



Chapter 26: Conclusion



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26 Conclusion

The NorthConnect Interconnector, once complete, will provide a 1,400 mega-watt electrical connection between Scotland and Norway, to facilitate the transfer of power between the UK and Norway. It will help to ensure the security of supply in both regions, provide a green battery to facilitate the development of intermittent renewable power and reduce energy price fluctuations.

NorthConnect obtained planning permission in 2015 for the Interconnector Converter Station at the Fourfields site near Boddam and the associated High Voltage Alternating (HVAC) cable route to the Peterhead substation. This Environmental Impact Assessment Report (EIAR) has been produced in support of the planning and marine licence applications for the associated HVDC Cables and Infrastructure.

NorthConnect have considered the environment throughout the cable consenting corridor selection and design process, to ensure that adverse environmental effects are minimised. Extensive survey work has been carried out to inform the corridor selection and ecological surveys aided in the identification of the landfall and onshore cable route. Marine surveys have identified suitable seabed conditions in terms of geology and marine sediments, as well as habitats and archaeological assets.

The selected marine consenting corridor specifically avoids wrecks and Annex 1 habitats, while minimising infrastructure crossings to keep the need for rock placement as low as practicable. Horizontal Directional Drilling (HDD) is proposed for use at the landfall and to route the cable under the A90 and disused railway line, in order to avoid disturbing seabirds nesting on the Seacliff's, disrupting traffic on the A90 and excavating the historical railway line embankment. Programming of the Landfall HDD works has taken into account the breeding seabirds associated with the Buchan Ness to Collieston Coast SPA and Bullers of Buchan Coast SSSI. Similarly, the early installation of cable ducts under the core path to the south of Fourfields prior to the bisecting path being closed, will ensure that there is always a path available for recreational users.

Offshore, a cable burial risk assessment and cable protection report have been completed based on the marine survey, to identify the cable protection levels required (NorthConnect, 2018a). The cables will be buried to a minimum of 0.4m with the majority of the cable being buried by at least 0.8m. Burial is expected to be achieved by trenching with natural backfill for 90% of the route. Backfill rock placement maybe required for large sections of the route within Scottish Territorial Waters (STW), but this will not be above original sea levels (OSL). Remedial rock placement above OSL may be required for 5 to 10% of the route in STW. For the full UK section of the route, including the 18 cable crossings in Scottish Territorial Waters (STW) and UK Exclusive Economic Zone (UKEEZ), remedial rock will be required for less than 2% of the route.

NorthConnect require the cable contractor to provide evidence that the burial methods they are proposing will work within the marine sediments present, or prove the technique by carrying out trials. This will de-risk the cable installation process, providing confidence that the cable can be laid, and the appropriate protection afforded, without the need for excessive remedial rock placement.

The EIAR considered eighteen environmental topics covering marine and terrestrial receptors. The assessment was focused on construction and operational effects, with decommissioning considered for topics where there could be specific effects. It is recognised that an assessment will be required prior to decommissioning to inform the approach and associated mitigation based on the environmental conditions at that point in time.

Seventeen significant effects were identified, fourteen adverse and three beneficial, as summarised in Table 25.1. All adverse impacts could be reduced by applying secondary mitigation measures as summarised in Table 25.1 to reduce their effect levels sufficiently to make them non-significant.

Mitigation in line with best practice was also identified where non-significant effects could be reduced further. Mitigation has been consolidated into a Schedule of Mitigation (Chapter 24), the majority of which will be implemented through Construction Environmental Management Plans (CEMP) and Risk Assessments & Method Statements (RAMS) procedures. In addition to the CEMP, the Fisheries Liaison and Mitigation Action Plan (FLMAP) (NorthConnect, 2018b) and UK Marine Communication Strategy (NorthConnect, 2018c) will be implemented.

The NorthConnect project will provide significant benefits in terms of Carbon savings by facilitating an increase in renewable power sources to the energy mix. In addition, it will aid in security of power supply, grid stabilisation services and stabilisation of energy prices to consumers, which all have an associated socio-economic benefit.

NorthConnect are committed to ensuring that adverse environmental effects associated with the development are minimised and beneficial effects are maximised. As the project moves forward, NorthConnect will continue to ensure that the design, construction and installation techniques utilised take account of environmental factors. It is recognised that ongoing communication with stakeholders is key to the project's successful implementation.

Table 25.1: Summary of Significant Effects in the absence of Secondary Mitigation

Receptor	Nature of Impact	Receptor Sensitivity/ Probability	Impact Magnitude	Significance (Absence of Secondary Mitigation)	Mitigation Summary	Residual Impact Magnitude	Significance of Residual Effect
Construction							
Ground Water	Release of Hazardous Substances	High Sensitivity	Adverse - Medium	Moderate: Significant Adverse	Appropriate storage and handling of materials and wastes as defined in Chapter 24. Spill response plans, spill kits and trained operators as per Chapter 10.	Adverse Low	Minor: Non-significant
Buchan Ness to Collieston Coast SAC, the Bullers of Buchan Coast SSSI designated sites; and Longhaven cliffs SWT nature reserve	Dust: Earthworks	Medium Sensitivity	Adverse - Large	Moderate: Significant Adverse	Dust Management Plan Implemented	Adverse Small	Minor: Non-significant
Watercourse G	Silt laden water from temporary road construction.	Probable	Adverse - Medium	Moderate: Significant Adverse	Utilisation of silt fences (or equivalent) to screen and filter sediment.	Adverse Low	Minor: Non-Significant
Watercourse G	Silt laden water during Landfall HDD bund creation.	Probable	Adverse - Medium	Moderate: Significant Adverse	Utilisation of silt fences (or equivalent) to screen and filter sediment.	Adverse Low	Minor: Non-Significant
Watercourses C, D, E, & G	Surface water runoff from cable installation	Probable	Adverse - Medium	Moderate: Significant Adverse	Utilisation of silt fences (or equivalent) to screen and filter sediment.	Adverse Low	Minor: Non-Significant
Otter	Habitat disturbance	International	Adverse - Low	Moderate: Significant	Avoidance of construction near otter holt location. Pre-construction surveys and exclusion zones.	Negligible	Minor: Non-significant
Otter	Accidental physical damage	International	Adverse - Low	Moderate: Significant	Pre-construction surveys, exclusion zones, and construction watching briefs. Measures to prevent entrapment.	Negligible	Minor: Non-significant

Receptor	Nature of Impact	Receptor Sensitivity/ Probability	Impact Magnitude	Significance (Absence of Secondary Mitigation)	Mitigation Summary	Residual Impact Magnitude	Significance of Residual Effect
Otter	Water course pollution	International	Adverse - Low	Moderate: Significant	As identified in Chapter 10: Water Quality	Negligible	Minor: Non-significant
Wolverine	Habitat disturbance	National	Adverse - Medium	Moderate: Significant	Pre-construction surveys Culverts installed as discussed in Chapter 10: Water Quality (Onshore)	Low	Minor: Non-significant
Marine Mammals: Harbour Porpoise Bottle Nose Dolphin Minke Whale White-Beaked Dolphin Other Cetaceans Grey Seals Common Seals	Disturbance due to SBP survey operations during installation works.	International	Adverse-Low Short Term Reversible	Moderate: Significant	Provision of SBP marine mammal protocol, and adherence to the Scottish Marine Wildlife Watching Code.	Adverse Negligible Short Term Reversible	Minor: Non-significant
Marine Mammals: Harbour Porpoise Bottle Nose Dolphin Minke Whale White-Beaked Dolphin Other Cetaceans Grey Seals Common Seals	Disturbance due to SBP survey operations during operations.	International	Adverse-Low Short Term Reversible	Moderate: Significant	Provision of SBP marine mammal protocol, and adherence to the Scottish Marine Wildlife Watching Code.	Adverse Negligible Short Term Reversible	Minor: Non-significant
Passerine & Waders Birds (red-list species) Snipe	Accidental nest site destruction during construction.	Regional Unlikely	Adverse Medium Permanent	Moderate: Significant	Pre-construction surveys. Exclusion Areas	Adverse Low	Minor: Non-Significant
Static Gear Fishing Operators	Temporary loss of access to fishing ground during installation works	Certain	Adverse Minor	Moderate Significant	Cable protection complete within 3 months. Fisheries Liaison Officer will work with local fishing organisations to identify static gear vessels that will be affected. Arrangements will be made with individual vessel owners.	Adverse Negligible	Non-significant

Receptor	Nature of Impact	Receptor Sensitivity/Probability	Impact Magnitude	Significance (Absence of Secondary Mitigation)	Mitigation Summary	Residual Impact Magnitude	Significance of Residual Effect
Workforce	Direct Employment	N/A	Beneficial High	Major: Significant	Procurement Policy Supply Chain Engagement	Beneficial High	Major: Significant
Residential Receptors: Longhaven Mains; Station House; and Jehrada Cottage.	Noise from HDD activities (night time).	High	Adverse	Significant	Best practice mitigation measures to be employed as detailed in BS5228. Additional modelling once equipment details are better understood. Provision of additional mitigation as required. Section 61 Consent.	Adverse	Non-Significant
Operations							
Climate Change	CO2 Savings		Beneficial Large	Moderate to Major: significant benefit	Material Optimisation Recycling of Wastes Engagement with Energy Sector	Beneficial Large	Moderate to Major: significant benefit
Socio-economic	Energy Market	National/International	Beneficial High	Major: Significant	No Specific Mitigation Required	Beneficial High	Major: Significant

Key

	Significant Effect
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26.1 References

- NorthConnect. (2018a). HVDC Cable Infrastructure - UK Construction Method Statement.
- NorthConnect. (2018b). HVDC Cable Infrastructure - UK Fisheries Liaison Mitigation Action Plan.
- NorthConnect. (2018c). HVDC Cable Infrastructure - UK Marine Communication Strategy.