



Airports Commission
Glossary for *Final Report*
1 July 2015

Term	Definition
2R	Second Runway
AADT	Annual Average Daily Traffic
AC	The Airports Commission
ADMS – Airport	Atmospheric Dispersion Modelling System; model developed specifically for the assessment of airports
Aero revenue	The part of an airport's revenue derived from a number of charges levied on airlines
Airline alliance	An airline alliance is an agreement between two or more airlines to cooperate: it may range from marketing agreements through code sharing and joint ventures to mergers. The three global airline alliances are Star Alliance, SkyTeam, and oneworld.
AMS	Amsterdam Schiphol Airport (IATA code)
Ancient woodland	Land that has had continuous woodland cover since at least 1600AD
AONB	Areas of Outstanding Natural Beauty
AoN	Demand scenario <i>assessment of need</i>
APD	Air Passenger Duty
APU	Auxiliary Power Unit
AMQA	Air Quality Management Area
Arrival holding	The practice of holding a flight in an airborne stack, waiting to land
ATFM	Air Transport Flow Management
ATM	Air Transport Movement. Landings or take offs of aircraft engaged in the transport of passengers or freight on commercial terms
BAA	British Airports Authority Limited, now Heathrow Airport Holdings Limited
Base/do minimum	Specifically the option of adding no new runway capacity as assessed in the Interim Report
BAP	Biodiversity Action Plan
Bilateral air service agreement	An agreement which two nations sign to allow international commercial air transport services between their territories on a reciprocal basis
Block hours	The industry standard measure of aircraft utilisation, or the time spent by the aircraft flying, taxiing or landing.
CAA	Civil Aviation Authority
CAEP	Committee on Aviation Environmental Protection
Capacity constrained	Modelling case where passenger and ATM demand must fit available future capacity where no significant additional runway or terminal capacity is added
Capacity unconstrained	Modelling case where passenger and ATM demand is not limited by runway or terminal capacity
Capex	Capital expenditure
Carbon-capped forecast	Modelling scenarios where CO ₂ carbon emissions in 2050 are limited to 2005 levels through higher carbon prices
Carbon-traded forecast	Modelling scenario where CO ₂ carbon emissions are part of an emissions trading scheme, but not limited to any target
Catalytic	Effects generated by the attraction, retention or expansion of economic activity resulting from the increased connectivity
CCC	UK Committee on Climate Change
CDG	Paris Roissy-Charles de Gaulle Airport (IATA code)
CGE modelling	Computable General Equilibrium modelling

CLRTAP	Convention on Long-Range Transboundary Air Pollution
COPERT4	Computer Programme to calculate Emissions from Road Transport
COPI	Construction Output Price Index. Published by the Department for Business, Innovation and Skills
CO ₂	Carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
Core baseline	Surface access schemes which have not yet been delivered, but which have firm policy and funding commitments in place.
Constrained forecasts	Modelling case where passenger and ATM demand must fit available future capacity where no significant additional runway or terminal capacity is added
CTA	Central Terminal Area
DECC	Department of Energy and Climate Change
Defra	Department for Environment Food and Rural Affairs
Designated Heritage Assets	Assets protected by statutory designation such as Scheduled Monuments, Listed Buildings, Conservation Areas
DfT	Department for Transport
Direct	Effects which are connected explicitly to the airport itself e.g. its staff
Do something	The scheme case with proposed airport capacity expansion
EEA	European Economic Area
EEA	European Environment Agency
EFT	Emissions Factor Toolkit - Defra information used to derive PM10 and NOx emissions for road traffic sources
EIB	European Investment Bank
Emissions	In a climate change context, emissions refer to the release of greenhouse gases and/or their precursors and aerosols into the atmosphere over a specified area and period of time
Energy from Waste (EfW) plant	Processing facilities, primarily incineration, whereby energy may be recovered from waste. The resultant energy can be used to create power, heat or combined heat and power
ENR	Extended Northern Runway (applicable to the Heathrow Extended Northern Runway scheme)
ETS	Emissions Trading Scheme
EU	European Union
European airports	Classified as the airports located in the European Economic Area (EEA), including for this purpose Croatia (ratified March 2015), Switzerland and the dependent territories of EEA States
Excess demand	In an airport context, a situation in which the market demand for flights from a particular airport is greater than the market supply, thus causing higher ticket prices
Extended baseline	Surface access schemes which have not yet been delivered and which do not have firm policy and funding commitments in place, but which the Commission believes may plausibly be required to meet background demand by 2030.
Full Service carrier	An airline that focuses on providing a wide range of pre-flight and on-board services including different service classes. In most European countries the former national carriers operate as full service carriers they are often also referred to as legacy carriers.

Future Airspace Strategy (FAS)	A plan for UK airspace until 2030 whose vision is to provide “Safe, efficient airspace, that has the capacity to meet reasonable demand, balances the needs of all users and mitigates the impact of aviation on the environment”
FDI	Foreign Direct Investment
Feeder traffic	Feeder traffic comprises connections at particular airports which ‘feed’ or connect passengers onto onward flights. These onward flights are therefore supported by higher passenger volumes than otherwise would be the case
FEGP	Fixed Electrical Ground Power
FRA	Frankfurt Airport (IATA code)
Network carriers	The network carrier business model is based on sustaining global route networks. As such, network carriers are based at one or more hub airports where their passengers can connect between a variety of flights. Traditionally network airlines were national carriers. Most of them are members of one of the three global airline alliances.
GAL	Gatwick Airport Limited, promoter of Gatwick Airport Second Runway option
GDP	Gross Domestic Product (National Income)
General aviation	General aviation (GA) can be defined as a civil aircraft operation that is not a commercial air transport flight operating to a schedule. General aviation flights range from gliders and powered parachutes to corporate jet flights
GF	Demand scenario <i>global fragmentation</i>
GG	Demand scenario <i>global growth</i>
GIG	Geo Information Group Categories
GIP	Global Infrastructure Partners. The largest shareholder of Gatwick Airport Limited and London City Airport amongst others
Green Book	HM Treasury guidance for public sector bodies on how to appraise proposals before committing funds to a policy, programme or project
Groundholding	The practice of holding a flight on the ground, ready to depart
GSE	Ground Support Equipment
ha	Hectares
HAL	Heathrow Airport Limited, the promoter of the Heathrow Airport North West Runway option
HDV	Heavy Duty Vehicles
Heathrow Opportunity Area	An area identified in the current London Plan (2011) capable of accommodating a proportion of 12,000 new jobs and over 9,000 new homes
Helios paper	UK CAA Runway Resilience Study
HGV	Heavy Goods Vehicle
HHL	Heathrow Hub Limited, the promoter of the Heathrow Airport Extended Northern Runway option
HS2	High Speed Two
Hub-and-spoke network	In hub-and-spoke networks, airlines and alliances route their traffic through one or more key airports (‘hubs’), with feeder traffic from other airports in the network (the ‘spokes’) supplementing local origin and destination traffic at the hubs
I - I	International to International interliners i.e. passengers who are transferring via a UK airport with their origin and destination outside the UK
IAN	Interim Advice Note – Highways England guidance

ICAO	International Civil Aviation Organisation. An agency of the United Nations establishing safe principles and fostering the planning and development of airports of member states
Indirect effects	Effects generated by the activities of the airport's supply chain
Induced effects	Effects generated by activities related to those directly or indirectly associated with the airport
International interliners	Passengers starting or finishing their journey in the UK but using a foreign hub
Isochrone	An isochrone is a line on a map or diagram connecting places from which it takes the same time to travel to a certain point
JFK	John F Kennedy Airport – New York (IATA code)
L_{Aeq}	L_{Aeq} is the noise measure used to describe the average sound level experienced over a period of time resulting in a single decibel value. This approach is used beyond aviation to measure most environmental noise exposure. L_{Aeq} is most commonly used with the A-weighted scale, expressed as L_{Aeq} . The A-weighted sound level is the most widely used to quantify sound from all modes of transport. When considering L_{Aeq} , it is always necessary to quote the time period over which the L_{Aeq} applies. UK airports produce noise contours showing locations of equal noise exposure over 16 hours (L_{Aeq} 16H) in effect presenting the average sound level experienced within certain areas around the airport between the hours of 07:00 and 23:00. Historically, UK policy has been to use 57 L_{Aeq} 16H as the level of daytime noise marking the approximate onset of significant community annoyance and this value has influenced the production of annual contour maps at many airports. Measurements are always in decibels (dB), though these are not stated. Thus 57 dB L_{Aeq} is written 57 L_{Aeq} throughout
London Airspace Management Programme	Part of the Future Airspace Strategy deployment plan
Landscape character	A distinct, recognizable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse
LAQM	Local Air Quality Management - every authority has to carry out regular reviews and assessments of air quality in its area to identify whether the local air quality objectives have been, or will be, achieved at relevant locations, by the applicable date
LCK	Demand scenario <i>low-cost is king</i>
LCY	London City Airport (IATA code)
LDEN	LDEN is the 24-hr L_{eq} calculated for an annual period, but with a 5 decibel weighting for evening and a 10 decibel weighting for night to reflect people's greater sensitivity to noise within these periods
LDV	Light Duty Vehicle
LGV	Light Goods Vehicle
LGW	Gatwick Airport (IATA code)
LGW2R	Gatwick Airport Second Runway, the option promoted by Gatwick Airport Limited
LHR	Heathrow Airport (IATA code)
LHR ENR	Heathrow Airport Extended Northern Runway, the option promoted by Heathrow Hub Limited
LHR NWR	Heathrow Airport Northwest Runway, the option promoted by Heathrow Airport Limited
LNR	Local Nature Reserve
Local Planning Authority (LPA)	A local planning authority (LPA) is the local authority or council that is empowered by law to exercise statutory town planning functions for a particular area of the United Kingdom

London airport system	For the purposes of this report, the London airport system refers to the following airports: Heathrow, Gatwick, Stansted, Luton and London City
Long-haul	For much of this report, 'long-haul' depicts a destination (or route) to or from a country that is not listed as part of the group of countries defined as 'Western Europe' (or 'short-haul'). However at certain points the ITF long-haul definition is used (destinations outside Europe).
Long-term options	Long-term options are those which involve the substantial development of a new or existing airport site. This includes the delivery of any surface access links or other infrastructure required to ensure that the new airport capacity can be utilized
Low-cost carrier	Low-cost carriers apply a business model that relies on reducing operating costs (for example, by using dense economy-only seating, not providing free in-flight meals, facilitating connections to other flights, discouraging carriage of hold baggage) to provide passengers with relatively cheap tickets.
LTN	Luton Airport (IATA code)
LTO	Landing and Take-off Cycle
macroeconomic	Macroeconomic impacts are those that affect economy wide movements and changes such as GDP, unemployment, and inflation.
MDI	Managing Directors Instruction – included in Airports Conditions of Use, and are to be complied with by all operators
MGPU	Mobile Ground Power Unit
microeconomic	Microeconomic impacts are those that affect the behaviour of firms and individuals in relation to their demand for and supply of goods and services (and therefore price and quantity)
mixed mode	Mixed mode operations would allow runways to be used for scheduled arrivals or departures at the same time
Monte Carlo analysis	A method of forecasting where inputs are randomly varied within a distribution to calculate the probability of a particular outcome
Mppa	Million passengers per annum
Mt	Million tonnes
MtCO ₂ e	Million tonnes of carbon dioxide equivalent
Multiplier	A factor of proportionality that assess how much a variable changes as a reaction to another variable
NAEI	National Atmospheric Emissions Inventory
Narrow-bodied jets	A narrow-body aircraft has a typical aircraft cabin width of 3 to 4 meters allowing for between 2 and 6 passengers to sit side by side. Narrow-body aircraft are commonly used for short-haul flights as their range will not allow transatlantic or transcontinental flights
NATS	NATS Holdings, formerly National Air Traffic Services, is the main air navigation service provider in the UK including provision of en-route air traffic control services to all flights in the UK
NECD	National Emissions Ceiling Directive
Net additional runway	Additional runway capacity over and above the level of runway capacity available today
Noise contours	Noise contours are lines on a map showing where equal levels of noise are experienced

Noise envelopes	The concept of a 'noise envelope' is one which would create a balance between aviation growth and noise reduction with the objective of incentivising airlines to introduce quieter aircraft whilst giving local communities more certainty about the levels of noise they may expect in the future. A noise envelope can be created through the introduction of a movement cap, a quota count system or by setting passenger number limits
Noise respite	The principle of noise respite is to provide defined periods of noise relief to people living directly under the flight path
NO _x	Nitrogen oxides
NPRs	Noise Preferential Routes. Paths known as Noise Preferential Routes (NPRs) are followed by aircraft departing airports in the London area. NPRs were set by the Department for Transport (DfT) in the 1960s and were designed to avoid overflight of built-up areas where possible
NPS	National Policy Statement
NSIPs	Nationally Significant Infrastructure Projects
NWR	North West Runway (applicable to the Heathrow North West Runway scheme)
Obstacle limitation surfaces	This refers to the definition of airspace around airports which must be maintained free from obstacles in order to ensure safe airport operations
OD market	Origin-and-destination market is a measure of how attractive an airport or city is to air traffic. The size of an OD market for a particular location is measured by adding passenger demand for using airport(s) at that location to fly somewhere else (the origin "O") and passenger demand for getting to that location as the ultimate destination (the destination "D").
OECD	Organisation for Economic Co-operation and Development
Open Skies agreement	Open Skies is an international policy concept that calls for the liberalisation of the international aviation industry – particularly commercial aviation – in order to create a free-market environment for the airline industry. The EU-U.S. Open Skies agreement is one of the most significant open skies agreements concluded in recent years
PCA	Pre Conditioned Air
PCM	Pollution Climate Mapping model – used by Defra to report to EU Commission on NO ₂ levels
PM2.5 & PM10	Concentrations of Particulate Matter for which the European Union has set limits
Point-to-point	Direct connection between two destinations
PPG	Planning Practice Guidance
Predict and provide approach	An approach based on forecasting future demand and then meeting that demand no matter the cost
PSDH	Project for the Sustainable Development of Heathrow
PSO	Public Service Obligation. In order to maintain appropriate scheduled air services on routes which are vital for the economic development of the region they serve, European Member States may impose PSOs on these routes
PV	Present Value
PwC	PricewaterhouseCoopers LLP
Ramsar	Ramsar sites are wetlands of international importance, designated under the Ramsar Convention
RDE	Demand scenario <i>relative decline of Europe</i>

Regional airports	For the purposes of this report, 'regional airports' refers to the following airports modeled by NAPAM: Southampton, Norwich, Southend, Bristol, Cardiff, Bournemouth, Birmingham, East Midlands, Coventry, Manchester, Newcastle, Liverpool, Leeds, Bradford, Durham Tees Valley, Doncaster – Sheffield, Humberside, Blackpool, Glasgow, Edinburgh, Aberdeen, Prestwick, Inverness, Belfast International and Belfast City. This is consistent with the approach taken by the DfT aviation forecasts
Resilience	For the purposes of this report, resilience refers to the ability of an airport to be able to anticipate, absorb or recover from unforeseen events, whether they arise from late passengers or aircraft, or from extraneous events such as fog, low visibility, or strong winds
Runway alternation	In this report, runway alternation refers to the practice at Heathrow airport whereby the designated landing runway is changed at 15:00 (so that the designated departure runway becomes the landing one) when the airport is operating during westerly operations, providing predictable periods of relief from the noise of landing aircraft for communities under the final approach tracks to the east of the airport
SAC	Special Area of Conservation
Scarcity rents	Airline scarcity rents arise when potential demand exceeds the physical capacity of the airport to accommodate it. Scarcity rents are created as average air ticket prices increase to balance supply and demand and clear the market i.e. ticket prices increase until demand is equal to the scarce capacity. Average ticket prices are therefore higher than they would be if all demand was accommodated.
Scheme	One of three short-listed proposals for runway expansion
SE	South East (for region only)
SEA	Strategic Environmental Assessment. The SEA identifies the significant environmental effects that are likely to result from the implementation of the plan or alternative approaches to the plan
Shadow cost	The extra cost of flying required to reduce passenger demand from above an airport's runway or terminal capacity, to a level that is back within capacity
Short-haul	In much of this report short-haul has been defined in the following way: 'Western Europe' and comprises the following group of countries: Andorra; Austria; Belgium; Bosnia Herzegovina; Cape Verde; Croatia; Cyprus; Czech Republic; Denmark; Estonia; Faroe Islands; Finland; France; Germany; Gibraltar; Greece; Greenland; Hungary; Iceland; Ireland; Italy; Latvia; Lithuania; Luxembourg; Macedonia; Malta; Republic of Moldova; Monaco; Montenegro; Netherlands; Norway; Poland; Portugal; San Marino; Serbia; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; United Kingdom. This is consistent with the DfT's definition of 'Western Europe' as used in their aviation demand modelling. However at certain points the ITF short-haul definition is used (destinations within Europe).
Short-term options	Short-term options are those which could be delivered without the provision of additional runways or terminals, within 5 years of the publication of our interim report in December 2013
SIDs	Standard Instrument Departure routes – the planned flight procedure followed by an aircraft immediately after take-off
Slots	A slot is the right to use a bundle of airport infrastructure at a certain date and time to operate an air service.

Slot allocation regime	In the UK context, the slot allocation regime is the mechanism currently used to allocate slots at Europe's congested airports (the slot-coordinated airports) governed by the European Commission's regulation on airport slot allocation (Council Regulation No 95/93 of 18 January 1993, which was amended by Regulation 793/2004). These Regulations are broadly based on the IATA Worldwide Slot Guidelines. The objective of the slot allocation regime is to encourage efficient use of airport capacity through optimal allocation of slots.
SPA	Special Protection Area
SSSI	Sites of Special Scientific Interest
STN	Stansted Airport (IATA code)
Taxiing	Movement of an aircraft on the ground, e.g. from a runway to its stand
TDRs	Traffic Distribution Rules - Rules that prohibit specified classes of air traffic from using particular airports; or direct that specified classes of air traffic should use particular airports. Where two or more airports serve the same city or area, TDRs are intended to allow the distribution of air traffic between those airports to meet local policy objectives. In the UK context, the application of TDRs is tightly regulated by European Union law to ensure that TDRs do not discriminate among destinations inside the EU or on grounds of nationality or identity of air carriers.
TEAM	Tactically Enhanced Arrival Management. A practice seen at Heathrow where both runways are used to land aircraft when a set of trigger points have been reached, namely related to the level of delay experienced on arrival
TIMs	Times in Mode – time it takes for certain aircraft activity such as take-off, climb out and approach times
Townscape	Built up areas such as towns and cities comprising of housing, offices, retail
Transfer traffic	Passengers connecting between their origin airport and destination airport through an intermediate airport
ULEV	Ultra Low Emission Vehicle
ULEZ	Ultra Low Emission Zone
UoW paper	The European airline delay cost reference values study conducted by university of Westminster
VFR	Visiting friends and relatives
VoT	Value of Time
Waterbody	Discrete section of a river, groundwater area, lake or coast that is a defined management unit under the WFD
Watercolumn	A conceptual column of water from surface to bottom sediments
Water Framework Directive (WFD)	A substantial piece of EU water legislation that came into force in 2000, with the overarching objective to get all water bodies in Europe to attain Good or High Ecological Status. River Basin Management Plans (RBMP) have been created which set out measures and potential mitigation to ensure that water bodies in England and Wales achieve 'Good Ecological Status'
Waterscape	Landscapes with views of the coast or seas, and coasts and adjacent marine environments with cultural, historical and archaeological links with each other
WebTAG	Department for Transport appraisal guidance
Westerly preference	Heathrow airport operates a 'westerly preference' which means that when there is a westerly wind aircraft make their final approach over London and departing aircraft depart over west London. During periods of light easterly winds (up to 5 knots), aircraft will often continue to land in a westerly direction making their final approach over London. The westerly preference was introduced in the 1960s to reduce numbers of aircraft taking off in an easterly direction over London, i.e. over the most heavily populated side of the airport
WHO	World Health Organisation

Wide-bodied jets	A wide-body aircraft has a typical aircraft cabin width of 5-6 metres allowing for between 7 and 10 passengers to sit side by side. The total capacity of a wide-body aircraft can be between 200 to 850 passengers
Yield	The total revenue raised by an airline, such as from sale of tickets and in-flight sales divided by an output measure

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