GLOSSARY

GLOSSARY OF ABBREVIATIONS

%	Percent
<	Less than
>	Greater than
µg	Microgram
AADT	Annual Average Daily Traffic
ACI	Airport Council International
ACN	Aircraft Classification Number
AFFF-LF	Aqueous Film Forming Foam – Low Freeze
AGL	Aeronautical Ground Lighting
ALC	Agricultural Land Classification
AONB	Area of Outstanding Natural Beauty
APIS	Air Pollution Information System
APU	Auxiliary Power Unit
AQ	Air Quality
AQS	Air Quality Strategy
ATC	Air Traffic Control
ATC	Automated Traffic Counts
AVGAS	Aviation Fuel
BAP	Biodiversity Action Plan
BATNEEC	Best Available Technology Not Entailing Excessive Cost
BPM	Best Practicable Means
CAA	Civil Aviation Authority
CDM	Construction Design and Management Regulations
CEMP	Construction Environmental Management Plan
CLEA	Contaminated Land Exposure Assessment
COFAR	Common Options for Airport Regions
CSM	Conceptual Site Model
dB	Decibel
DEFRA	Department of the Environment and Rural Affairs
DME	Distance Measuring Equipment
DMRB	Design Manual for Roads and Bridges
DTI	Department of Trade & Industry EA Environment Agency
EIA	Environmental Impact Assessment
EPA 1990	Environment Protection Act 1990
ES	Environmental Statement
EU	European Union
FIS	Flight Information Service
FOE	Friends of the Earth
Ft	Foot/Feet
FTE	Full Time Equivalent
GDP	Gross Domestic Product
GR	Grid
Ha	Hectare
HGBI	Herptofauna Groups of Britain and Ireland

HGV	Heavy Goods Vehicle
HLC	Historic Landscape Characterisation
HSE	Health & Safety Executive Ibid Ibidem (Latin) as previously cited
ICAO	International Civil Aviation Organisation
IDB	Internal Drainage Board
IEEM	Institute of Ecological & Environmental Management
IKF	Integrated Kent Franchise
ILS	Instrument Landing System
IMD	Index of Multiple Deprivation Impact Effect on identified receptor
K	Thousand
KCC	Kent County Council
Keq	Constant (called the equilibrium constant)
KM	Kilometre
KMBRC	Kent & Medway Biological Records Centre
kVA	Kilo Volt Amps
KWT	Kent Wildlife Trust
Lmax	Maximum sound level
LA90	Equivalent Continuous Noise Level – representing the Sound Pressure Level exceeded 90% of the time
Leq	Equivalent Continuous Noise
LAA	London Ashford Airport At Lydd
LAQM	Local Air Quality Management
LATS	Landfill Allowance Trading Scheme
LDD	Local Development documents
LLA	Local Landscape Area
LNR	Local Nature Reserve
LPA	Local Planning Authority
LTMA	London Terminal Manoeuvring Area
LTO	Landing and Take-off
m	Metre
m2	Square metres
m3	Cubic metres
mm	Millimetres
N	Nitrogen
NAQIA	National Air Quality Information Archive
NAQS	National Air Quality Strategy
NDB	Non-Directional Beacon
NE	North East
NMR	National Monuments Record
NMVOC	Non-methane Volatile organic Compounds
NNR	National Nature Reserve
NO2	Nitrogen Dioxide
NOx	Nitrous Oxides
NTS	Non Technical Summary
o	Degrees

ODPM	Office of the Deputy Prime Minister now Department for Communities and Local Government
OEF	Oxford Economic Forecasting
OSL	Optically Stimulated Luminescence
PaH	Polycyclic Aromatic Hydrocarbons
PAPI	Precision Approach Path Indicator
PB	Parsons Brinckerhoff Limited`
PCN	Pavement Classification Number
PM	Particulate Matter
PPA	Passengers Per Annum
PPB	Parts per billion
PPC	Pollution Prevention Control
PPE	Personal Protective Equipment
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RASCO	Regional Air Services Co-Ordination Study
RESA	Runway Extension Safety Area
RFC	Ratio to Flow Capacity
RFFS	Rescue Fire Fighting Services
RPA	Rural Priority Area
RPB	Regional Planning Bodies
RPB	Regional Planning Body
RPG	Regional Planning Guidance
RPG	Regional Planning Guidance
RSPB	Royal Society for the Protection of Birds
RW	Runway
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SCP	Sustainable Consumption and Production
SDC	Shepway District Council
SEEDA	South East England Development Agency
SEERA	South East Regional Assembly
SEERA	South East England Regional Assembly
SEETB	South East England Tourist Board Sewer Local term for drainage ditch
SI	Statutory Instrument
SLA	Special Landscape Area
SMR	Sites and Monuments Record
SO2	Sulphur Dioxide
SOx	Sulphur Oxide Gases
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SWMP	Site Waste Management Plan
TA	Transport Assessment
TSE	Tourism South East
UKBAP	United Kingdom Biodiversity Action Plan

VOCs	Volatile Organic Compounds
VOR VHF	Omnidirectional Radio
WCA	Wildlife & Countryside Act 1981
WRAP	Waste Resources Action Plan
ZVI	Zone of Visual Influence

GLOSSARY OF TERMS

GLOSSARY OF LAA TERMS RUNWAY EXTENSION ES

Ambient Noise	The totally encompassing sound in a given situation, at a given time, including noises from any source in any direction.
ADMS 3	Industrial Air Pollution Model modelling the impact of existing and proposed industrial installations.
Area source	A real or theoretical source that radiates as a plane. Sound from an area source radiates plane waves rather than spherical waves, particularly if the area source is large relative to the wavelength of the sound produced.
A-Weighting	Generally, the ear is most sensitive to frequencies in the range 1 to 4 kHz. The A-weighting is a filter that can be applied to measured results at varying frequencies, to mimic the frequency response of the human ear, and therefore better represent the likely perceived loudness of the sound. SPL readings with the A-weighting applied are represented in dB(A).
Back-barrier	An area behind a gravel ridge in which quiet-water depositional conditions prevail.
Background Noise	This is defined as the LA90 of the residual noise.
Baseline Studies[1]	Studies of existing environmental conditions against which any future changes can be measured or predicted.
Biodiversity Action Plan	The Biodiversity Action Plan is the UK's initiative to maintain and enhance biodiversity. Natural England and other organisations from across all sectors are committed to achieving the Plan's conservation goals over the next 20 years and beyond.
Borehole	Holes drilled by hand to determine the nature of the sediments at depth.
Buffer zone	An area 100m in width defined around the boundary of any proposed development.
Buried gravel	Gravel that had been deposited previously and has been buried by younger marsh sediments.
Chronology	Age sequence of coastal evolution, cf. history of coastal change.
Clay	Finest marsh sediments, less than 0.004 mm in diameter.
Clear Area	This is an area clear of all obstructions to a very low flying aircraft during an aborted landing or in an emergency take off situation.
Clinical waste	Any waste defined in accordance with the Collection and Disposal of Waste Regulations 1998 and the Controlled Waste Regulations 1992 (as amended).
Controlled Waste	A broad category of waste that is subject to Environment Agency regulation. Controlled wastes include inert, hazardous, non-hazardous, and clinical waste sub-categories.
Core	See Borehole. May also be used to refer to the material retrieved from the borehole.

Cumulative Impact	Impacts that result from incremental changes caused by other past, present or reasonably foreseeable future actions together with the project.
Deposition	The process by which sediments are laid down as their weight force exceeds the forces causing transport.
Depositional Energy	Term describing the general energy of the forces available for sediment transport.
Distal limb	Part of a recurved gravel storm beach that is distant from the 'ness' (see ness).
Do Nothing[1]	Predicted future environmental conditions which would exist in the absence of the development.
Ecosystem[1]	Community of interdependent plants and animals interacting in their environment.
Edelman auger	Drilling instrument that is screwed into the ground.
EDM	Electronic distance meter, used to obtain relative elevations between sites.
Eijkelkamp gouge	Drilling instrument that is pushed into soft sediment and rotated to retrieve cores material.
Environmental Assessment[1]	A process in which information on the environmental effects of a project is collected and taken into account by decision makers.
Environmental Statement[1]	Assessment of the likely effects of a project on the environment. The Statement is submitted by the developer in conjunction with an application for planning permission
Environmental Effects[1]	Consequences for human being in terms of health and well-being, including that of ecosystems and natural systems on which human survival depends resulting from the environmental impacts
Environmental Impacts[1]	The processes whereby a change, which may be adverse, beneficial, or both is brought about in the existing environment as a result of development activities
Equivalent Continuous Level (Leq,T)	The Equivalent Continuous Level represents a theoretical continuous sound, over a stated time period, T, which contains the same amount of energy as a number of sound events occurring within that time, or a source that fluctuates in level. For example, a noise source with an SPL of 80 dB(A) operating for two hours during an eight-hour working day, has an equivalent A-weighted continuous level over eight hours of 74 dB, or LAeq,8hrs = 74 dB. The time period over which the Leq is calculated should always be stated.
Facies	General term for a sediment type or group of sediment layers.
Fauna[1]	All members of the animal kingdom including vertebrates (birds, mammals and fish) and invertebrates (insects)
Feather edges	Term for the thinnest part of a gravel ridge, often on the distal limb, where the gravel may be penetrated by the hand-drilling.
Fining-up	Term referring to a series of sediments that decrease in grain-size up through the core, being indicative of a reduction in depositional energy.

Flora[1]	Members of the plant kingdom including ferns, mosses, and liverworts, algae and phytoplankton, fungi and lichens.
Fossiliferous	Containing fossils that may be used to determine the environment in which the sediments were deposited. These fossils may also be radiocarbon dated.
General Aviation	All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.
Geomorphological/ Geomorphic	The shape of landforms. Also used to refer to processes causing sediment erosion, transport and deposition.
Geomorphology	the study of earth surface processes and landforms. Also used as a general to describe the landforms present.
Graded Area	Clear and Graded area is clear of all obstructions to a very low flying aircraft during an aborted landing or an in an emergency take off situation, which is also (Clear and Graded graded to ensure that it can be accessed by emergency vehicles. Area)
Gravel	Coarse-grained sediment particles more than 2 mm in diameter.
Gravel Foreland Complex	Term to describe the landform made up of a series of gravel ridges that change orientation at a 'ness'.
Gravel Ridge	Landform made up of an accumulation of gravel, deposited by high-energy waves.
Hazardous Waste	Defined by the Hazardous Waste (England and Wales) Regulations 2005 (as amended) and the Lists of Wastes (England) Regulations 2005 (as amended) and special measures apply to the management of such wastes.
Holocene	The last 10,000 years.
Inert waste	Chemically inert, non-combustible, non-biodegradable and non-polluting waste as defined by the Landfill (England and Wales) Regulations 2002 (as amended)
Initial Noise	Ambient prevailing noise in an area before any changes to the existing noise climate
In situ	Materials found in the location where they were originally deposited or placed.
Inter-ridge	Environment of low depositional energy between roughly parallel gravel ridges.
Intertidal	Zone between high and low tides, i.e. the beach area exposed at low water.
Lamination/ Laminated	Sediments that are finely layered.
Line Source	A theoretical source of sound, with length only, often used to model long, thin sound sources, such as roads.
Lithostratigraphy	General term for the layering pattern of the sediment.
Loudness	A subjective assessment differing individually. The human ear perceives loudness in a logarithmic fashion. Generally, a perceived doubling or halving of loudness will correspond to an increase or decrease in SPL of 10dB. Note that a doubling of sound energy corresponds to an increase in SPL of only 3dB.

Macrofossils	Fossils that may be seen by the naked eye.
Marsh or marshland sediments	Fine grained sediments, generally muds, laid down in quite water conditions at the turn of the tide.
Microfossils	Fossils that may be revealed by microscopic examination.
Minerogenic	Sediments in which mineral matter predominates, i.e. clays, silts, sands, gravel and muds.
Mitigation[1]	Any process, activity or thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.
Mud	General term for fine-grained sediments, i.e. silts and clays.
Ness	Point where the gravel ridge (or ridges) change orientation as a function of wave processes.
Nitrous Oxides	Nitrous Oxides formed during high temperature combustion processes from the oxidation of nitrogen in the air or fuel. The principal source of nitrogen oxides -nitric oxide (NO) and nitrogen dioxide (NO2), collectively known as NOx - is road traffic; other sources being power stations, heating plants and industrial processes.
Noise	A noise can be described as an unwanted sound. Noise can cause nuisance.
Noise Sensitive Receptors (NSR's)	Any identified receptor likely to be affected by noise. These are generally human receptors, which may include residential dwellings, work places, schools, hospitals, and recreational spaces.
Non-hazardous	Any waste which is not hazardous or inert waste
Non-recoverable	Sediments that cannot be retrieved from the gouge or auger due to high water content.
Octave	In reference to the frequency of a sound, an octave describes the difference between a given frequency and that which is double that frequency, e.g. 125Hz to 500Hz, or 4kHz to 8kHz.
Octave/Third Octave Bands	A sound made up of more than one frequency can be described using a frequency spectrum, which shows the relative magnitude of the different frequencies within it. The possible range of frequencies is continuous, but can be split up into discrete bands, often an octave or third-octave in width. Each octave band is referred to by its centre frequency, generally 63Hz, 125Hz, 250Hz, 500Hz, 1kHz etc.
OSL (Optically Stimulated Luminescence) dating	Method for dating minerogenic sediments that determines the time which has elapsed since they were last exposed to sunlight.
Oxidation-mottled	Sediments that contain iron-oxides of various colours, normally orange and yellow, due to periodic wetting and drying.
PaH	Polycyclic Aromatic Hydrocarbons are members of a large group of organic compounds widely distributed in the atmosphere, whose molecular structures contain two or more aromatic rings fused together. Because of their low vapour pressures, some PAHs are present at ambient temperatures in air, both as gases and associated with particles. They are formed naturally in the environment, e.g. thermal geological reactions and natural fires and through human activities in all processes involving incomplete combustion of carbon-based fuels e.g. emitted during burning of common fuels, i.e. coal, oil, wood and gas. Tobacco smoke is an important source in indoor air.

Pathway[1]	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors
Peat	Organic sediment layers.
Point Source	A theoretical source of sound, with zero size and mass, often used as an approximation to model small sources. Sound from a point source radiates spherically in all directions.
Potential Impacts[1]	Impacts which could occur in the absence of appropriate design modifications and preventative measures.
Predicted Impacts[1]	Those impacts which are predicted as a consequence of the development, although the nature and severity of their effect will be conditioned by the scope for mitigation.
Producer	Anyone whose activities produce waste or anyone who carries out preprocessing, mixing or other operations resulting in a change in the nature or composition of this waste.
Progradation	Term to describe the growth of the gravel foreland as a result of deposition.
Public Safety Zone (PSZ)	The bulk of the effort to control risk in aviation has been concentrated at protecting the occupants of aircraft. It is only relatively recently that some governments and aviation authorities as a result of increasing aircraft activity and more accidents taking place near the runway thresholds, that are beginning to consider the risks to the public under flight paths in these areas. Within the PSZ's there are safety benefits from preventing any new development or change of use, which would result in a significant increase in the numbers of people within the zone. The PSZ is based on a risk contour using a 15 year period of aviation forecasts, which allows for a reasonable period of stability after their introduction and allows for growth. Not all countries have policies on PSZ's as there are no recommendations by the ICAO on the subject. Some countries such the UK the policy on PSZ's is administered by the Department of Transport. In the US Runway Protection Zones are established by the Federal Aviation Administration (FAA) and in Ireland by the Irish Aviation Authority (IAA)
Lydd Airport PSZ's	Since the extent of the PSZ area is a function of aircraft movements, the 10^{-4} risk contours for 2 and 5mppa remain clear of developed areas with only few properties affected. But development to support higher throughputs, including significant runway extension would have substantial impact on residential areas to the NE of the airport. The shape and length of the PSZ has been taken from the SERAS report on Lydd Airport. An example of the dimensions of a PSZ based on a 15 year aircraft movement forecast for Luton Airport is shown on Fig. 4.9
Radiocarbon (^{14}C) Dating	Method for dating organic material (peat and/or macrofossils) based on the radioactive decay of carbon.
Ramsar	The Convention on Wetlands of International importance, especially as Waterfowl Habitats, is an intergovernmental treaty that aims to stem the progressive encroachment on and loss of wetlands now and in the future.

Receptor[1]	A component of the natural or man made environment such as water, building, plant affected by impact
Recovery and Recycling	Recovery and recycling means the recovery of waste into products, materials or substances whether for the original or other purposes. It does not include energy recovery. Commonly applied to non-hazardous wastes such as paper, glass, cardboard, plastics and metals. However, hazardous wastes (e.g. solvents) can also be recycled by specialist companies, or by in-house equipment.
Recurved storm beach	Gravel ridge that exhibits changes in orientation along its length, deposited by high energy waves during storms.
Residual Noise	This is the ambient noise minus the specific noise, i.e. the remaining noise when the specific noise source is removed.
Restricted Zone	This is the zone at the end of a runway where the Planning Authority may restrict the type of permitted development due to a possible increase in risk.
Reuse	Reuse means any recovery operation by which products or components that have become waste are used again for the same purpose for which they were conceived;
Runway Strip (Clear and Runway Area)	CAP 168 requires a cleared strip of 300m wide for instrument runways code 3 and 4. of which the first 105m from the centreline are graded and have sufficient bearing strength to support an aircraft without causing major damage to the undercarriage of an aircraft in the event of an coming off the runway during takeoff or landing. The ILS being installed to serve runway 22 would require the establishment of the 300m wide strip. This would render unusable all of the existing aircraft parking apron to the southeast of the terminal area and the partial parallel taxiway (see figure 4.5). There are no other major problems associated with the establishment of an instrument runway strip at the airport.
Rhythmites/ Tidal rhythmites.	Laminated sediments, often muds, deposited under the influence of the tide.
Sand	Sediments between 0.062 and 2 mm in diameter.
Saturated sand	Sands that, because of a high water content, cannot be recovered from the borehole using the auger or gouge corers.
Scoping[1]	Initial stage in determining nature and potential scale of environmental impacts arising from the proposed development, and assessing what further studies are required to establish their significance.
Sea-level index point	Sediment association or included fossil material that shows a direct relationship with sea level and, hence, may be used to reconstruct the elevation of past sea level.
Sediments	General term for material that has been deposited.
Shoreface sands/ sand body	Landform that underlies the gravel, dominated by sand that was deposited below the low tide line.
Silt	Sediments between 0.004 and 0.062 mm in diameter.
Sound Power Level (SWL)	The Sound Power Level defines the rate at which sound energy is emitted by a source, and is also expressed in dB. It is defined as follows:

	SWL (dB) = 10 Log10(W/Wref) where W = Sound Power (in Watts) Wref = Reference Power 1 picoWatt
Sound Pressure Level (SPL)	The Sound Pressure Level has units of decibels, and compares the level of a sound to the smallest sound pressure generally perceptible by the human ear, or the reference pressure. It is defined as follows: SPL (dB) = 20 Log10(P/Pref) where P = Sound Pressure (in Pa) Pref = Reference Pressure 2x10-5 Pa An SPL of 0dB suggests the Sound Pressure is equal to the reference pressure. This is known as the threshold of hearing. An SPL of 140dB represents the threshold of pain.
Specific Noise	A component of the ambient noise, associated with the specific source under investigation.
Stratification	See Lamination.
Stratigraphic	See Lithostratigraphy. Also used to refer to the location of sediments and fossils within the lithostratigraphy.
Sulphur Oxide Gases	Sulphur Oxide Gases formed when fuel containing sulfur (mainly coal and oil) is burned and during metal smelting and other industrial processes.
Suspension	Sediments held in the water column when the forces available for transportation exceed the weight force of the sediments.
Tidal flat	Landform between the high and low water marks, often a flat ramp-like beach.
Topographic Survey	Investigation of the changes in height of a given surface.
Topography	Variation in height of a given surface, i.e. relief.
Treatment	Recovery or disposal of waste.
Troels-Smith classification scheme	Method from the Danish Geological Survey for the description and classification of sediments.
UKBAP	United Kingdom Biodiversity Action Plan.
Unconsolidated	Term given to soft sediments, i.e. muds, sands etc., that have not been transformed into rock.
Volatile Organic Carbons	Defined as under the VOC Protocal (Geneva 1991) as “all organic compounds of anthropogenic nature, other than methane, that are capable of producing photochemical oxidants by reations with nitrous oxides in the presence of sunlight”. VOCs are involved in formation of ground level ozone and depletion of the ozone layer contributing to the greenhouse effect as methane and photochemical oxidants are greenhouse gases.
Waste	means any substance or object which the holder discards or intends or is required to discard

REFERENCE

1. Department of the Environment Planning Research Programme: Preparation of Environmental Statements for Planning Projects that require Environmental Assessment, A Good Practice Guide, HMSO 1995