



## Chapter 25: Schedule of Mitigation

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## 25 Schedule of Mitigation

### 25.1 Introduction

Mitigation measures, which have been identified throughout the Environmental Impact Assessment (EIA) process, are collated within this chapter to form the Schedule of Mitigation (SoM) for the HVDC Cable Infrastructure elements of the NorthConnect project. The mechanisms by which they will be implemented are also provided.

### 25.2 Schedule of Mitigation

The mitigation measures identified in the various EIA Report (EIAR) chapters for the different stages and aspects of the installation and operation of the NorthConnect HVDC Cable Infrastructure, are collated together in Table 25.1. References to the relevant sections of the EIAR and other associated guidance documents are also provided.

Table 25.1. Schedule of Mitigation

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Seabed Quality	HVDC Marine Cable Installation	Reduction in sediment quality through loss of containment of hazardous substances by installation spread.	Adherence to mitigation detailed in Chapter 11: Water Quality (Marine Environment).	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 11 Section 11.5.4
		Disturbance and loss of seabed features and release of hazardous substances through inadvertent UXO detonation.	A UXO survey will be conducted prior to installation works commencing.	CIRIA: Assessment and management of unexploded ordnance (UXO) risk in the marine environment (C754)	Chapter 7 Section 7.5.5
			Where potential UXO are identified, the areas will be avoided by an appropriate safety buffer.		
			Where avoidance is not possible, the UXO items will be disposed of by an appropriately licenced explosives ordnance disposal contractor, or by the Royal Navy.		
A UXO risk assessment will be undertaken by the installation contractor.					
Geology and Hydrogeology	HVDC Onshore Cable Installation	Disturbance of topsoil during cable installation works, HDD site preparation and jointing pit installations.	All removed topsoil will be reinstated and the land returned to its former use.	PPG6: Working at Construction and Demolition Sites	Chapter 8 Section 8.4.1.1
		Release of hazardous substances impacting soil, rock or groundwater.	Adherence to mitigation detailed in Chapter 10: Water Quality (Onshore) regarding pollution prevent, and appropriate material storage in Chapter 24: Resource Usage and Waste.	GPP 5: Works and Maintenance in or Near Water	Chapter 10 Section 10.6.1 Chapter 24 Section 24.5.2
		Encountering of groundwater during cable installation has the potential to cause hydrogeological effects.	Where dewatering during construction works is required, the CAR compliance will be ensured.	GPP 5: Works and Maintenance in or Near Water	Chapter 8 Section 8.4.1.4 & Chapter 10 Section 10.5.1.3
Air Quality	General Onshore HVDC Cabling	Earthworks may see dust deposition, resulting in soiling of surfaces.	Development of Dust Management Plan.	PPG6: Working at Construction and Demolition Sites	Chapter 9 Section 9.7.1

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Air Quality	General Onshore HVDC Cabling	Earthworks may see dust deposition, resulting in soiling of surfaces.	Appropriate planning to minimise movement of material during earthworks.	Guidance on the Assessment of dust from demolition and construction	Chapter 9 Section 9.7.1
			Minimisation of the time ground is left bare.		
			Compacting of removed soil during cable trench refilling, reducing the amount of loose material and reducing the potential for dust.		
			Installation of directional dust deposit gauges 2 weeks prior to construction works, to gain understanding of background levels. The gauges will also be utilised throughout the construction period, with monitoring results reviewed to ensure employed mitigation is effective.	Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites	
			Dust audits will be undertaken. A checklist will be utilised to ensure all issues are covered and recorded. The audit will include: material storage status; use of dust covers by delivery vehicles; inspection of the access roads and the A90; and looking for signs of surface soiling on surfaces around site. Dust audits will be carried out more frequently in periods of dry weather and when cable trenches are open.		
			Utilisation of mobile water bowsers or equivalent during dry weather conditions to damp down potential dust sources and, where possible, they will utilise runoff water gathered on the site.		
	Overburden material removed at the Landfall HDD site will be used to create temporary bunds on which vegetation is allowed to establish, binding the soil and reducing potential dust.				
	General Onshore HVDC Cabling	Potential of trackout from construction sites depositing on public roads and leading to dust spread beyond the site boundaries.	Material transported by vehicles will be covered to prevent material escape.	PPG6: Working at Construction and Demolition Sites	Chapter 9 Section 9.7.1
The access road will be appropriately surfaced such that vehicles returning to the A90 will travel over clean stone and bituminous surfaces for at least 50m.					

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Air Quality	General Onshore HVDC Cabling	Potential of trackout from construction sites depositing on public roads and leading to dust spread beyond the site boundaries.	Monitoring of signs of trackout, with appropriate action taken if problems are identified, such as water-assisted dust sweeper(s) utilised on A90 and bituminous section of access roads.	Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites	Chapter 9 Section 9.7.1
	General Onshore HVDC Cabling	Potential of trackout from construction sites depositing on public roads and leading to dust spread beyond the site boundaries.	Dust audits will be undertaken. A checklist will be utilised to ensure all issues are covered and recorded. The audit will include: material storage status; use of dust covers by delivery vehicles; inspection of the access roads and the A90; and looking for signs of surface soiling on surfaces around site. Dust audits will be carried out more frequently in periods of dry weather and when cable trenches are open.	Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites	Chapter 9 Section 9.7.1
			Rumble strips will be installed on the access road at least 45m before exit onto the A90 to assist in the removal of mud from wheels.		
Water Quality (Onshore)	General Onshore HVDC Cabling	Release of Hazardous Substances	Adherence to mitigation detailed in Chapter 24: Resource Usage and Waste with regard to the storage of materials.	GPP 5: Works and Maintenance in or Near Water	Chapter 24 Section 24.5.2
			Spill response plan in place.	GPP 21: Pollution Incident Response Planning	Chapter 10 Section 10.6.1
			Spill kits available.	GPP 5: Works and Maintenance in or Near Water	
			Site personnel are trained in the spill response plans.	PPG 22: Incident Response - Dealing with Spills PGG 18: Managing Fire Water and Major Spillages	
	General Onshore HVDC Cabling	Surface water runoff from trenching earthworks with potential to reach watercourses or waterbodies, leading to potential sediment loading of water column and pollutant entry.	Clean water will be diverted away from exposed soils and work areas.	GPP 5: Works and Maintenance in or Near Water.	Chapter 10 Section 10.6.2
			Silt fences or equivalent (straw bales) will be utilised in the vicinity of watercourses to prevent silt laden water reaching the watercourses.		
			Stabilising of soil as soon as practical (refilling trenches and reinstating vegetation).		
Enabling Works		Where viable, the surface vegetation and upper layer of topsoil is removed as 'turf', which will be utilised to cover topsoil bunds.		Chapter 10 Section 10.5.1.2	

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
<b>Water Quality (Onshore)</b>	General Onshore HVDC Cabling	Surface water runoff from trenching earthworks with potential to reach watercourses or waterbodies, leading to potential sediment loading of water column and pollutant entry.	Where stored soils are not covered, they will be bladed off or other suitable means to reduce the potential for dust and silt run-off.	GPP 5: Works and Maintenance in or Near Water.	Chapter 10 Section 10.5.1.2
			A Pollution Prevention Plan will be produced.		
			A CAR Construction Licence will be obtained.		
	General Onshore HVDC Cabling	Potential for Flooding	Field drains found during the works will be maintained or replaced as necessary.		Chapter 10 Section 10.5.1.4
			A Pollution Prevention Pan will be produced.		
			A CAR Construction Licence will be obtained.		
	General Onshore HVDC Cabling	Physical disturbance of watercourse during culvert insertion and cable installation.	Stream to be dammed up and down stream of the crossing point for the duration of the works.	Engineering in the Water Environment: Good Practice Guide Temporary Construction Methods	Chapter 10 Section 10.5.1.3
			Prior to the removal of dams, culverts will be cleared of loose material.		
			Water to be pumped from upstream of the crossing point to downstream of the crossing point, such that flows up and downstream of the crossing point are maintained throughout.	GPP 5: Works and Maintenance in or Near Water.	
			Vegetation clearance will be minimised.		
Silt fences installed as required to prevent silt spreading down stream of construction works.			CAR GBR6: Construction and Maintenance (or removal) of a temporary bridge over a river, burn or ditch that has a channel width of less than 5 metres		
<b>Water Quality (Marine Environment)</b>	HDD Drilling	HDD drilling fluid discharges to the marine environment leading to increased sediment loading for the water column.	The drilling will stop before drilling through the HDD marine exit point. Excess fluid will be extracted before the final drilling reaches the marine exit point.	GPP 5: Works and Maintenance in or Near Water.	Chapter 11 Section 11.5.1.1
	HVDC Marine Cable Installation	Release of hazardous substances from cable installation vessels.	Vessels to have shipboard oil pollution emergency plans (SOPEP).	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 11 Section 11.5.1.4.1
			Vessels to be well maintained.		
Operators suitably trained in pollution response.					
		Spill kits available.			

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
<b>Water Quality (Marine Environment)</b>	HVDC Marine Cable Installation	Damage to an existing subsea pipeline leading to a release of hazardous substances.	Crossing agreements in place with asset owners. Detailed crossing engineering and cooperation with asset owners. Asset owners have contingency plans in place in case of damage to pipelines.	International Cable Protection Committee (ICPC) Recommendations	Chapter 11 Section 11.5.1.4.3
	General Marine HVDC Cabling	Waste water release from installation vessels.	Vessels compliant with MARPOL convention.	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 11 Section 11.5.1.4.2
	General Marine HVDC Cabling	Introduction of invasive non-native species through biofouling of vessel and equipment.	Requirement for sourced vessels from outside the North Sea to be cleaned and inspected prior to mobilisation.	International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)	Chapter 11 Section 11.5.1.5
				GreenBlue MNNS Guidance The Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species (Biofouling Guidelines) (resolution MEPC.207(62))	
<b>Archaeology and Cultural Heritage</b>	HVDC Onshore Cable Installation	Potential damage to the Boddam Branch, great North of Scotland Railway from cable installation works.	Any vehicular movement to access the working area for Joint Pit 1 and the HDD site to the south of the railway will be from the southwest, off the temporary access track after it has crossed the railway.	PAN 2/2011: Planning and Archaeology	Chapter 12 Section 12.6
			An archaeological watching brief will be undertaken to monitor ground breaking works associated with the forming of the temporary water main and access track which cross the railway where there is a shallow cutting.		
			Where feasible, the existing engineered surfaces will be retained and overlain by a new temporary structure.		



Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Archaeology and Cultural Heritage	HVDC Onshore Cable Installation	Potential damage to the Boddam Branch, great North of Scotland Railway from cable installation works.	Upon completion of works, the original platform of the railway cutting will be restored to maintain the integrity of the linearity of the monument.	PAN 2/2011: Planning and Archaeology	Chapter 12 Section 12.6
		Disturbance of previously unknown archaeological material.	An archaeological watching brief will be undertaken to monitor shallow ground breaking works. Appropriate and proportionate further stages of on-site mitigation (excavations and recording), technical reporting and subsequent analysis will be undertaken, to ensure the appropriate treatment of this material.		
	HVDC Marine Cable Installation	Disturbance of previously unknown archaeological material in the marine environment.	An Archaeological Discovery Protocol compliant with 'Protocol for Archaeological Discoveries' will be created in advance of marine works and included within the CEMP.	Protocol for Archaeological Discoveries for Offshore Renewables Projects 2014	Chapter 12 Section 12.6
			A retained archaeologist will be appointed who will liaise between the Project Manager, Nominated Contact and the Implementation Service, to ensure the smooth delivery of the protocol. These roles will be defined within the Archaeology Discovery Protocol.		
Terrestrial Ecology	General Onshore HVDC Cabling	Potential spread of the invasive non-native species Montbretia.	Locations supporting the invasive non-native species Montbretia near the works will be identified on relevant constraints drawings.	GreenBlue MNNS Guidance	Chapter 13 Section 13.6.1.1
			If works are located within 50m of invasive species, then the areas containing the invasive species will be clearly marked to prevent any disturbance.		
	If areas containing non-native or invasive species need to be disturbed, then a suitably experienced professional will be consulted with respect to the most appropriate method of managing the invasive species.				
HVDC Onshore Cable Installation	Disturbance of protected species' habitat, resulting from the construction activities.		Pre-construction protected mammal surveys will be undertaken to ascertain whether any protected mammal species, or areas of importance to these species, are present within, or in the immediate vicinity of, the construction area. This will focus on all watercourses within 200m of the proposed HVDC corridor for otters and water voles, and all areas within 200m of the HVDC cable corridor for badgers, and will be completed within 8 weeks of the start of construction.	Water Vole Conservation Handbook (Strachan, 2011)	Chapter 13 Section 13.6.2.1
			Scottish Wildlife Series: Otters and Development		

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Terrestrial Ecology	HVDC Onshore Cable Installation	Disturbance of protected species' habitat, resulting from the construction activities.	Depending on the results from the pre-construction surveys, an assessment of the likelihood of disturbance of protected mammals will be undertaken and the need for an EPS or derogation licence will be assessed and discussed with SNH.		Chapter 13 Section 13.6.2.1
			Checks for protected mammals will be carried out close to the time of works commencing.		
			Any identified protected mammal features in close proximity of the works will be clearly marked and an appropriate buffer zone created.		
			Any newly identified otter holt or badger sett will see a minimum buffer of 40m implemented, although this will be reviewed dependent on the level of activity identified during the survey.	Scottish Wildlife Series: Otters and Development	
			Depending on the identified nature of the protected mammal feature, appropriate mitigation will be implemented or altered to achieve maximum protection of the feature.		
	HVDC Onshore Cable Installation	Potential physical harm and entrapment of protected species.	Artificial lighting within the site, and along watercourses, will be minimised wherever possible, and directed to only the areas where it is required.		
			All personnel will be instructed to remain vigilant for protected mammals and stop operations where a risk of causing harm to a protected mammal is possible.		Chapter 13 Section 13.6.2.2
			There will be an ongoing watching brief for protected mammals by the sites' environmental staff, during all works with the potential to cause damage or injury to protected mammals, in areas identified as being sensitive during the preconstruction surveys.		Chapter 13 Section 13.6.2.2
			Any pipes or other material will be stored upright, have covers fitted to the ends or be appropriately fenced off, to prevent entrapment or occupation by a protected mammal species.	Scottish Wildlife Series: Otters and Development	Chapter 13 Section 13.6.2.2
			Temporary ramps will be utilised within the cable trenches to allow mammals to escape by themselves, should they fall in.		Chapter 13 Section 13.6.2.2

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
<b>Benthic Ecology</b>	General Marine HVDC Cabling	Damage to sensitive habitats and species.	Annex 1 habitats have been excluded from the Consenting Corridor with a buffer of at least 50m.		Chapter 14 Section 14.5.2
	HDD Drilling	HDD drilling fluid discharges to the marine environment leading to increased sediment loading for the water column.	Mitigation as per Chapter 11: Water Quality (Marine). The drilling will stop before drilling through the HDD marine exit point. Excess fluid will be extracted before the final drilling reaches the marine exit location.		Chapter 14 Section 14.5.2 Chapter 11 Section 11.5.1.1
	Operations Marine	Sediment heating and electro-magnetic fields from cables	For cable operation, a depth of lowering of at least 0.4 m in hard substrate and 0.5 m in soft substrate will be achieved, which will reduce EMF and sediment heating effects.		Chapter 14 Section 14.5.2
	General Marine HVDC Cabling	Introduction of invasive non-native species through ballast water.	Compliance with the International Convention for the Control and Management of Ships' Ballast Water and Sediments Convention.	International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)	Chapter 14 Section 14.5.2
	General Marine HVDC Cabling	Introduction of invasive non-native species through biofouling of vessel and equipment.	Requirement for vessels and equipment sourced from outside the North Sea to follow procedures to reduce or remove biofouling.	The Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species (Biofouling Guidelines) (resolution MEPC.207(62)) GreenBlue MNNS Guidance	Chapter 14 Section 14.5.2
	General Marine HVDC Cabling	Release of hazardous substances from cable installation vessels.	Pollution prevention and spill response procedures as detailed in Chapter 11: Water Quality (Marine Environment).	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 14 Section 14.5.2
	General Marine HVDC Cabling	Waste water release from installation vessels	Following of MARPOL convention.	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 14 Section 14.5.2

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
<b>Fish and Shellfish Ecology</b>	General Marine HVDC Cabling	Damage to sensitive habitats and species.	The consenting corridor has been designed to minimise environmental impacts by avoiding sensitive areas.		Chapter 15 Section 15.5.1
	HDD Drilling	HDD drilling fluid discharges to the marine environment leading to increased sediment loading for the water column.	Mitigation as per Chapter 11: Water Quality (Marine). The drilling will stop before drilling through the HDD marine exit point. Excess fluid will be extracted before the final drilling reaches the marine exit location.		Chapter 15 Section 15.5.1 Chapter 11 Section 11.5.1.1
	HDD Drilling	HDD drilling fluid discharges to the marine environment leading to increased sediment loading affecting spawning herring.	Timing restrictions have been put in place so that drilling activities will only occur between September and March only, with activities commencing in September. No breakouts of the drilling will therefore occur during herring spawning season (August/September).		Chapter 15 Section 15.5.1
	HVDC Marine Cable Installation	Smothering of sandeel eggs through resuspension of sediments and increased sediment loading.	Timing restrictions on cable installation activities mean that these activities will not occur during the sandeel spawning season (January/February).		Chapter 15 Section 15.5.1
	HVDC Marine Cable Installation	Harm to spawning sandeels resulting from releases of hazardous substances.	Timing restrictions on cable installation activities mean that these activities will not occur during the sandeel spawning season (January/February).		Chapter 15 Section 15.5.1
	HVDC Marine Cable Installation	Sediment heating and electro-magnetic fields from cables	For cable operation, a depth of lowering of at least 0.4 m in hard substrate and 0.5 m in soft substrate will be achieved, which will reduce EMF and sediment heating effects.		Chapter 15 Section 15.5.1
	General Marine HVDC Cabling	Introduction of invasive non-native species through ballast water.	Compliance with the International Convention for the Control and Management of Ships' Ballast Water and Sediments Convention.	International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)	Chapter 15 Section 15.5.1

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Fish and Shellfish Ecology	General Marine HVDC Cabling	Introduction of invasive non-native species through biofouling of vessel and equipment.	Requirement for sourced vessels from outside the North Sea to be cleaned and inspected prior to mobilisation.	GreenBlue MNNS Guidance The Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species (Biofouling Guidelines) (resolution MEPC.207(62))	Chapter 15 Section 15.5.1
	General Marine HVDC Cabling	Release of hazardous substances from cable installation vessels.	Pollution prevention and spill response procedures as detailed in Chapter 11: Water Quality (Marine Environment).	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 15 Section 15.5.1
	General Marine HVDC Cabling	Waste water release from installation vessels.	Compliance with MARPOL convention.	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 15 Section 15.5.1
Marine Mammals	HVDC Marine Cable Installation	Potential impact on marine mammals as a result of release of hazardous substances.	Pollution prevention and spill response procedures as detailed in Chapter 11: Water Quality (Marine Environment).	International Convention for the Prevention of Pollution from Ships (MARPOL)	Chapter 11 Section 11.5.1.4.1
	HDD Drilling	Increased sediment loading as a result of drilling fluid loss during HDD exit which can reduce marine mammal foraging success.	Mitigation as per Chapter 11: Water Quality (Marine). The drilling will stop before drilling through the HDD marine exit point. Excess fluid will be extracted before the final drilling reaches the marine exit location.		Chapter 16 Section 16.5.2.1.3 & Chapter 11 Section 11.5.1.1
	HVDC Marine Cable Installation	Potential harassment of marine mammals by vessels.	All vessels will be required to follow the guidance set out in SNH's 'Scottish Marine Wildlife Watching Code'.	The Scottish Marine Wildlife Watching Code	Chapter 16 Section 16.6.1

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<p><b>Marine Mammals</b></p>	<p>General Marine HVDC Cabling</p>	<p>Disturbance of marine mammals from sub bottom profiler operation by survey operations during both cable installation and operation phases.</p>	<p>Marine Mammal Observation (MMO) and Passive Acoustic Monitoring (PAM) protocols will be utilised for the start-up of SBP operations, based on the JNCC guidelines for minimising the risk of injury and disturbance to marine mammals from geophysical surveys. The protocols set out in the JNCC guidance are modified to take into account that SBP devices will not have the capacity to perform a soft start, and a much-reduced potential to cause injury or disturbance to marine mammals compared to the seismic survey operations for which the guidance is intended. The protocol will be incorporated into the CEMD and will be utilised for all SBP operations during both installation and operation.</p> <p>A 200m mitigation zone will be established around the SBP device, which will be monitored by MMO or PAM as appropriate, for a minimum of 20min before the device is activated. If marine mammals are present in the mitigation zone, SBP operations will be delayed for at least 10mins after the zone is clear.</p> <p>Full details of the protocol are provided in Chapter 16: Marine Mammals, Section 16.6.2.</p>	<p>JNCC Guidelines for minimising the risk of injury to marine mammals from geophysical survey operations</p>	<p>Chapter 16 Section 16.6.2</p>
			<p>An EPS licence will be sought from Marine Scotland for any survey operation involving the use of sub-bottom profilers.</p>		
<p><b>Ornithology</b></p>	<p>General Onshore HVDC Cabling</p>	<p>Terrestrial Birds - disturbance and accidental nest destruction.</p>	<p>Pre-works survey to locate nests will be carried out immediately prior to the commencement of construction operations.</p>	<p>BTO/JNCC/RSPB Breeding Bird Survey Instructions</p>	<p>Chapter 17 Section 17.7.1.1</p>
			<p>Exclusion zones to be imposed around any active nests found. The size of the zone will be dependent on the bird species and the nature of the present construction activities.</p>		
			<p>Where practicable, onshore works will be carried out outside the terrestrial breeding bird season, or at least started prior to the season.</p>		
			<p>If vegetation clearance is required, it will be carried out outside the terrestrial bird breeding season.</p>		
			<p>Lighting will be directional, within working areas and focused only within the working areas where lighting is required.</p>		

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Ornithology	HDD Drilling	Marine Dependant Birds - disturbance due to HDD Drilling.	Landfall HDD drilling to be carried out between September and March. HDD site layout designed to minimise noise at cliff tops, through screening and placement of the noisiest equipment as far as possible from the seabird cliffs.		Chapter 17 Section 17.7.1.3
	HDD Cable Pull	Marine Dependant Birds - disturbance by small craft.	A seabird observer will be utilised to ensure that small craft travel at slow speeds around the cliffs, and that the vessels do not travel through any substantial rafts of birds.		
	HDD Cable Pull	Marine Dependant Birds - disturbance due to vessel lighting.	During the cable pull and cable installation activity, measures will be put in place to ensure that the vessel lighting is only for the work area required.		
	HVDC Marine Cable Installation		Where possible, and where safe to do so, windows on the vessel will be blacked out at night to decrease the light emission of the vessel.		
	HDD Drilling	Marine Dependant Birds - disturbance.	Observation of birds during first HDD drill to identify any signs of disturbance and, if necessary, the source of disturbance will be investigated and, where practicable, improvements made for future works.		
	HDD Cable Pull		Observation of birds during first cable pull to identify any signs of disturbance and, if necessary, the source of disturbance will be investigated and, where practicable, improvements made for the second pull.		
			Time-lapse photography utilised to observe/record bird activity.		
EMF and Sediment Heating	Operations Onshore	Magnetic Field - cumulative effects of the full project, onshore.	Pre and post-energisation magnetic field measurements at the Fourfields site will be completed, to provide reassurance to local residents.		Chapter 18 Section 18.8.1
Navigation and Shipping	HVDC Marine Cable Installation	Collision of a passing (third party) vessel with a vessel associated with cable installation.	Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX, and/or broadcast warnings in advance of and during the offshore works. The notices will include a description of the work being carried out.	International Regulations for Prevention of Collisions at Sea (IRPCS).	Chapter 19 Section 19.5.2 & 19.6
			Cable vessels will display appropriate marks and lights, and broadcast their status on AIS at all times, to indicate the nature of the work in progress, and highlight their restricted manoeuvrability.	International Regulations for the Safety of Life at Sea (SOLAS)	

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Navigation and Shipping	HVDC Marine Cable Installation	Collision of a passing (third party) vessel with a vessel associated with cable installation.	Temporary aids to navigation will be deployed (if required) to guide vessels around any areas of installation activity.	International Regulations for Prevention of Collisions at Sea (IRPCS).  International Regulations for the Safety of Life at Sea (SOLAS)  The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 19 Section 19.5.2 & 19.6
			Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		
			Compliance with International Regulations for the Prevention of Collision at Sea (IMO, 1972) and the International Regulations for the Safety of Life at Sea (SOLAS).		
			Liaison with local ports and harbours, notably Peterhead.		
			Fisheries Liaison Officer (FLO) will be employed to facilitate communications between the project and the fishing sector.		
			Temporary (advisory) protection zones will be created around the installation works during the cable lay, and monitored by the guard vessel(s).		
	HVDC Marine Cable Installation	Disruption to passing vessel routing.	Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.	International Regulations for Prevention of Collisions at Sea (IRPCS).  International Regulations for the Safety of Life at Sea (SOLAS)  The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 19 Section 19.5.2 & 19.6
			Cable vessels will display appropriate marks and lights, and broadcast their status on AIS at all times, to indicate the nature of the work in progress, and highlight their restricted manoeuvrability.		
			Temporary aids to navigation will be deployed (if required) to guide vessels around any areas of installation activity.		
			Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		
			Compliance with International Regulations for the Prevention of Collision at Sea (IMO, 1972) and the International Regulations for the Safety of Life at Sea (SOLAS).		
			Liaison with local ports and harbours, notably Peterhead.  Fisheries Liaison Officer (FLO) will be employed to facilitate communications between the project and the fishing sector.		



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Navigation and Shipping	HVDC Marine Cable Installation	Disruption to passing vessel routing	Temporary (advisory) protection zones will be created around the installation works during the cable lay, and monitored by the guard vessel(s).	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	
			Circulation of information to marinas located along the east coast of the UK (including Peterhead and others north and south) to increase the likelihood of non-local sailors being made aware of the temporary installation work.		
	HVDC Marine Cable Installation	Snag risk to fishing vessel while cable is exposed	Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 19 Section 19.5.2
			Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		
			Cable protection works to be completed within three months of cable laying.		
			Liaison with local ports and harbours, notably Peterhead.		
	HVDC Marine Cable Installation	Vessel dragging anchor over exposed cable	Fisheries Liaison Officer (FLO) will be employed to facilitate communications between the project and the fishing sector.	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 19 Section 19.5.2 & 19.6
			Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.		
			Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		
			Cable protection works to be completed within three months of cable laying.		
HVDC Marine Cable Installation	Emergency Anchoring over Exposed Cable	Liaison with local ports and harbours, notably Peterhead.			
		Consultation and circulation of information to the Marine Safety Forum (MSF) whose members represent the oil & gas vessels anchoring in proximity to the cable landfall.			
			Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.		Chapter 19 Section 19.5.2

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Navigation and Shipping	HVDC Marine Cable Installation	Emergency Anchoring over Exposed Cable	Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		Chapter 19 Section 19.5.2
			Cable protection works to be completed within three months of cable laying.		
			Liaison with local ports and harbours, notably Peterhead.		
	HVDC Marine Cable Installation	Disruption to Military Exercises	Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.	International Regulations for Prevention of Collisions at Sea (IRPCS).  International Regulations for the Safety of Life at Sea (SOLAS)	Chapter 19 Section 19.5.2
			Cable vessels will display appropriate marks and lights, and broadcast their status on AIS at all times, to indicate the nature of the work in progress, and highlight their restricted manoeuvrability.		
			Temporary aids to navigation will be deployed (if required) to guide vessels around any areas of installation activity.		
			Guard vessels will be used to work alongside the cable lay vessel(s) during any work carried out. The guard vessel(s) will alert vessels to the presence of the installation activity and provide assistance in the event of an emergency.		
			Compliance with International Regulations for the Prevention of Collision at Sea (IMO, 1972) and the International Regulations for the Safety of Life at Sea (SOLAS).		
			Liaison with local ports and harbours, notably Peterhead.		
			Temporary (advisory) protection zones will be created around the installation works during the cable lay, and monitored by the guard vessel(s).		
	Operation Marine	Vessel dragging anchor over cable	As built information will be provided to the UKHO for inclusion in admiralty charts and the Kingfisher Cable awareness charts, with appropriate notes.		Chapter 19 Section 19.5.2 & 19.6
			Cable to be installed with appropriate protection as per the Construction Method Statement.		
Routine surveys will be carried out to verify that the cable protection status is adequate.					

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Navigation and Shipping	Operation Marine	Vessel dragging anchor over cable	Consultation and circulation of information to the Marine Safety Forum (MSF), whose members represent the oil & gas vessels anchoring in proximity to the cable landfall.		Chapter 19 Section 19.5.2 & 19.6
		Emergency Anchoring over Exposed Cable	As built information will be provided to the UKHO for inclusion in admiralty charts and the Kingfisher Cable awareness charts, with appropriate notes.		Chapter 19 Section 19.5.2
			Cable to be installed with appropriate protection as per the Construction Method Statement.		
			Routine surveys will be carried out to verify that the cable protection status is adequate.		
		Vessel foundering onto cable	Cable to be installed with appropriate protection as per the Construction Method Statement.		Chapter 19 Section 19.5.2
			Routine surveys will be carried out to verify that the cable protection status is adequate.		
		Vessel dropping object onto cable	Cable to be installed with appropriate protection as per the Construction Method Statement.		Chapter 19 Section 19.5.2
			Routine surveys will be carried out to verify that the cable protection status is adequate.		
		Vessel grounding due to reduced under keel clearance	Any protection measures used (e.g. rock placement) will not reduce the existing water depths by greater than 5%.		Chapter 19 Section 19.5.2
		Fishing gear snagging on cable or associated protection	As built information will be provided to the UKHO for inclusion in admiralty charts and the Kingfisher Cable awareness charts, with appropriate notes.		Chapter 19 Section 19.5.2
Routine surveys will be carried out to verify that the cable protection status is adequate.					
Collision of a passing (third party) vessel with a vessel associated with maintenance/repair	Compliance with International Regulations for the Prevention of Collision at Sea (IMO, 1972) and the International Regulations for the Safety of Life at Sea (SOLAS).	International Regulations for Prevention of Collisions at Sea (IRPCS).	Chapter 19 Section 19.5.2		
	Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.	International Regulations for the Safety of Life at Sea (SOLAS)			

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Navigation and Shipping	Operation Marine	Collision of a passing (third party) vessel with a vessel associated with maintenance/repair.	Cable vessels will display appropriate marks and lights, and broadcast their status on AIS at all times, to indicate the nature of the work in progress, and highlight their restricted manoeuvrability.	International Regulations for Prevention of Collisions at Sea (IRPCS).	Chapter 19 Section 19.5.2
		Interference with magnetic compass onboard passing vessel.	Compass deviation effects will be minimised by keeping cable separation distance as short as practicable. As built information will be provided to the UKHO for inclusion in admiralty charts and the Kingfisher Cable awareness charts, with appropriate notes.		Chapter 19 19.5.2
Commercial Fisheries	HVDC Marine Cable Installation	Loss of access to fishing grounds.	Fisheries Liaison Officer (FLO) will be employed to facilitate communications between the project and the fishing sector.	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 20 Section 20.6.2.1
			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.		
			Early communications with the fishing sector, to allow preparations to be made for the potential disruption.		
			Ongoing dialogue to update on progress and when re-entry to protection zone for fishing activities is possible.		
			Guard vessels will be used to monitor and advise vessels in the vicinity of the installation works as appropriate.		
			Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.		
		Cable protection works to be completed within three months of cable laying.			
Change in distribution of target species.	Marine habitat disturbance to be minimised as far as practically possible.		Chapter 20 Section 20.6.2.2		

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Commercial Fisheries	Operation Marine	Loss of access to fishing grounds.	Rock berm and mattresses will be designed to have a smooth over trawlable profile, utilising appropriate rock grades.	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 20 Section 20.6.3.1
			Circulation of information via Notices to Mariners, Radio Navigational Warnings, NAVTEX and/or broadcast warnings, in advance of and during the offshore works. The notices will include a description of the work being carried out.		
		Exposed cable.	As built information will be provided to the UKHO for inclusion in admiralty charts and the Kingfisher Cable awareness charts, with appropriate notes.	The European Subsea Cable Association. (2016). Guideline 01 - Fishing Liaison.	Chapter 20 Section 20.6.3.3
			Cable to be installed with appropriate protection as per the Construction Method Statement.		
			Routine surveys will be carried out to verify that the cable protection status is adequate.		
Local Community and Economy	General Onshore HVDC Cabling	Sourcing of supply chain and workforce.	Supply chains plans have been developed to make local content an important and appropriate component of tender proposals for contract delivery.		Chapter 21 Section 21.7.1.1
			Supply chain event and engagement activities will be carried out to maximise opportunity for local input.		
			Works will be publicly tendered wherever possible to allow fair competition and allow local companies to compete for work.		
	HVDC Onshore Cable Installation	Disturbance of local residents through onshore work for example through noise.	An onshore construction communication plan will be developed by NorthConnect and the Cable Contractors to ensure residents and recreational users are kept informed about the project.		Chapter 21 Section 21.7.1.2
			Contact details will be provided to allow any concerns or queries that residents or recreational users may have, to be raised and dealt with in a timely manner.		
	HVDC Onshore Cable Installation	Disruption of recreation.	NorthConnect and the construction contractor will comply with the Land Reform Act (Scotland) 2016 (as amended) and the Scottish Outdoor Access Code.		Chapter 21 Section 21.7.1.3
			Temporary closure of one section of the core path to the south of the Fourfields site will have diversions in place via the bisecting path.		
			Appropriate notification will be put in place to advise users of this activity.		

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference	
<p><b>Local Community and Economy</b></p>	<p>HVDC Marine Cable Installation</p>	<p>Disruption of recreation.</p>	<p>The core path will have vehicular access controlled via a gate system, which will be manned by bankspersons when vehicles are crossing the core path.</p>		<p>Chapter 21 Section 21.7.1.3</p>	
			<p>An onshore construction communication plan will be developed by NorthConnect and the Cable Contractors to ensure residents and recreational users are kept informed about the project.</p>			
			<p>Contact details will be provided to allow any concerns or queries that residents or recreational users may have, to be raised and dealt with in a timely manner.</p>			
			<p>Prior warning will be given to any changes in path routes or if there is a need for a short-term closure any areas for safety reasons.</p>			
			<p>Signage with contact details will be around the site to allow recreational users to raise concerns or queries.</p>			
			<p>The UK Marine Communications Plan will be complied with.</p>			
<p><b>Noise and Vibration (In-Air)</b></p>	<p>General Onshore HVDC Cabling</p>	<p>Disruption of local residents and ecology from in-air noise and vibration resulting from onshore construction activity.</p>	<p>Hours of operation will be 07:00 to 19:00 Monday to Friday and 07:00-13:00 on Saturdays for all onshore construction stages, except for cable pulling and the HDD drilling operations (both landfall and under A90 and disused railway). The cable pull will occur for a concentrated period that will require 7-day, 24 hour working. The HDD drilling operations are planned to be conducted on a 7-day per week basis, between 07:00 and 23:00, however, in order to ensure that the drilling works are completed in the available window prior to the bird breeding season, 24hr working may be required dependent on the rate of progress.</p>	<p>BSI (2014). BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.</p>	<p>Chapter 22 Section 22.7</p>	
			<p>NorthConnect will keep local residents informed of the proposed working schedule, as appropriate, including the times and duration of any abnormally noisy activity that may cause concern.</p>			
			<p>Haulage vehicles will not arrive at or leave the site between 1900 and 0700 hours.</p>			
			<p>All vehicles and mechanical plant will be fitted with effective exhaust silencers and 'smart' reversing alarms and be subject to programmed maintenance.</p>			
			<p>Where appropriate, inherently quiet plant will be selected.</p>			

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Noise and Vibration (In-Air)	General Onshore HVDC Cabling	Disruption of local residents and ecology from in-air noise and vibration resulting from onshore construction activity.	All major compressors, pumps and generators will be 'sound reduced' models fitted with properly lined and sealed acoustic covers, which will be kept closed during machines' use.	BSI (2014). BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites.	Chapter 22 Section 22.7
			All ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.		
			Machines will be shut down or throttled down to a minimum between work periods.		
			All equipment will be regularly maintained including maintenance related to noise emissions.		
			Vehicles are to be loaded carefully to ensure minimal drop heights so as to minimise noise during these operations.		
	All ancillary plant such as generators and pumps are to be positioned so as to cause minimum noise disturbance. Where necessary, temporary acoustic screens or enclosures will be employed.				
	HDD Drilling	Disruption of local residents and ecology from in-air noise and vibration resulting from 24hr landfall HDD operations.	Where 24hr working at the landfall HDD site is required, a Section 61 Consent will be applied for under the Control of Pollution Act 1974.		
			Any Section 61 Consent application under the Control of Pollution Act 1074 will contain additional noise modelling if details change significantly from those utilised in the EIAR.		
			Where the noise assessment identifies significant additional noise impacts on local residents, additional mitigation measures will be identified and will be detailed in the application.		
		Disruption of climbers' communication on climbing routes at the Warlord Cliff resulting in potential safety concerns for climbers.	During HDD activities, monitoring of noise levels in the area of the Warlord Cliff will be conducted.		
If it is found that noise is causing a safety concern, additional mitigation will be considered at that time.					
Resource Usage and Waste	General Installation Works	Sustainable Procurement.	All contractors will be required to give due consideration to sustainability, consideration of components and materials lifecycle cost, including their ability to be recycled.		Chapter 24 Section 24.5.1

Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Resource Usage and Waste	General Installation Works	Sustainable Procurement.	Material to be sourced locally where practicable.		Chapter 24 Section 24.5.1
	General Onshore HVDC Cabling	The use of fuel bowsers.	Fuel bowsers will be under strict management controls, secured to protect against oil thefts and tampering and locked when not in use.	CAR GBR28: The storage of oil	Chapter 24 Section 24.5.2
			The fuel bowsers will be double skinned with a level site gauge and stored in an appropriate area away from aquatic environments and where it is protected from vehicle damage.	GPP 2: Above ground oil storage tanks	
			Refuelling will be carried out away from watercourses, by trained operatives following site refuelling procedures.		
	General Installation Works	Storage and use of fuels, oils and chemicals.	Bio-degradable hydraulic fluids to be used where practicable.	GPP 5: Works and Maintenance in or Near Water	Chapter 24 Section 24.5.2
			All oils and chemicals will be subject to Control of Substances Hazardous to Health (COSHH) assessments under the COSHH Regulations. All COSHH assessments will include a section on the environment to highlight any particular precaution or mitigation requirements. Oils and chemicals will be appropriately stored and managed.	CAR GBR26: The storage of oil in a portable container with a capacity of less than 200 litres	
			Appropriately banded oil and chemical storage cabinets will be utilised. These will be kept locked, with the keys under management control to ensure appropriate use and accountability.	PPG6: Working at Construction and Demolition Sites	
			Just in time delivery, when practicable, to minimise bulk storage on site.	PPG 26: Safe Storage - Drums and Intermediate Bulk Containers	
	General Installation Works	Waste management.	The waste hierarchy shall be utilised throughout the project.	CAR GBR26: The storage of oil in a portable container with a capacity of less than 200 litres	Chapter 24 Section 24.5.3
			All waste shall be appropriately sorted and segregated.	PPG 26: Safe Storage - Drums and Intermediate Bulk Containers	



Topic	Stage	Aspect	Mitigation/Enhancement Management	Associated Guidance	EIAR Reference
Resource Usage and Waste	General Installation Works	Waste management	A Site Waste Management Plan will be put in place.	PPG6: Working at Construction and Demolition Sites	Chapter 24 Section 24.5.3
			Waste will be stored safely to prevent escape.	Waste Hierarchy	
			The use of single-use plastics will not be permitted wherever reasonable alternatives are available and, if they have to be utilised, then recycling arrangements shall be in place.		
	HVDC Onshore Cable Installation	Cement washings	Cement washings will be carried out in a dedicated area.	PPG6: Working at Construction and Demolition Sites	Chapter 24 Section 24.5.3
			Washing arisings will be collected for onsite treatment. This will include settlement and, if required, pH correction.		
			The liquids will be reused on site as grey water, if suitable, or disposed of via a consented waste route. The solids will be disposed of as solid waste potentially to be recycled as aggregate.		
	General Onshore HVDC Cabling	Litter	Training will be provided to all personnel with regard to waste management and that littering will not be tolerated.	PPG6: Working at Construction and Demolition Sites	Chapter 24 Section 24.5.4
			The use of single use plastics will be discouraged, and reusable crockery and cutlery will be provided in the welfare facilities.		
			Environmental walk rounds or Health & Safety inspections will identify if littering is becoming an issue on the construction site, or vessels, allowing corrective action to be taken.		
			Appropriate storage of materials and waste, and regular checks of arrangements on the vessels, will aid in ensuring marine litter is not created.		
Following the completion of the onshore works, a full litter sweep will be conducted.					
Decommissioning	Recovery of cables at point of decommissioning.	Cables recovered during decommissioning will be stripped, and materials recycled where practicable.		Chapter 24 Section 24.4.3	

### 25.3 Implementation

A SoM was also produced for the Interconnector Convert Station and HVAC Cable Route (NorthConnect, 2015). There are overlaps between the two SoMs. To ensure consistent implementation of mitigation across the project, the two SoMs will be included within the Overarching Construction Environmental Management Plan (CEMP), which will be produced by NorthConnect. There will be three contract packages of the works in the UK namely:

- Enabling Works;
- Converter Station and HVAC Cables; and
- HVDC Cables.

Each Contractor is expected to work to the Overarching CEMP and will be required to produce a Contract specific CEMP in line with the Overarching CEMP for their elements of the work.

The CEMP's will include the following elements as appropriate:

- Traffic Management Plan;
- Site Waste Management Plan;
- Incident Response and Reporting Procedure;
- Dust Management Plan;
- Traffic Management Plan;
- Drainage Management Plan or CAR Pollution Prevention Plan, as appropriate;
- Species Specific Mitigation Plans; and
- Copies of consents and licences.

The CEMP's will provide the policy and plans of how the construction and cable installation works are to be managed from an environmental perspective. Task specific Risk Assessed Method Statements (RAMS) will be utilised to implement elements of the environmental plans. RAMS will also be provided for all construction tasks, identifying task specific risks, including those to the environment, and detail the mitigation measures in place to prevent or reduce them.

The CEMP will clearly set out the lines of communication between NorthConnect's Management Team and Environmental Lead, and the Contractor's Management Team and their Environmental Representative. It will set out the roles and responsibilities of the various parties to with regard to ensuring that all environmental mitigation is appropriately implemented.

In addition to the CEMP, the Fisheries Liaison and Mitigation Action Plan (FLMAP) (NorthConnect, 2018a) and UK Marine Communication Strategy (NorthConnect, 2018b) will be implemented, these provide the mechanism for the implementation of a number of the mitigation measures identified in Table 25.1.

### 25.4 Environmental Clerk of Works

Due to the complexity and scale of the works, to ensure that the environmental effects are minimised, and that mitigation is implemented in an effective manner, responding to the actual situation on the site, there will be environmental expertise required to support the construction works.

Environmental Clerk(s) of Works (ECoW) will be utilised to provide environmental site supervision and advice on a day to day basis. The ECoW will carry out regular audits and ensure monitoring requirements are met, and these will be tailored to the aspects arising on the site at the time. The ECoW will have the power to stop works if there is imminent danger to the environment.

In addition, NorthConnect will retain the services of environmental expert(s) who have hands on experience working as an Environmental Clerk of works (ECoW) and detailed understanding of the whole project. Their role will include the following responsibilities:

- Ensuring that the various contractors are implementing the relevant CEMP's effectively;
- Providing support and advice to the ECoWs as required;
- Ensuring compliance with the associated permits and licences; and
- Ensuring any additional permits or licences are obtained as required in a timely manner.

### 25.5 Training

The construction site and vessel inductions will cover a range of environmental topics and their management on site. Specific training will be provided to appropriate staff as required, for example, spill response training and refuelling.

'Tool box talks' will be given on environmental topics of particular relevance to the activities that are being undertaken on site at that point, to ensure that the workforce's environmental awareness is current and relevant.

### 25.6 Environmental Management System

Moving into the commissioning and operational phases of the project, the Overarching CEMP will be replaced with an Environmental Management System, aligned to ISO14001 or equivalent. This will ensure that all aspects are appropriately identified and managed during the project's operational life.

### 25.7 References

- NorthConnect. (2015). NorthConnect Interconnector Converter Station and High Voltage Alternative Current Cable Route Environmental Statement. 2.
- NorthConnect. (2018a). HVDC Cable Infrastructure - UK Fisheries Liaison Mitigation Action Plan.
- NorthConnect. (2018b). HVDC Cable Infrastructure - UK Marine Communication Strategy.