The Great Grid Upgrade

Sea Link

Non-statutory consultation report

Version A

October 2023

nationalgrid

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Sea Link
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Contents

Table 1.1 List of abbreviations

Abbreviation	Definition
AONB	Area of Outstanding Natural Beauty
BNG	Biodiversity Net Gain
CPRSS	Corridor Preliminary Routeing and Siting Study
CWS	County Wildlife Site
DCO	Development Consent Order
EA1N	East Anglia One North
EA2	East Anglia Two
EIA	Environmental Impact Assessment
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LCC	Line Commutated Converter
NGET	National Grid Electricity Transmission
NGV	National Grid Ventures
NHA	Neighbouring Host Authority
NSIP	Nationally Significant Infrastructure Project
PCZ	Primary Consultation Zone
PEIR	Preliminary Environmental Information Report
RSPB	Royal Society for the Protection of Birds
SCZ	Secondary Consultation Zone
SoS	Secretary of State
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
VSC	Variable Source Converter

Table 1.2 Glossary

Term	Definition
Converter Station	A converter station is part of a HVDC system and converts High Voltage Direct Current to High Voltage Alternating Current and vice versa.
Development Consent Order	Where the Secretary of State (SoS) proposes to grant consent for a Nationally Significant Infrastructure Project (NSIP), this will be through a DCO which is normally made as a statutory instrument – a form of secondary legislation. The DCO not only provides planning consent for the Project but may also incorporate other consents and include authorisation for the compulsory acquisition of land.
East Coast 5 (EC5)	National Grid uses boundaries to study the power flows on the electricity transmission network. Boundary EC5 is a local boundary enclosing most of East Anglia.
East Coast 6 (EC6)	National Grid uses boundaries to study the power flows on the electricity transmission network. The Sizewell group boundary in Suffolk is referred to by the Electricity Systems Operator (ESO) as EC6.
HVAC	High Voltage Alternative Current is a type of electrical current in which the direction of the flow of electrons switches back and forth at regular intervals or cycles. In the UK, this happens 50 times per second (50 hertz or Hz).
HVDC	High Voltage Direct Current is an electric current that is uni-directional, so the flow of charge is always in the same direction. Converting from HVAC to HVDC and back takes place in a Converter Station.
Landfall	A location on the coast where the offshore cable comes ashore.
Nationally Significant Infrastructure Project	An NSIP is a project of a certain type (Energy, Transport, Water, Wastewater and Waste) over a certain size which is considered by the Government to be so big and nationally important that permission to build it needs to be given at a national level by the responsible Government Minister, which is the Secretary of State. Thresholds for a project becoming an NSIP are set out in The Planning Act 2008.
Non-Statutory Consultation	The aim of non-statutory consultation is to allow local communities and others to gain a better understanding of the project and its potential impacts. It also allows local communities to have their say and influence the project in its early stages.
Preliminary Environmental Information Report	Information that has been compiled by the applicant to support statutory consultation held in advance of submitting an

Term	Definition
	application for development consent. The PEIR should contain information reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development and any associated development.
Receptor	A component of the natural or man-made environment such as water or a building that is affected by an impact.
Substation	Electrical equipment in an electric power system through which electrical energy is passed for transmission, transformation, distribution or switching.

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1. Introduction

1.1.1 This non-statutory consultation report has been prepared by Stantec on behalf of National Grid Electricity Transmission plc (National Grid). It presents the results of the non-statutory consultation that took place between 24 October and 18 December 2022, on proposals for the Sea Link Project (hereafter referred to as the 'Project').

1.1 Background to the project

1.1.1 National Grid is proposing to reinforce the electricity transmission network across Suffolk and Kent via the Project. The Project is required to accommodate additional power flows generated from renewable and low carbon energy generation, as well as additional new interconnection with mainland Europe. This would be achieved by the construction and operation of a new, two-gigawatt high voltage direct current (HVDC) link approximately 140 km in length, predominantly offshore. The Project would also include onshore HVDC converter stations, an extension to a planned onshore substation and onshore high voltage alternating current (HVAC) connections onto the national electricity transmission network.

1.1.2 National Grid will seek to obtain a Development Consent Order (DCO) for the Project under procedures governed by The Planning Act 2008. National Grid will submit an application for development consent to the Planning Inspectorate, who will assess it and make a recommendation to the Secretary of State (SoS). The SoS will decide on whether a DCO should be granted for the Project.

1.2 Purpose of consultation

1.2.1 The consultation approach (see **Appendix A)** aimed to meet the following objectives:

- introduce the project to the public and provide an overview;
- explain why National Grid need to build the reinforcement;
- set out the options that have been considered and how National Grid made the decision on the corridor and graduated swathe being proposed;
- present National Grid's proposed corridors with graduated swathe;
- present National Grid's proposed converter station sites;
- present National Grid's proposed marine route and cable landfall locations;
- give stakeholders and members of the public the opportunity to provide feedback and have a greater influence on National Grid's work to date; and
- outline next steps.

1.3 Purpose of this report

1.3.1 This report presents the results of the non-statutory consultation that took place for the Project. The consultations were initially planned for an eight-week period between 24

October 2022 and 18 December 2022; however, consultation was extended to midnight on 22 December 2022, for several stakeholders on request. Furthermore, following a back check and review of the prescribed consultees notified of the non-statutory consultation, it was identified that 40 had not been contacted. National Grid wrote to the consultees on 22 February 2023 providing them with an 8-week period to provide feedback on the Project.

1.3.2 This report details how stakeholders and the public were informed, it presents an outline project description as it was presented during the non-statutory consultation, and a summary of the feedback received. It also includes a summary of specific questions and suggested changes raised by the consultees together with the response from National Grid.

1.3.3 National Grid has a dedicated Project website and all the reports/documents referenced in this Non-Statutory Consultation Report and Statutory Consultation materials can be found here[1].

1.3.4 This report will inform, and be appended to, the Consultation Report that will accompany the DCO application for the Project, currently proposed to be in Winter 2024.

1.4 Structure of this report

1.4.1 The rest of this report is structured as follows:

- chapter 2: Project description – presents an outline description of the Project;
- chapter 3: Methods of consultation – presents a summary of who was consulted together with the methods used;
- chapter 4: Analysis of feedback – presents the results of the closed questions and summarises the feedback received to open questions in themes on the Suffolk and Kent feedback forms, and summarises the feedback received from Prescribed and Non-Prescribed bodies in themes;
- chapter 5: Project design – sets out National Grid's response to the consultation feedback with regard to the design proposals for the Project; and
- chapter 6: Next steps – sets out the next steps in the DCO process.

[1] Sea Link Project website: https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

2. Project description

2.1 Introduction

2.1.1 This section sets out the description of the Project as it was presented during the non-statutory consultation between 24 October and 22 December 2022. The project description has evolved since the non-statutory consultation, and this is set out in more detail in the Preliminary Environmental Information Report (Part 1, Chapter 4 Description of the Proposed Project).

2.1.2 As presented during the non-statutory consultation, the Project would be developed across parts of Suffolk and Kent and in the North Sea. The design work is an iterative process with electrical system, environmental, engineering and economic considerations influencing the optioneering and design from which a number of options have been developed. Emerging preferences and alternative options in Suffolk and a singular option in Kent were the subject of the now complete, non-statutory consultations which this report summarises. The various Project elements together with the options under consideration at the time of the non-statutory consultation are described in the following sections. The scheme has been split into the following for ease of reference:

- Suffolk onshore scheme;
- Kent onshore scheme; and
- offshore scheme (including the landfall locations).

2.2 Suffolk onshore scheme

2.2.1 The Suffolk onshore scheme would comprise of:

- an extension to the proposed Friston substation;
- a new converter station site;
- a landfall location;
- a HVDC underground cable from the landfall location to the proposed converter station site; and
- an underground HVAC connection from the proposed converter station site to the proposed Friston substation.

2.2.2 National Grid is including the proposed Friston substation in the proposals, to give a comprehensive consenting position. However, it is expected that the proposed Friston substation to be built under the existing Scottish Power Renewables consents.

2.2.3 The converter station will have an approximate total footprint of six hectares once constructed; however, during construction up to ten hectares would be required for construction equipment and machinery, site offices, welfare facilities, storage, access and haul roads. Converter stations enable electricity to be converted between alternating and direct current. They contain specialist electrical equipment; some of which must be

housed inside buildings potentially up to 30 m high, while some could be located outdoors or in smaller buildings.

2.2.4 The landfall location is where the offshore cable route transitions between the marine environment and the terrestrial environment; the marine HVDC cable and the underground HVDC cable would be joined together at transition joint bays located as close to the coast as possible whilst considering any environmental or technical constraints. National Grid are considering the use of trenchless cable laying techniques to bring the HVDC cables ashore.

2.2.5 The underground HVDC cables would run between the landfall location and the converter station. The installation would require a working width of 40 m and a permanent easement of typically 15 m.

2.2.6 The underground HVAC cable would connect the converter station to the proposed Friston substation. A working width of up to 100 m would be required.

Suffolk options

2.2.7 A number of options for the landfall location and converter station site have been considered and the options have been narrowed down through assessment to the following:

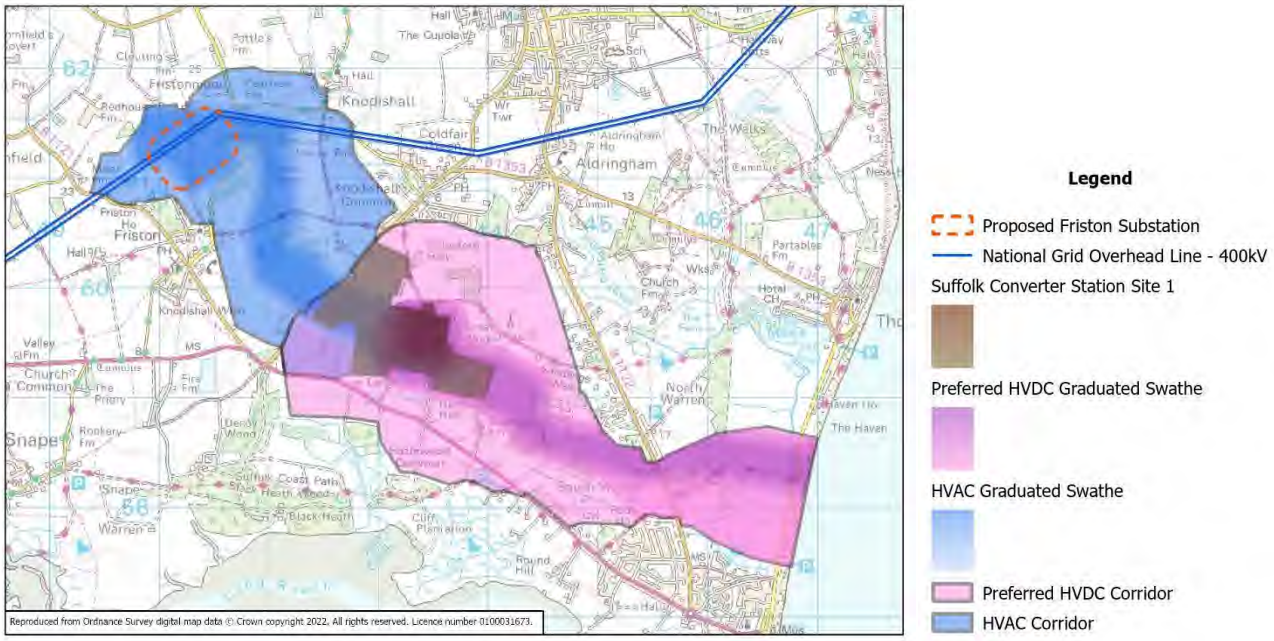
- two different proposed converter station sites: site 1 is located to the south of Knodishall and site 3 is located to the east of Saxmundham;
- two marine cable landfall locations: one between Aldeburgh and Thorpeness and one south of Sizewell and the Sizewell power stations;
- HVDC cable corridors between the above; and
- HVAC cable corridors between the converter station sites and the proposed Friston substation.

2.2.8 In total, five options are proposed for which feedback was sought during the non-statutory consultations (Figure 2.1 to **Figure 2.5**). These options are split into two categories: emerging preference and alternative option. The emerging preferences are based on a landfall location between Aldeburgh and Thorpeness and the alternative options are based on a landfall location just south of the Sizewell nuclear power station site. The route of the HVDC and HVAC cables would depend on which landfall and converter station site location is selected. The final route selected would also be dependent on intrusive and non-intrusive survey findings and further design and technical assessments. **Figure 2.1** to **Figure 2.5** show wide boundaries for the cable routes within which the cables would be routed; the specific routes are not yet identified. The options are presented in the following paragraphs.

Suffolk site 1 emerging preference

2.2.9 From a landfall location between Aldeburgh and Thorpeness, the HVDC cables would be installed running west, north of the A1094, to converter station site 1. HVAC cables would be installed from the converter station to the proposed Friston substation to the northwest (**Figure 2.1**).

Figure 2.1: Suffolk site 1 emerging preference



Suffolk site 3 emerging preference

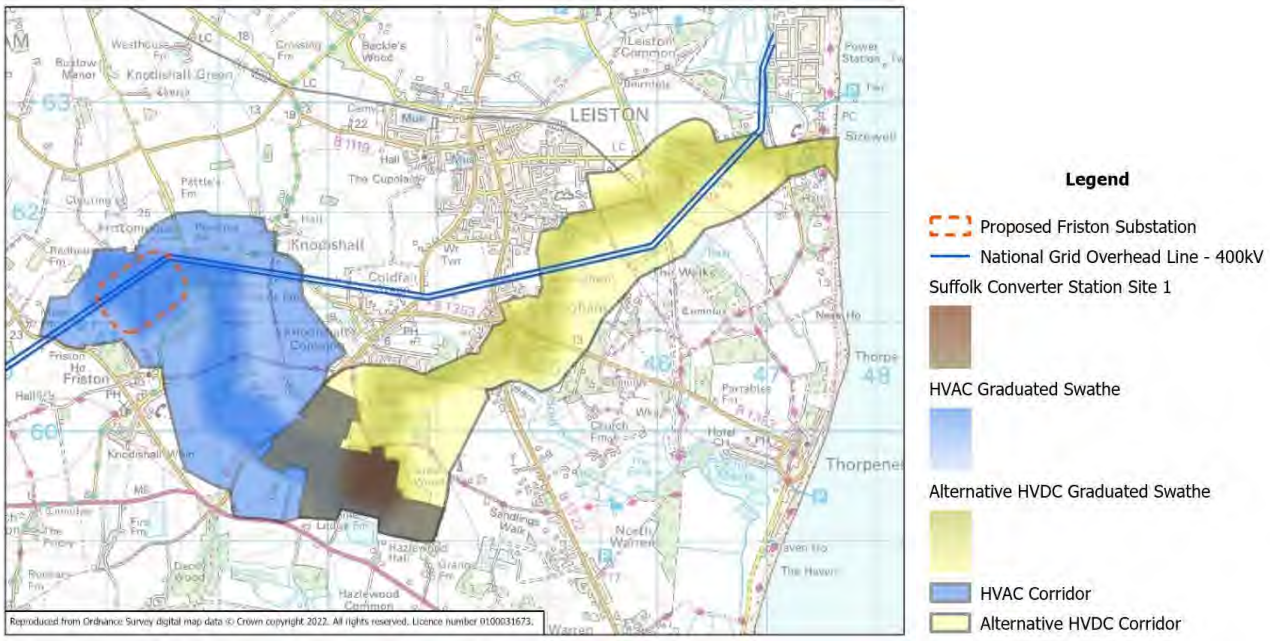
2.2.10 From a landfall location between Aldeburgh and Thorpeness, the HVDC cables would be installed running west, north of the A1094, to converter station site 3. HVAC cables would be installed from the converter station to the proposed Friston substation to the southeast (**Figure 2.2**).

Figure 2.2: Suffolk site 3 emerging preference

Suffolk site 1 alternative

2.2.11 From a landfall location at Sizewell, the HVDC cables would be installed running southwest, past Leiston and Aldringham, to converter station site 1. HVAC cables would be installed from the converter station to the proposed Friston substation to the northwest (**Figure 2.3**).

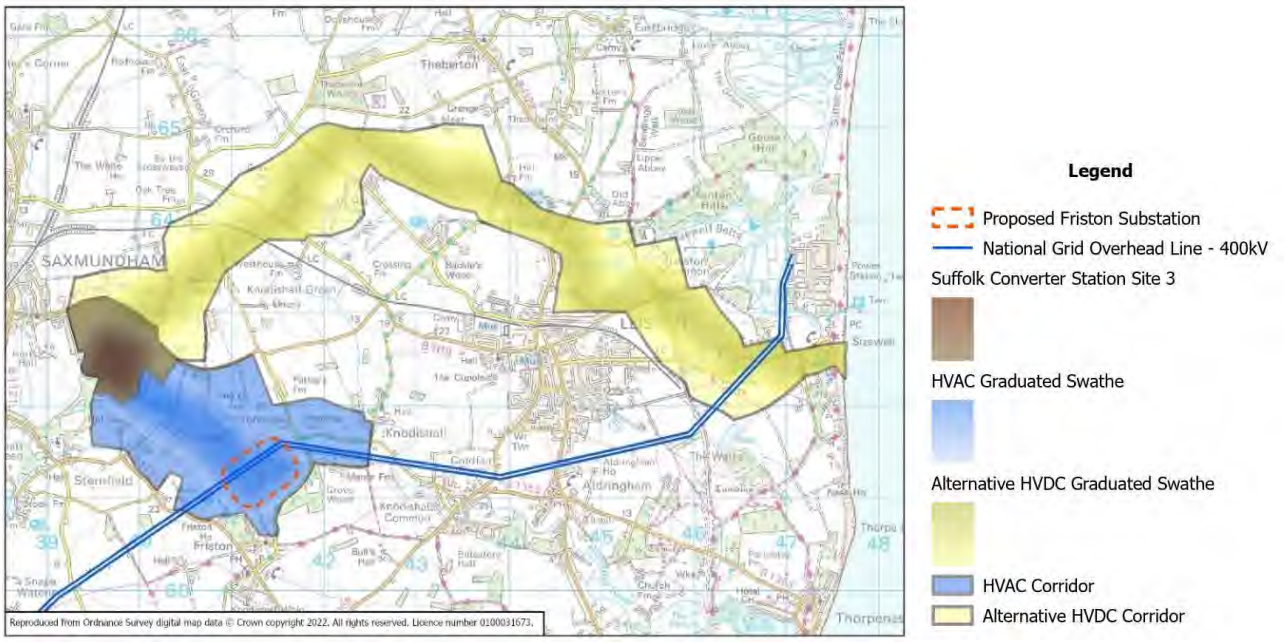
Figure 2.3: Suffolk site 1 alternative



Suffolk site 3 alternative (option 1)

2.2.12 From a landfall location at Sizewell, the HVDC cables would be installed running around the north of Leiston to converter station site 3. HVAC cables would be installed from the converter station to the proposed Friston substation to the southeast (**Figure 2.4**).

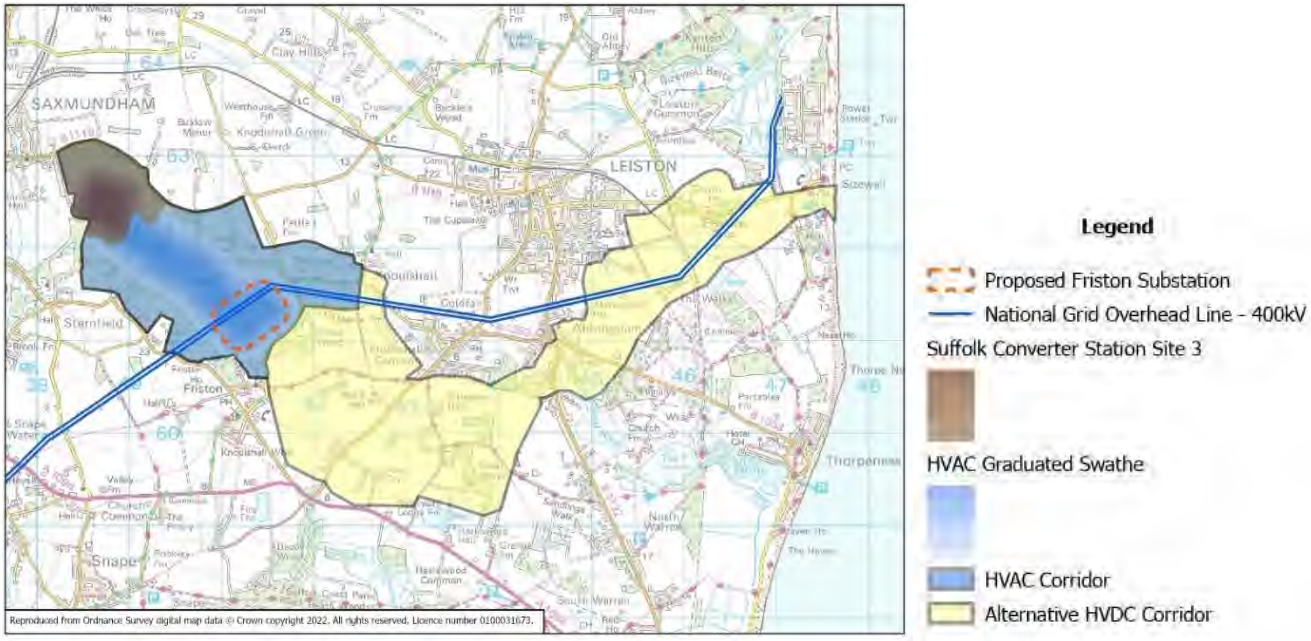
Figure 2.4: Suffolk site 3 alternative (option 1)



Suffolk site 3 alternative (option 2)

2.2.13 From a landfall location at Sizewell, the HVDC cables would be installed running southwest past Leiston and Aldringham to converter station site 3. HVAC cables would be installed from the converter station to the proposed Friston substation to the southeast (**Figure 2.5**).

Figure 2.5: Suffolk site 3 alternative (option 2)



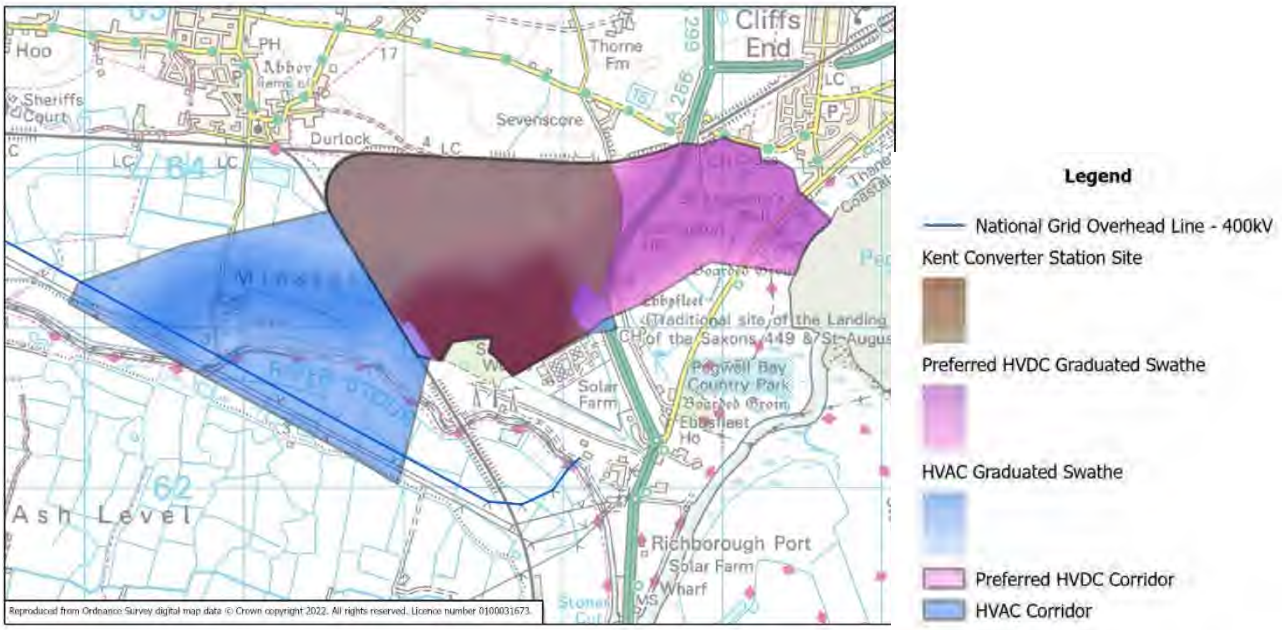
2.3 Kent onshore scheme

2.3.1 The Kent onshore scheme would comprise of:

- a new converter station site;
- a landfall location in Pegwell Bay;
- a HVDC underground cable from the landfall location to the proposed converter station site; and
- a HVAC connection either by overhead line or underground cable from the proposed converter station to the existing Richborough to Canterbury 400kv overhead line.

2.3.2 Unlike the scheme in Suffolk, the Kent scheme has been narrowed down to a single landfall location and converter station site, for which preferred routes for the cables have been identified following an assessment of available options (**Figure 2.6**). From a landfall location at Pegwell Bay, HVDC cables would be installed running west to connect into a new converter station located within 5 km of the existing Richborough 400kv substation. The preferred option is to come ashore under the saltmarsh using trenchless technology and to work with all landowners/occupiers to minimise the impact during construction. The installation would require a working width of 40 m and a permanent easement of typically 15 m.

Figure 2.6: Kent site



2.3.3 A HVAC connection, which could be either an underground cable, overhead line or a combination of the two, would be installed between the converter station and a point on the existing Richborough to Canterbury overhead line. If underground, a working width of up to 100 m would be required. If an overhead line is selected, the pylon type would be steel lattice, typically 46 m high, with a pylon footprint of 10 m^2.

2.3.4 The converter station would have a total footprint of six hectares once constructed; however, during construction up to ten hectares would be required for construction equipment and machinery, site offices, welfare facilities, storage, access and haul roads. Converter stations contain specialist electrical equipment, some of which must be in

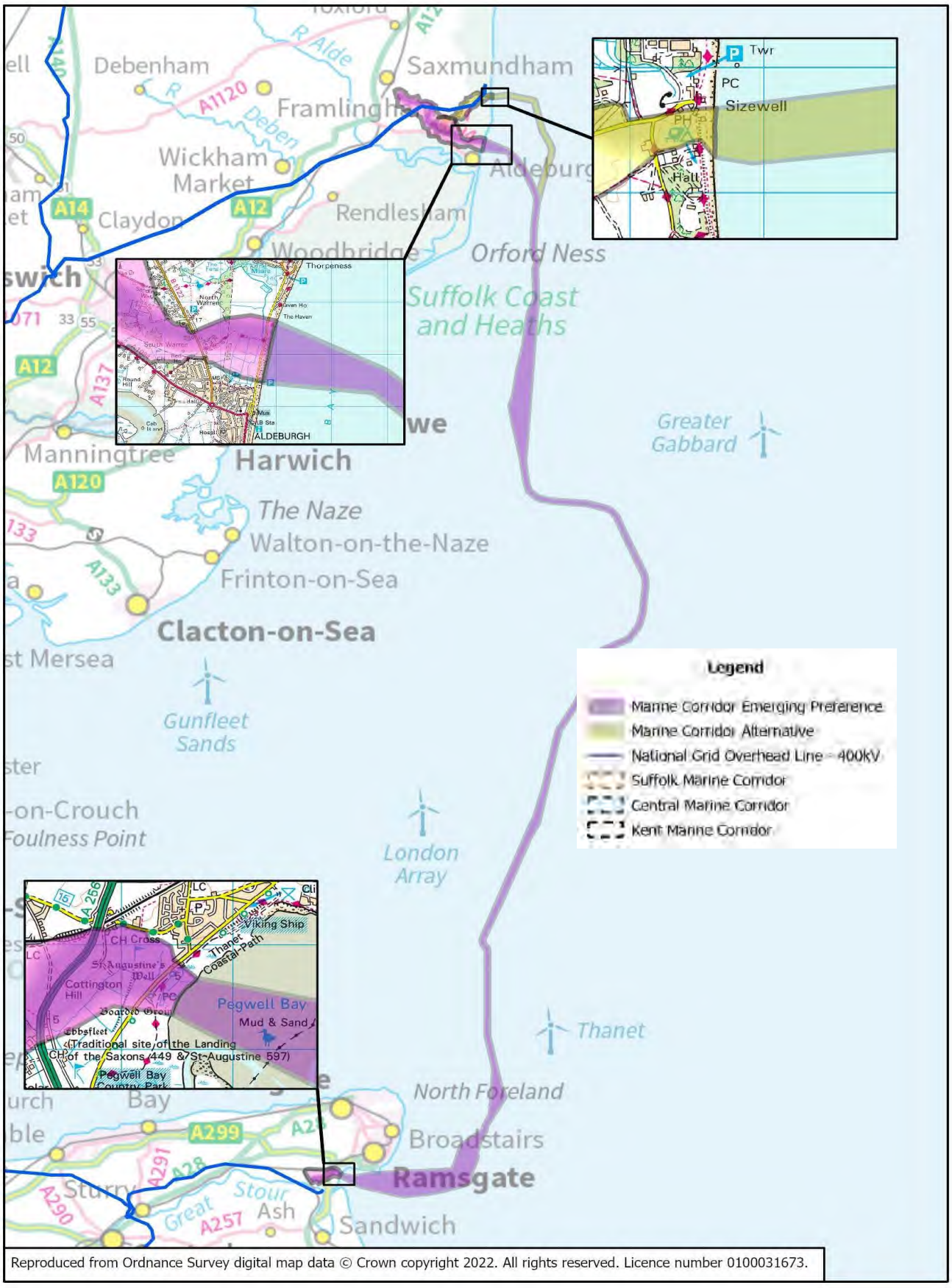
buildings potentially up to 30 m high, while some could be located outdoors or in smaller buildings.

2.4 Offshore scheme

2.4.1 A marine corridor approximately 130 km in length between a landfall on the Suffolk coast between Aldeburgh and Thorpeness and a landfall on the Kent coast at Pegwell Bay has been identified as the emerging preference. There is an alternative to the corridor at the Suffolk end of the connection which is a landfall location at Sizewell. These options are shown in **Figure 2.7.** The marine corridor avoids or minimises interactions with marine designated sites, maintains sufficient water depth at crossings of other cables and services, whilst also minimising interactions with other marine users as far as possible. The exact route within the identified corridor will be confirmed following further marine surveys and stakeholder engagement. Furthermore, the detailed configuration of the cable system is still under development and will be informed by further electrical design studies and through selection of the cable supplier and installation contractor.

2.4.2 In advance of the initial marine survey in summer 2021, numerous stakeholders were engaged and the draft outputs of the marine route options appraisal were presented. This engagement helped inform the decision making of choosing emerging preference and alternative marine route to be surveyed, reducing any potential consenting risk. The stakeholders engaged included Marine Management Organisation (MMO), The Crown Estate, Natural England, Environmental Agency, Maritime and Coastguard Agency, Trinity House, Port Authorities, as well as other developers. A full list of those consulted can be found in the Corridor Preliminary Routeing and Siting Study (CPRSS) Report (Oct 2022) (Ref 1) tables 7-5.

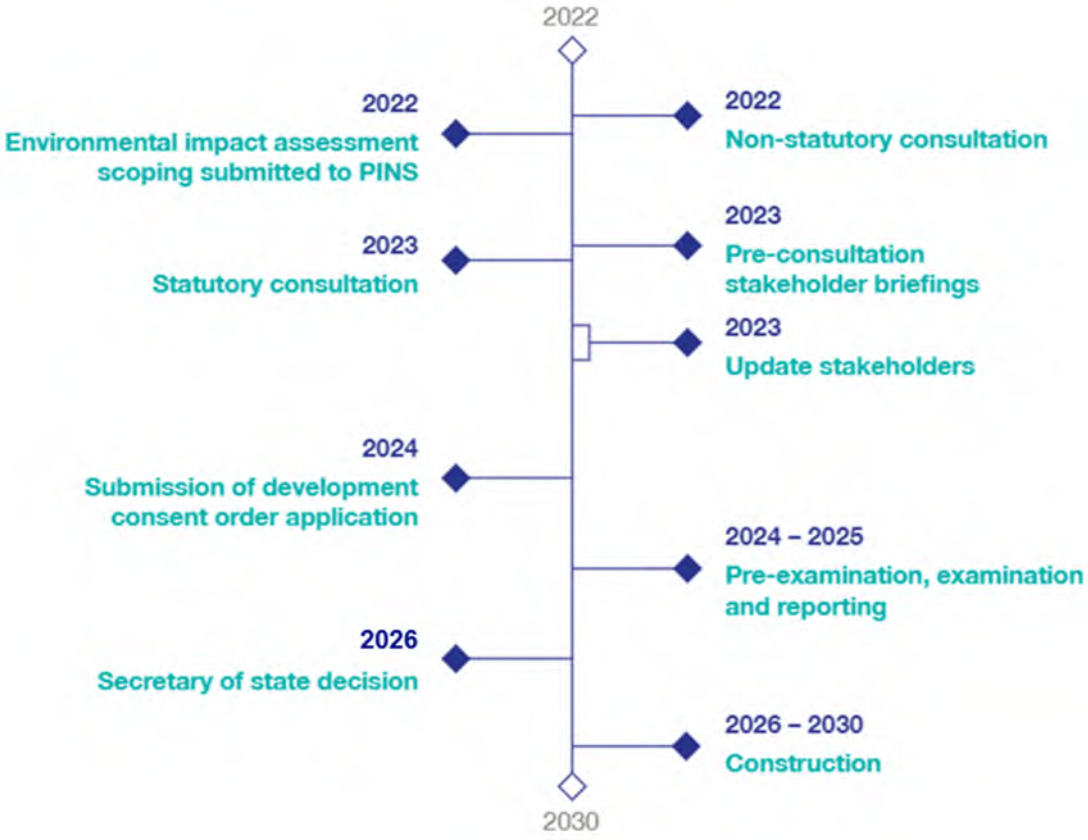
Figure 2.7 Offshore scheme



2.5 Programme

2.5.1 A programme is provided in **Figure 2.8**. Subject to gaining development consent, construction works will be expected to start in 2026 and be completed by 2030. Certain works, such as archaeological trial trenching or protected species mitigation, may take place in advance of the main construction period.

Figure 2.8 Program



3. Methods of consultation

3.1 Consultation strategy

3.1.1 National Grid developed a consultation strategy that set out how they intended to carry out pre-application non-statutory consultation for the Project. The strategy was discussed and presented to local authorities. Representatives of Suffolk County Council, Kent County Council, Dover District Council, Thanet District Council and East Suffolk Council were consulted about the proposed approach to consultation.

3.2 Consultation zones

3.2.1 Prior to the non-statutory consultation, National Grid developed a Primary Consultation Zone (PCZ) and a Secondary Consultation Zone (SCZ). These zones were geographical areas that sat within a certain distance from the Project footprint. The PCZ included properties that lay within a 1 km radius of the proposed underground cables and overhead line and 2 km around the proposed converter station sites. Where appropriate, the PCZ was extended to whole streets rather than dissecting hamlets or neighbourhoods.

3.2.2 The SCZ included properties that lay within a 4 km radius of the swathes that are to be constructed on and, as with the PCZ, where appropriate, the SCZ was extended to whole streets rather than dissecting hamlets or neighbourhoods.

3.3 Publicising of non-statutory consultation

3.3.1 National Grid publicised their non-statutory consultation locally and online through the methods described in the following paragraphs.

3.3.2 Prior to the start of non-statutory consultation, National Grid distributed a newsletter (see **Appendix B**) to all properties within the PCZ. A total of 17,685 newsletters were issued: 11,061 in Suffolk and 6,624 in Kent. The newsletter was also sent to 164 prescribed bodies.

3.3.3 Adverts were placed in both Suffolk and Kent (see **Appendix C**). In Suffolk, an advert was published in the Eastern Daily Press, The Anglian Daily Times and the Ipswich Star on 3 November 2022, and in Kent adverts were published in the Kentish Gazette and the Kent and Sussex Courier on 10 November and 11 November 2022 respectively. The Kent advert was also published in the Fishing News on 9 November 2022, due to a large fishing community being present in Kent.

3.4 Communication channels

Project website

3.4.1 Consultation materials, such as the Project Background Document (**Appendix E**), Corridor Preliminary Routeing and Siting Study (CPRSS) Report (Oct 2022) (Ref 1) and Newsletter (**Appendix B**) were published on the National Grid dedicated Project website for inspection.

3.4.2 The website also provided details of information events, including local in-person public exhibitions and webinars) and where hard copies of consultation materials were available to view such as public libraries.

3.4.3 The website provided a platform for people to submit their feedback via an online feedback form. The website hosted maps, diagrams, information pages and timelines to equip consultees with enough information to provide meaningful feedback on the proposals.

3.4.4 The website was accessible at all times throughout the consultation period and following closure of non-statutory consultations, the website remains live to provide a library of documents and a hub for project updates. Interested parties can register for e-mail updates via the website.

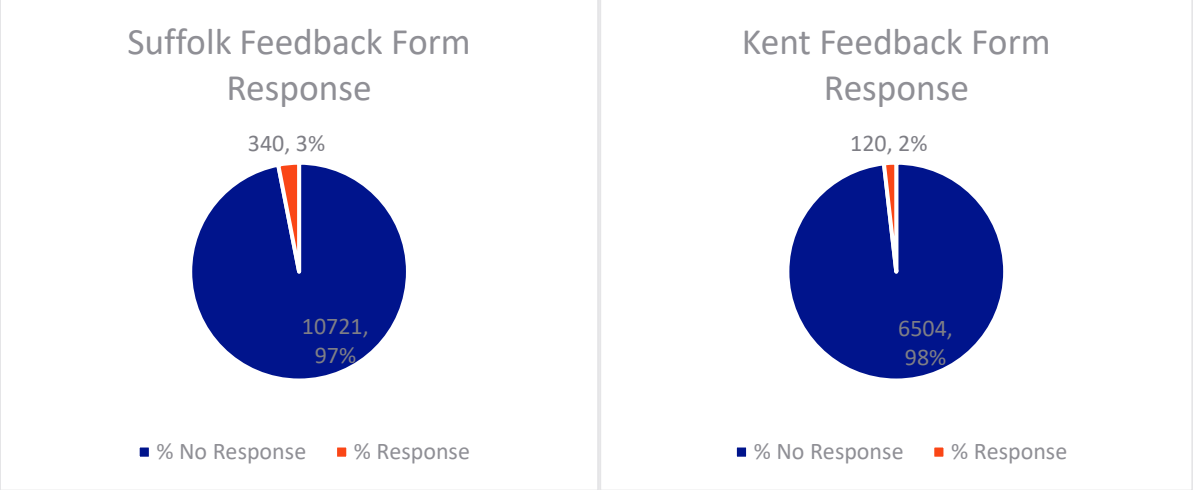
3.4.5 During the non-statutory consultation period, the website received 14,000 views and of these 11,360 were unique views, i.e., the number of individual people that have visited the website just once. Some people may have visited it multiple times which is why there is a higher number for views compared to unique users.

Feedback form

3.4.6 National Grid produced a feedback form for both Suffolk and Kent (see **Appendix D**) which could be filled in on-line via the Project website, by email, in person at consultation events or submitted by post. The feedback forms provided an introduction to the Project and gave a brief description of the Project proposals. This was followed by a series of closed, multiple-choice and open-end questions and an open section where consultees could provide information or comments on any aspect of the proposals. Interested parties were invited to answer all or any of the questions and provide comment on the issues that were important to them.

3.4.7 National Grid issued a total of 17,685 newsletters: 11,061 in Suffolk and 6,624 in Kent prior to the non-statutory consultation commencing. During the non-statutory consultation period, 340 feedback forms were received for Suffolk and 120 for Kent. **Figure 3.1** presents the number of responses received as a percentage of the newsletters distributed for both Suffolk and Kent.

Figure 3.1 Feedback form response (as a % of those directly contacted as part of non-statutory consultation)



Project email/telephone

3.4.8 The Project has a dedicated email address and a freephone telephone number (0808 134 9569). The website address is contact@sealink.nationalgrid.com. Interested parties were also able to write to National Grid about the Project to FREEPOST SEA LINK.

3.4.9 National Grid received 19 calls to the freephone telephone number and 262 emails during the non-statutory consultation period.

Webinars

3.4.10 One-hour online webinars were held during the non-statutory consultations. During the webinars, presentations were given providing a general overview of the proposals which were followed by an open question and answer session. Details of the webinars held, along with attendance statistics, are provided in **Table 3.1**.

Table 3.1: Webinars held

Webinar	Date	Attendees
Proposals in Suffolk	Tuesday 22 November 2022, 6pm – 7pm	28
Proposals in Suffolk	Tuesday 29 November 2022, 6pm – 7pm	25
Proposals in Kent	Wednesday 23 November 2022, 6pm – 7pm	12
Proposals in Kent	Wednesday 30 November 2022, 6pm – 7pm	6
Marine Route Proposals	Thursday 24 November 2022, 6pm – 7pm	11
Marine Route Proposals	Thursday 1 December 2022, 6pm – 7pm	4

In-person public exhibitions

3.4.11 National Grid held face-to-face public information events across Suffolk and Kent for interested parties to find out about the Project and speak to experts in the National Grid Project Team. The events held are shown in **Table 3.2** and **Table 3.3** together with the attendance.

Table 3.2 Public exhibitions in Suffolk

Location	Date	Attendees
Old Generator Station, King's Field, Aldeburgh	10 November 2022, 1pm – 8pm	500+
Friston Village Hall, Church Road, Friston	11 November 2022, 1pm – 8pm	164
Fromus Centre, The Saxmundham Hub, Saxmundham	12 November 2022, 10am – 5pm	104

Table 3.3 Public exhibitions in Kent

Location	Date	Attendees
Guildhall, Cattle Market, Sandwich	17 November 2022, 9am – 4pm	25
Newington Community Centre, Ramsgate	18 November 2022, 1pm – 8pm	7
Cliffsend Village Hall, Cliffsend, Ramsgate	19 November 2022, 10am – 5pm	26

3.4.12 Amongst the attendees at the first event in Suffolk were the local campaign group Substation Action Save East Suffolk and Save Our Sandlings as well as local politicians. The second event in Suffolk included the local Member of Parliament.

Landowner events

3.4.13 Two events were held for landowners during the non-statutory consultation period; one in Suffolk on 2 November 2022 and one in Kent on 16 November 2022. The Suffolk event was held in Saxmundham and was attended by 25 landowners and/or land agents. In Kent, the event was held in Minster and was attended by four landowners and/or land agents.

Meetings

3.4.14 In addition to the webinars, public exhibitions and landowner events, National Grid held several meetings as detailed in **Table 3.4**.

Table 3.4 Meetings held

Meeting	Date
Thanet District Council briefing	24 October 2022
East Suffolk District Council briefing	25 October 2022
Suffolk Parish Council's briefing, slot 1	31 October 2022
Suffolk Energy Action Solutions briefing	3 November 2022
Suffolk Parish Council's briefing, slot 2	3 November 2022
Suffolk Parish Council's briefing, slot 3	7 November 2022
Substations Action Save East Suffolk briefing	29 November 2022
Suffolk and East Suffolk Local Planning Authorities (LPAs) update meeting	8 December 2022
Kent LPAs update meeting	14 December 2022

Social media

3.4.15 A social media campaign was undertaken on Facebook and Instagram to promote the non-statutory consultation and to encourage people to attend an event or webinar. **Table 3.5** provides a summary of the interactions via social media.

Table 3.5 Summary of social media interactions

Social activity	Dates live	Interactions
Advert one - Kent	2 – 4 November 2022	919 engagements, five comments, eight reactions and two shares
Advert two - Suffolk	2 – 4 November 2022	569 engagements with 27 comments, 19 reactions and 11 shares
Advert three - Suffolk	16 – 18 November 2022	679 engagements with 15 comments, 14 reactions and two shares
Advert four - Suffolk	w/c 28 November 2022	634 engagements with 12 comments, six reactions and six shares

Deposit locations

3.4.16 During the consultation period, National Grid made paper copies of the key consultation materials available at 19 locations throughout Suffolk and Kent as follows:

- Ash Library, Ash, Canterbury, Kent;
- Broadstairs Library, Broadstairs, Kent;
- Birchington Library, Birchington, Kent;
- Cliftonville Library, Margate, Kent;
- Deal Town Council, Deal, Kent;
- Margate Library, Margate, Kent;
- Minster-in-Thanet Library, Minster, Ramsgate, Kent;
- Newington Library, Ramsgate, Kent;
- Ramsgate Library, Ramsgate, Kent;
- Sandwich Library, Sandwich, Kent;
- Walmer Town Council, Walmer, Kent;
- Westgate Library, Westgate-on-Sea, Kent;
- Aldeburgh Library and Town Council, Aldeburgh, Suffolk;
- Co-op, High Street, Aldeburgh, Suffolk;
- Leiston Co-op, Library and Town Council, Leiston, Suffolk; and
- Saxmundham Library and Town Council, Saxmundham, Suffolk.

4. Analysis of feedback

4.1 Introduction

4.1.1 In order to gather feedback on the Project, National Grid produced two feedback forms for Suffolk and Kent respectively (**Appendix D**). The feedback form was made available to complete online via the Project website, by email, in person at consultation events or submitted by post. The consultation responses during the non-statutory consultation period analysed on a weekly basis. In addition, comment slips were provided at events. These were collected and the feedback analysed.

4.1.2 The feedback forms provided an introduction to the Project and gave a brief description of the Project proposals. This was followed by a series of closed, multiple-choice and open-ended questions and an open section where consultees could provide information or comments on any aspects of the proposals.

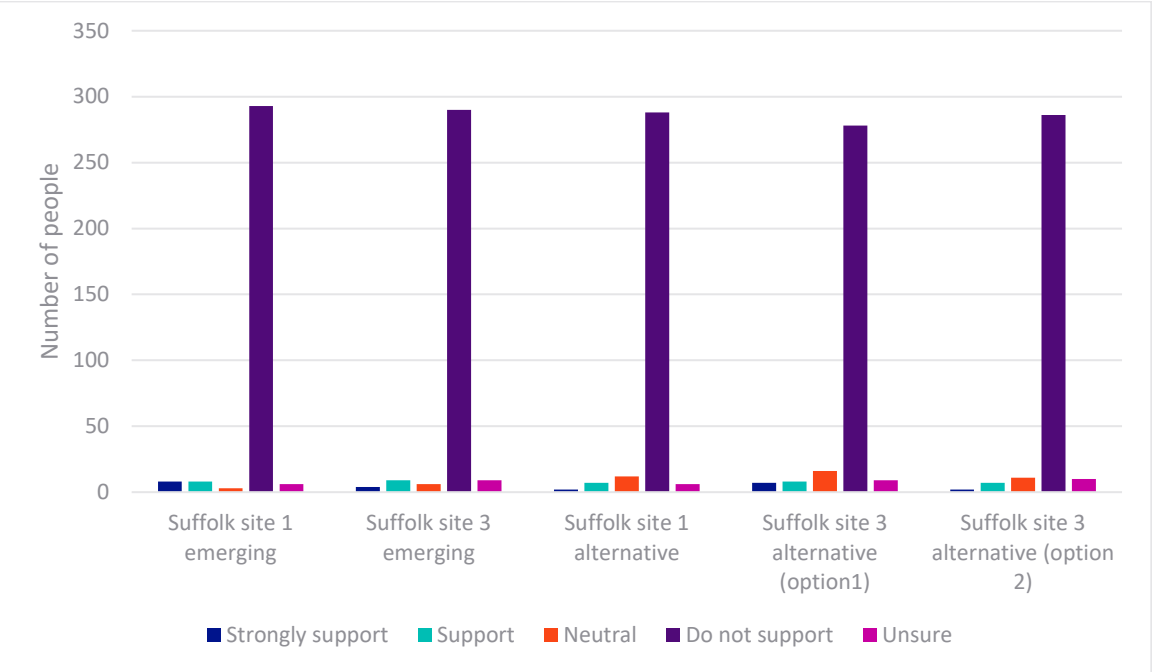
4.1.3 This section of the report presents the data collected from the completed feedback forms and comment slips with regard to the closed questions for Suffolk and Kent. All other comments in the feedback forms are presented later in this chapter, in a key-theme based analysis.

4.2 Suffolk feedback form responses to closed multiple-choice questions

4.2.1 The Suffolk feedback form (**Appendix D**) contained a combination of closed multiple-choice questions and open-ended questions. The following represents the response to the five closed multiple-choice questions within the feedback form. The question numbers do not run concurrently; they are question numbers one, three, four, five and seven (there are two parts to question number one).

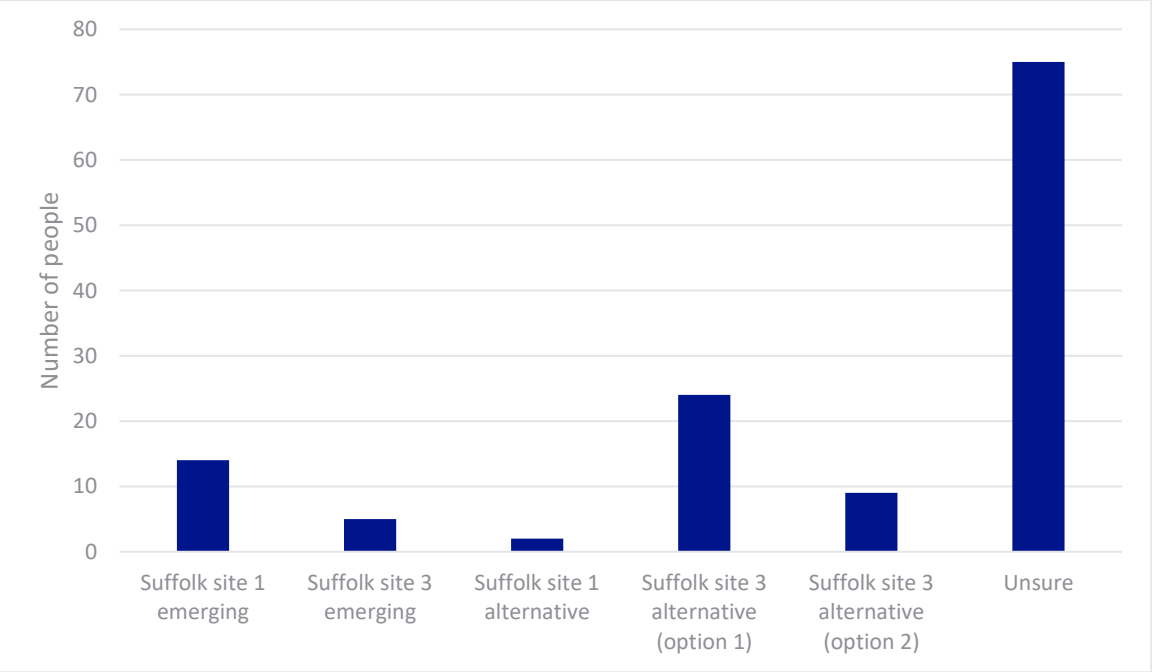
- Question 1 (**Figure 4.1**): What do you think about our proposals? Items 1 to 5 listed below each include a landfall location, underground cable corridors and converter station site. The landfall location for items 1 and 2 is between Aldeburgh and Thorpeness. This landfall location may accommodate up to three projects, including the Sea Link project. The landfall location for items 3, 4 and 5 is near Sizewell. This landfall location can only accommodate the Sea Link project.

Figure 4.1 Suffolk options



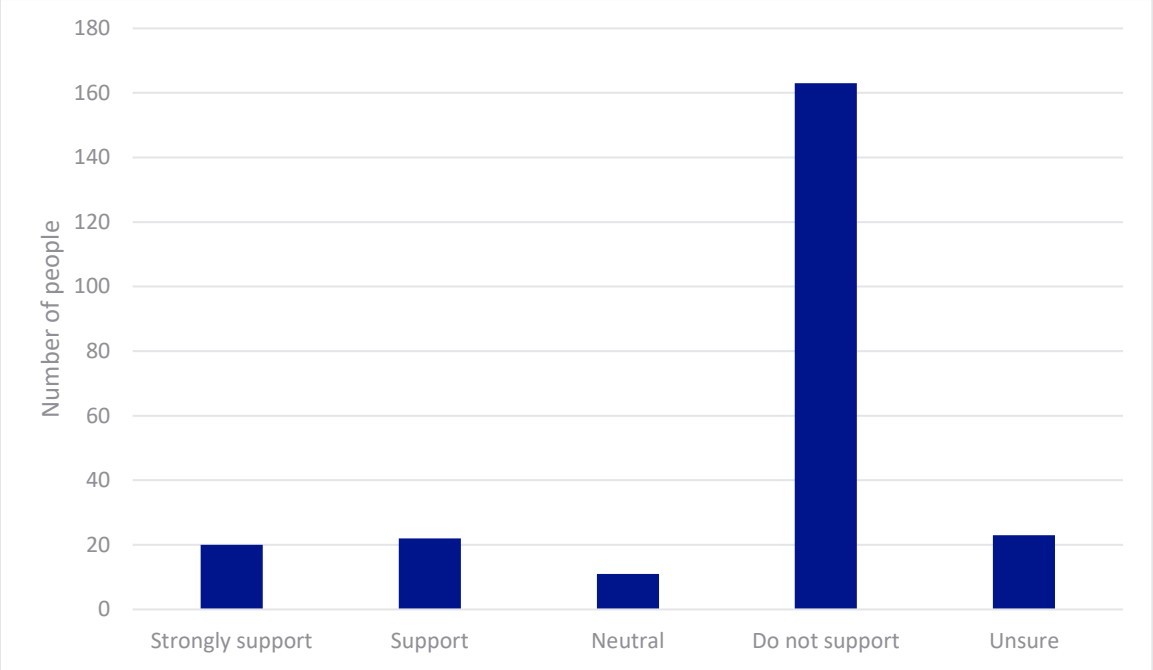
- Question 1 Extended (**Figure 4.2**): Please tick your preference and explain why:

Figure 4.2 Suffolk options



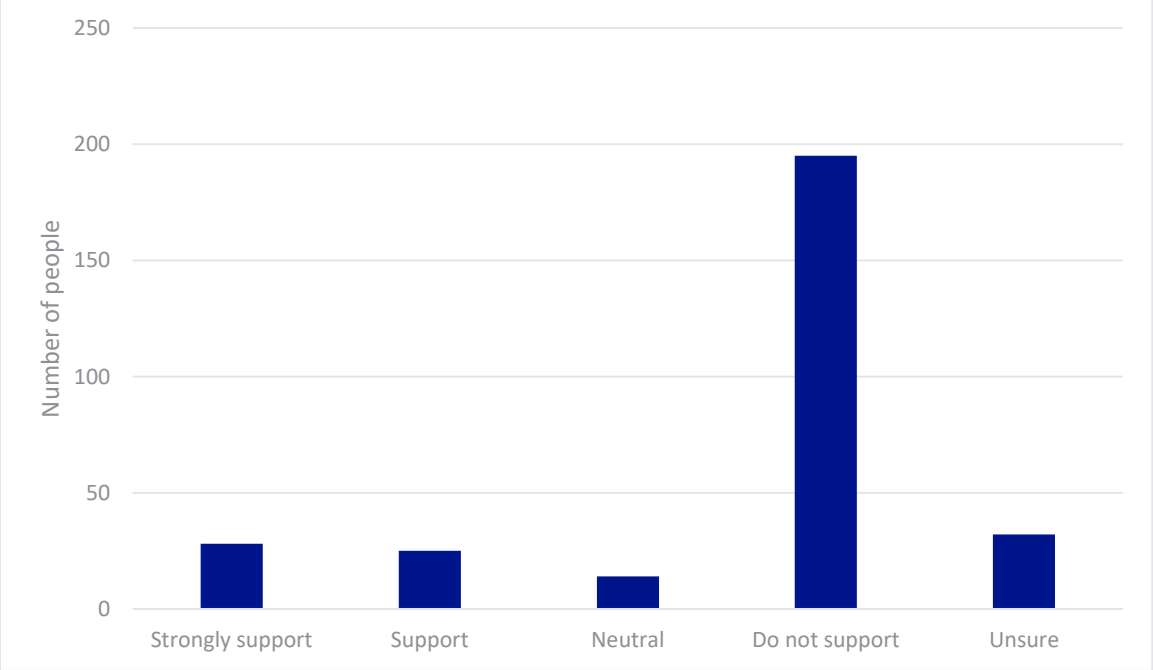
- Question 3 (**Figure 4.3**): What do you think about co-location of (up to three) converter stations?

Figure 4.3 Co-location of (up to three) converter stations



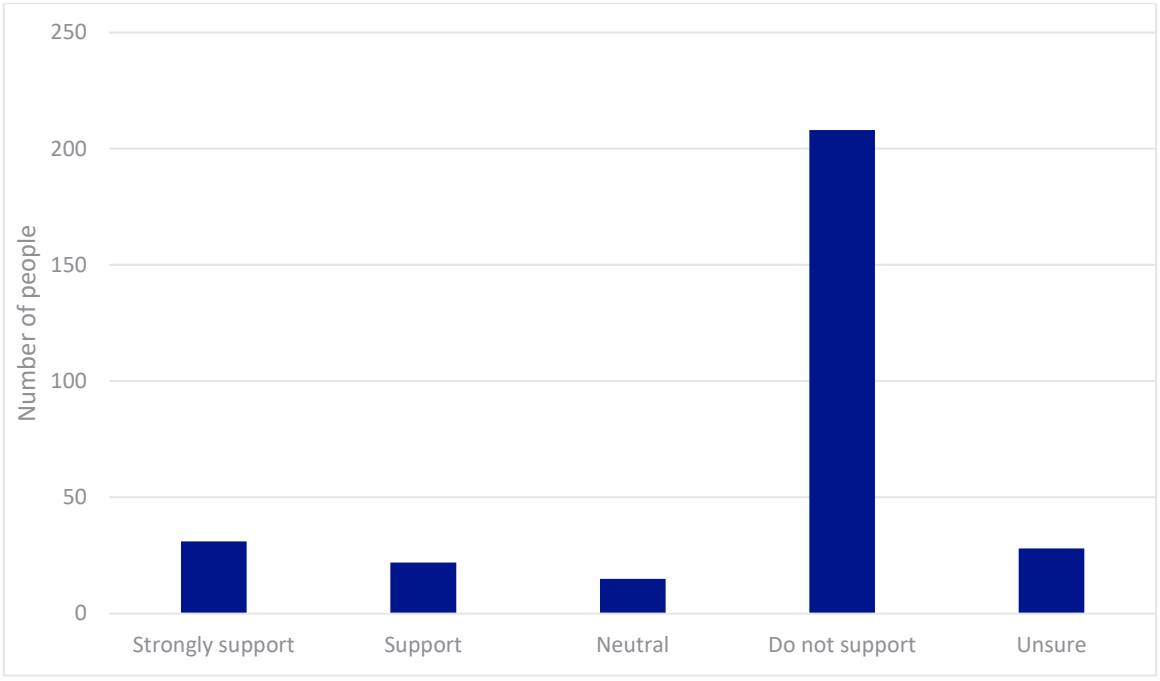
- Question 4 (**Figure 4.4**): What do you think about the projects (up to three) sharing underground cable corridors?

Figure 4.4 Co-location of (up to three) converter stations



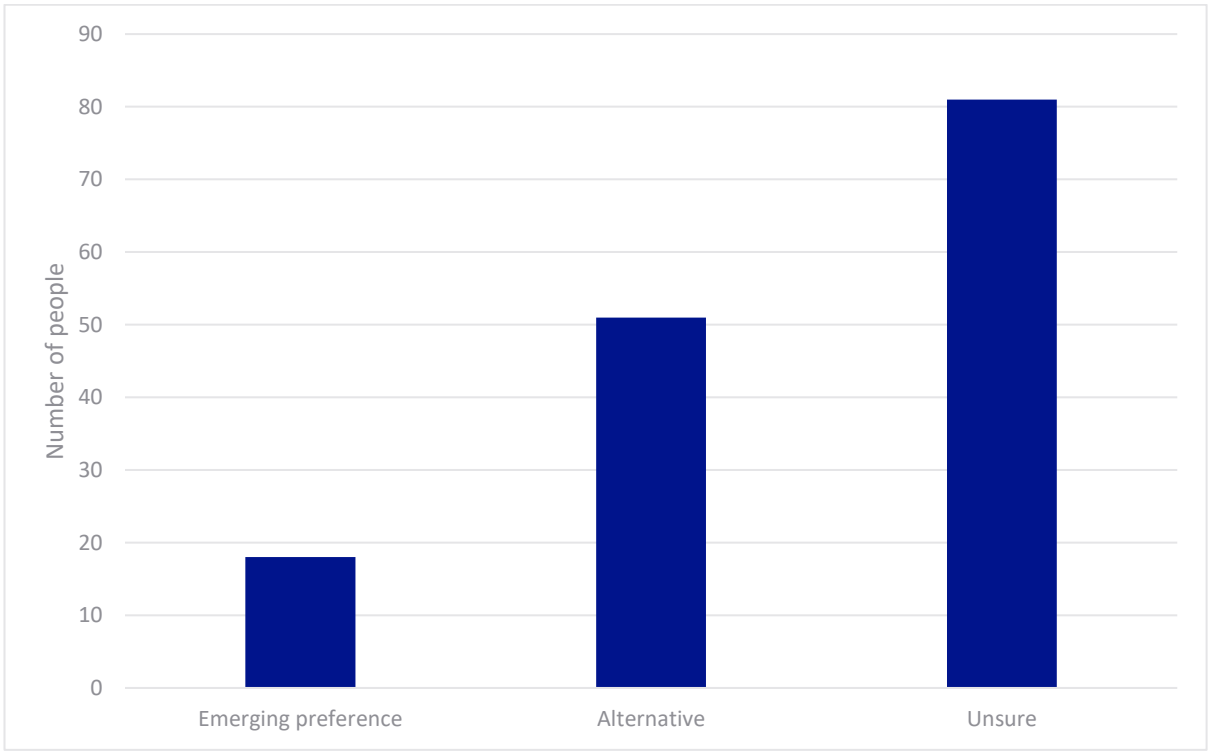
- Question 5 (**Figure 4.5**): What do you think about the potential to share a landfall location between (up to three) projects?

Figure 4.5 Sharing landfall location between (up to three) Projects?



- Question 7 (**Figure 4.6**): Suffolk Marine Corridor please tick your preferences 1. Emerging 2. Alternative 3. Unsure

Figure 4.6 Suffolk marine corridor

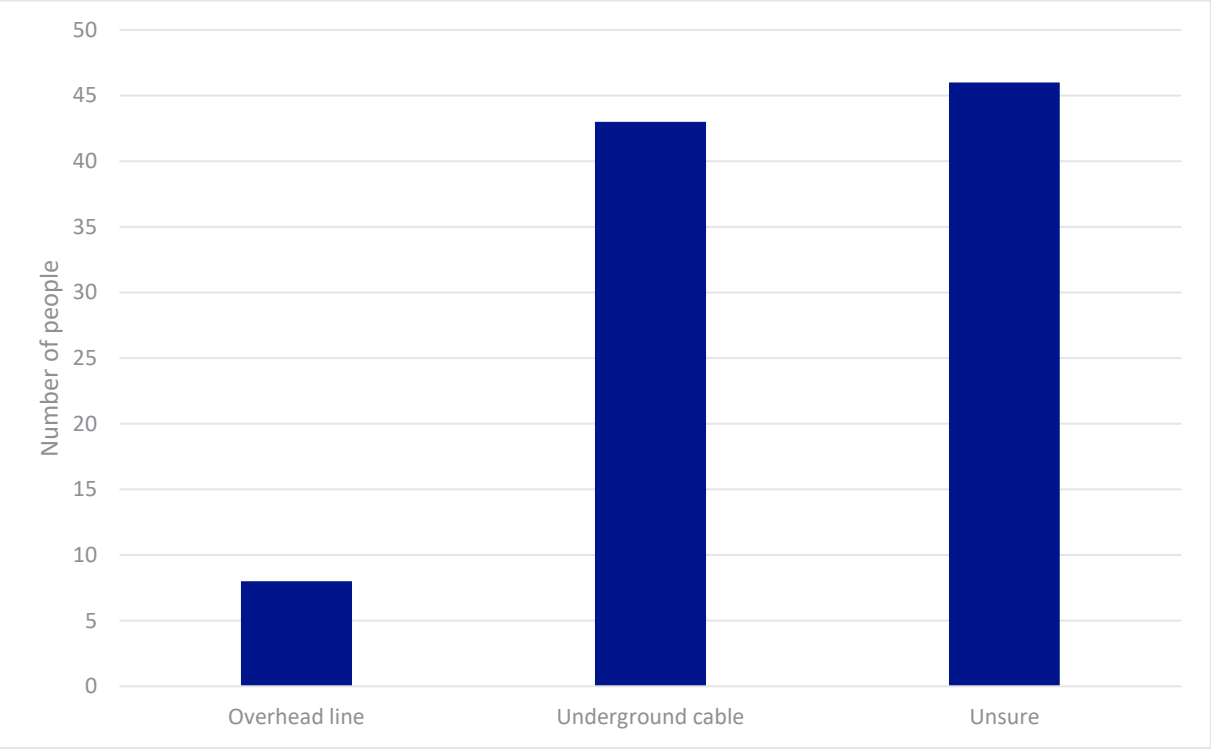


4.3 Kent feedback form responses to closed questions

4.3.1 The Kent feedback form (**Appendix D**) contained a combination of closed multiple-choice questions and open-ended questions. The following represents the response to the two closed multiple-choice questions within the feedback form. These were question numbers four and five.

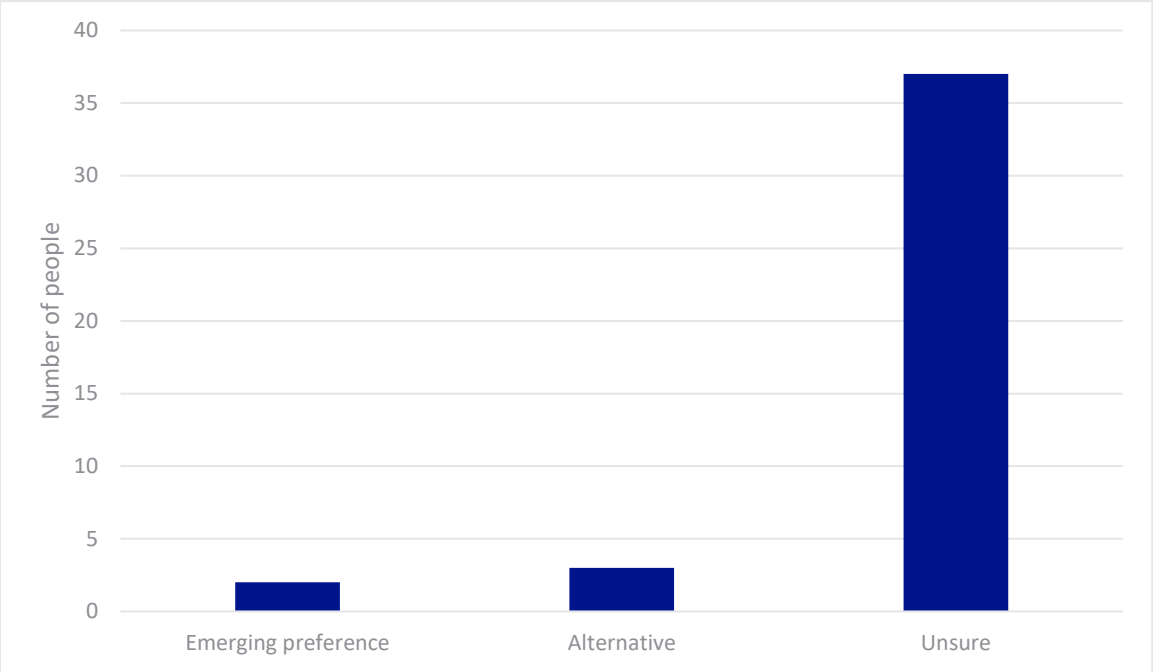
- Question 4 (**Figure 4.7**): The electrical connection between the converter station site and the existing Richborough to Canterbury overhead line will either be an overhead line connection or an underground cable connection. The preference was asked.

Figure 4.7 Overhead line or underground cable



- Question 5 (**Figure 4.8**): Suffolk Marine Corridor please tick your preference 1. Emerging 2. Alternative 3. Unsure

Figure 4.8 Suffolk marine corridor



4.4 Feedback form key themes

4.4.1 This section of the report presents a summary of comments received on the Suffolk and Kent feedback forms during the non-statutory consultation period on a key-theme basis in tabular form.

Table 4.1: Summary of feedback form key themes

No.	Key theme	Suffolk	Kent
1	Alternatives	Proposed Project locations prompted concerns from respondents who felt the development would be too imposing. The use of brownfield sites, such as the Isle of Grain or Bradwell, areas without environmental protection and offshore grids or facilities with onshore connections were suggested by respondents as suitable alternatives.	Many respondents expressed the view that the proposed converter station should be located on a brownfield site, such as Richborough or River Stour Old Docks.
2	Consultation	Some respondents were of the view that the consultation was not sufficiently communicated or publicised. Whilst some respondents felt the consultation materials, such as maps and visuals, were informative, many indicated an interest in more detailed, scaled maps with precise cable routes defined. Insufficient information on traffic management proposals, the impact of the Project on the Heritage Coastline and Suffolk's Coast and Heaths Area of Outstanding Natural Beauty (AONB), and the options appraisal process undertaken to rule-out the use of an offshore facility or brownfield sites was also mentioned.	Some respondents were of the view that the consultation was not sufficiently communicated or publicised. Some respondents did not feel confident that their feedback would be considered and questioned the value of the consultation. Some respondents felt the consultation materials lacked specific details which impeded their ability to choose preferred locations and/or route options.
3	Co-ordination of multiple projects	Many respondents expressed the view that all major energy projects currently proposed in East Suffolk should be coordinated, thus reducing the scale of industrialisation and minimising impacts on the area. Suggestions included using multipurpose interconnectors and a single location for all landfall, grid entry and converter stations.	Not a key theme for Kent.

4	Cumulative effects	Many respondents raised concerns about the impacts of multiple projects in East Suffolk. These concerns related to lasting impacts on the natural landscape, local wildlife and biodiversity, tourism and quality of life. Some respondents queried whether, following the development of this proposed Project, more projects would be developed in the same location in future.	Some respondents suggested that long-term surveys examining any impacts of Project development should be conducted, as well as consideration for residents' mental health and quality of life. Ecological damage from existing infrastructure in the Kent area was mentioned, with respondents questioning the effects of additional industrialisation.
5	Design	Of those in support of the Project, some stated their location and routing preference would be whichever had the least impact. Many respondents expressed the view that the current Project designs should be re-evaluated, suggesting that new designs implementing shorter cable routes, using existing infrastructure and offshore networks would have less impact. Additional information was requested regarding the width of a combined cable corridor (a Sea Link cable corridor combined with up to two other project cable corridors), as they felt they could not comparatively evaluate the impacts of a single and combined cable corridor option without this information. Questions were raised regarding the proposed width of the trenches for cable routes.	Many respondents expressed the view that cables should be underground so as not to impact bird safety or the visual landscape. Respondents suggested cables should be routed within, or as close to as possible, existing cable corridors, and have minimal impacts on ecology, using techniques such as moling. Design suggestions regarding the converter station included minimising the scale, a cylindrical design to mirror Oast houses (a form of architecture historical to Kent) and painting it green to blend in with the rural landscape.
6	Landscape and visual	Many respondents expressed their interest in maintaining East Suffolk's Heritage Coastline, AONB and protected landscapes including heathland, forest and acid grassland. Some respondents were concerned about whether the appearance and height of the proposed infrastructure would visually impact the natural landscape.	Respondents were concerned about the visual impact of the proposed development on Kent's natural landscape, especially regarding the implementation of overhead cables on the Minster Marshes.

7	Needs case	Some respondents appreciated the need to expand renewable energy infrastructure but questioned the need to develop in the Suffolk area. Most respondents cited intrusion and impacts on Suffolk's Coast and Heaths AONBs and designated wildlife sites as factors for why they believe this Project should not be constructed in Suffolk. The need for grid reinforcement was questioned, with future North Sea windfarms and a Modular Offshore Grid being referenced as sufficient schemes.	Some respondents showed support for plans to improve the UK's power network distribution and increase its security and flexibility. Others questioned the need to develop in the Kent area, referencing impacts on residents and local wildlife as concerns.
8	Onshore ecology and biodiversity	Many respondents raised concerns about the impact of construction on Suffolk's wildlife and biodiversity, referencing AONBs, the North Warren Nature Reserve, the Minsmere Royal Society for the Protection of Birds (RSPB) Reserve, the Suffolk Sandlings, Leiston, Aldeburgh Sites of Special Scientific Interest (SSSIs), the Suffolk Wildlife Trust Reserves including the Dingle Marshes, Walberswick National Nature Reserve and National Trust Dunwich Heath, as particularly ecologically sensitive.	Many respondents raised concerns about the impacts of the Project on local wildlife, particularly in ecologically sensitive areas such as Pegwell Bay and the Minster Marshes. The protection of badgers, grass snakes, and most notably, birds, including swans, geese, owls, raptors, cranes, falcons and turtle doves, were a priority for many. Respondents expressed the view that overhead cables would disrupt bird migration and cause bird fatalities, should they fly into the cables.
9	Onshore socio-economics, recreation and tourism	Many respondents raised concerns about construction and development affecting Suffolk's tourism, a main driver behind its local economy. Construction disruption and noise concerns impacting recreational use, including bird watching, hiking and concerts, subsequently affecting quality of life and mental health, were mentioned by local residents, as were impacts on the local housing market. Some respondents felt farming would be affected, citing loss of income and food production as potential outcomes. Protecting Aldeburgh Golf club was of particular interest amongst	Concerns were raised regarding the impacts of new infrastructure on Kent's local tourism, citing its natural landscape as a significant attraction. Many respondents questioned whether recreational activities such as walking, fishing and bird watching would be affected by the development, particularly around the Pegwell Bay area. The protection of St. Augustine's Golf Club was also a priority for some respondents.

		respondents, owing to its historical significance and members who bring income to the town.	
10	Traffic and transport	Some respondents expressed concerns about construction traffic and obstructed road access, with one suggestion for construction staff to operate feeder transport as opposed to individual vehicles. Some respondents questioned the ability to accommodate increased traffic and construction trucks citing concerns over existing roads being narrow and susceptible to flooding and damage. Increased demand on alternative routes through small villages was also a concern.	Not a key theme for Kent.

4.5 Feedback from local and national organisations

4.5.1 When carrying out its consultation for the Project, National Grid must write to certain expert and specialist bodies (called "prescribed" or "statutory" consultees) and send them information about the Project. They must give the consultees at least 28 days to respond. This includes the host and neighbouring local authorities as well as other bodies such as the Environment Agency and Natural England. There is a list of organisations set out in Schedule 1 of The Infrastructure Planning (Applications: Plans and Forms) Procedures 2017 Regulations that must be consulted in certain circumstances.

4.5.2 During the non-statutory consultation period, and the period for those originally not notified, responses were received from the following organisations:

- Friston Parish Council
- Benhall & Sternfield Parish Council
- Snape Parish Council
- East Anglia ONE
- Environment Agency
- East Suffolk Council
- Theberton and Eastbridge Parish Council
- Suffolk County Council
- Leiston-cum-Sizewell Town Council
- Thanet District Council
- Sudbourne Parish Council
- Suffolk Coast & Heaths AONB
- UK Health Security Agency
- EDF Energy Nuclear Generation Limited
- Ramsgate Town Council
- Kent County Council
- National Trust, Kent
- Altringham-cum-Thorpe Parish Council
- Members of the community
- The Suffolk Coast Destination Management Organisation
- Britten Pears Arts
- Save Our Sandlings
- Substation Action Save East Suffolk
- RSPB (Suffolk and Kent)
- Suffolk Wildlife Trust
- Alde and Ore Association
- Suffolk Energy Action Solutions
- Sizewell C Co.
- Babergh District Council
- Mid Suffolk District Council
- CEMEX Marine UK Limited
- The Coal Authority
- JNCC
- Kent Wildlife Trust
- Lumen

4.5.3 **Table 4.2** presents a summary, based on key themes arising, from the above organisations during the non-statutory consultation period in tabular form.

Table 4.2: Summary of local and national organisations comments

No.	Key theme	Prescribed bodies	Non-prescribed bodies
1	Alternatives	Some respondents suggested locating infrastructure closer to areas requiring more power would be a better solution, namely London and the southeast. The use of brownfield sites was also suggested, as was the exploration of offshore facilities to situate infrastructure.	Respondents expressed the view that as much infrastructure as possible should be located offshore. Many respondents called for the exploration of alternative site and route options for onshore infrastructure, if offshore would not be possible, namely existing brownfield locations such as Bradwell and Great Yarmouth (Suffolk), and the Isle of Grain and Tilbury (Kent).
2	Consultation	Many respondents expressed the view that the consultation provided little detail regarding environmental impact, potential mitigation and methods of construction, making it difficult for respondents to comprehend aspects of the proposed development. Some respondents raised concerns over National Grid's representatives apparent lack of knowledge about proposed areas of development, including local ecology and biodiversity, and the details of the proposals including development and next steps. Some respondents suggested that the coordination of consultations for all National Grid energy projects proposed in the area would be more suitable, minimising consultation fatigue for all stakeholders. Some respondents questioned National Grid's submission of the scoping request to the Planning Inspectorate before the conclusion of the consultation period. Some respondents requested that National Grid continue to engage and work closely with them as the Project proposals develop.	Many respondents expressed the view that it was difficult to comprehend aspects of the Project because the Consultation was insufficient in providing information regarding environmental impact, potential mitigation and methods of construction. Some respondents raised concerns regarding an apparent lack of local knowledge and proposal specifics, including development and next steps, from National Grid representatives. National Grid's submission of the scoping request to the Planning Inspectorate before the Consultation period had closed was questioned by some respondents. Many respondents requested that National Grid continue to engage and maintain a close relationship with them as the Project develops.

3	Cultural heritage and archaeology	Some respondents raised concerns about the impacts of Project development on areas of cultural heritage and archaeology, particularly the Heritage Coast, World War Two related historical sites, listed buildings and farms, and Roman and medieval sites. A full suite of archaeological assessments, including desktop and field evaluations, was requested by respondents to be conducted on all scheme elements as soon as possible, to inform further Project planning and design.	Not a key theme for non-prescribed bodies.
4	Cumulative impacts	Several respondents stated that the full cumulative impacts of the Project should be assessed in combination with other consented and planned developments in the area, together with a comprehensive package of mitigation measures where avoidance of impacts is not possible.	Some respondents questioned whether the cumulative impacts of the development of multiple major energy projects in East Suffolk have been considered by National Grid and other energy companies, including the displacement of the resident population and large-scale industrialisation on a natural landscape largely responsible for the local visitor economy.
5	Design	Some respondents requested more detail concerning the design of the Project in the event of coordination with other energy projects. Respondents suggested that National Grid consider independent professional advice on all design aspects and design the Project with as little residual impacts as possible, such as using the smallest possible cable routes and the least damaging drilling techniques.	A key theme was the design of the scheme in relation to the routeing of the cables and the siting of the converter station. Impacts were cited on biodiversity, local roads, landscape and the livelihoods of local residents.
6	Landfall location	Concerns were raised about the proposed landfall locations, with respondents citing ecological, archaeological and transportation constraints as grounds for the conduction of further assessments to inform design change. Some respondents requested that National Grid have consideration for the possibility of coordinating landfall locations for multiple energy projects; the principle of coordination was supported, but concern was had for the capability of the proposed	Some respondents commented that the proposed landfall locations would have detrimental impacts on biodiversity and suggested that National Grid look at alternative locations and means of construction such as all underground.

		landfall locations to accommodate more than one project.	
7	Landscape and visual	Concerns were had for the protection of sensitive landscapes such as heathland, woodland and marshes. If avoidance is not possible, respondents requested there be minimal impacts on the region's natural landscape. Further landscape assessments were requested by respondents, to ensure all potential impacts have been accounted for. The appearance of any infrastructure associated with the Project was requested to be designed in accordance with its location's landscape.	Comments were received with regard to the development of the Project within the AONBs in Suffolk. Respondents considered the Project to be unacceptable in nationally designated landscapes and that it would have an adverse effect on the landscape and the setting of listed buildings.
8	Needs case	Whilst some respondents supported principles of the Project, namely de-carbonisation of energy supply, others felt the needs case of such a major project in the proposed location was unclear.	While some respondents supported the principle of renewable energy generation, the need for the proposed Project was questioned. Reasons given included that the perceived negative impacts on all proposed areas would be too high, there are multiple other nationally significant energy projects in development in East Suffolk which is an area that has relatively low demand for electricity power, and that such projects do not contribute to renewable energy generation or energy security.
9	Onshore ecology and biodiversity	Concerns were raised about the impacts of Project development on local wildlife and ecology. Wetlands, woodland and the general Aldeburgh area were deemed particularly ecologically sensitive by respondents, home to a range of birdlife, amphibians and other wildlife that must be protected.	The safety and protection of local wildlife and ecology was a concern. Specific areas within the Suffolk area were deemed ecologically sensitive including Leiston, Aldeburgh, Minsmere and North Warren. Reasons given included that these areas are diverse habitats such as coastal wetlands, marshes, heathland and woodland, home to rare bird species, deer, amphibians and other valuable wildlife. Areas in the Kent area deemed ecologically sensitive by respondents included the Minster Marshes and Pegwell Bay, citing concerns for special terrain, seals and rare bird species that could be disturbed by infrastructure development.

10	Onshore mitigation	Many respondents requested more information regarding the specific mitigation process that National Grid would follow, if required. Many respondents requested that National Grid detail how they would prioritise minimising permanent harm, so that mitigation measures would only be used when avoidance of residual impacts is unattainable.	As with the Prescribed Bodies, several respondents requested more information regarding the specific mitigation measures that would be adopted to minimise or negate impacts of the project, particularly with regard to biodiversity. It was requested that clear evidence needs to be provided of how the impacts of works will avoid serious damage to sites of nature conservation importance at the landfall location and onshore.
11	Onshore route location	Not a key theme for prescribed bodies.	Some respondents felt that the proposed onshore route locations should be revised, citing that, in the Suffolk area, they disrupt a Sizewell evacuation route and sensitive ecology and terrain, and in the Kent area, they disrupt biodiverse wildlife sites, namely Pegwell Bay.
12	Onshore socio-economics, recreation and tourism	Respondents questioned the impacts of an increased number of construction workers in the local area. Respondents wanted to highlight to National Grid that there may be potential pressures on workforce acquirement given that the proposed construction period of the Project could coincide with other projects in the local area. The potential opportunity for temporary employment and training presented by the Project was welcomed. Respondents were concerned about the impacts of construction on East Suffolk's tourism economy, citing its natural landscapes and AONB's as popular tourist destinations. Concerns about the impacts of construction on the recreation and leisure of local residents, such as walking and wildlife observing, namely around Pegwell Bay in the Kent area, were raised.	Concerns regarding the impacts of construction and development on tourism in East Suffolk were raised, citing the area's natural landscape and coastline as a significant attraction for visitors, as well as The Aldeburgh Festival. There were concerns for the mental well-being of residents as a consequence of disruptions associated with the Project to recreation, such as birdwatching, walking and cycling.

13	Timescales / co-ordination of multiple projects	Many respondents expressed the view that all major energy projects underway in the Suffolk area should be coordinated in order to minimise cumulative impacts. Concerns about coordination were regarding the potential need for a significant amount of land to host coordinated infrastructure, and the national security risk posed from the concentration of energy supply in one area.	Many respondents expressed the view that all energy projects underway in East Anglia should be coordinated, in an effort to minimise cost, construction, environmental and societal impacts. Some respondents referenced the new Offshore Coordination Support Scheme, which was launched at the end of 2022, as an opportunity for National Grid, along with other energy companies, to integrate project proposals.
14	Traffic and transport	Concerns were raised about the accumulation of construction traffic from coinciding energy projects proposed in the Suffolk area. Existing road structure including hazardous junctions, narrow roads, and aged structures were raised by respondents as reasons why it is unsuitable for construction traffic and transport. Detailed traffic and transport assessments were requested. Also requested was a commitment from National Grid to fund any repair of damage caused by vehicles associated with Project development.	Some respondents raised concerns about construction traffic on fragile road networks in East Suffolk, asking for further traffic assessments to be conducted. Concern was had for road accessibility regarding emergency services, especially around the Sizewell nuclear power stations in event of an emergency.

5. Frequently asked questions

5.1 Introduction

5.1.1 This section presents the questions that were raised by stakeholders during the non-statutory consultation period together with answers provided by National Grid in tabular form. **Table 5.1** presents the questions for Suffolk, and **Table 5.2** the questions for Kent.

5.1.2 The questions and comments are not always presented verbatim; they have been paraphrased to make them more concise and thus easier to read and assimilate. They have been grouped together in themes where appropriate.

Table 5.1 Questions raised by respondents - Suffolk

No.	Topic	Question(s)	National Grid response
1	Air quality/ health	The cumulative impact of this and associated projects on the air quality for our residents is of concern. We ask there be consideration as to the impact of these projects on the health of our residents – particularly the young, the elderly and those already suffering from chronic disease.	The likely impacts of the proposed project on air quality and socio-economics, both alone and cumulatively with other projects, will be assessed as part of the Environmental Impact Assessment (EIA) that will be submitted as part of National Grid's DCO application. Preliminary findings are reported in the Preliminary Environmental Information Report (PEIR) that will be made available to support statutory consultation.
2	Alternatives	East Suffolk Council understands that in the absence of Sea Link as currently proposed, the alternative to the proposals would be greater onshore infrastructure in the form of overhead pylons in between Sizewell and Bramford. East Suffolk Council requests that National Grid Electricity Transmission (NGET) provides further clarification and communication regarding the alternative options for this project and confirms whether this is the case.	The details on the options considered for the project were previously published in the CPRSS (Ref 1) and are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). This includes an onshore option between Sizewell and Canterbury.
3	Alternatives	Why is everything not being kept on the Sizewell A, B & C site? Why destroy good farmland and blight the landscape over such a large area when all this infrastructure work could be carried out on just one site on the coast putting all three projects (Scottish Power Friston, Sizewell C and Sea Link) together at one location.	The details on the options considered for the project were previously published in the CPRSS (Ref 1) and are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). These sites were discounted due to technical and environmental constraints of siting a convertor station in this locality and connecting into the existing network.

No.	Topic	Question(s)	National Grid response
4	Alternatives	There are multiple energy projects consented or proposed for the North Sea corridor with very little coordination between them to harness the power generated. Each one will have separate offshore infrastructure including cabling to deliver the power to where it is needed. Belgium, Germany, Holland and Denmark have solved this problem using a Modular Offshore Grid and artificial islands, yet nowhere in National Grid's analysis has this option even been mentioned, let alone considered or analysed. The technology exists and would result in 50% less infrastructure which can only be more cost effective, yet National Grid has failed to investigate it. Further, whilst National Grid has given landfall 'options' in its presentation, the options are all very similar in outcomes and therefore not really options at all. They are all concentrated in the same area between Sizewell and Aldeburgh because it is expedient and cheaper to do so. National Grid has not considered landfall locations near brownfields or near where the energy is needed. Getting energy from landfall to the substations will require at least 5 miles of cabling. The laying of the cables themselves will necessitate the digging of 328 foot (100m) trenches through farmland, marshes and fragile environments which are home to various forms of wildlife and will result in the disruption, if not destruction, of the environment.	Power must be carried from where it is generated to where it is required. This is the purpose of all electricity transmission grids. Offshore grids and energy islands do connect back to the mainland where the transmission network needs to be reinforced to carry the additional power to consumers further inland. If offshore wind generation connections were focused into a handful of corridors, then the onshore reinforcement could be significant in those locations. This, in part, is due to the capacity of the underground or overhead cable. The greater the power, the greater the number of cables needed. When all that power lands in one place you need to build additional infrastructure to transport it to where it is required. By having power connections at different points along the coastline you: • allow for shorter, more cost-effective connections for offshore developers and consumers as well as reducing the burden on the marine environment; • distribute the power up and down the country from the outset, power is consumed across the whole of the UK and not just in London; • maximise the use of the existing onshore network – you spread the electrical burden across it thus likely reducing the total amount of reinforcements required; and • Spread those fewer reinforcements over a larger landscape.

No.	Topic	Question(s)	National Grid response
			National Grid are evaluating coordinated options with other developers and for the Project this is picked up as part of the Offshore Transmission Network Review. There are no firm outcomes on this at this stage and National Grid are pursuing the Project as a point-to-point network reinforcement. The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. The identification of converter site option areas was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and to minimise visual impacts on settlements. The proposal includes approximately 130 km of subsea cables between the Sizewell area in East Suffolk and Richborough in Kent. At landfall, the cables would go underground to a converter station (one at each end).

No.	Topic	Question(s)	National Grid response
			In Suffolk on land, there are two types of cable installations, HVDC and HVAC. The HVDC connection is likely to be made up of two cables that sit in one trench and the HVAC connection is likely to be made up of six cables that will be in two trenches. More specific dimensions will be provided as the design is progressed further; at present at statutory consultation, it is envisaged that the temporary works will require a working corridor of up to 100 m but the trenches themselves be 2.5 m across. The ground will be remediated following installation and it will be returned to its former use. Planting of vegetation with deep roots will not be possible (i.e., trees) over the cable but the land can be farmed. National Grid will assess the environment in which the cable is to be installed and apply the construction method that is best suited. Trenchless techniques are being considered in places of environmental/ ecological importance. In addition, where a habitat is affected, a 10 % BNG policy will be applied.
5	Alternatives	The onshore substations are yet another example of National Grid's failure to examine viable alternatives. National Grid's Sea Link proposal for Suffolk includes a massive substation. Its emerging preference is near the proposed Friston SPR substation on greenfield land near a medieval church. This proposal is premature as the Friston substation is subject to judicial review. Already industrialised brownfield sites such as Grain and Tilbury and Lowestoft and Great Yarmouth have	It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at

No.	Topic	Question(s)	National Grid response
		been suggested, but National Grid has not given those sites any consideration.	capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements.
6	Alternatives	Not use Sizewell C - why not?	The details on the options considered for the project were previously published in the CPRSS (Ref 1) and are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). Sites were discounted due to technical and environmental constraints of siting a convertor station in this locality and connecting into the existing network.
7	Alternatives	Bradwell should be considered a much better alternative than the area around Aldeburgh which is a beautiful AONB area which would be totally ruined by the industrialisation which you have in mind.	The Project has been developed in response to the identified need to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means that if the Project did make landfall at Bradwell, onshore physical infrastructure would be required to bring this connection from Bradwell to within the EC5 and EC6 boundaries otherwise it would not meet the aims and objectives which is to create additional capacity within this specific location. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3).

No.	Topic	Question(s)	National Grid response
8	Alternatives	There are 550 operational, and in power of being operational, under water electric cables. The UK have the link between Northumberland and Norway. 450 miles, capacity of 400w over 3 miles. 1) Why not capitalise on this technology and bring onshore at brownfield sites?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries. The proposal includes approximately 130 km of subsea cables between the Sizewell area in East Suffolk and Richborough in Kent. At landfall, the cables would go underground to a converter station (one at each end). National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements.
9	Alternatives	Why not come ashore at Sizewell and use land adjacent to Sizewell A for the converter station? Alternatively, you've just installed a link from Bawdsey to Bramford, this must surely have been built with spare capacity, why not transmit over additional cables installed in existing duct with the HVAC/HVDC conversion at Bramford?	The details on the options considered for the project were previously published in the CPRSS (Ref 1) and are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). Some sites were discounted due to technical and environmental constraints of siting a convertor

No.	Topic	Question(s)	National Grid response
			station in this locality and connecting into the existing network. The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundaries of the EC5 and EC6. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries. National Grid was not the developer responsible for the link between Bawdsey to Bramford. If the Project connected into Bramford it would not achieve the needs case as it does not reinforce these boundaries.
10	Alternatives	Why does it all have to go inland in East Anglia? Why can't you go under the sea to, for example, Bradwell (that area has the infrastructure to receive the power) or possibly, come onshore around the Isle of Sheppey? Obviously, all this is geared up to get to London, why go cross-country when it is clearly possible to go under the sea?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundaries of EC5 and EC6. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites

No.	Topic	Question(s)	National Grid response
			as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements. The proposal includes approximately 130 km of subsea cables between the Sizewell area in East Suffolk and Richborough in Kent. At landfall, the cables would go underground to a converter station (one at each end). National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.
11	Biodiversity net gain	As I understand it projects which damage the environment have to demonstrate net environmental gain, e.g., increase in biodiversity. Digging a trench through a near natural ecosystem (e.g., marsh, heathland, ancient woodland) causes vastly more damage than through a man-made system (e.g., arable farmland). Indeed, some local ecosystems may be unique and micro scale areas may not be recognised as such. How can you demonstrate net environmental gain if something unique has been damaged or destroyed?	National Grid aims to achieve a 10 % BNG in all of its projects. Initially, the implementation of the mitigation hierarchy (so avoid, minimise, mitigate, compensate) will be demonstrated through the avoidance of certain habitats, the use of environmental constraints, and integrated mitigation measures to minimize habitat loss and other impacts during construction. A BNG assessment will be conducted by comparing the biodiversity value of habitats at the site before and after the development. The assessment will consider the "baseline" biodiversity value of habitats

No.	Topic	Question(s)	National Grid response
			prior to the development and the "post-development" biodiversity value of habitats after the completion of the development. To attain BNG, the post-development biodiversity unit score must be higher than the baseline score. This assessment will be included as part of the Environmental Statement that forms part of the DCO application.
12	Brownfield sites	Has satisfactory consideration been given to the potential for brownfield site development elsewhere? How can an area designated AONB be chosen as appropriate and acceptable to be destroyed when a perfectly good brownfield site is within convenient reach? Why destroy AONB when you can use brownfield sites? Why use Aldeburgh and Thorpeness for landfall locations and not consider other options. Why is Friston the only option for the substation. Brownfield site not considered. Where is the consultation on alternatives, e.g., sea route, brownfield sites, etc? Why can't you use brownfield sites? Why can't you do more to use offshore links?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundaries of EC5 and EC6. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements. The details on the options considered for the project can be found in Chapter 2 of the CPRSS Report (Ref 1). This includes an onshore option between

No.	Topic	Question(s)	National Grid response
			Sizewell and Canterbury. These are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). The likely impacts of the proposed project including those for biodiversity and ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that is available to support statutory consultation. National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for Sea Link to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.
13	Brownfield sites	Why can't we consider brownfield sites? The proposals include up to three trenches, coming ashore near the Scallop sculpture between Aldeburgh and Thorpeness which is a beautiful spot and key to the local tourism industry. And the preferred cable route then crosses the statutorily protected North Warren Nature Reserve, which is destructive and probably will be blocked (the word protected is key here).	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at

No.	Topic	Question(s)	National Grid response
			capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements. The proposed approach to come ashore between Aldeburgh and Thorpeness is under the saltmarsh using trenchless technology and to work with all landowners / occupiers to minimise the impact during construction.
14	Brownfield/ offshore	Why do National Grid seek to cause the utmost destruction in our protected coastal areas when there are sensible brownfield/seaborne offshore options? Offshore converter hub: why was this option not among those offered at the consultation? All these proposed projects should be brought ashore at a single location, preferably on a brownfield site and not carving a line through an area of Outstanding Natural Beauty. I understand that this is a serious option so why rush through a consultation without having all the options available for discussion? This is a settled area of AONB. Why not have a 'ring main' out at sea and make landfall for them at a suitable brownfield site?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries. National Grid has been unable to find any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural

No.	Topic	Question(s)	National Grid response
		Why not build the converter offshore? Why no consultation on alternatives? e.g., brownfield sites or modular offshore grid? What about North Sea corridor? Or using brownfield sites? Why not put this out to sea and spare the destruction of land?	screening and minimising visual impacts on settlements. The proposal includes approximately 130 km of subsea cables between the Sizewell area in East Suffolk and Richborough in Kent. At landfall, the cables would go underground to a converter station (one at each end). National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring are able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.
15	Brownfield/ offshore	If future North Sea windfarms connect via a Modular Offshore Grid to brownfield sites further south leaving Greater Gabbard and Galloper as the only connection with a landfall location in East Suffolk would Sea Link still be needed? Similarly, if Sizewell C is not built, or if as expected it does not start generating until well into the 2030s, will Sea Link still be a good solution for network reinforcement over the next ten years?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explain network boundaries. The need for the Project and the strategic option chosen is regularly reviewed throughout the Project development phase to ensure the project is fit for purpose, delivering the necessary benefits to the network.

No.	Topic	Question(s)	National Grid response
16	Construction	There is no information on the number of workers to be employed on these projects and these figures must be provided urgently.	The numbers of workers that will be required to deliver the Project is not yet known and will be decided upon by the successful bidder(s) for the various work packages. Estimated numbers are available in the PEIR that will be published at statutory consultation.
17	Consultation	The in-person consultations have been confusing with National Grid personnel giving conflicting answers, for instance as to whether the DCO will consist of only extensions to the Friston substation or provide for an entire new National Grid substation. This is a fundamental question which it appears National Grid cannot answer at this time. As such the consultations are premature.	Friston Substation already benefits from development consent granted to Scottish Power Renewables (SPR), pursuant to 'The East Anglia ONE North Offshore Wind Farm Order 2022' and 'The East Anglia TWO Offshore Wind Farm Order 2022'. Given that these consents have yet to be implemented, the Friston Substation is included in the Proposed Project to achieve a comprehensive consenting position. Should the proposed Friston substation be installed under the current consent secured by SPR, the works required for the Proposed Project would be limited to the installation of new bays and additional switch gear, cable connections and bus bars, all within the boundary of the substation. Due to the planned use of gas insulation switchgear (GIS) rather than air insulated switchgear (AIS) the extension of 50 m is no longer proposed.
18	Consultation	My wife and I watched the National Grid webinar on 7 December and found it very informative.	There was no webinar held on 7 December 2022 for the Project. This was undertaken by National Grid Ventures (NGV) in connection with their proposals for LionLink (formally known as EuroLink), and as

No.	Topic	Question(s)	National Grid response
		After battling EDF with Sizewell C and Scottish Power with the Friston Substation, people in this delicate and sensitive area of Suffolk with Sandlings Special Protection Area (SPA), SSSI, AONB and RAMSAR sites feel they are having an unfair share of power companies wanting to ruin this lovely area of the country. Why do we have protected areas to help wildlife conservation, when the power companies can come along and ruin them?	such comments have been passed on to the NGV LionLink project team.
19	Consultation	Will you be publishing the results of your survey?	The feedback provided during the non-statutory consultation is provided in this document. Terrestrial ecological surveys and marine surveys form part of the PEIR published to support National Grid's statutory consultation, and further detail will be published in the Environmental Statement that will form part of the DCO application.
20	Consultation	Your engagement with parishes did not extend to our parish. It's only through our own efforts that we have participated in your online meetings. We think this is unacceptable as indeed is the lack of information. We are dismayed that information has not been sent by you to each household within our parish and wider communities. We contacted Grayling PR to ask for leaflets about Sea Link to be sent to us and offered to deliver them to households in our Parish to inform parishioners of what you plan. No leaflets have been forthcoming – just the website information. We question this approach. If you don't inform people of your proposals, then how can your consultation process be meaningful?	National Grid have created two consultation zones to optimize their communication and engagement with stakeholders, the PCZ and the SCZ. The PCZ encompasses properties within a 1 km radius of the proposed underground cable route and 2 km around the converter site locations. This area includes stakeholders who will be most directly impacted by the proposal. They received a newsletter with information on how to participate in the consultation.

No.	Topic	Question(s)	National Grid response
			The SCZ includes properties within a 4 km radius of the proposed consultation areas. National Grid advertised their consultation and engagement events through local newspapers and a social media campaign that ran during the consultation period. Project documents and consultation materials were available at deposit locations and on the Project website, and paper copies were available upon request. National Grid also held briefings with elected representatives of district and county councils within the PCZ, as well as town and parish councils that fall partially or fully within the PCZ. With regard to Sudbourne Parish Council, a small section of the estuary falls within the 1k m buffer zone, and as a result, Sudbourne Parish is classified as a Neighbouring Host Authority (NHA). The majority of residents within this area will not have received a newsletter, however, Sudbourne Parish Council was contacted in October 2022 with information on the proposals and an invitation to provide feedback. It is important to note that Grayling PR is not associated with the Project. All contact information can be found on the Project website.
21	Coordination of projects	In the current circumstances can we expect a separate Scoping Report to be submitted for EuroLink (now known as LionLink) with the consequent burden on Councils to respond again within a short timeframe?	NGV LionLink will submit a separate Scoping Report, while NGET is a separate business, and the projects must be separately consented with coordination considered in the submissions.

No.	Topic	Question(s)	National Grid response
		The cavalier way National Grid has chosen to ignore the considered advice of PINS is concerning. Subject to the outcome of the Judicial Review, if these projects proceed, National Grid's conduct so far does not bode well for the efficiency of the process for Sea Link, EuroLink (now known as LionLink) and Nautilus. Would NGET and NGV please therefore follow PINS advice and combine consultations or documents requiring responses wherever possible. In this context FPC points out that the onshore impacts of these projects in Suffolk are similar and may become identical.	Regarding the claims that National Grid ignored the Planning Inspectorate's (PINS) advice, National Grid understand it was taken from a meeting held with the PINS on 20 October 2022, where National Grid discussed the non-statutory consultation and scoping report. Meeting minutes were produced and are publicly available, which state that PINS reminded National Grid of their previous advice recommending that the request for a Scoping Opinion be delayed until the close of the non-statutory consultation. The meeting minutes also noted that National Grid acknowledged the Inspectorate's advice and considered it along with advice in their Advice Notes. Before initiating the non-statutory consultation and submitting an EIA Scoping Request to PINS, National Grid worked with other ongoing projects in the Suffolk area to ensure that all consultation materials and media coverage were clear and avoided any confusion. As for the consultation, National Grid discussed the possibility of combining events with PINS and presented their proposed approach, including information about consultation zones and activities. The meeting minutes noted that National Grid confirmed the different ways they would raise awareness of the project through advertisements, newsletters, deposit locations, face-to-face events, and webinars. PINS advised National Grid to ensure that consultees understand the differences between the various proposals in the East Anglia area while combining consultation resources where appropriate.

No.	Topic	Question(s)	National Grid response
			In conclusion, the project did not ignore PINS' advice as National Grid discussed the possibility of combining consultations with them.
22	Coordination of projects	Whilst it is understood and welcomed that NGET is working with other developers including NGV to deliver greater offshore coordination, there have not been any tangible outcomes from this process. At present, whilst East Suffolk Council supports NGET's commitment to this review, the Sea Link project alongside other energy projects proposed in this locality, are continuing to progress with no visible signs of offshore coordination. East Suffolk Council requests details of the options being explored by NGET in relation to the OTNR and offshore coordination and an explanation as to how this would affect the current proposals. At present ESC seeks further information regarding the opportunities for offshore coordination being explored and considers that proposals do not currently reflect a coordinated onshore approach which is a significant concern.	National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. However, National Grid is currently not in a position to share any further details at this time. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain. National Grid has taken on board this comment and have reviewed how they communicate co-ordination with other developers and will be presented at statutory consultation.
23	Coordination of projects	Has sufficient attention been given to exploring coordinated network design and coordinating projects? Council expects a coordination of projects coming forward from NGV, EuroLink (now LionLink) and Nautilus and expects to see more tangible outcomes in this respect.	National Grid is working closely with other developers in the area to consider opportunities for coordination between projects but is not at a position to share information at this time. National Grid has established a joint-working group and agreed a core set of coordination principles to guide project decision making to:

No.	Topic	Question(s)	National Grid response
		Why don't all the energy companies talk to one another? Three separate locations does not make sense, other than to use up a lot of your obscene profits.	• explore possible opportunities for co-location of onshore infrastructure; • minimise impacts on local infrastructure and the environment; and • share information and data where appropriate to support mutual refinement. Coordinating projects could allow National Grid to reduce impacts of construction on areas that host new infrastructure, while connecting low carbon, renewable energy and meeting the Government's target to decarbonise their energy system. NGET and NGV project teams are continuing to explore opportunities to collaborate wherever possible, despite the challenges this presents from regulatory and programme perspectives. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure such as a converter station and cables in this area will still remain.
24	Coordination of projects	Given that the Friston substation is subject to judicial review, and Sizewell C is, despite our government's desire to impose it upon us, far from certain with costs reportedly already rising to over £40 billion, why are two new infrastructure projects being consulted upon now that totally hinge on these developments.	National Grid cannot speak for LionLink, but the Project is proposed to alleviate network constraint on the existing infrastructure in the EC5 and EC6 boundaries. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries.

No.	Topic	Question(s)	National Grid response
			National Grid is proposing to connect into the proposed Friston substation as it is policy to use existing network infrastructure first where possible. National Grid then look to use proposed new network infrastructure and then last of all develop new infrastructure. National Grid are including the Friston substation in the proposals, to give a comprehensive consenting position. However, it is expected that the proposed Friston substation to be built under the existing Scottish Power Renewables consents.
25	Decommissioning	What will happen to the buildings when they come to the end of their life, will they be left to fall into disrepair, or will they be removed and the land put back to agriculture?	The standard design life of National Grid installations is approximately 40 years. Some specific assets could and do outlive this timeframe. All equipment is subject to asset management. National Grid will maintain their assets in line with supplier recommendations to achieve an ongoing reliable operation. This could include the like-for-like replacement of given components, for instance those that become obsolete. If the need for the electrical installation is longer than the asset life then National Grid would undertake a larger scale replacement programme to extend the life of the overall installation. National Grid would not be in a position to state what would be done to the Project installation in more than 40 years' time from now.
6	Design	A working width of 40 m has been assumed for HVDC cables and 100 m for HVAC cables. Further information is required to justify the use of these parameters. For example, Scottish Power Renewables has a consented HVAC cable corridor width of 32 m, with the	The working corridors provided are based on the possible routes reviewed at the time. National Grid have now undertaken the design work and typical arrangements of working widths and revised corridors for one project are provided in the

No.	Topic	Question(s)	National Grid response
		exceptions of a few specific locations. It is assumed these widths relate to one project alone, if this is the case further information needs to also be provided as to the width of a shared coordinated cable corridor.	statutory consultation documentation and are also shown below – Typical HVAC cable details – • Working Width: 63 m • Permanent Easement: 63 m • No. of Cables: up to 6 • No. of Trenches: up to 2 • Trench Width: 2.5 m • Trench Depth: 1.5 m • Number of Ducts: Eight ducts (6x cable and 2x fibre optic split over the two trenches) 2x DTS tubes. • Minimum Depth of Cover: 0.75 m to 5 m depending on land-use. • Cable Section Length: 800 m-1200 m Typical HVDC cable details – • Working Width: 40 m • Permanent Easement: 40 m • Number of Cables: up to 2 • Number of Trenches: up to 2 in Suffolk (1 in Kent) • Trench Width: 2.3 m · Trench Depth: 1.5 m • Number of Ducts: 3 (2x Cables and 1x Fibre) • Minimum Depth of Cover: 0.75 m to 5 m depending on land-use • Cable Section Length: 800-1200 m The cable corridor construction swathe widths will be reviewed if there is a need to coordinate

No.	Topic	Question(s)	National Grid response
			multiple projects, typical values can be found in the table below.

	Single project	Dual project	Triple project
Typical HVDC construction swathe width	40 m	59 m	69 m
Typical HVAC construction swathe width	63 m	95 m	112 m
Typical combined HVDC & HVAC construction swathe width	78 m	106 m	131 m

All plans and drawings prepared can be found on the Project website[2]. These plans are titled 'General arrangement plan' and 'Typical design drawings'. To help interaction with these plans, please see our Guide to Interacting With Our Consultation Plans and Drawings (Ref 4).

27	Design	Paragraph 5.2.24 of the CPRSS (Ref 1) identifies the parameters of the converter station which are stated to be either a 6-hectare site with building footprint of 200mx300m and a building height of 3 0m or a 10-hectare site with a footprint of 320 m x 320 m and building height of 30m. Further information is required in relation to the two different converter station parameters with an explanation	The current parameters taken to statutory consultation are provided based on the types of converter station technology available to National Grid. There are two types of converter station - LCC (Line Commentated Converter) and VSC (Variable Source Converter). The LCC has a larger footprint than the VSC. All dimensions provided at this stage are typical dimensions to provide the scale of what National Grid need to build.

[2] https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

No.	Topic	Question(s)	National Grid response
		as to what circumstances each version would be promoted.	Exact sizes and layouts will not be known until they engage the supply chain. Further information, along with architect's visual impressions of what the converter station could look like are provided at statutory consultation.
28	Design	It is noted that there is a commitment to use trenchless techniques at landfalls to minimise impacts on coastal habitats "where feasible". However, it is unclear whether landfall options where trenchless techniques are not feasible will automatically be removed from consideration. Clarification on this point is necessary in addition to the provision of further detail in relation to the engineering feasibility of trenchless techniques.	National Grid's preferred landfall cable installation technique is a trenchless solution to minimise the impact at these locations. National Grid is undertaking landfall and ground investigation surveys, to confirm design of the preferred technique.
29	Design	Council notes on Page 4 of the project summary in the feedback form 'and overhead transmission line modifications' and seeks clarification. Is this suggesting additional pylons in the area?	The text referred to on page 4 of the Project Background document (**Appendix E**Project Background Document) refers to both Kent and Suffolk. In Suffolk no additional pylons are planned.
30	Design	Further clarification is needed to understand the impact of the onshore cabling HVDC and HVAC. Understanding the width of cabling interference in the landscape: What width is needed? 40m or 100 m? Where will the access points be along the route? What permanent infrastructure will be left in situ post construction? What depth of drilling will be necessary? I have heard that the cable route will require a 50 m wide trench? I don't have a problem with temporary	All plans and drawings prepared can be found in on the project website, nationalgrid.com/sealink. These plans are titled 'General arrangement plan' and 'Typical design drawings'. To help interaction with these plans, please see our Guide to Interacting With Our Consultation Plans and Drawings (Ref 4). However to provide clarification - 1) The HVDC construction corridor between the transition joint bay at the landfall and the converter station is anticipated to be up to 40 m wide for a single project. 2) The HVAC construction corridor between the proposed Saxmundham converter station and the

No.	Topic	Question(s)	National Grid response
		disturbance but as a layman the obvious question is why so wide? It is not clear how wide a combined corridor would need to be. The HVDC cables are proposed to require 40 m wide corridors and the HVAC cables require 100 m. What width would be needed for cables combining 2 or more projects?	connection point (the proposed Friston Substation) is anticipated to be up to 63 m wide for a single project. 3) There are currently options proposed for the permanent access to the proposed Converter Station sites - There are three options being considered for the permanent access arrangement to Saxmundham Converter Station these are: • permanent access is taken off the B1121 South Entrance (bellmouth BM09); • permanent access is taken off B1121 Main Road (bellmouth BM12 via BM11 and BM10); or • permanent access is taken off the B1121 The Street (bellmouth BM13) There are two options being considered for permanent access to Minster 400kV substation and Minster Converter Station these are: • permanent access is taken off the A256 (via bellmouth BM02); or • permanent access is taken off Jutes Lane (via bellmouth BM03) with bellmouth BM02 retained in case of future Abnormal Indivisible Loads (AIL) movements. 4) Along the HVDC cable route from the landfall point to the converter station site, there will be limited above ground infrastructure visible. 5) Along the HVAC route in Suffolk there will be small kiosks (link boxes) above ground at the joint locations, generally surrounded by a timber fence to protect them from livestock or machinery.

<table>
<tr><th>No.</th><th>Topic</th><th>Question(s)</th><th>National Grid response</th></tr>
<tr><td></td><td></td><td></td><td>6) Other permanent infrastructure will be the proposed converter stations and substations as well as their respective compounds, accesses and drainage features.
7) The current depth of the drilling in unknown but National Grid are currently carrying out surveys to determine these parameters.
8) The cable corridor construction swathe widths will be reviewed if there is a need to coordinate multiple projects, typical values can be found in the table below.
<table>
<tr><th></th><th>Single project</th><th>Dual project</th><th>Triple project</th></tr>
<tr><td>Typical HVDC construction swathe width</td><td>40 m</td><td>59 m</td><td>69 m</td></tr>
<tr><td>Typical HVAC construction swathe width</td><td>63 m</td><td>95 m</td><td>112 m</td></tr>
<tr><td>Typical combined HVDC & HVAC construction swathe width</td><td>78 m</td><td>106 m</td><td>131 m</td></tr>
</table>
</td></tr>
<tr><td>31</td><td>Design</td><td>If the Suffolk devastation has to go ahead then surely the least dreadful choice would be Site 1 alternative via Sizewell. To disturb the coastline between Thorpeness and Aldeburgh would be a serious act of vandalism, affecting a special site of scientific interest. Can you explain to me why the corridor and "graded swathe" is the width of a motorway? This really cannot be necessary for a cable run.</td><td>All plans and drawings prepared can be found on the project website3. These plans are titled ‘General arrangement plan’ and ‘Typical design drawings’. To help interaction with these plans, please see our Guide to Interacting With Our Consultation Plans and Drawings (Ref 4).</td></tr>
</table>

[3] https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

No.	Topic	Question(s)	National Grid response
			The HVDC construction corridor between the transition joint bay at the landfall and the converter station is anticipated to be up to 40 m wide for a single project. The HVAC construction corridor between the proposed Saxmundham converter station and the connection point (the proposed Friston Substation) is anticipated to be up to 63 m wide for a single project.
			The preferred method is to come ashore under the saltmarsh using trenchless technology, and to work with all landowners/occupiers to minimise the impact during construction. The likely impacts of the proposed project including those for biodiversity and ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.
32	Design	Will the scale of the converter substation at Friston be discussed? I'm guessing that is a separate issue? If so, where can I get information and provide feedback?	The Converter station will be either to the East of the B1069 - Snape Road or to the East of Saxmundham south of the B1119. Friston Substation already benefits from development consent granted to Scottish Power Renewables (SPR), pursuant to 'The East Anglia ONE North Offshore Wind Farm Order 2022' and

No.	Topic	Question(s)	National Grid response
			'The East Anglia TWO Offshore Wind Farm Order 2022'. Given that these consents have yet to be implemented, the Friston Substation is included in the Proposed Project to achieve a comprehensive consenting position. Should the proposed Friston substation be installed under the current consent secured by SPR, the works required for the Proposed Project would be limited to the installation of new GIS bays and additional switch gear, cable connections and bus bars, all within the boundary of the substation. Due to the proposed use of gas insulation switchgear (GIS) rather than air insulated switchgear (AIS) the extension of 50 m is no longer proposed. This information is presented in the statutory consultation material.
33	Design	Probably the most critical aspect of the project as far as the long-term impact on the local area is concerned. The ground area of the site at around 250 m^2 is not a large concern to me but the height certainly is! Is there any way this could please be somehow reduced by pushing a percentage of the development underground? Being the only real long-term scar of the project, I strongly believe the Converter Station itself should be designed in such a way so that we as locals can forget it is even there rather than driving past a huge industrial building regularly and being able to see it from our upstairs windows! Likewise light pollution from the completed site should be kept to an absolute minimum - the lack of cities in this area makes the night sky truly	National Grid reviews all feedback as it develops their proposals. All design elements for converter stations have been taken into consideration at this next stage of the project. Further information on the design of the convertor stations alongside the architect's visual impressions are provided at statutory consultation.

No.	Topic	Question(s)	National Grid response
		spectacular and every care should be taken to protect this.	
34	Designated sites and sensitive areas	There are so many things wrong with this proposal but one that stands out is the destruction of part of the RSPB nature reserve. You say in your newsletter that you are seeking to minimise the impact on the environment. You are surely aware that the government is seeking to protect 30% of the UK land area by 2030 so how can you possibly suggest damage/destruction of currently protected areas. I await your comments and clarifications.	Landfalls were considered in the CPRSS Report (Ref 1). These are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). As part of the design process, taking into consideration feedback from both Scoping and non-statutory consultation, National Grid are looking at methods of construction to minimise impact on the environment. National Grid's preferred approach is to come ashore under the saltmarsh using trenchless technology and to work with all landowners/occupiers to minimise the impact during construction.
35	Designated sites and sensitive areas/ offshore	Please consider carefully where you plan your route and avoid further damaging Nature Reserves and AONB. Minsmere is already under serious threat from EDF. The whole of the Suffolk coast is an important area for migrants and other wildlife. Surely it would be easier and cheaper to proceed by sea? Why on earth don't you do what other countries are doing and put the cables round the coast? It's dangerous and short term to hasten coastal erosion,	The proposal includes approximately 130 km of subsea cables between the Sizewell area in East Suffolk and Richborough in Kent. At landfall, the cables would go underground to a converter station (one at each end). The purpose of the Sea Link project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundaries of EC5 and EC6.

No.	Topic	Question(s)	National Grid response
		particularly adjacent to a coastline already at risk and one so rich in nature and rare flora and fauna.	The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.
			The likely impacts of the proposed project on coastal processes and ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.
36	Designated sites and sensitive areas	As I understand it the primary purpose of the designation, AONB, is to conserve and enhance natural beauty - with the emphasis on 'natural'. Should landfall and cable routes actually occur in an AONB? Damage will be done no matter how sensitively it is handled.	The CPRSS Report (Ref 1) details the routeing work undertaken and how all options were appraised. Further detail on the locations considered can be found in the CPRSS Report (Ref 1). The options are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). As part of the design process, and feedback from both Scoping and non-statutory consultation, National Grid are looking at methods of construction to minimise impact on the environment.

No.	Topic	Question(s)	National Grid response
			The likely impacts of the proposed project, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.
37	Energy islands	During the consultation, and particularly at public consultation events, there was discussion and exploration of the role of energy islands in providing and supporting a coordinated offshore network, which is assumed could reduce the terrestrial harm of the project. The Council recognises that there is considerable public interest in this issue, which has also been bolstered by the recent publication of the North Sea Wind Power Hub feasibility report in November 2022. Therefore the Council requests that NGET provides information to such options, as to the role, utility, and timeliness, of energy islands to support, or not, greater offshore coordination whilst delivering the necessary targets and required deadlines.	National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure such as a converter station and cables in this area will still remain. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and explains network boundaries.
38	Energy islands	The consultation has been significantly compromised as only some of the potential options have been presented to those attending the drop in exhibitions held locally. A conversation with members of your staff at one of the local exhibitions revealed that there are further options that include 'off-shore energy islands' which have not	The proposals for the Project do not include an offshore energy island. However, there were materials about the Offshore Transmission Network Review 'Early Opportunities' workstream at the non-statutory consultation. More information can be found on the Department for Energy Security and Net Zero website[4].

[4] This link takes you to the latest joint statement published in July 2022: https://www.gov.uk/government/publications/offshore-transmission-network-review-pathfinder-projects/joint-statement-from-north-falls-five-estuaries-and-national-grid-commitment-to-exploring-coordinated-network-designs-in-east-anglia

No.	Topic	Question(s)	National Grid response
		been included or even mentioned in your proposals. We wonder why this may be?	
39	Landfall	If two or more projects make landfall between Thorpeness and Aldeburgh how much greater will be the disruption to the popular beach area during and after construction?	The impact of two or more projects making landfall at the beaches (Aldeburgh) will depend on the timing of the planned works. National Grid are considering the use of trenchless cable laying techniques to bring the HVDC cables ashore and depending on when the projects are delivered the may be opportunity to install all the required ducts at the same time. However National Grid is currently still working with other projects to explore the feasibility of these opportunities.
40	Needs case	Whilst it is recognised in simple terms that the requirement for the project was established by National Grid Electricity System Operator within the Network Options Assessment and National Grid Electricity Transmission are now seeking to deliver the reinforcements identified, further explanation is required in relation to clarifying the detailed needs case for the Project. Information became known during the consultation that the needs case for the project is more complex and multi-faceted than had been previously understood. East Suffolk Council understands the need stems from not just the local requirements but a combination of local, regional, and national drivers across the network in terms of generation. Further, in addition to the need for additional capacity there is also a requirement to	National Grid has taken on board this comment and will review how it communicates their needs case during statutory consultation.

No.	Topic	Question(s)	National Grid response
		provide redundancy within the system to comply with the National Electricity Transmission Security and Quality of Supply Standards. ESC considers the full extent of the wider needs case has not been clearly articulated.	
41	Needs case	Why start at Friston? The electricity is being generated in the North Sea, not at Friston so if you want to get it to Kent why not link the wind farms direct to Kent or to a coastal point (hopefully a brown field site) if you need to consolidate the outputs of several windfarms.	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries. Friston sits within these boundaries and has been identified as a preferred connection point. The purpose of the Project is not to connect offshore wind farms to the network but to achieve the following: • transport excess electricity generated in Suffolk to Kent which will be exported through interconnectors in the south; and • when electricity needs to be imported into the UK from Europe via interconnectors it will be transported into the wider UK network from Kent through Sea Link and Suffolk. There are no plans to approach the area near Snape.
42	Needs case	National Grid has failed to initiate a master plan and in lieu of that, these projects are proudly promoted as a	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of

No.	Topic	Question(s)	National Grid response
		"coordination" package, a trophy, whilst they are in real terms, not answering the priority questions: Where are the wind farms? How can we pool their energy at sea? How can we integrate at sea? How can we use brownfield sites for superhubs?	a network reinforcement which includes the network boundaries of EC5 and EC6. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3), and this explains network boundaries. The purpose is not to connect offshore wind farms to the network but to achieve the following: • transport excess electricity generated in Suffolk to Kent which will be exported through interconnectors in the south; and • when electricity needs to be imported into the UK from Europe via interconnectors it will be transported into the wider UK network from Kent through Sea Link and Suffolk. National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.

No.	Topic	Question(s)	National Grid response
			National Grid did not identify any brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project. Therefore, the identification of converter site option areas was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and to minimise visual impacts on settlements.
43	Offshore development	Other European countries are using offshore grids for their energy project, why are national grid not doing the same?	National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries.
44	Policy	Has satisfactory consideration been given to change in Government Policy Change to look at offshore alternatives, e.g., an Offshore Grid through the North Sea Corridor?	There is no change in Government policy. Coordination of offshore infrastructure is under review as part of the Holistic Network Design.

No.	Topic	Question(s)	National Grid response
			National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination. It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries.
45	Substation	The consultation material proposes to erect an extension to the proposed Friston substation should the infrastructure be brought forward under the Scottish Power Renewables offshore wind consents. The Scoping Report however included reference to the fact that should the substation not come forward, NGET will need to propose a new substation. Further clarification is required in relation to this matter and the parameters of the substations which would be needed.	Friston Substation already benefits from development consent granted to Scottish Power Renewables (SPR), pursuant to 'The East Anglia ONE North Offshore Wind Farm Order 2022' and 'The East Anglia TWO Offshore Wind Farm Order 2022'. Given that these consents have yet to be implemented, the Friston Substation is included in the Proposed Project to achieve a comprehensive consenting position. Should the proposed Friston substation be installed under the current consent secured by SPR, the works required for the Proposed Project would be limited to the installation of new bays and additional switch gear, cable connections and bus bars, all within the boundary of the substation. Due to the proposed use of gas insulation switchgear (GIS)

No.	Topic	Question(s)	National Grid response
			rather than air insulated switchgear (AIS) the extension of 50 m is no longer proposed.
46	Traffic and transport	Is there sufficient capacity on main arterial roads, e.g. A12 to cope with additional traffic movements bearing in mind SZC traffic? Whilst these include plans to create 2 village bypasses, the A12 in part will remain single lane suggesting congested routes, particularly during the summer season with tourist traffic to nearby honeypot sites such as Sizewell Beach, Aldeburgh, Southwold impacting the local tourism offer. How can East Suffolk's transport infrastructure support all these major infrastructures projects, given that just a small group of cyclists or a single tractor can cause long tailbacks on our rural roads?	The likely impacts of the proposed project on traffic, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

Table 5.2: Questions raised by respondents - Kent

No.	Topic	Question(s)	National Grid response
1	Biodiversity net gain	What steps are being taken to protect our biodiversity in minister marshes, this is a key wildlife area, close to an SSSI (Pegwell bay). What is the relationship between the two?	The likely impacts of the proposed project on biodiversity and ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application.
		What will be the impact on our bird life? What baselines are currently established? What measures to avoid further erosion of bird life in this area are being put into place?	Preliminary findings, including proposed mitigation, are reported in the PEIR that will be made available to support statutory consultation.
		A number of important invertebrate species are present throughout Thanet district. Do we know for certain that none of this species are also found in or are dependent on Minster marshes?	
		A local beekeeper who has kept honeybees complains that the bees in/on the marsh are already under threat from nearby Rape Seed crops. What bee keeping or bees live in the Minster marshlands?	
		Can I ask, as the County Councillor for Ramsgate what is the specific impact of the HVDC on the bio-diversity of this area?	
2	Brownfield sites	As I understand it you are proposing to build your converter station in Kent on the Stour marshes when there is an existing brownfield site at Richborough that could be used. The marshes are important for nature generally and specifically for wintering birds - why are	National Grid has been unable to find any suitable brownfield sites within the converter station option area that are suitable for the infrastructure proposed. All existing National Grid substations in the area are already at capacity or do not have the space around them to allow the connection required by this project.

No.	Topic	Question(s)	National Grid response
		you even suggesting that option when we continue to lose so much of our nature in the UK?	The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundaries of EC5 and EC6. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries. Therefore, the identification of converter station site options was based on avoidance of designated sites as far as possible, landform, opportunities for natural screening and minimising visual impacts on settlements.
3	Consultation	I represent the view of Hoath Parish Council, North Thanet constituency. I have only discovered today through twitter that this proposal for a converter station exists. Have you been in contact with Canterbury District Council, also stakeholders? Hoath belongs to this district. This proposal appears to only consider the immediate area around the intended substation and the reasons why National Grid considers this necessary.	National Grid have created two consultation zones, the PCZ and the SCZ, to optimize their communication and engagement with stakeholders.
		Where is mention of the impact on residents in the area? Where is mention of consideration of the substation's impact on the regional biodiversity of the Minster wetlands— these connect to the Stour Valley, & the Wantsum Channel — these areas are one and the same — they cannot be considered independently of each other. Canterbury district is recognising the significance of reviving these wetlands as per the current UN Biodiversity conference in Montreal which stresses the vital role played by so doing. We have lost 97% of the	The PCZ encompasses properties within a 1 km radius of the proposed underground cable route and 2 km around the converter site locations. National Grid have made efforts to ensure that whole streets are included in the PCZ, rather than dividing communities. This area includes stakeholders who will be most directly impacted by the proposal. They received a newsletter with information on how to participate in the consultation. The SCZ includes properties within a 4 km radius of the proposed consultation areas and, similarly,

No.	Topic	Question(s)	National Grid response
		world's wetlands, vital to our biodiversity and hence survival.	whole streets have been included where appropriate. National Grid advertised their consultation and engagement events through local newspapers and a social media campaign that ran during the consultation period. The likely impacts of the proposed project both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation. National Grid aims to achieve a 10 % BNG in all of its projects. Initially, the implementation of the mitigation hierarchy (so avoid, minimise, mitigate, compensate) will be demonstrated through the avoidance of certain habitats, the use of environmental constraints, and integrated mitigation measures to minimise habitat loss and other impacts during construction. A BNG assessment will be conducted by comparing the biodiversity value of habitats at the site before and after the development. The assessment will consider the "baseline" biodiversity value of habitats prior to the development and the "post-development" biodiversity value of habitats after the completion of the development. To attain BNG, the post-development biodiversity unit score must be higher than the baseline score. This assessment will be included as part of the

No.	Topic	Question(s)	National Grid response
			Environmental Statement that forms part of the DCO Application.
4		Climate Change and Biodiversity are interconnected. Biodiversity is much more than the Bee pollinator and Tree strategy, National Grid refers to in its FAQ. Green space must be considered in detail in how it contributes to strengthening local biodiversity, inset life, wildlife corridors, tree canopy, etc. But all this remains a NPPF tick box exercise unless Community feedback consists of going out into communities and taking a 360 degree approach to analysing the impact of projects such as these on infrastructure, biodiversity, landscape and the other headings of the NPPF.	Project documents and consultation materials were available at deposit locations and on the Project website, and paper copies were available upon request. National Grid also held briefings with elected representatives of district and county councils within the PCZ, as well as town and parish councils that fall partially or fully within the PCZ. With regard to Hoath Parish and Canterbury District, these do not fall within the PCZ or the SCZ, and they are not a NHA. Therefore, residents in these areas will not have received a newsletter, however, to raise general awareness of the project within the area and to advertise the consultation programme, advertisements were placed in key local and regional publications. The likely impacts of the proposed project including those for biodiversity, ecology and socio-economics, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

No.	Topic	Question(s)	National Grid response
5	Design	Are the cables underground or aerial?	The HVDC cable from the sea to the converter station will be underground; the connection from the converter station to the existing Canterbury to Richborough overhead line in Kent will either be underground or a small run of pylons.
6	Designated sites and sensitive areas	Thanet has little green space left, how are these proposals not going to impact this area of natural beauty and habitat for the hundreds of thousands of species of birds, animals and plant life?	The likely impacts of the proposed project on ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation. National Grid aims to achieve a 10 % BNG in all of its projects. Initially, they will demonstrate the implementation of the mitigation hierarchy (so avoid, minimise, mitigate, compensate) through the avoidance of certain habitats, the use of environmental constraints, and integrated mitigation measures to minimize habitat loss and other impacts during construction. A BNG assessment will be conducted by comparing the biodiversity value of habitats at the site before and after the development. The assessment will consider the "baseline" biodiversity value of habitats prior to the development and the "post-development" biodiversity value of habitats after the completion of the development. To attain BNG, the post-development biodiversity unit score must be higher than the baseline score.

No.	Topic	Question(s)	National Grid response
			This assessment will be included as part of the Environmental Statement that forms part of the DCO application.
7	Farming	Viability of farmers affected. Has this been taken into account?	The impact on the viability of farming operations will be discussed by National Grid as part of the terms for acquiring land rights. Most of the project is buried so the long-term effect on farming is minimised.
8	Farming	Impact on soil profiles & quality and impact on future crop yields. Has this been carried out?	National Grid will consider future crop yields when calculating disturbance claims. As part of the installation process, the topsoil is removed and stored as close as possible. This is then reinstated post-construction where feasible.
9	Landfall	I would have thought that underwater laying of the cable will be cheaper to do than digging up half of Cliffsend or trying to swing a line across there, so why do they not bring their line in near The Sportsman and run it up the Sandwich Road to Richborough just as the Nemo one has or even take it up the River Stour and make landfall south of Ambrosetti's near the old wharfs. Making landfall south of Ambrosetti the cable could mean less digging up of any land to get to where the converter station may be. Making landfall in Pegwell Bay near the old hoverport they would need to be careful of the Manston Airport disposal pipeline under the area and into Pegwell Bay already covered by the Manston DCO, so as not to interfere with that. I take it the National Grid know of it and its route? The only sensible routing of any cables from Pegwell into the area that they are talking of	Based on National Grid's understanding of previous projects in this locality and the recoverability of sensitive saltmarsh habitat along this coastline, their preference is to adopt a trenchless solution for cable installation (under the saltmarsh) at the proposed landfall location. This prohibits them from paralleling the Nemo Link onshore through the Local and National Nature Reserves and a preferred onshore route to a converter site location. The CPRSS Report (Ref 1) details the routing work undertaken and how all areas were investigated. The options are further summarised in Chapter 4 of the Options Selection and Design Evolution Report (Ref 2). Routing up the Stour to make landfall was considered but the river is still a viable transport link and harbour with a mobile mouth that would require mitigation

No.	Topic	Question(s)	National Grid response
		at the moment are taking it eastwards south of Cliffsend and across one or both golf courses.	methods to prevent disturbance to the cable during the lifetime of the asset.
		So why not make landfall along the Stour and have the converter station where I have suggested or even on the other side of the river? The old Peugeot site would be easy access before and after build and is a brownfield site, it already is hardstanding. The swathe of land being touted by the National Grid has various waterways that they would have to be careful of.	The proposal is to make landfall south of the former hoverport and south of Thanet offshore windfarm and Nemo Link assets. National Grid are currently working with the waterway owners to develop a method for optimal crossings on the onshore cable route.
10	Onshore ecology and biodiversity	What will be the impact on the habitat? Impact on functional land and species for the SPA? Has this been carried out?	The likely impacts of the proposed project on ecology, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of the DCO application. Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

6. Project design

6.1 Introduction

6.1.1 During the consultation period, any changes or design queries that were raised by stakeholders were passed through National Grid's Design Change Control process.

6.1.2 Proposed design amendments were carefully considered in the context of environmental constraints and opportunities, engineering feasibility and cost, planning policy and other relevant considerations. Proposed design amendments were considered whether they arose from non-statutory consultation feedback or from other drivers (e.g., continued design and development, ongoing discussion with stakeholders).

6.1.3 The process of considering design changes included an initial filter for benefit and feasibility, an assessment incorporating inputs from relevant technical experts, and further stages of additional study if required. The outcome of the design change process is either that a change is included in the project design, or that the change is not made following balanced and informed consideration.

6.1.4 The changes suggested by respondents during the non-statutory consultation period are summarised below in themes together with National Grid's response.

6.2 Design change control

Use of brownfield sites

6.2.1 Numerous queries were raised in the consultation feedback for Suffolk regarding why National Grid were not proposing to develop on brownfield sites for the Project. These comments related both to the converter station and the extension to the Friston substation. General comments were made about the use of brownfield sites over greenfield sites, but also specific sites were mentioned, i.e., Sizewell, Bradwell, Isle of Grain, Lowestoft and the old airport site at Leiston. Furthermore, one respondent questioned why the Bawdsey to Bramford interconnector is not suitable.

6.2.2 Similarly in Kent, feedback received queried why National Grid were not developing on brownfield sites and in particular the former Richborough power station site, the old Peugeot site, the old Pzifer site, the River Stour Old Docks and the Manston Airport.

National Grid response

6.2.3 The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundary of the EC5 and EC6 boundaries. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries.

6.2.4 National Grid have reviewed all areas, including brownfield sites, within a 5 km radius of the connection onto the network to maximise efficiency, reduce energy loss and minimise additional electrical infrastructure (thereby lessening the potential impact on the local environment).

6.2.5 Land in and adjacent to Sizewell in Suffolk was investigated and discounted due to the land being both in the AONB but also was part of EDF's rewilding site (to be used for reptile translocation) and the fact that there are no suitably sized areas of land within the Sizewell complex that could be used for the Project.

6.2.6 The use of the Isle of Grain and/or Bradwell for the Project in Suffolk was discounted because development on either of these sites does not resolve the needs case/network boundary issues.

6.2.7 Development at Lowestoft in Suffolk would not meet the needs case of the EC5 and EC6 boundaries and, because it is over 35 km away from any existing infrastructure, a new overhead line or cable would be required.

6.2.8 The disused Airfield to the north of Leiston in Suffolk is not considered a suitable site for a substation as this is too far from the existing infrastructure and would require additional overhead lines or cables to connect it back to the network. This would have an increased impact on the environment. This area was considered for a converter station, but the HVAC connection would have to be routed back to the proposed Friston substation at this stage.

6.2.9 Use of the Bawdsey to Bramford interconnector in Suffolk is not suitable because it doesn't meet the needs case as it is outside of the EC5 and EC6 boundaries and was not a project developed by National Grid.

6.2.10 There is insufficient space at the Richborough Power Station site for a converter station. With regard to the old Pzifer site and the River Stour Old Docks, the emerging preference for the landfall location has been selected to avoid designations; moving the landfall further south to allow for a connection would interfere with existing infrastructure. The SoS for Transport has granted a DCO for works to reopen Manston Airport primarily as an international freight airport, so the site is not an option.

Use of land outside Suffolk

6.2.11 Several suggestions were made in the Suffolk feedback that the onshore infrastructure need not be constructed in Suffolk at all but be located closer to where the energy was needed such as the Thames Estuary and beyond.

National Grid response

6.2.12 The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement which includes the network boundary of the EC5 and EC6 boundaries. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries.

6.2.13 The use of sites outside of East Suffolk does not resolve the needs case/network boundary issues as outlined in the Strategic Options Report (Ref 3).

Development of an entirely offshore scheme

6.2.14 Stakeholders wondered why National Grid were not assessing solutions that were entirely offshore with the creation of offshore grids/ring mains and energy islands. It was suggested that if the power does need to make landfall, then it must do so at brownfield sites.

National Grid response

6.2.15 The purpose of the Project is to transfer electricity between Suffolk and Kent and vice versa, as part of a network reinforcement. The full needs case can be found in Chapter 3 of the Strategic Options Report (Ref 3) and this explains network boundaries.

6.2.16 The Project is required to resolve a constraint on the onshore network to support power exporting from and importing into East Anglia and ensure National Grid can continue to operate a safe, compliant and economic transmission network. This means that the Project is required regardless of offshore co-ordination, as there will be a significant increase in the levels of power being brought onshore as they move towards the Government's ambition of connecting 50 GW of offshore wind by 2030. Development offshore does not mitigate the need for additional onshore infrastructure.

6.2.17 National Grid is continuing to work with other developers to explore opportunities for offshore co-ordination.

6.2.18 It should be noted that any offshore co-ordination does not remove the need for the Project to reinforce the EC5 and EC6 network boundaries, ensuring it is able to safely cope with the planned increase in generation in this area. This means the requirement for onshore infrastructure in this area will still remain.

Impact on local roads

6.2.19 Concerns were raised with regard to the potential impact of construction traffic on the local road network. Issues relating to site access, narrow local roads unsuitable for lorries, the danger to cyclists and the Suffolk County Council Lorry Route were noted.

National Grid response

6.2.20 The likely impacts of the proposed project on traffic, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of National Grid's DCO application.

6.2.21 Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

Impact on designated sites and sensitive areas

6.2.22 Concerns were raised with regard to the potential environmental impact on designated and sensitive ecological sites within the Project footprint. These included Suffolk Coast and Heaths AONB, RSPB Reserve at North Warren, North Haven Wildlife Site, Stour Marshes, Pegwell Nature Reserve and Pegwell Bay Country Park. County Wildlife Sites (CWS) cited are as follows:

- Suffolk Shingle Beach CWS;
- Aldringham to Aldeburgh Disused Railway Line CWS;
- Great Wood CWS;
- Grove Wood CWS; and
- Leiston Common CWS.

6.2.23 Respondents queried whether it would be possible to use horizontal directional drilling (HDD) underneath wildlife sites to minimise impacts.

National Grid response

6.2.24 National Grid will avoid all national nature conservation sites where possible and look to minimise effects on local nature conservation designations where effects cannot be avoided.

6.2.25 Open cut is the preferred method of cable installation, but where there are sensitive receptors, that can't be avoided, National Grid will consider alternative trenchless installation techniques. An example of this is at the landfall location where they propose to adopt trenchless techniques to avoid the most sensitive receptors.

6.2.26 The likely impacts of the proposed project, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of National Grid's DCO application.

6.2.27 Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

Impact on sites of archaeological and cultural heritage importance

6.2.28 Numerous sites of archaeological and cultural heritage interest have been identified in the Suffolk area through the feedback responses that can potentially be affected by the Project. All the scheme elements have the potential to affect existing or previously unknown sites of archaeological interest. Many of the areas have not been subjected to any systematic archaeological investigations.

National Grid response

6.2.29 The likely impacts of the proposed project on archaeology and heritage, both alone and cumulatively with other projects, will be assessed as part of the EIA that will be submitted as part of National Grid's DCO application.

6.2.30 Preliminary findings are reported in the PEIR that will be made available to support statutory consultation.

Kent onshore cables and overhead lines

6.2.31 It was suggested that the HVAC cable could be buried so that the need for an overhead line is reduced.

National Grid response

6.2.32 Buried solutions for the HVAC connection have been considered but have been discounted on the following grounds:

- a buried cable connection would require the construction of a large sealing end compound adjacent to the existing overhead line within the flood plain. This would have maintenance and flood security risks;
- a buried solution would require drilling under the railway; the increased depth of the railway on an embankment would impact on the rating of the HVAC cables;
- the buried solution would take longer to construct and would have a larger impact in terms of construction activities, vehicle movements and works footprint over the proposed overhead line solution; and
- the high water table will make a buried solution challenging to install, requiring significant dewatering during construction and additional inground infrastructure to stop the cable ducts, which contain the cables, floating to the surface over time.

6.2.33 A decision on the connection option is published at statutory consultation.

Aesthetic design

6.2.34 Feedback was received regarding the aesthetic design of the converter station in Kent. It was suggested that the converter station buildings could be painted green to blend in with the landscape and that the buildings could have pitched roofs (square buildings) or conical roofs (cylindrical buildings) to disguise them as Oast houses which are a feature of Kent.

National Grid response

6.2.35 The convertor station design had not been developed at the non-statutory consultation stage of the project. However, the individual buildings that form the converter station can be designed in various ways. There may be opportunities to incorporate architectural approaches into the design of the converter station buildings included within the application for development consent. The statutory consultation material seeks feedback on the design approaches that could be explored once the Project enters more detailed design stages.

6.2.36 Further information on the design of the convertor stations alongside the architect's visual impressions is provided at statutory consultation.

6.3 Design evolution since non-statutory consultation

6.3.1 Having regard to the feedback, further assessments and surveys, National Grid have refined the Project as follows:

Suffolk

- On balance, Site 3 has been identified as the preferred option to progress. Although both Site 1 and Site 3 could accommodate co-location with up to two converter stations associated with potential future National Grid Ventures' projects, site 3 was considered to offer the greatest flexibility for co-location.
- A landfall between Aldeburgh and Thorpeness, rather than a landfall at Sizewell, has been identified. This is because the Sizewell landfall interacts with more marine and onshore constraints. Additionally, the landfall between Aldeburgh and Thorpeness allows for the potential co-location of up to two other cable corridors associated with potential future National Grid Ventures' projects.
- The proposed Friston substation is include in the proposals, to give a comprehensive consenting position. However it is expected that the proposed Friston substation be built under the existing Scottish Power Renewables consents. A gas insulated switchgear substation is proposed, which has a smaller footprint than the alternative air insulated version. This aligns with what is expected from Scottish Power Renewables to deliver. The 50 m of additional substation footprint is no longer proposed.

Offshore

- A single marine corridor from Suffolk to Kent is proposed, which connects to the proposed landfall between Aldeburgh and Thorpeness in Suffolk, removing the alternative northern option which connected to the discounted landfall at Sizewell.

Kent

- An overhead line connection from the proposed Minster substation into the existing high voltage electricity transmission network is proposed. This is because there are technical constraints to building an underground cable in this area.

6.3.2 National Grid are also presenting detailed draft Order Limits. The draft Order Limits form the anticipated boundary of the entire area within which Sea Link could take place, including temporary and permanent works and construction accesses, along with works to existing infrastructure.

6.4 Project at statutory consultation

6.4.1 The Project proposed by National Grid that is being taken to statutory consultation consists of three elements, as follows:

Suffolk

- A connection from the existing transmission network via Friston Substation, including the substation itself. Friston Substation already has development consent as part of other third-party projects. If Friston Substation has already been constructed under another consent, only a connection into the substation would be constructed by the project.
- A HVAC underground cable of approximately 1.7 km in length between the proposed Friston Substation and a proposed converter station (below).
- A 2 GW HVDC converter station up to 26 m high plus external equipment (such as lightning protection & railings for walkways) near Saxmundham.
- A HVDC underground cable connection of approximately 10 km in length between the proposed converter station near Saxmundham, and a transition joint bay (TJB) approximately 900 m inshore from a landfall point (below) where the cable transitions from onshore to offshore technology.
- A landfall on the Suffolk coast (between Aldeburgh and Thorpeness).
- The proposals in Suffolk have been developed as a standalone project, but also include opportunities to co-locate infrastructure for up to two further NGV projects at the converter station site, cable corridors and the landfall location.

Offshore

- Approximately 130 km of subsea HVDC cable, running between the Suffolk landfall location (between Aldeburgh and Thorpeness), and the Kent landfall location at Pegwell Bay.

Kent

- A landfall point on the Kent coast at Pegwell Bay.
- A TJB approximately 800 m inshore to transition from offshore HVDC cable to onshore HVDC cable, before continuing underground for approximately 2 km to a new converter station.
- A 2 GW HVDC converter station, up to 26 m high plus external equipment (such as lightning protection & railings for walkways), near Minster. A new substation would be located immediately adjacent.
- Removal of approximately 1 km of existing HVAC overhead line, and installation of approximately 2.25 km of new HVAC overhead line from the substation near Minster and the existing Richborough to Canterbury overhead line.
- The project also includes modifications to sections of existing overhead lines in Suffolk and Kent, diversions of third-party assets, and land drainage from the construction and operational footprint. It also includes opportunities for environmental mitigation, compensation and enhancement (which could include hedgerow creation, native tree planting or funding local wildlife groups). The construction phase will involve various temporary construction activities including overhead line diversions, working areas for construction equipment and machinery, site offices, storage, accesses, bellmouths, and haul roads, as well as watercourse crossings and the diversion of public rights of way (PROWs).

7. Next steps

7.1.1 The non-statutory consultation formed the first stage of consultation for the Project and provided consultees with an opportunity to provide their views on the emerging proposals in advance of further project design.

7.1.2 Each consultation response received has been analysed, and regard has been had to it by National Grid.

7.1.3 The feedback from this consultation has now been used to inform the design for the Project as it has been developed further.

7.1.4 Design work has now been undertaken and statutory consultation presents the proposed route.

7.1.5 A Statement of Community Consultation has been published and the document sets out National Grid's approach to statutory consultation. A draft version of this document was shared with local authorities for comment, and the final version is published for statutory consultation.

7.1.6 Following the statutory consultation, further design work will be carried out, taking into account the responses received at statutory consultation and a final design prepared, along with the documents required for the DCO application.

7.1.7 The Consultation Report, submitted as part of the DCO application, will outline how both non-statutory and statutory consultations were undertaken, the feedback received and how National Grid has responded to this feedback. This non-statutory consultation report will inform and be appended to the Consultation Report.

8. References

Ref 1: National Grid Electricity Transmission plc, Corridor Preliminary Routeing and Siting Study (CPRSS) Report (Oct 2022) [online] Available at: https://www.nationalgrid.com/electricity-transmission/document/146256/download

Ref 2: National Grid Electricity Transmission plc, Options Selection and Design Evolution Report (Oct 2023) [online] Available at: https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

Ref 3: National Grid Electricity Transmission plc, Strategic Options Report (Oct 2023) [online] Available at: https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

Ref 4: National Grid Electricity Transmission plc, Guide to Interacting With Our Consultation Plans and Drawings (Oct 2023) [online] Available at: https://www.nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

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Appendix A Non-Statutory Consultation Strategy

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Sea Link

Consultation strategy

October 2022

nationalgrid

This document sets out how National Grid Electricity Transmission intends to carry out pre-application non-statutory consultation in 2022 on the Sea Link project.

Our proposals include building an offshore high voltage direct current (HVDC) link between Suffolk and Kent, to address network constraints arising from existing and new nuclear generation, interconnectors and new renewable energy generation connecting into the network.

Representatives of Suffolk County Council, Kent County Council, Dover District Council, Thanet District Council and East Suffolk Council have been consulted about the proposed approach to consultation.

Following the initial stage of consultation, we will refine our plans using the feedback you have given us, and we will hold a second, statutory public consultation in 2023. Before that, we will consult with these local authorities to find the best way of running the consultation, which we will describe in a statement of community consultation (SoCC).

Contact us

nationalgrid.com/sealink
contact@sealink.nationalgrid.com
0808 134 9569

Contents

1. About National Grid

National Grid sits at the heart of Britain's energy system, connecting millions of people and businesses to the energy they use every day.

It is our vision to be at the heart of a clean, fair and affordable energy future.

We bring energy to life – in the heat, light and power we bring to our customers' homes and businesses; in the way that we support our communities and help them to grow.

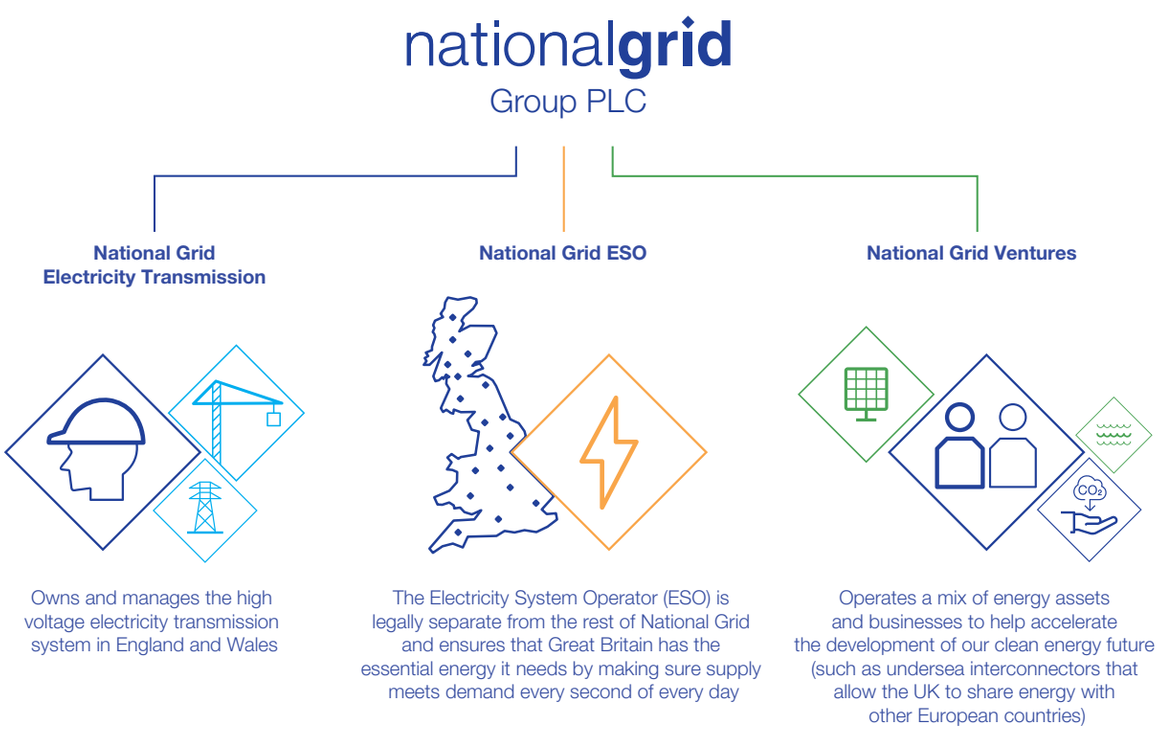
National Grid Electricity Transmission (NGET) owns, builds and maintains the network in England and Wales. It is NGET that is developing plans for the Sea Link project.

Within the National Grid Group there are distinctly separate legal entities, each with their individual responsibilities and roles. These are shown in the diagram below.

Each of the different entities within the National Grid Group are working to build a cleaner, fairer and more affordable energy system that serves everyone – powering the future of our homes, transport and industry.

Our general duties

Under the Electricity Act 1989, National Grid Electricity System Operator (ESO) and NGET must develop transmission network proposals in an efficient, coordinated, and economical way, and in a way which considers people and places. Options to deliver additional network capability and the options we take forward are evaluated against these statutory duties.



The world we live in is changing, and the UK is at a turning point as we embrace the enormous opportunities a cleaner, greener future brings. The net zero economy will be underpinned by affordable clean electricity. A clean, reliable power system is the foundation of a productive net zero economy as we electrify other sectors.

The UK has amongst the largest offshore wind capacity in the world, which is to achieve net zero by 2050. Put simply, this means that we will remove the same amount of greenhouse gases from the atmosphere as we produce.

As a country we are already making progress. The UK has one of the largest offshore wind capacities in the world, with some 11 gigawatts (GW) in operation.

2020 was the greenest year on record for Britain's electricity system. Spring 2020 saw the longest run since the industrial revolution without burning coal, stretching almost 68 days. 2020 was also a record breaking year for renewables. Wind generation records were broken several times during the year, peaking at 59.9 per cent of the electricity mix on August 26. Solar power too set new records with 9.7 GW of power being produced, and its highest share of the electricity mix reaching 34 per cent on several occasions in May.

In April 2021, Great Britain's electricity transmission network set a record for being the greenest it has ever been and in April 2022, wind power generation peaked at 19.9 GW, a new record.

However, more needs to be done. A net zero future for Britain requires significant upgrades to our energy infrastructure to deliver new renewable, low carbon energy from where it is produced to where it is needed.

Decarbonising the energy system means replacing fossil fuel-based electricity production with renewable and low carbon energy technologies such as from wind turbines and nuclear power. Increasing the energy generated from offshore wind is a key part of achieving net zero and the Government's British Energy Security Strategy sets an ambitious target to deliver up to 50 GW of offshore wind connected to the network by 2030 - enough to power every home in the UK.

We have explained how we set out to meet these responsibilities and our commitments relating to engagement and consultation about our proposal in our Stakeholder, Community and Amenity Policy.

2. The project

National Grid Electricity Transmission is proposing to reinforce the electricity transmission network across Suffolk and Kent.

This would be achieved by the construction and operation of a new 2 gigawatt (GW) high voltage direct current (HVDC) link approximately 140 km in length and predominantly offshore. This includes HVDC converter stations and high voltage alternating current (HVAC) connections onto the national electricity transmission system.

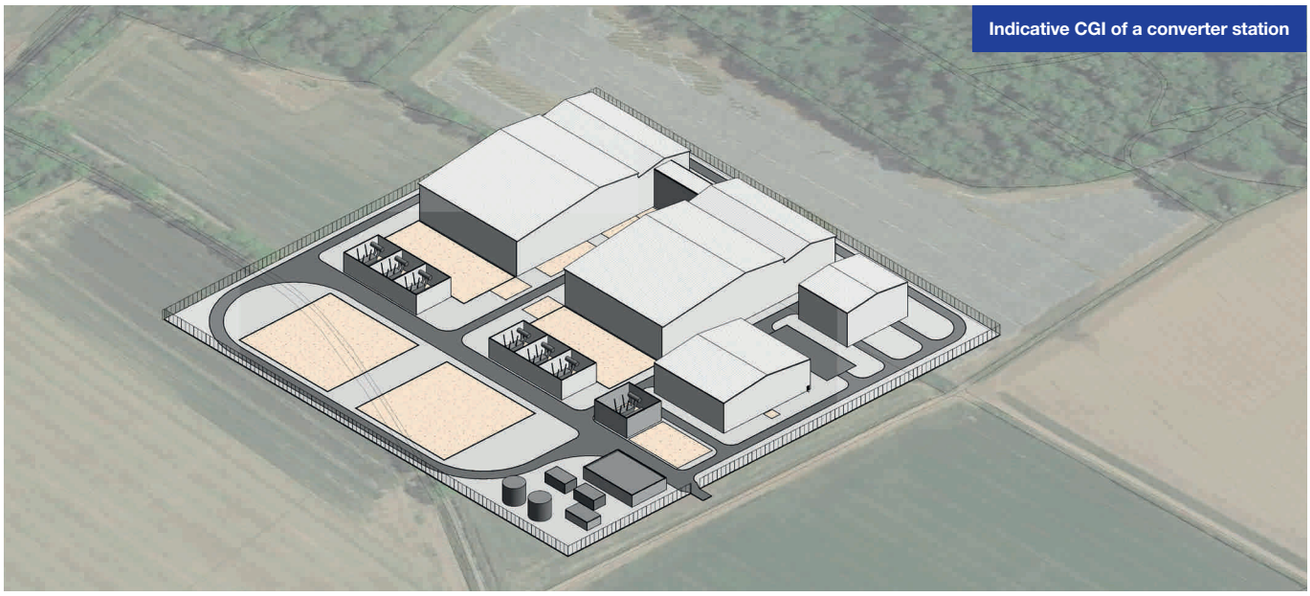
From north to south, the reinforcement would comprise:

- an extension of the proposed substation at Friston to accommodate an extra bay for Sea Link to connect into
- a HVAC underground cable connection between the proposed Friston 400 kV substation and a proposed HVDC converter station (which converts AC to DC, and vice versa). This will also include underground cable joint bays (connecting different sections of underground cables together) along this part of the route
- a new 2 GW HVDC converter station in Suffolk, including essential utility services such as electric, water and drainage
- a HVDC underground cable connection from the HVDC converter station to the transition joint bay up to 1 km from the Suffolk landfall location (where the cable transitions from offshore to onshore). There will also be underground cable joint bays along this part of the route
- a buried subsea HVDC cable between the Suffolk coast and the Kent Coast, approximately 130 km in length
- restringing (replacing the existing conductor for a different type that is able to carry more power) of the Richborough to Canterbury 400 kV overhead line, which is necessary to cater for the increased power flows
- a HVDC underground cable connection from the transition joint bay up to 1 km from the Kent landfall location (where the cable transitions from offshore to onshore) and onto the Kent HVDC converter station location. There will also be underground cable joint bays along this part of the route
- a new 2 GW HVDC converter station in Kent which includes the essential utility services such as electric, water and drainage
- a HVAC connection (either underground cable or overhead line) between the proposed Kent HVDC converter station and the Richborough to Canterbury overhead line.

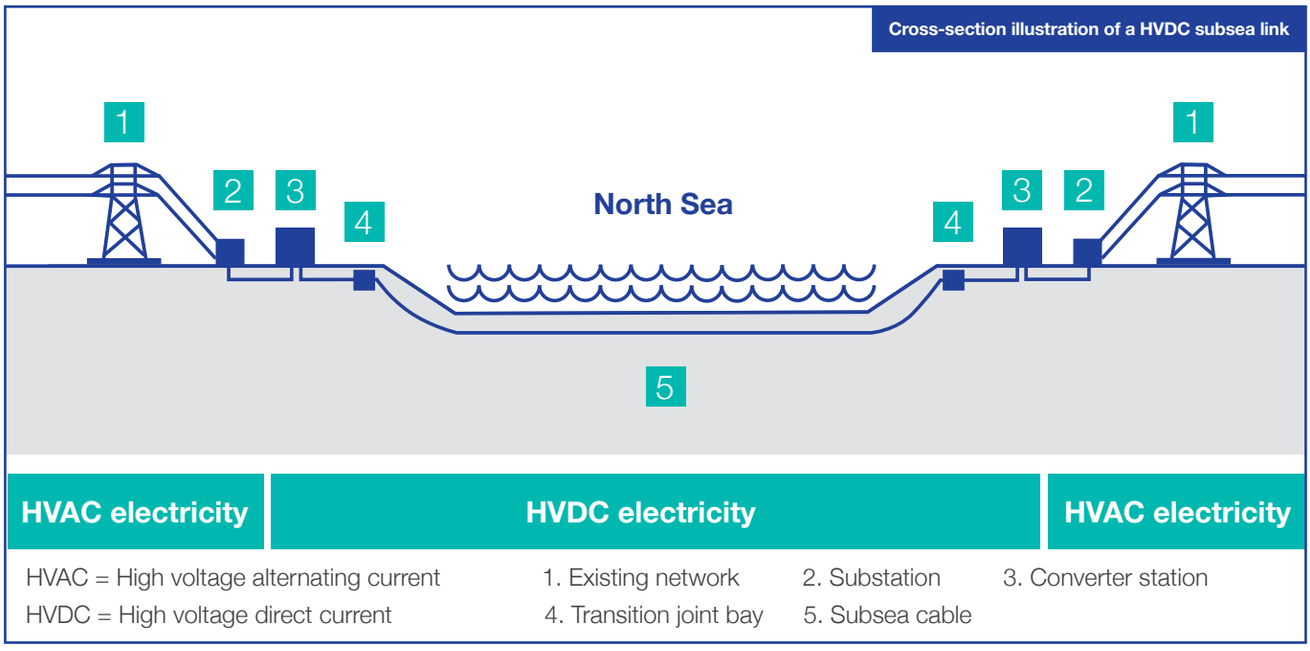
Other elements required to facilitate construction and operation of the project include, but are not limited to, temporary uses of land for construction activities such as working areas for construction equipment and machinery, site offices, welfare, storage, access, and haul roads.

What is a converter station?

Converter stations are the key components of HVDC links. They enable electricity to be converted from alternating current to direct current or vice versa depending on the direction of operation. Converter stations contain specialist electrical equipment; some of this must be located indoors in buildings potentially up to 30 m tall, while some could be located outdoors or in smaller buildings. The total footprint of the converter station is approximately 6 hectares but additional land will be needed during construction.



Indicative CGI of a converter station



Cross-section illustration of a HVDC subsea link

HVAC = High voltage alternating current
HVDC = High voltage direct current

1. Existing network
2. Substation
3. Converter station
4. Transition joint bay
5. Subsea cable

3. Proposal for consultation

We want to ensure that all stakeholders have the opportunity to provide feedback. Given the current status of work, our non-statutory consultation has a number of aims, to:

- introduce the project to the public and provide an overview
- explain why we need to build the reinforcement
- set out options that have been considered and how we made the decision on the corridor and graduated swathe being proposed
- present our proposed corridors with graduated swathe
- present our proposed high voltage direct current converter sites
- present our proposed marine route and cable landing locations
- give stakeholders the opportunity to provide feedback on our work to date
- outline next steps.

The feedback received throughout the first stage of consultation will inform how Sea Link is developed further and will influence the next stage in the design of the project. Our next stage of consultation is planned for 2023.

Exploring opportunities for coordination

In response to stakeholder feedback, NGET and National Grid Ventures (NGV) are exploring:

- in Suffolk, opportunities to coordinate NGV's projects, EuroLink and Nautilus, and NGET's project, Sea Link, including separately consulting on shared: converter station sites; cable route corridors; and landfalls
- opportunities with other developers to minimise the impact of construction on the environment and local communities
- offshore coordination with other developers as part of the Offshore Transmission Network Review

In exploring these opportunities to coordinate, NGV's Eurolink and NGET's Sea Link are consulting at the same time. We hope that by sharing our proposals, people feel better informed about how different parts of the infrastructure could fit together and can share their views on each of the projects accordingly.

4. Consultation timing

The non-statutory consultation will be held over an eight-week period, between Monday 24 October and Sunday 18 December 2022.

Consultation area

We have developed a primary consultation zone (PCZ) and a secondary consultation zone (SCZ), to inform our engagement activities. These consultation zones are geographical areas that sit within a certain distance of the proposed project. They will be used to help us tailor our communications and to engage more effectively with stakeholders across the area.

Primary consultation zone

The PCZ includes properties that lie within a 1 km radius of the proposed underground cable and overhead line route and 2 km around the converter site locations. Where appropriate, the PCZ has been extended to include whole streets rather than dissecting hamlets or neighbourhoods.

The PCZ includes stakeholders who will be most directly affected by the proposal. We want to ensure they are kept fully informed about the project and we will actively seek to engage with them.

Before we start our consultation, we will mail a newsletter to all properties within the PCZ. The newsletter will include:

- an introduction to the project and overview of the proposal
- details of the project website, consultation and how stakeholders can discuss the proposals with the project team through local public information events, and online webinars
- information on how people can provide feedback online, request copies of materials in printed form or in alternative formats, and how they can contact the project with further questions.

Secondary consultation zone

The SCZ includes properties that lie within a 4 km radius of the swathes that are to be consulted on. Where appropriate, the SCZ has been extended to include whole streets rather than dissecting hamlets or neighbourhoods.

We will seek to raise awareness of the project and public consultation with stakeholders within the SCZ through the broad dissemination of information. This will include:

- placing advertisements for the consultation and engagement events, along with information on how to get involved, in prominent community locations
- placing advertisements in local newspapers
- providing consultation material deposit points
- placing advertisements on social media to target different demographics and to include those who might not otherwise engage with the consultation
- providing contact details for queries or to request paper copies of project documents.

5. Materials

All project documents will be made available as below:

Project background document, to provide an overview of the project

Corridor preliminary routeing and converter station siting report

Summary newsletter, to provide a high-level description of the proposal and invite people to our consultation events

Detailed maps of the proposals

Feedback form

Dedicated project website

Documentation on deposit

All important project documents will be available on the consultation website. We will also place paper copies of important documents at suitable, publicly accessible locations along the route of the proposed connection. These will be available to stakeholders who are not able to access the project website and will include:

Project background document, to provide an overview of the project

Corridor preliminary routing and converter station siting report

Summary newsletter to provide a high-level description of the proposal and invite people to our consultation events

Feedback form

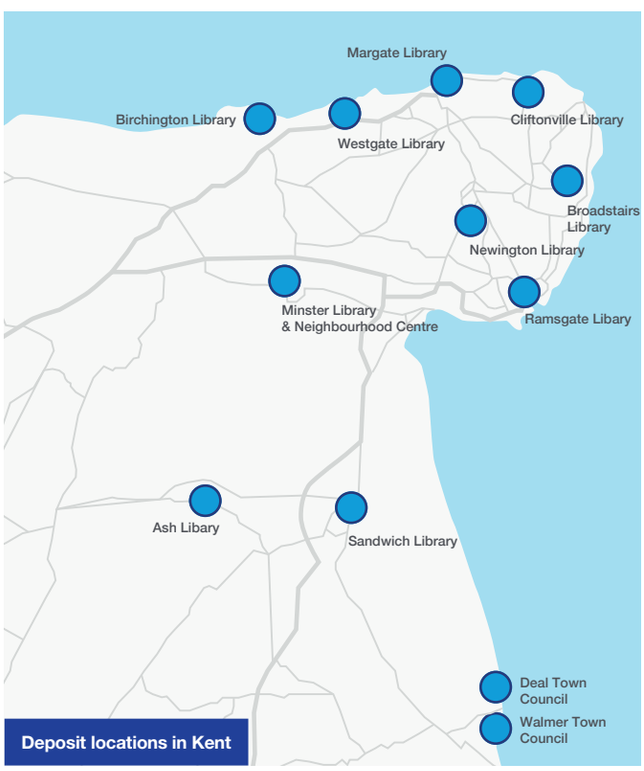
Postage paid envelopes

Consultation materials deposit points

We will set up consultation materials deposit points at the following locations:

Kent

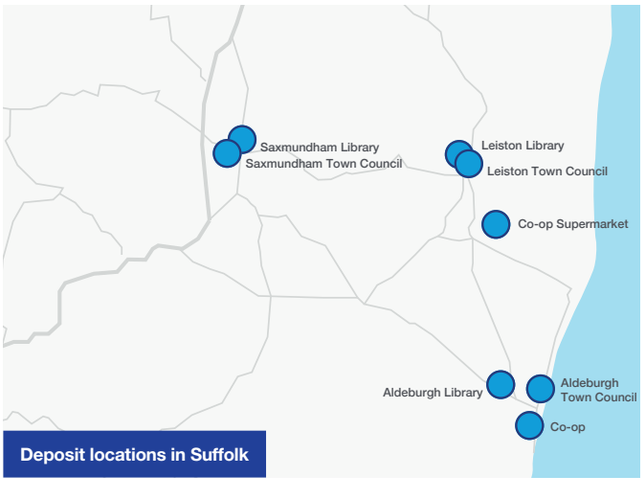
- Ash Library, 11 Queen's Rd, Ash, Canterbury, CT3 2BG
- Broadstairs Library, the Broadway, Broadstairs, CT10 2BS
- Birchington Library, Alpha Road, Birchington, Kent, CT7 9EG
- Cliftonville Library, Queen Elizabeth Avenue, Margate, Kent, CT9 3JX
- Deal Town Council, High St, Deal, CT14 6TR
- Margate Library, Thanet Gateway Plus, Cecil Street, Margate, Kent, CT9 1RE
- Minster-in-Thanet Library, 4A Monkton Road, Minster, Ramsgate, Kent, CT12 4EA
- Newington Library, Marlowe Academy, Marlowe Way, Ramsgate, CT12 6NB
- Ramsgate Library, Guildford Lawn, Ramsgate, CT11 9AY
- Sandwich Library, 13 Market Street, Sandwich, Kent, CT13 9DA
- Walmer Town Council, 62 The Strand, Walmer, Deal CT14 7DP
- Westgate Library, Minster Road, Westgate-On-Sea, Kent, CT8 8BP



Deposit locations in Kent

Suffolk

- Aldeburgh Library, Victoria Rd, Aldeburgh IP15 5EG
- Aldeburgh Town Council, Moot Hall, Market Cross Pl, Aldeburgh IP15 5DS
- Co-op, 117 High Street, Aldeburgh, Suffolk IP15 5AR
- Co-op, Sizewell Rd, Leiston IP16 4AE
- Leiston Library, Old Post Office Square, Main St, Leiston IP16 4ER
- Leiston Town Council, Main St, Leiston IP16 4ER
- Saxmundham Library, Block B, Street Farm Rd, Saxmundham IP17 1AL
- Saxmundham Town Council, Block B, Street Farm Rd, Saxmundham IP17 1AL



Deposit locations in Suffolk

6. Stakeholder briefings and meetings

In the run up to, and during the early weeks of, our consultation we will offer briefing meetings with the following stakeholders:

- members of Parliament, where all or part of their constituencies lie within the primary and secondary consultation zones
- elected representatives of district and county councils that fall within the primary consultation zone (PCZ)
- Kent County Council and Suffolk County Council officers
- East Suffolk Council, Thanet and Dover District Council officers
- town and parish councils, where all or part of the parish fall inside the PCZ
- action groups SEAS and SASES.

We will consider all requests to engage with other organisations. These may include:

- third party groups, such as local enterprise partnerships and business groups
- community groups or residents' associations with a close geographical relationship to the project
- parish councils which fall outside of the PCZ
- interest groups with a close relationship to the project
- those with close links to public rights of ways, such as the Thanet Ramblers, British Horse Society and Natural England.

These stakeholders will be sent digital copies of project information (paper copies will be provided upon request, or where digital receipt is not possible) and details on how to engage with the project team. We will keep them updated at key project milestones.

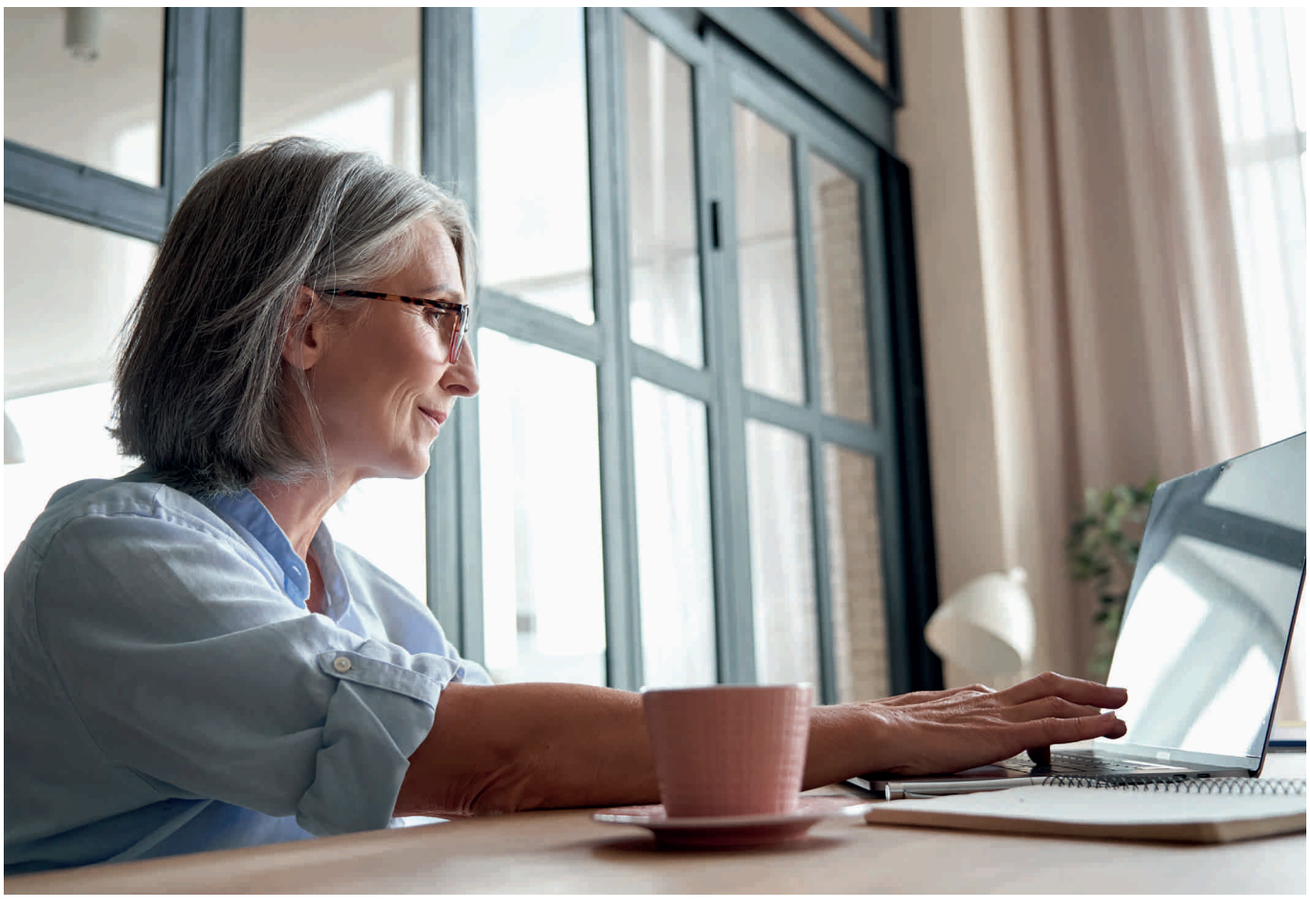
7. Public consultation

We are proposing to use a blend of digital and traditional engagement channels for this public consultation.

This will involve using the project website and other digital tools to present information on the project and gather feedback on our proposals. This approach is widely accepted for consultations on infrastructure proposals.

We remain committed to engaging with all stakeholders and we want to ensure that all our engagement and consultation is inclusive and that it will reach those who otherwise may not engage with us.

We also recognise that some people may not have access to or use of the internet. We have set out more details in section 10 on how we will make our consultation fully accessible to those who do not have digital access.



Project website

The website will be fully accessible for people using assisted technologies. It includes:

Function	Rationale
Document library	The document library will be the 'go to' digital location for all project information. It will ensure that all project information is available in one, easy to access location. We will encourage third parties hosting deposit locations (such as local authorities and libraries) to provide links to this page. All available documents will be easy-to-read and accessible for members of the public.
'About Sea Link' page	Project information will be laid out in a simple, visual and interactive format, with pointers and instructions throughout to aid easy navigation.
'Consultation and next steps' page	Details of dates and timings of public information events and webinars.
FAQs	This will be kept up to date throughout the consultation period to help visitors find answers to frequently asked questions.
Project videos, infographics and animations	A way of explaining the plans in a way that is accessible and understandable to the general public, ensuring greater levels of inclusion.
Project update section	Enabling members of the public to stay updated on the project and provides an easily accessible place for all recent updates to be hosted.
Project contact details	We will publish telephone, email and freepost details for the public to get in contact and request further details or ask questions.
Feedback form (including a downloadable version)	The online form will enable members of the public to provide their feedback easily and submit to the project team.
Webinar sign-up function and face-to-face event details	To enable members of the public to sign-up to our webinars and to find out details of where public information exhibitions will be held.
GDPR (legal statement)	All personal data will be held in accordance with the General Data Protection Regulation (GDPR) (EU) 2016/679 and personal data will not be transferred outside of the European Economic Area, or used for purposes other than those outlined. The website will be made accessible for all users through the provision of audio guides, videos, other visual material, and the ability to request translation. The website will include a full accessibility statement and privacy notice.

Interactive map

We have created an interactive map which shows the entire route and local points of interest that helps users to way-find. This will be hosted on the project website.

Public consultation webinars

A hybrid programme of public events and webinars will provide stakeholders opportunities to find out more about the proposals and to provide feedback.

At least one webinar will be recorded and available on the project website for playback by those who cannot attend the webinar sessions. The sessions will also include time for questions and answers. Different webinars have been organised to focus on specific geographical areas and the programme will be widely advertised.

Six project webinars will be held throughout the consultation period at the following date and time:

Date	Time	Topic
Tuesday 22 Nov Tuesday 29 Nov	6pm – 7pm 6pm – 7pm	Our proposals in Suffolk
Wednesday 23 Nov Wednesday 30 Nov	6pm – 7pm 6pm – 7pm	Our proposals in Kent
Thursday 24 Nov Thursday 1 Dec	6pm – 7pm 6pm – 7pm	Marine route proposals

Public consultation events

We will hold face-to-face events on eight separate days throughout the consultation period.

Any recurring questions will be added to the Frequently Asked Questions webpage, hosted on our project website.

Suffolk

Date	Time	Location
Thursday 10 Nov	1pm – 8pm	Old Generator Station, King's Field, Old Generator Station, Aldeburgh, IP15 5HY
Friday 11 Nov	1pm – 8pm	Friston Village Hall, Church Road, Friston, Saxmundham, IP17 1PU
Saturday 12 Nov	10am – 5pm	The Fromus Centre, The Saxmundham Hub, Street Farm Road, Saxmundham, IP17 1AL

Kent

Date	Time	Location
Thursday 17 Nov	9am – 4pm	Guildhall, Cattle Market, Sandwich, CT13 9AH
Friday 18 Nov	1pm – 8pm	Newington Community Centre, Princess Margaret Avenue, Ramsgate, CT12 6HX
Saturday 19 Nov	10am – 5pm	Cliffsend Village Hall, 55 Foads Ln, Cliffsend, Ramsgate, CT12 5JH

Events will be held at suitable, publicly accessible venues that are within or near to the consultation zone and close to the proposed converter station locations.

Paper copies of all relevant consultation materials will be made available at each exhibition. There will also be a series of information banners and maps to present the proposals. We will include details of where and when the events are taking place on the project website, in newspaper adverts, social media adverts and direct mailing.

If events need to be cancelled for any reason, we will endeavour to hold an online event at the published time. Online webinars will be organised to enable the project team to present the same information as that at the public events to a large number of interested stakeholders.

8. Feedback

We want to make providing feedback on our proposal as easy as possible for all stakeholders.

Paper copies of the feedback form will be available at consultation material deposit points. Visitors to our project website will be able to fill out a feedback form online and send it back directly or download and print and return via our freepost address.

Members of the public will also be able to telephone our freephone contact number and request a paper copy of the feedback form, enabling them to send their feedback to the project team free of charge; alternatively feedback can be taken over the phone. Members of the public and key stakeholders can also submit feedback and comments regarding the proposal via the designated project email address.

A process will be implemented to address relevant design changes to the proposed draft corridor identified through feedback received from the non-statutory consultation. The process will ensure that each identified design change will be effectively assessed by National Grid Electricity Transmission's specialist teams covering environment, design and construction and land rights.

9. Advertisement

We will use advertising to raise awareness of the public consultation on the project proposal.

Print media

To raise general awareness of the project within the area and to advertise the consultation programme, we will place advertisements in key local and regional publications. These advertisements will help ensure that stakeholders without access to the internet, or who do not frequently use websites which will receive targeted virtual advertisement, are made aware of the consultation.

Advertisements will be quarter page prints, published in the run up to the start of public consultation, and during the consultation period, to inform stakeholders of deadlines for feedback and public information event and webinar dates.

Social media

We will use social media to advertise the consultation. We will target advertisements to the postcodes within the primary consultation zone (PCZ). Social media advertisement may draw in stakeholders who wouldn't otherwise engage with the consultation, for example young people. We will also ask local authorities, and other identified groups, to use their own social media channels to advertise the consultation.

10. Seldom heard groups and accessibility strategy

We want to ensure that all our engagement and consultation is inclusive and that it will reach those who otherwise may not engage with us.

We are developing a strategy on how to engage groups that are considered as seldom heard. 'Seldom-heard groups' refers to under-represented people who are less likely to be heard by professionals and decision-makers, so are less likely to engage or be engaged by traditional or conventional methods of engagement.

While the coronavirus pandemic had presented us with a situation where digital consultation was a necessity, we recognise that some people and groups may not have access to, or use of, the internet. We want to engage equally with all stakeholders, irrespective of access to digital communications.

To ensure our consultation is accessible to all, we will:

- directly mail a newsletter with project information to all stakeholders within the primary consultation zone (PCZ); and provide details of how to access paper copies of other project documents and provide feedback by post
- make important information available in both digital and non-digital formats and we will provide alternative formats for those who need them, as set out in our seldom heard strategy
- make paper copies of the information available at deposit locations, along with contact details for the project team who will be able to provide further assistance
- send consultation packs to those who are unable to access the material online; advertise the consultation and project contact details through a variety of traditional methods and social media.

Seldom heard groups include the following:

- ethnic minority groups and people for whom English is a second language
- the traveller community
- the elderly
- people with visual and hearing impairments
- people with limited mobility and / or disability
- the 15-19 and 20-39 age groups
- carers and families with young children
- economically inactive individuals
- geographically isolated communities or individuals.

We will discuss how best to engage with seldom heard stakeholders with local authority leads on seldom heard engagement. Our strategy for engaging with seldom heard groups and interest groups will be developed before the start of the non-statutory consultation. It will include the use of the communication tools set out in the table opposite.

We welcome thoughts and input from local authorities on who the key interest groups are in their areas. We expect those interest groups will include:

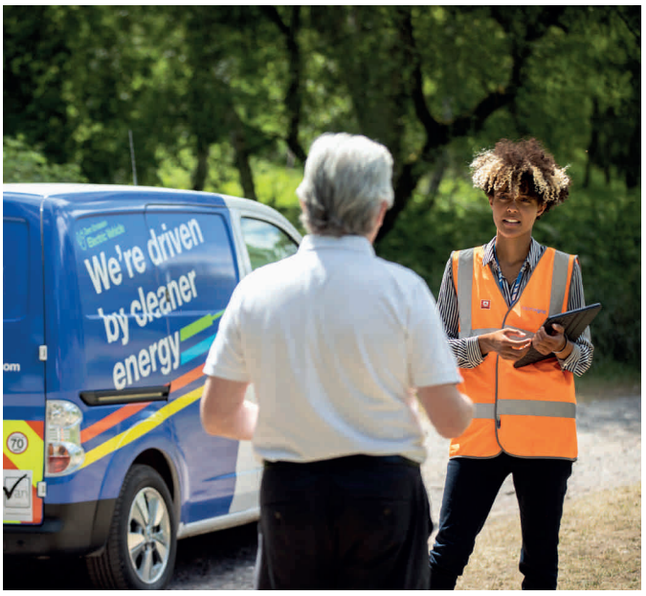
- business groups, such as local enterprise partnerships and chambers of commerce
- community groups, such as residents' associations with a close geographical relationship to the project
- educational establishments, such as universities, colleges and schools.

Activity	Objective(s)	Result
Direct engagement with representative groups and organisations	To build up links to groups and organisations we identify as representing seldom heard sections and interest groups in local communities. These could include community groups, youth groups, business groups, activity centres, ethnic minority groups.	National Grid can make use of existing communications channels that these community groups have in place to communicate with a wider audience of harder to reach further groups and individuals.
Engagement with ambassadors / champions (for example, parish councils which have their own communications channels)	To facilitate wider consultation beyond traditional channels. To assist the project team in identifying likely issues and concerns from seldom heard audiences and ways to overcome them.	Feedback is received from seldom heard representatives and individuals.
Events and webinars, dates and times for which will be advertised through the following channels: • **printed materials** • **press releases** • **email/e-shot** • **paid advertising** • **social media advertising.**	To engage with a wide range of audiences and spread awareness of the proposal and consultation to those who may not otherwise hear about them or have the opportunity to participate. These may be integrated with other consultation activities, such as the programme of digital consultation events.	To enable participation in the consultation process.

Seldom heard and interest groups contact database

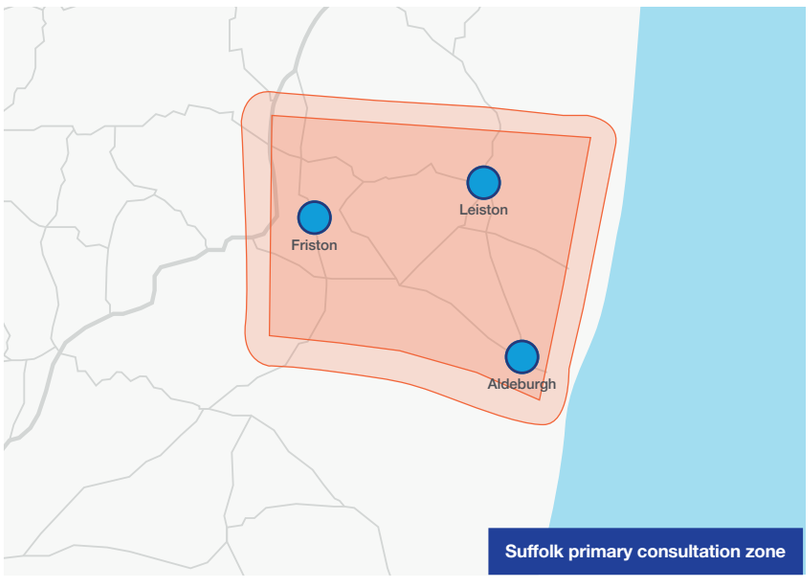
In addition to our engagement with local authorities, we have created a database of identified relevant contacts of seldom heard community groups, along with other interest groups and organisations. We will use this contact database to ensure these groups and organisations are kept up to date with the development of the scheme through regular mailing, telephone, digital and face to face contact.

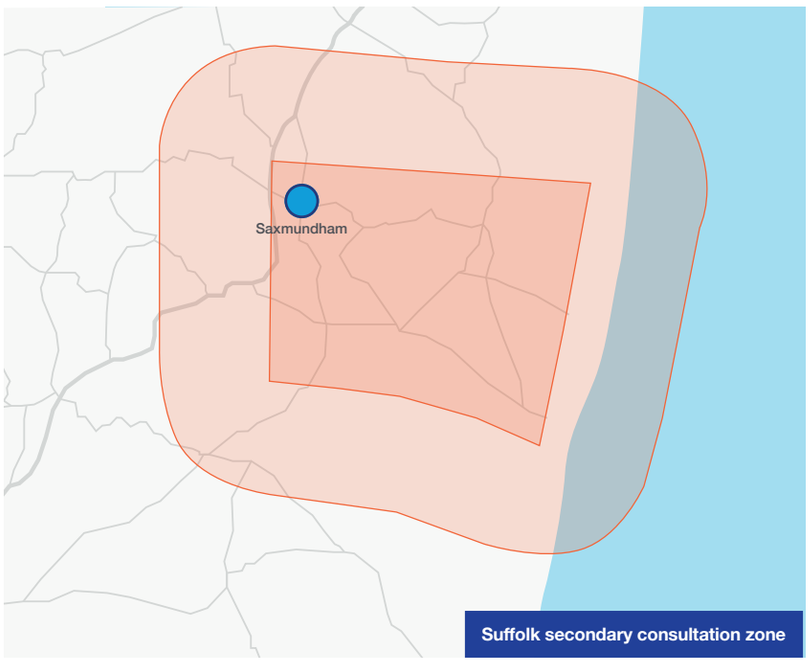
We will also monitor the success of our communications tools to test the suitability of our approach to engagement. Depending on the reception of our early communications with these interest groups, we will adjust our approach to engagement accordingly.

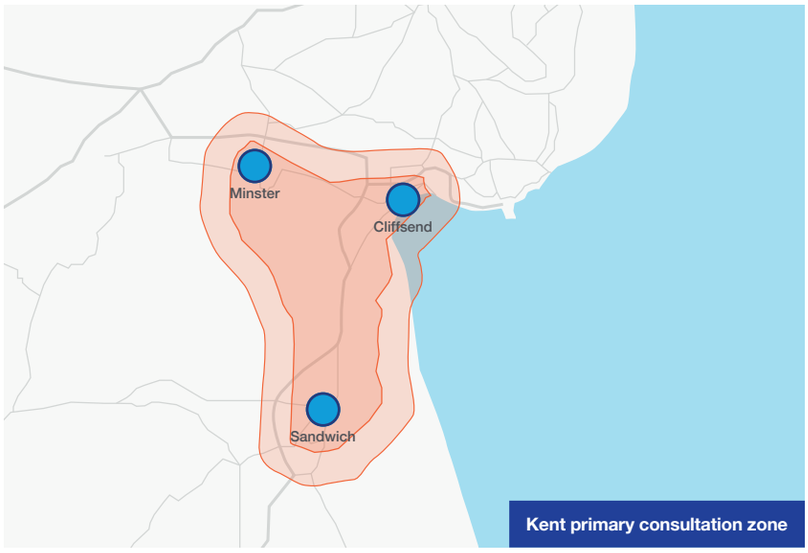


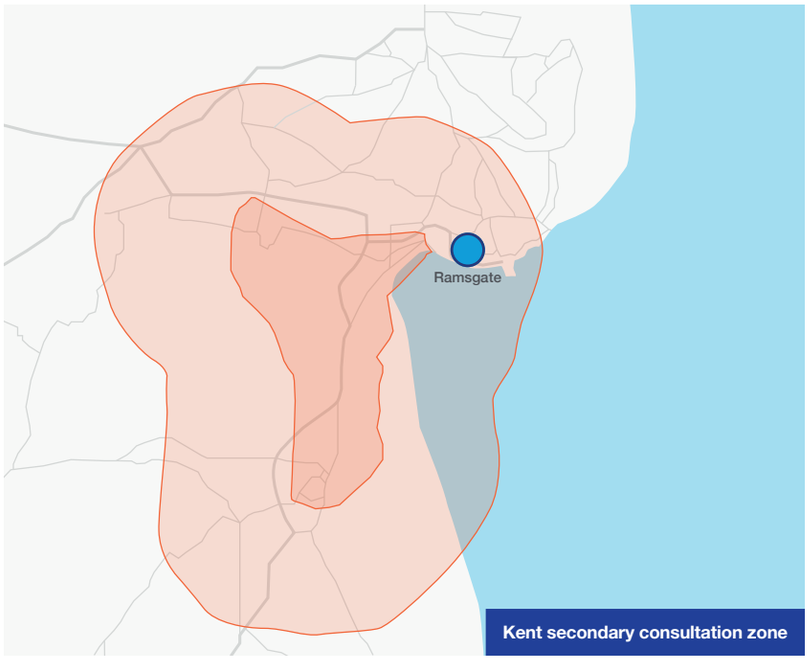
11. Appendices

The maps below represent out consultation zones. The darker shade represents our primary consultation zone. The outer border of the primary consultation zone map represents a 1 km buffer. The outer border on the secondary consultation zone maps represent a 4 km buffer around the primary consultation zone.






Minster
Cliffsend
Sandwich
Kent primary consultation zone


Ramsgate
Kent secondary consultation zone

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

nationalgrid.com

Appendix B Project Newsletter

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Sea Link

nationalgrid

Community newsletter
October 2022

National Grid Electricity Transmission is consulting on proposals for Sea Link, a new underground and subsea electricity link between the proposed Friston substation in Suffolk and Richborough in Kent.

The need for reinforcement

The Government's ten point plan for a green industrial revolution, together with the net zero strategy and the British energy security strategy, is driving unprecedented investment into new renewable and low carbon electricity generation. This includes the target of up to 50 gigawatts (GW) of offshore wind generation by 2030.

At the same time, electricity demand is set to increase as other sectors of the economy move away from fossil fuels and increasingly rely on renewable and low carbon electricity.

This will put significant pressure on the national electricity transmission system, the network of pylons, substations and cables that takes energy from where it's generated to where it's used. The network needs to be reinforced so that electricity continues to flow securely and reliably around the UK.

National Grid Electricity Transmission (NGET) is planning several major reinforcement projects needed to meet this challenge; Sea Link is one of those reinforcements.

Why Suffolk and why Kent?

A growing amount of low carbon and renewable energy generation is scheduled to connect to the network up and down the east coast including Suffolk. Reinforcing the network here is vital if we are to make efficient use of these new sources of power.

The network in the south of England is experiencing a similar increase in generation. Its proximity to the continent makes Kent an ideal location for interconnectors (undersea electricity links to different countries) and several already operate here.

The network needs reinforcing so that in the future there will be sufficient transmission capacity in the region.

Sea Link creates a shortcut between the electricity network in Kent and Suffolk and offers a mutual benefit to both. It will help carry excess wind generation to the interconnectors in Kent and it will carry interconnector imports from Kent onto the East Anglian network and beyond to meet energy demands.

What is Sea Link?

The Sea Link proposal includes:

- two high voltage direct current (HVDC) converter stations (which converts AC to DC, and vice versa), one in Kent and one in Suffolk
- underground and subsea electricity cables between these two stations
- an underground cable connection to the proposed Friston substation in Suffolk
- an underground cable or overhead line connection to the existing Richborough to Canterbury overhead line in Kent.

What are the proposals in Suffolk?

In Suffolk we are proposing:

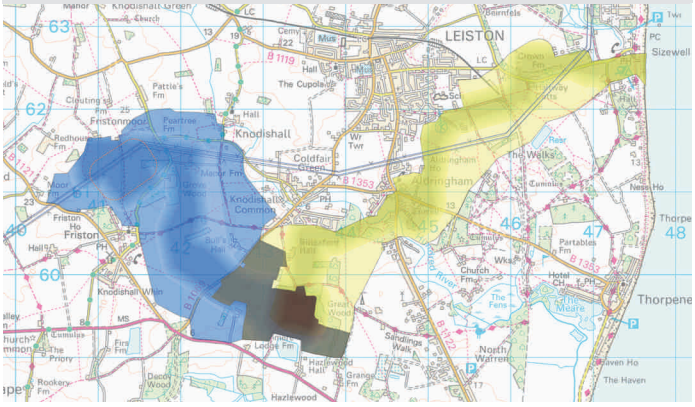
- a 2 GW HVDC converter station
- a high voltage alternating current (HVAC) underground cable connection between the converter station and the proposed Friston substation
- an extension to the proposed Friston substation, typically up to 50 m
- a HVDC underground cable connection between the converter station and a landfall point on the coast, where it transfers to a marine cable.

We are asking for feedback on proposals for where the underground cables and the converter station should go. We have identified five potential cable routes to two potential converter station sites. These are illustrated on maps along with more details on the project in our consultation materials.

Suffolk site 1 alternative

Key

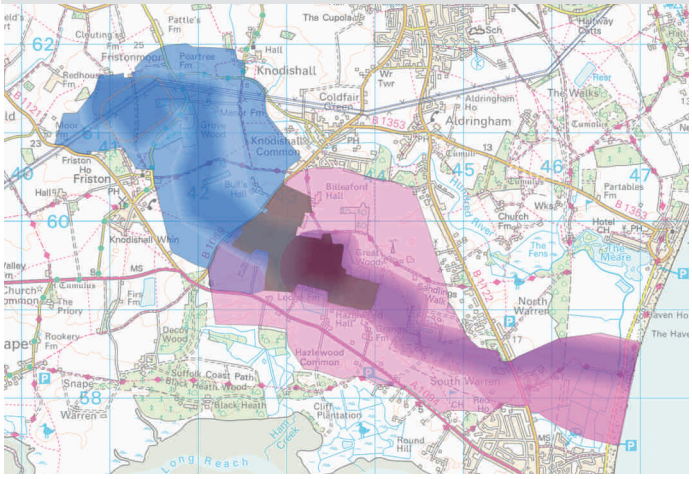
- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 1
- HVDC corridor and graduated swathe
- HVAC corridor and graduated swathe



Suffolk site 1 emerging preference

Key

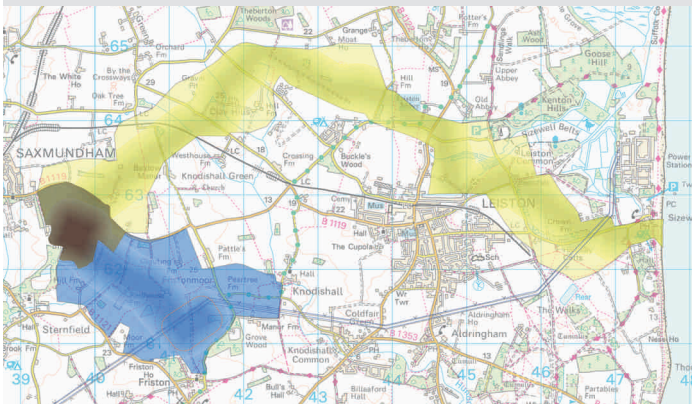
- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 1
- Preferred HVDC graduated swathe
- HVAC graduated swathe



Suffolk site 3 alternative (option 1)

Key

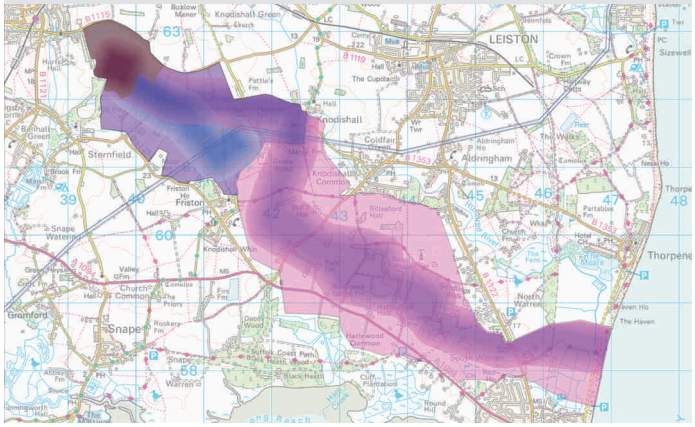
- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 3
- HVDC corridor and graduated swathe
- HVAC corridor and graduated swathe



Suffolk site 3 emerging preference

Key

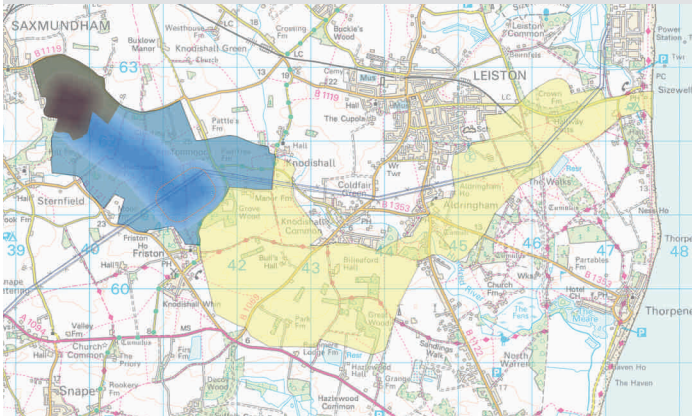
- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 3
- Preferred HVDC graduated swathe
- HVAC graduated swathe



Suffolk site 3 alternative (option 2)

Key

- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 3
- HVDC corridor and graduated swathe
- HVAC corridor and graduated swathe



Exploring opportunities for coordination

In response to stakeholder feedback, NGET and National Grid Ventures (NGV) are exploring:

- in Suffolk, opportunities to coordinate NGV's projects, EuroLink and Nautilus, and NGET's project, Sea Link, including separately consulting on shared: converter station sites; cable route corridors; and landfalls
- opportunities with other developers to minimise the impact of construction on the environment and local communities
- offshore coordination with other developers as part of the Offshore Transmission Network Review

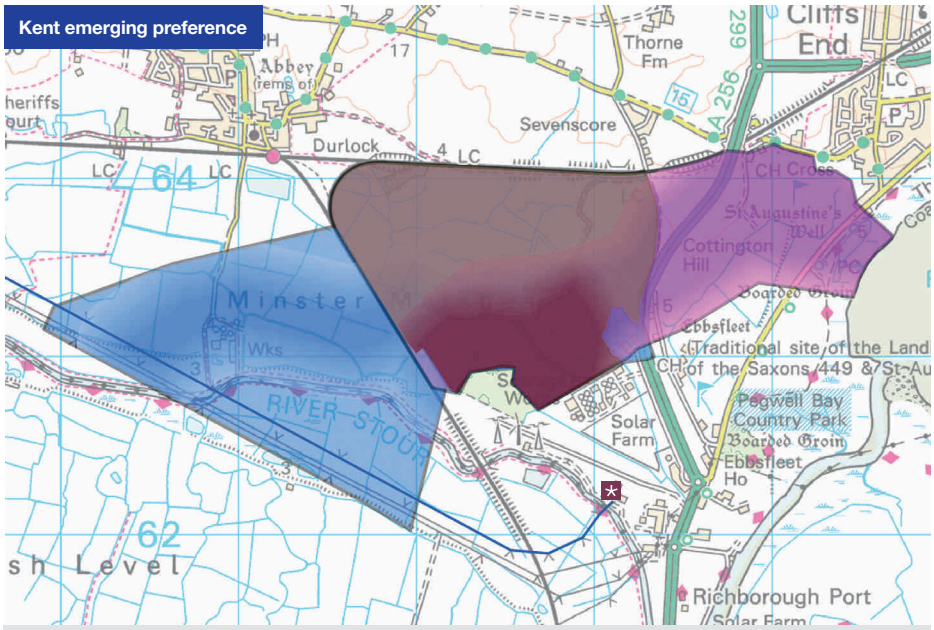
In exploring these opportunities to coordinate, NGV's Eurolink and NGET's Sea Link are consulting at the same time. We hope that by sharing our proposals, people feel better informed about how different parts of the infrastructure could fit together and can share their views on each of the projects accordingly.

What are the proposals in Kent?

In Kent we are proposing:

- a 2 GW HVDC converter station
- a connection onto the existing Richborough to Canterbury overhead line, which will need to be rewired
- a HVAC underground cable connection, overhead line or a combination of both to connect the converter station to the Richborough to Canterbury overhead line
- a HVDC underground cable connection between the converter station and a landfall point on the coast at Pegwell Bay, where it transfers to a marine cable.

We have identified an emerging preference for the location of the underground cables and the converter station, we are asking for feedback on these proposals.



What are the proposals offshore?

We are proposing a marine corridor route that is approximately 130 km in length. We have identified emerging preferences for landfall in Kent and Suffolk, as well as an alternative landfall option in Suffolk.

The routes we are proposing have been designed to minimise interactions with designated environmental sites and other offshore infrastructure, such as wind farms and other cables. The exact alignments of the cables will be further informed by additional marine surveys.

Our public consultation: 24 October – 18 December 2022

We want to ensure that people interested in the proposals have an opportunity to understand it and give us their views. All feedback will be carefully considered. We will hold a second round of public consultation in 2023 before we finalise the plans.

We have arranged a programme of face-to-face events and webinars, details of which are in this newsletter. You can also visit our website or call a member of the team for more details.

Sea Link is a nationally significant infrastructure project (NSIP). This means that we are required to submit a Development Consent Order (DCO) to the Planning Inspectorate, which we aim to do in 2024. They in turn will make a recommendation to the Secretary of State for a final decision.

Public consultation events

Our programme of in-person events and online webinars will provide you with the opportunity to find out more about the proposals and offer your feedback. Please find the full list of events and webinars below.

Date	Time	Location
Suffolk		
Thursday 10 November	1pm – 8pm	Old Generator Station, King's Field, Aldeburgh, IP15 5HY
Friday 11 November	1pm – 8pm	Friston Village Hall , Church Road, Friston, Saxmundham, IP17 1PU
Saturday 12 November	10am – 5pm	Fromus Centre, The Saxmundham Hub, Street Farm Road, Saxmundham, IP17 1AL
Kent		
Thursday 17 November	9am – 4pm	Guildhall, Cattle Market, Sandwich, CT13 9AH
Friday 18 November	1pm – 8pm	Newington Community Centre, Princess Margaret Avenue, Ramsgate, CT12 6HX
Saturday 19 November	10am – 5pm	Cliffsend Village Hall, 55 Foads Lane, Cliffsend, Ramsgate, CT12 5JH
Webinars		
Tuesday 22 November	6pm – 7pm	Our proposals in Suffolk
Tuesday 23 November	6pm – 7pm	Our proposals in Kent
Thursday 24 November	6pm – 7pm	Marine route proposals
Tuesday 29 November	6pm – 7pm	Our proposals in Suffolk
Wednesday 30 November	6pm – 7pm	Our proposals in Kent
Thursday 1 December	6pm – 7pm	Marine route proposals

Have your say

Our consultation runs from 24 October 2022 to 18 December 2022.

Consultation documents will be available online. Additionally, we will place paper copies of our consultation documents at publicly accessible locations along the route of our proposals, known as deposit points. Details of these locations can be found online, or by calling the team.

To find out more information on Sea Link and provide your feedback on the project, you can contact us using any of the following methods:

Complete a feedback form

Paper copies of our feedback forms can be collected from any of the deposit points. You can also download and print a copy of the feedback form from our website. Alternatively, please get in touch and we will post one to you.

Send us a letter

Please send a letter / or completed feedback form to FREEPOST SEA LINK (no stamp or further address details are required).

Email us

If you prefer to send us your comments via email, you can send them to contact@sealink.nationalgrid.com

Call us

Freephone 0808 134 9569 (lines are open Monday to Friday 9am – 5.30pm).

Visit our website

nationalgrid.com/sealink

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Appendix C Non-Statutory Consultation Adverts

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Very Media

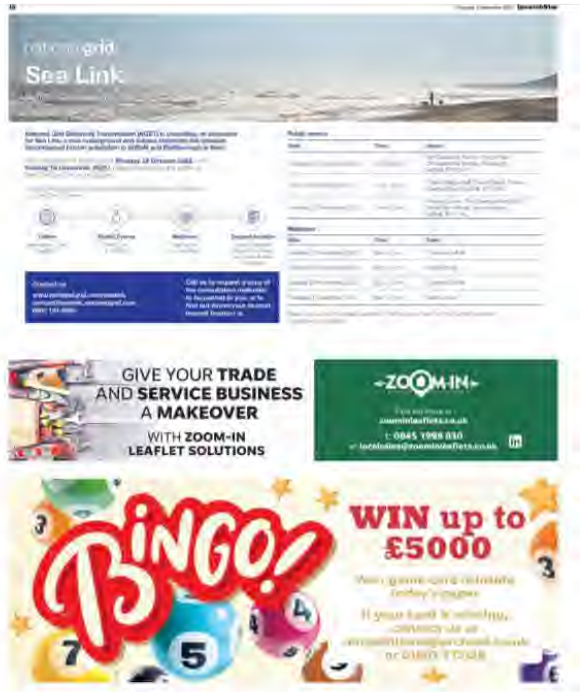
nationalgrid

Half page print campaign
November 2022

East Anglian Daily Times inc. Ipswich Star

Ad published: 3rd November, page 18

Circulation: 11,346



Eastern Daily Press

Ad published: 3rd November, page 12

Circulation: 22,734

Fishing News

Ad published: 9th November, page 7

Circulation: 4,600

Monk cuts 'threaten viability of Shetland fleet'

NE England trout netting to continue – but no new licences

New wind farms east of Shetland move ahead

IFPEA: 'More fisheries inspectors in Ireland than France and Spain combined'

West coast welcome for Seaman's Card plans

Interim chair for Northern Ireland Fishery Harbour Authority

Kentish Gazette

Ad published: 10th November, page 18

Circulation: 29,495

18

GEORGIAN PROPERTY DESTROYED

Shock as historic home gutted by fire

By Sean Axtell
saxtell@thekmgroup.co.uk

A historic Georgian home went up in "flames and explosions" on bonfire night.

Julian Thatcher was abroad when he received messages on Sunday morning showing his property in Ash, near Canterbury, gutted by fire.

A neighbour told how she banged on doors as flames metres high engulfed the house, known as Rose Hill, which is understood to have been occupied by intruders.

Five fire engines and a height vehicle attended the blaze at the derelict building shortly before 2am.

Crews fought the fire using main jets, hose reel jets and water from hydrants.

Mr Thatcher, who does not live at the property in The Street, believes a "rogue firework" or "undue care" may have caused the building's destruction.

He said: "I imagine there will be an investigation into how the fire was caused and I think there must have been some kind of human intervention.

"It was bonfire night so it could have been a rogue firework, arson or an accident where people were behaving with undue care.

"It was upsetting seeing those images and I feel really sorry for the neighbours who witnessed the house burn down.

"At the moment we're on a family holiday in the Canary Islands and woke up to various upsetting messages from people telling me what happened."

Mr Thatcher told how the property has been plagued by intrusions and internal damage after having stood empty.

And he described how, a year ago, a mysterious fire was discovered in a barn on the building's one acre of land.

"It was originally my grandparents' home and, after various life events, the house was left empty for years and years - my wife and I eventually bought it.

"But during that time there have been multiple intrusions by multiple intruders, with the police called on various occasions," he explained.

"There was an incident about a year ago where it seemed the barn was almost set on fire.

"Over the years intruders got inside the house and destroyed the interior - they left it looking like a bomb had gone off."

As smoke billowed, the fire tore through the home, with various neighbours calling the emergency services.

Carys Stone, who lives nearby and dialled 999, banged on neighbours' doors after seeing the home she has walked past for years succumb to the flames in minutes.

She said: "When I first arrived the fire was large, but it seemed to be mostly on the ground floor. I really hoped that we had got there in time for the building to be saved.

"But in a matter of five minutes, it had spread and engulfed the whole house, the roof was collapsing."

Ms Stone continued: "The fire was pretty loud and there was consistent rumbling of the flames.

"The part that shocked me was all the exploding sounds coming from within the grounds, they were so loud, sounding like bird scarers."

Ms Stone said she was alerted to the inferno after smelling burning and, when she went outside, the "road was covered in smoke".

"Once I got there the fire department was immediately called, and I proceeded to knock on all the neighbours' doors to alert them of the danger," she said.

"I was in a state of shock, and my priority at the time was making sure everyone in the proximity was safe."

There were no reported injuries and the cause is not yet known.

Rose Hill in Ash, after the fire

The building went up in flames

'The fire was pretty loud and there was consistent rumbling of the flames...'

Kent & Sussex Courier

Ad published: 11th November, page 14

Circulation: 8,294

News

Taco Bell set to open new branch

MEXICAN FAST FOOD RESTAURANT IS COMING TO TONBRIDGE

By SAM HONEY

Local competition adds spice to this year's Asian Curry Awards

National Grid Electricity Transmission (NGET) is consulting on proposals for Sea Link, a new underground and subsea electricity link between the proposed Friston substation in Suffolk and Richborough in Kent.

Our consultation is running from Monday 24 October 2022 until Sunday 18 December 2022

Online

Public Events

Webinars

Deposit location

Contact us

www.nationalgrid.com/sealink

contact@sealink.nationalgrid.com

0808 134 9569

Call us to request a copy of the consultation materials to be posted to you, or to find out where your nearest deposit location is.

Public events

Date	Time	Venue

Webinars

Date	Time	Topic

Appendix D Project Feedback Forms

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Sea Link

Consultation feedback form

Suffolk

October 2022

We are seeking your views on our work to date.

The feedback we receive at this consultation will help with the development of detailed proposals. We will then present our updated proposals at a future round of public consultation. This will include a summary of how your feedback has helped to influence the design of the project.

We have published a set of consultation documents, that will provide you with information to help inform your feedback response, including:

- project background document
- corridor and preliminary routeing and siting study.

The deadline for submitting your response to our consultation is on **Sunday 18 December 2022**.

How to provide your feedback:

- complete and return a feedback form at a consultation event
- complete a feedback form online at **nationalgrid.com/sealink**
- email us your completed feedback form at **contact@sealink.nationalgrid.com**
- return this feedback form, free of charge in the freepost envelope provided or by writing to Freepost SEA LINK.

Contact us

nationalgrid.com/sealink

contact@sealink.nationalgrid.com

0808 134 9569 - call us to request paper copies of the materials

You may also leave feedback via our website **nationalgrid.com/sealink**

How to provide your feedback

You are welcome to answer all or only some of the questions in this feedback form, depending on the issues that are most important to you. We'd like to know if there are any other issues you think are important that we should consider and, importantly, why.

All feedback received before the deadline will be considered as we develop our proposals further. As part of our future application for development consent, we will produce a consultation report that sets out the feedback received and how we have taken it into account.

So that we can make the most of your thoughts and feedback, please give as much detail as possible in your response. If you need additional space please use extra paper, clearly marking which question you are responding to.

Data privacy statement

National Grid is committed to protecting your personal information. Whenever you provide such information, we are legally obliged to use it in line with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR).

How will National Grid use the information we collect about you?

We will use your personal data collected via this consultation for a number of purposes, these are:

- to analyse your feedback to the consultation
- to produce a Consultation Report, based on our analysis of feedback (individuals will not be identified in the report)
- to keep up-to-date records of our communications with individuals and organisations
- with your consent we will write to you with updates about the Sea Link project. Please note you can withdraw your consent by contacting us at any time
- we need to keep records of our communications with individuals and organisations during development of the project. These are kept no longer than necessary and in line with our retention periods.

Any personal information you include in this form will be processed by (or made available to) the following recipients to record, analyse and report on the feedback we receive:

- the Planning Inspectorate (which will consider our application for consent to build Sea Link – any details published as part of this process will be anonymised)
- our appointed external consultants working on Sea Link.

What rights do I have over my personal data?

Under the terms of the UK GDPR you have certain rights over how your personal data is retained and used by National Grid. For more information, see our full data privacy statement at nationalgrid.com/privacy-policy.

Sea Link proposals in Suffolk

1. What do you think about our proposals?

Items 1 to 5 listed below each include a landfall location, underground cable corridors and converter station site.

The landfall location for items 1 and 2 is between Aldeburgh and Thorpeness. This landfall location may accommodate up to three projects, including the Sea Link project.

The landfall location for items 3, 4 and 5 is near Sizewell. This landfall location can only accommodate the Sea Link project.

1. Suffolk site 1 emerging

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

2. Suffolk site 3 emerging

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

3. Suffolk site 1 alternative

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

4. Suffolk site 3 alternative (option 1)

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

5. Suffolk site 3 alternative (option 2)

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

(please tick your preference and explain why)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ unsure

Add your comments here:

2. As we develop, refine and narrow down our proposals do you have any views or local knowledge that you would like us to take into account?

(please be as specific as possible in your response)

Add your comments here:

Exploring opportunities for coordination

In response to stakeholder feedback, NGET and National Grid Ventures (NGV) are exploring:

- opportunities to coordinate NGV's projects, EuroLink and Nautilus, and NGET's project, Sea Link, including separately consulting on shared: converter station sites; cable route corridors; and landfalls
- opportunities with other developers to minimise the impact of construction on the environment and local communities
- offshore coordination with other developers as part of the Offshore Transmission Network Review.

In exploring these opportunities to coordinate, NGV's Eurolink and NGET's Sea Link are consulting at the same time. We hope that by sharing our proposals, people feel better informed about how different parts of the infrastructure could fit together and can share their views on each of the projects accordingly.

3. What do you think about co-location of (up to three) converter stations?

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

Add your comments here:

4. What do you think about the projects (up to three) sharing underground cable corridors?

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

Add your comments here:

5. What do you think about the potential to share a landfall location between (up to three) projects?

☐ Strongly Support ☐ Support ☐ Neutral ☐ Do not support ☐ Unsure

Add your comments here:

6. As we develop, refine and narrow down our proposals do you have any views or local knowledge that you would like us to take into account about the potential coordination of (up to three) projects?

Please consider co-location of converter station sites, sharing a landfall location and sharing underground cable corridors, and be as specific as possible, in your response.

Add your comments here:

Sea Link marine proposal

Our proposed marine cable route is made up of three separate marine corridors:

- Suffolk marine corridor – which includes both an emerging preference and alternative marine corridor
- central marine corridor
- Kent marine corridor.

7. As we develop, refine and narrow down our marine proposals do you have any views or local information that you would like us to take into account?

(Please be as specific as possible in your response)

Suffolk marine corridor

1. Emerging preference **2. Alternative**

Please tick your preference and explain why

☐ 1 ☐ 2 ☐ Unsure

Add your comments here:

Central marine corridor

Add your comments here:

Kent marine corridor

Add your comments here:

8. Additional comments

Do you have any other comments about our proposals that you have not already mentioned?

Add your comments here:

About you

Your details

We would be grateful if you could please provide your details so that the location and age range of respondents can be captured as part of our consultation.

☐ Please tick here if you would like us to use your contact details to keep you updated about our proposals

Age group (please tick):

☐ Under the age of 13*

☐ 13-17 ☐ 18-24 ☐ 25-34

☐ 35-44 ☐ 45-54 ☐ 55-64

☐ 65-74 ☐ 75-84 ☐ 85+

* under UK GDPR parental consent must be sought for anyone under the age of 13

Your contact details

We will only use these details to contact you and update you on the proposals. You don't have to fill in this section if you'd rather we didn't contact you.

Title: _____

First Name: _____

Surname: _____

Address: _____

_____

Town/City: _____

Postcode: _____

Email: _____

9. In what capacity are you responding to the consultation?

☐ Local resident

☐ Business

☐ Community representative

☐ Local organisation (Name of organisation: _____)

☐ Local supplier/contractor

☐ Affected landowner or occupier

☐ Prescribed consultee

☐ Other (please state) _____

10. Why do you have a particular interest in this/these section(s) of the proposed route?

Please tick all that apply.

☐ I live in the local area

☐ I have friends and family who live in the local area

☐ I use this area recreationally

☐ I work in the local area

☐ I regularly travel in the local area

☐ Other (please state) _____

_____

PIL reference (if applicable): _____

Please see page 2 for details of how we protect your personal data.

How are we doing?

Please let us know your views on the quality of our consultation materials, the accessibility of our consultation, how we have notified people about our proposals, and anything else related to this consultation.

11. Please let us know how you heard about this consultation by ticking one or more of the following boxes:

- ☐ Informed by a local representative
- ☐ Received a letter from National Grid
- ☐ Received a leaflet from National Grid
- ☐ Received an email from National Grid
- ☐ Received information from a local authority
- ☐ Saw an advert in the local and/or national media
- ☐ Saw social media coverage
- ☐ Saw coverage in local and/or national media
- ☐ Word of mouth
- ☐ Other (please state) _____

_____

12. Please rate the information included as part of this consultation in terms of how clearly it was presented and how easy it was to understand:

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very Poor ☐ Unsure

13. Please rate how well this consultation was promoted and advertised to the public:

☐ Very good ☐ Good ☐ Average ☐ Poor ☐ Very Poor ☐ Unsure

14. Which consultation documents have you viewed during the consultation process?

Please tick all that apply

- ☐ Project background document
- ☐ Corridor and preliminary routeing and siting study
- ☐ Other (please state) _____

Inclusion and diversity

National Grid would be grateful if you could answer the following inclusion and diversity questions. We will use the information we receive to help understand whether our consultation has been useful to people of different backgrounds and requirements.

We may publish a summary of the results, but no information about an individual would be revealed. The answers you provide to these questions are defined as 'special category data'. If you agree to provide Inclusion and Diversity Information, you can withdraw your permission at any time. To withdraw your details, please contact us via email at **contact@sealink.nationalgrid.com** or Freephone **0808 134 9569**.

15. What is your gender?

☐ Male ☐ Female ☐ Non-binary ☐ Prefer not to say

16. Do you consider yourself a person with a disability?

☐ Yes ☐ No ☐ Prefer not to say

17. How would you describe your ethnic background?

☐ White English, Welsh, Scottish, Northern Irish or British

☐ Irish

☐ Gypsy or Irish Traveller

☐ Any other White background

☐ Mixed or Multiple ethnic groups

☐ White and Black Caribbean

☐ White and Black African

☐ White and Asian

☐ Any other Mixed or Multiple ethnic background (please state)

_____

☐ Asian or Asian British

☐ Indian or Pakistani

☐ Bangladeshi

☐ Chinese

☐ Any other Asian background

☐ Black, African, Caribbean or Black British

☐ African

☐ Caribbean

☐ Any other Black, African or Caribbean background (please state)

_____

☐ Arab

☐ Any other ethnic group (please state)

_____

☐ Prefer not to say

Contact us

If you have any difficulties completing this feedback form or accessing the consultation documents, or require the documents in an alternative format, please contact the project team via the contact details.

nationalgrid.com/sealink

contact@sealink.nationalgrid.com

0808 134 9569

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

nationalgrid.com

nationalgrid

Sea Link

Consultation feedback form

Kent

October 2022

We are seeking your views on our work to date.

The feedback we receive at this consultation will help with the development of detailed proposals. We will then present our updated proposals at a future round of public consultation. This will include a summary of how your feedback has helped to influence the design of the project.

We have published a set of consultation documents, that will provide you with information to help inform your feedback response, including:

- project background document
- corridor and preliminary routeing and siting study.

The deadline for submitting your response to our consultation is on **Sunday 18 December 2022**.

How to provide your feedback:

- complete and return a feedback form at a consultation event
- complete a feedback form online at **nationalgrid.com/sealink**
- email us your completed feedback form at **contact@sealink.nationalgrid.com**
- return this feedback form, free of charge in the freepost envelope provided or by writing to Freepost SEA LINK.

Contact us

nationalgrid.com/sealink

contact@sealink.nationalgrid.com

0808 134 9569 - call us to request paper copies of the materials

You may also leave feedback via our website **nationalgrid.com/sealink**

How to provide your feedback

You are welcome to answer all or only some of the questions in this feedback form, depending on the issues that are most important to you. We'd like to know if there are any other issues you think are important that we should consider and, importantly, why.

All feedback received before the deadline will be considered as we develop our proposals further. As part of our future application for development consent, we will produce a consultation report that sets out the feedback received and how we have taken it into account.

So that we can make the most of your thoughts and feedback, please give as much detail as possible in your response. If you need additional space please use extra paper, clearly marking which question you are responding to.

Data privacy statement

National Grid is committed to protecting your personal information. Whenever you provide such information, we are legally obliged to use it in line with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR).

How will National Grid use the information we collect about you?

We will use your personal data collected via this consultation for a number of purposes, these are:

- to analyse your feedback to the consultation
- to produce a Consultation Report, based on our analysis of feedback (individuals will not be identified in the report)
- to keep up-to-date records of our communications with individuals and organisations
- with your consent we will write to you with updates about the Sea Link project. Please note you can withdraw your consent by contacting us at any time.
- we need to keep records of our communications with individuals and organisations during development of the project. These are kept no longer than necessary and in line with our retention periods.

Any personal information you include in this form will be processed by (or made available to) the following recipients to record, analyse and report on the feedback we receive:

- the Planning Inspectorate (which will consider our application for consent to build Sea Link – any details published as part of this process will be anonymised)
- our appointed external consultants working on Sea Link.

What rights do I have over my personal data?

Under the terms of the UK GDPR you have certain rights over how your personal data is retained and used by National Grid. For more information, see our full data privacy statement at nationalgrid.com/privacy-policy.


TIKKA
TIKKA
SIOEN

Sea Link proposals in Kent

1. As we develop, refine and narrow down our proposals for a converter station site, do you have any views or local knowledge you would like us to take into account?

(please be as specific as possible in your response)

Add your comments here:

2. As we develop, refine and narrow down our proposals do you have any views or local knowledge that you would like us to take into account about the cable corridors?

(please be as specific as possible in your response)

Add your comments here:

3. As we develop, refine and narrow down our proposals do you have any views or local knowledge that you would like us to take into account about the landfall at Pegwell Bay?

(please be as specific as possible in your response)

Add your comments here:

4. The electrical connection between the converter station site and the existing Richborough to Canterbury overhead line will either be an overhead line connection or an underground cable connection.

(please tick your preference and explain why)

☐ Overhead line ☐ Underground cable ☐ Unsure

Add your comments here:

Sea Link marine proposal

Our proposed marine cable route is made up of three separate marine corridors:

- Suffolk marine corridor – which includes both an emerging preference and alternative marine corridor
- central marine corridor
- Kent marine corridor.

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Suffolk marine corridor

1. Emerging preference **2. Alternative**

Please tick your preference and explain why

☐ 1 ☐ 2 ☐ Unsure

Add your comments here:

Central marine corridor

Add your comments here:

Kent marine corridor

Add your comments here:

6. Additional comments

Do you have any other comments about our proposals that you have not already mentioned?

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☐ Please tick here if you would like us to use your contact details to keep you updated about our proposals

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8. Why do you have a particular interest in this/these section(s) of the proposed route?

Please tick all that apply.

☐ I live in the local area

☐ I have friends and family who live in the local area

☐ I use this area recreationally

☐ I work in the local area

☐ I regularly travel in the local area

☐ Other (please state) _____

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_____

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_____

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☐ Any other White background

☐ Mixed or Multiple ethnic groups

☐ White and Black Caribbean

☐ White and Black African

☐ White and Asian

☐ Any other Mixed or Multiple ethnic background (please state)

_____

☐ Asian or Asian British

☐ Indian or Pakistani

☐ Bangladeshi

☐ Chinese

☐ Any other Asian background

☐ Black, African, Caribbean or Black British

☐ African

☐ Caribbean

☐ Any other Black, African or Caribbean background (please state)

_____

☐ Arab

☐ Any other ethnic group (please state)

_____

☐ Prefer not to say

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

nationalgrid.com

Appendix E Project Background Document

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Sea Link

Project background document

October 2022

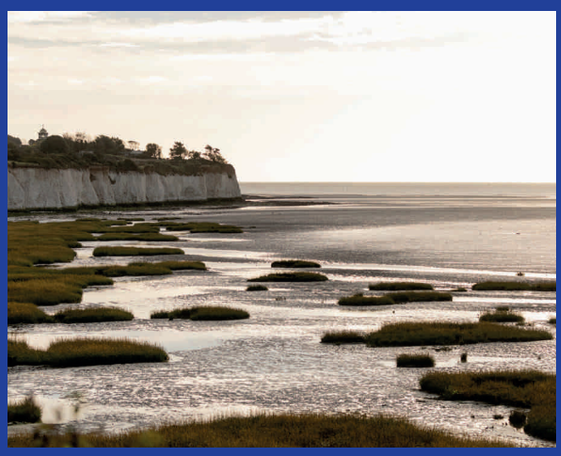
nationalgrid

This document explains National Grid Electricity Transmission's (NGET) proposals to reinforce the electricity transmission network across Suffolk and Kent.

Our proposals include building an offshore high voltage direct current link between Suffolk and Kent with onshore converter stations and connections back to the national electricity transmission system.

This document has been prepared to support the first stage of public consultation, and the feedback we receive will help us to refine our proposals.

Contents



If you feel your land may be affected by these proposals, please contact the Sea Link land team by calling **01452 889000** or by emailing **SeaLink@dalcourmaclaren.com**

1. Executive summary

This project background document explains our proposals to reinforce the electricity transmission network across Suffolk and Kent. It has been designed to assist stakeholders in responding to our non-statutory consultation, which runs between Monday 24 October and Sunday 18 December 2022.

The UK was the first major economy to pass a net zero emissions law with a 2050 target. The energy industry is playing a key part in this transition, from developing renewable energy generation technology, to upgrading the existing transmission network, which will allow communities across the country to benefit from renewable and low carbon energy.

Helping society to decarbonise is the biggest contribution we can make to the environment, and we at National Grid have a critical role to play in the acceleration towards a cleaner future.

In Great Britain, we are in the middle of a transformation, with the energy we use increasingly coming from cleaner, greener sources. We are making progress, for example, on 25 May 2022 we achieved 19.9 gigawatts (GW) of wind generation on Britain's electricity system, a new wind power record. While recognising that there is more to do, we should be proud of the progress we have made and the fact that Britain is leading the world in many aspects of decarbonising electricity systems. National Grid is at the heart of that energy transformation – investing c.£8 bn on UK Electricity Transmission between 2021/22 and 2025/26, to adapt and develop our transmission network to connect new sources of low carbon and renewable energy to our homes and businesses.

Whilst it is vital that more of the energy we use comes from low carbon and renewable sources, both National Grid and the Government recognise it is also important to keep the impact as low as possible on bills, people, communities and our natural environment. National Grid is committed to finding the right balance between these factors.

Great Britain already has 11 GW of offshore wind energy in operation, The Government's recent British Energy Security Strategy[1] highlights the ambition to deliver up to 50 GW by 2030.

The proposed Sea Link project will support the UK's net zero target by reinforcing the transmission network across Suffolk and Kent. It will facilitate the connection of new renewable and low carbon energy generation as well as interconnectors.

The reinforcement is needed because our existing national electricity transmission network does not have sufficient capacity for all the new energy we expect to connect to the network over the next eight years and beyond. Sea Link, together with other planned reinforcements, will play a part to enable the energy transition for all.

Our proposal is to build a new 2 GW high voltage direct current underground and offshore electricity link between Suffolk and Kent, including the associated infrastructure needed to support this (such as converter stations, substations and overhead transmission line modifications).

1. British energy security strategy: (Gov UK, April 2022) – Available at gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

Our public consultation

The Sea Link project will seek to obtain a development consent order (DCO) under procedures governed by the Planning Act 2008. We will submit an application for development consent to the Planning Inspectorate, who will assess it and make a recommendation to the Secretary of State, who will decide on whether a DCO should be granted for the project.

We want to ensure that all stakeholders, including local communities, are engaged in the development of our proposals and have the opportunity to comment on them at key decision making points.

This document sets out information on our plans, what we are consulting upon and how you can get involved. It also signposts to where we are publishing consultation materials.

We are holding a range of both online and in person consultation events and this is your opportunity to comment on the proposals at an early stage of the project's development.

We are holding our first stage of public consultation to introduce the project, explain why additional capability is needed on this part of the network, outline the process that we have been through so far to present our preferred route corridor, and gather public feedback.

It is important that we hear the views of local people so that we can take them into account, where possible, as we develop our plans. Please therefore take time to give us your feedback on these proposals.

The feedback we receive from this consultation, together with information from environmental and technical studies, will inform the next iteration of design.

This is the first stage of consultation on our proposals, and we will carry out further consultation on our project as it develops. We will report all feedback and our responses to your comments in a Consultation Report that will be submitted with our application for development consent.

2. About National Grid

National Grid sits at the heart of Britain's energy system, connecting millions of people and businesses to the energy they use every day.

It is our vision to be at the heart of a clean, fair and affordable energy future.

We bring energy to life – in the heat, light and power we bring to our customers' homes and businesses; in the way that we support our communities and help them to grow.

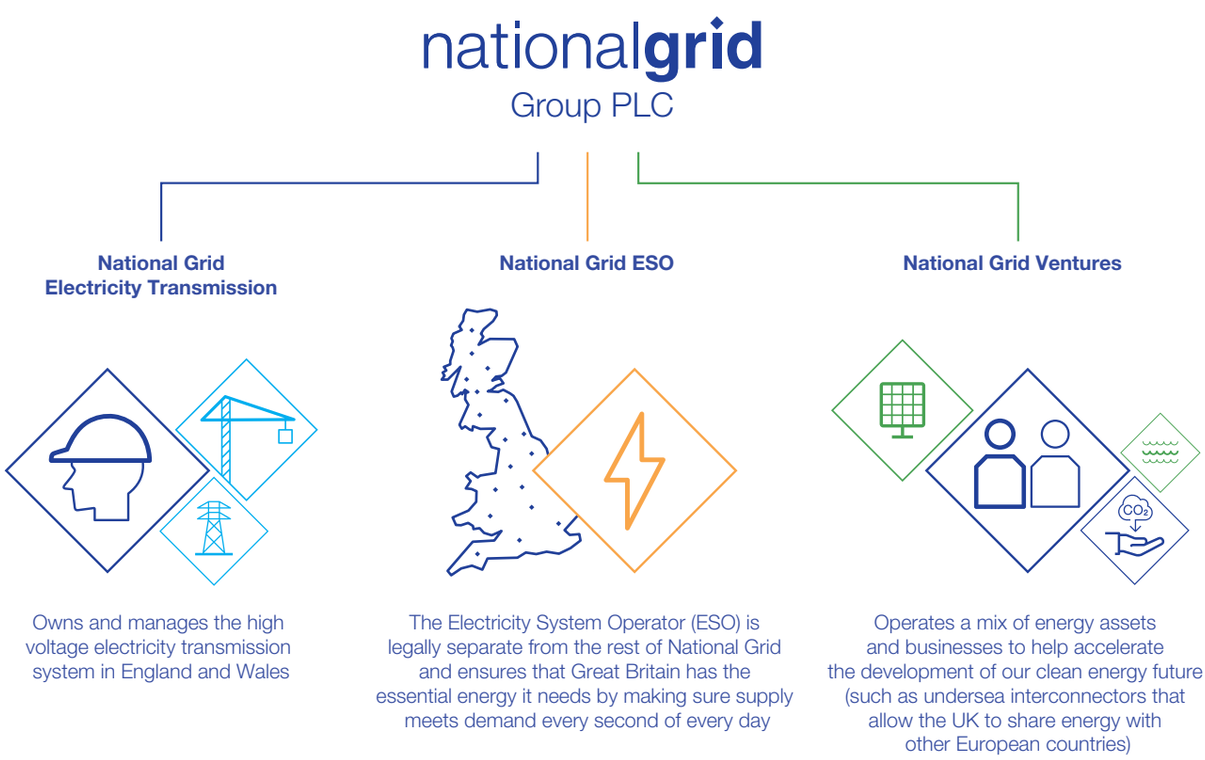
National Grid Electricity Transmission (NGET) owns, builds and maintains the network in England and Wales. It is NGET that is developing plans for the Sea Link project.

Within the National Grid Group there are distinctly separate legal entities, each with their individual responsibilities and roles. These are shown in the diagram below.

Each of the different entities within the National Grid Group are working to build a cleaner, fairer and more affordable energy system that serves everyone – powering the future of our homes, transport and industry.

Our general duties

Under the Electricity Act 1989, National Grid Electricity System Operator (ESO) and NGET must develop transmission network proposals in an efficient, coordinated, and economical way, and in a way which considers people and places. Options to deliver additional network capability and the options we take forward are evaluated against these statutory duties.



How we achieve this cleaner and fairer future, meet our amenity responsibilities and involve stakeholders and communities is outlined in our commitments when undertaking works in the UK[2]:

- **establishing need** – we only seek to build electricity lines along new routes or build new above-ground installations where existing infrastructure cannot be upgraded, where forecasted increases in demand cannot be met by other means, where customer connections are required, or where existing infrastructure has been identified for replacement
- **involving stakeholders and communities** – we promote genuine and meaningful engagement, meeting and, where appropriate, exceeding the requirements for consultation or engagement
- **routeing networks and selecting sites** – if we need to build new infrastructure, we seek to avoid areas which are nationally or internationally designated for their landscape, wildlife or cultural significance
- **minimising the effects of new infrastructure** – when we are developing new infrastructure, we seek to reduce the effect of our work on communities by having particular regard to safety, noise and construction traffic
- **mitigating adverse effects of works** – we carry out relevant environmental investigations and report on these when we apply for consent for new works. Additionally, we use best practice environmental impact assessment techniques to assess possible effects of our works and identify opportunities for mitigation measures
- **offsetting where mitigation is not practicable** – when we cannot mitigate the impacts of our proposals, we offset these impacts in practical and sustainable ways that are developed through engagement with local stakeholders
- **enhancing the environment around our works** – when undertaking works, we consider what practical measures can be taken to enhance nearby and surrounding areas for the benefit of local communities and the natural and historic environment
- **monitoring and learning for the future** – we monitor, evaluate and review our engagement processes to learn from previous experiences to improve our working practices
- **reviewing our commitments** – we review these commitments at least every five years, and make additional revisions in response to new legislation, policy and guidance
- **working with others** – we require other organisations working on our behalf to demonstrate these same commitments and continue to create an environment where we can share and deliver best practice.

2. National Grid's commitments when undertaking works in the UK: Our stakeholder, community and amenity policy (National Grid, December 2016) – Available at nationalgrid.com/uk/electricity-transmission/document/81026/download

3. Moving towards net zero

The world we live in is changing, and the UK is at a turning point as we embrace the opportunities a cleaner, greener future brings. The net zero economy will be underpinned by a clean reliable power system.

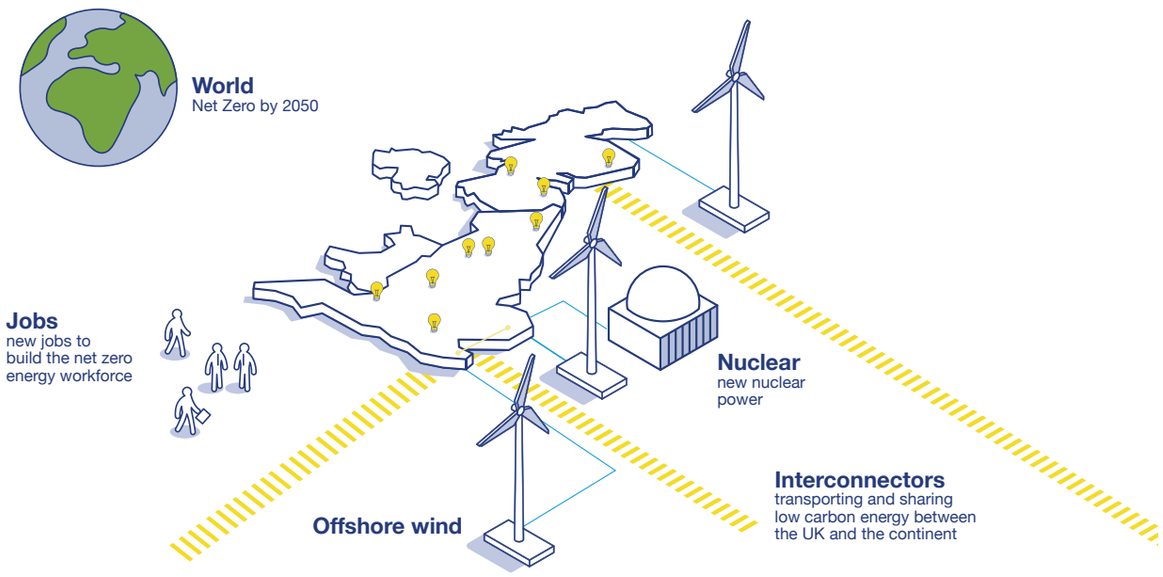
The UK Government has committed to ambitious targets for the country to have up to 50 gigawatts (GW) of offshore wind by 2030, a fully decarbonised power system by 2035, subject to security of supply, on the way to achieving net zero by 2050. At the same time, demand for electricity will increase as we decarbonise other sectors of the economy, such as heating and transport.

As a country we are already making progress. The UK has one of the largest offshore wind capacities in the world, with over 11 GW in operation.

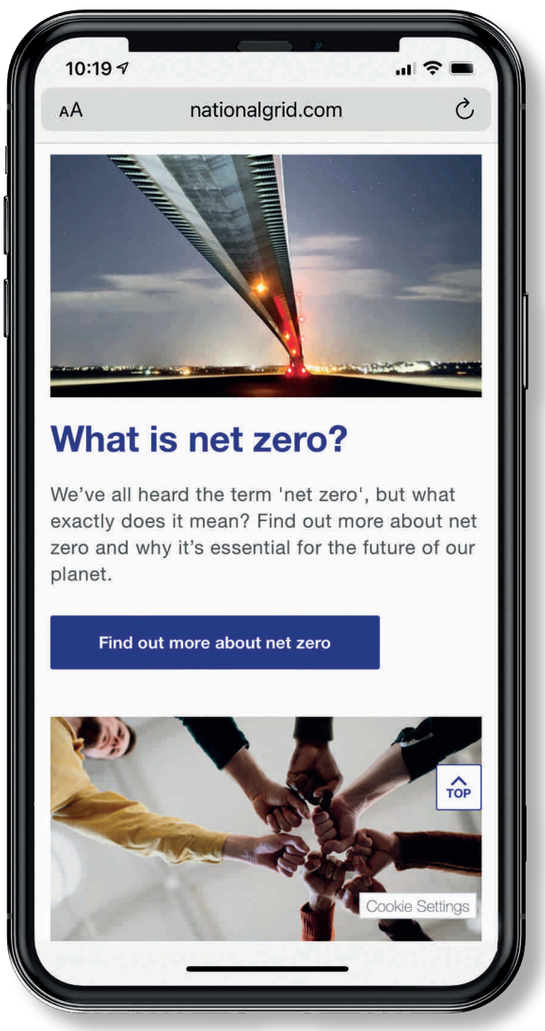
However, more needs to be done. A net zero future for Britain requires significant upgrades to our energy infrastructure to take new renewable and low carbon energy from where it is generated to where it is used.

The new sources of generation are largely set to be located along our coastlines. NGET needs to extend and reinforce the national electricity transmission system – the pylons, cables and substations that transport power around the country – so that we can continue to benefit from secure and reliable energy.

We all want to see the energy we use coming from low carbon and renewable sources. It's also important to keep the impact on the people, places and environments that host our infrastructure as low as possible. As we seek to do this, we will listen to a wide range of stakeholders and communities to help us strike a balance between everything we must take into account.



Find out more about the UK's journey to a net zero future on our website.



4. The project

National Grid Electricity Transmission is proposing to reinforce the electricity transmission network across Suffolk and Kent.

This would be achieved by the construction and operation of a new 2 gigawatt (GW) high voltage direct current (HVDC) link approximately 140 km in length and predominantly offshore. This includes HVDC converter stations and high voltage alternating current (HVAC) connections onto the national electricity transmission system.

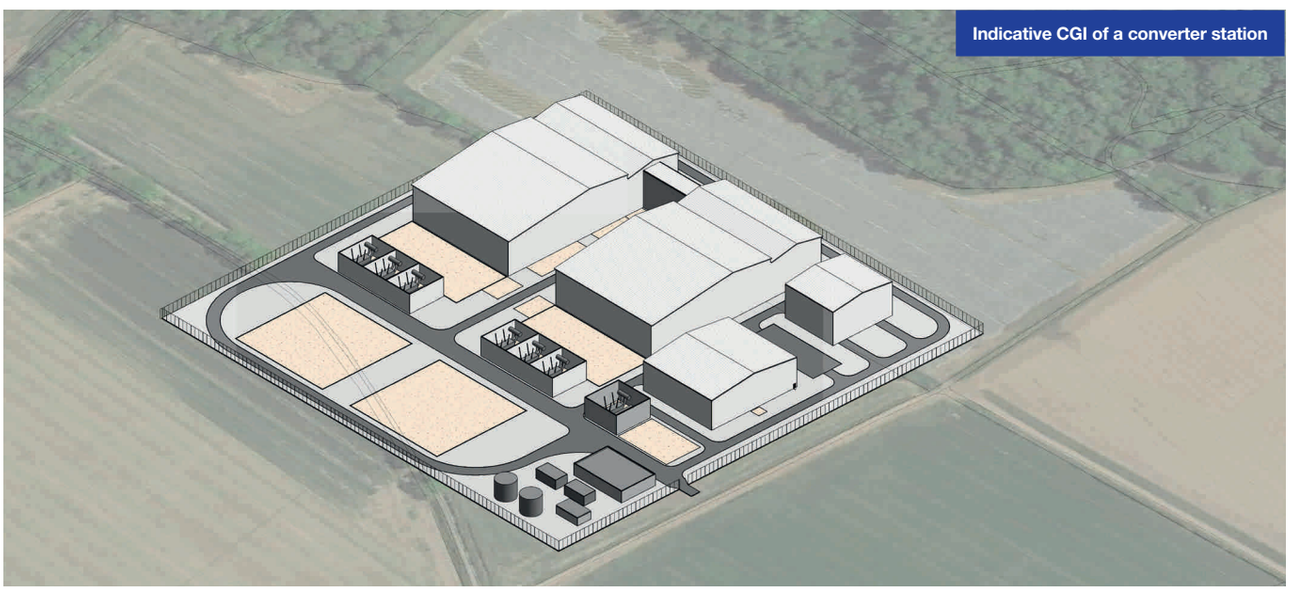
From north to south, the reinforcement would comprise:

- an extension of the proposed substation at Friston to accommodate an extra bay for Sea Link to connect into
- a HVAC underground cable connection between the proposed Friston 400 kV substation and a proposed HVDC converter station (which converts AC to DC, and vice versa). This will also include underground cable joint bays (connecting different sections of underground cables together) along this part of the route
- a new 2 GW HVDC converter station in Suffolk, including essential utility services such as electric, water and drainage
- a HVDC underground cable connection from the HVDC converter station to the transition joint bay up to 1 km from the Suffolk landfall location (where the cable transitions from offshore to onshore). There will also be underground cable joint bays along this part of the route
- a buried subsea HVDC cable between the Suffolk coast and the Kent Coast, approximately 130 km in length
- restringing (replacing the existing conductor for a different type that is able to carry more power) of the Richborough to Canterbury 400 kV overhead line, which is necessary to cater for the increased power flows
- a HVDC underground cable connection from the transition joint bay up to 1 km from the Kent landfall location (where the cable transitions from offshore to onshore) and onto the Kent HVDC converter station location. There will also be underground cable joint bays along this part of the route
- a new 2 GW HVDC converter station in Kent which includes the HVAC substation as well as essential utility services such as electric, water and drainage
- a HVAC connection (either underground cable or overhead line) between the proposed Kent HVDC converter station and the Richborough to Canterbury overhead line.

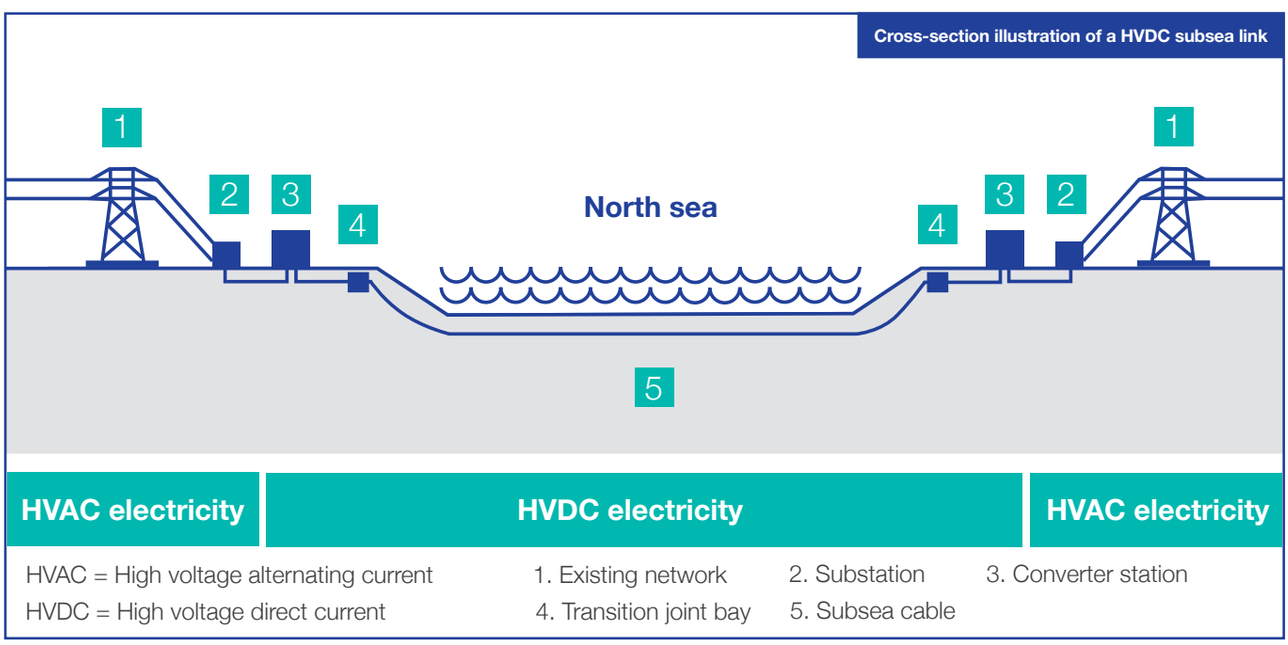
Other elements required to facilitate construction and operation of the project include, but are not limited to, temporary uses of land for construction activities such as working areas for construction equipment and machinery, site offices, welfare, storage, access, and haul roads.

What is a converter station?

Converter stations are the key components of HVDC links. They enable electricity to be converted from alternating current to direct current or vice versa depending on the direction of operation. Converter stations contain specialist electrical equipment; some of this must be located indoors in buildings potentially up to 30 m tall, while some could be located outdoors or in smaller buildings. The total footprint of the converter station is approximately 6 hectares but additional land will be needed during construction.



Indicative CGI of a converter station



Cross-section illustration of a HVDC subsea link

5. How the need for network reinforcement is identified

National Grid Electricity System Operator (ESO) leads an annual review which looks at how much energy needs to be transported across the transmission network in the future, and where the capability of the network needs to be improved to make that happen.

The overall effect of that process is to ensure that efficient, coordinated, and economical proposals to reinforce the network are brought forward and progressed at the right time. This enables National Grid to deliver what the country needs from the national electricity transmission system (transmission system), in a way that represents best value for electricity consumers.

National Grid ESO analyses and reports on how the network needs to be reinforced by preparing:

1. **A range of Future Energy Scenarios**[3] (FES) that are discussed with stakeholders and published each summer. These are a credible range of scenarios for how energy will be both produced and consumed up to 2050. FES are used to determine the peak demand and generation capacity regionally.

2. The FES inform the analysis in the **Electricity Ten Year Statement**[4] (ETYS) which is published each November, setting out National Grid ESO's view of future transmission requirements, and importantly, where the capability of the transmission network might need to be reinforced and improved over the next decade.

3. Transmission Owners respond with solutions to address the requirements identified in the ETYS. National Grid ESO assesses and publishes its recommendations as to which proposals should proceed in a **Network Options Assessment**[5] (NOA) report published each spring.

4. National Grid Electricity Transmission (NGET) responds to the NOA recommendations through its **Network Development Policy**[6] which is published each summer. The Network Development Policy sets out which network proposals NGET will take forward.

In planning and operating the network, transmission licence holders, such as NGET, are required by their licence to comply with the National Electricity Transmission Security and Quality of Supply Standard (SQSS). This standard sets out criteria and methodologies for planning and operating the network in Great Britain – in essence, it sets out the minimum requirements for the operation of a secure and stable transmission system.

Sea Link (known as SCD1 in NOA) is a new offshore HVDC link between Suffolk and Kent which provides additional capability across East Anglia, the south east and several boundaries along the south coast. Sea Link has been consistently recommended to 'proceed' through NOA reports since 2019/20. NGET confirmed in 2021 that it will be taking forward work to develop and deliver this reinforcement, as identified in its Network Development Policy statement.

In the recent NOA 2021/22 Refresh (July 2022) SCD1 has been deemed as essential to deliver the Pathway to 2030.

The Network Options Assessment (NOA)

The NOA is an annual report published by National Grid ESO which outlines its recommendations for projects to take forward during the coming year. When a new edition of the NOA is released, NGET will use this to identify where it needs to build new lines and will back check and review the need case for projects that are in progress.

3. Future Energy Scenarios (National Grid ESO, July 2022) - Available at nationalgrideso.com/future-energy/future-energy-scenarios

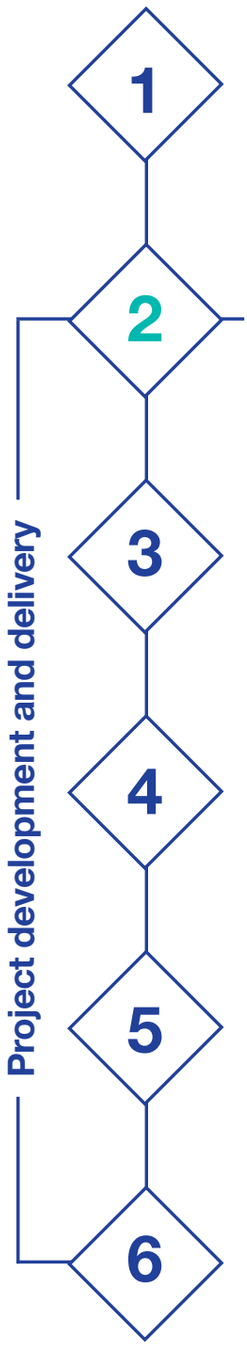
4. Electricity Ten Year Statement (National Grid ESO, November 2021) - Available at nationalgrideso.com/research-publications/etys

5. Network Options Assessment (National Grid ESO, July 2022) - Available at nationalgrideso.com/research-publications/network-options-assessment-noa

6. Network Development Policy Decisions (National Grid, June 2021) - Available at nationalgrid.com/electricity-transmission/document/137041/download

6. How we develop projects

Our project development process includes the following key stages[7]:



Strategic proposal

Identify network options to meet need case, undertake strategic options appraisal and select strategic proposal.

Options identification and selection

Identify and appraise project options, engage stakeholders and seek consultees' feedback to shape the development of the project.

Defined proposal and statutory consultation

Develop project design in response to feedback, identify preliminary environmental information and undertake statutory consultation on the proposal.

Assessment and land rights

Refine project design in response to feedback, assess the project impacts and seek voluntary land rights. Prepare the application documents.

Application, examination and decision

Submit application, respond to Examining Authority's questions and support through examination hearings.

Construction

Discharge Requirements, deliver project, implement reinforcements.

Our project development process includes the following key stages:

We undertake a phased options appraisal and assessment process when developing proposals to reinforce our network.

The options appraisal process has been designed to meet our duties and also follows other relevant policy and guidance when making judgments and decisions on the project. This has included consideration of the relevant National Policy Statements, the Holford Rules (which apply to the routeing and design of overhead lines) and the Horlock Rules (which apply to the location and design of substations). There is no specific guidance regarding routeing of underground and marine cables, but we have applied the principles of the Holford and Horlock Rules where applicable.

Further details on these policies and guidance can be found in Corridor and Preliminary Routeing and Siting Study (CPRSS)[8] report.

We are currently at the options identification and selection stage of the process (step 2, as highlighted on our timeline) and we are seeking feedback during this consultation on our work to date. Your feedback will help to shape our project as we move forward.

The Holford and Horlock Rules

National Grid employs two sets of rules and guidelines for the routeing and siting of new energy transmission infrastructure, which we have applied to this project where relevant:

The Holford Rules[9] provide guidelines for the routeing of high voltage overhead transmission lines. These are important guidelines during the development of a preferred alignment and considerations of whether certain sections should be undergrounded.

The Horlock Rules[10] provide guidelines for, the design and siting of substations and converter stations (in addition to cable sealing end compounds and line entries). When considering new electricity infrastructure, National Grid has regard to the degree to which options comply or deviate from these rules.

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7. Our approach to consenting (National Grid, April 2022) - Available at nationalgrid.com/electricity-transmission/document/142336/download

8. Sea Link Corridor Preliminary Routeing and Siting Study National Grid, October 2022) - Available at nationalgrid.com/electricity-transmission/network-and-infrastructure/infrastructure-projects/sealink/document-library

9. The Holford Rules (Lord Holford, 1959) – Available at nationalgrid.com/sites/default/files/documents/13795-The%20Holford%20Rules.pdf

10. The Horlock Rules (National Grid, 2009) – Available at nationalgrid.com/sites/default/files/documents/13796-The%20Horlock%20Rules.pdf

7. The need for reinforcement in East Anglia and the South East

To keep global warming to no more than 1.5°C above pre-industrial levels, avert the worst impacts of climate change and preserve a liveable planet, the world needs to halve emissions over the next decade and reach net zero carbon emissions by the middle of the century.

As part of the Paris Agreement, a legally binding treaty on climate change adopted at COP21 in Paris in December 2015, countries agreed to communicate or update their emissions reduction targets - their Nationally Determined Contribution - every five years to reflect their progression over time. These targets set out how far countries plan to reduce emissions across their entire economy and/or in specific sectors.

In June 2019, the UK became the first major economy to pass legislation to end its contribution to global warming and bring all greenhouse gas emissions to net zero by 2050, putting clean growth at the heart of our modern industrial strategy and seizing the economic opportunities that transition to a greener economy creates.

2050 may seem some way in the future but work is underway to ensure we get there in incremental steps. The Climate Change Act introduced carbon budgets for the UK Government, which cap emissions over successive five-year periods.

The Climate Change Committee has developed a 'Balanced Pathway' as the basis for their latest recommended Sixth Carbon Budget[11]. While it is not a prescriptive path that must be followed exactly, it provides a good indication of what needs to be done over the coming years.

Expansion of low carbon energy supplies is identified as a key area for action.

Key targets along the balanced pathway are:

By 2030:

- reduce UK greenhouse gas emissions by at least 68 per cent from 1990 levels
- decrease the amount of carbon produced when electricity is generated, that is the amount of greenhouse gases emitted per unit of electricity produced by c.80 per cent, from 220 gCO2/KWh in 2019 to around 50 gCO2/KWh in 2030
- increased demand for electricity from around 300 terawatt hour (TWh) today to 360 TWh in 2030
- renewables, such as wind and solar accounting for 60 per cent of electricity generation by 2030.

By 2035:

- reduced UK greenhouse gas emissions by at least 78 per cent from 1990 levels
- decrease the amount of carbon produced when electricity is generated by c.95 per cent from 220 gCO2/KWh in 2019 to around 10 gCO2/KWh in 2035
- increased demand for electricity from around 300 TWh today to 460 TWh in 2035
- renewables accounting for 70 per cent of electricity generation by 2035.

What is net zero? nationalgrid.com/stories/energy-explained/what-is-net-zero

As we move to decarbonise the United Kingdom to reach net zero by 2050, our reliance on renewable and low carbon forms of electricity generation is growing. Every person in the country who relies on electricity to power their lives, education, work and hobbies is benefiting, and will be doing so in a way that will impact the atmosphere and the climate less and less.

The electricity industry is tackling climate change, security of energy supplies and energy costs simultaneously. This is highlighted in the UK Government's British Energy Security Strategy[1] published in April 2022. Offshore wind energy has an important role to play in delivering this strategy, and a significant step change is required to deliver up to 50 GW of offshore wind energy by 2030, given the current capacity is around 11 GW.

What this means for the national electricity transmission system:

We've explained in the previous chapter how the need for network reinforcement is identified through the annual cycle, and where the latest associated information can be found.

The Future Energy Scenarios sets out credible ways that the UK can achieve net zero by 2050, as well as the UK Government's commitment to a decarbonised electricity system by 2035. Based on extensive stakeholder engagement, research and modelling, each scenario considers how much energy we might need, where it could come from, and how we maintain a system that is reliable.

In short, fossil fuel-based generation is being phased out and will be replaced with renewable and low carbon generation, much of which is planned to be installed along the east coast. This will be coupled with greater consumer demand as other sectors of the economy move away from fossil fuels. This will put significant pressure on the transmission system which will need to be upgraded to cope and ensure reliable supplies are maintained.

11. The Sixth Carbon Budget: The UK's path to Net Zero (Committee on Climate Change, December 2020) – Available at theccc.org.uk/publication/sixth-carbon-budget/

To help put these values into perspective:

- a watt is a unit of power
- one gigawatt (GW) is 1,000,000,000 (a thousand million) watts
- a typical kettle uses 2,000 watts
- 50 GW of wind generation is enough to power 25 million kettles simultaneously
- today 11 GW of offshore wind can power 5.5 million kettles
- this decade, as a nation, we are going to increase our offshore wind generation by around 4.5 times what it is today.

Multiple significant reinforcements are needed to the transmission system up and down the east coast:

- to facilitate the connection of future sources of renewable and low carbon power generation along the coast, such as offshore wind farms, nuclear power, and interconnectors
- to enable the transport of all this new proposed power from where it is produced to where it is needed, to centres of demand
- to meet security of supply quality standards and ensure we can continue to play our part in connecting millions of people reliably to the energy they need every day.

The network is planned and operated under a set of standards designed to ensure there are no widespread electricity supply interruptions. These standards ensure that, for given operational and fault scenarios:

- the electricity system frequency is maintained within statutory limits
- no part of the network is overloaded beyond its capability
- voltage performance stays within acceptable statutory limits, and the system remains electrically stable.

How do network boundaries work?

Power is generated and consumed in all regions of the UK; however, some regions generate more or consume less than others, and surplus electricity is shared across the country. In addition, surplus power is traded with our European neighbours through electricity interconnectors.

Reliance on interconnectors will increase as a means of balancing the peaks and troughs in our domestic electricity generation, as a growing amount will be intermittent due to it being increasingly weather dependent. For example, when wind generation is high, surplus power will be exported; and when wind generation is low, some of our needs will have to be met through importing power.

To understand current and future demands on the electricity network, the concept of network boundaries is used. A boundary splits the system into sections and shows where there are high-power flows between parts of the network. When flows across a network boundary are forecast to be above the capability of the network, there are two options to manage this:

1. pay electricity generators on one side of the boundary to reduce the energy they produce (and in turn pay generators on the other side of the boundary to compensate for the shortfall). This then reduces the flows of electricity across the boundary. When National Grid ESO pay generators to do this, these are called 'constraint payments'
2. increase the capability of the network to allow more electricity to flow.

The need for reinforcement in East Anglia

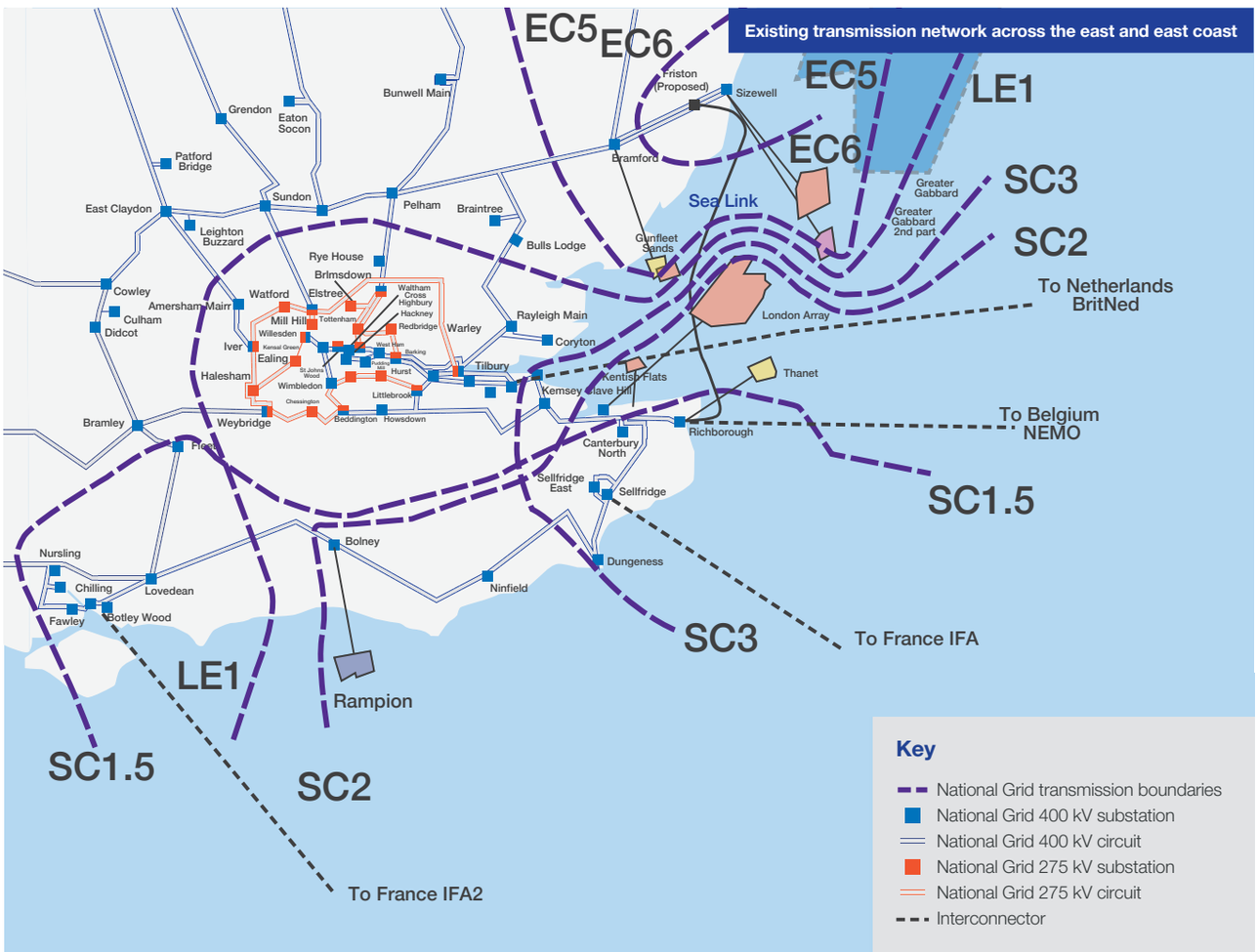
The national electricity transmission system in East Anglia is encompassed by the EC5 boundary.

Like much of the high voltage electricity transmission network across the country, the network in East Anglia was largely developed in the 1960s. It was built to supply regional demand, centred around Norwich and Ipswich. A large loop runs from Walpole in the north of the region to Pelham and Rayleigh/Tilbury in the south, via Norwich and Bramford.

In addition, two 400 kV overhead lines form radial circuits that connect Sizewell B to Bramford substation, these circuits cross boundary EC6. The coastline and relatively shallow waters around East Anglia are attractive for the connection of offshore wind projects, including the large East Anglia Round 3 offshore zone that lies directly to the east. The existing nuclear generation site at Sizewell is one of the approved sites selected for new nuclear generation development. New interconnector projects are also contracted to connect within this area.

The growth in offshore wind, nuclear generation and interconnector capacities connecting behind this boundary greatly increase the power transfer requirements out of the region as local total generation will exceed local demand. The existing high voltage electricity network in East Anglia does not have the capability needed to reliably and securely transport all the energy that will be connected while meeting the Security and Quality of Supply Standard. Several network reinforcement projects are planned to address the shortfall of which Sea Link is one.

In addition to reinforcing the EC5 boundary, by connecting Sea Link into the transmission system at the proposed Friston substation it also reinforces the Bramford-Sizewell radial circuits, which are due to carry additional power from offshore wind, new nuclear and interconnectors, so offering additional constraint savings to the consumer.



The need in the South East

The south of England transmission region includes boundaries LE1, SC1, SC1.5, SC2 and SC3. The LE1 boundary almost exclusively imports power from the north and west of England into the south east.

Power flows in the region are determined by the need to meet domestic demand in the south east as well as imports and exports to Europe via interconnectors.

As more energy is pulled across London and into Kent, power flows across LE1 are set to increase. Demand for electricity will grow; interconnectors will exchange more energy with European countries to help balance intermittent sources of power. As a result, the electricity transmission network in the south east will need to be reinforced to ensure it is able to continue operating safely and securely.

The strategic proposal

The network reinforcement needs identified in both East Anglia and the south east were reviewed together. A single solution which simultaneously dealt with both constraints was selected.

The identified reinforcement that will help achieve this is an offshore 2 GW HVDC link between Suffolk and Kent.

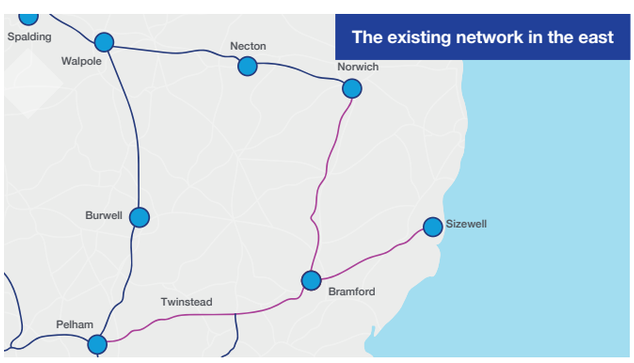
8. Options identification and selection process

In developing our preferred route and sites, we have followed National Grid Electricity Transmission's approach to options appraisal[12] and approach to consenting[7]. Our work is set out in full in our Sea Link corridor and preliminary routeing and siting study (CPRSS[8]) report.

Define the study area

We defined a study area informed by factors including:

- the Sea Link connection end points
- the location of towns and other built-up areas
- the location of physical features such as estuaries
- protected sites such as environmental designations (including Areas of Outstanding Natural Beauty)
- offshore infrastructure and marine activities.



Constraint mapping

We then map out key features in the terrestrial and marine environment that we want to avoid or minimise contact with. These have been informed by planning policy and expert professional judgement. At this stage, we only consider features that would make a difference to our routeing decisions. These include the built-up areas where people live, other infrastructure that is present and features that may be sensitive in terms of ecology, heritage or landscape, as well as features or activities that may represent planning or technical constraints. The full list can be found within our CPRSS report.

Option identification, appraisal and selection

Considering the constraints and opportunities available, using expert professional judgement, we devise and refine various routes from one connection end to another. These seek to represent different high-level options for making the connection, avoiding the identified constraints.

We then carry out an appraisal of each option with engineers, environmental experts and consenting specialists in order to consider the implications of each option. This allows us to compare between options on a consistent basis and on topics that are likely to influence the decision. Through this appraisal we may also identify further options or combinations and do further assessment if required.

We then consider the relative merits of each option to reach our balanced conclusion on a preferred corridor. The decision is informed by National Grid's statutory duties, the options appraisal and planning policy, including Schedule 9 of the Electricity Act 1989 as enshrined within National Grid's commitments when undertaking works in the UK[2].

The options appraisal is a staged process, first identifying options within each geographic study area – Suffolk, marine waters and Kent – appraising each of the options and then identifying an on balance preferred end to end solution.

Landfalls

Landfalls are where the offshore (subsea) cables come ashore and are therefore the interface between the onshore and offshore elements of the project. Potential landfalls were identified based on:

- suitability of ground conditions (e.g. areas of low elevation, avoidance of estuarine habitats)
- consideration of traffic and access opportunities
- avoidance or minimising interaction with existing infrastructure.

Marine route corridors

The primary driver for marine routeing was to identify areas that would ensure long-term integrity and security of the cables whilst minimising environmental and socio-economic impacts. Marine route corridors were developed based on:

- avoiding or minimising lengths of corridors through ecologically sensitive areas, anchorages and areas of archaeological importance
- avoidance of offshore infrastructure
- minimising crossings of other cables and pipelines
- minimising interaction with other marine users, such as shipping and navigation and fishing activities.

Terrestrial corridors

The primary driver for terrestrial routing is to identify the shortest route possible to minimise environmental and socio-economic impact, whilst taking into account constraints such as:

- avoidance of environmental designations where possible
- avoidance of settlements
- consideration of traffic and access opportunities.

12. Our approach to Options Appraisal (National Grid, 2012) – Available at nationalgrid.com/ electricity-transmission/document/96531/download

Converter station sites

Areas of search for potential converter site locations were based on a 5 km radius from the identified connection points. This was to ensure as short as possible high voltage alternating current (HVAC) connection between the converter station and connection point. Sites were identified based on:

- scope for mitigation
- nature of adjacent roads
- proximity to existing areas of woodland (providing screening for converter station infrastructure)
- proximity of adjacent residential properties or listed buildings
- location of public rights of way and cycle routes
- the presence of any potentially valuable landscape elements
- the relative length of high voltage direct current and HVAC connections.

Developing a graduated swathe

Following the selection of a preferred terrestrial corridor, we produced a graduated swathe which indicates where an alignment could be routed. This shaded area is darker where the alignment is more likely to be routed when taking into account the identified constraints but remains indicative only until further assessment work is undertaken. We will consider feedback from public consultation and further information from surveys and stakeholder engagement as we develop the proposal for the alignment.

The marine option does not include a graduated swathe, the dynamic nature of the marine environment means the process for selecting the installation route is largely determined by the environment itself. Following the routeing and siting stage, we have identified a preferred wide corridor (known as the scoping boundary) which will later be refined to the installation route based on survey data and assessments.

9. Identifying our preferred landfall and converter station sites

Routeing and siting considerations are an iterative process, and we need to carefully consider the implications of different combinations when making a balanced overall decision.

To help set out the process we have taken, we have separately described discrete route corridors and siting elements, as follows:

Suffolk

Our study area is between the River Alde in the south, Minsmere in the north and the A12 in the west.

Our emerging preferences

On balance, a landfall between Aldeburgh and Thorpeness has been identified as the emerging preference for Sea Link. This is because it minimises interaction with other infrastructure in the immediate nearshore environment and avoids a nearshore geological feature, the Coralline Crag. The appraisal also identified that this landfall presents opportunities for coordination with other proposed developments.

An alternative landfall, in the proximity of Sizewell nuclear power station has also been identified in Suffolk. Based on the work we have done to date, we believe that landfall in the proximity of Sizewell can only accommodate one set of cables, thereby reducing the opportunity for coordination.

Two converter station sites have been identified as emerging preferences: site 1 which is located to the south of Knodishall and site 3 which is located to the east of Saxmundham.

Both sites are naturally screened by the trees and woodland which surrounds them, and present opportunities to incorporate further mitigation planting into the design of the site. There are also opportunities to minimise the length of the overall onshore cable corridors from the landfall, and for a HVAC connection into the proposed Friston substation.

Kent

Our study area is between Herne Bay on the north Kent coast and Sandwich Bay on the east Kent coast.

Our emerging preference

On balance, we have identified our preference as a route which runs from a landfall in Pegwell Bay to a proposed converter station site north east of the existing National Grid Richborough substation, and a HVAC connection back onto the existing overhead line to the south of Minster. This has sought to minimise the length of the onshore project whilst avoiding an area of challenging seabed on the north Kent coast.

Marine

Our study area runs from the Suffolk coast, in the vicinity of the existing network and the proposed Friston substation; to the Kent coast, in the vicinity of the existing network near the Richborough substation.

Our preferred and alternative options

A marine route corridor between a landfall on the Suffolk coast between Aldeburgh and Thorpeness and a landfall on the Kent coast at Pegwell Bay has been identified as the emerging preference. The marine route corridor emerging preference avoids or minimises interactions with marine designated sites, maintains sufficient water depth at crossings of other cables, whilst also minimising interactions with other marine users as far as possible.

An alternative marine route corridor to the landfall in the proximity of Sizewell nuclear power station has also been identified for the Suffolk section of the marine route corridor.

An example valve hall - IFA2 converter station in Fareham

10. Our proposals

To make it easier to understand our plans, we have broken the route of the project down into various sections, as set out on the following pages.

See section 16 for large versions of our maps.

Our marine proposals

Considerations

We have considered and assessed a number of options for the landfall point and marine route corridor. We have narrowed these options down a single marine route corridor which is approximately 130 km in length, with an emerging preference and alternative landfall option in Suffolk.

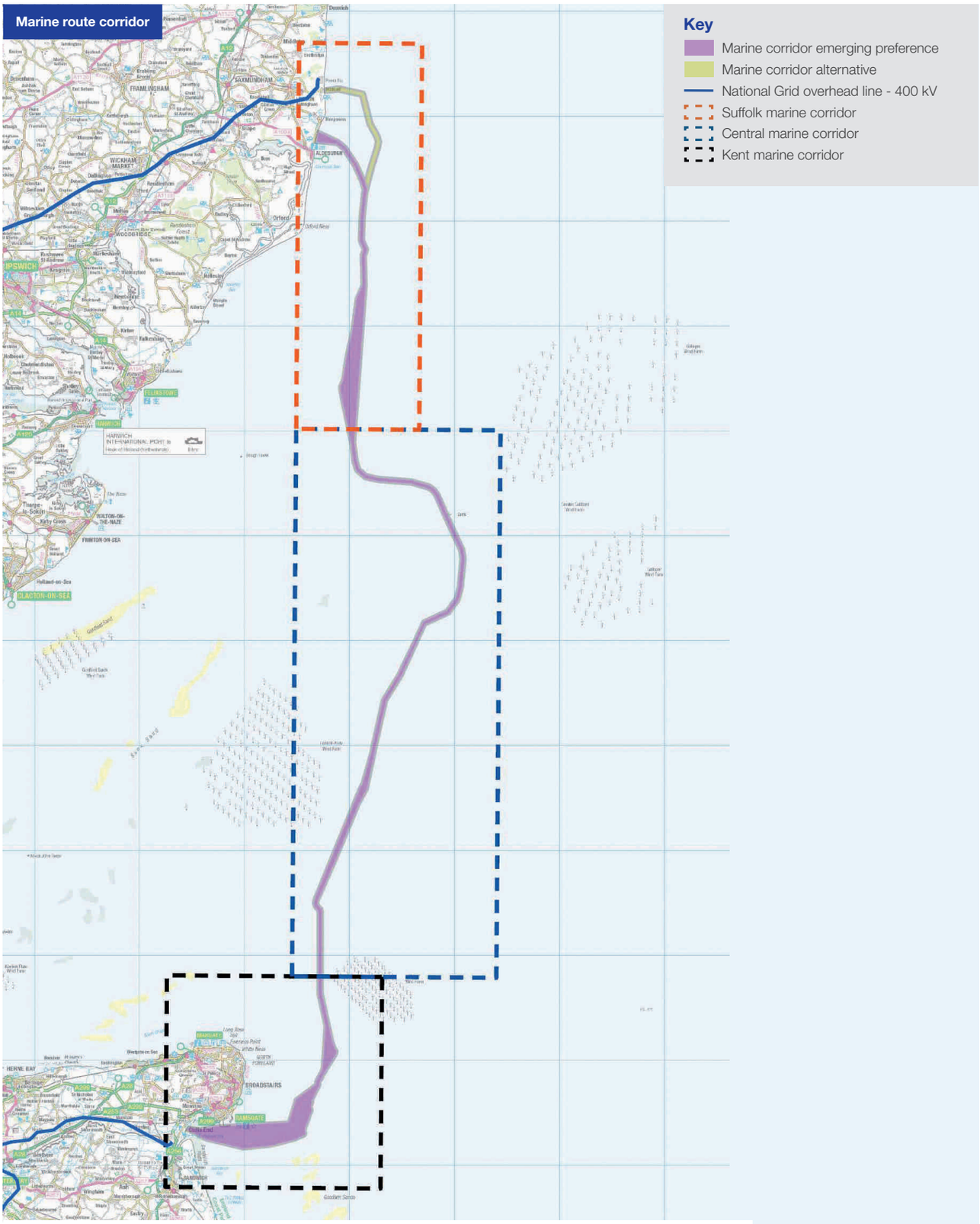
The exact alignment of the cables will be informed by marine surveys and feedback from this consultation.

Marine route corridor emerging preference

From a landfall between Aldeburgh and Thorpeness in Suffolk we would install a subsea cable and associated infrastructure to a landfall at Pegwell Bay in Kent.

Marine route corridor alternative option

From a landfall south of Sizewell nuclear power station in Suffolk we would install a subsea cable and associated infrastructure to a landfall at Pegwell Bay in Kent.



Our proposals in Suffolk - emerging preferences

Considerations

We have considered and assessed a number of options for the landfall point and converter station.

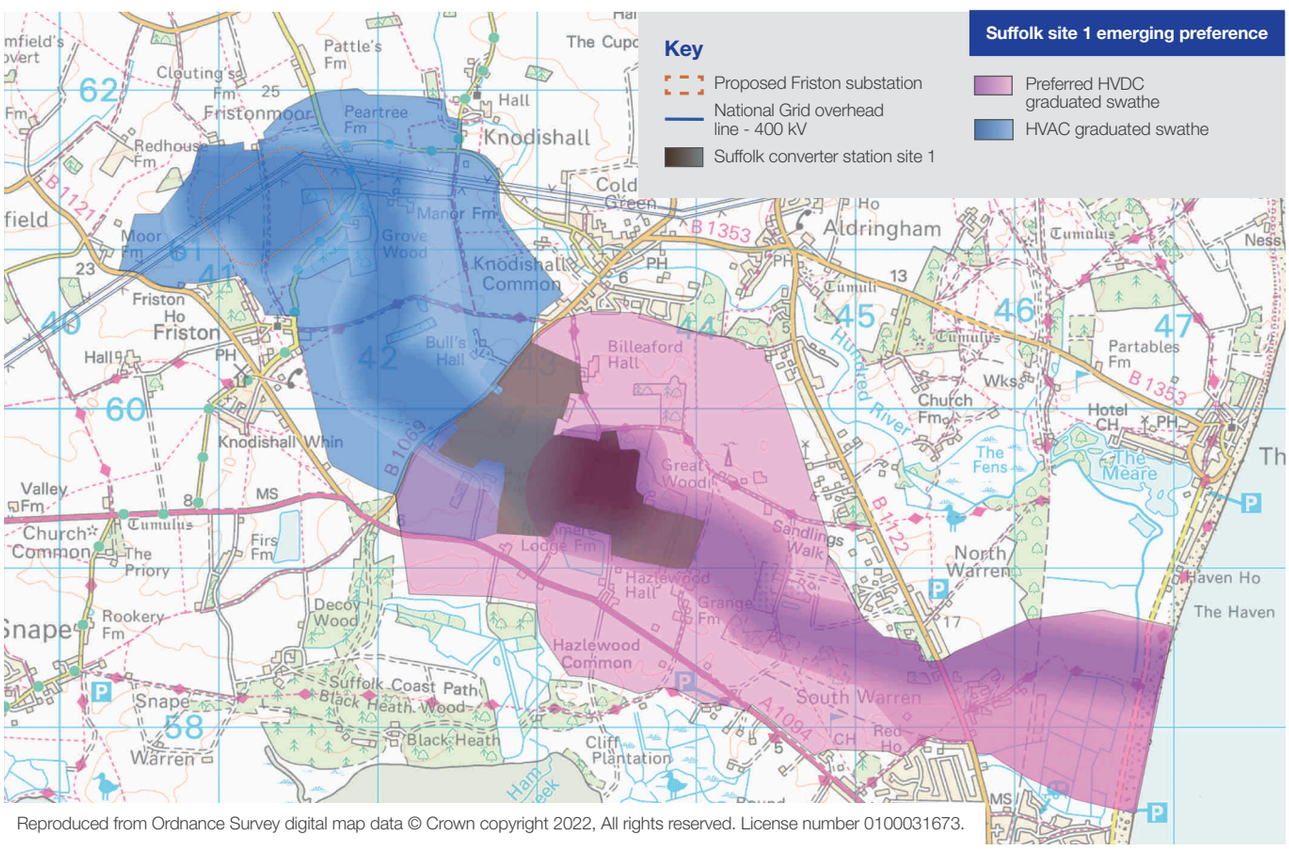
We have narrowed these options down to:

- two different proposed converter station sites
- two marine cable landfall locations
- HVDC cable corridors between the above
- HVAC cable corridors between converter station sites and proposed Friston substation.

In total we are proposing five options for which feedback is sought. These options are split into two categories, emerging preference and alternative option. The two groups cover both proposed converter sites but have their own marine cable landfall location. Our emerging preferences are based on a landfall location between Aldeburgh and Thorpeness whereas the alternative options are based on a landfall location at Sizewell.

From the landfall location, we are proposing to install underground HVDC cables to a new converter station, which will convert electricity from direct to alternating current. We are currently showing two 'search' areas within which we are proposing to locate the converter station but have not yet identified a specific site within the search areas for this infrastructure.

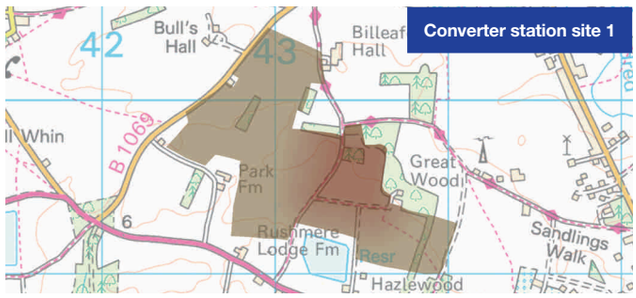
The route of the underground cables into the converter station will depend on which landfall location is chosen. It will also be subject to further design work and technical assessments. Our plans therefore show wide cable route 'corridors' from each landfall option into the converter station 'search area,' and then onwards to the proposed Friston 400 kV HVAC substation. We would not need all of the land within the route corridors to install the underground cables.

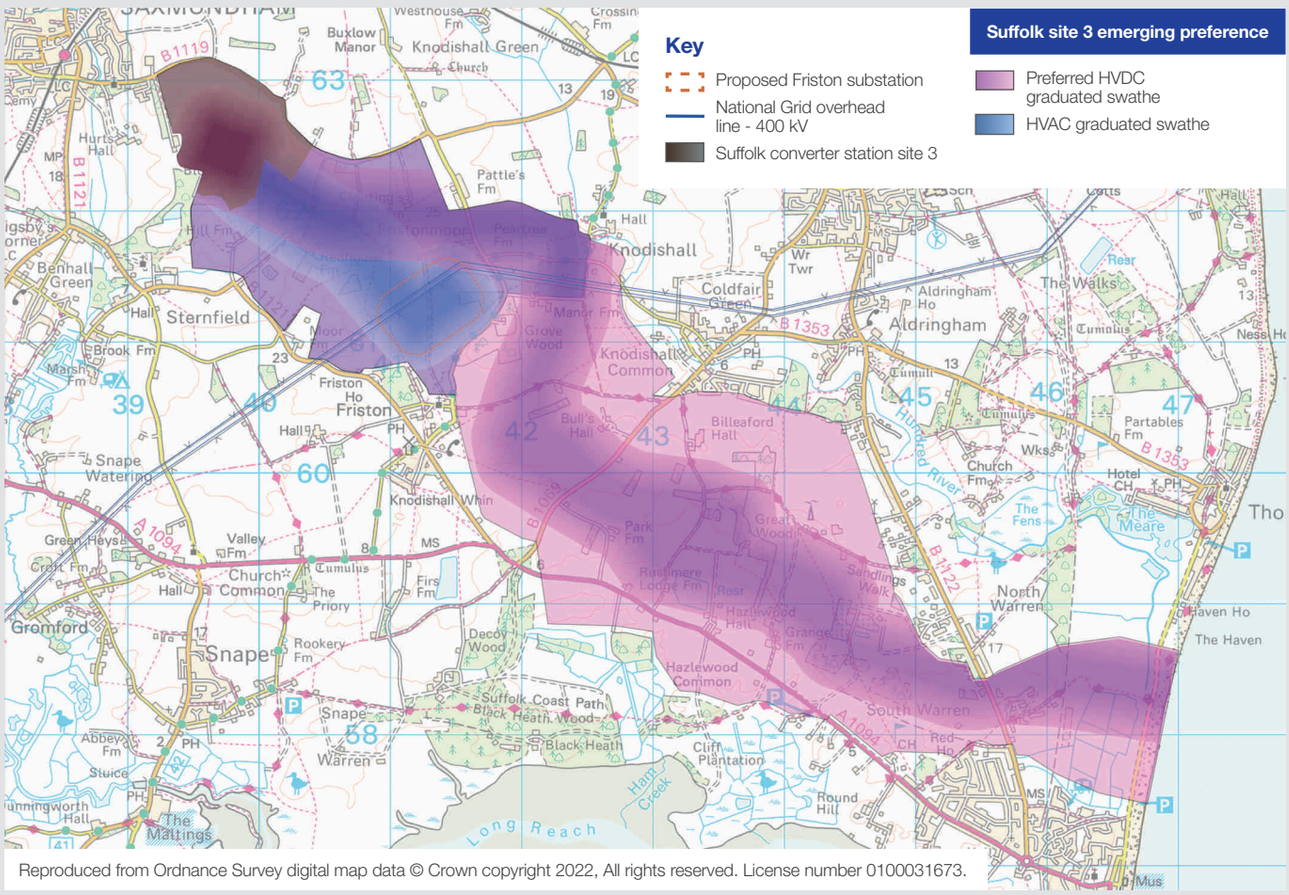


Suffolk site 1 emerging preference

From a landfall location between Aldeburgh and Thorpeness, we would install underground HVDC cables running west (north of the A1094) to the converter station site 1.

We would install HVAC underground cables from the converter station to the north west to connect into the proposed Friston 400 kV HVAC substation.

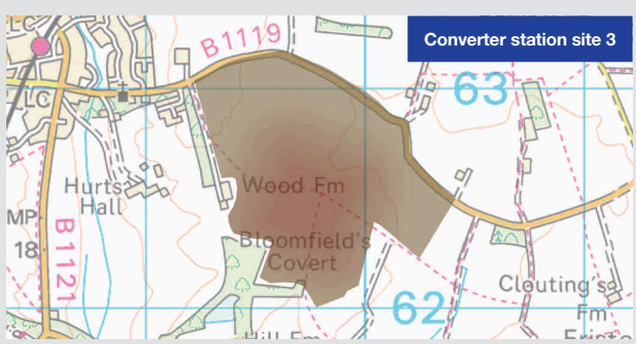




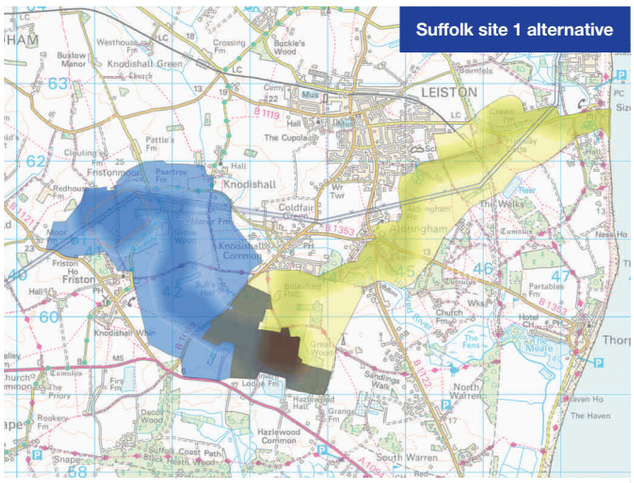
Suffolk site 3 emerging preference

From a landfall location between Aldeburgh and Thorpeness, we would install underground cables running north west (north of the A1094) to the converter station site 3.

We would install HVAC underground cables from the converter station to the south east in order to connect into the proposed Friston 400 kV substation.



Our proposals in Suffolk - alternative options



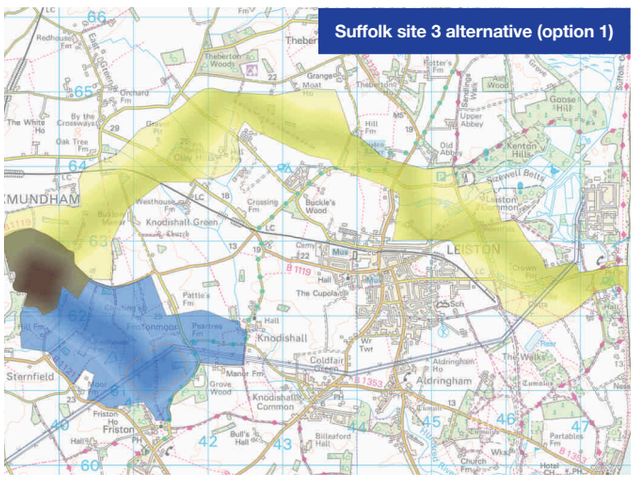
Key

- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 1
- HVDC corridor and graduated swathe
- HVAC corridor and graduated swathe

Suffolk site 1 alternative

From a landfall location at Sizewell, we would install underground HVDC cables running south west (past Leiston and Aldringham) to the converter station site 1.

We would install HVAC underground cables from the converter station to the proposed Friston 400 kV HVAC substation.



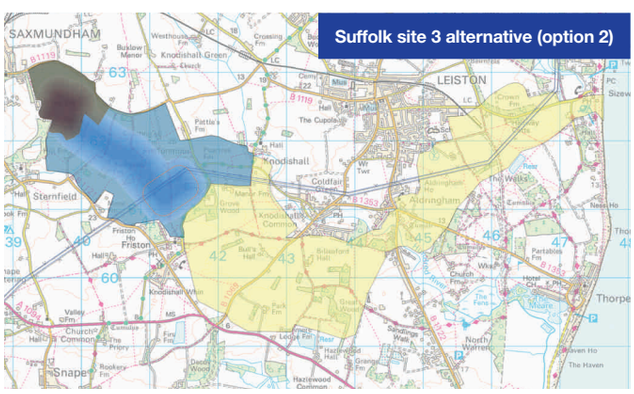
Key

- Proposed Friston substation
- National Grid overhead line - 400 kV
- Suffolk converter station site 3
- HVDC corridor and graduated swathe
- HVAC corridor and graduated swathe

Suffolk site 3 alternative (option 1)

From a landfall location at Sizewell we would install underground HVDC cables running around the north of Leiston to the converter station site 3.

We would install HVAC underground cables from the converter station to the south east in order to connect into the proposed Friston 400 kV HVAC substation.



Suffolk site 3 alternative (option 2)

From a landfall location at Sizewell, we would install underground HVDC cables running south west (past Leiston and Aldringham) to the converter station site 3.

We would install HVAC underground cables from the converter station to the south east in order to connect into the proposed Friston 400 kV HVAC substation.

Proposed Friston substation

At both ends of Sea Link the HVDC converter stations need to connect into the existing national electricity transmission system. In Suffolk, we are proposing a HVAC underground cable connection to be made into the proposed Friston substation. This substation will need to be extended to allow this Sea Link connection to be made. The extension would include busbars, switchgear, cable sealing ends, civils and associated infrastructure.

Consideration for coordination with National Grid Ventures projects

Alongside National Grid Electricity Transmission's proposals for Sea Link, there are two other HVDC projects being proposed in the Suffolk area by National Grid Ventures, EuroLink and Nautilus.

All the proposed Suffolk specific routeing and siting options defined in this project background document are applicable to Sea Link as a standalone project.

However, subject to further assessment and studies, some of our proposals in Suffolk could potentially accommodate co-location of up to three converter stations with shared HVDC and HVAC cable corridors and shared landfall as follows:

- site 1 and site 3 converter station locations could potentially accommodate up to three converter stations
- the landfall between Aldeburgh and Thorpeness and the cable corridors from here to both site 1 and site 3 could potentially accommodate up to three sets of HVDC cables
- the HVAC cable corridors between site 1 or site 3 converter station locations to the proposed HVAC Friston substation could potentially accommodate the HVAC cables necessary to connect up to three converter stations.

Co-locating infrastructure could contain the spread of impact, whereas separating the proposed infrastructure may reduced the intensity on a single area.

In the feedback section of this consultation, we are seeking your views on potential co-location. Please let us know what you think.

As the project progresses, we will continue to explore opportunities to coordinate at all levels.

Our proposals in Kent

Considerations

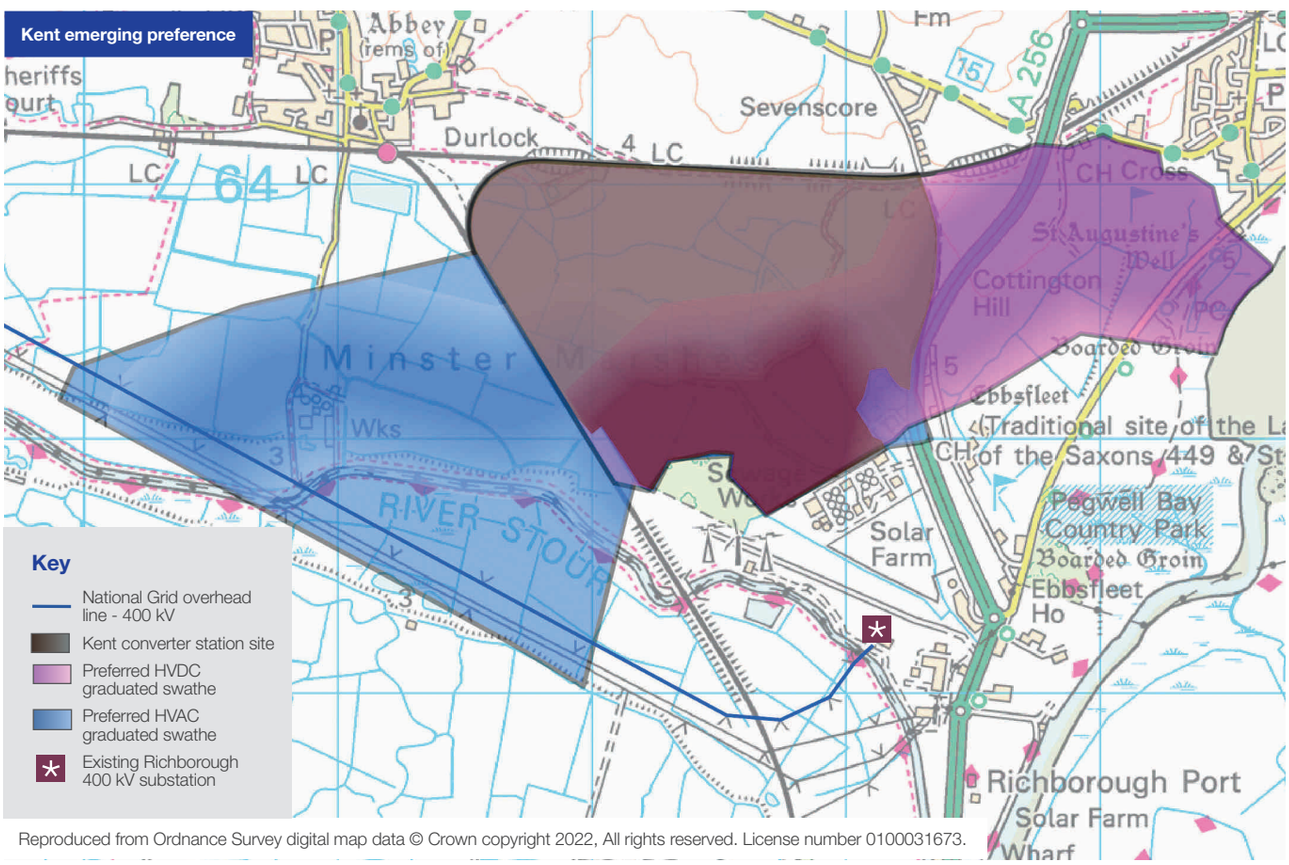
We have considered and assessed a number of options for marine cable landfall locations, converter station sites and interlinking HVDC cable corridors, as well as the HVAC connection between the converter site and the nearby electricity transmission system.

We have narrowed these options down to a single converter station site, for which we have identified preferred route corridors for the HVDC and HVAC connection infrastructure.

The route of the underground cables into the converter station is subject to further design work and technical assessments. Our plans therefore show wide cable route 'corridors' from Pegwell Bay into the converter station 'search area', and then an onward HVAC connection to the Richborough to Canterbury overhead line. We would not need all of the land within the route corridors to install the HVDC cables and HVAC cable or overhead line connections.

Emerging preference

From a landfall (where the link would transition from offshore to onshore) location at Pegwell Bay, we would install underground HVDC cables running west to connect into a new converter station, located within 5 km of the existing Richborough 400 kV substation. A HVAC connection, which could be either underground cable, overhead line or a combination of the two, would be installed between the converter station and a point on the existing Richborough to Canterbury overhead line.

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11. The Business, Energy and Industrial Strategy (BEIS) review of offshore coordination

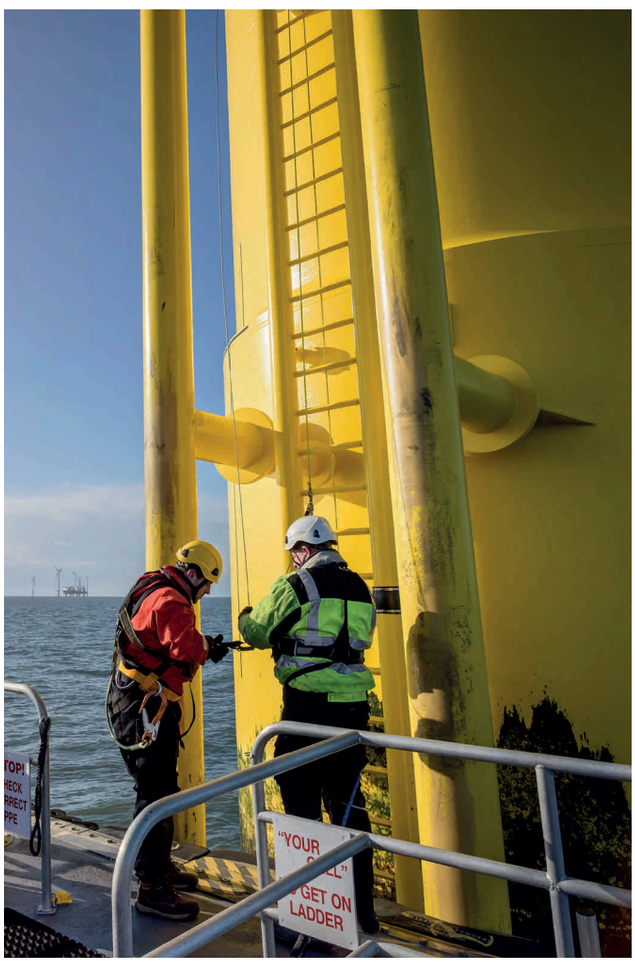
The BEIS department's Offshore Transmission Network Review[13] looks into the way that the offshore transmission network is designed and delivered.

Onshore and offshore energy infrastructure are critical to delivering on the ambition for the UK to be net zero by 2050.

National Grid Electricity Transmission is working together with other developers to explore the potential for offshore coordination with Sea Link, as part of the Offshore Transmission Network Review (OTNR) "Early Opportunities" workstream[14].

Offshore coordination could reduce, but not avoid, the need for new onshore infrastructure and reinforcement of the existing network. The need for Sea Link, its converter stations, and associated infrastructure in Suffolk and Kent, remains regardless of offshore coordination.

We are working with the Government and Ofgem as they continue to progress the changes needed to enable greater offshore coordination.



13. Offshore Transmission Network Review (BEIS) - Available at gov.uk/government/groups/offshore-transmission-network-review

14. Joint Statement from North Falls, Five Estuaries and National Grid (Gov UK, July 2022) - Available at gov.uk/government/publications/offshore-transmission-network-review-pathfinder-projects/joint-statement-from-north-falls-five-estuaries-and-national-grid-commitment-to-exploring-coordinated-network-designs-in-east-anglia

12. Our public consultation

Our commitment to you

As we upgrade the electricity transmission network and develop proposals to allow more energy to flow on our network, we will work with a wide range of stakeholders and experts.

Listening to communities gives us valuable feedback and insight as we develop our proposals and look to minimise any impacts.

Where our plans affect you or your community, we encourage you to let us know your opinions on our proposals.

Your views are important to us and we will carefully consider all feedback we receive. It will help shape our plans as our infrastructure projects develop.

Our approach to public consultation

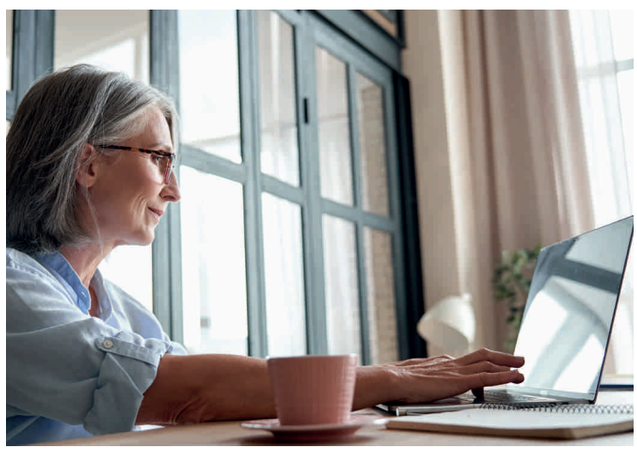
Certain types of energy infrastructure fall within the classification of nationally significant infrastructure project, which require a development consent order (DCO).

Applications for DCOs are submitted to and examined by the Planning Inspectorate. They are determined by the Secretary of State for Business, Energy and Industrial Strategy, not by a local planning authority, who remain an important consultee in the process.

Consultation to support our DCO application is planned to take place over two stages this year and next. This first stage of public consultation is being held at an early stage of development to introduce the project and ensure we capture the views and knowledge of local people before developing our plans further.

The aim of this consultation is to:

- introduce the project to the public and provide an overview
- explain why we need to build the reinforcement
- set out options that have been considered and how we made the decision on the corridor and graduated swathe being proposed
- present our proposed corridors with graduated swathe
- present our proposed HVDC converter sites
- present our proposed marine route and cable landing locations
- give stakeholders the opportunity to provide feedback on our work to date
- outline next steps.



We are using a blend of both traditional and digital consultation tools to reach the widest possible audience. Information about our proposals and access to the project team will be equally available both online and offline.

We are committed to engaging with all stakeholders and we recognise that some people have particular needs or may not have access to the internet.

Our consultation has been designed to ensure we understand these different needs and are accessible to everyone. If you or anyone you know has difficulty accessing project information or providing feedback, please contact us using the details found in section 14. We want to make our consultation as inclusive as possible, and our community relations team will be pleased to help.

Who are we consulting?

Our consultation is open to anyone who may have an interest in our proposals.

We are consulting with residents, communities, landowners, local businesses and interest groups, as well as elected representatives and prescribed consultees, such as the Environment Agency, Natural England and Historic England.

What information is available?

We have published the materials listed in the table below to provide information on our proposals.

Paper copies of the newsletter and feedback form are available at consultation materials deposit points for collection, see details of these in section 13. The feedback form is also available on our website to complete or download. See section 14 for details on how to give feedback.

What we are asking for feedback on

Throughout this document we have explained the need case for Sea Link and our approach to consenting. We want to know your views on our proposed Sea Link corridors and graduated swathes, the proposed Friston substation and converter stations sites, along with any feedback on coordination with National Grid Ventures' projects.

We also want to know about any concerns or questions you might have about our proposals, or any local factors we should consider. The feedback received through this first consultation stage will inform how we further develop Sea Link.

Available materials	
Project background document	Providing an overview of the project and detailing our proposals and how we are consulting
Corridor preliminary routeing and substation siting report	Providing more information on the project and the need for the project, the options considered, the routeing and siting options assessed
Newsletter	Summarising details of the project and public consultation
Feedback form	Providing you the opportunity to give us your comments and feedback, to inform the next version of design where possible
Website	Hosting all project information, including downloadable versions of the above documents, an online feedback form and interactive map

13. Consultation events and materials

Throughout the consultation we are holding a series of face to face and online events. These events provide the opportunity to present information, and members of the project team will be available to talk through our proposals and answer questions.

Public information events

Please visit our face to face public information events being held at the following locations across the proposed route to find out more and speak to experts within the team.

Public exhibitions in Suffolk	
Location	Date and time
Old Generator Station King's Field Aldeburgh IP15 5HY	Thursday 10 November 1pm – 8pm
Friston Village Hall Church Road Friston Saxmundham IP17 1PU	Friday 11 November 1pm – 8pm
Fromus Centre The Saxmundham Hub Street Farm Road Saxmundham IP17 1AL	Saturday 12 November 10am – 5pm

Public exhibitions in Kent	
Location	Date and time
Guildhall Cattle Market Sandwich CT13 9AH	Thursday 17 November 9am – 4pm
Newington Community Centre Princess Margaret Avenue Ramsgate CT12 6HX	Friday 18 November 1pm – 8pm
Cliffsend Village Hall 55 Foads Lane Cliffsend Ramsgate CT12 5JH	Saturday 19 November 10am – 5pm

Website

The project website will host downloadable copies of consultation documents, an online feedback form and interactive map.

Consultation materials deposit points

Paper copies of the main consultation materials are available to inspect at the following locations throughout the consultation period. Venue opening hours are subject to change – please check with the location.

Kent locations
Ash Library, 11 Queen's Rd, Ash, Canterbury, CT3 2BG
Broadstairs Library, the Broadway, Broadstairs, CT10 2BS
Birchington Library, Alpha Road, Birchington, CT7 9EG
Cliftonville Library, Queen Elizabeth Avenue, Margate, CT9 3JX
Deal Town Council, High St, Deal, CT14 6TR
Margate Library, Thanet Gateway Plus, Cecil Street, Margate, CT9 1RE
Minster-in-Thanet Library, 4A Monkton Road, Minster, Ramsgate, CT12 4EA
Newington Library, Marlowe Academy, Marlowe Way, Ramsgate, CT12 6NB
Ramsgate Library, Guildford Lawn, Ramsgate, CT11 9AY
Sandwich Library, 13 Market Street, Sandwich, CT13 9DA
Walmer Town Council, 62 The Strand, Walmer, Deal, CT14 7DP
Westgate Library, Minster Road, Westgate-On-Sea, CT8 8BP

Online webinars

Attend an hour online webinar where we will present details of the proposals followed by an open Q&A. We are holding webinars that provide a general overview of the proposals.

Six project webinars will be held throughout the consultation period at the following dates and times:

Our proposals in Suffolk
Tuesday 22 November, 6pm – 7pm
Tuesday 29 November, 6pm – 7pm

Our proposals in Kent
Wednesday 23 November, 6pm – 7pm
Wednesday 30 November, 6pm – 7pm

Marine route proposals
Thursday 24 November, 6pm – 7pm
Thursday 1 December, 6pm – 7pm

You can register to attend one of our webinars by visiting our website, calling our freephone number or emailing us.

Suffolk locations
Aldeburgh Library, Victoria Rd, Aldeburgh, IP15 5EG
Aldeburgh Town Council, Moot Hall, Market Cross Pl, Aldeburgh, IP15 5DS
Co-op, 117 High Street, Aldeburgh, IP15 5AR
Leiston Library, Old Post Office Square, Main St, Leiston, IP16 4ER
Leiston Town Council, Main St, Leiston, IP16 4ER
Saxmundham Library, Block B, Street Farm Rd, Saxmundham, IP17 1AL
Saxmundham Town Council, Block B, Street Farm Rd, Saxmundham, IP17 1AL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14. Have your say

This section sets out how you can find out more information, and provide your feedback on the project.

Our consultation runs from 24 October to 18 December 2022. You can provide your feedback in the following ways:

Complete a feedback form

We have produced an online feedback form for you to fill in and submit on our website at **nationalgrid.com/sealink**

Paper copies of our feedback form will be available to pick up from our face to face public information events and consultation materials deposit points listed in section 13. You can also download and print a copy of the feedback form from our website; alternatively, please get in touch and we will post one to you.

Send us a letter

You can send a letter/or completed feedback form to **Freepost SEA LINK** (no stamp or further address details are required).

Email us

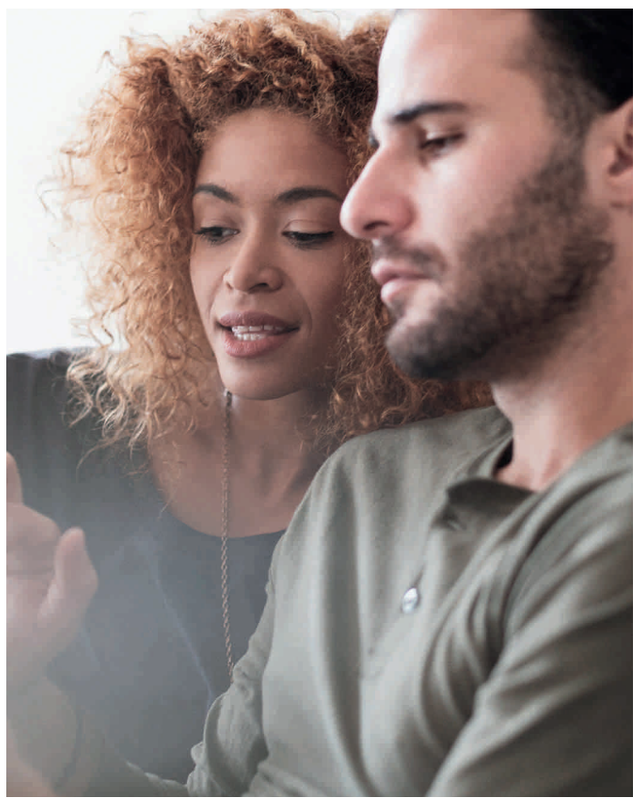
If you prefer to send us your comments via email, you can send them to us at **contact@sealink.nationalgrid.com**

Call us

Freephone 0808 134 9569
(Lines are open Monday to Friday 9am – 5.30pm)

If you would prefer to receive any information relating to the consultation through the post, or you need it in another format, please get in touch.

If you have difficulty writing down your feedback, a member of the team will be able to take comments over the phone.



15. Next steps

The feedback received throughout the first stage of consultation will inform how Sea Link is developed further and will influence the next stage in the design of the project.

Over the coming months we will be in discussions with landowners and people with an interest in land which interacts with the project.

We will carry out environmental impact assessment work and undertake surveys along the route. Further to this we will discuss with local authorities what we need to consider as part of the formal environmental assessments and this will be set out within a scoping document.

The findings of our assessments will be detailed in a preliminary environmental information report which will be presented at the next stage of consultation.

When the non-statutory consultation closes, we will review all the responses as we continue to develop the designs.

Our next stage of consultation is planned for 2023, when we will present more detailed proposals. At that point people will be able to see how we have taken their views into account, and provide further feedback on the project, which will help us further refine the project design.

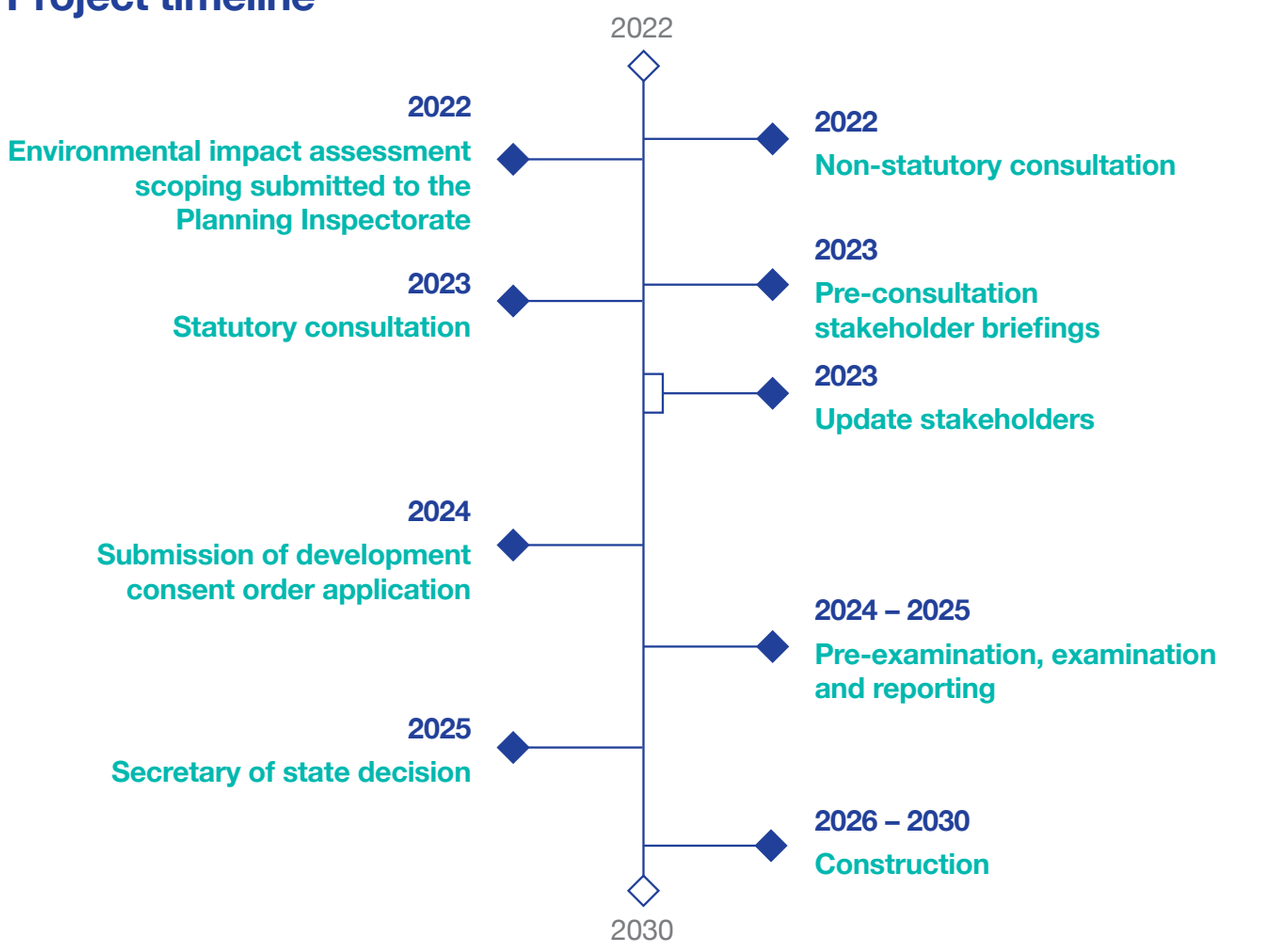
Following the statutory consultation, we will review the responses and prepare our submission documents, including the environmental statement, which will set out the likely effects of the project. Once all documents have been prepared, we will submit an application to the Planning Inspectorate, seeking consent for the reinforcement and associated development. This will include seeking powers of compulsory purchase of land and rights, as necessary.

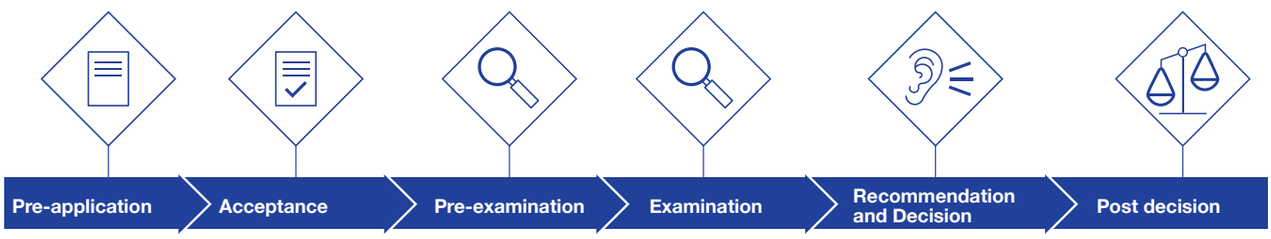
Once submitted, it can take up to 18 months for the application to be determined. The Planning Inspectorate, on behalf of the Secretary of State, will decide whether the application meets the standards required to be formally accepted for examination. If the application is accepted, the Examining Authority, a group of independently appointed inspectors, will have six months to examine the proposal, listening to the views of Interested Parties and other relevant stakeholders through submission of evidence and through public hearings.

The Examining Authority will then prepare a report on the application to the Secretary of State for Business, Energy and Industrial Strategy, including a recommendation, within three months of examination closing. The Secretary of State then has a further three months to decide on whether to grant or refuse development consent.

Further details on the development consent process can be found on the Planning Inspectorate's website at infrastructure.planninginspectorate.gov.uk

Project timeline





We are here

Before submitting an application, potential applicants have a statutory duty to carry out consultation on their proposals

The Acceptance stage begins when an applicant submits an application for development consent to the Planning Inspectorate.

There follows a period of up to 28 days (excluding the date of receipt of the application) for the Planning Inspectorate, on behalf of the Secretary of State, to decide whether or not the application meets the standards required to be accepted for examination.

At this stage, the public will be able to register with the Planning Inspectorate to become an Interested Party by making a Relevant Representation.

The Planning Inspectorate has up to six months to carry out the examination. During this stage Interested Parties who have registered by making a Relevant Representation are invited to provide more details of their views in writing.

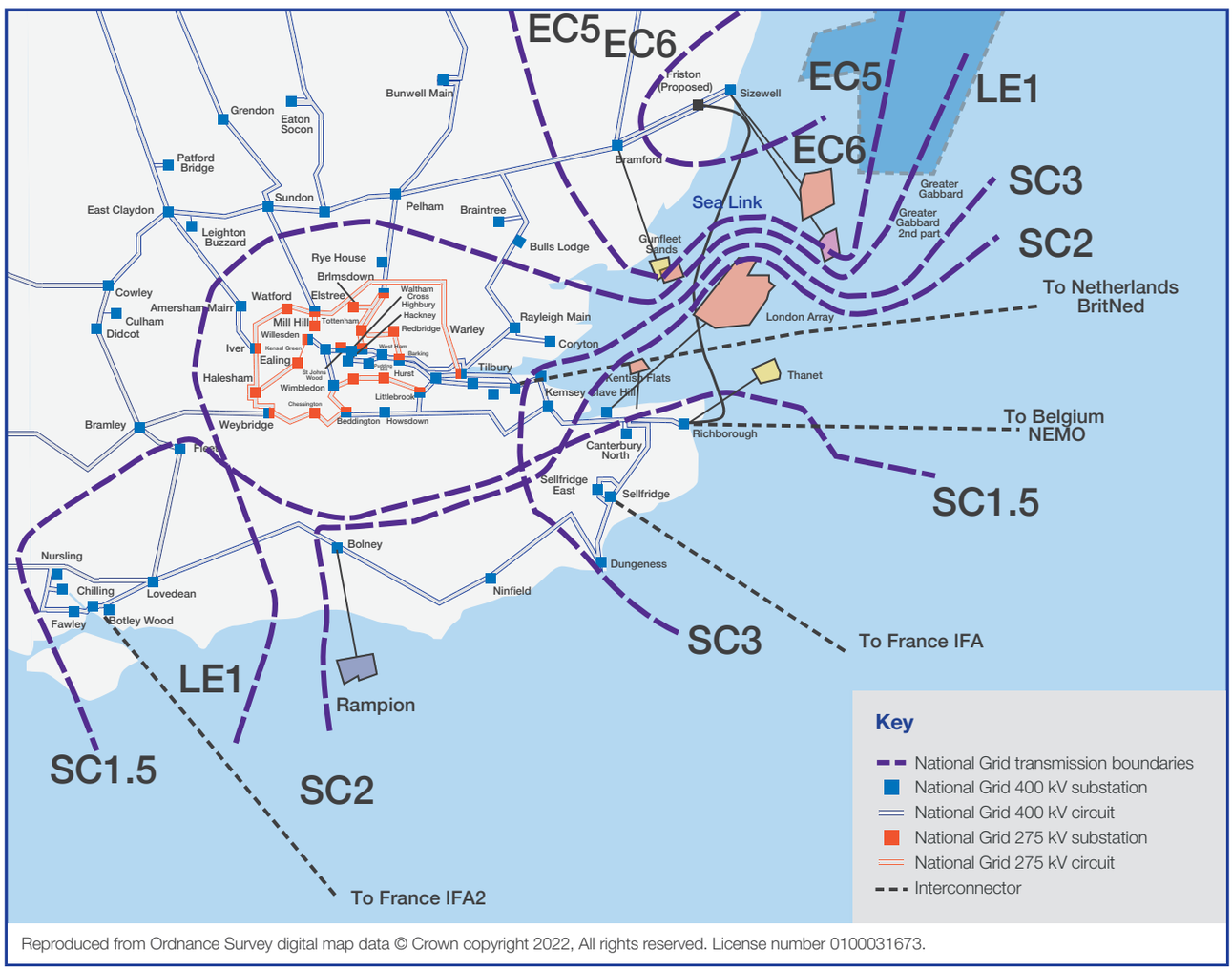
The Planning Inspectorate must prepare a report on the application to the relevant Secretary of State, including a recommendation, within three months of the close of the six month Examination stage.

The relevant Secretary of State then has a further three months to make the decision on whether to grant or refuse development consent.

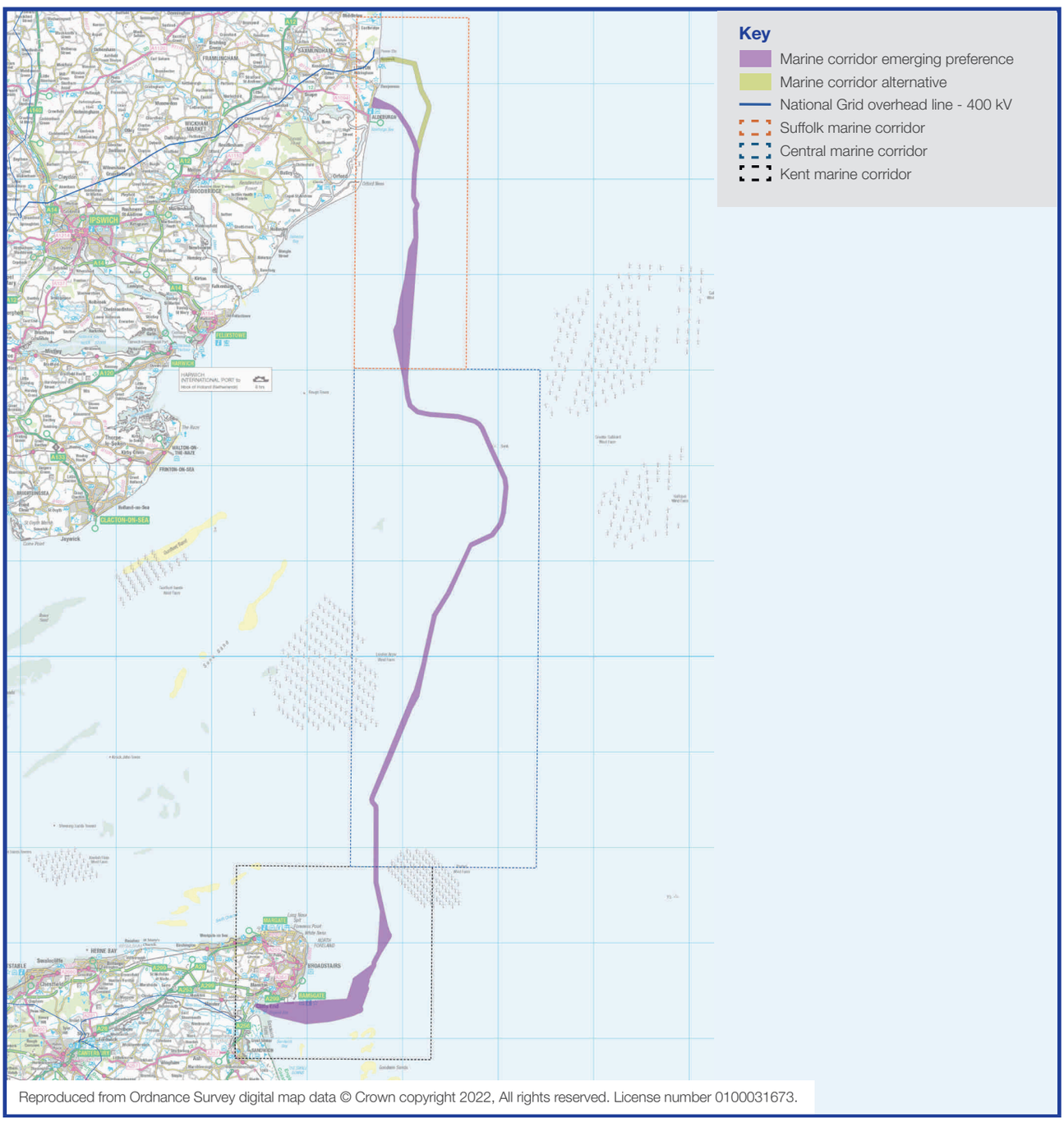
Once a decision has been issued by the relevant Secretary of State, there is a six week period in which the decision may be challenged in the High Court. This process of legal challenge is known as Judicial Review.

16. Project maps and information

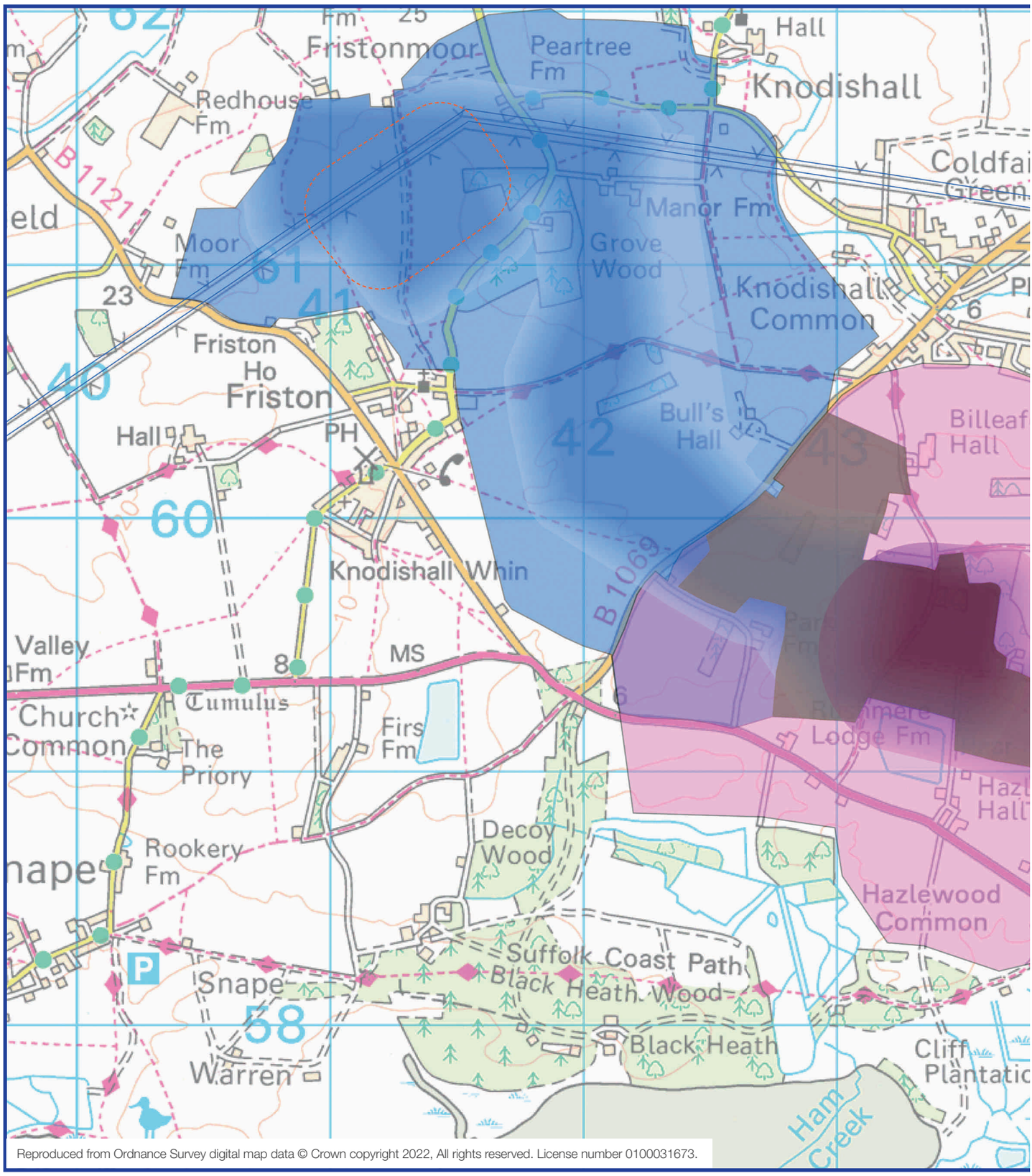
Existing transmission network across the east and east coast

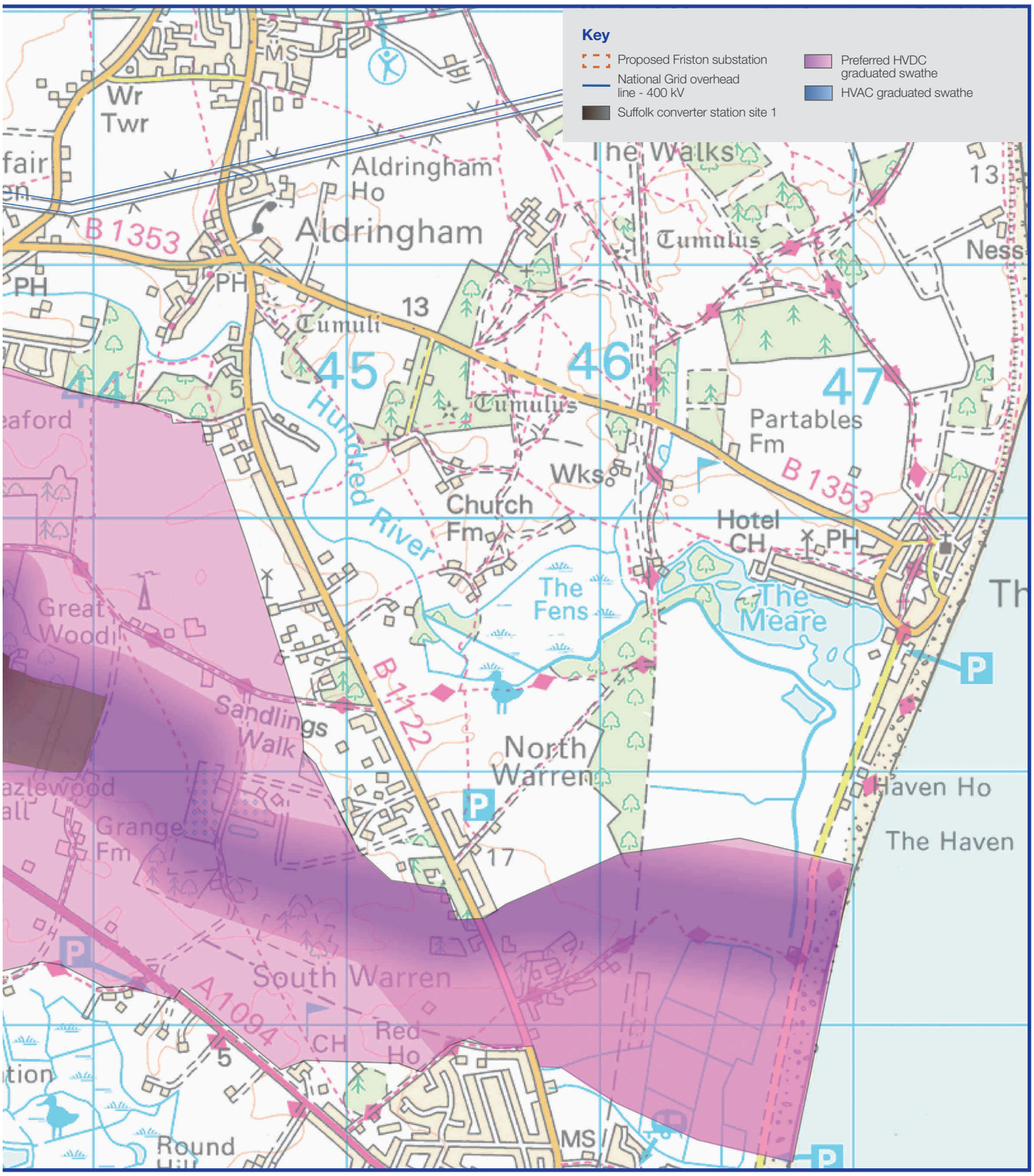


Marine route corridor

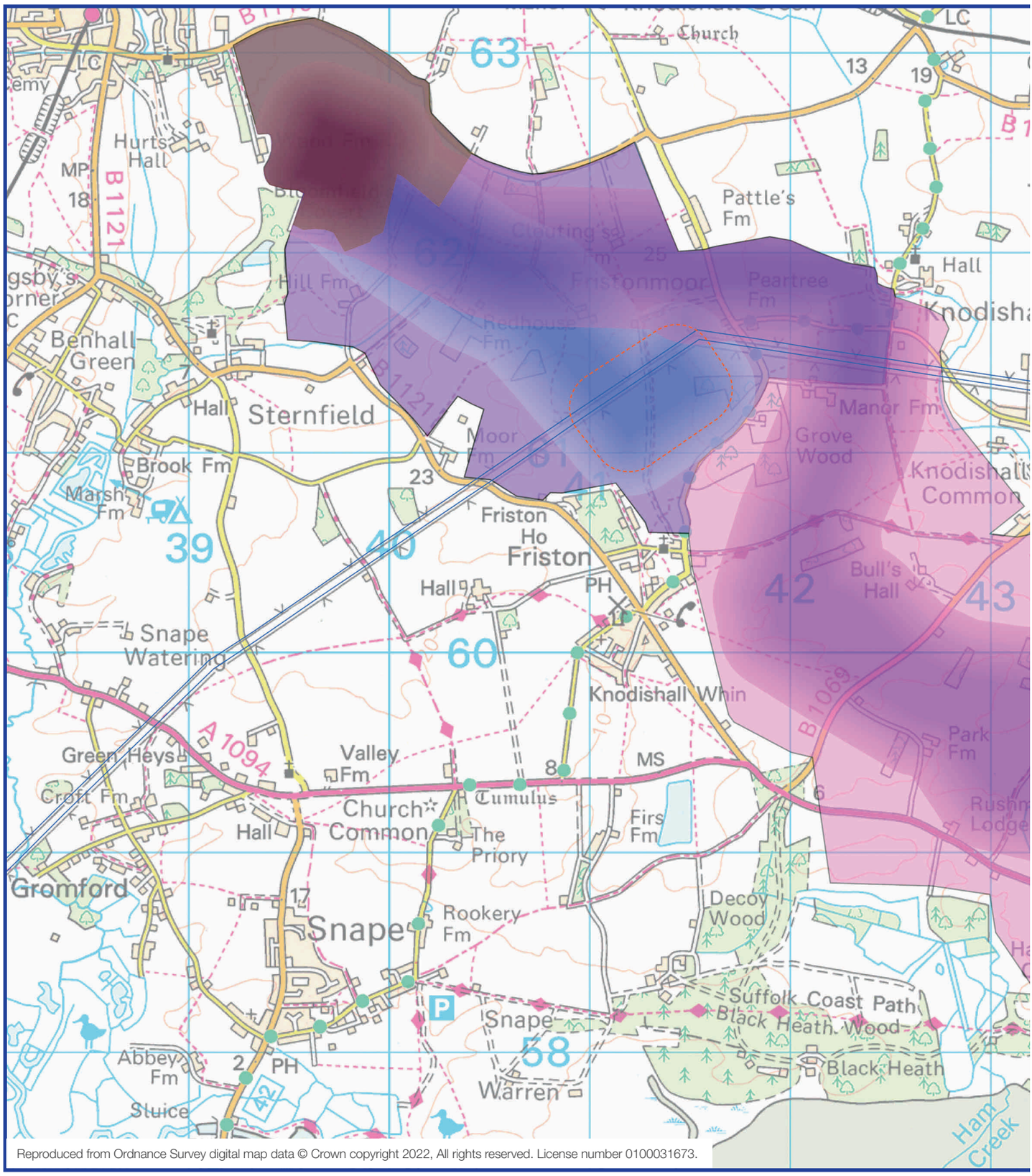


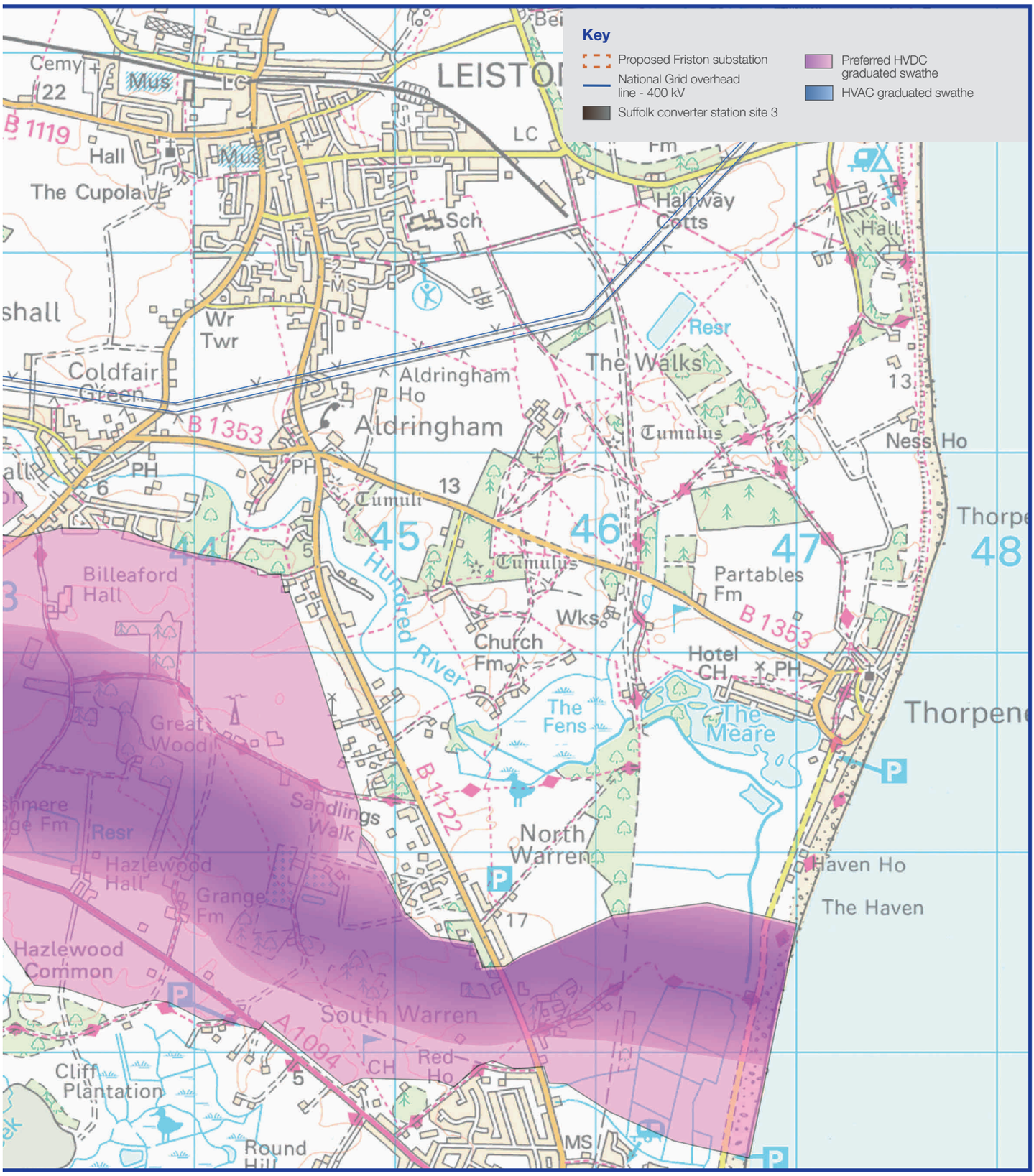
Suffolk site 1 emerging preference




Key
Proposed Friston substation
National Grid overhead line - 400 kV
Suffolk converter station site 1
Preferred HVDC graduated swathe
HVAC graduated swathe
Aldringham
Aldringham Ho
B 1353
The Walks
Tumulus
Ness
Tumuli
45
46
47
44
Hundred River
Partables Fm
Church Fm
Wks
Hotel
CH
PH
The Fens
The Meare
Great Wood
Sandlings Walk
B 1122
North Warren
Haven Ho
The Haven
Grange Fm
South Warren
A1094
Red Ho
Round Hill
MS
Wr Twr

Suffolk site 3 emerging preference




Key
Proposed Friston substation
National Grid overhead line - 400 kV
Suffolk converter station site 3
Preferred HVDC graduated swathe
HVAC graduated swathe
LEISTO
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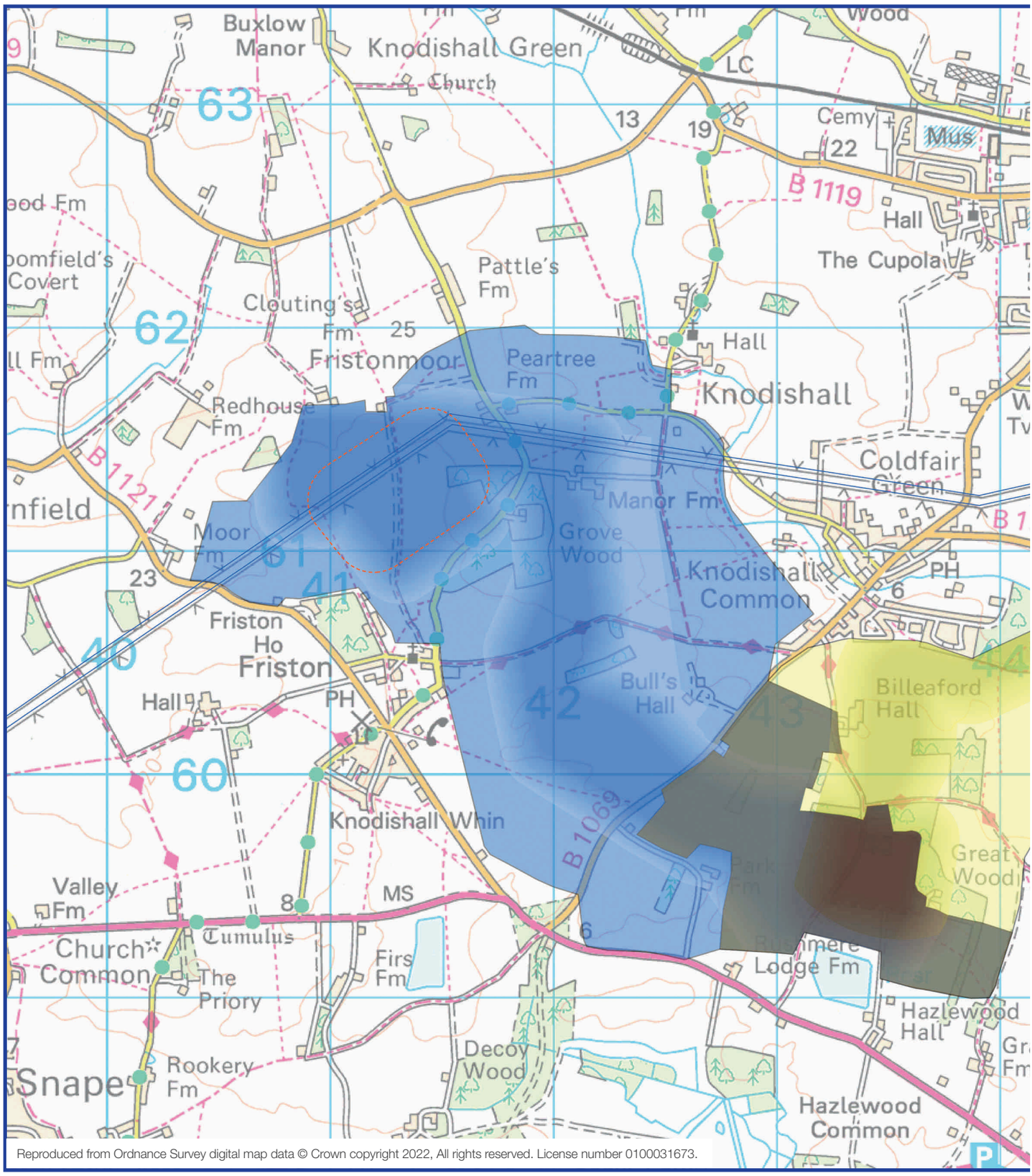
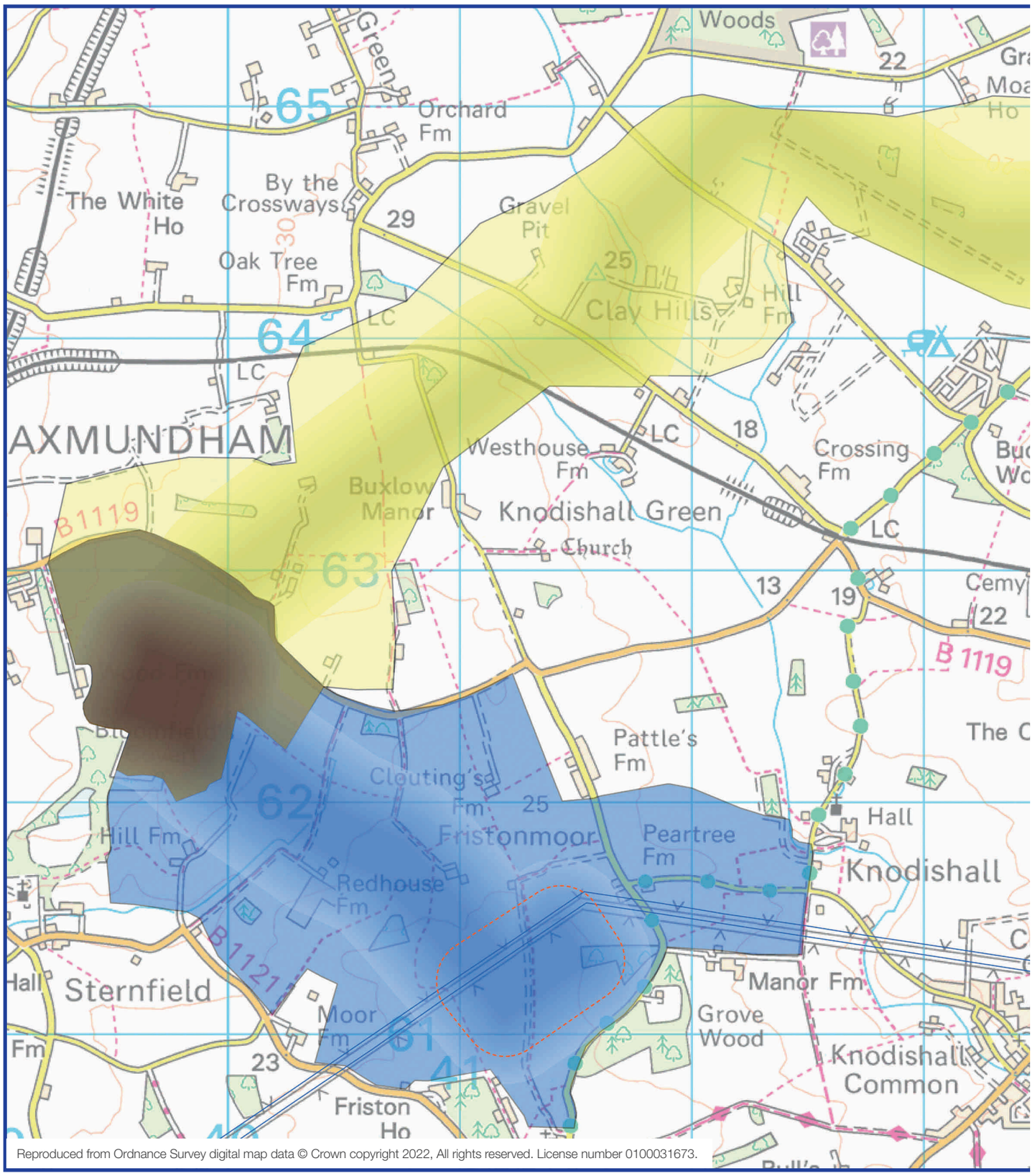
LC
B 1119
Hall
The Cupola
Sch
Halfway Cotts
Hall
shall
Wr Twr
MS
Resr
Coldfair Green
Aldringham Ho
Aldringham
The Walks
Tumulus
13
Ness Ho
B 1353
PH
6
Tumuli
45
46
47
48
Thorpe
Billeaford Hall
Hundred River
Partables Fm
Wks
Church Fm
Hotel
CH
The Fens
The Meare
Thorpene
Great Wood
Sandlings Walk
B 1122
Resr
Hazlewood Hall
Grange Fm
North Warren
Haven Ho
The Haven
17
Hazlewood Common
South Warren
A1094
Red Ho
Cliff Plantation
Round Hill

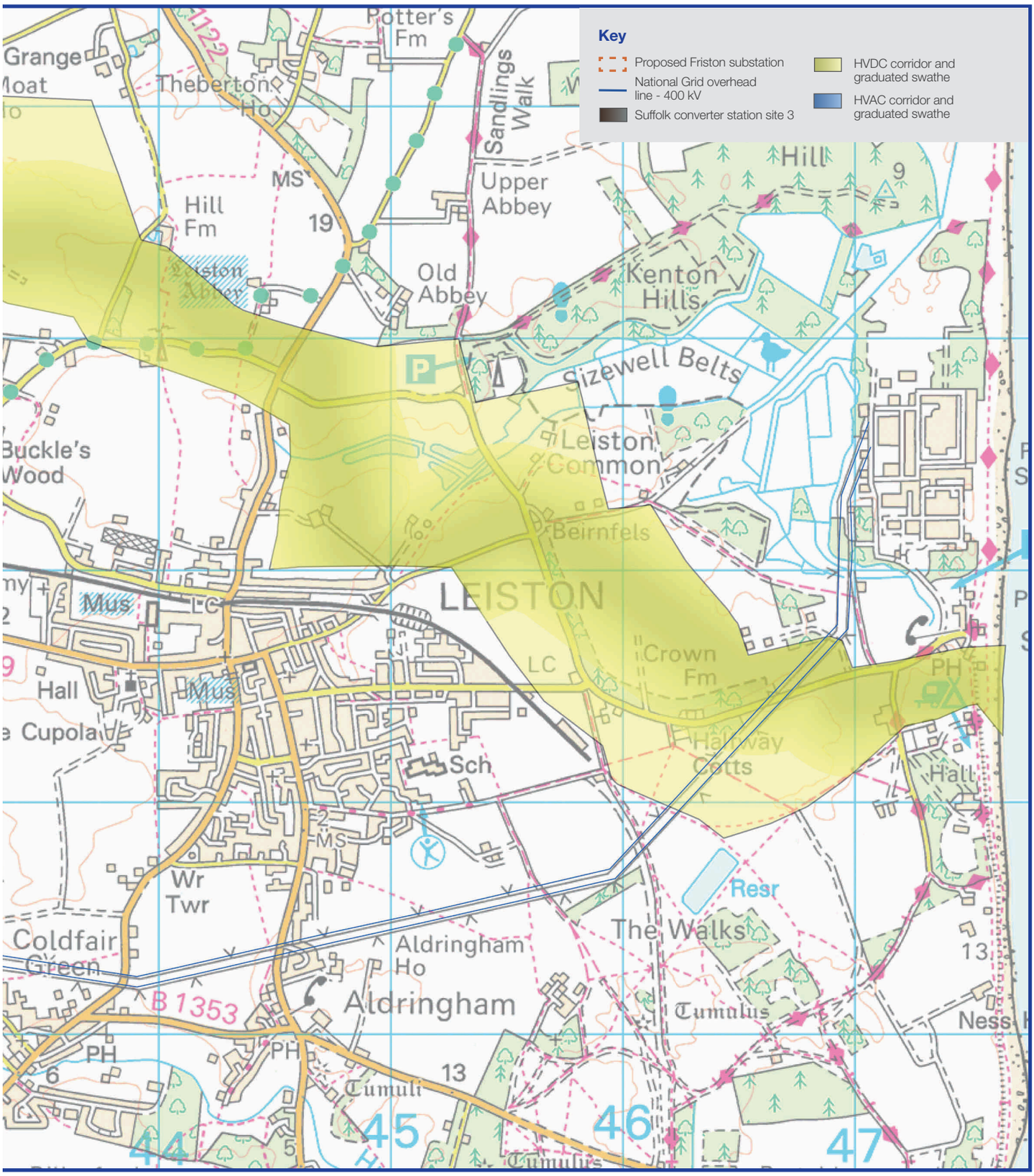
Suffolk site 1 alternative




Key
Proposed Friston substation
National Grid overhead line - 400 kV
Suffolk converter station site 1
HVDC corridor and graduated swathe
HVAC corridor and graduated swathe
Beirnfels
LEISTON
LC
Crown Fm
Sizewell
PH
Mus
Sch
Halfway Cotts
Hall
MS
Wr Twr
Resr
The Walks
Aldringham Ho
Aldringham
B 1353
Tumulus
13
Ness Ho
Thorpe Ness
48
Tumuli
45
46
47
Tumulus
Partables Fm
Hundred River
Wks
B 1353
Church Fm
Hotel
CH
PH
The Fens
The Meare
Thorpeness
P
B 1122
Sandlings Walk
North Warren
Haven Ho
The Haven
Grange Fm
17

Suffolk site 3 alternative (option 1)




Key
Proposed Friston substation
National Grid overhead line - 400 kV
Suffolk converter station site 3
HVDC corridor and graduated swathe
HVAC corridor and graduated swathe
Potter's Fm
Grange
Moat
Theberton Ho
Sandlings Walk
Upper Abbey
Hill Fm
Old Abbey
Kenton Hills
Sizewell Belts
Leiston Common
Buckle's Wood
Beirnfels
LEISTON
Crown Fm
Hall
Cupola
Sch
Halfway Cotts
Wr Twr
Coldfair Green
Aldringham Ho
Aldringham
B 1353
The Walks
Resr
Tumulus
Tumuli
Ness
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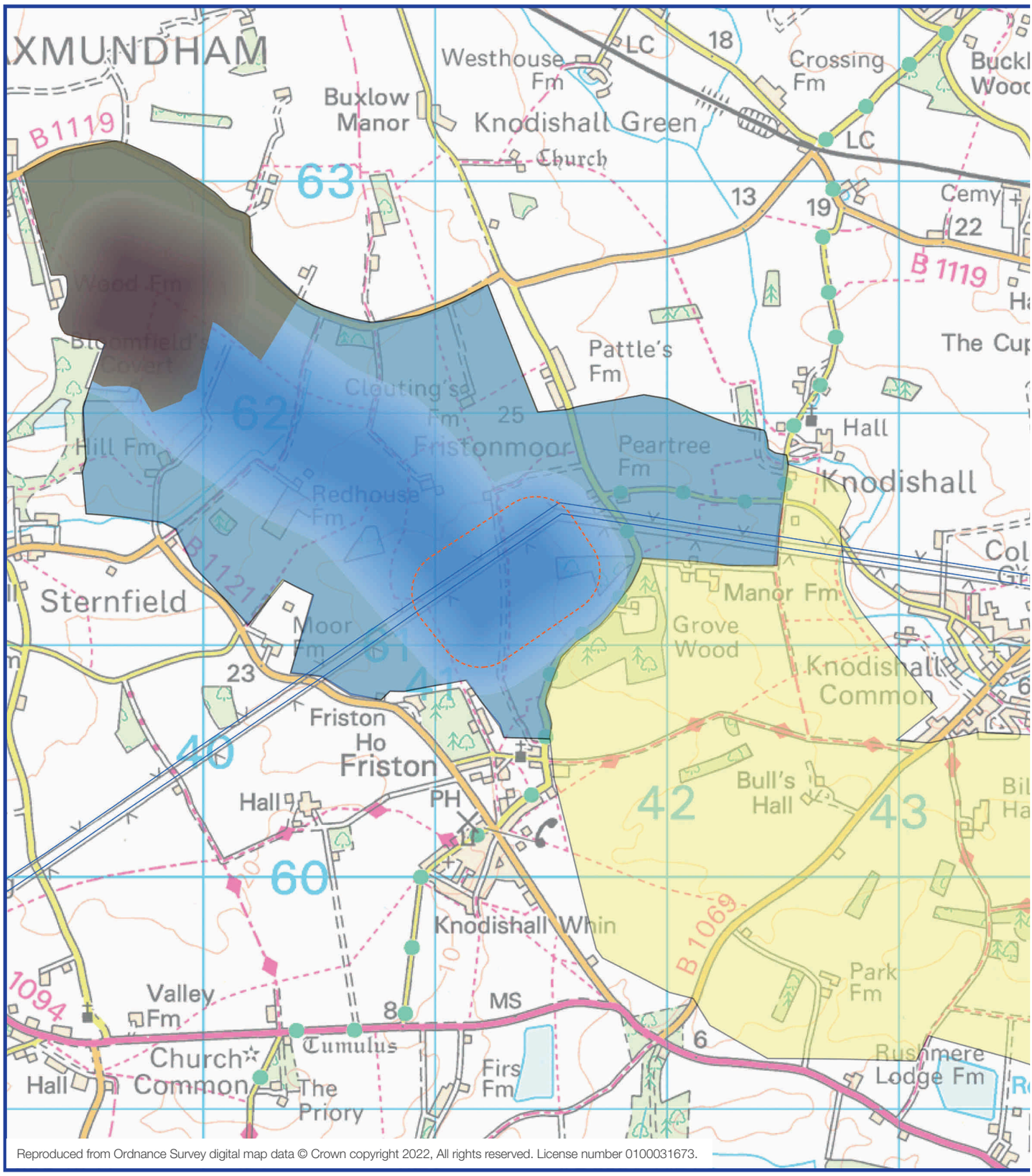
Suffolk site 3 alternative (option 2)




Key
Proposed Friston substation
National Grid overhead line - 400 kV
Suffolk converter station site 3
HVDC corridor and graduated swathe
HVAC corridor and graduated swathe
LEISTON
Crown Fm
Halfway Cotts
Aldringham Ho
Aldringham
The Walks
Resr
Tumulus
Ness Ho
B 1353
Billeaford Hall
Great Wood
Hundred River
Church Fm
Partables Fm
Hotel
The Fens
The Meare
Sandlings Walk
B 1122
North Warren
Hazlewood Hall
Grange
Haven Ho
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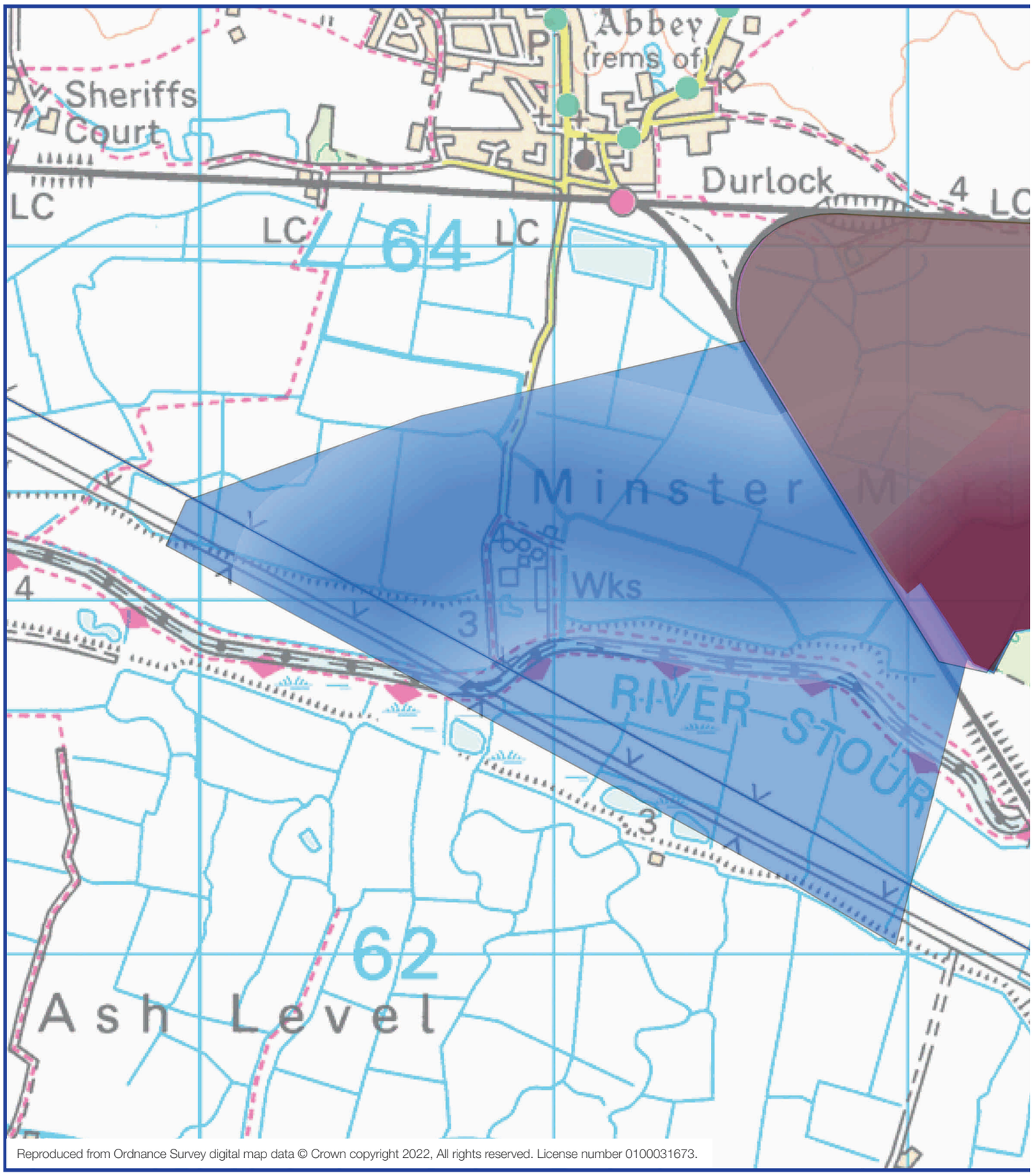
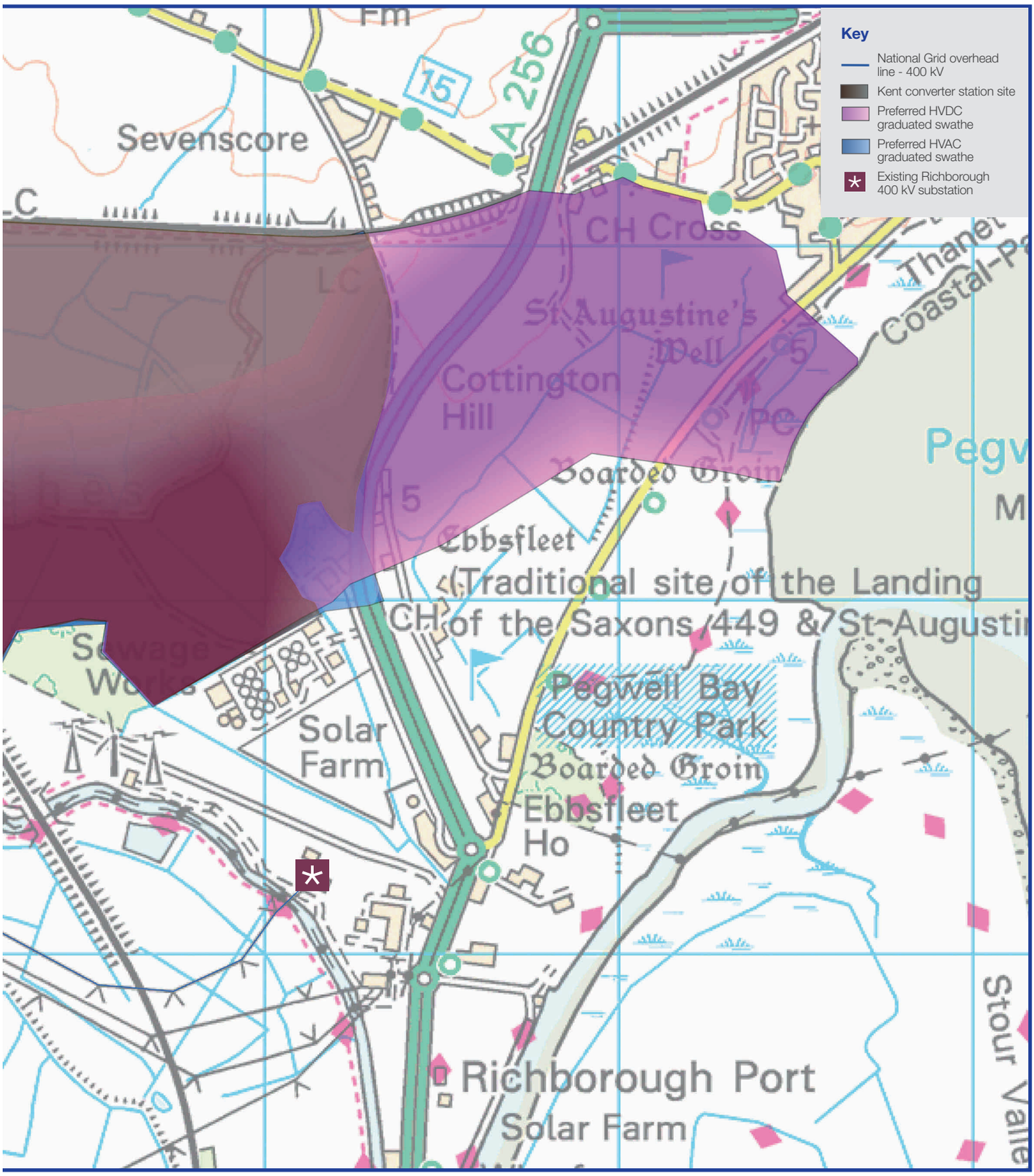
Kent emerging preference




Key
National Grid overhead line - 400 kV
Kent converter station site
Preferred HVDC graduated swathe
Preferred HVAC graduated swathe
Existing Richborough 400 kV substation
Sevenscore
A 256
15
CH Cross
St Augustine's Well
Cottington Hill
Ebbsfleet
(Traditional site of the Landing
CH of the Saxons 449 &
Pegwell Bay Country Park
Solar Farm
Ebbsfleet Ho
Richborough Port Solar Farm
Coastal-Pa

17. Glossary

British Energy Security Strategy

A strategy, published by the Government in April 2022, which sets out how the UK will work towards security of supply/energy independence. The driving factor for this is rising global energy prices, provoked by increases in demand post-pandemic and the Russian invasion of Ukraine. It also reinforces previous government ambitions about increasing the amount of offshore wind and nuclear generation, as a means of achieving security of supply.

Brownfield land

Land that has been previously developed.

Business separation

Ofgem licence requirements that are represented by a series of rules defining how engagement between group businesses can take place, and a code of conduct to ensure National Grid's monopoly businesses do not exploit their dominant position to gain an unfair commercial advantage in other competitive markets.

Cable corridor

The area within which underground or overhead lines will be installed.

Cable sealing end compound

A facility which transfers a transmission line from underground cabling to overhead line, and vice versa.

Converter station

Converts direct current (DC) into alternating current (AC) and vice versa, depending on the direction of operation.

Development consent order (DCO)

A DCO is the means of obtaining (planning) consent for a development categorised as a Nationally Significant Infrastructure Project (NSIP). This includes energy, transport, water, and waste projects.

Distribution network operator (DNO)

These companies operate the local electricity distribution systems across the United Kingdom.

Environmental net gain

An approach to development that leaves the environment in a better state than before, including both biodiversity net gain and natural capital ecosystem service provisions.

EuroLink

A proposal to build a HVDC interconnector cable between England and the Netherlands, developed by National Grid Ventures.

Future Energy Scenarios (FES)

National Grid reviews and publishes a range of Future Energy Scenarios each summer. These represent different credible scenarios for how quickly the UK might make the transition to net zero by 2050.

Graduated swathe

Indicates the potential area within which the cable corridor could be located. Darker colours reflect the areas which are more likely to be developed.

High voltage alternating current (HVAC)

Power is generated and predominantly transmitted across our electrical system as HVAC. Alternating Current (AC) power is well suited to efficient transmission and distribution as the voltage can be increased or decreased with the use of transformers, which rely on the magnetic fields to work.

High voltage direct current (HVDC)

A HVDC electric power transmission system is more efficient in transferring power over long distances when compared to HVAC. HVDC is considered advantageous for offshore electricity transmission systems.

Horizontal directional drilling (HDD)

A technique whereby a narrow tunnel is drilled under a waterway or other designated area (such as Areas of Outstanding Natural Beauty (AONB), and a pipeline or other utility is pulled through the drilled underground tunnel.

High voltage cable

An insulated cable used for electricity transmission at high voltage that can be buried.

High voltage compounds

The operational compound containing high voltage electrical equipment.

Electricity interconnector

Interconnectors are high voltage cables that connect different electricity systems, such as the systems of different countries, they enable excess power to be traded and shared.

Landfall

The location where offshore cables come ashore.

National electricity transmission system (transmission system)

National Grid own the national electricity transmission system in England and Wales. The system consists of approximately 4,500 miles of overhead line, over 900 miles of underground cable and over 300 substations.

National Grid

National Grid is an energy company operating in the UK and US. We deliver electricity and gas safely, reliably, and efficiently to the customers and communities we serve – all while working towards a clean energy future.

National Grid Electricity System Operator (ESO)

National Grid ESO is the electricity system operator for Great Britain.

National Grid Electricity Transmission (NGET)

NGET owns and maintain the high-voltage electricity transmission network in England and Wales.

National Grid Ventures (NGV)

National Grid Ventures is the competitive division of National Grid plc, one of the largest investor-owned energy companies in the world. NGV operates outside of National Grid's core regulated businesses.

Nationally Significant Infrastructure Projects (NSIPs)

NSIPs are major infrastructure projects that are considered by the Government as nationally important, permission to build NSIPs is given at the national level, by the Secretary of State.

Nautilus

A proposal to build a HVDC interconnector cable between England and Belgium, developed by National Grid Ventures.

Network boundary

The national electricity transmission system is split into different parts – known as system boundaries - and circuits carry power between different sections of the network.

Network Development Policy (NDP)

The NDP provides the framework on which NGET decides to proceed, not start or to delay wider investment in an economic, efficient, and coordinated manner.

Network Options Assessment (NOA)

The NOA is an annual report published by National Grid ESO which outlines its recommendations for projects to take forward during the coming year.

Ofgem

Ofgem (the Office of Gas and Electricity Markets) is the government regulator for gas and electricity markets in Great Britain. Ofgem is a non-ministerial government department and an independent National Regulatory Authority, whose role is to protect consumers now and in the future by working to deliver a greener, fairer energy system.

Offshore Transmission Network Review

The Business Energy and Industrial Strategy (BEIS) department's Offshore Transmission Network Review looks into the way that the offshore transmission network is designed and delivered.

Planning Inspectorate

The Planning Inspectorate is the government agency responsible for examining proposals for Nationally Significant Infrastructure Projects (NSIPs).

Security and Quality of Supply Standard (SQSS)

The Security and Quality of Supply Standard sets out the criteria and methodology for planning and operating the transmission system.

Substation

Where overhead power lines or underground cables are switched and where electricity is transformed to lower voltage for distribution to surrounding areas.

The Crown Estate

The Crown Estate manages the seabed and half the foreshore around England, Wales and Northern Ireland, along with a portfolio of commercial property.

The Department for Business, Energy and Industrial Strategy (BEIS)

BEIS is the ministerial department with primary responsibility for energy.

The Holford Rules

Guidelines for the routeing of high voltage overhead transmission lines. These are important guidelines during the development of a preferred route when considering if certain sections should be undergrounded.

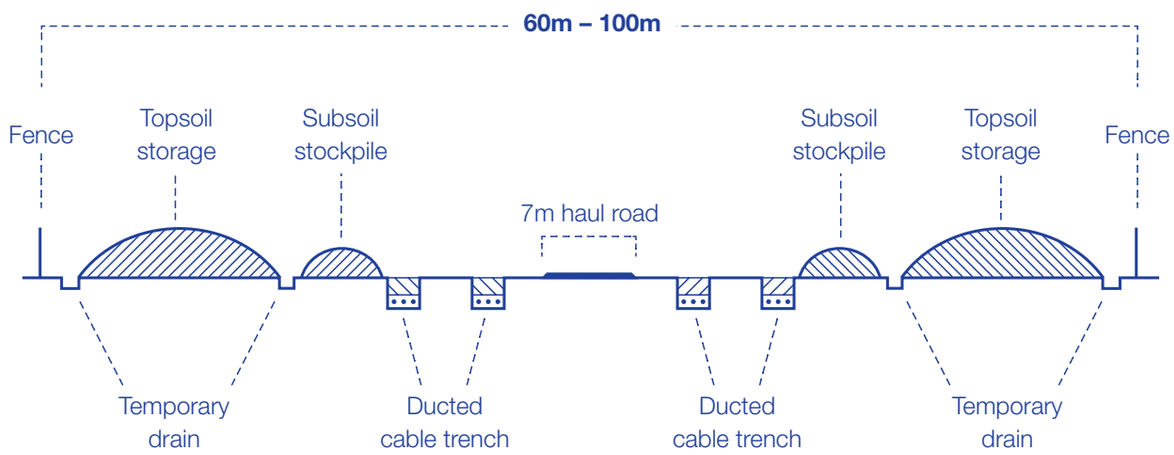
The Horlock Rules

Guidelines for the design and siting of substations and converter stations (in addition to cable sealing end compounds and line entries). When considering new electricity infrastructure, National Grid has regard to the degree to which options comply or deviate from these rules.

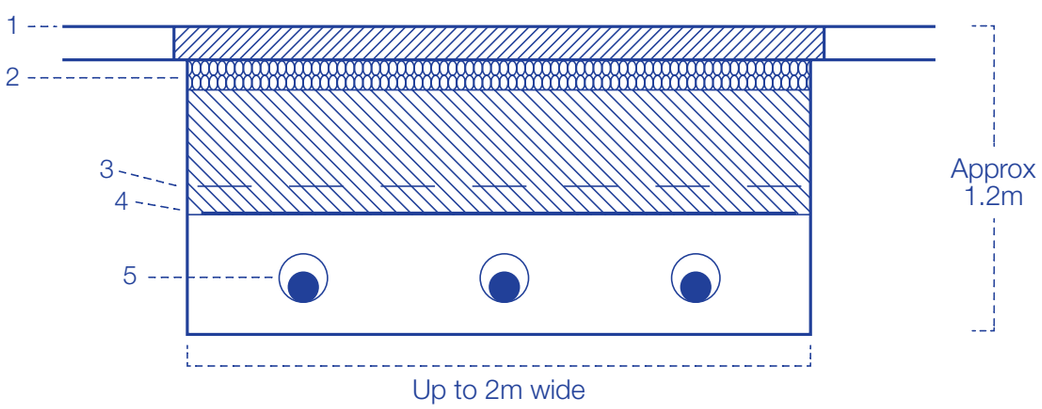
Transition joint bay

The joint at which the subsea cables are connected to the onshore cables near to the coast.

AC swathe



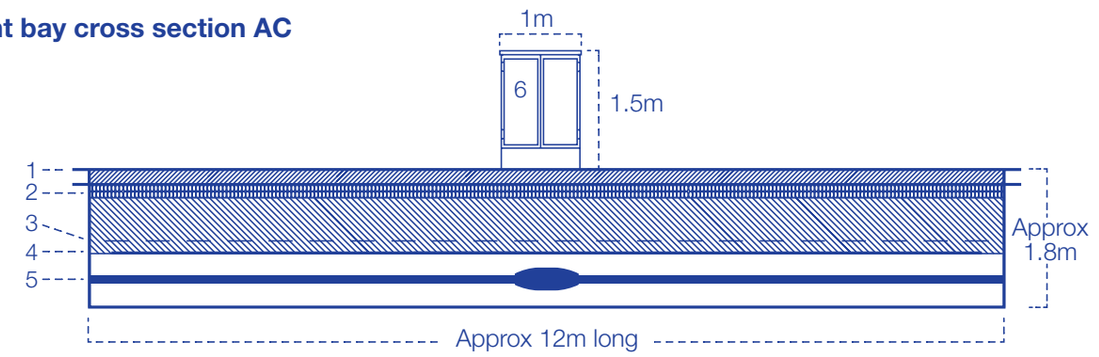
AC cable trench



1. Ground level
2. Sub-base
3. Warning tape
4. Protective tile
5. Cable duct with AC cable

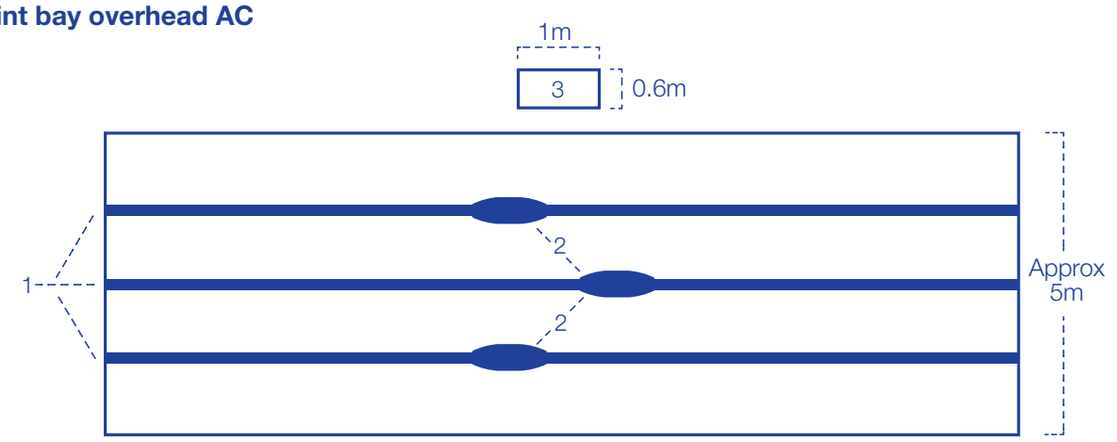
AC joint bay

Joint bay cross section AC



1. Ground level 2. Sub-base 3. Warning tape 4. Protective tile 5. Cable and cable joint 6. Link box

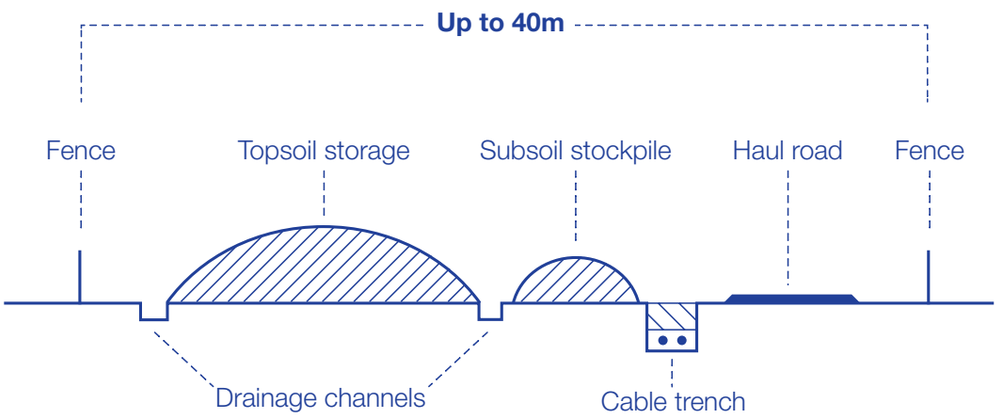
Joint bay overhead AC



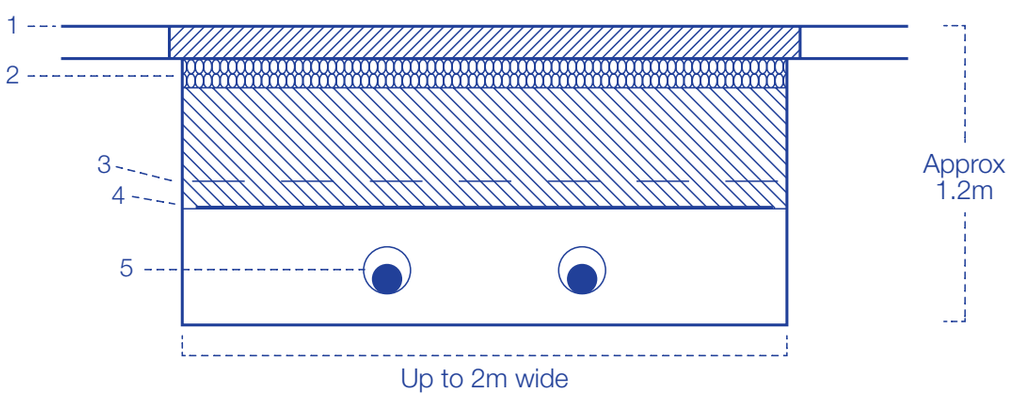
1. Underground cable 2. Cable joint 3. Link box

DC swathe

Cross section of a typical construction swathe for DC cabling works



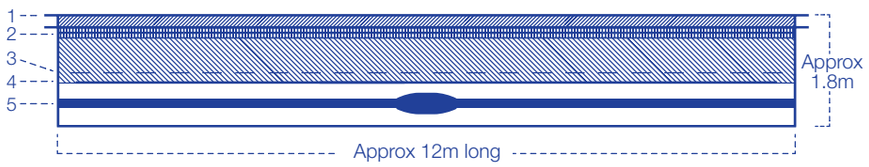
DC cable trench



1. Ground level
2. Sub-base
3. Warning tape
4. Protective tile
5. Cable duct with DC cable

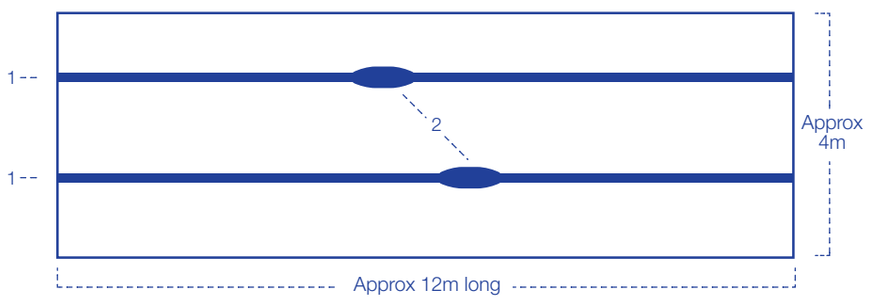
DC joint bay

Joint bay cross section DC



1. Ground level 2. Sub-base 3. Warning tape 4. Protective tile 5. Cable duct with cable joint

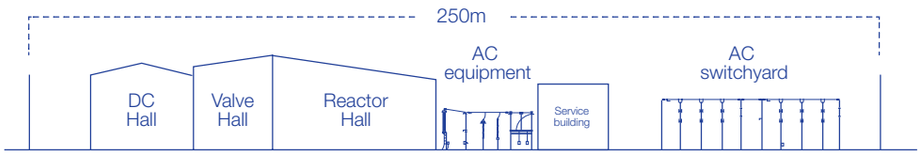
Joint bay overhead DC



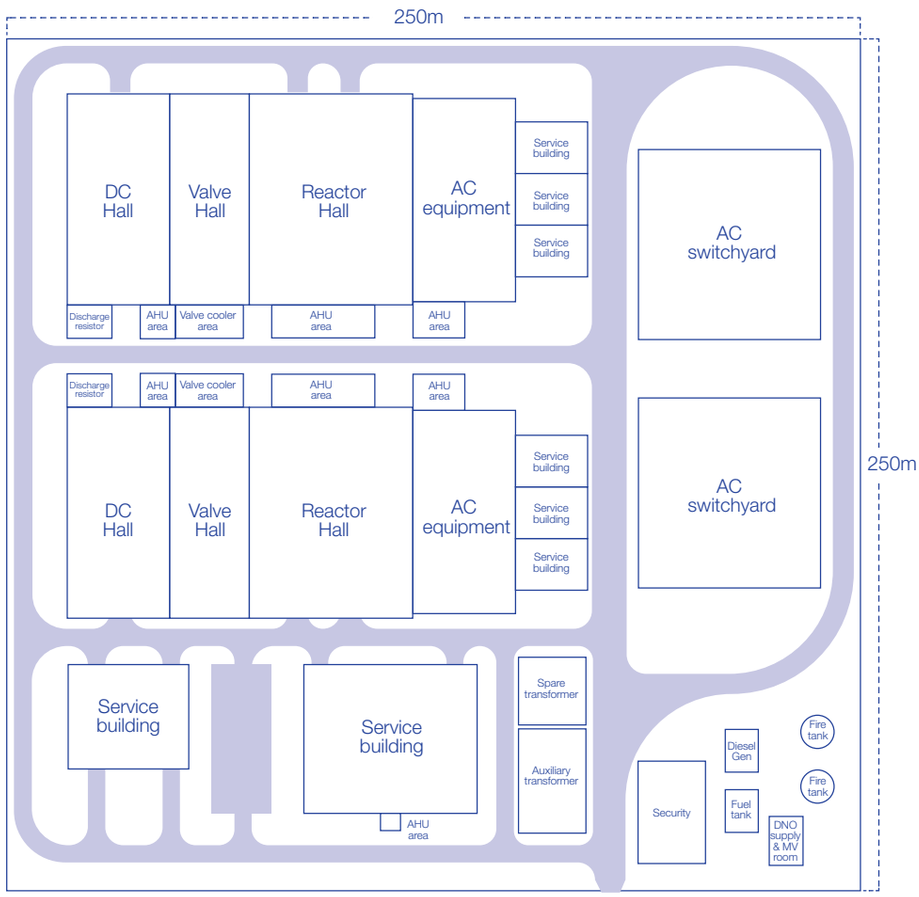
1. Underground cable 2. Cable joint

Converter station

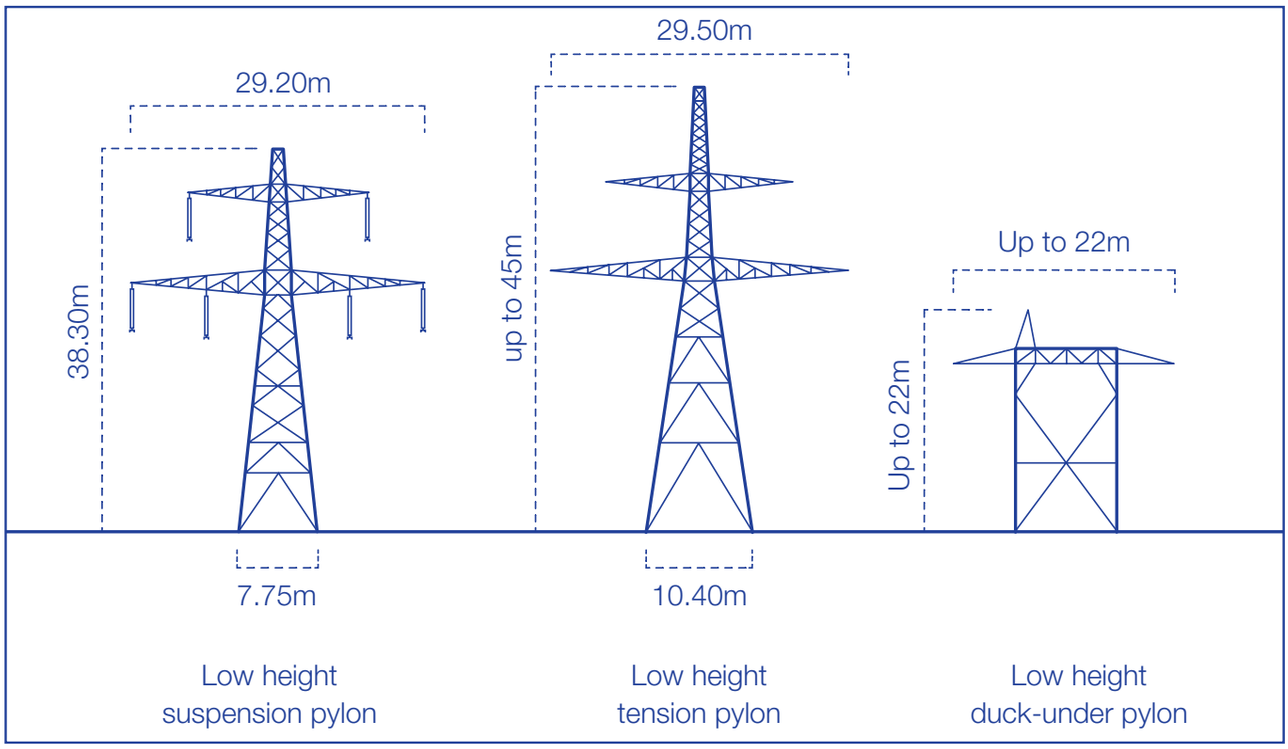
Convertor station cross section



Convertor station overhead



Pylons (Kent*)



*Being considered for the connection into the existing transmission network in Kent

Contact us

Please get in touch if you have any questions:

Complete a feedback form

We have produced an online feedback form for you to fill in and submit on our website at **nationalgrid.com/sealink**

Paper copies of our feedback form will be available to pick up from our face to face public information events and consultation materials deposit points listed in section 13. You can also download and print a copy of the feedback form from our website; alternatively, please get in touch and we will post one to you.

Send us a letter

You can send a letter/or completed feedback form to **Freepost SEA LINK** (no stamp or further address details are required).

Email us

If you prefer to send us your comments via email, you can send them to us at **contact@sealink.nationalgrid.com**

Call us

Freephone **0808 134 9569**
(Lines are open Monday to Friday 9am – 5.30pm)

If you are a member of the media and wish to contact the National Grid team, please call **0800 377 7347** (24 hour) or find our Press Contacts at **nationalgrid.com/media-centre/contacts**

We are committed to making project information accessible to all users. If you or someone you know needs any information or documents in an alternative format, please get in touch using the above contact details.

If you feel your land may be affected by these proposals, please contact the Sea Link Land Team by calling **01452 889000** or by emailing **SeaLink@dalcourmaclaren.com**

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