual installation methodology.
- 3.7.3 Whilst avoidance would be the preferred approach, if UXO clearance is necessary, the activity would be undertaken in accordance with approved industry practices for removal and disposal/waste management of ordnance.
- 3.7.4 The MCA preference is typically not to remove the UXO unless essential for safety. Therefore, Sea Link may identify and leave UXO in situ where there is no danger to shipping. If identified UXO does need removal for construction reasons, Sea Link will be required to follow the marine licensing process which will include discussion with the

relevant authorities to plan removal and discuss any necessary mitigations. The marine licensing process requires consideration of shipping and navigation activities in the area.

3.8 Pegwell Bay

- 3.8.1 The Sea Link NRA has highlighted that Pegwell Bay is an area of particular interest regarding project activities, and therefore the Kent Landfall AOI has been created for this NIP.
- 3.8.2 Pegwell Bay is a region of very shallow water and challenging navigation for vessels entering and exiting the River Stour and may also have a high presence of amateur or inexperienced recreational boaters.
- 3.8.3 Sandwich Port and Haven Authority will be included in all notifications and communications of construction or maintenance activities within this region, in particular on the topic of any expected (or unexpected) change in under-keel clearance or anticipated introduction of seabed hazards.
- 3.8.4 In terms of expected changes in under-keel clearance within the Pegwell Bay, the Project is currently not anticipating any significant changes in under-keel clearance as a result of construction works.
- 3.8.5 In terms of any anticipated introduction of seabed hazards within Pegwell Bay, during the construction phase there may be temporary hazards present within the Kent Landfall AOI. These may include the presence of a Shallow Water Barge (SWB) and post-installation trenching support vessel which will be in the intertidal and subtidal area and initially on an anchor spread. Further details of this will be provided once known.

3.9 Magnetic compass deviations

- 3.9.1 The NIP will, where necessary, highlight areas of high potential magnetic compass deviations, where identified by EMF assessment.
- 3.9.2 The Sea Link EMF Report (**Application Document 6.5 Electric and Magnetic Field Compliance Report [APP-289]**) establishes that very low compass deviation occurs over the majority of the route, and meets MMO requirements.
- 3.9.3 The report concludes that where the cables come ashore for very short distances in shallow waters this results in greater compass deviations, despite the reduced magnetic fields produced. However, given the shallow sea depths in the transition areas, very close proximity to the shoreline and limited distance the magnetic fields extend, navigation via compass in this particular situation is unlikely to be considered an issue.

References

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