TARCHON

Tarchon Interconnector PROJECT

Intention and Participation Plan (VenP)

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Reading Guide

Introduction

This is the Intention and Participation Plan (“Voornemen en Participatieplan” or VenP) for the Tarchon subsea high-voltage connection (hereinafter referred to as “Tarchon” or the “Project”) in the exclusive economic zone (EEZ) of the Netherlands. Tarchon is a proposed subsea electricity connection between the United Kingdom (UK) and Germany, a so-called “interconnector”, which runs through the Dutch EEZ (Figure 0-1). The interconnector will connect Niederlangen, Germany, with the Tendring Peninsula, UK. Tarchon is being developed by Copenhagen Infrastructure Partners (CIP), a leading international player in renewable energy investment, and Volta Partners.

The Project will consist of two offshore direct current (DC) cables and one fibre-optic cable (hereinafter collectively referred to as “the cable”). The cable will have a length of approximately 610 km between the two landing points at Harwich, UK, and south of the island of Langeoog, Germany. Within the Dutch EEZ, the subsea cable will be approximately 270 km long. The VenP concerns only the section within the Dutch EEZ.

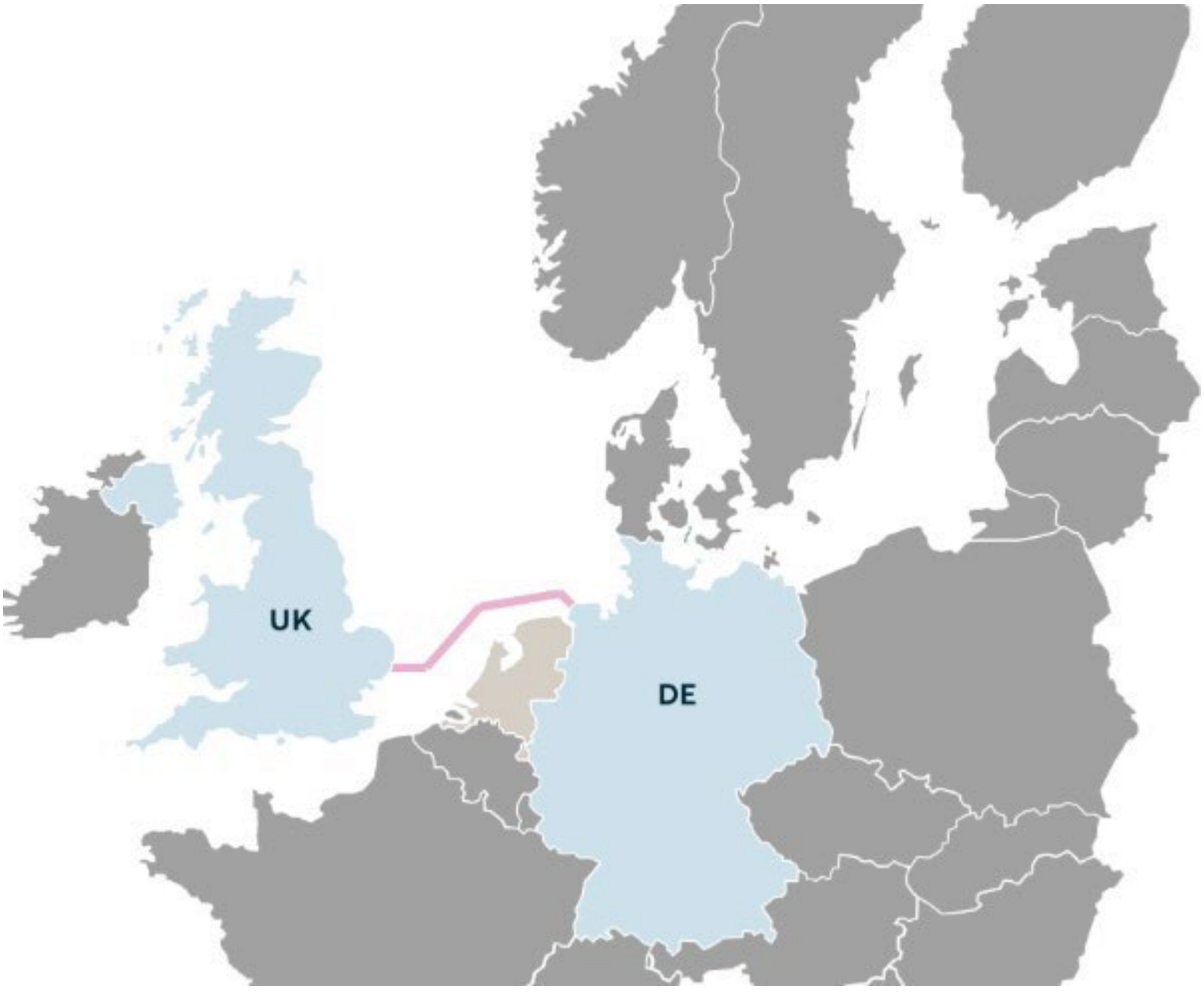

Figure 0-1 Proposed route for the Tarchon Interconnector Project

The Project has been designated by the European Commission as a Project of Mutual Interest (PMI) under the TEN-E Regulation[1]. This makes it a priority project that contributes to the European Union (EU)'s 2050 climate targets. Tarchon will establish a direct electricity connection between Germany and the UK. The project is therefore in line with the European Commission's vision of an integrated, efficient and reliable infrastructure that contributes to affordable, stable and green energy for EU Member States.

The procedure

As this is a large-scale infrastructure project of public interest, the Project Procedure applies to the Project

section within the Dutch EEZ. This procedure under the Environment Act assists the Ministry of Economic Affairs and Climate Policy (EZK) in the implementation of complex projects of general interest. The State Secretary for Climate and Green Growth will take the project decision, in consultation with the Minister for Housing and Spatial Planning (VRO).

Contents of the VenP

The VenP consists of two parts. Part 1 describes why Tarchon wishes to carry out this Project and what the Project entails (the Intention). Part 2 describes how administrative bodies, civil society organisations, businesses and citizens will be involved in this Project (the Participation plan). Part 2 also contains information on how and when you can submit a response or opinion during this project procedure.

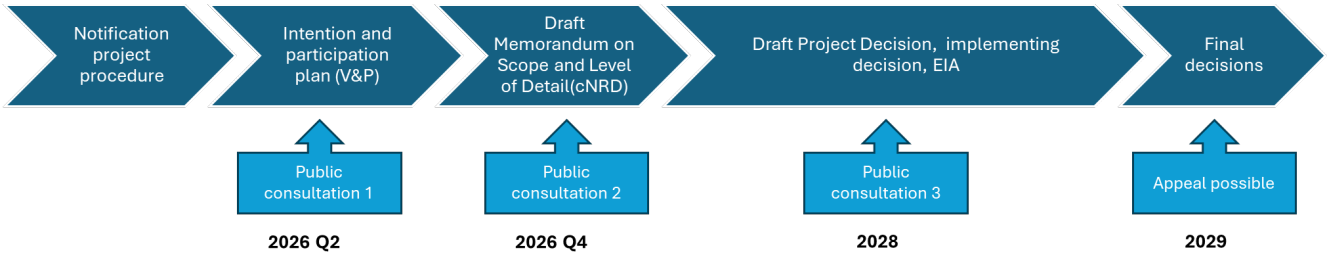

Figure 0-1 Formal opportunities for public participation

Box 1 on the following page provides an indication of what you can contribute at this stage. Responses to this VenP may be submitted between Friday 22 May and Thursday 2 July 2026 via the RVO website (http://www.rvo.nl/tarchon).

Public participation is possible at various stages of the project procedure (Figure 0-1).

[1]https://eur-lex.europa.eu/NL/legal-content/summary/guidelines-for-trans-european-energy-infrastructure.html

BOX 1 What you can contribute during the VenP phase

In this phase, we would like to hear your ideas, points for consideration and questions. You may, for example, provide input on the following:

- The Project is explained in the Intention (Chapter 1 of this document). Do you see any other possible solutions or approaches? If so, which ones?
- What do you consider important in the implementation of the Project? Think, for example, of the local environment, safety, nature or planning.
- The Participation Plan (Chapter 2 of this document) sets out how we intend to keep you informed and involve you. Do you have any suggestions for improving this? And how would you like to be involved?
- Do you have any questions, concerns or points for consideration regarding the project that you would like to share with us?

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Glossary

Term	Explanation
Route	The proposed cable route is currently envisaged as a 500 m wide cable corridor (referred to as the 'corridor'). This is intended to allow for further route determination following future detailed geophysical and geotechnical surveys.
Benthic species	Species living on or in the substrate (seabed).
MSFD areas	MSFD areas are zones designated under the Marine Strategy Framework Directive (MSFD), an EU policy aimed at achieving good environmental status (GES) of marine ecosystems. They protect vulnerable seabed habitats, vulnerable benthic species and sites where ecological restoration is planned (e.g. oyster restoration areas).

Abbreviations

Abbreviation	Explanation
BSH	German Federal Maritime and Hydrographic Agency ("Bundesamt für Seeschifffahrt und Hydrographie")
DWR	Deep Water Route
ENTSO-E	European Network of Transmission System Operators for Electricity
EU	European Union
EZK	Ministry of Economic Affairs and Climate Policy
FEP '25	German Spatial Development Plan ("Flächenentwicklungsplan") 2025
HVDC	High-voltage direct current
MSFD	European Marine Strategy Framework Directive
IenW	Ministry of Infrastructure and Water Management
NCEA	National Commission for Environmental Impact Assessment
NRD	Scope and Level of Detail Memorandum
PMI	Project of mutual interest
RVO	Netherlands Enterprise Agency
TEN-E	Trans-European Networks for Energy
TNW	Offshore wind farm "Ten Noorden van de Waddeneilanden"
TSS	Traffic Separation Schemes

TYNDP	Ten-Year Network Development Plan
VAWOZ programme	Offshore Wind Landfall Connections Programme (“Verbindingen Aanlanding Wind Op Zee“)
UK	United Kingdom
VRO	Department for Housing, Communities and Local Government

1. The Intention

1.1 Why this Project?

Tarchon will establish a direct power link between Germany and the United Kingdom (UK), running through the Dutch exclusive economic zone (EEZ). The Project will connect the energy markets of both countries and enhance the safety, security of supply, stability and reliability of their electricity systems. This is necessary to meet growing energy demand.

Both Germany and the UK have ambitious net-zero targets, which require a significant expansion of energy sources across various technologies. The rapid changes in the German energy mix and the commissioning of additional renewable energy capacity in the UK create an opportunity to integrate the energy markets of both countries more closely. This contributes to better and more efficient integration of fluctuating renewable energy sources.

The Project thus contributes to the EU's 2050 climate targets and aligns with the European Commission's vision of an integrated, efficient and reliable infrastructure that can help ensure affordable, stable and green energy for EU Member States.

Tarchon is recognised as a key infrastructure initiative under the Ten-Year Network Development Plan (TYNDP) drawn up by the European Network of Transmission System Operators for Electricity (ENTSO-E) and has been designated by the European Commission as a Project of Mutual Interest (PMI). Since 2020, it has been included in successive versions of the TYNDP, highlighting its key role in advancing the European Union's climate, energy and market integration objectives.

Purpose and necessity of the Project

The interconnector links the European electricity market with that of the UK. This enables both markets to cooperate more effectively and support one another. If there is a surplus of electricity in one area and a shortage in another, Tarchon makes it possible to exchange power. This increases the reliability, flexibility and resilience of the energy supply on both sides.

In recent years, it has become clear just how vulnerable the electricity supply can be. Geopolitical uncertainty, limited domestic generation and increasing pressure on the electricity grid underline the importance of a stable and diverse energy system for Europe and the UK. Effective interconnection of electricity markets is seen as an effective way of future-proofing the energy supply. Thanks to additional cross-border capacity, electricity from other regions can be utilised in the event of shortages. At the same time, surplus electricity can be exported when there is high production from renewable sources. This ensures that available renewable energy is utilised more effectively.

The Project strengthens the security of supply for Europe and the UK by providing a stable, high-capacity connection to the European mainland. This connection helps to balance fluctuations in supply and demand, reduces dependence on a single energy source or region, and contributes to a stable electricity grid, even in the event of disruptions or extreme weather conditions. The Project has an electricity transmission capacity equivalent to the consumption of up to 1.95 million households.

The EU has designated Tarchon as a PMI, thereby underlining the Project's contribution to a secure, affordable and sustainable energy supply and to long-term decarbonisation across the European region.

The objectives of the Project are:

- **Affordable, stable and secure energy supply**: The Project makes a significant contribution to the stability of the energy supply by balancing supply and demand across international borders. This increases security of supply whilst supporting a more efficient use of renewable energy. Increased market integration promotes competition and supports the integration of renewable energy, whilst keeping construction and operating costs proportionate, delivering net benefits for consumers and society and supporting the European energy transition.
- **Promoting decarbonisation**: The interconnector will enable the efficient exchange of renewable energy, allowing for better utilisation of sustainable energy and reducing dependence on fossil fuels.

This is expected to lead to a CO_2 reduction of approximately 7 Mt, contributing to the climate targets of the EU and the UK.

- **Minimal environmental impact**: Given the environmental pressures on the Dutch North Sea, the Project aims to avoid or minimise impacts through careful planning and compliance with relevant regulatory frameworks.
- **Minimal disruption to existing users**: Given the increasing spatial pressure on the North Sea, the Project aims to minimise its spatial impact by connecting to existing infrastructure where possible and avoiding conflicts with current land and sea uses wherever possible.
- **Societal benefits:** As part of the project development, Tarchon aims to deliver long-term, tangible benefits for European society by both creating jobs and utilising local supply chains where practically feasible.

BOX 2 The initiator

Tarchon is being developed by Copenhagen Infrastructure Partners (CIP), a leading international investor in renewable energy. Through its projects, CIP makes a significant and meaningful contribution to the energy transition, working alongside a team of experienced specialists.

Volta Partners has a minority ownership stake in Tarchon Energy Limited. The Volta team has experience in the development of transmission lines and interconnectors, including the 1.4 GW NeuConnect interconnector between the UK and Germany, which is currently under construction.

The development of the Tarchon project is supported by the EU (through the recognition of the Project as critical infrastructure for TYNDP, and the designation of the Project as a Project of Mutual Interest and part of the Trans-European Networks for Energy).

1.2 What does this Project entail?

Tarchon is a planned subsea interconnector between the UK and Germany, running through the Dutch EEZ. Interconnectors are high-voltage cables that link the electricity grids of two or more countries. They ensure that electricity can flow in both directions, depending on where it is most needed. These connections are typically constructed using high-voltage direct current (HVDC) technology and can be installed underground, underwater or on land. A key advantage of interconnectors is that they can flexibly manage peak loads or excess capacity, thereby preventing energy wastage. If individual countries temporarily produce more electricity than they consume themselves, the surplus (which can be supplied at a lower cost) can be exported via interconnectors, and vice versa.

In Dutch waters, the Project will consist of a subsea cable system comprising two offshore HVDC cables for electricity transmission and one fibre-optic cable for cable monitoring and communication between converter stations. The project procedure covers only the Dutch section. The three cables will be installed in a bundle, hereinafter collectively referred to as ‘the cable’. The configuration of the marine section of the cable bundle is shown in Figure 1-1. HVDC connections require converter stations at each end point, where electricity is converted from HVDC to high-voltage alternating current (HVAC) that can be fed directly into the national transmission grid.

The cable installation in the Dutch EEZ will be carried out by a cable-laying vessel (CLV) (Figure 1-1). Where possible, the subsea cables will be buried in trenches beneath the seabed. Where trenches cannot be excavated, the subsea cables will be protected using alternative protection systems. The Project planning is shown in Figure 1-2.

Figure 1-1 Illustration of the marine cable system (left). Cable-laying vessel NKT Victoria (right).

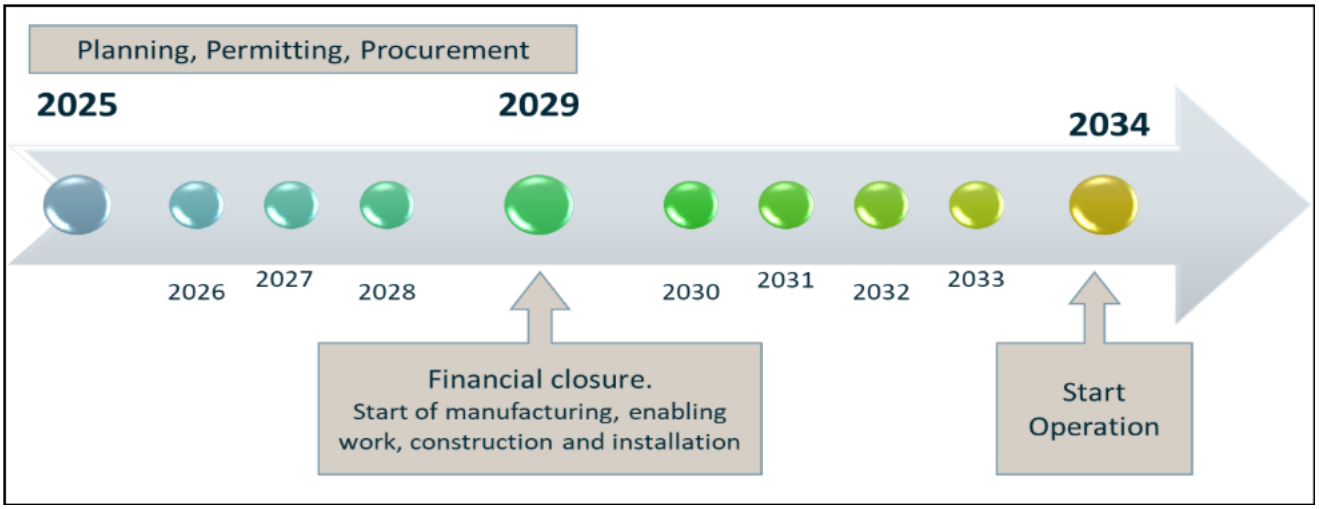

Figure 1-2 Project planning

1.3 How will the Project be implemented?

Pre-sweep dredging of the mobile seabed

If after seabed mobility and burial methodology studies, it is concluded that the removal of mobile seabed features is necessary to ensure cable protection in certain sections, the cable route is usually pre-swept on both sides of the cable before the cable is installed (pre-sweeping). This ensures that the cable can be installed beneath the non-mobile seabed.

Crossings with other linear assets

The Project crosses both in-use and out-of-services cables and pipelines. Most crossing structures will involve the installation of a layer of rock or concrete mattresses before cable lay..

Cable laying

The impact of laying the cable on the seabed depends on whether the cable system is laid in a prepared trench, laid and buried simultaneously, or whether the cable is buried after laying. The methodology used depends on a combination of seabed conditions, location-specific risk assessment and available vessels and equipment. The three main methods expected to be used for laying and burying cables in Dutch waters are illustrated in Figures 1–3.

The Project will ensure, as far as possible, that cable connections are not installed in high-risk areas, such as shipping lanes or anchorages grounds, or where the long-term presence of installation equipment is undesirable.

Operation and maintenance

In the event of an internal fault or a fault in the cable caused by external factors, the affected section of the cable will be removed and replaced with a new section. Repair works are comparable to small-scale installation works.

Decommissioning

The decommissioning of the cable will take place in accordance with industry best practices available at the time of decommissioning.

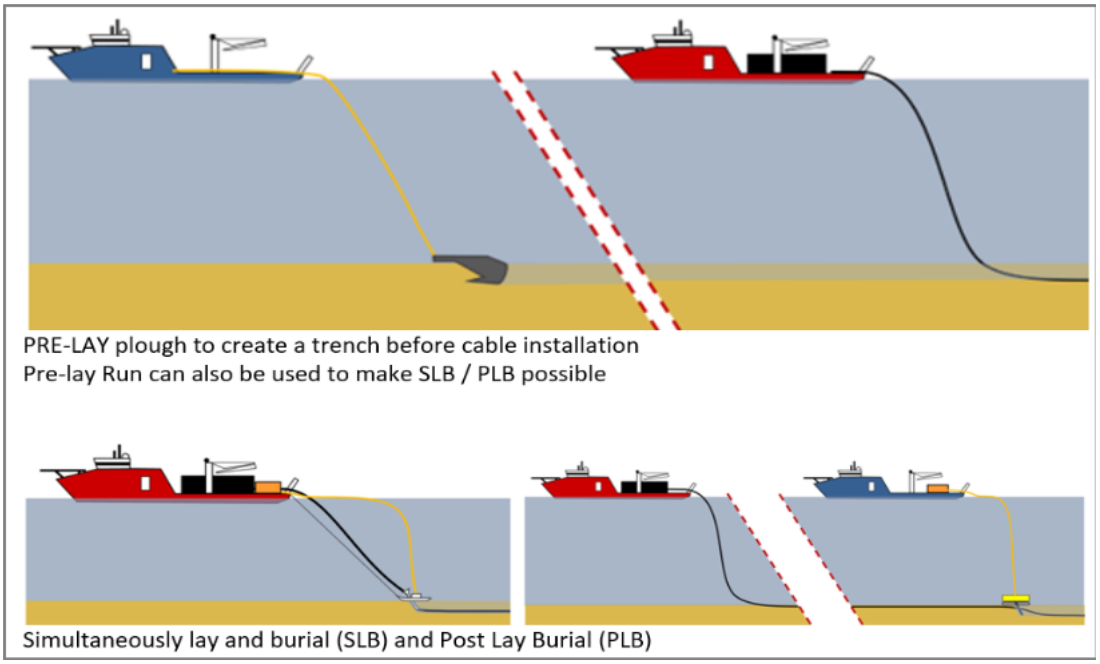

Figure 1-3 Illustration of the methods for Pre-lay trenching, Simultaneous Lay and Burial, Post-Lay Burial method.

1.4 Project location exploration

When determining potential routes, spatial constraints were considered, such as existing users and interests in the North Sea area, ecological values, shipping routes, the fishing industry, cable owners, sand extraction sites, defence interests, oil and gas production, cultural heritage and offshore wind farms.

To evaluate the potential route between the fixed endpoints in the UK and Germany, Tarchon carried out a detailed route assessment, which is summarised in this chapter. The route assessment provides a clear and transparent comparison of environmental, technical, planning and commercial considerations. To determine the cable route in detail following further geophysical and geotechnical investigations, cable corridors 500 metres wide are currently used.

In an iterative process during 2025 and early 2026, the views of the relevant authorities and stakeholders on the identified route alternatives were included into the route exploration process.

1.4.1 Principles for route selection

Connection points

To contribute to an affordable, stable and secure energy supply, Tarchon aims to establish a direct electricity connection between the European and British electricity grids. The relevant transmission system operators in both countries have identified and allocated suitable connection points. These connection points are located in Essex (UK) and in Niederlangen (Germany) and form the endpoints of the Project Route.

In addition, the development of the German Flächenentwicklungsplan 2025 (FEP ’25) provided the opportunity to acquire construction rights for a cable within a designated corridor for offshore infrastructure. In consultation with the German authority BSH (Bundesamt für Seeschifffahrt und Hydrographie), Tarchon submitted an application for inclusion in an existing corridor, which is available to multiple developers. Following the approval of FEP ’25, the German authorities have determined where the Project will enter Dutch waters. As a result, the connection will run between the British coast and a designated maritime border crossing between the Netherlands and Germany.

Route parameters

The Project aims to minimise the impact on the environment. Therefore, the aim is to achieve the shortest

possible cable route, both at sea and on land. This limits the consequences for nature, shipping and other stakeholders, and keeps the impact of the project as small as possible.

Figure 1-4 shows the route parameters used for the analysis of the identified initial alternatives. The Project objectives mean that the Project aims to minimise its footprint, conflicts with other users of the sea and potential environmental impacts, whilst at the same time ensuring a cost-effective energy supply for consumers in both the EU and the UK, through the cost-effective construction of the Project.

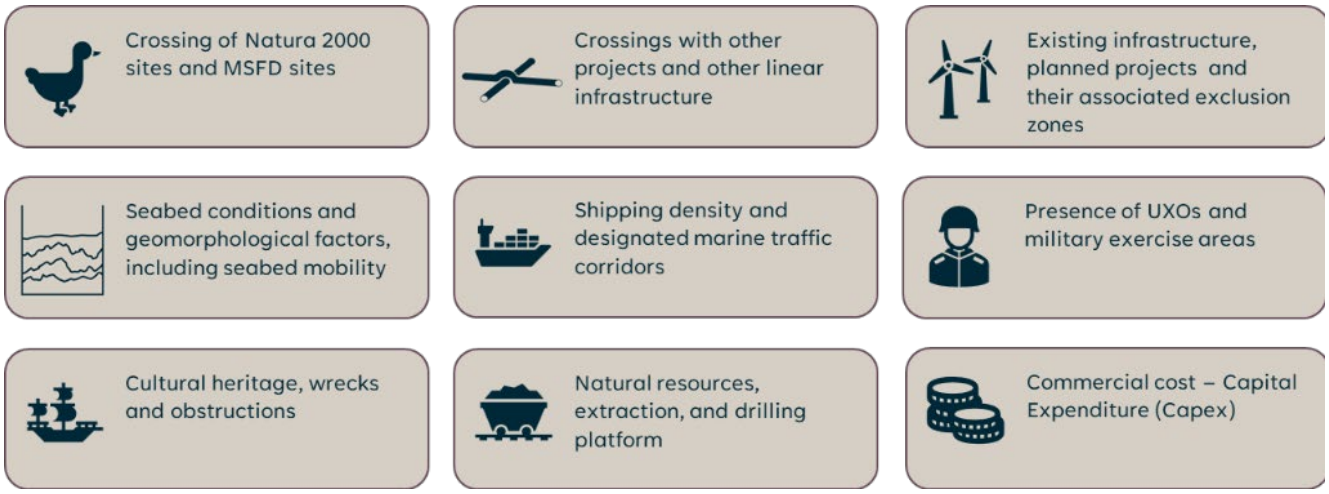

Figure 1-4 General route parameters used to identify the potential route alternatives

Based on the established principles, **eight potential route alternatives** for the Project have been identified (Figure 1-5). These routes are being further assessed for technical feasibility and environmental impacts. Stakeholders are also being involved in this process. In this way, all feasible options have been carefully weighed up before the routes were included in the EIA.

The environmental, technical, structural and cost-related considerations underpinning the assessment of the eight identified potential routes are described below.

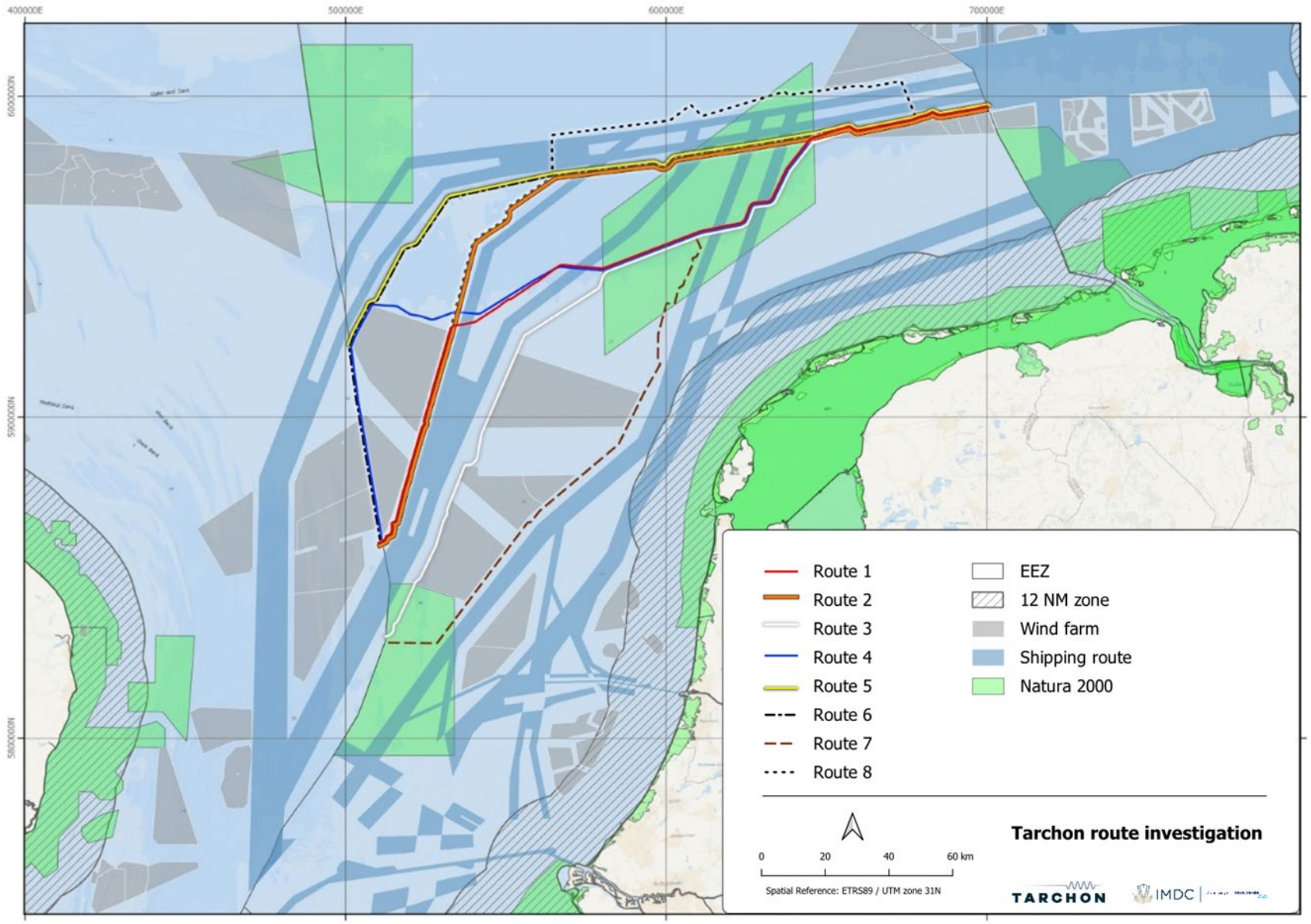

Figure 1-5 The identified potential alternatives for the Tarchon Project in the Dutch EEZ

1.4.2 Environmental considerations

This chapter sets out the environmental feasibility of the eight potential alternatives (with regard to protected areas and protected species). Figure 1-6 shows the identified pressure factors that may cause an environmental impact during the various phases of the Project.

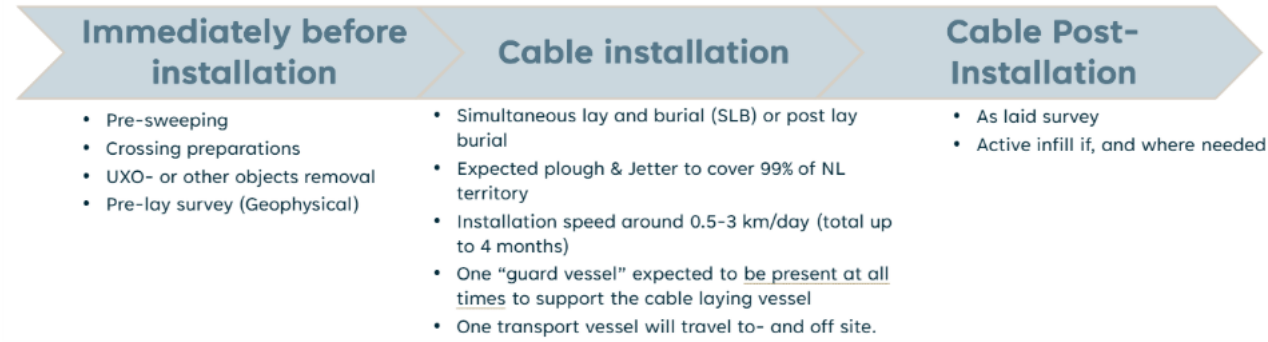

Figure 1-6 Pressure factors on the ecosystem during the various phases of the Project

In Tarchon's analysis, potential alternatives are deemed unsuitable if they pose a significant risk to protected areas or species that could be avoided by other alternatives. Route alternatives that entail some environmental risk, which cannot be avoided via other routes, were identified for further ecological assessment. Any necessary mitigation measures will be addressed in the environmental impact assessment.

Various legal restrictions relating to protected areas and species have strongly influenced the route selection (Figure 1-7):

- In the Dutch EEZ, there are two Natura 2000 sites relevant to the Tarchon interconnector: the Friese Front and the Bruine Bank. Both sites have been designated under the EU Birds Directive due to their importance for specific seabird species (Figure 1-7). The aim of the Natura 2000 framework is to protect habitats that are essential for the survival of these species, which means that for any activity within, and near, these areas, it must be demonstrated that it does not significantly undermine the conservation objectives. Although the impacts in Natura 2000 sites are expected to be temporary and limited to the laying and removal of cables, regulatory authorities require strict mitigation measures, including avoiding sensitive periods (e.g. the moulting of guillemots in the Friese Front in July–September and the winter period on the Bruine Bank for the list of protected seabirds), deploying marine fauna observers, maintaining a distance from flocks of birds, and applying 'soft start' procedures to reduce underwater noise.

- MSFD areas are zones designated under the Marine Strategy Framework Directive (MSFD), an EU policy aimed at achieving good environmental status (GES) for marine ecosystems. They protect vulnerable seabed habitats, vulnerable benthic species and sites where ecological restoration is planned (e.g. oyster restoration areas). The Dutch government has already established no-fishing zones in parts of the Friese Front MSFD area to protect vulnerable benthic communities, with plans to extend these restrictions to the entire MSFD area as part of a long-term shift towards full protection against seabed disturbance. The Bruine Bank has also been designated as a future MSFD no-fishing zone (Figure 1-7).
- Two 50 km² flat oyster recovery areas and a beam trawl research area also fall within the MSFD boundary of the Friese Front. Although all potential routes avoid these areas by at least 2 km, the MSFD policy places strong emphasis on preventing sedimentation, turbidity and seabed disturbance that such projects could cause.

- Various regulatory frameworks, such as the IUCN Red List, OSPAR, the Spatial Planning Act and ASCOBANS, also protect specific species (marine mammals, biogenic reefs, benthic species, fish and birds).
- The Dutch EEZ is home to various marine mammals, with the harbour porpoise (*Phocoena phocoena*) being the most common species off the coast.
- Species that form biogenic reefs and are protected under the MSFD/OSPAR include: flat oysters (*Ostrea edulis*), *Sabellaria spinulosa* reefs, horse mussel beds (*Modiolus modiolus*), sea feathers and burrowing megafauna communities. These communities are particularly sensitive to seabed disturbance. They are mainly found in the areas of the Friese Front and the Bruine Bank, making the routing of the cables crucial.
- Only two fish species are legally protected under the Environment Act: the European sturgeon and the European whitefish. Both species are mainly found in coastal or estuarine areas. The broader fish community, particularly OSPAR/IUCN species, is however present throughout the Dutch EEZ, with the Bruine Bank and the Friese Front acting as biodiversity hotspots.
- Eleven species occur in Dutch waters that are sensitive to disturbance (little gull, black-legged kittiwake, long-tailed duck, grebe, common guillemot, razorbill and little auk) or even highly sensitive to disturbance (common eider, velvet scoter and common scoter, red-throated diver). Of these disturbance-sensitive species, only the little gull, the black-legged kittiwake, the common guillemot and the razorbill can occur in the project area.

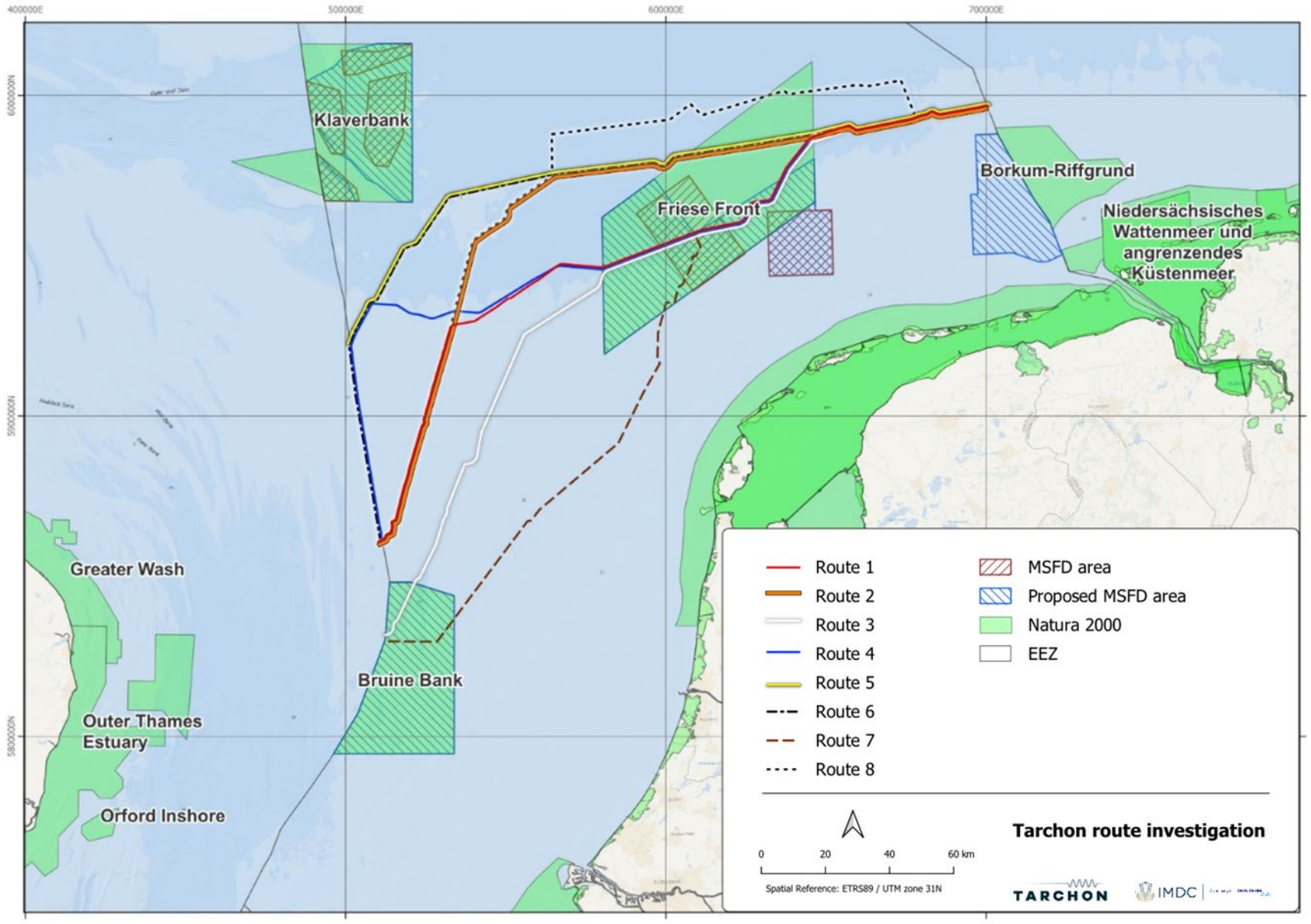

Figure 1-7 Protected areas in the Dutch EEZ

Based on the restrictions mentioned above, routes #1, #3, #4 and #7 have the greatest impact on both protected areas and species. As these routes cross the Natura 2000 site Bruine Bank and the MSFD site Friese Front—areas with a high concentration of protected species—they are not considered further and are deemed unviable. Furthermore, alternative routes are available that avoid these risks whilst meeting the Project's objectives.

- Routes #1, #3, #4 and #7 have significantly longer crossings through the **Friese Front Natura 2000 site**. This increases the risk of a negative impact on the conservation objectives of this site.
- Routes #3 and #7 also cross the **Natura 2000 site Bruine Bank**. This further increases the ecological risk of a negative impact on the conservation objectives of this site.
- Routes #1, #3, #4 and #7 also cross the **(proposed) MSFD areas of the Friese Front** (routes #1, #3, #4 and #7) **and the Bruine Bank** (routes #3 and #7), which are subject to increasingly stringent regulations to ensure the protection of the seabed. Crucial to this assessment is the potential disturbance of biogenic reef species such as *Sabellaria spinulosa* and burrowing megafauna communities, which are protected under the MSFD and OSPAR frameworks. There is a clear preference for routes that avoid protected benthic areas, minimise seabed disturbance and do not interact with restoration or research areas – just as with Natura 2000.
- Routes #1, #3, #4 and #7 overlap with zones posing a higher risk to **protected biogenic habitats** and should therefore also be avoided.

With regard to protected marine mammals, all routes have a similar (relatively low) impact, mainly due to potential underwater noise generated by construction activities and vessel movements. Disturbance is a particular concern during the breeding season (May–September). Mitigation measures, should they be necessary, include a gradual increase in noise levels (soft start procedure) and the deployment of marine mammal observers during installation works to prevent disturbance or injury. The geophysical surveys, which may generate underwater noise that disturbs marine mammals, are carried out at an earlier stage and are not subject to the coordination of the project procedure. They are dealt with in separate permit applications.

Routes #2, #5, #6 and #8 are ecologically preferable because they cross the Friese Front Natura 2000 site over a shorter distance (see Box 2 on the crossing of the Friese Front), they do not cross the Bruine Bank Natura 2000 site, they avoid the existing and future MSFD areas of Friese Front and Bruine Bank, and they largely avoid areas with a higher presence of protected species. Although route #8 crosses the Friese Front over the shortest distance, this route is not preferred due to bottlenecks relating to spatial planning and shipping safety (see below). A preliminary assessment will examine the likelihood of the Project having a significant effect on a Natura 2000 site. To this end, the conservation objectives of that site will be considered. Furthermore, the potential environmental impacts are the subject of the EIA and a possible appropriate assessment.

Regardless of the route, critical ecological seasons must be avoided with regard to other protected species such as birds and mammals (June–September):

- The entire North Sea for porpoises: avoid the breeding season from June to September.
- Natura 2000 site Friese Front: avoid the moulting period of the protected guillemot in July-September.

To further minimise ecological risks, the following best practices are relevant precautionary mitigation measures:

- Ensure there is a marine mammal observer on board.
- Keep a distance of 500 m from large flocks of birds.

BOX 3 Natura 2000 site Friese Front

All eight route alternatives investigated crossing the Friese Front Natura 2000 site, albeit over vastly different distances (ranging from approximately 16 to 85 km). Given the location of this site and the requirement to enter German waters via the cable corridor designated in the German FEP ’25, it is not possible to avoid the Friese Front entirely.

Routes north of the Friese Front have been assessed as unfeasible due to the significant increase in cable length. This could lead to additional environmental impact, higher CO_2 emissions, increased risks to maritime safety and entails disproportionate costs relative to the benefits.

Routes south of the Friese Front entail the same risks as those that led to route #7 being excluded from further consideration (limited space between the TSS Off Vlieland and the eastern side of the IJmuiden Ver wind farm, significant uncertainties surrounding the VAWOZ corridors, and additional installation challenges due to the high degree of seabed mobility). Furthermore, crossing the Friese Front remains unavoidable due to the safety zone around the Ten Noorden van de Waddeneilanden (TNW) offshore wind farm, whilst passing through areas with high seabed dynamics would lead to increased safety and maintenance risks.

1.4.3 Technical, structural and cost considerations

Spatial planning plays a central role in determining the feasibility of potential route alternatives, as the North Sea is an increasingly busy environment with many competing uses. Dutch authorities require that new offshore infrastructure be situated in such a way as to minimise conflicts with existing and planned activities and that it complies with national policy on the efficient use of maritime space.

A key planning principle of the authorities is that new cables should, where possible, be laid in parallel with existing infrastructure (such as the NeuConnect interconnector) (Figure 1-8). In doing so, the prescribed minimum distances from other facilities must be observed: typically 500 metres, with 200 metres as the absolute minimum, in accordance with Rijkswaterstaat guidelines. In addition, the authorities emphasise the importance of avoiding areas with a high concentration of planned or future activities, such as the export cable corridor of the Nederwiek offshore wind farm, VAWOZ concept areas for the landfall of wind farms, zones with oil and gas installations, and areas with intensive shipping traffic, including designated Traffic Separation Schemes (TSS).

Various factors and principles have had a significant influence on the route choices (Figures 1–8):

- Preference is given to the shortest route in order to minimise environmental impacts, risks and costs.
- The development of the FEP ’25 provided the opportunity to obtain construction rights within a designated offshore infrastructure corridor. In consultation with the German authority BSH, Tarchon submitted an application for inclusion in an existing corridor for multiple developers. With the approval of the FEP ’25, the German authorities have established the offshore access point to Dutch waters. This means that the cable route must establish a connection from the British coast to this designated access point between the Netherlands and Germany.

- Due to the location of this entry point, the Ten Noorden van de Wadden (TNW) wind farm will be bypassed to the north. As it is not possible to lay the cable within the wind farm, it is not possible to realise a route that runs completely parallel to the NeuConnect Interconnector.

- The proposed areas for the Nederwiek wind farm and the associated export cables limit the available space, particularly in the southern section, meaning that the route design must take into account the proposed maintenance zones of the wind farm, the Nederwiek export cables, shipping routes and existing pipelines. The authorities also emphasised that any route between Nederwiek and the TSS West-Friesland is severely constrained due to multiple overlapping planned routes for other infrastructure projects.

- A key concern is the vulnerability of the cable to vessels that unintentionally drift off shipping routes, particularly vessels in distress that may drop anchor or be towed, creating a high risk of damage. For this reason, the Project aims to maintain a buffer of 1 nautical mile between the cable and the TSS boundaries wherever possible. Where crossings are unavoidable, these must be carried out at an angle of 60–90° to minimise the length of exposure to vessel movements. Furthermore, the burial depth of the cable near TSS zones is increased to ≥1.5 metres to reduce the risk of damage from anchoring, fishing gear or maintenance dredging.

- Crossings with existing infrastructure are avoided where possible. If a crossing is unavoidable, it is preferably constructed at an angle of 60° to 90°, to keep the crossing as short as possible and limit technical complexity. In doing so, safe distances from other infrastructure are maintained, in accordance with the advice of the competent authorities: a minimum of 500 metres from parallel cables (with 200 metres as the absolute minimum if no alternative is available) and a minimum of 1 nautical mile (NM) from the edges of major shipping routes (TSS boundaries), to avoid conflicts with shipping traffic.

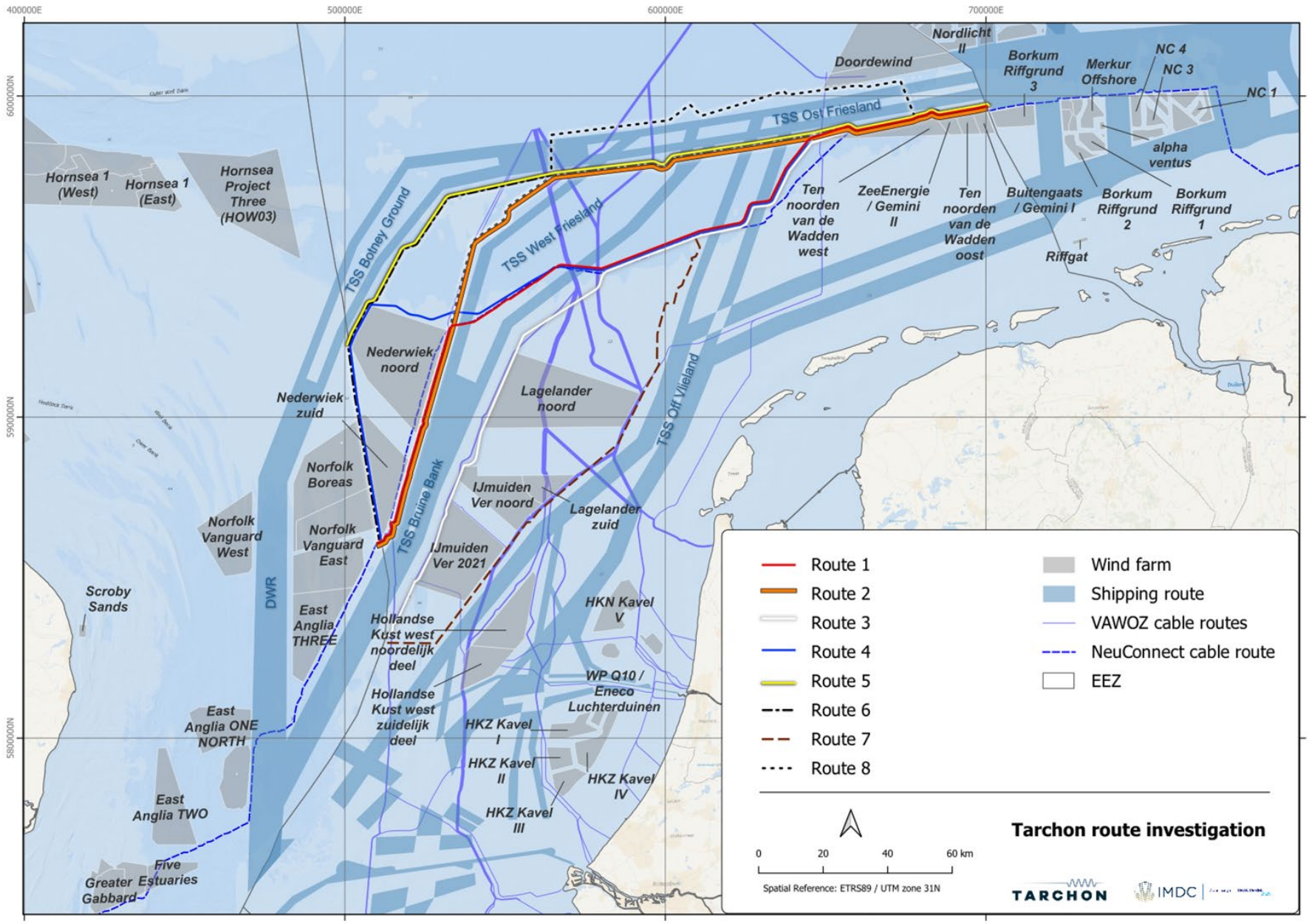

Figure 1-8 The location of offshore wind blocks and wind farms and the VAWOZ cable routes in the Dutch EEZ.

Spatial planning ensures that the cable route is integrated efficiently, conflicts are avoided as far as possible, and it is aligned with the long-term objectives for the development of the North Sea. Stakeholder feedback on spatial planning led to the conclusion that not all eight potential routes are realistic: routes #4, #5, #6, #7 and #8 face conflicts with existing and planned infrastructure in Dutch and UK waters (Figure 1-8).

- Routes #4, #6 and #8 have the **greatest total length** (Germany-UK), leading to greater overall disturbance of the seabed, a longer installation time and thus a potentially higher risk of environmental impacts. These routes also require significantly higher investment, which could jeopardise the financial viability of the Project (see project objective on affordable energy supply). Tarchon's analysis found no significant benefit that could justify the additional impact and costs of these routes. Therefore, routes #4, #6 and #8 are not preferred.

- Routes #4 and #6 run between the Dutch wind farm Nederwiek and the British wind farms Norfolk Boreas and Norfolk Vanguard East, and thus follow the boundary zone between Dutch and British waters. The **available space** between the Dutch and British wind farms is limited to approximately 900 m, which presents a significant spatial constraint – particularly given that Equinor's future CO_2 pipeline may also run along the western boundary of Nederwiek. The combination of these existing and planned installations makes integration along this route challenging, given the need to maintain the recommended **safety zones** of 500 m around each infrastructure element.

- Route #5, which runs west of the Norfolk Boreas, Norfolk Vanguard East and East Anglia offshore wind farms, imposes significant spatial constraints in UK waters, where the only available route lies within an **emergency anchorage zone** between a Designated Water Route[2] (DWR) and the offshore wind farms – a configuration considered by maritime safety experts to pose challenges to safety and long-term viability. Furthermore, crossing the shipping route (TSS) north of Norfolk Boreas in a southerly direction, between NorfolkWest[3] and the TSS, entails risks similar to those described above. A route running further west in the UK is not considered feasible due to the rapidly increasing number of crossings with existing infrastructure from multiple offshore wind farms. UK safety guidelines specify that a distance of 1 to 2 nautical miles between a wind farm and an IMO (International Maritime Organization) route is required to achieve 'Tolerable with Mitigation' status. As part of the Norfolk Vanguard Navigation Risk Assessment (NRA) process, the 1-nautical-mile zone was assessed as necessary to maintain safety; the assumption was that this zone would be free of wind farm infrastructure to ensure there would be a minimum safety buffer between the wind farm and traffic within the DWR. Although there are no definitive restrictions on cables in this area, the presence of Route #5 would increase the risk to the anchoring of (emergency) vessels and may also mean that construction activities and the required safe **passage distances** for the installation vessels would overlap with the DWR. This zone cannot be avoided in the UK if the boundary into British waters is crossed to the north-west of Nederwiek.

- Route #6 crosses an area with a high concentration of oil and gas pipelines.

- Route #7 faces significant constraints due to the very limited available space between the TSS Off Vlieland and the eastern side of the IJmuiden Ver wind farm. Due to the **presence of the VAWOZ routes** in this section, there would be no room for Tarchon without coming too close to the TSS or entering the 500 m maintenance zone of IJmuiden Ver. Furthermore, this area is **morphologically very dynamic**, which would present additional challenges for burying and protecting the cable.

[2] Anatec Ltd. 2026 - Tarchon NL Route 5 – Shipping and navigation
[3] Marine Guidance Note (MGN) 654 contains the 'Wind Farm Shipping Route Template' (s://assets.publishing.service.gov.uk/media/64637cd60b72d3000c34454c/MGN_654.pdf)

- Route #8 has been developed in an attempt to further reduce the extent to which the project crosses the Natura 2000 Friese Front, but this significantly increases the total **cable length** of the project, and the presence of the TSS in the northern part of the Friese Front entails significant additional **navigation risks**. The following significant safety risks have been identified:
    - Route #8 has the most crossings with major commercial routes, resulting in the highest number of interactions and the greatest risk of collisions between an installation / maintenance vessel and third-party vessels.
    - Route #8 is longer and requires more prolonged installation work within the identified study area.
    - Route #8 may limit the ability of large cargo vessels to enter the TSS at their preferred location.
    - Other routes make effective use of the wide separation zone, whilst Route #8 involves sharper bends. **Sharper bends** may require a longer installation period and greater exposure to the risk of collisions.

The conclusion of the screening of technical/operational considerations is that routes #4, #5, #6, #7 and #8 entail significant spatial constraints (e.g. navigation risks) and are therefore not preferred for Tarchon. The remaining routes #1, #2 and #3 are not without technical challenges (e.g. the number of crossings and the likelihood of UXO), but these can be relatively easily overcome, for example through micro-routing within the route corridor.

1.5 Conclusion on project location

Based on the screening of the eight potential routes through the Dutch EEZ, the environmental, spatial, technical and commercial assessment revealed that most routes present significant ecological or spatial constraints (see Box 4 for a brief summary). Tarchon concludes that route #2 is the preferred option for the Project, taking these constraints into account.

The preconditions and conclusions were discussed in several consultations in 2025 and 2026 with the competent authorities, the VAWOZ team and the North Sea Consultation (Energy and Infrastructure Working Group), with the input received being taken into account and incorporated.

Furthermore, discussions led to the recommendation that route #8 be carefully considered, with the aim of further limiting the crossing of the Friese Front Natura 2000 area. Routes #5 and 6 were identified as potentially interesting options for avoiding the busier zones east of Nederwiek. Route #5 is also the shortest route within the Dutch EEZ.

Although risks for these routes have been identified in section 1.4 (longer routes with consequent increased risks, in particular high-risk TSS crossings for #8 and the UK safety zone for #5 and #6), Tarchon wishes to facilitate further consultation on these routes. Therefore, these three alternatives are being further explored, together with alternative #2, which is the preferred option for the Project. Figure 1-9 shows the preferred route alternative #2 alongside these three alternatives. The following advantages and disadvantages have been identified:

- **Preferred Alternative #2:** this route reduces ecological risks as it does not cross the Bruine Bank Natura 2000 site and completely avoids the MSFD areas, although the Friese Front Natura 2000 site cannot be completely avoided. The potential environmental impacts and possible influence on the conservation objectives in the Friese Front are the subject of the EIA and a potential appropriate assessment. It is expected that the potential impacts can be limited to an acceptable level. However, further coordination is required with the potential route development of Equinor's CO_2 pipeline project in this area.

- **Alternative #5**: this route offers the shortest path within the Dutch EEZ and avoids the busier zones east of Nederwiek, but poses additional risks to shipping safety on the British side. This is avoided with route #2.

  The impact on shipping safety in British waters will be compared in more detail with shipping safety in the zone east of the Nederwiek wind farms.

- **Alternative #6**: this route does not pass through the busier areas east of Nederwiek. However, near the UK-Netherlands border, this route is constrained by the limited space available between planned UK and Dutch offshore wind farms, and potentially Equinor's future CO_2 pipeline, leading to increased maritime safety risks. Furthermore, the route crosses an area with many oil and gas pipelines, making the construction of crossings technically more complex. This is avoided with route #2.

  The feasibility in the border zone and for the crossings is being examined further.

- **Alternative #8:** has been included because it overlaps the least with protected areas in the Dutch EEZ (Natura 2000 area Friese Front). However, two additional crossings with the TSS are required, and therefore this alternative entails the highest shipping risk due to the greatest interaction with shipping traffic. Furthermore, it is a longer route with potential additional environmental impacts, safety risks and extra costs. This is avoided with route #2.

  The impact on shipping safety is still being investigated in more detail.

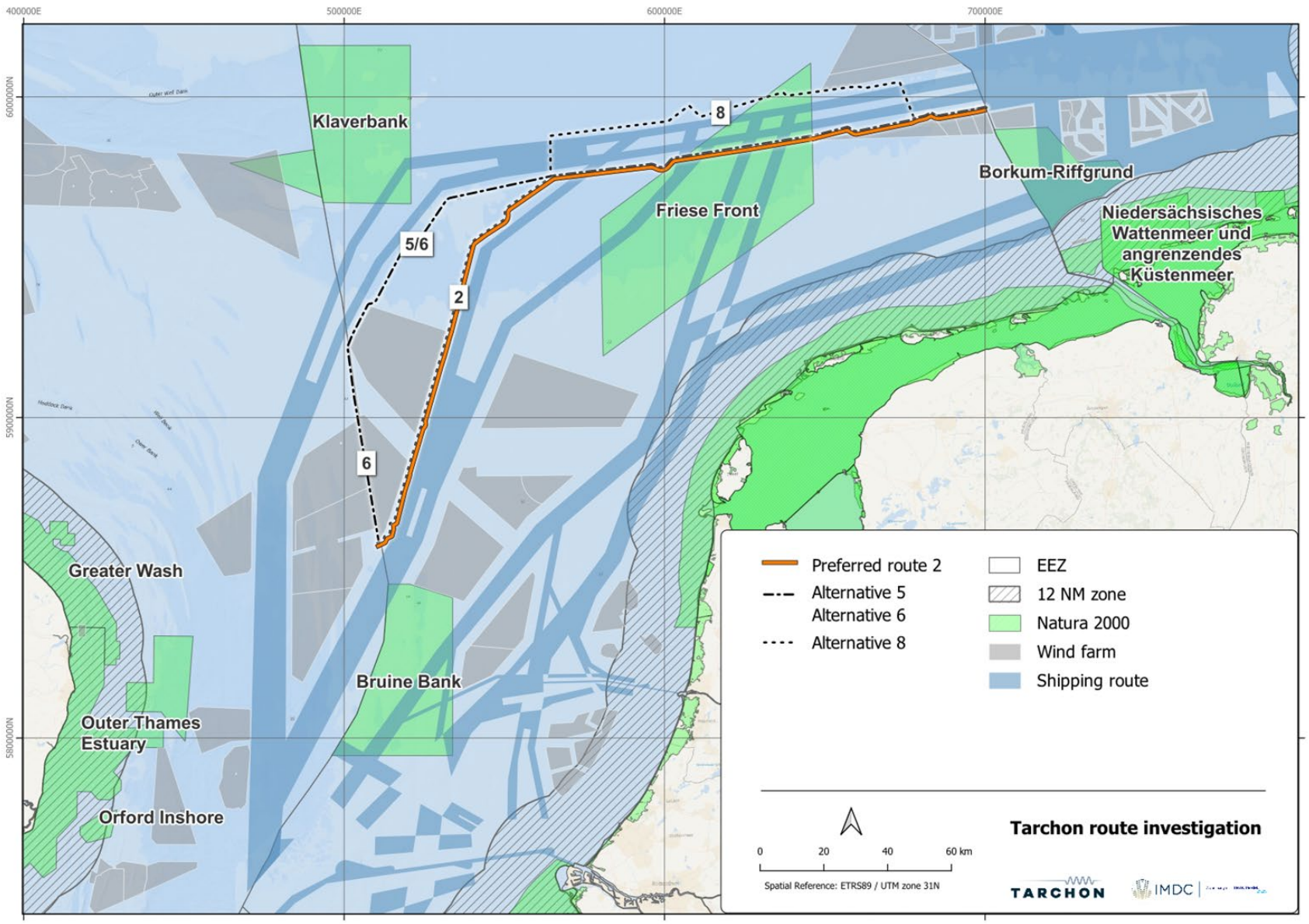

Figure 1-9 Overview of the route preferred by Tarchon (#2) and the three alternatives in the Dutch EEZ that are to be discussed further.

BOX 4 Summary of the main objections that can be avoided with other route alternatives

#1
- The objective of minimising the project's ecological footprint in Dutch waters, particularly within Natura 2000 and MSFD areas, makes the choice of routes #1, #3, #4 and #7 undesirable. These alternatives would result in longer or more extensive crossings within protected zones. Furthermore, these alternatives pass through (future) areas designated under the MSFD and through areas with a greater presence of protected species, which further justifies the decision not to investigate these alternatives further.

#2
- This is Tarchon's preferred route. The Friese Front Natura 2000 site is not entirely avoided (see Box 3), but the crossing is relatively short and runs parallel to a shipping route (only route #8 has an even shorter crossing). The areas designated under the MSFD are, however, avoided.

#3
- Crossing the Bruine Bank Natura 2000 area is not necessary if other feasible routes exist that still meet the project objectives.
- The objective of minimising the project's ecological footprint in Dutch waters, particularly within Natura 2000 and MSFD areas, makes the choice of routes #1, #3, #4 and #7 undesirable. These alternatives would result in longer or more extensive crossings within protected zones. Furthermore, these alternatives pass through (future) areas designated under the MSFD and through areas with a greater presence of protected species, which further justifies the decision not to investigate these alternatives further.

#4
- The objective of minimising the project's ecological footprint in Dutch waters, particularly within Natura 2000 and MSFD areas, makes the choice of routes #1, #3, #4 and #7 undesirable. These alternatives would result in longer or more extensive crossings within protected zones. Furthermore, these alternatives pass through (future) areas designated under the MSFD and through areas with a greater presence of protected species, which further justifies the decision not to investigate these alternatives further.
- The additional length entails increased risks and results in costs that are disproportionate to the benefits.
- Potential spatial constraints in UK waters, but also in the Netherlands. The only available route lies within an emergency anchorage zone between the TSS and the East Anglia offshore wind farm – a configuration that entails significant safety risks and may affect long-term operational reliability.

#5
- In British waters, there are significant spatial constraints, as the only available route is situated within the 1-mile-wide safety buffer between wind farm developments and the Deep Water Route. Tarchon considers this unacceptable for safety and long-term operational performance. This zone in the UK cannot be avoided if the boundary into UK waters is crossed to the north-west of Nederwiek.

#6
- The additional length entails increased risks and results in costs that are disproportionate to the benefits.
- Potential spatial constraints in British waters, but also in the Netherlands. The only available route lies within an emergency anchorage zone between the TSS and the East Anglia offshore wind farm – a configuration that entails significant safety risks and may affect long-term operational reliability.
- A high concentration of intersections with oil and gas infrastructure increases the technical complexity.

#7
- Crossing the Bruine Bank Natura 2000 site is not necessary when other feasible routes exist that still meet the project objectives.
- The objective of minimising the project's ecological footprint in Dutch waters, particularly within Natura 2000 and MSFD areas, makes the choice of routes #1, #3, #4 and #7 undesirable. These alternatives would result in longer or more extensive crossings within protected zones. Furthermore, these alternatives pass through (future) areas designated under the MSFD and through areas with a greater presence of protected species, which further justifies the decision not to investigate these alternatives further.
- Significant spatial constraints that are not feasible due to the amount, or lack, of space between the TSS Off Vlieland and the eastern side of the IJmuiden Ver wind farm.
- The presence of the planned VAWOZ corridors in this section leads to a lack of space for additional infrastructure.
- Crossing of military zones
- Number of crossings with other cables and pipelines

#8
- The additional length entails increased risks and results in costs that are disproportionate to the benefits.
- Two additional crossings with the TSS, which entails additional navigation and installation risks.

1.6 Procedures

1.6.1 Project procedure

For the Dutch part of the Project, a project decision will be taken on the basis of Article 6.1(1) of the Energy Act. In order to take that project decision, the Ministry of Economic Affairs and Climate Policy (EZK) follows the so-called project procedure (in accordance with Section 5.2 of the Environment Act).

The Ministry of EZK is also coordinating with the Netherlands Enterprise Agency (RVO) and the Ministry of Infrastructure and Water Management (Ministry of IenW) regarding the necessary permits. In collaboration with the Ministry of EZK, Tarchon is ensuring that the best possible project is developed.

The State Secretary for KGG is the competent authority and will take a project decision in agreement with the Minister for VRO. EZK is responsible for coordination in this regard and works according to a fixed approach. EZK has indicated that no preferred decision will be taken for this project.

The project procedure consists of two phases (Figure 1-10): the exploratory phase and the project development phase. Public consultation is possible at various stages of this procedure.

1. During the **exploratory phase**, responses from the public are collected and addressed in a Response Memorandum, which sets out which views and responses are being taken into account. The procedure begins with the notification of the VenP (this document). Subsequently, partly on the basis of the advice and input gathered from the local community, a research plan is drawn up regarding the scope and level of detail of the information for the environmental impact report (the draft Scope and Level of Detail Memorandum (cNRD)). The NRD describes the project, any reasonable alternatives and the environmental impacts to be investigated in the environmental impact assessment (EIA). This is followed by a further opportunity for public consultation and participation on the cNRD. In addition, the independent EIA Committee is asked to provide advice on this document. At the end of this phase, the NRD is adopted and published. This also marks the conclusion of the exploratory phase.
2. Following the publication of the adopted NRD, the **project development phase** begins and the Project EIA is drawn up. The EIA contains the assessment of the (potential) environmental impacts of the Project. To this end, detailed studies are carried out on the potential environmental impacts of this Project. In this phase too, the EIA Committee is asked to provide advice on the EIA. Based on this study and the advice, the project decision and the permits and exemptions are drawn up. These are made available for public inspection before they become final.

Stakeholder involvement is provided for through various steps in the project procedure and in accordance with the TEN-E requirements[4] . Further information on the participation procedure can be found in the following chapter.

[4] See the procedural manual for the permit-granting procedure: About the Energy Projects Agency | RVO.nl

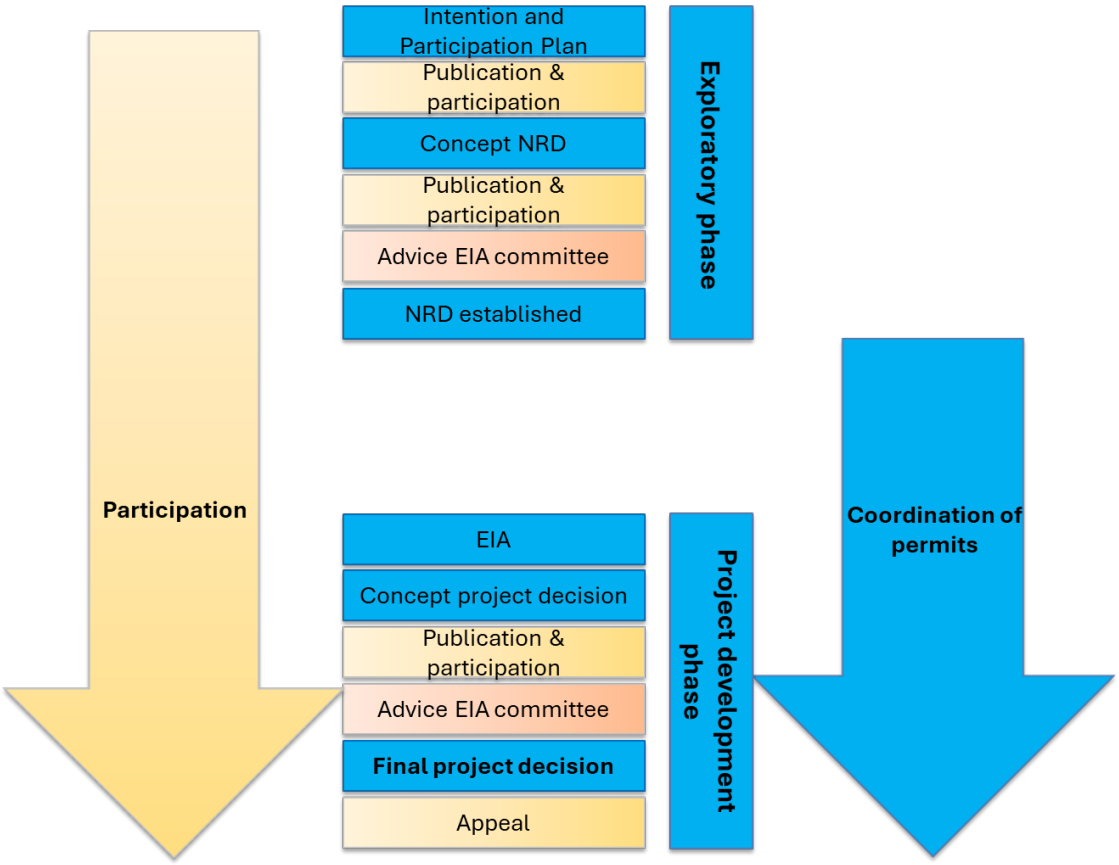

Figure 1-10 Phases of the project procedure (source: RVO)

1.6.2 Permits

In addition to the project decision, various permits are required for the implementation of the Project. The application, preparation and issuance of permits are coordinated by the Ministry of EZK and run in parallel with the drafting of the project decision. The following permits are involved:

- an environmental permit for an activity in a restricted area relating to a facility within a water management structure;
- an environmental permit for a Natura 2000 activity;
- an environmental permit for a Flora and Fauna activity;
- and, where applicable, additional permits or approvals, for example in the field of maritime safety (such as authorisation from the Coastguard).

As the Project has cross-border effects, competent authorities in other Member States will also be involved, in accordance with the obligations under the Environment Act and the ESPOO Convention[5] on environmental impact assessment in a transboundary context.

During the NRD phase, a detailed overview of the permits, notifications and authorisations will be drawn up.

[5]https://eur-lex.europa.eu/NL/legal-content/summary/convention-on-environmental-impact-assessment-in-a-transboundary-context-espoo-convention-and-the-protocol-on-strategic-environmental-assessment-sea-protocol.html

2. Participation plan

2.1 Introduction

To realise the Project, it is important that all relevant parties are kept informed during the various phases of the Project. Tarchon is convinced that a good participation process leads to a better Project. Participation already takes place in the exploratory phase, before any permit decisions are made. This ensures that a Project is developed that effectively responds to the needs and interests of the stakeholders. The Ministry of EZK, as the competent authority for decision-making on the Project, and Tarchon, as the initiator of this plan, are jointly responsible for the participation process. As the process progresses, Tarchon and the Ministry of EZK will evaluate and update the participation plan. The VenP marks the first formal participation stage in the project procedure.

Although we aim to take all relevant interests into account, it is not feasible to consider the input of all stakeholders. Decisions will be taken following a thorough evaluation, clearly setting out how environmental, technical and spatial considerations have been addressed and what the consequences of this are. We will make clear what is feasible and why.

2.2 The responsibilities of the competent authority and the project initiator (Tarchon)

The efforts of the Ministry of EZK and Tarchon are focused on an open and transparent exchange of information with stakeholders. We wish to maintain a continuous understanding of stakeholders' concerns and their suggestions regarding the process and the final implementation. On behalf of the project initiators, Tarchon is the point of contact for substantive questions about the Project (such as what, where and why), whilst the Ministry of EZK, as the competent authority, is responsible for the procedure and decision-making. Details regarding the respective roles of the competent authority and Tarchon, as the project initiator, can be found in Figure 2-1.

The competent authority role

- Decision-making regarding the spatial integration of this project;
- Publishing official documents (such as draft decisions);
- Organising and facilitating information and consultation sessions;
- Responding to and sharing reactions, opinions and objections;
- Coordinating permits.

The initiator role

- Drawing up the project documentation (NRD, EIA, etc.);
- Providing technical justification for choices;
- Promoting participation.

Figure 2-1 The respective roles of the competent authority (the Ministry of EZK) and the project initiator (Tarchon)

In the following chapters, we describe the purpose of the participation process, the principles we apply, and explain the activities and resources that form part of the participation and communication process.

Principles of participation

To achieve our objectives for participation, we have drawn up a number of principles for participation, which are listed below:

- We want to gain an understanding of relevant interests and information, which means we want to understand how our plans may affect other users of the sea.
- We are transparent about our choices and considerations.

- We communicate clearly and purposefully and actively involve stakeholders through public consultation events, EIA procedures and the project process. Throughout the entire duration of the project, we also ensure ongoing communication via our website and newsletters.
- We are open to ideas and concerns during all phases of the Project, including outside of public consultation periods. We can be contacted via our project website, by telephone and at the email address:i nfo@tarchoninterconnector.nl.
- We communicate in a timely and proactive manner. We actively and openly share information about the Project and are clear about the issues that need to be resolved and what the process entails.

Who will be actively involved in the public consultation process?

A wide range of parties will be actively involved in the public consultation process for the Project, including:

- External stakeholders (Ports, Energy, Nature/environment, Shipping and safety, Fisheries)
- Internal stakeholders (government bodies)
- International government bodies (Belgium, Denmark, UK, Germany)

The full list of stakeholders can be found in Appendix A.

2.3 How will we involve you?

Everyone will be informed from the start of the process in the following way:

- The Ministry of EZK and Tarchon have drawn up this VenP. The Ministry of EZK is responsible for publishing the notification of this document in the Government Gazette. Efforts will also be made to reach the target group through other channels. The VenP is the formal announcement of the start of the Project and the procedure.
- The VenP is available on the RVO website (http://www.rvo.nl/tarchon). From now on, this website will contain all information regarding the formal decision-making process, including the documents that are published. These include (draft) decisions, relevant reports and recommendations, updates to participation plans, etc.
- Other information about the Project is shared via the project website. This includes updated schedules, visual information about the Project's preferred location, the status of permits and contact details. You can also sign up for the newsletter via this page, which will automatically keep you informed of new posts on the project page.
- Upcoming public consultations and engagement events will also be published on the project website.

  - https://tarchoninterconnector.nl/ -

- During the public consultation period for the VenP, an information session will be held on 4 June (http://www.rvo.nl/tarchon). The aim is to explain the VenP, answer questions and hear your views on this Intention.

In addition, regular contact will be maintained regarding progress with directly involved parties. Sharing information and project communication form an integral part of the consultation meetings between the initiators, involved parties and public authorities.

All stakeholders already known to us will receive a message shortly after the publication of the notice regarding the start of the Project and the procedure.

2.4 How can you contribute?

You are welcome to put forward ideas and solutions to improve the project. We will keep you informed in good time and clearly explain how your suggestions and concerns will be taken into account in the subsequent process.

You could, for example, provide the following:

- The Project is explained in the Intention (Chapter 1 of this document). Do you see any other possible solutions or approaches? If so, what are they?
- What do you consider important in the implementation of the Project? Think, for example, of the local environment, safety, nature or planning.
- The Participation Plan (Chapter 2 of this document) sets out how we intend to keep you informed and involve you. Do you have any suggestions for improving this? And how would you like to be involved?
- Do you have any questions, concerns or points for consideration regarding the project that you would like to share with us?

During the participation process, specific input will be sought from nature and environmental organisations. They will be invited to consider environmental issues and put forward ideas for solutions and possibilities.

All ideas and solutions will be compiled and assessed by the Ministry of EZK as the competent authority and Tarchon as the project initiator, based on the principles outlined in this document. Responses may be submitted until the closing date for the public consultation on the VenP (from Friday 22 May to Thursday 2 July 2026).

2.5 When can you contribute?

Participation is possible throughout the entire procedure. There are four periods during which anyone can formally respond to the Project and the published information (Figure 2-2). Formal responses and views will be addressed per phase in a response memorandum or Memorandum of Reply. Responses and views can be submitted via the RVO website (http://www.rvo.nl/tarchon).

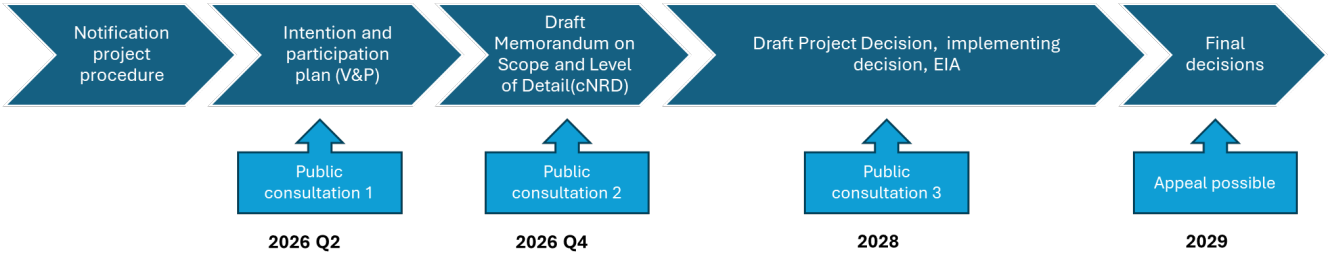

Figure 2-2 Formal opportunities for public participation

2.6 What happens to your input?

All ideas and comments are recorded and responded to by the project team from the Ministry of EZK and Tarchon. We will incorporate the responses into an updated participation plan, and this process will be repeated after each public consultation. All responses will be collated anonymously and addressed in a response memorandum. The response memorandum will be published on the RVO website (http://www.rvo.nl/tarchon). Everyone who has submitted a comment will receive a letter announcing the publication.

2.7 Contact details

For information about the procedure, documents and participation in the Project:

Please contact the Ministry of EZK via

Bureau Energieprojecten

Inspraakpunt Tarchon

Postbus 111

9200 AC Drachten

Telephone: on weekdays between 9.00 and 17.00 on +31-88 042 47 47

Web: http://www.rvo.nl/tarchon

For information about the content of the Project and participation in the Project:

Please contact the Tarchon team via Telephone:

+44 (0)3 303 010079

Web: https://tarchoninterconnector.nl

Email: info@tarchoninterconnector.nl

Appendix A Stakeholders

External stakeholders

Ports

- Den Helder Port Authority
- Groningen Seaports
- Port of Rotterdam
- North Sea Port

Energy

- Energie Beheer Nederland (EBN)
- Element NL
- ENI (formerly Neptune)
- Nedzero
- NAM
- NGT
- NOGAT
- Aramis

Nature/Environment

- Vereniging Kust en Zee
- De Rijke Noordzee
- Greenpeace
- Natuurmonumenten
- Stichting La Mer
- Bird Protection Netherlands
- Doggerland Foundation
- Wadden Association
- Cultural Heritage

Shipping and Safety

- Coastguard
- KVNR (Royal Association of Dutch Shipowners)
- Loodswezen
- Hydrographic Service

Fisheries

- Shrimp fishing
- Dutch Fishermen's Association
- PO Mussel Farming
- Urk Producers' Organisation
- Sportfishing Netherlands
- VisNed
- visNETwerk

Internal stakeholders and VAWOZ

- EZK WOZ
- EZK WIN
- EZK CO2 op zee
- EZK Mijnbouw
- IenW/ DGWB
- RWS/ Sea and Delta
- RWS/ Joint Nautical Authority
- LVVN
- BZK
- Ministry of Defence
- Gasunie
- TenneT
- ABCP

International stakeholders

Belgium

- Federal Public Service – Energy
- Flanders – Department of Mobility and Public Works
- Fluxys
- Elia

Denmark

- Ministry of Climate, Energy and Utilities
- Energinet DK

UK

- Department of Energy Security & Net Zero
- The Crown Estate
- Maritime Organisation
- National Grid

Germany

- Federal Network Agency
- Federal Waterways and Shipping Administration (WSV)

In addition, all others who wish to participate but are not listed here. If you would like to be listed here, please contact Tarchon at the following address:info@tarchoninterconnector.nl .