

Nemo Link®

# Environmental Statement

Non-Technical Summary

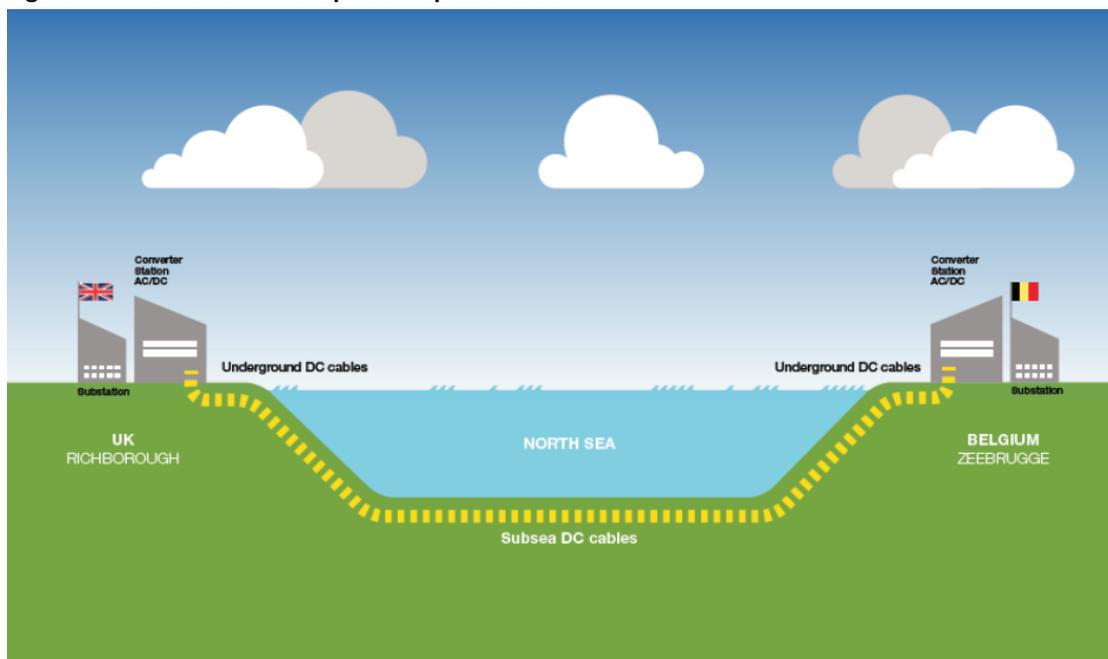
February 2013

## Introduction

The Nemo Link (the Project) is a proposed high voltage direct current (HVDC) electrical interconnector with an approximate capacity of 1,000 megawatts (MW) which will allow the transfer of electrical power via subsea cables between the UK and Belgium. The power would be bi-directional, able to flow in either direction at different times, depending on the supply and demand in each country.

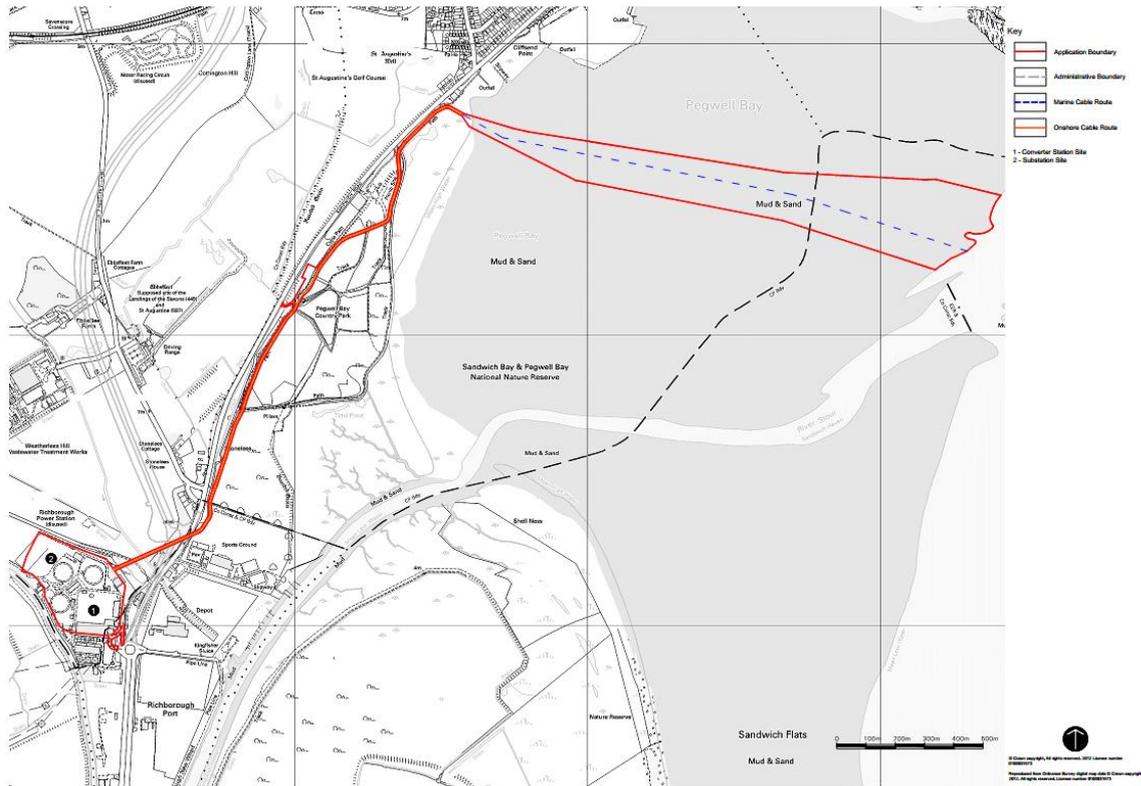
The proposed subsea cables would run from the converter station at the former Richborough power station site to Pegwell Bay at Richborough in Kent to Zeebrugge in Belgium passing through English, French and Belgian waters.

**Figure 1 – The Nemo Link Graphical Representation**



The UK onshore elements (the Proposed Development) of the Project for which planning permission is being sought (as part of this application) comprise a converter station and substation at the former Richborough power station site, and cables installed below the ground between the converter station and mean low water at Pegwell Bay. These will connect to the other parts of the interconnector (which are outside the planning jurisdiction of the local planning authorities), being the subsea cables from mean low water across the North Sea; onshore underground cables, a converter station and 400kV substation in Belgium. In the UK and Belgium, a connection to the corresponding electricity transmission networks will be required; these will be subject to a separate consenting process and will be promoted separately to this planning application.

**Figure 2 – The Proposed Development Application Boundary**



The Nemo Link is being developed jointly by National Grid Nemo Link Ltd (NGNLL), part of the National Grid group, and Elia Asset S.A. (Elia) which is part of the national electricity transmission company in Belgium. The proposed substation at Richborough would be owned and operated by National Grid Electricity Transmission (NGET).

This document provides a Non-Technical Summary (NTS) of the predicted effects on the environment of the Proposed Development. It also sets out a summary of the effects, including cumulative effects, of the other parts of the interconnector, together with the effects of the connection to the UK transmission network, which would be promoted by NGET separate to this planning application.

Full details of the effects of the Proposed Development are contained within the Environmental Statement (ES) that has been prepared to support the planning application. Separate Environmental Statements have been prepared to describe the effects of the subsea cables and the onshore elements in Belgium.

### **Need for the Project**

It is European Union (EU) and UK policy to increase the transmission capacity between countries, with the stated wish to see each member state establish an interconnector capacity of around 10% of installed generation capacity. The reasons for this policy is to allow a more efficient energy market within the EU, to facilitate the sustainable development of the electricity sector by increasing opportunities for clean and efficient generation and by making it easier to exploit intermittent renewable electricity resources in the UK and Continental Europe.

There is no existing connection between the UK and Belgian transmission systems. Belgium is particularly suitable for a new interconnector not only because of its geographical proximity to the UK, but also because its electricity transmission system is highly connected to Central Europe. A UK-Belgium interconnector will provide enhanced opportunities for the UK to trade with wider European power markets.

### **The Planning Process**

Electrical interconnectors and the individual components for which consent is being sought are not listed in the Schedules which describe and define Environmental Impact Assessment (EIA) development.

However, NGNLL has decided to prepare and submit a voluntary ES to accompany the planning application to enable the anticipated environmental effects of the proposed works to be assessed and appropriate mitigation measures to be determined and implemented.

Detailed pre-application consultation was undertaken with statutory consultees, including the local Councils, local communities and the general public. Responses received during the formal consultation process have informed the EIA process, throughout which, informal consultation has also been undertaken with a range of stakeholders.

### **Content of the Environmental Statement**

The ES contains the following information:

- A description of the Proposed Development;
- An outline of the alternatives considered;
- A description of the likely significant effects of the Proposed Development on the environment; and
- A description of measures envisaged to prevent, reduce or where possible off-set any significant adverse impacts on the environment.

The ES along with other supporting documents are available on the project website at:

[www.nemo-link.com](http://www.nemo-link.com)

### **Project Proposals**

#### Feasibility Studies

Alternative converter station sites, underground cable routes, landfalls and subsea cable routes were considered as part of the development of the Nemo Link. This established that a converter station site at Richborough and an underground cables route to a landfall at Pegwell Bay was the preferred option as this best meets the project objective relating to technical feasibility, economic viability, deliverability and the least disturbance to the environment and people

Following selection of the preferred option, further detailed environmental and technical studies as well as consultation have been used to refine the preferred option and further reduce the potential environmental effects of the Nemo Link project including the substation which the converter station is required to connect to. This included considering emerging results from environmental assessments with initial technical designs and results of consultation with stakeholders, land owners and local communities.

### Proposed Development

The Proposed Development will comprise a new converter station, substation and onshore underground cable route leading to the sub-sea cable connection.

#### *Converter Station*

The converter station will convert between direct current (DC), which is used for sending electrical power through the subsea cables, and alternating current (AC), which is used by each country's national electricity transmission system. The converter station will require a footprint of approximately 4.85 hectares (ha) and it is proposed that the main building will be constructed re-using the steel frame of the former Richborough Power Station's turbine hall.

The converter station will contain the equipment necessary for the conversion between DC and AC, transformers for switching to the correct voltage rating, filter banks and associated switch gear. The converter station requires 'valve halls' and other buildings to enclose the equipment. The main building will comprise 3 main parts and in total will be approximately 149 metres (m) long by 93m wide with a maximum height of approximately 30.3m. The roof and walls of the converter station will be formed by a steel frame clad with metal panels which will graduate in colour from dark green (lower levels) to white (roofline). AC connection gantries of approximately 15m in height will also be required.

The other equipment will be enclosed in two smaller buildings which comprise a service building and a storage building. These buildings will each be approximately 27.4m long, 13.6m wide and 14.5m high, and attached to the main building. The converter station will be designed for a 40 year lifespan.

#### *Substation*

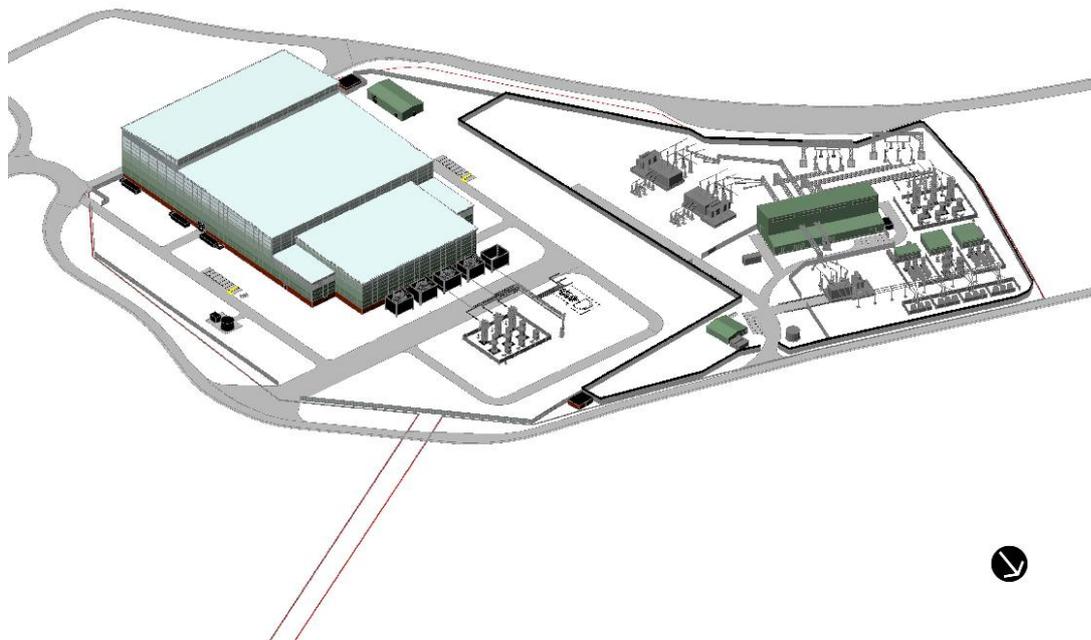
A new 400kV Gas Insulated Switchgear (GIS) substation is needed to connect the interconnector to the national electricity transmission system.

The substation will be within a separately fenced compound adjacent to the proposed converter station to the west. The proposed substation will occupy a footprint of approximately 2.65 ha and will contain a combination of indoor and outdoor electrical equipment.

The substation will include a GIS Hall containing switchgear outdoor gas insulated busbar (GIB), overhead line gantries, two Super Grid Transformers (SGTs), a Mechanically Switched Capacitor (MSC) and a Static Var Compensator (SVC) compound. The MSC and SVC are specific types of equipment used to regulate and stabilise transmission voltages.

The GIS Hall will be approximately 52.2m long, 21.5m wide and 15m high and clad in a similar manner to the converter station. The maximum height of the outdoor electrical equipment will be approximately 12.7m.

**Figure 3 – Isometric Drawing of the Proposed Converter Station and Substation**



#### *Onshore Underground Cables and Subsea Cables Connection and Landfall*

The Proposed Development will include two underground cables (each approximately 15 centimetres (cm) in diameter) which will be installed onshore in a trench approximately 1m wide and 1m deep and sub-sea between the mean low water mark and the landfall in a trench approximately 1-2m wide and 2-3m deep. Fibre optic cables will also be installed for control and communication along the link. An onshore underground cables route has been identified between the subsea cables' landfall at Pegwell Bay and the converter station taking account of the environmental constraints including designated sites of nature conservation, the presence of protected species, the quality of saltmarsh habitat, proximity to residential area, archaeology, highways, planning proposals, watercourses, risk of encountering contamination, utilities and services and land use. The route of the subsea cables to Pegwell Bay has been confirmed by geophysical and geotechnical survey.

The HVDC onshore underground cables will run from the landfall on the coastal side of the existing cycle track which runs parallel to the A256 Sandwich Road, through Pegwell Bay Country Park, then into Stonelees Nature Reserve and the BayPoint sports complex. From the Sports Ground, the cables will be routed by horizontal directional drilling (HDD) beneath the A256, Minster Stream, and a compartment of Hacklinge Marshes SSSI. The cables will terminate at the converter station. The overall length of the onshore cable route and sub-sea cable route from the mean low water mark is approximately 2.1km and 1.8km long respectively.

Upon completion of the cable installation works, land will be restored to its previous condition.

### Construction Programme

The construction of the converter station and substation is intended to be undertaken over a period of 36-42 months between mid-2014 and mid-2018. Both the converter station and substation will be commissioned in October 2018.

Main construction activities will include:

- Preliminary works and preconstruction surveys;
- Site clearance and establishment;
- Civil engineering works including earthworks;
- Mechanical and electrical works;
- Commissioning and testing; and
- Site reinstatement and landscape works.

### Operation

The converter station and substation will form an integral part of the national grid electricity transmission system. The substation would be an unmanned site and subject to periodic inspections and maintenance visits. The converter station is likely to operate with approximately 6 personnel per day divided between 3 shifts over a 24 hour period.

### **Summary of Environmental Impacts**

The following section summarises the predicted effects of the construction and operation of the Proposed Development on the environment.

### Land Use

The cable route and converter station and substation site have been carefully selected to minimise disruption to amenity and the future use of land.

The construction of the converter station and substation will result in the permanent loss of approximately 8 hectares of derelict brownfield land. There is no defined on-going land use; the site and the surrounding land is part of the Richborough Energy Park proposals. The Proposed Development would make a positive contribution as it would result in the re-use of derelict industrial land contributing to national and local sustainability objectives. There would be no adverse effects from the loss of the derelict land to the Proposed Development.

The onshore cables have been routed to avoid areas of existing and proposed developments and the cable route will not result in any permanent land take. Effects on land use during construction will be highly localised and temporary so will be of low significance. Where open space and land which is available for recreation and walking is disturbed, there will be alternative routes available and the absence of any facility will be short term and reversed after the reinstatement of the land.

A permanent 5m cable easement will be required; however this will not affect current land use although there will be some restrictions on planting above the cables route.

#### Ground Conditions and Contamination

Construction activities such as cables installation, drilling and piling have the potential to disturb areas of contamination and create pathways for the migration of contaminants into watercourses. Prior to construction, targeted investigation works will be undertaken in agreement with an Environmental Health Officer to assess the nature and extent of all known existing areas of contamination and develop appropriate mitigation measures. Cable laying over the surface of the ground within Pegwell Bay Country Park will prevent potential contamination pathways being opened up and the migration of landfill gas and leachate.

There is a risk of ground and water contamination from spillages of fuel, oil and chemicals and from the importation of contaminated materials from off-site; however this can be managed by the implementation of best practice guidelines. A Construction Environmental Management Plan (CEMP) will be prepared to set out the minimum requirements which contractors will be required to undertake in order to prevent adverse impacts.

Appropriate mitigation techniques will ensure that potential adverse effects are prevented both during construction and operation.

#### Hydrology and Flood Risk

The Proposed Development has the potential to have adverse effects on the water environment through surface water run-off, ground contamination and disturbance to existing flows and the mobilisation of contaminants both during construction and operation. The River Stour is approximately 10m south of and Minster Stream is approximately 100m north east of the former Richborough power station site.

Best practice measures to prevent pollution of the water environment during construction will be implemented through a CEMP which as a minimum will be based on addressing the EA Pollution Prevention Guidance documents. The cables will be installed by HDD beneath the A256 and Minster Stream before connecting to the proposed converter station; this will avoid any disturbance to this watercourse.

The proposed substation and converter station site is within Flood Zone 1 (low probability of flooding). Ground levels will be raised to ensure the proposed substation and converter station compounds will operate safely in an extreme flood event without increasing flood risk elsewhere. Sustainable drainage measures will be integrated into the detailed drainage design to ensure that water quality is not adversely affected and water discharge rates into the River Stour are no higher than the current rate.

#### Ecology

A number of designated sites are located along the proposed cable route including Thanet Coast and Sandwich Bay Special Protection Area (SPA) and Ramsar site, Sandwich Bay Special Area of Conservation (SAC), Thanet Coast SAC and Sandwich Bay to Hacklinge Marshes Site of Special

Scientific Interest (SSSI). The cable route crosses the designated areas at three locations along the route, passing through the north of Pegwell Bay, Stonelees Nature Reserve and land north of the Richborough Site. Mitigation measures will be developed in consultation with Kent Wildlife Trust to minimise impacts on, and reinstate, the habitats within these sites. Further details of the likelihood of effects on these nature conservation areas and mitigation measures are detailed at Appendix 8.9 (information for Habitats Regulations Assessment).

The construction of the converter station and substation will not have a significant impact on nature conservation due to a lack of ecologically sensitive features within the site. The cable has been routed to minimise effects on important species and habitats and site specific mitigation measures will be applied where valuable areas cannot be avoided.

Protected species have been identified along the cable route and mitigation measures identified to ensure no adverse effects will result from the Proposed Development. Any disturbance of the local bird population will be avoided by carrying out construction works at the appropriate time of year in consultation with the statutory authorities.

Impacts affecting protected species will be short-term and mainly associated with site clearance during construction and temporary disturbance or loss of habitat. Habitats affected by the works will be reinstated to prevent long term habitat losses and botanical surveys will be repeated prior to the works to confirm the absence of protected plant species. Where necessary, licences to carry out the works will be obtained from Natural England.

Overall a minor adverse to minor beneficial impact during construction is predicted. No impacts are envisaged during operation.

#### Archaeology and Cultural Heritage

A desk-based study and walkover survey were undertaken to assess the archaeological potential of the development site.

There are no Scheduled Monuments, UNESCO World Heritage Sites, Registered Parks and Gardens or Registered Battlefields within 1.5km of the development area; a total of 165 designated and non-designated heritage assets were recorded. This included seven designated receptors of high importance (one Grade II\* Listed building and six Grade II Listed buildings), and twenty-eight non-designated receptors of medium importance which largely comprise archaeological sites recorded as part of modern development control regimes. The remaining 126 sites are non-designated receptors of low and negligible importance.

No significant impacts on above ground or shallow archaeological deposits are predicted; however, a watching brief is proposed during cables installation to identify the presence of unknown archaeological deposits.

Following the implementation of a programme of mitigation, the archaeological and cultural heritage resource within, and close to, the development site will remain unaffected and the overall impact of the scheme is neutral.

## Landscape and Views

The converter station and substation development would be consistent with the existing landscape character of the site and immediate surroundings and would match the scale of existing industrial built form. The existing landscape character of the underground cable route is generally urban as the route runs close to the A256 and the landscape will be reinstated following construction.

Measures have been incorporated into the development proposals to mitigate effects on landscape and views during construction and on completion of the Proposed Development. Mitigation of the long-term effects on landscape and views would be achieved by using colour graded cladding to the converter station building ranging from a muted green at the building's base to off-white at the roofline, and muted green cladding to the substation building to minimise landscape and visual effects. Native tree and shrub planting is proposed to the western site boundary adjacent the River Stour, to provide filtering and screening of the converter station and substation buildings and associated outdoor equipment particularly in views looking north, east and southwest towards the site from the Saxon Shore Way and River Stour.

The wider proposals for Richborough Energy Park include the implementation of new planting associated with a new estate road. The planting scheme will include tree planting along the eastern and north eastern site boundaries (partly mitigating trees removed to accommodate the new road), new native trees, shrubs and fruit trees near the site entrance, and new native tree planting amongst existing trees and shrubs on the northern site boundary.

The underground cable route would have no effect on landscape character or views 15 years after the reinstatement of land. The above ground cable route through the northern part of Pegwell Country Park will be quickly re-established as chalk grassland resulting in a very limited negative effect on landscape and views after reinstatement. Following 15 years' establishment of the planting proposals surrounding the converter station and substation site it is anticipated that there would be a small negative effect on landscape character as the development would increase the extent of industrial development evident in the locality.

## Traffic and Transport

Average Annual Daily Traffic (AADT) flows have been obtained for the key roads to be used during the construction of the Proposed Development including the A229 West Canterbury Road, the A256 Richborough Road, the A256 Dover Road and Sandwich Road. It is predicted that overall the long-term environmental impact of the Proposed Development on traffic and transport during the construction phase would be minor to negligible; a maximum increase of 0.9% in total traffic and 17% increase in HGV traffic is anticipated. A range of mitigation measures including traffic management during construction, appropriate signage in the local area and the preparation of a Transport Management Plan will ensure significant construction effects are avoided.

There are likely to be a number of minor environmental impacts that cannot be fully mitigated during the construction phase. These mainly include impacts relating to pedestrian and cyclist delay and will be addressed by signage and delivery agreements with routes to be agreed for construction and delivery traffic. This is likely to be temporary during the construction period and is not expected to continue during the operation of the proposed converter station and substation.

Once operational, the converter station will generate a small number of vehicular trips as it is anticipated that six members of staff will be based at the site with two people working shifts over a 24 hour period. This would result in approximately 12 two-way trips per day. The substation will be unmanned; however, it will on average generate approximately four staff trips a week made by car or Light Goods Vehicle (LGV). A small number of trips may be generated during maintenance of both the converter station and substation; however, this is anticipated to occur infrequently. Operation traffic effects are expected to be negligible.

### Noise and Vibration

The general noise climate at sensitive receptors in the vicinity of the Proposed Development is primarily affected by road traffic noise, existing industrial noise, noise from agricultural activities and birdsong.

Best practice construction noise methods will be used to minimise noise associated with cables installation and construction of the substation and converter station and detailed in the CEMP. General construction noise is anticipated to be of minor to neutral significance and will be of a temporary nature. Construction noise during HDD will be of moderate significance; however HDD duration will be for a maximum of 2 days and 1 night for each cable (3 cables in total) and effects will be temporary in nature.

Without mitigation, there is potential for the operation of both the converter station and substation to give rise to complaints from neighbouring properties. Mitigation will be incorporated into the design of the converter station and substation to ensure that noise levels no higher than the background noise levels. Mitigation measures could include the use of noise shields, noise enclosures, low noise fans, and silencers or barriers on cooling fans. With mitigation measures included, the significance of operational noise would be minor as noise levels will be below background levels.

### Air Quality

The Proposed Development will make no emissions to air during operation and has not been assessed. Potential construction effects on air quality can potentially arise from construction traffic (including the operation of motor vehicles and plant) and dust arising from construction works.

Background concentrations for 3 representative existing sensitive receptor locations have been obtained from the latest 2010 Defra Background Maps which provide an estimate for Particulate Matter (PM<sub>10</sub>) concentrations of between 15.55 and 16.14µg/m<sup>3</sup> and concentrations of Nitrogen Dioxide (NO<sub>2</sub>) of between 12.84 and 14.33µg/m<sup>3</sup>. In the absence of monitoring data for dust deposition, it is assumed to be absent from the local environment (this is a very conservative assessment because dust deposition will be occurring naturally in the surrounding environment).

Exceedance of the annual mean objective concentrations for PM<sub>10</sub> and NO<sub>2</sub> at the 3 representative receptor locations is not predicted to occur as a result of construction traffic. The significance of effects will be negligible.

A number of mitigation measures will be implemented during the construction works and detailed within the CEMP to minimise potential impacts from dust and air quality emissions. Measures

include reducing vehicle speed limits, site management, maintenance of equipment, and careful location of storage to avoid wind-blown dust. Following the implementation of these mitigation measures, effects on air quality resulting from construction traffic and other dust generating activities will be negligible.

#### Coastal Tourism, Recreation and Socio-Economics

Indirect impacts on tourism and recreational activities would result from temporary disruption caused by construction activities. This would affect coastal recreational activities during the landfall and cable installation works at Pegwell Bay. However the duration of works in this area would be very short and the wider area of the Bay will provide undisturbed opportunities.

Clearly signed temporary diversions will be in place to ensure the Thanet Coastal Trail and the Viking Coastal Trail remain open throughout the duration of the installation works. Access to the Country Park will be possible throughout the duration of the works although there will be some areas with limited access and there will be some temporary disruption to users of BayPoint sports complex.

The works to install the cables are similar to those carried out by any utility company in its day-to-day business and would be of short duration and limited in geographic effect. All land take associated with cables installation will be reinstated following completion of cable laying activities so will not adversely affect future recreational land use.

There would be a large number of construction jobs which would be temporary and short-term. These will be valuable to the local economy and the service industry due to accommodation requirements and the purchase of materials, equipment and other services during the construction phase. This may have a small benefit through the creation of temporary and permanent jobs locally and nationally.

#### Electric and Magnetic Fields (EMF)

All equipment that generates, distributes or uses electricity produces EMFs. The NEMO Link uses both AC and DC technology therefore producing both static and alternating electric and magnetic fields.

The new converter station and substation will be designed to ensure that they are compliant with the relevant UK Government guidelines on EMF exposure using the Department for Energy and Climate Change (DECC) Code of Practice to assess the compliance.

An assessment has been carried out of the likely impact of the cable route, converter station and substation. The assessment has demonstrated that no mitigation will be required because the EMFs are within UK Government guidance levels and there will not be any significant effects arising from the NEMO link.

#### **Cumulative Impacts**

##### Unrelated Projects

There is the potential for cumulative construction and operation effects to arise from the proposed UK onshore elements of the Nemo Link together with other projects in the surrounding area

(unrelated to the Nemo Link) either currently under construction, soon to be subject to a planning application, pending planning decision, or recently granted planning permission. These projects include: a peaking plant facility at the former Richborough power station site; the Richborough Energy Park estate road; the Pegwell Bay Flood Defence Scheme north of Pegwell Bay Service Station; waste related development on land west of Ramsgate Road; a 5MW solar farm on land west of the River Stour; glasshouses, water storage tanks and pack house at Ebbsfleet Lane; and an anaerobic digestion plant on Ramsgate Road.

An assessment has been undertaken to determine the likely significance of such cumulative effects. There are no predicted long-term cumulative effects resulting from this Proposed Development and other development proposals in the study area. Any potential effects are likely to be localised and temporary during construction and can be mitigated by the use of well-established and industry-standard techniques.

The significance of cumulative effects on landscape character and on views of the proposed converter station and substation in combination with all development proposals (excluding the solar farm) is considered as being no greater than the residual effects (with landscape mitigation and after establishment) recorded in relation to the proposed converter station and substation. Upon completion (with landscape mitigation and after establishment), cumulative effects of the solar farm on landscape will result in a slightly greater adverse effect than reported for the proposed converter station and substation in isolation, but no greater than a minor adverse effect overall.

#### Other Elements of the Nemo Link Project

Applications for consent for the other elements of the Project (sub-sea cables between the UK and Belgium and onshore cables, converter station and substation in Belgium) are being submitted to the relevant national authorities and each element has been subject to environmental assessment to determine the potential for effects on the physical, biological and human environment. All other elements of the Nemo Link have been assessed as having no significant adverse effects on the environment.

There is the potential for cumulative construction and operation effects to arise from the proposed UK onshore elements of the Nemo Link (to which this application relates) together with other elements of the Project, namely the subsea cables in the UK, France and Belgium and the onshore infrastructure in Belgium. Cumulative effects will be limited to the interaction of the subsea cables close to the UK foreshore and the land cable installation in the foreshore and the surrounding area. There will be no cumulative effects as a result of the UK onshore components and the subsea cable works within French and Belgian waters, and with Belgian onshore components, due to distance between these developments during construction and operation.

No significant cumulative adverse effects resulting from any aspect of the UK onshore elements with any other aspect of the Nemo Link are anticipated to arise during the construction or operation phases as significant adverse effects can be avoided through cable micro-routing and the adoption of best practice and industry-standard mitigation measures during construction.

## Grid Connection

The construction and operation of the grid connection which is required for the operation of the Nemo Link, has the potential to result in direct environmental effects and cumulative effects when considered together with the construction and operation of the UK onshore elements of the Nemo Link. The development of the grid connection is the responsibility of NGET and the route and technology options for the connection are still in early development. The grid connection does not form part of this planning application; an assessment of the likely effects of the connection is considered within the ES.

For the majority of the environmental topic areas, potential adverse effects will be temporary and localised. Adverse construction effects can also be avoided or reduced through the implementation of best practice industry standard mitigation and prevention measures. Careful route alignment would likely ensure that the potential for significant adverse effects on designated areas could be avoided or minimised as far as possible (subject to detailed routing at a later date).

Appropriate mitigation measures can be implemented during the construction period to ensure that no significant cumulative effects occur. For construction effects with the potential to be longer lasting and/or permanent (e.g. ground conditions and hydrology), the implementation of best practice industry-standard mitigation and preventative measures will also ensure that significant cumulative effects can be avoided.

Potential cumulative effects during the operation period are largely minimal and localised and are not anticipated to be significant. There is potential for cumulative ecological effects on Thanet Coast and Sandwich Bay, Stodmarsh and The Swale Natura 2000 sites (disturbance to breeding and wintering birds using these sites and moving between them). Such effects could potentially be avoided or minimised through the development of the detailed design of the connection (careful route alignment) and identification of mitigation measures. Environmental assessment work will also be undertaken for the connection option to determine the significance of likely effects and appropriate mitigation. The cumulative operation effects on landscape and views (if an overhead line is proposed) are anticipated to be no greater than moderate adverse due to the presence of existing infrastructure in the surrounding area including three 132kV overhead lines, a wind turbine and two masts.

At a time when the nature and extent of the grid connection is finalised, consent under the relevant legislation will be applied for by NGET separately to this planning application for the UK onshore elements of the Nemo Link. All potential relevant environmental effects and appropriate mitigation of the connection will be assessed and identified separately by NGET to provide sufficient information to the relevant authority to enable consents (if required) to be granted under the relevant legislation.

## **Summary and Conclusions**

The Nemo Link is a proposed HVDC electrical interconnector which will allow the transfer of electrical power between the UK and Belgium. The power would be bi-directional, able to flow in either direction at different times, depending on the supply and demand in each country. The development of the Nemo Link will enable a more efficient energy market within the EU in accordance with EU policy.

NGNLL has decided to prepare and submit a voluntary ES to accompany the planning application to enable the anticipated environmental effects of the Proposed Development to be assessed and appropriate mitigation measures to be determined and implemented.

The construction and operation of the Proposed Development will not give rise to any significant long term effects, either in isolation or when considered in combination with other unrelated projects, other aspects of the Nemo Link and the grid connection. Any impacts identified as part of the assessment are considered to be localised and temporary and appropriate mitigation measures will be implemented to avoid, offset or reduce impacts.

The table below provides a summary of the residual (i.e. with mitigation in place) environmental effects of the proposed UK onshore elements of the Nemo Link to which this application relates.

<b>SUMMARY OF EIA RESULTS</b>		
Topic Area	Residual Effects*	
	Construction	Operation
Land Use	Minor Adverse	No Effect
Ground Conditions and Contamination	No Effect	No Effect
Hydrology and Flood Risk	Minor Adverse	Minor Adverse
Ecology	Minor Adverse-Minor Beneficial	Negligible
Archaeology and Cultural Heritage	Low/Negligible	No Effect
Landscape	Moderate Adverse	Minor Adverse
Views	Moderate/Minor Adverse	Moderate/Minor Adverse
Traffic and Transport	Minor Adverse	Negligible
Noise	Moderate	Minor
Air Quality	Negligible	No Effect
Coastal Tourism, Recreation and Socio-Economics	Minor Adverse-Minor Beneficial	No Effect
Electric and Magnetic Fields	No Effect	No Effect

\* Summarises residual effects on the basis of the 'worst' or most significant effect identified.

