Luxembourg, 22 July 2022

Public

Environmental and Social Data Sheet

Overview

Project Name:	*NEUCONNECT INTERCONNECTOR*
Project Number:	*2020-0756*
Country:	*Germany*
Project Description:	The proposed project concerns the implementation of a High Voltage Direct Current (HVDC) link interconnecting Germany and Great Britain across the North Sea. The project will have a rated capacity of 1400 MW, DC voltage of 525 kV and a total route length of 720 km, of which 706 km offshore. The offshore route of the project crosses German, Dutch and British waters.

EIA required: yes

Project included in Carbon Footprint Exercise[1]: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

Environmental Assessment

The Project consists of the following main components:

- A bipole converter station in Wilhelmshaven (Lower Saxony, Germany).
- 2 x 12.5 km of land cable in Germany.
- 2 x 706 km of submarine cable, crossing the Territorial Waters (TW) and Exclusive Economic Zone (EEZ) of Germany, the EEZ of The Netherlands, and the TW and EEZ of Great Britain.
- 2 x 1.6 km of land cable in Great Britain.
- A bipole converter station in Isle of Grain (Kent, Great Britain).

The Project connects to the TenneT TSO GmbH transmission network at the Fedderwarden 380 kV substation and to the National Grid high voltage network via the Grain West 400 kV substation.

Given its technical characteristics, the Project does not fall under either Annex I or Annex II of the EIA Directive. The Project is subject to various permitting regimes in Germany, the Netherlands and Great Britain as described in the below paragraphs.

The Project was included in the 4th PCI List and accordingly complied, in all three jurisdictions, with the pre-application and public consultation requirements of the TEN-E Regulation 347/2013. The Project was however excluded the from the 5th PCI adopted by the

[1] Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.

European Commission on 19 January 2022 and is therefore no longer subject to the TEN-E Regulation.

Germany

Permit according to the Federal Mining Act (BBerG) is required for the offshore cables in the EEZ. The competent authority is the Federal Maritime and Hydrographic Agency (BSH). BSH permit requires a parallel permit from the Lower Saxony State Office for Mining, Energy and Geology (LBEG) for the cables burial aspects. LBEG permit was issued on 20 December 2021. The BSH permit was issued on 10 May 2022.

Permit according to the Electricity Energy Industry Act (EnWG) is required for the planning approval of the cables on land and in TW. The competent authority is the Lower Saxony State Authority for Road Construction and Transport (NLStBV). The permit was issued on 12 April 2022. Neither the BSH nor the NLStBV permits define an end date of validity. Their conditions and obligations remain in force until the Project is taken out of operation and decommissioned.

Permit according to the Federal Immission Control Act is required for the construction and the operation of the converter station. The relevant competent authority is the State Trade Inspectorate Oldenburg (GAA Oldenburg). The second and final BImSchG permit is outstanding. The first partial BImSchG permit granted in August 2021 notes that there are no fundamental reasons not to issue the second and final BImSchG permit. The final BImSchG requires some detailed design work to be completed and should be obtained in December 2023. The first partial BImSchG permit requires inter alia that prior to the start of the construction of the converter station the building permit for the erection of the access roads must be obtained. The sponsors have applied for the building permit regarding the access roads.

According to the German Environmental Impact Assessment Act (UVPG) the Project is not an activity for which an environmental impact assessment (EIA) is required. The Federal Maritime and Hydrographic Agency (BSH) confirmed this in a letter issued on 12 July 2021, following a request by the Project sponsors. All permits applications required however environmental analyses, including assessment of route alternatives, for meeting the requirements of the Federal Nature Conservation Act (BNatSchG) and to comply with the water laws and legal requirements for Natura 2000 sites and species.

The Project has the potential to interact with the Natura 2000 sites “Borkum Riffgrund DE2104301” and “Lower Saxony Wadden Sea NP DE2306301”. The Appropriate Assessment screening ruled out significant effects on “Borkum Riffgrund” but likely significant effects could not be ruled out in Lower Saxony Coastal Sea as cables directly interact with the “Lower Saxony Wadden Sea NP” and the EU bird sanctuary “Lower Saxony Wadden Sea NP and adjacent coastal sea”. The Project was therefore subjected to Appropriate Assessment in line with Article 6.3 of the Habitats Directive. Three protected benthic habitats (species-rich gravel, coarse sand and shingle grounds and Mudflats in the coastal area) were noted in DE offshore. The assessment concluded that the Project does not lead to destruction or other significant impairment of legally protected habitats. The Water Framework Directive (WFD) applies to territorial waters between 1 nm and the 12 nm from the coastline. The related assessment concludes that there are no project-related activities likely to negatively impact the achievement of good environmental status or the environmental objectives of the coastal waters and seas. Subject to the implementation of compulsory mitigation measures, the absence of significant impairment was confirmed by the competent authority also on consideration of the limited time and temporary nature of the project-related interventions, the reversible nature of the sediment-benthos fabric and the short regeneration period of the involved protected habitats.

The following main conditions/restrictions apply to offshore/onshore cable works:

- In order to reduce EMF and sediment heating in the upper sediment layers, a permanent minimum cover of 1.5 m has to be maintained for the off-shore cables. Soil-conserving

systems are to be used for cable laying, which is suitable for achieving the required installation depth. In addition, a laying method shall be chosen which reduces the affected area and the redistribution of sediment quantities as much as possible.

- In the territorial sea the conductor cross-section of the offshore cable must be at least 2,000 mm2 in order to comply with the 2K-criterion at a reference point depth of 30 cm. A heat monitoring programme with a duration to be agreed with the competent authority will be undertaken to demonstrate compliance with the 2-K criterion. In case of significant deviations, the competent authority reserves the right to order further avoidance, compensation or replacement measures.
- Areas of legally protected habitats are only used to the minimum extent that is absolutely necessary. Except for the prevention of damage, such areas shall not be entered by floating units or vehicles.
- The impact on the tidal flats and seabed, e.g. due to driving, anchoring, screw jetting and the construction of excavation pits, must be reduced to the absolutely necessary level, e.g. by optimising the construction sequence, the use of equipment, the selection of equipment and the utilisation of tidal conditions.
- Floating units are always used in such a way that the mudflats are not affected. Journeys are only started if the destination of the journey can be reached without touching the ground.
- Within a 1000 m radius from the habitat of the sea ducks quick vessel movements shall be avoided.
- Within a 1000m protection zone of grey and harbour seals quick vessel movements and noisy tasks shall be avoided.
- In case piling is required in coastal areas, this must use soft-start techniques to allow marine mammals and fish to leave the area before the maximum noise emission level is reached.
- Trees may not be cut down or put on the ground during the period from 1 March to 30 September.
- The excavated soil is to be stored separately depending on the different soil types in order to restore the former structure as far as possible.
- Temporary access routes are to be removed immediately after the end of the construction work. Any vegetation removed during construction work is to be replanted.

As per applicable German law, the sponsors will have to provide compensations for residual impacts. In territorial water, the sponsors will make a financial contribution to a project called “Westerneßmer Sommerpolder” for the development and restoration of mudflat and salt marsh in the Lower Saxony Coastal Sea. The final and binding amount of compensation will be decided at a later stage depending on the actual area impacted by the cables installation works (currently estimated between 12.8 and 26.5 ha). In the EEZ the competent authority concluded instead that the anticipated compensatory measure “Resettlement of European oysters” in Borkum Riffgrund is at this stage not feasible and imposed a financial compensation of EUR 1.694 m.

- The following main conditions/restrictions apply to the works for the converter station: Works shall not be conducted during the breeding season (March – September). Exceptions are possible in coordination with the nature conservation authority.
- Illumination of the construction site is regulated and partly restricted.
- For the subsequent BImSchG permit the sponsors must demonstrate that the converter is less noisy for a bat in the relevant frequency (10 – 110 kHz) than a highway in a distance of 60m.

Luxembourg, 22 July 2022

The Netherlands

The offshore cables of the Project will cross the Dutch EEZ for approximately 265 km.

A permit under the Water Act, which includes a full EIA, is required. The Minister of Infrastructure and Water Management (represented by Rijkswaterstaat (RWS)) is the relevant competent authority. A further permit under the Nature Conservation Act is required. The Ministry of Agriculture, Nature and Food Quality (LNV) is the relevant competent authority.

The Water and Nature permits were issued on 29 October 2021 and 14 September 2021, respectively. Both permits are valid until the cables are taken out of operation.

As anticipated above, upon decision of the Minister of Infrastructure and Water Management, a full EIA was required for the permit under the Water Act.

The cables route crosses the Natura 2000 protected site "Friese Front NL2016166" for approximately 78 km. Appropriate Assessment screening, including assessment of projected nitrogen deposition and associated impacts, was therefore carried out. The screening determined that, without mitigation, significant disturbance to the Guillemots colony in the Friese Front could not be ruled out. The Project was therefore subjected to Appropriate Assessment in line with Article 6.3 of the Habitats Directive. Taking into account mitigation measures, the assessment concluded that the installations of the cables has no significant effects on the conservation objectives of the Friese Front. Based on the AA screening, emission and deposition of nitrogen, as a result of both the operation and construction phases, does not have significant negative effects on the Friese Front. This was confirmed by the competent authority subject to the implementation of compulsory mitigation measures.

As regards benthic habitats, the results of the assessments show that most of the route in Dutch waters consists of one flat and stable seabed, the risk of disturbance of the morphological characteristics of the seabed is considered minor. In addition, no EU/National protected seabed receptors are noted. Mitigating measures were therefore not considered necessary.

The Water Framework Directive (WFD) applies to territorial waters between 1 nm and the 12 nm from the coastline. This means that the Dutch part of the Project does not fall within the scope of the WFD.

In light of the presence of the Guillemot in the Natura 2000 protected site Friese Front, the Nature permit provides that the installation of the cables will not take place in the period July through September. In addition disturbing fauna present in the area has to be limited as much as possible, which entails more specifically that groups of birds may not be approached at a distance closer than 500m. For the installation phase, the Nature permit is valid from January 2022 until 1 December 2026.

Great Britain

Planning permission is required from Medway Council under the Town and Country Planning Act 1990 for the converter station and the cables above Mean High Water Spring (MHWS). The Medway Council issued the outline planning permission and the integrated favourable EIA decision for the Project on 12th February 2021. The outline planning permission implies that certain details of the development must be separately approved as part of a further application process. This is standard for a project of this nature.

A Marine Licence is required under the Marine and Coastal Access Act 2009 (as amended in 2011), which covers licensing in both TW and EEZ. The Marine Management Organisation (MMO) is the consenting authority. The marine licence was granted on 11 March 2022 and a varied licence (to correct certain omissions) was granted on 25 March 2022. The Marine Licence is valid until March 2037.

A full EIA was required for the planning permission of the schemes onshore and above MHWS on account of the proposal to install the cables within the ecologically-sensitive intertidal zone. Statutory EIA was not required in respect of the application for the offshore

scheme. Notwithstanding this, a voluntary non-statutory Environmental Impact Statement, whose scope was discussed and agreed with the competent authority MMO, was prepared by the sponsors.

The Project has the potential to interact with several special protection and conservation sites designated under the Conservation of Habitats and Species Regulations 2017. These include the Greater Thames Special Protection Area (SPA) Complex and Ramsar Sites, the Outer Thames Estuary SPA, the Margate and Long Sands Special Area of Conservation (SAC), the Southern North Sea SAC, the Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar, the Essex Estuaries SAC, the Medway Estuary MCZ and the Alde-Ore Estuary SPA. Accordingly, the Project was subject to Appropriate Assessment, which concluded that the Project would not have a likely significant effect on the integrity of any of the identified sites, either alone or in-combination with other plans or projects. The conclusions of the Appropriate Assessment are in accordance with the advice and recommendations of Natural England and Joint Nature Conservation Committee (JNCC).

The Thames Estuary is an Estuarine and Coastal Water Body under the Water Framework Directive (WFD) east of the study area, at the landfall location. The assessment carried out for this designated waterbody ruled any likely significant residual effects. This was confirmed by the Environment Agency on determination of the planning application.

Works associated with the offshore scheme were considered to have the potential to impact the current or targeted status of WFD water bodies with which it interacts. The WFD compliance assessment concluded however that, subject to the implementation of avoidance and mitigation measures, no significant deterioration or change in water body status is expected.

To minimise impacts, the Marine Licence imposes restrictions on the periods and/or locations within which construction and operation works can take place, namely:

- To minimise disturbance to Red-throated diver, works associated with the installation and/or protection of the cables will not be carried out within the Outer Thames Estuary SPA during the most sensitive time period of 1st November to the 31st March for each year unless written approval is provided by the MMO in consultation with Natural England.
- To protect the designated features of this site, no anchoring will take place within the Medway Estuary MCZ.
- Cable preparation and installation works must not take place in areas known to offer suitable spawning habitat for Downs herring and sandeel during peak spawning periods (1 November to 28 February).
- To minimise impacts of underwater noise to sensitive mobile fish and marine mammals and habitats, Sub Bottom Profiler survey work will not be carried out in the Southern North Sea (SNS) Special Area of Conservation (SAC) during the wintering period between the months of 1 October to 31 March.
- No cable protection berms and/or cable crossings are permitted to be constructed and/or maintained within the Margate and Long Sands SAC or Thames Estuary and Marshes SPA.
- No cable activities will take place in the intertidal area during the months of 1st February to 31st March, for the protection of Smelt (Osmerus eperlanus).

Additionally, the Marine Licence impose limitations on the amount of additional rock that can be installed, and the length and/or total footprint of cable protection that can be used, at various phases of the Project within protected sites.

Under the planning permission, main conditions/restrictions include:

- To use Horizontal Directional Drilling (HDD) for the installation of the cables through the intertidal zone.

- To stop piling activities if carried out within 300m of where a Marsh Harrier nest is located. This piling shall cease until the birds have fledged.
- Percussive piling not to take place in the months of January and February.

In addition to the primary permitting regimes described above, a range of secondary consents[2], which may fall under the responsibility of the EPC contractors, are required for the Project.

EIB Carbon Footprint Exercise

The sources of CO2 equivalent (CO2 e) emissions for the Project are the ohmic losses in the converters and in the cables of the Project and the indirect emissions resulting from the losses in the rest of the network. These emissions are however offset by the indirect emissions savings resulting from the avoided curtailment of intermittent RES enabled by the Project.

Over the economic life of the Project the corresponding average absolute emissions are estimated at 94 kt CO2 equivalent per year while the relative emissions savings are estimated at 110 ktCO2 equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the Project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of Project cost.

Social Assessment

The offshore part of the Project has the potential to interfere with commercial fisheries. Standard mitigations are proposed in Great Britain and the Netherlands. These include a) appointment of Fisheries Liaison Officer, b) updating of nautical charts, c) use of temporary safety zones; and d) appropriate cable burial depths. Mitigation proposed for Germany are more limited and include only temporary safety zones.

Public Consultation and Stakeholder Engagement

As per requirement of the TEN-E regulation, in all three jurisdictions public consultations were carried out prior to the submission of the permit application files in order to facilitate comments and objections by stakeholders/members of the public in advance of formal submission. In addition, separate information leaflets in English, Dutch and German have been prepared, were made available and are still available at the Project website.

Germany

Pre-application public participation by way of information events was held in Wilhelmshaven on 28 March 2019 and 16 August 2019 and further on 22-23 September 2020.

As regards stakeholders' engagement, a large number of (bilateral) coordination meetings and events for the various approval procedures have taken place since 2017. The sponsors informed that alternative routes were considered and that discussions on the alternatives were held with the relevant authorities, public bodies and other stakeholders.

Public participation is required by law for the plan approval procedure for the cables on land and in TW under responsibility of NLStBV. From 17 May 2021 up to 16 June 2021, the permit application documents have been published by the authority and the responsible municipalities. Public virtual information events took place on 28-29 May 2021. Interested parties were given the opportunity to file objections until 30 June 2021. An online consultation was held from 29 September 2021 until 19 October 2021.

The Project received an objection by a German mussel fisherwoman, dated 17 June 2021, noting that the Project would result in the fisherwoman having to abandon their mussel farm

[2] These include the following permit/licences and potentially others: European Protected Species (EPS) licences, Environment Agency Environmental Permit to discharge groundwater, Internal Drainage Board (IDB) consent to discharge to an IDB watercourse or drain, Marine Licence for UXO clearance, if required.

due to the cables being installed up to 38m close to the farm, which does not allow for sufficient space for accessing the farm by ship in a safe way. There are no alternative access routes to the farm. The sponsors have increased the distance to the mussel farm as well as increased the burial depth so that no impacts to the mussels from the cable will exist. It is however for the relevant authority to accept or reject the objection of the mussel farmer. The final NLTsBV permit rejects the objection from the mussel farmer. The final NLTsBV was publicly displayed on 4 may 2022 for a period of two weeks. The appeal period expired on 17 June 2022 without any appeal being lodged, as confirmed by the sponsors.

Public participation is required by law also for the permits of the cables in the EEZ under the responsibility of BSH. In summer 2021, BSH invited 113 stakeholders (Ministries, authorities, associations, municipalities, companies and environmental and nature conservation associations) to comment on the permit procedure. 21 of these stakeholders submitted comments which were subsequently responded and incorporated into the preparation of the permit. No objection were received on the Project during the consultation process. The final BSH permit was publicly displayed on 3 June 2022. The appeal period expired on 21 July 2022 without any appeal being lodged, as confirmed by the sponsors.

The Netherlands

Prior to the submission of the permit application files, public notification was issued in the Government Gazette on 11th March 2019, with the EIA scope available for inspection until 21st April 2019. During this time everyone could provide a feedback on the scope and level of detail of the EIA, and express any concerns of importance for the EIA procedure.

EIA and draft permits were issued on 2nd July 2021 for a 6 week public inspection, closing on 12th August 2021. The final Water and Nature permits were made available for public inspection between 5 November 2021 and 17 December 2021. During the public inspection period, parties were able to file an appeal in first and only instance with the Council of State (Dutch high administrative court). No appeals were lodged during the public inspection period.

Great Britain

Pre-application public consultations was held on 21st November 2018 in Isle of Grain, to present three route/siting options. Feedback from this event helped to inform the selection of the proposed cable route and confirm the siting of the proposed converter station. Two further events were held on 20th and 22nd June 2019 in Isle of Grain to present the outline design. Feedback provided from these events helped to finalise the design and appearance of the main converter buildings. The period within which a challenge to the planning permission could be lodged expired without any challenge being lodged.

For the offshore scheme, statutory consultations took place from 29th January 2021 to 19th March 2021. The judicial period expired on 11 June 2022 in respect of the original Marine Licence and on 25 June 2022 in respect of the varied Marine Licence. The sponsors confirmed that no appeals have been lodged.

Other Environmental and Social Aspects

The sponsors are developing an Environmental Action Plan to manage all the mitigation and monitoring measures identified through the EIA process and detailed in the Environmental Statements/Reports and other primary consent/permit application documents across all three jurisdictions. This will facilitate the delivery of the mitigation commitments so that environmental effects are appropriately managed and risk of unforeseen adverse effects arising during the implementation of the Project is kept to minimum.

Conclusions and Recommendations

Based on the review of the EIA reports, other assessments prepared by the sponsors and the permits granted for the Project, the Bank identified no significant residual environmental and social impacts associated with the Project.

Luxembourg, 22 July 2022

Based on the information available, the Project is acceptable to the Bank in environmental and social terms.