



Eastern Green Link 2 - Marine Scheme

Environmental Appraisal Report

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nationalgrid



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June 2022

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2. Acronyms

Acronym or Abbreviation	Term	Definition
2013 PAC Regulations	Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013	This instrument implements sections 22 to 24 of the Marine (Scotland) Act 2010 which provides that in certain circumstances consultation must be undertaken concerning a proposed licensable activity, before an application for a marine licence may be made. The instrument sets down the procedure which must be followed by the prospective applicant to satisfy the pre-application consultation requirement, which includes consulting specified persons and the holding of a public event. The instrument also prescribes the form of a report which sets out what has been done to comply with the legislative requirements. The consultation ensures that local communities, conservation groups and other interested parties may comment on a proposed development, and to allow their views to be taken into account by the prospective applicant, at an early stage.
3D	Three Dimensional	Having or appearing to have extension in depth.
A	Amps	The basic unit of electric current the constant current that, when maintained in two parallel conductors of infinite length and negligible cross section placed 1 metre apart in free space, produces a force of 2×10^{-7} newton per metre between them. 1 ampere is equivalent to 1 coulomb per second
AA	Appropriate Assessment	An AA is an assessment used during a Habitats Regulations Assessment (HRA) and can be broken down into two distinct phases: 1. a scientific appraisal of all the likely significant effects of the plan or project on the relevant qualifying interests of a European site, based on the site's conservation objectives 2. a decision-making process based on the conclusions of this appraisal – i.e. coming to a conclusion about the integrity of a European site
AC	Alternating Current	An electric current that reverses direction at regular intervals, having a magnitude that varies continuously in a sinusoidal manner.
ACOPS	Advisory Committee on Protection of the Sea	ACOPS is an environmental Non-Governmental Organisation that informs, advises and engages to achieve sustainable seas consistent with international law and sound science.
AEZ	Archaeological Exclusion Zone	Archaeological Exclusion Zones are to be declared by the developer (i.e. Consent Holder) so that identified seabed anomalies of known or possible archaeological interest are avoided by all project contractors conducting seabed-impacting operations.
AHMWB	Artificial and Heavily Modified Waterbodies	Sometimes the natural conditions of a water body are substantially altered, e.g. by irrigation, drinking water supply, power generation and navigation. The Water Framework Directive recognises that in some cases the benefits of such uses need to be retained. If a series of criteria are fulfilled, it allows designation of the water body as “artificial” or “heavily modified”, e.g. reservoirs, canals or canalised rivers.
AIAA	Areas of Intense Aerial Activity	Within these areas, night operations may be conducted by aircraft using reduced navigation and/or anti-collision lights.
AIS	Automatic Identification System	An AIS-equipped system on board a ship presents the bearing and distance of nearby vessels in a radar-like display format.

Acronym or Abbreviation	Term	Definition
AL1	Action Level 1	Cefas's non-statutory guideline action levels for the disposal of dredged material. Action Level 1 (AL1) contaminant concentrations for dredged material are lower than Action Level 2 (AL2) concentrations. Action Levels are used as part of a weight of evidence approach to decision-making on the disposal of dredged material to sea. In general, contaminant levels in dredged material below AL1 are of no concern and are unlikely to influence the licensing decision. Dredged material with contaminant levels between AL1 and AL2 requires further consideration and testing before a decision can be made.
AL2	Action Level 2	Cefas's non-statutory guideline action levels for the disposal of dredged material. Action Level 1 (AL1) contaminant concentrations for dredged material are lower than AL2 concentrations. Action Levels are used as part of a weight of evidence approach to decision-making on the disposal of dredged material to sea. Dredged material with contaminant levels above AL2 is generally considered unsuitable for sea disposal.
ALARP	As Low As Reasonably Practicable	ALARP, which stands for "as low as reasonably practicable", is a term often used in the regulation and management of safety-critical and safety-involved systems. The ALARP principle is that the residual risk shall be reduced as far as reasonably practicable.
ALB	All-weather Lifeboat	All-weather lifeboats are capable of high speed and can be operated safely in all weather conditions. They are inherently self-righting after a capsize and fitted with navigation, location and communication equipment.
AMAA 1979	Ancient Monuments and Archaeological Areas Act 1979	AMMA 1979 consolidates and amends the law relating to ancient monuments; to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and (in connection therewith) for the regulation of operations or activities affecting such matters; to provide for the recovery of grants under section 10 of the Town and Country Planning (Amendment) Act 1972 or under section 4 of the Historic Buildings and Ancient Monuments Act 1953 in certain circumstances; and to provide for grants by the Secretary of State to the Architectural Heritage Fund.
ARPA	Automatic RADAR Plotting Aid	A marine radar with automatic radar plotting aid (ARPA) capability can create tracks using radar contacts. The system can calculate the tracked object's course, speed and closest point of approach (CPA), thereby knowing if there is a danger of collision with the other ship or landmass.
ASA	Archaeological Study Area	The study area relating to the archaeological appraisal
ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas 1992	Approved in Geneva in September 1991, with the main purpose to ensure that the signed Parties undertake to cooperate closely in order to achieve and maintain a favourable conservation status for small cetaceans. The Agreement Area is defined as "... the marine environment of the Baltic and North Seas and contiguous area of the North East Atlantic, as delimited by the shores of the Gulfs of Bothnia and Finland; to the south-east by latitude 36°N, where this line of latitude meets the line joining the lighthouses of Cape St. Vincent (Portugal) and Casablanca (Morocco); to the south-west by latitude 36°N and longitude 15°W; to the north-west by longitude 15° and a line drawn through the following points: latitude 59°N/longitude 15°W, latitude 60°N/longitude 05°W, latitude, 61°N/longitude 4W;latitude 62N/ longitude 3W; to the north by latitude 62°N; and including the Kattegat and the Sound and Belt passages."
ASN	Alcatel Submarine Networks	Part of Nokia, ASN has an installed base with more than 600,000 km of optical submarine cable deployed worldwide.

Acronym or Abbreviation	Term	Definition
AToN	Aids to Navigation	A device, system or service, external to vessels, designed and operated to enhance safe and efficient navigation of individual vessels and/or vessel traffic. AToN can be visible, audible or electronic symbols that are established by government and private authorities for piloting purposes and include buoys, day beacons, lights, lightships, radio beacons, fog signals, marks and other devices used to provide "street" signs on the water.
ATT	Admiralty TotalTide	ATT is a pursueable data publication that provides fast, accurate tidal height and tidal stream predictions for more than 7,000 ports and 3,000 tidal streams worldwide. Key features of ATT include accurate tidal predictions, reducing the risk of human error and providing bridge crews with an easy means of viewing both under-keel and safe overhead clearances. ATT is approved for use by the Flag States of over 80% of ships trading internationally, with certification to aid inspections
AU	Assessment Unit	The Assessment Unit is the ICES designated marine mammals' area in the North Sea.
BAC	Background Assessment Concentrations	To enable assessments of monitoring data for hazardous substances in marine sediment and biota, there is a need to have relevant assessment tools. OSPAR developed BACs to assess contaminant concentrations in the environment. BACs are used to test whether concentrations are "near background" or "close to zero" in the case of man-made substances.
BAP	Biodiversity Action Plan	The BAP was published in 1994 and was the government's response to the Convention on Biological Diversity (CBD) which the UK signed up to in 1992. The CBD called for the development and enforcement of national strategies and associated action plans to identify, conserve and protect existing biological diversity and to enhance it wherever possible.
BC	Background Concentrations	The total concentration of a pollutant comprises those from explicit local emission sources and those that are transported into an area by the wind from further away. If all the local sources were removed, all that would remain is that which comes in from further away; it is this component that is called 'background'.
BEIS	Department for Business, Energy and Industrial Strategy	The Department for Business, Energy and Industrial Strategy (BEIS) is a department of the government of the United Kingdom.
BGS	British Geological Survey	The British Geological Survey (BGS) is an organisation founded in 1835 focused on research to understand earth and environmental processes.
BIFA	British International Freight Association	The prime trade association for UK registered companies engaged in the international movement of freight by all modes of transport, air, road, rail and sea, and/or customs brokerage.
BoCC	Birds of Conservation Concern	Commonly referred to as the UK Red List for birds, the BoCC reports provide updates on the status of all regularly occurring birds in the UK, Channel Islands and Isle of Man.
BODC	British Oceanographic Data Centre	The British Oceanographic Data Centre (BODC) is an organisation founded after a restructure in 1989 to operate as a world-class data centre in support of UK marine science.

Acronym or Abbreviation	Term	Definition
BSI	British Standards Institute	The British Standard Institute (BSI) is an organisation founded in 1901 to play a leading role in developing a new generation of standards and help organisations become better governed and more responsible.
BTO	British Trust for Ornithology	The British Trust for Ornithology (BTO) is an organisation founded in 1932 for the study of birds in the British Isles.
BWM Convention	International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004	The BWM Convention is an international maritime treaty which requires signatory flag states to ensure that ships flagged by them comply with standards and procedures for the management and control of ships' ballast water and sediments. The purpose of the Convention is to prevent, minimize and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments.
CA	Cruising Association	A club for motorboat and sailing yacht users. The CA provides information and hosts events for its members.
CATS	Central Area Transmission System	The Central Area Transmission System (CATS) comprises a subsea gas gathering and transportation system in the central North Sea, along with an onshore gas treatment and processing facility at Seal Sands, Teesside, UK.
CBRA	Cable Burial Risk Assessment	A report identifying where trenching may and may not be achievable based on industry best practice cable burial risk management.
CCME	Canadian Council of Ministers of the Environment	Canadian Council of Ministers of the Environment (CCME) is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern.
CCS	Carbon Capture and Storage	Carbon Capture and Storage (CCS) is the process of capturing carbon dioxide (CO ₂) before it enters the atmosphere and subsequently transporting and storing it.
CCUS	Carbon Capture Usage and Storage	Carbon Capture Usage and Storage (CCUS) involve the capture of carbon dioxide (CO ₂) from fuel combustion or industrial processes, the transport of it via ship or pipeline, and either use it as a resource or permanently store it deep underground in geological formations.
CD	Chart Datum	A chart datum is the water level surface serving as origin of depths displayed on a nautical chart.
Cefas	Centre for Environment, Fisheries and Aquaculture Science	The Centre for Environment, Fisheries and Aquaculture Science is an executive agency of the United Kingdom government Department for Environment, Food and Rural Affairs. It carries out a wide range of research, advisory, consultancy, monitoring and training activities for a large number of customers around the world
CEMP	Construction Environmental Management Plan	The purpose of a construction environmental management plan is to outline how a construction project will avoid, minimise or mitigate effects on the environment and surrounding area.

Acronym or Abbreviation	Term	Definition
CES	Crown Estate Scotland	Crown Estate Scotland (CES) is the public corporation of the Scottish Government responsible for managing land and property owned by the Crown.
CFB	Coastal Flood Boundary	Created in partnership with SEPA (Scottish Environment Protection Agency), this data provides an up-to-date scientifically robust national evidence base and practical guidance on appropriate design sea level and swell wave conditions around the country.
CFP	Common Fisheries Policy	The Common Fisheries Policy (CFP) is the mechanism and set of rules through which European fishing fleets and fish stocks are managed.
CI	Confidence Interval	A confidence interval is a range of values that describes the uncertainty surrounding an estimate.
CIEEM	Chartered Institute of Ecology and Environmental Management	The leading professional membership body representing and supporting ecologists and environmental managers in the UK, Ireland and abroad.
CIfA	Chartered Institute for Archaeologists	The Chartered Institute for Archaeologists is a professional organisation for archaeologists working in the United Kingdom and overseas.
CL	Confidence Limits	Confidence limits are the numbers at the upper and lower end of a confidence interval.
CLB	Cable Laying Barge	A Cable Laying Barge (cable layer or cable ship) is a sea going vessel specially designed to lay underwater cables (telecommunications, electric power transmission, or other).
CLV	Cable Laying Vessel	A Cable Laying Vessel (cable layer or cable ship) is a sea going vessel specially designed to lay underwater cables (telecommunications, electric power transmission, or other).
cm	Centimetre	Centimetre is a metric unit of length, equal to one hundredth of a metre.
COLREGS	International Regulations for Preventing Collisions at Sea 1972	Published by the International Maritime Organization (IMO) and set out, among other things, the "rules of the road" or navigation rules to be followed by ships and other vessels at sea to prevent collisions between two or more vessels.
CoS	Chamber of Shipping	The Chamber of Shipping (CoS) is the trade association of the UK shipping industry.
CPA	Coastal Protection Act	The Coastal Protection Act provides the measures against erosion and encroachment of the coast of Great Britain by the sea.
CPT	Cone Penetration Test	Cone Penetration Test (CPT) is an in-situ test that is used to identify the soil type.
CRoW	Countryside and Rights of Way Act 2000	The Countryside and Rights of Way Act 2000 is an act that gives a right of access to the countryside for the purpose of open-air recreation.

Acronym or Abbreviation	Term	Definition
CSEMP	Clean Seas Environmental Monitoring Programme	The Clean Safe Seas Environmental Monitoring Programme (CSEMP) provides a coordinated approach to environmental monitoring in the UK's coastal and estuarine areas and fulfills the UK's commitment to European directives by achieving its mandatory monitoring requirements. The data collected from this programme is stored in MERMAN a national database which holds and provides access to this data.
CSIP	UK Cetacean Strandings Investigation Programme	The UK Cetacean Stranding Investigation Programme (CSIP) has been running since 1990 and is funded by DEFRA. The programme is responsible for the investigation of all cetacean strandings around the UK coastline.
dB	Decibel	Decibel (dB) is a relative unit of measurement equal to one tenth of a bel (B) and is used to measure the intensity of a sound.
DC	Direct Current	Direct current is one-directional flow of electric charge
DCC	Durham County Council	Durham County Council is a local authority governing the contemporary unitary authority area of County Durham in North East England.
DCO	Development Consent Order	A Development Consent Order (DCO) is the means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP).
DDV	Drop-down Video	An underwater video sampling technique that can provide semi-quantitative or fully quantitative data for environmental assessment using small dropdown/towed camera systems.
Defra	Department for Environment, Food and Rural Affairs	The Department for Environment, Food and Rural Affairs (Defra) are responsible for improving and protecting environment through the growth of the green economy and supporting the UK's food, farming and fishing industries.
DENI	Department of the Environment Northern Ireland	The Department of the Environment was a devolved Northern Irish government department in the Northern Ireland Executive. The minister with overall responsibility for the department was the Minister for the Environment.
DP	Dynamic Positioning	Dynamic Positioning (DP) is a computer-controlled system to automatically maintain a vessel's position and heading.
DPS	Dynamic Positioning System	Dynamic Positioning System (DPS) is a computer-controlled system to automatically maintain a vessel's position and heading.
DVV	Dual van Veen	The Dual van Veen Grab is a universal tool ideal for taking dual samples for biological, hydrological and environmental studies.
DWT	Deadweight tonnage	Deadweight tonnage or tons deadweight is a measure of how much weight a ship can carry. It is the sum of the weights of cargo, fuel, fresh water, ballast water, provisions, passengers, and crew.
E Field	Electric Field	The cables themselves produce no external electric field because of the presence of a metallic outer sheath
EA	Environmental Appraisal	A non-statutory appraisal which provides detailed information on the potential environmental impacts of development proposals.
EAR	Environmental Appraisal Report	A non-statutory appraisal which provides detailed information on the potential environmental impacts of development proposals.

Acronym or Abbreviation	Term	Definition
ECMWF	European Centre for Medium-range Weather Forecast	The European Centre for Medium-range Weather Forecasts is a research institute and 24/7 operational service producing global numerical weather predictions and other data.
EDR	Effective Deterrent Range	EDRs are considered the initial starting point for consideration in any environmental assessments determining the range of underwater noise disturbance.
EA	Environment Agency	The Environment Agency (EA) is a non-departmental public body, established in 1995 and sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England.
EEZ	Exclusive Economic Zone	An Exclusive Economic Zone (EEZ) is an area of the sea in which a sovereign state has special rights regarding the exploration and use of marine resources, including energy production from water and wind.
EGL2	Eastern Green Link 2	Also referred to as the Project Marine Scheme.
EIA	Environmental Impact Assessment	A statutory assessment which provides detailed information on the potential environmental impacts of development proposals.
EL1	Eastern Link 1	A second HVDC link, Eastern Link 1 (EL1) (also known as 'Scotland England Green Link 1', or 'SEGL1') from a Scottish landfall at Thorntonloch Beach to an English landfall at Seaham.
EMF	Electromagnetic Field	Electric and magnetic fields are invisible areas of energy, often referred to as Radiation, that are associated with the use of electrical power and various forms of natural and man-made lighting.
EMODnet	European Marine Observation Data Network	The European Marine Observation Data Network provides access to European marine data across seven themes including bathymetry, biology, chemistry, geology, physics, seabed habitats and human activities.
EMP	Environmental Management Plan	Environmental Management Plan (EMP) is a guidance document to measure and achieve compliance with the environmental protection and mitigation requirements of a project, which are typically requirements for project permits/approvals.
ENG	Ecological Network Guidance	The Ecological Network Guidance sets out the guidelines which the regional stakeholder groups used to identify Marine Conservation Zones and to ensure they contribute to the creation of an ecologically coherent network of Marine Protected Areas,
ENVID	Environmental Issues Identification	The purpose of the Environment Identification (ENVID) process is for the early identification of aspects that can potentially impact the environment. Another key element of the process is the identification of proposed measures to prevent, control or mitigate the potential environmental hazards identified.
EOWDC	European Offshore Wind Deployment Centre	The European Offshore Wind Deployment Centre (EOWDC) is Scotland's largest offshore wind test and demonstration facility, located around 3 km off the east coast of Aberdeenshire, in the North Sea, Scotland.
EPS	European protected species	European Protected Species (EPS) receive full protection under The Conservation of Species and Habitats Regulations 2010 meaning a mitigation licence is needed if a development will have impacts on an EPS.

Acronym or Abbreviation	Term	Definition
ERL	Effect Range Low	Concentration below which effects are rarely observed or predicted among sensitive life stages and species of biota for Sediment Effect Concentrations used to evaluate sediment concentrations of trace elements and synthetic organic compounds.
ERM	Effect Range Median	Concentration above which effects are frequently or always observed among most species of biota for Sediment Effect Concentrations used to evaluate sediment concentrations of trace elements and synthetic organic compounds.
ERYC	East Riding Yorkshire Council	East Riding of Yorkshire Council is the local authority of the East Riding of Yorkshire. It is a unitary authority, having the powers of a non-metropolitan county and district council combined.
ESCA	European Subsea Cables Association	The European Subsea Cables Association is an organisation of submarine cable owners, operators and suppliers and is primarily aimed at promoting marine safety and protecting cable installations in European and surrounding waters.
ESO	Electricity System Operator	Undertake balancing the cost of investing in the network against the costs of constraints
ESRP	Emergency Spill Response Plan	This plan will assess the risk of spills and provide a step guide which is to be followed in the event of a spill during the installation phase of the Project Marine Scheme.
ETRS	European Terrestrial Reference System	The European Terrestrial Reference System 1989 is an ECEF geodetic Cartesian reference frame, in which the Eurasian Plate as a whole is static.
ETYS	Electricity Ten Year Statement	Using data from the FES, National Grid ESO undertakes an annual assessment to identify points on the transmission system where more network capability is needed to ensure that energy is delivered efficiently and reliably to where it is needed
EU	European Union	The European Union is a political and economic union of 27 member states that are located primarily in Europe.
EUNIS	European Union Nature Identification System	The European Nature Information System (EUNIS) provides access to the publicly available data in the EUNIS database for species, habitat types and protected sites across Europe.
FAME	Future of the Atlantic Marine Environment	The FAME project involved partners from 5 countries (UK, Ireland, France, Spain and Portugal) who have interest, knowledge and expertise in the marine environment, ranging from seabird tracking and monitoring to mapping, data analysis and engagement with the offshore renewable energy and fisheries sectors.
FeAST	Feature Activity Sensitivity Tool	Developed annually by National Grid ESO with input from industry and other stakeholders. The FES represent a range of different, credible ways in which the energy system could evolve taking account of policy and legislation, including net zero targets.
FES	Future Energy Scenarios	Future Energy Scenarios (FES) represent a range of different, credible ways to decarbonise our energy system as we strive towards the 2050 target.
FEPA	Food and Environmental Protection Act	An Act to authorise the making in an emergency of orders specifying activities which are to be prohibited as a precaution against the consumption of food rendered unsuitable for human consumption in consequence of an escape of substances; controlling the deposit of substances and articles in the sea; to make provision for the control of the deposit of substances and articles under the sea-bed; to regulate pesticides and substances.
FLCP	Fisheries Liaison and Co-existence Plan	Fisheries Liaison and Co-existence Plans document and communicate commitments to coexist with the fishing industry in areas of marine operations and installations. Note that this will be a single document that will perform the role of other fisheries liaison plans, for instance, a Fisheries Management and Mitigation Strategy that will be produced following appointment of the Contractor.

Acronym or Abbreviation	Term	Definition
FLO	Fisheries Liaison Officer	FLOs liaise between fishing vessels and Clients, using local knowledge and fisheries experience to encourage co-operation and help ensure operations run smoothly and efficiently.
FLOWW	The Fishing Liaison with Offshore Wind and Wet Renewables Group	The Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) was setup in 2002 to foster good relations between the fishing and offshore renewable energy sectors and encourage co-existence of the industries in the UK.
FMMS	Fisheries Management and Mitigation Strategy	The production of a Fisheries Management and Mitigation Strategy (FMMS) is a condition of marine licences under the Marine (Scotland) Act 2010 and Marine and Coastal Access Act 2009 and section 36 consents under the Electricity Act 1989. The aim of a project FMMS is to implement all measures committed to during an application process.
FO	Fibre Optic	Consisting of or using thin flexible fibres with a glass core through which light signals can be sent with very little loss of strength.
FOC	Fibre Optic Cable	Consisting of or using thin flexible fibres with a glass core through which light signals can be sent with very little loss of strength.
FOCI	Features of Conservation Importance	Features of Conservation Interest (FOCI) are marine features that are particularly threatened, rare, or declining species and habitats.
FSA	Formal Safety Assessment	FSA is a structured and systematic methodology, aimed at enhancing maritime safety, including protection of life, health, the marine environment and property, by using risk analysis and cost benefit assessment.
FU	Functional Unit	A Functional Unit (FU) refers to a product, service or system whose impacts are calculated by a life-cycle assessment (LCA).
GBA	General Boating Area	GBA are areas of recreational boating activity in UK waters
GES	Good Environmental Status	The state of a water body, derived from a number of factors, including: the abundance of aquatic flora and fauna, nutrient availability, salinity, temperature and chemical pollution levels. If the water body meets certain criteria it can be assessed as having 'good ecological status'.
GIS	Geographic Information System	A geographic information system is a conceptualised framework that provides the ability to capture and analyze spatial and geographic data.
GW	Gigawatt	Unit of energy.
HDD	Horizontal Directional Drilling	Horizontal Directional Drilling is a guided trenchless method in which a pilot borehole is drilled along a pre-determined bore path, subsequent hole enlargement follows the path set by the pilot bore, from the surface with minimum disturbance.
HE	Historic England	Historic England is an executive non-departmental public body of the British Government sponsored by the Department for Digital, Culture, Media and Sport.
HER	Historic Environment Records	HERs are information services that provide access to comprehensive and dynamic resources relating to the archaeology and historic built environment of a defined geographic area.
HES	Historic Environment Scotland	Historic Environment Scotland is an executive non-departmental public body responsible for investigating, caring for and promoting Scotland's historic environment.
HMSO	Her Majesty's Stationery Office	Formerly, the government's official publisher. Following privatization in 1996 most of its functions were taken over by The Stationery Office but certain core functions of HMSO have been retained.

Acronym or Abbreviation	Term	Definition
HOCI	Habitats of Conservation Importance	Habitats of Conservation Importance (HOCI) are habitats which contain Features of Conservation Interest (FOCI).
HOW04	Ørsted Hornsea Four Wind Farm	Hornsea Four is an offshore wind farm which Ørsted is proposing to develop in the North Sea, approximately 69 km off the Yorkshire Coast. The export cable route runs adjacent to the Marine Installation Corridor between KP425 and KP431
HRA	Habitats Regulation Assessment	A Habitats Regulations Assessment (HRA) refers to the several distinct stages of Assessment which must be undertaken in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) to determine if a plan or project may affect the protected features of a habitats site before deciding whether to undertake, permit or authorise it.
HSC	Historic Seascape Characterisation	Historic Seascape Characterisation (HSC) maps describe historic cultural influences which shape present seascape perceptions across the UK's marine areas and coastal land.
HSE	Health, Safety and Environment	HSE (Health, Safety and Environment) is a set of processes and procedures identifying potential hazards to a certain environment, developing best practices to reduce or remove those hazards, and then training employees for accident prevention, accident response, etc.
HVAC	High Voltage Alternating Current	The preferred mode of onshore electricity transmission over long distances.
HVDC	High Voltage Direct Current	A high-voltage, direct current (HVDC) electric power transmission system (also called a power superhighway or an electrical superhighway) uses direct current (DC) for the bulk transmission of electrical power, in contrast with the more common alternating current (AC) systems.
Hz	Hertz	The hertz is the unit of frequency in the International System of Units and is defined as one cycle per second.
IALA	New International Association of Marine Aids to Navigation and Lighthouse Authorities	The International Association of Lighthouse Authorities (IALA) is a non-profit association established in 1957 to foster the safe, economic and efficient movement of vessels.
IAMMWG	Inter Agency Marine Mammal Working Group	The Joint Nature Conservation Committee chairs an inter-agency working group on marine mammals and industries in order to share knowledge across the four countries' nature conservation agencies and facilitate a joined-up approach to advice.
ICES	International Council for the Exploration of the Seas	The International Council for the Exploration of the Sea is the world's oldest intergovernmental science organization.
ICOMOS	International Council of Mounments and Sites	The International Council on Monuments and Sites is a professional association that works for the conservation and protection of cultural heritage places around the world.

Acronym or Abbreviation	Term	Definition
ICPC	International Cable Protection Committee	IALA is a non-profit, international technical association. Established in 1957, it gathers together Marine Aids to Navigation authorities, manufacturers, consultants, and scientific and training institutes from all parts of the world and offers them the opportunity to exchange and compare their experiences and achievements.
iE Field	Induced Electric Field	The induced electric field is a non-conservative field that is generated by a changing magnetic field.
IEMA	Institute of Environmental Management and Assessment	The Institute of Environmental Management and Assessment (IEMA) is a professional body for people working, studying or interested in the environment, sustainability and impact assessment.
IFCA	Inshore Fisheries and Conservation Authority	Inshore Fisheries and Conservation Authorities lead, champion and manage a sustainable marine environment and inshore fisheries by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry
IHLS	International Herring Larvae Surveys	The International Herring Larvae Surveys were in operation from 1967 – 2015. The main purpose of this survey was to provide quantitative estimates of herring larval abundance, which are used as a relative index of changes of the herring spawning-stock biomass.
ILB	Inshore Lifeboat	Inshore lifeboats (ILBs) usually operate closer to shore, in shallower water, near cliffs, rocks and even in caves. They are designed to be quick and manoeuvrable, allowing our crews to get as close as possible to those in need.
IMARES	Institute for Marine Resources and Ecosystem Studies	Institute for Marine Resources and Ecosystem Studies (IMARES) is the Netherlands research institute established to provide the scientific support that is essential for developing policies and innovation in respect of the marine environment, fishery activities, aquaculture and the maritime sector.
IMCA	International Marine Contractors Association	International Marine Contractors Association is a leading international trade association for the marine contracting industry. It is a not for profit organisation with members representing the majority of worldwide marine contractors in the oil and gas and renewable energy industries
IMO	International Maritime Organization	The International Maritime Organization is a specialised agency of the United Nations responsible for regulating shipping.
INNS	Invasive Non-Native Species	Species which have been introduced into areas outside their natural range through human actions and are posing a threat to native wildlife, are known as invasive non-native species.
IUCN	International Union of Conservation of Nature	The International Convention for the Conservation of Nature (IUCN) was founded in 1948 and has become a global authority on the status of the natural world and the measures needed to safeguard it.
JNAPC	Joint Nautical Archaeology Policy Committee	The Joint Nautical Archaeology Policy Committee (JNAPC) was formed as a working group in 1988 for individuals and organisations who wished to raise awareness of the UK's underwater cultural heritage.

Acronym or Abbreviation	Term	Definition
JNCC	Joint Nature Conservation Committee	The Joint Nature Conservation Committee is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.
kg	Kilogram	The kilogram is the base unit of mass in the International System of Units (equivalent to approximately 2.205 lb).
kHz	Kilohertz	A measure of frequency equivalent to 1,000 cycles per second.
KIS-ORCA	Kingfisher Information Service	The KIS-ORCA project is the only EU service aiming to provide complete coverage of offshore subsea cables and renewable developments. It is a joint initiative between the European Subsea Cables Association (ESCA), Renewable UK and the Kingfisher Information Service of Seafish.
km	Kilometre	Kilometre (km) is a unit of length equal to 1000 m and the equivalent of 0.6214 mile.
KP	Kilometre Point	A kilometre point is a term used to provide reference points alongside a transport route such as a road, a railway line or a canal. It is the distance in kilometres from a specified point.
kV	kilo Volts	A unit of electric potential, there are 1,000 volts (V) in a Kilovolt (kV).
LAT	Lowest Astronomical Tide	Lowest Astronomical Tide (LAT) is the lowest tide level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.
LPA	Local Planning Authority	A Local Planning Authority (LPA) is a local government body that is empowered by law to exercise urban planning functions for a particular area.
LSO	Long Sea Outfall	Long Sea Outfall is a pipeline or tunnel that discharges municipal or industrial wastewater, stormwater, combined sewer overflows (CSOs), cooling water, or brine effluents from water desalination plants to the sea.
m	Metre	It is the SI base unit of length (equivalent to approximately 39.37 inches), first introduced as a unit of length in the metric system.
m/s	Metres per Second	Meter per second is a unit of speed. The meter per second corresponds to the speed at which the body travels a distance of one meter in a time of one second.
MAG	Magnetometer	A magnetometer is a device that measures magnetic field or magnetic dipole moment.
MarESA	Marine Evidence based Sensitivity Assessment	These assessments are based on a detailed review of available evidence on the effects of pressures on biotopes, and a subsequent scoring of sensitivity against a standard list of pressures, and their benchmark levels of effect.
MARPOL	The International Convention for the Prevention of Pollution from Ships	The International Convention for the Prevention of Pollution from Ships (MARPOL) is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes.
MBES	Multi-beam Echo Sounder	A multibeam echosounder is a type of sonar that is used to map the seabed. Like other sonar systems, multibeam systems emit acoustic waves in a fan shape beneath the transceiver of the multibeam echosounder.
MCA	Maritime and Coastguard Agency	The Maritime and Coastguard Agency is an executive agency of the United Kingdom working to prevent the loss of lives at sea and is responsible, through the Secretary of State for Transport to Parliament, for implementing British and international maritime law and safety policy.

Acronym or Abbreviation	Term	Definition
MCAA	Marine and Coastal Access Act 2009	The Marine and Coastal Access Act 2009 (c 23) is an Act of the Parliament of the United Kingdom. It creates "a new system of marine management".
MCMS	Marine Case Management System	The Marine Case Management System is provided by the Marine Management Organisation to manage the determination of Marine Licence Applications.
MCZ	Marine Conservation Zone	Marine Conservation Zones are areas that protect a range of nationally important, rare or threatened habitats and species.
MEEB	Measures of Equivalent Environmental Benefit	Used in the context of MCZs to refer to measures of equivalent environmental benefit to the damage which an act will or is likely to have in or on an MCZ.
MEFEPO	Making the European Fisheries Ecosystem Plan Operational	The Making the European Fisheries Ecosystem Plan Operational (MEFEPO) project was designed to further development of a framework, and the supporting evidence base (natural and social science), to integrate the Marine Strategy Framework Directive (MSFD) objectives within a reformed Common Fisheries Policy in the context of ecosystem based fisheries management.
MFE	Mass Flow Excavator	MFE may be used for the excavation of the HDD exit pits, displacement plough backfill and/or burial of joints, as well as to increase burial depth in sections of the marine installation corridor with medium to coarse sands, where achieved burial depths using other methods may not meet the required minimum burial depth.
MGN	Marine Guidance Notice	Marine Guidance Notes (MGNs) gives guidance and recommendations about best practice to industry on interpretation of law and general safety advice.
MHWS	Mean High Water Spring	Mean high water springs is the highest level that spring tides reach on the average over a period of time. The height of mean high water springs is the average throughout the year of two successive high waters during those periods of 24 hours when the range of the tide is at its greatest.
MI	Mass-Impregnated	HVDC Mass Impregnated (MI) cables are a very consolidated and traditional technology mainly deployed for subsea applications.
MLA	Marine Licence Application	The Marine and Coastal Access Act 2009 states a marine licence is required for certain activities carried out within the UK marine area. A marine licence application can be submitted through the Marine Management Organisation (MMO).
MLWS	Mean Low Water Spring	The height of mean low water springs is the average throughout a year of the heights of two successive low waters during those periods of 24 hours (approximately once a fortnight) when the range of the tide is greatest.
mm	Millimetre	A millimetre (abbreviated as mm) is a small unit of displacement (length/distance) in the metric system.
MMO	Marine Management Organisation	The Marine Management Organisation is an executive non-departmental public body in the United Kingdom established under the Marine and Coastal Access Act 2009, with responsibility for English waters.
MMPP	Marine Mammal Protection Plan	A Marine Mammal Mitigation Plan (MMMP) is a written and finalised document listing appropriate mitigation measures during offshore activities that are likely to produce underwater noise and vibration levels capable of potentially causing injury or disturbance to marine mammals.

Acronym or Abbreviation	Term	Definition
MMSI	Maritime Mobile Service Identity	Maritime Mobile Service Identities (MMSIs) are nine digit numbers used by maritime digital selective calling (DSC), automatic identification systems (AIS) and certain other equipment to uniquely identify a ship or a coast radio station.
MoD	Ministry of Defence	The Ministry of Defence (MoD) is responsible for the defence, security and resilience of the UK and its overseas territories.
MoRPHE	Management of Research Projects in the Historic Environment	It is a written guidance for those planning research and research and development (R&D) projects in the historic environment.
MP	Member of Parliament	A member of parliament is a member of the House of Representatives, the lower house of the Commonwealth (federal) parliament.
MPA	Marine Protected Area	A Marine Protected Area (MPA) is a clearly defined geographical space, recognised through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.
MPP	Marine Planning Partnership	Responsibility for the development of Marine Plans in the UK has been delegated to the MMO in England. In Scotland, responsibility lies with Scottish Ministers, and can be delegated to Marine Planning Partnerships (MPPs) for the preparation of regional marine plans.
MPS	Marine Policy Statement	Prepared in March 2011 in accordance with Section 44 of the Marine and Coastal Access Act (MCAA) 2009. The MPS sets out the policies intended to help achieve sustainable development in the UK marine areas and provides the framework for preparing marine plans and for taking decisions that affect the marine environment.
MS	Marine Scotland	Marine Scotland manages Scotland's seas and freshwater fisheries along with delivery partners NatureScot and the Scottish Environment Protection Agency.
MSA	Marine (Scotland) Act 2010	An Act of the Scottish Parliament to make provision in relation to functions and activities in the Scottish marine area, including provision about marine plans, licensing of marine activities, the protection of the area and its wildlife including seals and regulation of sea fisheries; and for connected purposes.
MSFD	Marine Strategy Framework Directive	The Marine Strategy Framework Directive aims to achieve Good Environmental Status (GES) of the EU's marine waters and to protect the resource base upon which marine-related economic and social activities depend. The Directive enshrines in a legislative framework the ecosystem approach to the management of human activities having an impact on the marine environment, integrating the concepts of environmental protection and sustainable use.
MS-LOT	Marine Scotland Licensing Operations Team	MS-LOT is the regulator on behalf of Scottish Ministers for marine licence applications in the Scottish inshore region (between 0 and 12 nm) under the Marine (Scotland) Act 2010 and in the Scottish offshore region (between 12 and 200 nm) under the Marine and Coastal Access Act 2009.
MSP	Marine Spatial Planning	An approach to the management of the sea.
MSS	Marine Scotland Science	Marine Scotland Science (MSS) is the scientific division of the Marine Scotland Directorate and supports the Scottish Government by providing expert scientific advice, evidence to support policies, performing regulatory and enforcement activities relating to marine and freshwater fisheries, aquaculture, marine renewable energy and the aquatic environment and its flora and fauna.

Acronym or Abbreviation	Term	Definition
MTS	Marine Traffic Survey	A survey of maritime traffic, combining radar, Automatic Identification System and visual observations.
MU	Management Unit	Provide an indication of the spatial scales at which impacts of plans and projects alone, cumulatively and in-combination, need to be assessed for the key cetacean species in UK waters, with consistency across the UK.
NBN	National Biodiversity Network	The National Biodiversity Network (NBN) is a collaborative partnership created to exchange biodiversity information. The NBN Trust, the charity which oversees and facilitates the development of the Network, is a membership organisation built on these partnership principles.
NCERM	National Coastal Erosion Risk Mapping	The National Coastal Erosion Risk shows the coastal baseline. This baseline is split to 'frontages'. These are defined as lengths of coast with consistent characteristics based on the cliff behaviour characteristics and the defence characteristics.
NCMPA	Nature Conservation Marine Protected Area	Nature Conservation Marine Protected Areas (MPAs) are a type of marine protected area that can be designated in Scottish territorial and offshore waters.
NE	Natural England	Natural England was established by an Act of Parliament in 2006 with the purpose of helping to conserve, enhance and manage the natural environment.
NEIFCA	North Eastern IFCA	Inshore Fisheries and Conservation Authorities lead, champion and manage a sustainable marine environment and inshore fisheries by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry.
NEP	Northern Endurance Partnership	The Northern Endurance Partnership (NEP) enables Net Zero Teesside and the East Coast Cluster by providing the common infrastructure needed to transport CO2 from emitters in the Humber and Teesside to secure offshore storage in the North Sea.
NERC	Natural Environment and Rural Communities Act 2006	The act created Natural England and the Commission for Rural Communities and, amongst other measures, it extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity.
NERFIG	North and East Coast Regional Inshore Fisheries Group	The North and East Coast Regional Inshore Fisheries Group is responsible for developing and implementing its Fisheries Management Plan for the region as well as being a forum for discussing inshore fishing issues and making recommendations to Marine Scotland. It covers the area between Durness on the north coast and all the east coast down to Burnmouth by the border with England.
NFFO	National Federation of Fishermen's Organisations	The National Federation of Fishermen's Organisations (NFFO) exists to provide a voice for fishermen, irrespective of where on the coast they are based or the size of the vessel they operate.
NFPD	National Fish Populations Database	The National Fish Populations Database (NFPD) holds information collected from fisheries monitoring work on rivers, lakes, transitional and coastal waters.

Acronym or Abbreviation	Term	Definition
NGET	National Grid Electricity Transmission	The electricity transmission licensee that owns and maintains the onshore electricity transmission assets in England and Wales.
NGV	National Grid Ventures	National Grid Ventures is a diverse portfolio of commercial energy businesses operating in competitive markets in the UK and the US.
NIFCA	Northumberland Inshore Fisheries Conservation Authority	Inshore Fisheries and Conservation Authorities lead, champion and manage a sustainable marine environment and inshore fisheries by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry.
NLB	Northern Lighthouse Board	The Northern Lighthouse Board is the General Lighthouse Authority for Scotland and the Isle of Man, currently operating and maintaining 207 lighthouses and 170 buoys.
NM	Nautical Mile	A nautical mile is a unit of measurement used in air, marine, and space navigation, and for the definition of territorial waters. It is based on the circumference of the earth, and is equal to one minute of latitude. It is slightly more than a statute (land measured) mile (1 nautical mile = 1.1508 statute miles). Nautical miles are used for charting and navigating.
NMFS	US National Marine Fisheries Service	The National Marine Fisheries Service, informally known as NOAA Fisheries, is a United States federal agency within the U.S. Department of Commerce's National Oceanic and Atmospheric Administration that is responsible for the stewardship of U.S. national marine resources.
NMP	National Marine Plan	A National Marine Plan (NMP) provides a comprehensive overarching framework for all marine activities in a specified area.
NMPi	National Marine Plan Interactive	Interactive mapping tool is to assist in the development and implementation of Scotland's National Marine Plan (NMP) by Marine Scotland.
NNRCMP	National Network of Regional Coastal Monitoring Programmes	The Network comprises six Regional Programmes, collecting coastal monitoring data in a co-ordinated and systematic manner to serve the needs of coastal engineering and management.
NOA	Network Options Appraisal	The Transmission Owners and other stakeholders respond to ETYS with solutions to address network capability requirements. These are assessed by National Grid ESO so that the most economic and efficient solutions are recommended to proceed, and others told to hold or stop.
NPS	National Policy Statement	National Policy Statements are produced by government. They give reasons for the policy set out in the statement, and must include an explanation of how the policy takes account of government policy relating to the mitigation of, and adaptation to, climate change. They comprise the government's objectives for the development of nationally significant infrastructure in a particular sector and state.
NRA	Navigational Risk Assessment	Navigation (Marine) Risk Assessment identifies and assesses the hazards and risks affecting vessel navigation, before considering current controls to mitigate risks and further controls that could be adopted to minimise risk as low as reasonably practicable (ALARP).

Acronym or Abbreviation	Term	Definition
NRHE	National Record of the Historic Environment	The National Record of the Historic Environment (NRHE) contains over 550,000 digital records relating to England's historic environment and has been in development since the 1980s.
NRW	Natural Resources Wales	Natural Resources Wales is a Welsh Government sponsored body, which became operational from 01 April 2013, when it took over the management of the natural resources of Wales.
NSIP	Nationally Significant Infrastructure Project	Major infrastructure developments in England and Wales that bypass normal local planning requirements.
NSL	North Sea Link	The North Sea Link is a 720 km subsea interconnector linking the electricity systems of the UK and Norway.
NSN	North Sea Network	The North Sea Network of Investigators and Prosecutors, NSN for short, was set up in 2002 to help enforcement and prosecution of MARPOL maritime pollution offences aiming to prevent and minimize pollution from ships, both accidental and that from routine operations, in the North Sea.
NST Authority	North Sea Transition Authority	The North Sea Transition Authority (NSTA) regulate and influence the oil, gas and carbon storage industries and help to drive the North Sea energy transition.
NtM	Notice to Mariners	A notice to mariners advises mariners of important matters affecting navigational safety, including new hydrographic information, changes in channels and aids to navigation, and other important data. Over 60 countries which produce nautical charts also produce a notice to mariners.
NZNS	Net Zero North Sea Storage	Net Zero North Sea Storage is a subsidiary company of BP Exploration Operating Company Limited.
NZT	Net Zero Teesside	Net Zero Teesside is a collection of industrial, power and hydrogen businesses which aim to decarbonize their operations through the deployment of carbon capture utilization and storage (CCUS).
O&M	Operations and Maintenance	Operations & Maintenance (O&M) means the functions, duties and labour associated with the daily operations and normal repairs, replacement of parts and structural components, and other activities needed to preserve an asset so that it continues to provide acceptable services and achieves its expected life.
OGA	Oil and Gas Authority	Oil and Gas Authority is now called North Sea Transition Authority. It is a private company limited by shares wholly owned by the Secretary of State for Business, Energy and Industrial Strategy. It is responsible for maximising the economic recovery of oil from the North Sea.
OGUK	Oil & Gas UK	Oil and Gas UK is the leading trade association for the UK's offshore oil and gas industry.
OOS	Out of Service	Cables which are out of service.
ORPAD	Protocol for Archaeological Discoveries: Offshore Renewables Projects	The aim of the Protocol for Archaeological Discoveries (PAD) is to provide a system for reporting and investigating unexpected archaeological discoveries encountered during site investigation, construction and installation work.

Acronym or Abbreviation	Term	Definition
OSRL	Oil Spill Response Ltd	Oil Spill Response Limited (OSRL) is an industry-owned and funded cooperative that exists to respond effectively to oil spills.
OWF	Offshore wind farm	As offshore wind farm can be defined as a power plant that contains all the facilities needed to capture the wind power, transform it into electricity and supply it to the main electricity network.
PAC	Pre-application Consultation	Pre-application consultation is consultation undertaken in advance of a Marine Licence Application. It may be voluntary or may be required under The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 in Scottish territorial waters.
PAD	Protocol for Archaeological Discoveries	A system for reporting and investigating unexpected archaeological discoveries encountered during installation activities, with a Retained Archaeologist providing guidance and advising industry staff on the implementation of the PAD
PAH	Polycyclic Aromatic Hydrocarbon	Polycyclic aromatic hydrocarbons are a class of chemicals that occur naturally in coal, crude oil and gasoline.
PDE	Project Design Envelope	The Rochdale Envelope approach or Project Design Envelope was developed during onshore planning applications to provide flexibility in design options where details of the whole project are not available when the application is submitted, while ensuring the impacts of the final development are fully assessed during the Environmental Impact Assessment (EIA).
PDV	Phocine Distemper Virus	Phocine Distemper Virus is a virus that is pathogenic for pinniped species, particularly seals and has caused very large and well-documented epizootics in seals in Europe.
PEXA	Military Practice and Exercise Areas	Military Practice and Exercise Areas are areas along the coast used by the Ministry of Defence (MoD) for training and locating bases. The sea is also used for training and test and evaluation activities as well as surveillance and monitoring of potential threats.
PINS	Planning Inspectorate	The Planning Inspectorate for England is an executive agency of the Department for Levelling Up, Housing and Communities of the United Kingdom Government with responsibility to make decisions and provide recommendations and advice on a range of land use planning-related issues across England.
PLB	Post-Lay Burial	Post Lay Burial is the last stage of cable installation where a ROV buries the cable to the required depth.
PLGR	Pre-Lay Grapnel Run	The Pre Lay Grapnel Run occurs a few days before the installation. The ship dredges a grapnel to clear any obstacle that could obstruct the plough, such as fishing nets, ropes, lines
PLONOR	Pose Little or No Risk to the Environment	Substances/Preparations Used and Discharged Offshore which are Considered to Pose Little or No Risk to the Environment (PLONOR).
PMF	Priority Marine Feature	Priority Marine Features are habitats and species considered to be marine nature conservation priorities.
PMRA 1986	Protection of Military Remains Act 1986	The Protection of Military Remains Act 1986 prohibits entering and tampering with wrecked military vessels or aircraft. All military aircraft is automatically protected under this legislation, but vessel's need to be designated individually.
PPA	Planning Performance Agreement	A planning performance agreement is a project management tool which the local planning authorities and applicants can use to agree timescales, actions and resources for handling particular applications.

Acronym or Abbreviation	Term	Definition
PPL	Paper-polypropylene Laminate	Polypropylene paper laminate (PPL) is an insulation comprising an extruded sheet of polypropylene on either side of which are bonded two layers of thin paper.
PSA	Particle Size Analysis	The particle-size analysis of a powder, or granular material, or particles dispersed in fluid, is a list of values or a mathematical function that defines the relative amount, typically by mass, of particles present according to size
PSD	Particle Size Distribution	The particle-size distribution of a powder, or granular material, or particles dispersed in fluid, is a list of values or a mathematical function that defines the relative amount, typically by mass, of particles present according to size
PTS	Permanent Threshold Shift	A permanent elevation in hearing threshold (i.e., an unrecoverable reduction in hearing sensitivity). PTS can occur from a variety of causes, but it is most often the result of intense and / or repeated noise exposures
PW	Pinnipeds in Water	The pinnipeds are a group of the marine mammals, which includes the seals, sea lions, and walrus.
PWA 1973	Protection of Wrecks Act 1973	The Protection of Wrecks Act 1973 secures the protection of wrecks in territorial waters and the sites of such wrecks from interference by unauthorised individuals.
RBMP	River Basin Management Plan	River basin management plans (RBMPs) set out how organisations, stakeholders and communities will work together to improve the water environment.
RCP	Representative Concentration Pathway	A Representative Concentration Pathway is a greenhouse gas concentration trajectory adopted by the IPCC. Four pathways were used for climate modeling and research for the IPCC fifth Assessment Report in 2014
RIFG	Regional Inshore Fisheries Group	The Regional Inshore Fisheries Groups (RIFGs) is a network that was established in 2016 for local fishers to come together to explore local fisheries management initiatives. The networks aim is to improve the sustainable management of inshore fisheries and to give commercial fishers a voice in wider marine management developments.
RMP	Regional Marine Plan	It is the intention that 11 Regional Marine Plans (RMPs) will eventually support the NMP and cover territorial waters in each of the Scottish Marine Regions.
RNLI	Royal National Lifeboat Institution	The Royal National Lifeboat Institution is the largest charity that saves lives at sea around the coasts of the United Kingdom, the Republic of Ireland, the Channel Islands, and the Isle of Man, as well as on some inland waterways. It is one of several lifeboat services operating in the same area.
ROV	Remotely Operated Vehicle	ROVs are often used when diving by humans is either impractical or dangerous, such as working in deep water or investigating submerged hazards. ROVs and AUVs carry equipment like video cameras, lights, robotic arms to grab things.
RRM	Risk reduction measure	Measures to reduce the frequency or severity of losses, also known as loss control.
RSPB	Royal Society for the Protection of Birds	The Royal Society for the Protection of Birds is a charitable organisation registered in England and Wales and in Scotland. It was founded in 1889.
RYA	The Royal Yachting Association	The Royal Yachting Association is a United Kingdom national body for dinghy sailing, yacht and motor cruising, sail racing, RIBs and Sportsboats, windsurfing and personal watercraft and a leading representative for inland waterways cruising.
SAC	Special Area of Conservation	A Special Area of Conservation (SAC) protects one or more special habitats and/or species – terrestrial or marine – listed in the Habitats Directive.

Acronym or Abbreviation	Term	Definition
SAR	Search and Rescue	Search and Rescue (SAR) is the search for and provision of aid to people who are in distress or imminent danger.
SARH	Search and Rescue by Helicopter	Helicopters used in Search and Rescue (SAR) operations.
SBP	Sub-bottom Profiler	Directing a pulse of acoustic energy into the seabed and using reflections from the sub-surface geology to assess the thickness or depth of the sediment
SCANS	Small Cetaceans in European Atlantic waters and the North Sea Project	SCANS is a series of large-scale surveys for cetaceans in European Atlantic waters with the purpose of providing estimates of abundance needed to put bycatch in a population context and to allow EU Member States to discharge their responsibilities under the Habitats Directive.
SCOS	Special Committee on Seals	NERC has appointed the SCOS to provide scientific advice to government on matters related to the management of seal populations
SDC	Selby District Council	Selby District Council is a local government district of North Yorkshire, England.
SEA	Strategic Environmental Assessment	Strategic environmental assessment is a systematic decision support process, aiming to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and program making.
SEGL1	Scotland England Link 1	A second HVDC link, 'Scotland England Green Link 1', or 'SEGL1' (also known as Eastern Link 1 (EL1)) from a Scottish landfall at Thorntonloch Beach to an English landfall at Seaham.
SEL	Sound Exposure Level	Sound Exposure Level (SEL) is a measure of energy that takes into account both received level and duration of exposure.
SEL _{cum}	Cumulative Sound Exposure Level	The cumulative sound exposure level combines the relative energies of ambient, shipping, and seismic sounds.
SEPA	Scottish Environment Protection Agency	The Scottish Environment Protection Agency is Scotland's environmental regulator and national flood forecasting, flood warning and strategic flood risk management authority. Its main role is to protect and improve Scotland's environment.
SFF	Scottish Fishermen's Federation	The Scottish Fishermen's Federation is the largest fish Producer Organisation (PO) in the UK and one of the biggest in Europe.
SG	Scottish Government	The devolved government for Scotland is responsible for most issues concerning the people of Scotland.
SHE Transmission	Scottish Hydro Electric Transmission	Scottish Hydro Electric Transmission is the licensed Transmission Owner (TO) of northern Scotland's electricity network.

Acronym or Abbreviation	Term	Definition
SIMOPS	Simultaneous Operations	Simultaneous operations (SIMOPs) are situations where two or more operations or activities occur at the same time and place.
SMP	Shoreline Management Plan	A Shoreline Management Plan (SMP) is a strategy for managing flood and erosion risk for a particular stretch of coastline, over short, medium and long-term periods.
SMRTS	Scottish Marine Recreation and Tourism Survey 2015	The Scottish Marine Recreation and Tourism Survey (SMRTS) was carried out between August 2015 and October 2015. It was designed to gather information for 23 different recreation and tourism activities undertaken at sea or around the Scottish coastline.
SMWWC	Scottish Marine Wildlife Watching Code	Scottish Marine Wildlife Watching Code is a concise code of conduct sets out best practice on watching marine wildlife whether you're on the coast, on the sea or in the sea.
SNH	Scottish Natural Heritage	NatureScot, which was formerly known as Scottish Natural Heritage, is the public body responsible for Scotland's natural heritage, especially its natural, genetic and scenic diversity.
SOA	Strategic Options Appraisal	An options appraisal is a technique for reviewing options and analyzing the costs and benefits of each one.
SOLAS	Safety of Life at Sea 1974	The International Convention for the Safety of Life at Sea (SOLAS) is an international maritime treaty that sets minimum safety standards in the construction, equipment and operation of merchant ships.
SOPEP	Shipboard Oil Pollution Emergency Plan	The Shipboard Oil Pollution Emergency Plan, or SOPEP, is a prevention plan carried on board tanker and other vessels. It contains an overview of possible procedures in case of an oil spill. It also describes who should be contacted (list of authorities, oil cleanup teams and port state control) and how to report the event to the nearest coast guard station.
SPA	Special Protection Area	A Special Protection Area (SPA) is the land designated under Directive 2009/147/EC on the Conservation of Wild Birds. SPAs are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979.
SPL	Sound Pressure Level	Sound Pressure Level (SPL) is the pressure level of a sound, measured in decibels (dB).
SPL _{peak}	Peak Sound Pressure Level	The Peak Sound Pressure Level is 137 decibels (dB).
SPM	Suspended Particulate Matter	Suspended particulate matter (SPM) are finely divided solids or liquids that may be dispersed through the air from combustion processes, industrial activities or natural sources.
SPT	Scottish Power Transmission	SP Transmission (SPT) is responsible for the transmission of electricity in central and southern Scotland.
SSC	Suspended Sediment Concentrations	Suspended Sediment Concentration (SSC) is defined as the total value of both mineral and organic material carried in suspension in water.

Acronym or Abbreviation	Term	Definition
SSS	Side Scan Sonar	Mapping of the seabed surface and identification of sediment types. Obstacles lying on the seabed, such as wrecks, trawler debris and surface-laid or exposed pipelines and cables that might impede cable installation can be identified from the SSS outputs
SSSI	Site of Special Scientific Interest	Sites of Special Scientific Interest (SSSIs) is a conservation designation denoting a protected area in the United Kingdom where some of the most important habitats, species and geological features can be found.
STAR	Seabird Tracking and Research	The BirdLife International Seabird Tracking Database is the largest collection of seabird tracking data in existence. It serves as a central store for seabird tracking data from around the world and aims to help further seabird conservation work and support the tracking community.
STECF	EU Scientific, Technical and Economic Committee for Fisheries	The Commission involved with consultations on matters pertaining to the conservation and management of living marine resources, including biological, economic, environmental, social and technical considerations.
SWFPA	Scottish White Fish Producers Association	The Scottish Whitefish Producers Association (SWFPA) is the largest Association of fishermen in the UK, its member's activities account for a significant proportion of Scottish and UK landings both in terms of volume and income.
TCE	The Crown Estate	The Crown Estate was established by an Act of Parliament over 260 years ago and is tasked with generating profit for the Treasury, being custodians of the Windsor Estate and managing the seabed and half the foreshore around England, Wales and Northern Ireland.
TH	Trinity House	Trinity House is a charity dedicated to safeguarding shipping and seafarers with a statutory duty to act as the General Lighthouse Authority (GLA).
The Sofia Charter	Charter on the Protection and Management of Underwater Cultural Heritage 1996	This Charter is intended to encourage the protection and management of underwater cultural heritage in inland and inshore waters, in shallow seas and in the deep oceans.
TJB	Transition Joint Bay	The offshore cables are connected to onshore cables near the coast at a Transition Joint Bay (TJB) above the beach.
TJP	Transition Joint Pit	Underground pit where the offshore export cables are jointed to the connection works.
TO	Transmission Operator	An entity entrusted with transporting energy.
TOC	Total Organic Carbon	Total Organic Carbon (TOC) is a measure of the total amount of carbon in organic compounds in pure water and aqueous systems.
TOM	Total Organic Matter	Total Organic Matter (TOM) is the amount of carbon in an organic compound in this case seabed sediments.
TPH	Total Petroleum Hydrocarbon	Total petroleum hydrocarbons (TPH) is a term used to describe a large family of several hundred chemical compounds that originally come from crude oil.

Acronym or Abbreviation	Term	Definition
TraC	Transitional and Coastal Waters	Transitional waters are zones where seawater is diluted with river water and is a transition zone between the river and sea. Coastal waters represent the interface between land and ocean and in the context of the Water Framework Directive coastal waters include water, that has not been designated as transitional water, extending one nautical mile from a baseline defined by land points where territorial waters are measured.
TSS	Traffic Separation Scheme	A traffic separation scheme or TSS is a maritime traffic-management route-system ruled by the International Maritime Organization or IMO. The traffic-lanes (or clearways) indicate the general direction of the ships in that zone; ships navigating within a TSS all sail in the same direction or they cross the lane in an angle as close to 90 degrees as possible.
TTS	Temporary Threshold Shift	A recoverable elevation in hearing threshold (i.e., a non-permanent reduction in hearing sensitivity) most commonly resulting from long-term noise exposure not high enough to cause PTS
TW	Territorial Waters	Territorial waters are considered everything from the baseline to a limit not exceeding twelve nautical miles is considered the State's territorial sea.
UK	United Kingdom	The United Kingdom, made up of England, Scotland, Wales and Northern Ireland, is an island nation in north-western Europe.
UK BAP	UK Biodiversity Action Plan	The UK Biodiversity Action Plan was published in 1994 and was the government's response to the Convention on Biological Diversity (CBD) which the UK signed up to in 1992. The CBD called for the development and enforcement of national strategies and associated action plans to identify, conserve and protect existing biological diversity and to enhance it wherever possible.
UKCCP18	UK Climate Change Projections 2018	The UK Climate Projections (UKCP) is a set of tools and data that shows you how the UK climate may change in the future.
UKCP	UK Climate Projections	The UK Climate Projections (UKCP) is a climate analysis tool that forms part of the Met Office Hadley Centre Climate Programme.
UKCS	UK Continental Shelf	The UK Continental Shelf (UKCS) is the region of waters surrounding the United Kingdom in which the country has mineral rights.
UKHO	UK Hydrographic Office	The UK Hydrographic Office (UKHO) is a world-leading centre for hydrography, specialising in marine geospatial data that helps others to unlock a deeper understanding of the world's oceans.
UKOOA	UK Offshore Operators Association	The UK Offshore Operators Association (UKOOA) is now Oil & Gas UK which was founded in 2007.
UKSIA	UK Single Issuing Authority	The UKSIA manages UK domestic fishing vessel access to non-UK waters and foreign vessel access to UK waters.
UN	United Nations	The United Nations is an intergovernmental organization whose purpose is to maintain international peace and security, develop friendly relations among nations, achieve international cooperation, and be a centre for harmonizing the actions of nations.
UNCLOS	United Nations Convention for the Law of the Sea 1982	Also called the Law of the Sea Convention or the Law of the Sea Treaty, is an international agreement that establishes a legal framework for all marine and maritime activities.

Acronym or Abbreviation	Term	Definition
UNEP	United Nations Environment Programme	The United Nations Environment Programme is responsible for coordinating responses to environmental issues within the United Nations system.
UNESCO	The United Nations Educational, Scientific and Cultural Organization	The United Nations Educational, Scientific and Cultural Organization is a specialised agency of the United Nations aimed at promoting world peace and security through international cooperation in education, arts, sciences and culture.
USBL	Ultra-short Base Line	A method of underwater acoustic positioning.
UTM	Universal Transverse Mercator	Universal Transverse Mercator (UTM) is a coordinates and map projection system .
UXO	Unexploded Ordnance	Explosives that did not explode when deployed and thus still pose a risk of detonation.
Valletta	European Convention on the Protection of the Archaeological Heritage 1992	The Valletta Treaty is a multilateral treaty of the Council of Europe. The 1992 treaty aims to protect the European archaeological heritage as a source of European collective memory and as an instrument for historical and scientific study.
VC	Vibrocore	Is used for obtaining sediment cores up to 4m long and 3 inches in diameter from unconsolidated sediments.
VMS	Vessel Monitoring System	Vessel Monitoring System data tracks vessels in a similar way to an Automatic Identification System but this data has historically been restricted to government regulators or other fisheries authorities.
VTS	Vessel Traffic Service	Vessel traffic service (VTS) are shore-side systems which range from the provision of simple information messages to ships, such as position of other traffic or meteorological hazard warnings, to extensive management of traffic within a port or waterway.
WFD	European Communities Water Framework Directive (WFD) 2000/60/EC	A European Union Directive which commits member states to achieve good status of all waterbodies (both surface and groundwater), and also requires that no such waterbodies experience deterioration in status. Good status is a function of good ecological and good chemical status, defined by a number of elements.
WoE	Weight of Evidence	WoE is a method for decision-making that involves consideration of multiple sources of information and lines of evidence. In the absence of Environmental Quality Standards for in situ sediments in the UK, a series of guidance has been used to help inform a WoE approach to assess whether benthic ecology is at risk from concentrations of toxic contaminants, refer to Chapter 8: Benthic Ecology.
WSI	Written Scheme of Investigation	Documents which set out the approach to undertaking archaeological monitoring of ground investigation works.

Acronym or Abbreviation	Term	Definition
WWT	Wildfowl and Wetlands Trust	The Wildfowl & Wetlands Trust is an international wildfowl and wetland conservation charity in the United Kingdom.
XLPE	Cross-linked Polyethylene	Cross-linked polyethylene, commonly abbreviated PEX, XPE or XLPE, is a form of polyethylene with cross-links. It is used predominantly in building services pipework systems, hydronic radiant heating and cooling systems, domestic water piping, and insulation for high tension electrical cables.
Zol	Zone of Influence	A Zone of Influence (Zol) is an area which may be affected by the proposed changes associated with the Marine Scheme.
°C	Degree Celsius	The degree Celsius is a unit of temperature on the Celsius scale.

3. Glossary

Term	Definition
Admiralty Chart	Nautical charts issued by the United Kingdom Hydrographic Office and subject to Crown Copyright.
Bathymetry data	Bathymetry is the information that describes the topography of the seabed. It is an essential component in understanding the dynamics of the marine environment, both in terms of sediment transport but also in the prediction of tides, currents and waves.
Cable crossings	The crossing of existing submarine cables by the Project Marine Scheme.
Combined Effects	These effects derive from combinations of Scheme-specific impacts which, when acting together, would result in a new or different likely significant effect or an effect of greater significance than one impact would result in when considered in isolation.
Concrete mattressing	A rectangular unit made of concrete blocks joined together by polypropylene ropes. The mattress is flexible in two dimensions and is available in a range of thicknesses to suit the conditions required. Concrete mattresses are used for the anchorage and protection of underwater pipelines and cables and for protecting the foundations of structures against water scouring.
Converter station	An HVDC converter station (or simply converter station) is a specialised type of substation which forms the terminal equipment for a high-voltage direct current (HVDC) transmission line. It converts direct current to alternating current or the reverse.
Crossing Agreements	Crossing agreements help ensure that pipeline operators know about upcoming crossings or excavation work so they can help prevent accidents.
Cumulative Effects	These effects derive from Scheme-specific impacts which, when considered together with the impacts of other planned developments, could result in a new or different likely significant effect or an effect of greater significance than the Projects's effect when considered in isolation.
Do nothing' option	A scenario used for the purposes of assessments where the Project is not created.
Embedded mitigation measures	Mitigation measures designed into the project.
Emergency Spill Response Plan	A plan which is followed after a spillage of hazardous chemicals.
English Landfall	The point at which the Project Marine Scheme reaches land within England.
Environmental Impact Assessment Directive	A piece of legislation which aims to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation of projects, plans and programmes with a view to reduce their environmental impact.
European Protected Sites	The EU's Natura 2000 network and the Bern Convention's Emerald Network are ecological networks of protected areas, set up to ensure the survival of Europe's most valuable species and habitats.
Functionally-linked habitat	Habitat outside the boundaries of a European site but which is essential for achieving the conservation objectives of that European site.
Good Chemical Status	For surface waters, good chemical status means that no concentrations of priority substances exceed the relevant EQS established in the Environmental Quality Standards Directive 2008/105/EC (as amended by the Priority Substances Directive 2013/39/EU).
Guard vessel	During the Installation Phase of the Marine Scheme, the construction site needs to be secured by a guard vessel. The vessel must constantly monitor marine traffic near the construction site visually and with radar and AIS.

Term	Definition
Intertidal area	The extent of soft sediment beach that lies between High Water Springs and Low Water Springs at the landfall location.
Kingfisher Bulletins	The Kingfisher Bulletin provides the fishing and marine industries with alerts of offshore hazards, activity notices and news via a website, app and a personalised alerts service.
Marine aquaculture sites	Locations of registered active and inactive marine finfish and shellfish farming sites.
Marine Cable Route	The proposed route of the marine elements of the Project.
Marine Licence	Marine licences are an authorisation for activities such as: coastal and marine developments. windfarms. wave and tidal power. removing and disposing of marine dredged material at sea.
Mechanical ploughing	A mechanical plough is a device towed along the seabed and is optimised to help deliver reductions in the cost of offshore wind installation and to minimise project risk by combining operations to reduce the time required to install subsea cables.
Metoccean	Metoccean conditions refer to the combined wind, wave and climate (etc.) conditions as found on a certain location.
NAVAREA warnings	NAVAREAs are the maritime geographic areas in which various governments are responsible for navigation and weather warnings.
Navigational dredging sites	Dredging sites to deepen berths and channels for the purpose of navigation. Navigational dredging will usually require a licence but there is an exemption available for low volume dredging and harbour authorities in certain circumstances.
Nephrop grounds	Areas where Norway prawns (<i>Nephrops norvegicus</i>) can be fished.
Open cut	Open cut is a method of installation that requires opening up the surface of the ground to the required depth for installing a cable.
Project Marine Scheme	The offshore elements of the Project which fall within Scottish and English territorial and offshore waters.
Project Scottish Onshore Scheme	The onshore elements of the Project within Scotland.
RADAR	Radar is a detection system that uses radio waves to determine the range, angle, or velocity of objects.
Ramsar sites	Ramsar sites are wetlands of international importance designated under the Ramsar Convention.
Rock placement vessel	A rock placement vessel or fallpipe vessel (FPV) is a self-propelled vessel that is equipped with a flexible fallpipe. The vessel's design allows the fallpipe to be lowered into the water beneath the vessel. Uniquely, the fallpipe vessel can position rock with extreme accuracy down to a depth of 1,500 meters.
Scottish landfall	The point at which the Marine Scheme reaches land within Scotland.
Seabed plough	Subsea cable ploughs are used for the process of pre-trenching cable routes and backfilling the seabed and are designed to work in a seabed consisting mostly of sands and clays, where the seabed is well known and understood.
Side-Scan Sonar surveys	Side-scan sonar produces a detailed picture of the seafloor or riverbed, regardless of water clarity. The system, which may be towed from a surface vessel or mounted on a ship's hull, emits fan shaped pulses down towards the seafloor across a wide angle, perpendicular to the path of the sensor through the water.
Statutory consultation	Engagement with stakeholders determined or governed by statutory requirements.
Statutory consultee	Organisations and bodies, defined by statute, which must be consulted on relevant planning matters.

Term	Definition
Study Area	The spatial area within which environmental effects are assessed (i.e. extending a distance from the project footprint in which significant environmental effects are anticipated to occur).
Substation	A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions.
Subtidal drill conduit breakout points	The area below MHWS where the drill route will breach through the seabed, forming connection points for the marine cable.
Suspended sediment concentration	Is defined as the total value of both mineral and organic material carried in suspension by a river.
The Project	All offshore and onshore elements of the project within the project boundary.
Transboundary effects	The term used to describe the significant environmental effects of a project which extend beyond the boundary of the European Economic Area State within which it would be implemented.
Transition Joint Pit	Sterile working area forming the connection point between marine HV and terrestrial HV cable.
UK Marine Area	The UK marine area extends over 867,400 km ² , It is rich in marine life and natural resources.
UKHO	The UK Hydrographic Office (UKHO) is a world-leading centre for hydrography, specialising in marine geospatial data that helps others to unlock a deeper understanding of the world's oceans.

