

CITY AIRPORT DEVELOPMENT PROGRAMME
(CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

VOLUME 1: MAIN ES

DECEMBER 2022



Glossary of Terms and Abbreviations

Term / Abbreviation	Definition / Description
2015 UES	Updated Environmental Statement, produced in 2015 and submitted to PINS as part of the Planning Inquiry
AADT	Annual Average Daily Traffic Flows
AAWT	Annual Average Weekday Traffic
ADMS	Atmospheric Dispersion Modelling System
AC	Airports Commission
ACA	Airport Carbon Accreditation
ACR	Aircraft Categorisation Review
AEDT	The Aviation Environmental Design Tool (AEDT) is industry standard software for the evaluation of aircraft noise in the vicinity of airports based on aircraft type, operation, route and flight profile.
Airside	The areas of the airport which require full security screening to gain access to.
Aircraft Stands	Parking position for an aircraft.
Airfield	An area of land set aside for the takeoff, landing, and maintenance of aircraft.
AMS	Airspace Modernisation Strategy
ANCS	Air Noise Categorization System
ANPS	Airports National Policy Statement
APEC	Air Pollution Exposure Criteria
APF	Aviation Policy Framework
APIS	Air Pollution Information System
Applicant	London City Airport
APU	Auxiliary Power Unit – An auxiliary power unit (APU) is a device on a vehicle that provides energy for functions other than propulsion.
AQCMMS	Air Quality Construction Management and Mitigation Strategy
AQMA	Air Quality Management Area
ASHP	Air Source Heat Pump
ATI	Aerospace Technology Institute
ATM	Air Transport Movement
A&E	accident and emergency
BACF	BA Cityflyer
BAP	Biodiversity Action Plan
BDDT	Busy Day Timetable
BEIS	Department for Business Energy and Industrial Strategy
BPM	Best Practicable Means
BRES	Business Register and Employment Survey
BS	British Standard
CAA	Civil Aviation Authority
CADP1	City Airport Development Programme, approved by the Secretary of State in 2016 following an appeal and public inquiry.
Carbon	The term 'carbon' as an abbreviation of carbon dioxide, is commonly used as a simple term to describe greenhouse gases.
CCC	Committee on Climate Change

Term / Abbreviation	Definition / Description
CCG	Clinical Commissioning Group
CEMP	Construction Environmental Management Plan
CH ₄	Methane
CHP	Combined Heat and Power
CIL	Community Infrastructure Levy
Climate	Description of the long-term pattern of weather in a particular area, typically over a 30-year period.
Climate change	A change in climate conditions that can be statistically identified by changes in the mean and/or variability of its properties that persists for decades or longer.
Climate hazard	An extreme weather event which poses a threat to an environment, population or development.
Climate impact	The impact of an extreme weather event on an environment, population or development.
Climate risk	Likelihood of a climate hazard occurring multiplied by the potential impact of this hazard.
CNVMMMS	Construction Noise and Vibration Management and Mitigation Strategy
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
Code C aircraft	A standard of aircraft size specified by the International Civil Aviation Organization.
Commercial flights	These flights offered for general sale to passengers, comprising the scheduled flights operating at the Airport
CORSIA	Carbon Offset and Reduction Scheme for International Aviation
CPZ	Controlled Parking Zone
CRFs	Concentration-Response Factors
CRTN	Calculation of Road Traffic Noise
CSIS	Construction Sound Insulation Scheme
DAP	Directorate of Airspace Policy
DATCT	Digital Air Traffic Control Tower
dB	Decibel
DCLG	Department for Communities and Local Government
DC Scenario	The Development Case Scenario is the proposed development, i.e. allowing growth up 9mppa and a change to operational hours (and other associated amendments).
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DHN	District Heat Network
DLR	Docklands Light Railway
DMRB	Design Manual for Roads and Bridges
DM Scenario	The Do Minimum Scenario is the existing 6.5mppa cap and operational hours are retained.
Dolphins	Structural remains are visible in the dock, in the form of fixed jetties known as 'Dolphins'.
EA	Environment Agency
EEA	European Economic Area
EEA EMEP	European Environment Agency / European Monitoring and Evaluation Programme
EEC	Eastern Energy Centre - Proposed Energy Centre situated in the eastern Dockside area and housing various elements of plant that service the proposed Eastern Terminal Extension and proposed Forecourt
EFT	Emissions Factor Toolkit

Term / Abbreviation	Definition / Description
EIA	Environmental Impact Assessment
ELBA	East London Business Alliance
EMAS	Engineered Material Arrestor System
EMEP/EEA	European Environment Agency
EqS	Equality Statement
EPUK	Environmental Protection UK
ERCD	Civil Aviation Authority – Environmental Research and Consultancy Department
ES	Environmental Statement
ETE	East Terminal Extension - Eastern Extension of the main Terminal, including the Arrivals Concourse Building, the Main Processor Building, the Outbound Baggage Extension, the Eastern Pier and Noise Barrier.
EU ETS	European Union Emissions Trading Scheme
FDI	Foreign Direct Investment
FEGP	Fixed Electrical Ground Power – Ground based system of electrical power on all permanent south side stands capable of providing electricity for aircraft systems at 115/200volts 400HZ. Separate transformers are available for aircraft requiring 28volts.
FAA	The Federal Aviation Administration (FAA) is the regulatory body for civil aviation in the United States. The FAA produces AEDT, the industry standard modelling software for aircraft noise.
FRA	Flood Risk Assessment
FtF	Flightpath to the Future – the Government’s latest statement of aviation policy
FTE	Full-time Equivalent
GAWC	Global and World Cities Network
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GLA	Greater London Authority
GP	General practitioner (medical)
GPU	Ground Power Unit – Diesel powered mobile generator for providing aircraft power on stand.
GVA	Gross Value Added
HAP	Health Action Plan
HFCs	Hydrofluorocarbons
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HRA	Habitats Regulations Assessment
HVAC	Heating, Ventilation and Air-Conditioning
IAQM	Institute of Air Quality Management
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IEMA	Institute of Environmental Management and Assessment
ILS	Instrument Landing System
IMD	Indices of Multiple Deprivation
Jet Centre	Corporate Aviation Centre located at the western side of the Airport.
JZ	The Government’s Jet Zero Strategy 2022

Term / Abbreviation	Definition / Description
KGV Dock	King George V Dock - the last of the Royal Docks to be constructed, situated to the south of the Airport runway and the Royal Albert Dock.
KSI	Killed or seriously injured
kW/hr	Kilowatt-hour
LA90	The LA90,T value is often used to describe background noise levels and is defined as the level exceeded for 90% of the measured time.
LAeq,T	<p>LAeq,T, or the equivalent continuous A-weighted sound pressure level, is the most widely used noise metric. It is an energy average and is defined as the level of a notional sound which would deliver the same A-weighted sound energy as the actual variable sound over a defined period of time, T.</p> <p>LAeq,16h and LAeq,8h are commonly used to describe the daytime period (07:00 to 23:00) and night-time period (23:00 to 07:00) respectively. In the context of aircraft noise, these are typically averaged over the summer period (92 days from June 16th to September 15th inclusive) and are referred to as the summer day and summer night values.</p>
LAmx,T	LAmx,T is the maximum A-weighted sound pressure level measured in a defined period, T. Normally associated with a time weighting, F (fast, LAFmax,T) or S (slow, LASmax,T), which is related to the sampling speed of the measurement instrument. It is sometimes used independently of a time period, for example when describing the maximum value of a single aircraft flyover
LAMP	London Airspace Management Programme
Landside	The areas of the airport which do not require full security screening to gain access to.
LAQM	Local Air Quality Management
LBN	London Borough of Newham
LCY	London City Airport
Lden	<p>Lden, or the day-evening-night noise indicator, is a long-term average (usually annual in the context of aircraft noise) 24 hour LAeq,T value where a 10 dB penalty is applied to noise at night and a 5 dB penalty is applied to noise in the evening. It is defined by the following formula:</p> $L_{den} = 10 \times \text{Log} \left(\frac{12}{24} \times 10^{\left(\frac{L_{day}}{10}\right)} + \frac{4}{24} \times 10^{\left(\frac{L_{eve} + 5}{10}\right)} + \frac{8}{24} \times 10^{\left(\frac{L_{night} + 10}{10}\right)} \right)$ <p>Where:</p> <p>Lday is the A-weighted long-term average sound level for the 12 hour daytime period (07:00 to 19:00),</p> <p>Leve is the A-weighted long-term average sound level for the 4 hour evening period (19:00 to 23:00), and</p> <p>Lnight is the A-weighted long-term average sound level for the 8 hour night-time period (23:00 to 07:00).</p>
LEP	Local Enterprise Partnership
LGV	Light Goods Vehicle
Listed Building	Building identified on the English Heritage statutory list as being historically and/or architecturally important.
LLFA	Lead Local Flood Authority
LOAEL	Lowest Observed Adverse Effect Level
Local Study Area	The area defined in the S106 Agreement for monitoring local employment
LPA	Local Planning Authority – London Borough of Newham
LPG	Liquefied Petroleum Gas
LSOAs	Lower Super Output Areas
LTO	Landing and take-off

Term / Abbreviation	Definition / Description
LUF	Levelling Up Fund
MBU	Beyond the Horizon The future of aviation Making best use of existing runways – the Government’s policy on making best use of runway capacity
mppa	Million passengers per annum
MSOA	Middle Super Output Area
MtCO ₂ e	Megatonnes (million tonnes) carbon dioxide equivalent
MTS	Mayor’s Transport Strategy
NAEI	National Atmospheric Emissions Inventory
NH	National Highways
NATS	NATS Holdings (formerly National Air Traffic Services)
NE	Natural England
NEET	Young people not in education employment or training
NF ₃	Nitrogen trifluoride
NFTMS	A noise and flight track monitoring system (NFTMS) comprises a network of NMTs that record and correlate noise data with individual flights by use of other airport logged flight telemetry, such as radar data
NHS	National Health Service
NMT	A noise monitoring terminal (NMT) is a fixed or mobile station with the appropriate instrumentation to measure aircraft noise in the vicinity of an airport on a long-term basis.
N ₂ O	Nitrous oxide
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NOEL	No Observed Effect Level
NO _x	Nitrogen oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NPS	National Policy Statement
NPSE	Noise Policy Statement for England
NRMM	Non-Road Mobile Machinery
NTS	Non-Technical Summary
Nx Contours	Nx contours define the area exposed to a minimum number of events with a specified maximum noise level x in a given period. For example, an N60,100 contour shows the area exposed to at least 100 noise events, each of which has a maximum noise level of at least 60 dB L _{ASmax} .
O ₃	Ozone
OAG	Official Airline Guide
OAPF	Opportunity Area Planning Framework
OECD	The Organization for Economic Co-operation and Development
OLS	Obstacle Limitation Surfaces
ONS	Office for National Statistics
OS	Ordnance Survey
Pax	Passengers
PEA	Preliminary Ecological Appraisal
PFCs	Perfluorocarbons

Term / Abbreviation	Definition / Description
PIA	Personal Injury Accident
PINS	Planning Inspectorate
PLA	Port of London Authority
PM ₁₀	Particulate Matter that is 10 micrometres or less in diameter
PM _{2.5}	Particulate Matter that is 2.5 micrometres or less in diameter
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
Principal Assessment Year	The year in which the proposed cap will be reached under Development Case Scenario is 2031. The ES assesses and describes the incremental changes in effects between the Do Minimum and Development Case scenarios in this year.
Proposed Amendments	The proposed amendments to the planning conditions attached to the CADP1 planning permission, being sought under this S73 Application.
Proposed Development	The CADP1 development, as amended by the proposed amendments.
PSED	Public Sector Equality Duty
PSRZ	Public Safety Restricted Zone
PSZ	Public Safety Zone – Areas of land at the end of runways established at the busiest airports in the UK, within which certain planning restrictions apply.
PV	Photovoltaic cells (solar panels)
RCP8.5	Representative Concentration Pathway to average global warming of 8.5 watts per square meter, equivalent to warming of around 4.3 degrees Celsius above pre-industrial levels by 2100.
RICS	Royal Institution of Chartered Surveyors
SAC	Special Area of Conservation
SAF	Sustainable Aviation Fuel
SCI	Statement of Community Involvement
SEL	SEL is the sound exposure level which is a measure of the total sound energy from an event such as an aircraft movement. The SEL value is the notional constant sound level that has the same amount of energy in 1 second as the original noise event has in total. This is equal to $L_{Aeq,T} + 10\text{Log}(T)$.
SES	Socio-economic status
Single Mode Contours	Most noise contours reflect the aircraft operations that occur during a period when runways are used in both directions, primarily in response to the varying direction of the wind. Single mode contours differ in that they assume all the movements use only a single direction on each runway
SIS	Sound Insulation Scheme
Site	The Airport, London City Airport
SO ₂	Sulphur dioxide
SOAEL	Significant Observed Adverse Effect Level
SPG	Supplementary Planning Guidance
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
TA	Transport Assessment
TfL	Transport for London
Transitional Year	The year in which the existing cap will be reached under Do Minimum and Development Case scenarios is 2027.
UAEL	Unacceptable Adverse Effect Level
UFP	ultra fine particulates

Term / Abbreviation	Definition / Description
UNFCCC	United Nations Framework Convention on Climate Change
UK	United Kingdom
UKCP18	United Kingdom Climate Projections 2018 (the most recent UK Met Office climate projections published).
UK ETS	UK Emissions Trading Scheme
WEC	Western Energy Centre - Proposed Energy Centre situated in the western Service Yard and housing various elements of plant that services the Western Terminal Extension and the Facilitating Works Coaching Facility
WebTAG	DfT Transport Analysis Guidance (TAG)
WFD	Water Framework Directive
WHO	World Health Organisation
WTE	West Terminal Extension - Proposed extension containing an expanded and reconfigured goods and waste facility, as well as storage and other minor support facilities, and situated within the existing 'triangle' Service Yard.
ZEA	Zero Emissions Aircraft / Zero Emissions Aviation