

The West Midlands Rail Freight Interchange Order 201X
ES - Vol 1 - Glossary and Abbreviations
Regulation 5(2)(a)
Ramboll - July 2018

Glossary of Terms

1 hour Mean	The mean air quality concentration recorded over a time period of 1 hour.
24 hour Mean	The mean air quality concentration recorded over a time period of 24 hours.
Accurately Verified Representation	A static or moving image that shows the location of a proposed development, the degree to which it will be visible, its detailed or outline form. It combines images of the proposed development with a representation of the existing view.
Air Quality Action Plan	Where an AQMA is declared an AQAP must be prepared to identify and implement actions to reduce air quality concentrations to meet the objectives.
Air Quality Management Area	A local authority is required by the Environment Act 1995 to declare an AQMA where it believes the UK air quality objectives prescribed in the Air Quality (England) Regulations will not be met.
Ambient Noise Level	The totally encompassing sound in a given situation at a given time, usually composed of a sound from many sources both distant and near (LAFeq,T).
Amenity	A pleasant or advantageous aspect of the environment.
Annual Mean	The mean air quality concentration recorded over a time period of a year.
Arisings	Material (often spoil) derived from the ground through excavation or from consumption of materials
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
Baseline Studies	Studies of existing environmental conditions which are designed to establish the baseline conditions against which any future changes can be measured or predicted.
Beaufort Wind Scale	Measure of Wind Speed, based on effect of wind on surroundings.
Biodiversity	The diversity, or variety of plants and animals and other living things in a particular area of region. It encompasses landscape diversity, ecosystem diversity, species diversity and genetic diversity.
Biodiversity Action Plan	Describes the biological resources of the UK (divided into habitats and species) and sets out a detailed plan for their conservation in the form of Species Action Plans and Habitat Action Plans.
Borehole	A hole drilled into the ground which can be used to obtain samples of soil, rock, water and gases.
Brownfield Land	Derelict, abandoned or underused, often post-industrial land and land that is or was occupied by a permanent structure (excluding agricultural or forestry buildings), and associated fixed surface infrastructure.
Brownfield Site	A site comprising previously developed land.

Bund	A secondary wall surrounding a tank, designed to prevent or contain accidental spillage to the surrounding land.
Bunding	A secondary containment system (e.g. an earth, brick, concrete, metal or plastic wall) surrounding a tank which is designed to prevent inundation or breaches of various types.
Carbon Dioxide (CO ₂)	Carbon dioxide is a naturally occurring gas comprising 0.04% of the atmosphere. The burning of fossil fuels releases carbon dioxide fixed by plants many millions of years ago, and this has increased its concentration in the atmosphere by some 12% over the past century. It contributes about 60 per cent of the potential global warming effect of manmade emissions of greenhouse gases.
Consented Developments	Developments that have received planning permission and have a signed legal agreement in place. They are assumed to be in place by the time the Development being assessed is completed.
Contaminated Land	Defined under Section 78A (2) of Part IIA - Environmental Protection Act 1990) as: "any land which appears to the LA in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that – a) significant harm is being caused or there is a significant possibility of such harm being cause; or b) pollution of controlled waters is being, or is likely to be, caused."
Decibel	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s1 and s2 is given by 20 log ₁₀ (s1 / s2). The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20µPa.
Designated Sites	Refers to sites with national and international statutory designations designed to protect England's natural environment.
Desk-top Study	A non-intrusive study and review of all available information pertaining to a site, including historical records, collated and monitored data, and consultation with relevant stakeholders.
Dewatering	The removal of water from the ground to make it dry.
Directive	European Union (EU) Directives impose legal obligations on European Member States. They are binding as to the results to be achieved, but allow individual states the right to decide the form and methods used to achieve the results. An example of this is the EU Air Quality Framework Directive (1996) that is brought into legal effect in the UK by the Air Quality (England) Regulations (2000).
Direct Effects	Effects which arise as a direct consequence of a project action, e.g. the loss of habitat or the run-off of surface water to a watercourse.
Displacement	An estimate of economic factors that may have reasonably been attained by other competitors in the absence of the development.
Ecological Mitigation and Management Plan	A plan designed to direct the management of a site for the benefit of wildlife over a suitable time period.
EIA Scoping	Scoping is the term in the EIA Regulations used to determine the form and requirements of the EIA, whereby the Applicant can request a formal opinion from the competent authority on the content of the ES and the extent of the information to be supplied for the assessment.

EIA Scoping Opinion	A written statement of the opinion of the relevant planning authority as to the information to be provided in the Environmental Statement.
EIA Screening	Screening is the term in the EIA Regulations used to describe the process in which the need for EIA is considered
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Environmental Impact Assessment	A process by which information about the environmental effects of a development is collected and taken into account by the relevant decision-making body before a decision is given on whether the development should go ahead.
Environmental Statement	A statement that includes such information that is reasonably required to assess the environmental effects of a development.
Façade	The front or face of a building.
Fit-out	Installation of all non-substructure and non-superstructure items such as electrical water services, as well as final internal finishings.
Flood Zone 1	Flood Zone 1 comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
Flood Zone 2	Flood Zone 2 comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding 0.5% – 0.1%) in any year.
Flood Zone 3	Flood Zone 3 comprises 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.
Floodplain	Land adjacent to a watercourse over which water flows, or would flow but for defences in place, in times of flood.
Geophysical Survey	A remote sensing technique, which is non-intrusive, using a magnetometer to map subsurface structures and can be used to identify potential archaeological features.
Geotechnical	Ground investigation, typically in the form of boreholes and/or trial/test pits, carried out for engineering purposes to determine the nature of the subsurface deposits.
Gross External Area	A measure of floor space calculated in accordance with the Royal Institution of Chartered Surveyors (RICS) Code of Measuring Practice.
Groundwater	Subsurface water in the zone of saturation, including water below the water table and water occupying cavities, pores and openings in underlying rocks.
Groundwater Source Protection Zone	An area in which groundwater is abstracted for public water supply.
Hoarding	A temporary board fence set up on the perimeter of a building site.
Hydrocarbon	An organic compound consisting entirely of hydrogen and carbon.
Hydrogeology	The study of geological factors relating to the Earth's water.
Indirect Effect	Effects are those which arise as a secondary consequence of a project action. E.g. the decline in the abundance of a species as a result of the loss of habitat or the damage to aquatic vegetation as a result of water

	pollution. Other common examples include the effect on air quality and ambient noise as a result of increased traffic movements
In-situ	In the natural, original or appropriate position.
Intra-Project Effects	Combined effects of different types of impact, for example impact interactions arising from noise, dust and visual impacts during construction of the Proposed Development on particular sensitive receptors. These are also known as 'impact interactions'
Inter-Project Effects	Combined effects generated from the Proposed Development together with other planned / potential developments. These other developments may generate their own individually insignificant effects, but when considered together the effects could amount to a significant cumulative effect, for example, combined transport impacts from two or more (proposed) developments. These are referred to as 'in-combination' impacts.
Interceptor (oil-water)	A tank typically with three compartments separated by weir plates, forming part of a surface water drainage system. Oily water enters the tank and passes through the three compartments, progressively removing the oil before the cleaned water is discharged. The oil remains in the tank for removal and off-site disposal by vacuum tanker.
Intrusive Investigation	An in-depth investigation involving further sampling and analysis, such as the gathering of samples from the ground, walls, ceilings for the detection of contamination, asbestos and or archaeological remains.
L _{AF10,T}	The A-weighted noise level index. The noise level exceeded for 10% of the time over the period T. L ₁₀ can be considered to be the "average maximum" noise level. Generally used to describe road traffic noise.
L _{AF90,T}	The A-weighted noise level index. The noise level exceeded for 90% of the time over the period T. L ₉₀ can be considered to be the "average minimum" noise level and is often used to describe the background noise.
L _{AFmax,T}	The A-weighted noise level index defined as the maximum noise level during the period T. L _{max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall Leq noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
LiDAR	Light detection and ranging (LiDAR) data comprises high resolution height data based on laser recordings from aircraft and can be used to illustrate relative differences in ground levels. This data is sometimes used for archaeological assessment to build digital terrain models which can identify potential archaeological features.
Listed Building	A building or structure of special architectural or historic interest which is included in a list made by the Secretary of State.
Local Biodiversity Action Plan	LBAPs identify local wildlife priorities and determine the contribution they can make to the delivery of the national Species and Habitat Action Plan targets. LBAPs generally conform to county boundaries.
Made Ground	Soils or other material which has been deposited by man rather than natural processes, for example to make up ground levels.
Mitigation	The term used to refer to the process of avoiding where possible and, if not, minimising, controlling and/or off-setting potentially significant adverse effects of a development.

National Air Quality Strategy	These are targets set by the Government as minimum acceptable standards of air quality for the protection of human health, vegetation and ecosystems.
National Nature Reserves	Protect some of the finest sites in England for wildlife and geology, and provide opportunities for people to experience nature.
Nitrogen Dioxide (NO ₂)	Road transport and the burning of fossil fuels for power are the main sources of Nitrogen dioxide. In addition to being a green house gas it also contributes to photochemical smog formation. It is an irritant to the respiratory system.
Non-Technical Summary	A summary of the Environmental Statement in 'non-technical language'.
Oxides of Nitrogen (NO _x)	The sum of NO (nitric oxide) and NO ₂ . Typically combustion sources emit NO _x which comprise largely of NO, which in turn is converted to the more polluting form NO ₂ due to oxidation within the atmosphere.
Order Limits	The boundary of the area relating to the development consent order application.
Ordnance Datum	Land levels are measured relative to the average sea level at Newlyn, Cornwall. This average level is referred to as 'Ordnance Datum'.
Organic contamination	Contamination of the ground or groundwater with chemicals and compounds containing carbon (i.e. organic compounds).
Particulate Matter	Discrete particles in ambient air, sizes ranging between nanometres (nm, billionths of a metre) to tens of micrometres (µm, millionths of a metre).
Pathways	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors.
Perched Groundwater	A localised water table (above the regional water table) which is usually discontinuous or of very limited extent.
Personal Protective Equipment (PPE)	Protective outerwear (e.g. clothing, footwear, face masks, eye protection) to protect the wearer from hazards in the workplace, e.g. airborne dust, contaminated soil/ water.
pH	A measure of the acidity or the alkalinity of a solution.
Phase I Habitat Survey	This technique provide a standardised system to record semi-natural vegetation and other wildlife habitats. The survey can be 'extended' to include scoping surveys for protected species.
Pile	A timber, steel or concrete post which is driven, jacked or cast (bored) into the ground to carry vertical or horizontal loads.
Plant	A building's generator, heating, ventilation, and/or electricity-production system.
Pollutant Linkage	This is produced when the following three elements occur: <ul style="list-style-type: none"> • Source: a pollutant with the potential to cause harm; • Pathway: the pollutant can reach someone (or something) by some means, i.e. through soil, vapour, water etc.; and • Receptor: there is someone or something that can be affected by the pollutant.
Potable water	Drinking water, i.e. water pure enough for human consumption.
Precautionary Principle	The precautionary principle states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in

	the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action.
Radon gas	A natural radioactive gas which occurs in rocks and soils.
Ramsar Sites	Wetlands of international importance designated under the Ramsar Convention.
Rating Noise Level	The specific noise level plus any adjustment for the characteristic features of the noise (L _{Ar,T}).
(Sensitive) Receptor	A component of the natural, created, or built environment such as human being, water, air, a building, or a plant that is affected by an impact.
Residual Effects	The effects of a development on a receptor following implementation of mitigation proposals.
Risk Assessment	An assessment of the likelihood and severity of an occurrence.
Setting	The context in which a building or area can be appreciated.
Significant Harm	Defined in Part IIA of the Environmental Protection Act 1990 in reference to human health: "Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions".
Site of Special Scientific Interest (SSSI)	The best sites for wildlife and geological features in England as designated under the Wildlife and Countryside Act 1981.
Scheduled Monument	A nationally important archaeological site or historic building / feature.
Sites and Monuments Record	A computerised record of information for all statutorily listed buildings, known archaeological sites and stray finds, parks and gardens of special interest in England
Special Areas of Conservation (SAC)	Give special protection under the European Union's Habitats Directive to a variety of wild animals, plants and habitats.
Special Protection Areas (SPA)	Give protection under the Birds Directive to rare and vulnerable birds, and for regularly occurring migratory species.
Specific Noise Level	The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source (the noise source under investigation) over a given time interval (L _{Aeq,T})
Statutory Consultees	Groups or bodies that, by law, must be consulted as part of the planning application process for EIA development.
Strata	Layer of rock or soil.
Substructure	Elements of a development below ground level, typically basements and foundations.
Superstructure	Elements of a development above ground principally the mega frame, supporting northern core and outer shell cladding.
Surface water	Water collecting on the ground or in a stream, river, lake, wetland, or ocean.
Susceptibility	The inability of equipment/systems to perform without degradation in the presence of an electromagnetic disturbance. Susceptibility is often characterized as a lack of immunity. The threshold of susceptibility is the level of interference at which the test article begins to show a degradation in performance. This is often frequency-dependent.

Sustainable Development	Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.
The Applicant	The person or entity making the development consent order application.
Topography	The natural and man-made features of an area collectively
Trial Pits	Intrusive investigation positions excavated by a mechanical excavator.
VOCs	Volatile Organic Carbons: organic (i.e. carbon containing) chemicals that easily vaporise at room temperatures.

Abbreviations

μgm^{-3}	Micrograms per cubic metre
μm	Micrometres
LAQM.TG-16	DEFRA Local Air Quality Management Policy Guidance
AADT	Annual Average Daytime Traffic Flows
AAP	Area Action Plan
AAWT	Annual Average Weekly Traffic Flows
AC	Alternating Current
agl	Above ground level
ALC	Agricultural Land Classification
AOD	Above Ordnance Datum
AQ	Air Quality
AQAP	Air Quality Action Plan
AQO	Annual Mean Air Quality Objective
AQS	Air Quality Strategy
ASA	Alternative Sites Assessment
AST	Aboveground Storage Tanks
AQMA	Air Quality Management Area
AQR	Air Quality Regulations
AQS	Air Quality Standards
ASR	Air Quality and Annual Status Reports
AW	Ancient Woodland
BAP	Biodiversity Action Plan
bgl	Below Ground Level
BGS	British Geological Survey
BHS	British Hydrological Survey
BMV	Best and Most Versatile (Agricultural Land)
BPM	Best Practical Means

BS	British Standard
BT	British Telecom
CA	Conservation Area
CEA	Cumulative Effects Assessment
CCC	Cannock Chase Council
CFC	Chlorofluorocarbon
CHP	Combined Heating and Power
CIRIA	Construction Industry Research and Information Association
CRT	Canal & Rivers Trust
CMS	Construction Method Statement
CO	Carbon monoxide
CO ₂	Carbon dioxide
CoCP	Code of Construction Practice
COSHH	Control of Substances Hazardous to Health
CRoW	The Countryside and Rights of Way Act, 2000
CRTN	Calculation of Road Traffic Noise
CTMP	Construction Traffic Management Plan
DAS	Design and Access Statement
dB	Decibel
DCLG	Department for Communities and Local Government
DCEMP	Demolition and Construction Environmental Management Plan
DCO	Development Consent Order
DCTMP	Demolition and Construction Traffic Management Plan
DEFRA	Department of Environment, Food and Rural Affairs
DETR	Department of Environment, Transport and Regions
DfT	Department for Transport
DMP	Dust Management Plan
DMRB	Design Manual for Roads and Bridges
DO	Dissolved Oxygen
DOE	Department of Environment
DPD	Development Planning Documents
EA	Environment Agency
EC	European Community
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment
EMMP	Ecological Mitigation and Management Plan
EPAQS	Expert Panel on Air Quality Standards

EPUK	Environmental Protection UK
EQS	Environmental Quality Standards
ES	Environmental Statement
EU	European Union
FFL	Finished Floor Level
FEMMP	Framework Ecological Mitigation and Management Plan
FM	Frequency Modulation
FRA	Flood Risk Assessment
GEA	Gross External Area
GCN	Great Crested Newt
GI	Green Infrastructure
GIA	Gross Internal Area
GVA	Gross Added Value
Ha	Hectare
HAPs	Habitat Action Plan
HER	Historic Environment Record
HCFC	Hydrochlorofluorocarbon
HDV	Heavy Duty Vehicles
HE	Highways England
HGV	Heavy Goods Vehicle
HRA	Habitats Regulation Assessment
IAM	Impact Assessment Matrix
IAQM	Institute for Air Quality Management
IEEM	Institute of Ecology and Environmental Management
IEMA	Institute of Environmental Management and Assessment
IMD	Indices of Multiple Deprivation
JNCC	Joint Nature Conservation Committee
km	Kilometre
kw	Kilowatt
l/s	Litres per second
LAQM	Local Air Quality Management
LAQN	Local Air Quality Network
LDF	Local Development Framework
LGV	Light Goods Vehicle
LNR	Local Nature Reserve
LTP	Local Transport Plan
LWS	Local Wildlife Site

LVIA	Landscape and Visual Impact Assessment
m	Metre
m ²	Square metre
m ³	Cubic metre
MHz	Mega Hertz
mm	Millimetre
mm/s	Millimetre per second
MOD	Metre Ordnance Datum
mg/m ³	Microgram per cubic metre
m/s	Metre per second
N/A	Not applicable
NAQS	National Air Quality Strategy
NAOQ	National Air Quality Objective
NE	Natural England
NEC	Noise Exposure Category
NIA	Net Internal Area
NGR	National Grid Reference
NNR	National Nature Reserve
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NPS	National Policy Statement for National Networks 2015
NPSE	Noise Policy Statement for England
NSIPs	Nationally Significant Infrastructure Projects
NTS	Non-Technical Summary
NVZ	Nitrate Vulnerable Zone
OD	Ordnance Datum
ODCEMP	Outline Demolition Construction Environmental Management Plan
ONS	Office for National Statistics
OS	Ordnance Survey
Pa	(Pascal) unit of pressure
PAH	Polycyclic Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenyls
PINS	Planning Inspectorate
PM ₁₀	Particulate matter with an aerodynamic diameter of less than 10 microns
PM _{2.5}	Particulate matter with an aerodynamic diameter of less than 2.5 microns

ppb	Parts per billion
PPG	Planning Policy Guidance Note
ppm	Parts per million
PPE	Personal Protective Equipment
PPS	Planning Policy Statements
PPV	Peak Particle Velocity
PRA	Preliminary Risk Assessment
PRoW	Public Rights of Way
RTN	Road Traffic Noise
SAC	Special Areas of Conservation
SBC	Stafford Borough Council
SCC	Staffordshire County Council
SC	Shropshire Council
SGV	Soil Guidelines Values
SI	Site Investigation
SNCI/SINC	Site of Nature Conservation Importance/Site of Importance for Nature Conservation
SME	Small, Medium Enterprise
Sqm	Square meters
SO ₂	Sulphur Dioxide
SoS	Secretary of State
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SPZ	(Groundwater) Source Protection Zone
SRP	Soil Resource Plan
SSDC	South Staffordshire District Council
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TA	Transport Assessment
TWC	Telford and Wrekin Council
UK	United Kingdom
UKAMN	United Kingdom Air Monitoring Network
UKBAP	United Kingdom Biodiversity Action Plan
VDV	Vibration Dose Value
WCC	Wolverhampton City Council
WCML	West Coast Main Line
WDC	Walsall District Council

WFD	Water Framework Directive
WHO	World Health Organisation
WSI	Written Scheme of Investigation
ZOI	Zone of Theoretical Visibility