

GLOSSARY

Term	Definition
Allision	Contact between a moving and stationary object.
Automatic Identification System (AIS)	Automatic Identification System. A system by which vessels automatically broadcast their identity, key statistics e.g. length, brief navigation details e.g. location, destination, speed and current status e.g. survey. Most commercial vessels and European Union (EU) fishing vessels over 15 m are required to have AIS.
Baseline	The existing environment.
Bathymetry	The measurement of water depth in oceans, seas and lakes.
Biodiversity	The amount of diversity between different plants, animals and other species in a given habitat at a particular time.
Capital breeder (life history)	Capital breeders use energy stored prior to the breeding season to meet the costs of reproduction.
Capital Expenditure (CAPEX)	Funds used by a company to acquire, upgrade, and maintain physical assets such as property, industrial buildings, or equipment.
Cetacean	The order Cetacea includes whales, dolphins and porpoises, collectively known as cetaceans.
Collision	The act or process of colliding (crashing) between two moving objects.
Collision Risk Modelling (CRM)	Prediction of the number of bird collisions that might be caused by a wind farm development.
Creel	Small traps baited with fresh or salted fish are set down on the seabed to catch crabs, lobster and Nephrops.
Cumulative effects	The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.
Cumulative impact	Impacts that result from changes caused by other projects and plans together with Project Alpha and Project Bravo.
dBht	A frequency weighted scale. The dBht (Species) provides a measurement of sound that accounts for inter-species differences in hearing ability.
Demersal	Living in close relation with the bottom of a body of water and dependent upon it.
Demersal otter trawl	Trawl towed by a single boat; their horizontal opening is obtained by otter boards, relatively heavy and equipped with a steel sole designed for good contact with the ground.
Design Envelope	The 'Design Envelope' (otherwise known as the 'Rochdale Envelope') enables assessment of impacts based on a range of projects design parameters.
Dose response curve	A fitted mathematical relationship between the magnitude of a stressor and the magnitude of the response. In the context of this chapter this term refers to fitted relationship between the received sound level and the proportion of animals that would be predicted to respond by moving away.
Dredges	Gear dragged along the bottom, usually to collect molluscs such as mussels, oysters, scallops, clams, etc. The shellfish are held in a sort of bag or sieve which allows the water, sand or mud to run out. Boat dredges are dredges of varying weight and size, but are usually fairly heavy, equipped with or without diving boards

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Effect	The physical change in the environment as a result of a particular activity or activities related to the development (e.g. the placement of anchors, trenching, and cable burial). Effects are usually measurable (e.g. area, weight, length, time, volume) and include a range of physical changes to the environment (e.g. sediment removal, elevated turbidity, noise, etc.).
Environmental Statement (ES)	A document reporting the findings of the Environmental Impact Assessment (EIA) and produced in accordance with the EIA Directive as transposed into United Kingdom (UK) law by the EIA Regulations.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement.
European site	A Special Area of Conservation (SAC) or candidate SAC, a Special Protection Area (SPA) or potential SPA, a site listed as a site of community importance or a Ramsar site.
Fecundity	The reproductive rate of an animal or population, measured by the number of offspring. In this sense, fecundity may include both birth rates and survival of young to a particular time step.
Fishing gear	Equipment used for fishing.
Fleet	A number of vessels having a shared origin, purpose or area of operation.
Formal Safety Assessment (FSA)	A structured and systematic process for assessing the risks and costs (if applicable) associated with shipping activity.
Future Case	The assessment of risk based on the predicted growth in future shipping densities and traffic types as well as foreseeable changes in the marine environment.
Gross Value Added (GVA)	The value generated by any unit engaged in the production of goods and services.
Habitats Regulations Appraisal (HRA)	A process which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites.
High Voltage Alternating Current (HVAC)	High voltage alternating current is the bulk transmission of electricity by alternating current (AC), whereby the flow of electric charge periodically reverses direction.
High Voltage Direct Current (HVDC)	High voltage direct current is the bulk transmission of electricity by direct current (DC), whereby the flow of electric charge is in one direction.
Impact	Change that is caused by an action; for example, rock deposit (action) during construction which results in habitat loss (impact).
Income breeder (life history)	An income breeder is an animal which uses concurrent energy intake to support the energetic cost of breeding and, unlike a capital breeder doesn't rely on stores of energy built up over time.
Indirect effects	Effects on the environment, which are not a direct result of the development but are often produced away from it or as a result of a complex pathway. Sometimes referred to as secondary impacts.
In-Fill	A technique for mitigating the effects of wind turbines on radar whereby the affected radar is blanked in the area of the wind farm and data from an alternate unaffected radar is used to fill the blanked area.
Landscape character	A distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse, and how these are perceived by people.

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Landscape character type	A landscape type would have broadly similar patterns of geology, landform, soils, vegetation, land use, settlement and field pattern discernible in maps and field survey records.
Landscape effects	Effects on the landscape as a resource in its own right.
Landscape quality (or condition)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Magnitude (of impact)	A term that combines judgements about the size and scale of the impact assessed, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term, in duration.
Management Unit (MU)	The management unit is a term given to the scale defined for the management of a specific marine mammal population, based on understanding of population movements and dynamics. Management Units for cetaceans were defined by the UK SNCB Interagency Marine Mammal Working Group in 2015 and seal management units (or areas) are defined by the Special Committee on Seals published annually by the Sea Mammal Research Unit.
Marine Environmental High Risk Area (MEHRA)	Areas in UK coastal waters where ships' masters are advised of the need to exercise more caution than usual i.e. crossing areas of high environmental sensitivity where there is a risk of pollution from commercial shipping.
Marine Guidance Note (MGN)	A system of guidance notes issued by the Maritime and Coastguard Agency (MCA) which provide significant advice relating to the improvement of the safety of shipping and of life at sea, and to prevent or minimise pollution from shipping.
Maximum design scenario piling parameters	The definition of the hammer energy profile (how the hammer energy ramps up over time) and the maximum hammer energy based on the absolute maximum expected hammer energy to be required across all locations for the installation of each foundation type.
Mean	The average of a range of values (the sum of the values added together, divided by the number of values)
Median	The middle number in a range of values.
Minimum Landing Size	Size of a fish or shellfish species below which catches must be returned to the sea.
Mitigation	Measures, including any process, activity or design to avoid, reduce, remedy or compensate for adverse impacts of a development.
Most likely piling parameters	The definition of the hammer energy profile and the maximum hammer energy likely to be reached on the majority of pile installations.
Navigational Risk Assessment (NRA)	A document which assesses the overall impact to shipping and navigation of a proposed Offshore Renewable Energy Installation (OREI) based upon formal risk assessment.
Noise propagation	The transmission of noise through water. Propagation loss is the term given to the reduction in sound energy with distance from the source of the noise. Models are used to predict how noise is propagated through water in relation to a number of factors such as water depth, temperature, bottom substrate, the frequency of the noise.
Not Under Command	Under Part A of the International Regulations for Preventing Collisions at Sea (COLREGs), the term "vessel not under command" means a vessel which through some exceptional circumstance is unable to manoeuvre as required by these Rules and is therefore unable to keep out of the way of another vessel.
Odontocete	Odontocetes (toothed-whales) form a suborder of the order Cetacea (cetaceans). This suborder is characterised by the presence of teeth, rather than the baleen of other whales and includes sperm whales, beaked whales and dolphins.

Term	Definition
Offshore Habitats Regulations	The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended), which applies to marine habitats extending beyond 12 nautical miles (NM).
Offshore Renewable Energy Installation (OREI)	OREIs as defined by Guidance on UK Navigational Practice, Safety and Emergency Response Issues, MGN 543. For the purpose of this report and in keeping with the consistency of the EIA, OREI can mean offshore turbines and the associated electrical infrastructures such as offshore High Voltage Alternating Current (HVAC) transformer substations, offshore High Voltage Direct Current (HVDC) converter substations, accommodation platforms and offshore HVAC booster stations.
Offshore Transmission Owner (OFTO)	A transmission owner who assumes responsibility for offshore transmission assets. An OFTO is competitively appointed by Ofgem through a tender process and is awarded an OFTO Licence.
Operating Expense (OPEX)	An operating expense is an expense a business incurs through its normal business operations.
Pelagic fish	Fish that spend most of their life swimming in the water column with little contact with or dependency on the bottom.
Permanent Threshold Shift (PTS)	Following a marine mammal's exposure to high noise levels, if a Threshold shift occurs and does not return to normal after several weeks then a Permanent Threshold Shift (PTS) has occurred. This results in a permanent auditory injury to the marine mammal.
Pinniped	A fin-footed group of marine mammals which are semi-aquatic. Pinnipeds comprise of the following families: Odobenidae (walrus); Otariidae (eared seals, sea lions, and fur seals); and Phocidae (earless seals). Pinnipeds are more broadly known as "seals".
Population Viability Analysis (PVA)	Statistical process that brings together species characteristics and environmental variability to forecast population health.
Radar	Radio Detection And Ranging - an object-detection system which uses radio waves to determine the range, altitude, direction, or speed of objects.
Receptor	Physical, biological or anthropogenic group that would experience an effect or impact.
Regional seascape unit	A unit of land, coastline and sea defined by a distinct and recognisable pattern of elements connected by the related inter-visibility.
Regular Operator	A commercial vessel operator whose vessel(s) are observed to transit through a particular region on a regular basis.
Safety Zone	A marine zone demarcated for the purposes of safety around a possibly hazardous installation or works/ construction area under the Energy Act 2004.
Seascape character	A distinct and recognisable pattern of elements in the seascape that makes one seascape different from another, rather than better or worse, and how these are perceived by people.
Seascape character type	A seascape type would have broadly similar patterns of bathymetry, coastal landform, geology, coastal vegetation, types of use and coastal settlement discernible in maps and field survey records.
Seascape effects	Effects on the seascape as a resource in its own right.
Soft-start	The term 'soft-start' is applied to the gradual, or incremental, increase in hammer blow energy from the initiation of piling activity until required blow energy is reached for installation of each pile, usually over a period of 30 minutes (not less than 20 minutes). Maximum hammer blow energy may not be required to complete pile installation.

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Sound Exposure Level (SEL)	Sound exposure level (SEL) is a measure of energy that takes into account both received level and duration of exposure. SEL can be calculated for a single pulse or signal (SEL _{ss}) or SEL can be calculated accounting for the accumulated exposure over the duration of an activity within a 24-hour period (SEL _{cum}).
Sound Pressure Level (SPL)	Sound pressure level (SPL) is a means of characterizing the amplitude of a sound.
Sensitivity	A term applied to specific receptors, providing judgements on the sensitivity of the receptor to the specific type of change or development proposed.
Special Area of Conservation (SAC)	A site designation specified in the Habitats Directive (Council Directive 92/43/EEC). Each site is designated for one or more of the habitats and species listed in the Directive. The Directive requires a management plan to be prepared and implemented for each SAC to ensure the favourable conservation status of the habitats or species for which it was designated. In combination with SPAs, these sites contribute to the Natura 2000 Sites network.
Special Protection Area (SPA)	A site of European Community importance designated under the Birds Directive (Directive 2009/147/EC), classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species. SPAs contribute to the Natura 2000 Sites network.
Supply Chain	A supply chain is a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer. Supply chain activities involve the transformation of natural resources, raw materials, and components into a finished product that is delivered to the end customer.
Trawl	A cone or funnel-shaped net that is towed through the water by one or more vessels
Temporary Threshold Shift (TTS)	Following a marine mammal's exposure to high noise levels, a Threshold Shift may occur in the animals' auditory ability. If recovery is possible before continued sound exposure, this is termed a Temporary Threshold Shift.
Whitefish	Demersal fish species such as cod, haddock and whiting
Vessel Monitoring System (VMS)	A satellite-based monitoring system which at regular intervals provides data to the fisheries authorities on the location, course and speed of vessels.
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of people living, working, visiting or travelling through an area.
Visual effect	Effects on specific views and on the general visual amenity experienced by people.
Visual envelope	Extent of potential visibility to or from a specific area or feature.
Zone of Theoretical Visibility (ZTV)	Area within which it is illustrated that a proposed development would be visible, as determined by terrain. It can be as bare ground terrain or can include built form and tree obstructions.
Zone of visual influence	Area within which a proposed development may have an influence or effect on visual amenity.