

## ABBREVIATIONS / ACRONYMS AND GLOSSARY

### Abbreviations

Abbreviation / Acronym	Meaning
AARUN	Automatic Rural and Urban Network
AA	Appropriate Assessment
AADVT	Annual Average Daily Traffic
ACD	Anti-Climb Device
ALC	Agricultural Land Classification
AODN	Above Ordinance Datum Newlyn
AONB	Area of Outstanding Natural Beauty
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
ASHE	Annual Survey of Hours and Earnings
ASIDOHL2 Assessment	Assessment of Significance of Development Proposals on Historic Landscapes
ATC	Automatic Traffic Count
BAP	Biodiversity Action Plan
BC	Before Christ
BGS	British Geological Survey
BMV	Best and Most Versatile
BSI	British Standards Institution
c.	Circa / approximately
Cal	Calibrated
CBA	Cost Benefit Analysis
CEMP	Construction Environment Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CIFA	Chartered Institute of Archaeology
CIRIA	Construction Industry Research and Information Association
CLR	Contaminated Land Report

<b>Abbreviation / Acronym</b>	<b>Meaning</b>
CoPA	Control of Pollution Act 1974
CPRW	Campaign for Rural Wales
CRoW	Countryside and Rights of Way Act 2000
CRTN	Calculations of Road Traffic Noise
CS	Countryside Stewardship
dB	Decibel
DCLG	Department for Communities and Local Government
DECC	Department for Energy & Climate Change
DEFRA	Department for Environment Fisheries and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DNO	Distribution Network Operator
EA	Environment Agency
EC	European Commission
EclA	Ecological Impact Assessment
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment
ELC	European Landscape Convention
ELF	Extremely Low frequency
ELS	Entry Level Stewardship
EMC	Electromagnetic Compatibility
EMF	Electronic Magnetic Fields
EN-1	Overarching National Planning Statement for Energy
EN-5	Electricity Networks Infrastructure
EPA	Environmental Protection Act (1990)
EPSML	European Protected Species Mitigation Licence
ES	Environmental Statement

<b>Abbreviation / Acronym</b>	<b>Meaning</b>
FCA	Flood Consequence Assessment
GAT	Gwynedd Archaeological Trust
GIS	Geographic Information System
GLVIA3	Guidelines for Landscape and Visual Impact Assessment
GP3	Groundwater Protection: Principles and Practice
GPA	Good Practice Advice
GPLC	Guiding Principles for Land Contamination
ha	Hectare
HA	Highways Agency
HDD	Horizontal Directional Drill
HDV	Heavy Duty Vehicles
HE	Historic England
HEGS	Hedgerow Evaluation and Grading System
HER	Historic Environment Record
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HLS	Higher Level Stewardship
HRA	Habitat Regulation Assessment
HSIIS	Habitat Suitability Index
Hz	Hertz
IAQM	Institute of Air Quality Management
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IDD	Internal Drainage District
IEA	Institute of Environmental Assessment
IEMA	Institute of Environmental Management & Assessment
ISO	International Organization for Standardization
JLDP	Joint Local Development Plan

Abbreviation / Acronym	Meaning
JNCC	Joint Nature Conservation Committee
km	Kilometres
km <sup>2</sup>	Square kilometre
kV	Kilovolts
kV	Kilovolts
LBAP	Local Biodiversity Action Plans
LCA	Landscape Character Areas
LCA	Landscape Character Area
LCT	Landscape Character Types
LDF	Local Development Framework
LDP	Local Development Plan
LDWR	Long Distance Walking Routes
LGVs	Light Goods Vehicles
LI	The Landscape Institute
LSOA	Lower Super Output Area
LTP	Local Transport Plan
LVIA	Landscape and Visual Impact Assessment
LWS	Local Wildlife Site
m	Metre
MAFF	Ministry of Agriculture, Food and Fisheries
MAGIC	Multi-Agency Geographic Information for the Countryside
MCA	National Marine Character Area
MCZ	Marine Conservation Zone
MHWM	Mean High Water Mark
MHWN	Mean High Water Neap
mm	Millimetres
MMP	Materials Management Plan

<b>Abbreviation / Acronym</b>	<b>Meaning</b>
MSOA	Middle Super Output Area
NCA	National Character Areas
NCN	National Cycle Network
NERC	Natural Environment and Rural Communities
NGR	Ordnance Survey National Grid Reference
NHBC	National House Building Council
NHS	National Health Service
NLCA	National Landscape Character Area
NMRW	National Monuments Record for Wales
NNR	National Nature Reserve
No.	Number
NO2	Nitrogen Dioxide
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NRMM	Non Road Mobile Machinery
NRW	Natural Resources Wales
NSRI	National Soil Resources Institute
NTL	Normal Tidal Limit
NTS	Non Technical Summary
NVC	National Vegetation Classification
NWRPG	North Wales Regional Planning Group
NWWT	North Wales Wildlife Trust
NWWT	North Wales Wildlife Trust
OALS	Open Access Land
OAPS	Options Appraisal Study
OD	Ordnance Datum
ODPM	Office of the Deputy Prime Minister

<b>Abbreviation / Acronym</b>	<b>Meaning</b>
OELS	Organic Entry Level Stewardship
Ofgem	Office of Gas and Electricity Markets
OHL	Overhead Line
ONS	Office of National Statistics
OS	Ordnance Survey
PAD	Protocol for Archaeological Discoveries
PEA	Preliminary Ecological Appraisal
PPG	Planning Policy Guidance
PPG	Pollution Prevention Guidelines
PPS	Planning Policy Statement
PPW	Planning Policy Wales
PRoW	Public Rights of Way
RAF	Royal Air Force
RBMP	River Basin Management Plan
RF	Radio Frequency
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SCA	Seascape Character Area
SEC	Sealing End Compound
SGZ	Safeguard Zones
SINC	Site of Importance for Nature Conservation
SLA	Special Landscape Area
SNCI	Sites of Nature Conservation Importance
SNPA	Snowdonia National Park Authority
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SPG	Supplementary Planning Guidance documents

<b>Abbreviation / Acronym</b>	<b>Meaning</b>
SPZs	Source Protection Zones
SRG	Stakeholder Reference Group
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TA	Transport Assessment
TAN	Technical Advice Notes
TBM	Tunnel Boring Machine
TCF	Technical Construction File
THHs	Tunnel Head Houses
TIS	Transport Implementation Strategy
TMP	Traffic Management Plan
UDP	Unitary Development Plan
UK	United Kingdom
UKSO	United Kingdom Soil Observatory
UXB	Unexploded Bomb
UXO	Unexploded Ordnance
V/m	Volts per metre
VIP	Visual Impact Provision
VSAA	Visual and Sensory Aspect Areas
WCA	Water Conservation Area
WeITAG	Welsh Transport Planning and Appraisal Guidance
WFD	Water Framework Directive
WFDa	Water Framework Directive Assessment
WG	Welsh Government
WHIASU	Wales Health Impact Assessment Support Unit
WHO	World Health Organisation
WS	Wildlife Site

Abbreviation / Acronym	Meaning
WSI	Written Scheme of Investigation
WSP	Wales Spatial Plan
ZTV	Zone of Theoretical Visibility

## Glossary

Glossary	Meaning
Above Ground Infrastructure	These are structures, buildings and other that are above the ground.
Abstraction	Removal of water from surface water or groundwater, usually by pumping.
Abstraction Licence	Permission to abstract surface water or groundwater, subject to conditions laid down in the licence, issued by the relevant environmental regulator.
Adverse	Having a negative/harmful effect on something.
Agri-environmental Scheme	Agricultural and environmental schemes that provide funding to farmers and other land managers to deliver effective agricultural and environmental management on their land.
Air Quality Management Area (AQMA)	An area where pollutant monitoring or modelling indicates that the national air quality objectives will not be met
Alluvium	Material transported by rivers and deposited along its course.
Air Quality Management Area (AQMA)	An area where pollutant monitoring or modelling indicates that the national air quality objectives will not be met
Ambient	Of or relating to the immediate surroundings (e.g. ambient noise level).
Ancient Woodland	Woodland that has existed continuously since at least AD 1600.
Aquifer	A body of permeable rock that is capable of storing significant quantities of water; is undertaken by impermeable material, and through which groundwater moves.
Archaeological Desk-based Assessment (DBA)	A study of existing records to identify known and potential archaeological sites.



<b>Glossary</b>	<b>Meaning</b>
Area of Search	The term given to a wide area within which the route corridors are identified.
Areas of Archaeological Interest	An area of archaeological interest often identified by a Local Plan.
Areas of Outstanding Natural Beauty (AONB)	Areas designated by the Countryside Commission under the National Parks and Access to Countryside Act 1949 for their particularly attractive landscape and unspoilt character, which should be protected and enhanced as part of the national heritage.
Baseline	The conditions against which potential effects arising from the Scheme are identified and evaluated.
Beneficial	Conferring benefit; advantageous; helpful.
Biodiversity	The variety of life. The term embraces the full range of habitats, species, and the variation found within species (including genetic variation).
Borehole	A hole drilled in to the ground to tap an underground water-bearing layer of rocks for water supplies (or alternatively to investigate underlying layers of the ground)
Catchment	The area from which water or runoff drains to a specified point (e.g. to a reservoir, river, lake, borehole).
Characteristics	The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.
Compensation	Measures that offset the damage caused by a development, e.g. creation of new habitat.
Conservation Area	Designated by local authorities on account of its special architectural or historic interest, the character and appearance of which it is intended to preserve and enhance.
Construction Environmental Management Plan (CEMP)	Outlines the approach to environmental management throughout the construction phase, with the primary aim of reducing any adverse impacts from construction on local sensitive receptors.
Construction phase	Activity taking place on site up until commissioning.
Corridor	Search area used to provide a degree of flexibility in which to develop a route proposal.

Glossary	Meaning
Cumulative Effects	The effects of other development projects - in addition to those which pertain to combined effects - (whether underway, consented, or proposed) which, on an individual basis may be insignificant, but cumulatively with National Grid's proposed development, may have a significant effect. These effects can be temporal (e.g. construction phases occur at the same time) or spatial (e.g. the same area is affected).
Decommissioning phase	The project phase during which the potential development would be decommissioned. This occurs after the operation phase and would be undertaken after the development was no longer required.
Designated Landscape	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Dewatering	The removal of groundwater/surface water to lower the water table or to empty an area, such as an excavation, of water.
Direct Effect	An effect that is directly attributable to the proposed development.
Directional drilling	The pipeline is bored under a crossing to emerge at a target point on the opposite side.
Distribution	The geographical area within which a species can be found, or the arrangement or spatial pattern of a species over its habitat.
Dust	all particulate matter up to 75 µm in diameter and comprising both suspended and deposited dust
Ecology	The study of interactions between organisms and their environment.
Element	A component part of the landscape for example, trees, hedges and buildings.
Embedded Mitigation	Mitigation measures developed through the iterative design process that have become integrated mainstream components of the design of the Proposed Project.
Emergence (in relation to bat surveys)	A bat exiting its roosting site at dusk.
Enhancement	Measures that can increase and improve habitats for plants and animals.

Glossary	Meaning
Environmental Impact Assessment	The process by which the impacts of a proposed development upon all aspects of the receiving environment are identified and analysed.
Environmental Statement	Document that reports the findings of an Environmental Impact Assessment.
Feature (landscape)	Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines or a particular aspect of the project proposal.
Flood Consequence Assessment (FCA)	An assessment of flood risk from all sources to a development and the mitigation of that risk
Flood Zone 1	Flood Zone 1 - land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).
Flood Zone 2	Flood Zone 2 - land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% - 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% - 0.1%) in any year.
Flood Zone 3	Flood Zone 3 - land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
Flood Zone A	Considered little or no risk of fluvial or tidal/ coastal flooding. Within the precautionary framework, this zone is used to indicate that a justification test is not applicable and there is no need to further consider flood risk.
Flood Zone B	Describes areas known to have flooded in the past as evidences by sedimentary deposits. This zone is used as part of a precautionary approach to indicate where site levels should be checked against extreme flood levels, wherein if site levels are greater than flood levels used to define adjacent extreme flood outline there is no need to further consider flood risk.
Flood Zone C	This zone is based on the Environment Agency extreme flood outline, $\geq 0.1\%$ (fluvial, tidal or coastal). This is used to indicate that flooding issues should be considered an integral aspect of decision making and a justification test including an assessment of consequences should be applied.
Flood Zone C1	Identifies the areas of the floodplain which are developed and served by significant infrastructures including flood defences. This zone is used to indicate that development can take place subject to the application of a justification test including

Glossary	Meaning
	acceptability of consequences.
Flood Zone C2	Indicates those areas of the floodplain without significant flood defence infrastructures. Used to identify that only less vulnerable development should be considered, subject to the application of a justification test including acceptability of consequences.
Floodplain	A floodplain is the area that would naturally be affected by flooding if a river rises above its banks, or high tides and stormy seas cause flooding in coastal areas
Fluvial flooding	Fluvial flooding occurs when rivers overflow and burst their banks, due to high or intense rainfall which flows into them.
Geology	The scientific study of the origin, history, and structure of the earth.
Groundwater	Defined by the EC groundwater Directive (80/68/EEC) as "all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil".
Habitat	A type of landscape (e.g. wet woodland, lowland heathland) characterised by particular communities of vegetation and animals.
Habitats Regulations Assessment (HRA)	Assessment undertaken in accordance with the requirements of The Conservation of Habitats and Species Regulations 2010. Also known as Appropriate Assessment.
Heritage Asset	Heritage asset is defined in the NPPF as "A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)."
Historic Environment Desk Based Assessment	"A programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as

Glossary	Meaning
	appropriate.” (the ClfA Code of Conduct, 2014)
Hydraulic fluid	The medium by which power is transferred in hydraulic machinery.
Hydrogeology	The branch of geology that deals with water below the ground surface.
Impact	An identifiable change to the baseline environment, which can be either beneficial or adverse.
Iterative design process	The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it.
Land Drainage	Artificial installation of land drainage to remove surplus water enabling farmers to cultivate and farm the land over a wider time period.
Landform	The shape and form of the land surface which has resulted from a combination of geology, geomorphology, slope, elevation and physical processes.
Landscape	An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape Character Areas	Areas of the landscape defined by their physical and cultural elements.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Limit of Deviation	Defines the maximum extent of the permanent works.

<b>Glossary</b>	<b>Meaning</b>
Listed Buildings	Grade I buildings are of exceptional interest, sometimes considered to be internationally important. Grade II* buildings are particularly important buildings of more than special interest. Grade II buildings are nationally important and of special interest.
Local Nature Reserve (LNR)	A site controlled by local authority, which offer people opportunities to study, learn or enjoy nature.
Micro-tunnelling	A trenchless construction method for installing pipelines.
Mitigation (in relation to ecology)	Measures that reduce and/or minimise effects on habitats or species.
Monitoring	Continued assessment of the performance of a project, including mitigation measures. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.
National Electricity Transmission System (NETS)	High voltage network of electricity cables carrying power between generating stations and the local electricity supply networks of the regional Distribution Network Operators (DNOs). Owned and operated by National Grid. The system operates at 275 kV and 400 kV.
National Grid	National Grid Electricity Transmission plc
National Nature Reserve	Designated areas by Natural England that represent many of the finest wildlife and geological sites in the country.
Nature Conservation	The conservation of habitats and species. Usually includes the protection through legislation or designation of species, habitats and sites of nature conservation importance.
Nature Conservation Value	Measure of the nature conservation of a particular site/feature/species.
Operation phase	The project phase during which the development would be operational; this includes any period of maintenance. This occurs between the construction and decommissioning phases.
Ordinary Watercourses	Ordinary watercourses are those watercourses which do not form part of a main river. A lead local authority has permissive powers to carry out flood defence works for ordinary watercourses at their discretion.

<b>Glossary</b>	<b>Meaning</b>
Pathway	The route by which potential contaminants may reach receptors.
Permeability	The property or capacity of a rock, sediment or soil for transmitting a fluid
Phase 1 Habitat Survey	A nationally recognised system for allocating land into broad habitat types.
Plan	A document, including an illustration, which details planned activities.
PM10 (particulate matter)	mass fraction of airborne particles of diameter of 10 µm or less.
Pollution Prevention Guidelines	Best practice guidelines set out by the Environment Agency to advise industry and public on legal responsibilities and good environmental practice.
Population	Any group of individuals, usually of a single species, occupying a given area at the same time.
Proximity Distance	The distance the pipeline can be located to property, structures and populated areas.
Ramsar site	A site as set out in the Ramsar Convention (Convention on Wetlands of International Importance, especially as Waterfowl Habitats) (1971).
Receptor	Any defined feature that is sensitive to or has the potential to be subject to an effect.
Residual Effects	Environmental effects remaining after mitigation measures have been implemented.
Riparian	Terrestrial habitat associated with a watercourse (river or stream).
River Basin Management Plan	Documents that outline measures and targets to improve the quality of rivers, estuaries, coasts and aquifers.
Route Corridor	Search area used to provide a degree of flexibility in which to develop a route proposal.
Route Corridor Study	An appraisal of the high-level planning and environmental constraints to identify potential route corridor options within a defined Area of Search.
Runoff	The water from rain, snowmelt or irrigation that flows over the land surface and is not absorbed into the ground, but which instead flows into streams or other surface waters of land

Glossary	Meaning
	depressions.
Scheduled Monuments	An archaeological site of national importance, which is included on a schedule compiled by the Secretary of State for National Heritage under the terms of the Ancient Monuments and Archaeological Areas Act 1979 (as amended by the National Heritage Act 1983).
Scoping	Process of identifying the issues to be addressed by the environmental impact assessment. Ensures that the assessment focuses on the important issues and scopes out those that are considered not significant.
Scoping Opinion	The opinion given by a competent authority that indicates the issues an environmental impact assessment should consider.
Screening	Formal process to determine whether it is necessary to carry out an environmental impact assessment.
Screening Opinion	The opinion given by a competent authority that indicates whether an environmental impact assessment should be carried out.
Sealing End Compound (SEC)	Transition location where high-voltage underground cable and an overhead line join. The overhead line finishes on a terminal tower. Downleads bring the conductors down to join on to where the ends of the underground cables come out of the ground. There may also be some monitoring equipment, but usually no transformers or switchgear.
Site Boundary	Boundary of the Proposed Project. Encompasses all temporary and permanent works (equivalent to the planning redline boundary).
Sites of Special Scientific Interest (SSSI)	An area of land of special interest by reason of its flora, fauna, geology or physiographical features notified under section 28 of the Wildlife and Countryside Act 1981.
Source	The activity or process producing a hazardous substance or contaminant that may adversely impact a receptor via a pathway.
Source Protection Zone (SPZ)	Designated protection area around drinking water supplies.
Special Area for Conservation (SAC)	Special Area for Conservation (SAC), designated as European Sites (Natura 2000) under the Habitats Directive. The listed habitat types and species are those considered to be most in



Glossary	Meaning
	need of conservation at a European level (excluding birds).
Special Protection Area (SPA)	Areas selected by the national government on the advice of English Nature, designated for the protection of particularly sensitive bird species, or for regularly migrating birds.
Species	A taxonomic group into which a genus is divided, the members of which are capable of interbreeding.
Strata	A layer of rock or soil.
Surface Water	Water that appears on the land surface that has not seeped into the ground, i.e. lakes, rivers, streams, standing water, ponds, precipitation.
Topography	The physical features or configuration of a land surface.
Traffic Management Plan	It sets out how traffic will be managed at all stages during a construction project.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
Transect	A set path used to count and record occurrences of a particular species (e.g. bats). It is standardised so that it is repeatable.
Tree Preservation Order (TPO)	Tree Preservation Orders are made under the Town and Country Planning Act 1990 to protect trees.
Vibration	Vibration is used to describe the transmission of energy through solid media by oscillation.
Visibility	The state or fact of being visible.
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 the people living, working, recreating, visiting or travelling through an area.
Visual Impact	Visual change within a heritage asset or its setting as a result of the Project, resulting in an affected ability to interpret, understand or appreciate the asset's significance, and which typically could occur during operational phases
Visual Receptors	People with views of the development or associated activities. These are located within the zone of theoretical visibility and are typically residents, motorists, pedestrians, recreational users in

<b>Glossary</b>	<b>Meaning</b>
	residential areas on publicly accessible roads, footpaths and open spaces.
Workability	This ease with which soils can be worked; and effects upon the restoration process over the working width. It is related to soil drainage status, soil texture, local climate and, therefore, to the safe working period and is closely associated with the trafficability considerations.
World Heritage Site	Places of 'outstanding universal value' selected by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Sites can be selected because they contain important cultural or natural features.
Zone of Influence	The area/resources that may be affected by the biophysical changes caused by activities associated with a project.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which a development is theoretically visible.