

## ***GLOSSARY OF TECHNICAL TERMS***



## GLOSSARY OF TECHNICAL TERMS

TERM	DESCRIPTION
Ameliorate	Take measures to diminish a negative impact.
Anticline	Fold or fold system in the form of an arch
AOD	Above Ordnance Datum
Appraisal Well	A well drilled as part of an appraisal drilling programme which is carried out to determine the physical extent, reserves and likely production rate of a field
Aquifer	A water bearing bed of strata, either by virtue of its porosity or because it is pervious
Auger	A tool for boring holes
Bar	A unit of pressure
Bar g	Bars above atmospheric pressure
Baseline survey	A description of the existing environment against which future changes can be measured
BAT	Best Available Technique
BATNEEC	Best Available Technology Not Entailing Excessive Costs
bbl	Barrel(s)
Bedding	Layers within sedimentary rocks characterised by differences in composition, texture or structure
Benthos	Organisms that live on or in the seabed.
BGE	Bord Gáis Éireann
BH	Borehole
Biocides	Chemicals which destroy living organisms within the pipeline during hydrotesting
BOD	Biological Oxygen Demand
boepd	Barrels of oil equivalent per day
BP	Before Present
BPEO	Best Practicable Environmental Option
Bronze Age	c. 2300 BC–500 BC
BTEX	Benzene Toluene Ethyl Benzene and Xylene
Bund	An earth embankment
BWI	BirdWatch Ireland
Cairn	Burial mound composed of stones, sometimes with internal structures
Cd	Cadmium
CH <sub>4</sub>	Methane
Children's burial ground	A burial ground used for unbaptised children, and others who could not be buried on consecrated ground. Graves are sometimes marked with simple stones, and burials are occasionally set within earlier enclosures, or outside church sites.
Christmas Tree	The assembly of fittings or valves on the top of the casing which controls the production rate from the well.
Cist	Box-like structure of stone, set into the ground or into a burial monuments, used to contain the burial.
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
COD	Chemical Oxygen Demand
Commissioning	The rendering fully operational of a project or process.
Competent Authority	Any agency charged with examining an Environmental Impact Statement with a view to issuing a consent to develop

TERM	DESCRIPTION
Completion	The installation of permanent wellhead equipment for the production of oil or gas.
Condensate	Hydrocarbons which are in the gaseous state under reservoir conditions and which become liquid when the pressure and/or temperature is reduced. A mixture of pentanes and higher hydrocarbons.
Corrosion inhibitor	Liquid that will be added to the offshore system in small quantities to prevent corrosion of the steel pipes and equipment.
Court tomb	Megalithic tomb dating to the Early Neolithic, so called because of a its large open court feature with a gallery leading into a long trapezoidal cairn
cSAC	Candidate Special Area of Conservation
Cuttings	Rock chippings cut out from the formation by the drill bit, and brought to the surface with the mud. Used by geologists, while drilling a well, to obtain formation data.
DAFOR	Ecological abundance classification D: Dominant A: Abundant F: Frequent O: Occasional R: Rare
Daily cover	Material used as a cover on top of a pile of spoil at the end of a working period
DCQ	Daily Contract Quantity
Decommissioning	The final closing down, and putting into a state of safety of a development, project or process when it has come to the end of its useful life.
Deep-Tine Cultivation	Blades pulling behind a tracked vehicle used to loosen compacted soils
Demersal	Organisms that occur near the seabed
DIP	The angle in degrees between a horizontal plane and an inclined feature such as rock strata
Drift	A general name for the superficial as distinct from the solid formation of the earth's crust or material deposited by a glacier
Drilling Rig	A drilling unit that is not permanently fixed to the seabed, e.g. a drillship, a semi submersible or a jack-up unit.
Dry Gas	Natural gas composed mainly of methane with only minor amounts of ethane, propane and butane and little or no heavier hydrocarbons in the gasoline range.
Earthwork	Any monument made entirely or largely of earth.
EC	European Commission
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
ELV	Environmental Limit Value
EMP	Environmental Management Plan
Enclosure	Any monument consisting of an enclosing feature, such as a bank or a ditch, usually earthen, such as barrows or ringforts.

TERM	DESCRIPTION
Environmental Quality Standards	The EQS values reflect the maximum level in the water body that may be present without affecting biological communities in their functional processes or otherwise give rise to unacceptable adverse effects on the ecosystem or accumulation of substances that are harmful to the biota (EPA, 1997). The Environmental Quality Standards referred to throughout this EIS are those for marine waters (EPA, 1997).
EPA	The Environmental Protection Agency
EPIC	Engineer Procure Install and Commission
Epifauna	The animal life which lives on the surface of the seabed, a river bed, etc., or attached to submerged objects or to aquatic animals or plants
EQS	See Environmental Quality Standard
ESRI	Economic and Social Research Institute
EU	European Union
Evapo-transpiration	Combined water loss through evaporation and transpiration by plants
Excavatability	Related to the ease with which the trench can be dug
Exploration well	A well drilled in an unproven area. Also known as a 'wildcat well'.
FEED	Front End Engineering Design
Field	A geographical area under which an oil or gas reservoir lies.
Field system	Pattern of fields, now no longer in use, usually visible as low earthworks, often associated with medieval or earlier settlements
Flowline	Steel pipeline between wellheads and the manifold, usually between 6 and 10 inches diameter.
Formation water	Salt water underlying gas (and oil if any) in the formation.
Fosse	Ditch associated with a ringfort.
FPO	Floral Protection Order
Fracturing	A method of breaking down a formation by pumping fluid at very high pressures. The objective is to increase production rates from a reservoir.
g/J	Grams per Joule
Gas field	A field containing natural gas but no oil.
Geotextile sheet	A permeable synthetic membrane specifically designed to be used as a construction material
Gley soils	Waterlogged soils that develop where the drainage is poor or the water table high
GPR	Ground Penetrating Radar
GWP	Global Warming Potential
HAZOP	Hazard and Operability Studies
HCl	Hydrogen Chloride
HDD	Horizontal Directional Drilling
HF	Hydrogen Fluoride
Hg	Mercury
High Water Mark	The line of high water of ordinary or medium tides
HOCNF	Harmonised Offshore Chemical Notification Format
Holy well	A natural spring or well with an association with a saint, or a tradition of cures. Often found near ecclesiastical or monastic sites.

TERM	DESCRIPTION
Horizontal directional drilling	A method of drilling and installing pipelines under large features, such as rivers, with minimal ecological and environmental impact.
HP	High Pressure
HS&E	Health Safety and Environment
Hut site	Small ring of stones representing the foundation of a hut. Can be of any date, usually found in upland or marginal land
Hydrate	A solid ice-like material formed from gas and water at specific temperatures and pressures.
Hydrocarbon	A compound containing only the elements hydrogen and carbon. May exist as a solid, a liquid or a gas.
Hydrostatically	Relating to the study of the mechanical properties and behaviour of fluids not in motion
Hydrotest	Water used in testing the integrity of the pipeline
Iceberg scour	A seabed feature caused by the tracking of icebergs.
IFA	Irish Farmers Association
Impact	The degree of change in an environment resulting from a development.
Infauna	The animal life found within the sediments of the ocean floor, river beds, etc
Integrated Pollution Control - IPC	Aims to prevent or solve pollution problems rather than transferring them from one medium to another. All major emissions to land, air and water are considered simultaneously and not in isolation in order to minimise pollution of the environment as a whole.
Intelligent PIG	A device used for the measurement of several parameters which operates inside a pipe
IOOA	Irish Offshore Operators Association
IPCC	Irish Peatland Conservation Council
Iron Age	c. 500 BC – AD 500
Jacket	The lower section, or 'legs', of an offshore platform.
kW	Kilowatt
Landfall	The point on the coastline where the pipeline transporting natural gas from the Corrib Field to the terminal comes ashore.
LAT	Lowest Astronomical Tide
Lay barge	A vessel that is specially equipped to lay submarine pipelines.
Leq	The equivalent continuous sound level (Leq) that is the notional steady noise level which, over a given period, would deliver the same amount of sound energy as the actual fluctuating level
Linear earthwork	A long bank or ditch, often a territorial boundary. Can be of any date
LPG	Liquid Petroleum Gas
LWL	Low Water Level
Manifold	An item of subsea equipment that gathers gas from each of the wells in the field.
MAPP	Major Accident Prevention Plan
MARPOL	International Convention for the Prevention of Pollution from Ships. International agreement to prevent marine pollution.
MEG	Monoethyleneglycol
Megalithic tomb	Literally 'large stone' Neolithic tomb
MeOH	Methanol

TERM	DESCRIPTION
Mesolithic	Middle Stone Age (c. 10,000 BC–4000 BC)
mg/m <sup>3</sup>	Milligrams Per cubic Metre
MJ/m <sup>3</sup>	Mega Joules Per cubic Metre
mmscfd	Million standard cubic feet of gas per day
MODU	Mobile offshore drilling unit
Monitoring	The repetitive and continued observation, measurement and evaluation of environmental data to follow changes over a period of time, also used to assess the effectiveness of control measures.
Moored tower “guyed tower”	Tower standing upright in the water column, which is attached to the seabed by mooring lines.
MSDS	Material Safety Data Sheet
Mud	A mixture of base substance and additives used to lubricate the drill bit and to counteract the natural pressure of the formation.
MW	Megawatt
Natural gas	Gas, occurring naturally, sometimes occurring in association with crude oil.
Neolithic	New Stone Age (c.4000 BC–2300 BC)
Nephrops	Dublin Bay prawn, also known as Norway Lobster
NHA	Natural Heritage Area
NMI	National Museum of Ireland
NMVOG	Non-Methane Volatile Organic Compound
NO	Nitrogen monoxide, also known as nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NOx	Oxides of Nitrogen
<i>n</i> th percentile (where <i>n</i> is a number between 0 and 100)	In any set of numerical data, the value below which <i>n</i> % of the values fall.
Oil	A mixture of liquid hydrocarbons of different molecular weights.
Oil-based mud (OBM)	Drilling mud used to drill through rock which can react with water based materials
Onshore Injection	Disposal of water by injecting it into the ground at depth.
Open-cut crossing	A method of pipeline crossing whereby an open trench is dug
Operator	The company that has legal authority to drill wells and undertake production of hydrocarbons found. The Operator is often part of a consortium and acts on behalf of this consortium.
OS(I)	Ordnance Survey (Ireland)
OSPAR	Oslo and Paris Commission
OTU	Onshore Transmission Unit
PE	Polyethylene
Pelagic	Organisms that occur in the water column, especially near the surface.
Petroleum	A generic name for hydrocarbons, including crude oil, natural gas liquids, natural gas and their products.
PIG	Pipeline Integrity Gauge- remotely operated tool which is sent through the pipeline to gather information.
PIG launcher	Equipment for sending PIGs through a pipeline
PIG trap or PIG receiver	Equipment for retrieving PIGs from a pipeline

TERM	DESCRIPTION
Plankton	Small animals and plants which drift with the currents and are incapable of swimming against them.
Platform	An offshore structure that is permanently fixed to the seabed.
PLEM	Pipeline End Manifold- allows the gas flow from the manifold to be shut off from the pipeline to shore
PLONOR	Chemicals that "Present Little Or No Risk" to the marine environment
PM <sub>10</sub>	Particulate Matter with a diameter of less than 10 µm
pNHA	Proposed Natural Heritage Area
POCP	Photochemical Ozone Creation Potential
Portal tomb	Megalithic tomb dating to the Early Neolithic, so called because of its large door feature, on which a large capstone is balanced. Known also as dolmens or cromlechs. Usually situated near streams and rivers
ppm	Parts per Million
Produced Water	This is a combination of the water of condensation and the formation water.
PSG	Porcupine Studies Group
PSV	Pressure Safety Valve (relief valve)
Reservoir	The underground formation where oil and/or gas have accumulated. It consists of a porous rock that holds the hydrocarbons, and a cap rock that prevents its escape.
RIB	Rigid Inflatable Boat
Risk assessment	An analytical study of the probabilities and magnitude of harm to human health or the environment associated with a physical or chemical agent, activity or occurrence.
ROV	Remotely Operated Vehicle - diverless underwater vehicle.
RSG	Rockall Studies Group
Ruderal	Plants which colonise open ground
SAC	Special Area of Conservation
Scale inhibitor	Liquid that may be added to the offshore system in small quantities to prevent the precipitation of natural mineral salts in the field facilities.
Schist	Metamorphic rock defined by well-developed parallel orientation of more than 50% of the minerals present
Scoping	The process of identifying the significant issues which should be addressed by a particular Environmental Impact Assessment
SDU	Subsea Distribution Unit- distributes the hydraulic fluid and chemicals from the umbilical to the wells
Semi submersible drilling rig	Floating drilling platform which is towed to site in an unballasted condition, and ballasted (lowered) for stability upon mooring on location.
Semi-natural habitat	Habitat modified by human activity from its original state but with a vegetation composed of native species similar in structure to natural types and with native animal communities
Separator	A steel tank (vessel) with internal baffles. Used to separate liquid from gas.
SEVESO	An EU Directive on control of major accident hazards.
Sheet piling	Vertical supports for trench excavations i.e. wall support.
SMR	Sites and Monuments Record
SO <sub>2</sub>	Sulphur dioxide

TERM	DESCRIPTION
Sonar	Sound Navigation and Ranging- a system for underwater detection of objects.
SOx	Oxides of Sulphur
SPA	Special Protection Area
Stone circle	Ceremonial ring of stones dated to the Bronze Age, occasionally associated with burials
STP	Standard Temperature and Pressure (1 atmosphere of pressure and 15 °C)
Strings (pipe strings)	Assembled lengths of pipe
Subsoil	The layer of soil between the topsoil and bedrock
Suspended well	A well that has been capped off temporarily.
Sward	Mixture of grasses forming a turf
Syncline	A basin shaped fold or fold system
Synthetic-based mud (SBM)	Drilling mud used to drill through rock which can react with water based materials
Terminal	The plant where the Corrib gas will be separated from any associated liquids to meet BGE export specifications.
THI	Threshold Inhibitor (related to hydrate inhibition)
Till/boulder clay	A poorly sorted mixture of sands, clays and boulders produced by the erosion of rocks by moving ice
TOC	Total organic carbon
Togher	Literally a causeway, usually used to mean a wooden trackway across a bog
Topography	The physical features or configuration of a land surface
TP	Trial Pit
TPS	Tilted Plates Separator
Transmission Specification, or Specification	Before a gas can be exported on to the transmission system it has to meet certain criteria.
Trench stability	Ease of producing trenches (without collapse)
Turlough	Formed when solution cavities within the limestone collapse to form surface depressions.
UKOOA	United Kingdom Offshore Operators Association
Umbilical	A 'bundle' of electrical and hydraulic control lines and chemical transportation lines used to a) control and monitor the subsea facilities from the terminal and b) supply methanol and other chemicals to the manifold and wellheads. The bundle is encased in a protective cable.
UNECE	United Nations Economic Commission for Europe
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
Water of condensation	The hydrocarbon gas in the reservoir contains a certain amount of water in vapour phase. This water in vapour phase condenses out as liquid during the production process as the temperature and pressure of the hydrocarbon gas decreases. This water is known as water of condensation. It is produced throughout field life in rough proportion to the gas production rate.
Water-based mud (WBM)	Basic composition of drilling mud, used for drilling uncomplicated section of wells.
Wedge tomb	Megalithic tomb dating to the Late Neolithic and Early Bronze Age, so called because of a wide high front, sloping and narrowing towards the back.

<b>TERM</b>	<b>DESCRIPTION</b>
Well	A borehole, lined with steel, that is drilled from the sea bed into the reservoir and through which gas is brought to the seabed surface.
WHO	World Health Organisation
Workover	Remedial work to a well.

**IMPERIAL/METRIC CONVERSIONS**

<b>IMPERIAL TO METRIC</b>		<b>METRIC TO IMPERIAL</b>	
<b>Imperial Unit</b>	<b>Metric Unit</b>	<b>Metric Unit</b>	<b>Imperial Unit</b>
<b><i>Lengths</i></b>		<b><i>Lengths</i></b>	
1 inch	25.4 mm	1 mm	0.0397 in
1 ft	0.3048 m	1 m	3.281 ft
1 mile	1.609 km	1 km	0.6214 miles
1 nautical mile (nm)	1.853 km	1 km	0.5396 nautical miles
<b><i>Volumes</i></b>		<b><i>Volumes</i></b>	
1 standard cubic ft (scf)	0.0283 m <sup>3</sup>	1 m <sup>3</sup>	35.33 cf
1 million standard cubic feet (mmscf)	28,300 m <sup>3</sup>	1 m <sup>3</sup>	6.29 barrels
1 barrel	0.159 m <sup>3</sup>		