

Summary of proposals for making best use of existing airport capacity in the short and medium term

Introduction

The Airports Commission's terms of reference requires us to report no later than the end of 2013 on our recommendation(s) for immediate actions to improve the use of existing runway capacity in the next 5 years – consistent with credible long term options.

In February 2013 we published our '[Guidance Document 01: Submitting evidence and proposals to the Airports Commission](#)' to explain how we plan to take forward our work programme to inform the interim report, and to explain to those with an interest in submitting evidence and proposals for options for improving our use of existing capacity should do so by 17th May 2013.

Our Guidance Document also set out our intention to develop a strategy for making best use of existing airport capacity drawing upon the expertise of relevant organisations such as the Civil Aviation Authority; the options proposed and; other evidence provided in external submissions on this matter.

The purpose of this paper is to summarise the range of options received from external submitters for making best use of existing capacity in the short and medium term. Alongside these options we also received a range of submissions setting out views on particular measures. Whilst these submissions did not directly propose options, the evidence and views they contain are being considered as part of our work.

Those who did not provide us with their views in May but still wish to do so, are invited to submit their views by 27th September 2013 to airport.proposals@airports.gsi.gov.uk making clear in the subject line of the email that it relates to the short and medium term options.

Due to the large number of submissions received and the level of overlap between submissions, we are publishing this summary document rather than the individual 75 submissions, which is intended to provide an accessible summary of the options submitted.

The Guidance Document 01, defined short and medium term options in the following way:

- **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.
- **Medium term options** are those which do not require the provision of additional runways or terminals, but which may need more than 5 years to deliver (for example, measures requiring significant planning approvals to be obtained or improvements in surface access infrastructure serving an existing airport).

In the course of our work we will also be considering whether the measures submitted offer transitional benefits towards the range of long term options received on 19th July 2013.

Submissions for making best use of existing capacity

The Airports Commission's Guidance Document 01 asked for suggestions for making best use of existing airport capacity in the short and medium term.

The deadline for submissions was 17th May 2013, and we received over 70 submissions from organisations and private individuals. Details of those organisations who submitted proposals are set out in Table 1.1.

Table 1.1 Submitters of options for making best use of existing capacity (in alphabetical order)

2M Group	Aberdeen and Grampian Chamber of Commerce	Aberdeen City and Shire Economic Future (ACSEF)	Aberdeen International Airport
ABTA	Air League	British Airways	BAR UK
Birmingham Airport	Bristol Airport	Cardiff Airport	CBI
Chartered Institute of Logistics and Transport	Connected Scotland Expert Working Group	Dorset LEP	Essex County Council (Officer Response)
Exeter City Council	Farnborough Airport	Gatwick Airport	Gatwick Airport Conservation Campaign
HACAN	Hampshire County Council – Transport Action Group Enterprise M3 LEP	Heart of South West Local Enterprise Partnership	Heathrow Airport
Heathrow Hub Ltd	HITRANS	IAAG	Institute of Directors
International Air Rail Organisation	Kent County Council	Kent Federation of Amenity Societies	LCCI
London (Heathrow) Airline Consultative Committee and Airline Operators Committee	London Biggin Hill	London City Airport	London Councils
London First	London Stansted Corridor Consortium	Luton Airport	Manchester Airport Group
Manston Airport	National Trust	NATS	Natural England
NESTRANS	NetJets Europe	Newcastle Airport	North East Chamber of Commerce

Pembrey Airport	Richmond Heathrow Campaign	Rothwell Aviation Limited	Scottish Council for Development and Industry
Scottish Regional Transport Partnerships	Sheffield City Region	South East LEP	Southampton International Airport
Southend Airport	The Guild of Air Pilots and Navigators	Transport for London	Viable Plymouth Limited
Virgin Atlantic	Welsh Government	West Midlands Planning and Transportation Sub-Committee	Western Gateway
Westminster City Council			

There were a range of key issues identified in our review of submissions. Some of the common recurring themes included the following:

- The importance of resilience to disruption in the UK's airport system;
- The need to consider the UK's connectivity as a whole;
- The importance of taking into account the noise and carbon emissions from any short and medium term measures proposed.
- The interdependencies that exist between a number of the measures and the need to recognise these when considering any strategy for making best use of existing airport capacity.

We are now working on analysing the evidence and ideas put forward. This will include detailed consideration of each measure's impact (both positive and negative) on areas such as the environment, capacity, resilience and connectivity. As part of this work we have been meeting proposers, where we require further clarification on their proposals, as well as a range of other stakeholders. We expect this to continue throughout the year.

The options can be broken down into the following nine broad categories:

- **Airport Operations options** for changes to the operations of particular airports, or to the general principles of UK airport operation.
- **Airspace Operations options** for the more efficient management of the UK's airspace beyond the bounds of individual airports.
- **Slot/Scheduling options** for changes to the governance and incentive mechanisms around the use of slots.
- **Regulatory options** for changes to the regulatory and legal frameworks that govern the UK's aviation sector.
- **Air Passenger Duty (APD) options** for changes to the tax regime to promote different uses of the UK's airport capacity.

- **Air Services Agreement options** for the promotion of bilateral and international agreements to encourage the development of new routes between the UK and overseas destinations.
- **Surface Transport options** for the provision of new or enhanced infrastructure to improve the surface access to particular airports and or for changes to the operation of the UK's existing surface transport infrastructure so as to better support the aviation sector.
- **Financial Incentivisation options** for non-tax changes to the financial incentives in place around the use of the UK's airport capacity.
- **Night Flight and Enhanced Mitigation options** for changes to the night flights regimes in place at various UK airports and to reduce the adverse impacts of aviation.
- **Traffic Redistribution rules** for mandating or incentivising changes to the usage of particular UK airports (this has some overlap with the two categories above).

The remainder of this document summarises the proposals that have been made. Please note this summary includes all the options received as they have been proposed to us and should not be considered an indication of the Commission's views on options nor of their suggested benefits.

Summary of options received

Airport Operations options
<p><u>Application of the alternation regime on easterly operations:</u> Heathrow's runways are operated in segregated mode where one runway is used for arrivals and the other for departures. The arrival and departure runways are alternated at 15:00 each day to give those living under the flight paths respite from noise. For historical reasons, there is no alternation of the runways on easterly operations. This measure would support a move to a full alternation regime.</p>
<p><u>Removal or change to the westerly preference criteria:</u> Heathrow's runways are oriented east-west and due to the prevailing wind the airport operates mainly with arrivals and departures to the west, i.e. flying into the wind. This is supplemented by a 'westerly preference' during daytime operations, which means that the airport continues to operate in a westerly direction until the easterly component of the wind (effectively the tailwind) exceeds 5 knots. This measure would support a change to this preference either by (a) removing it so that aircraft would always operate into the wind; or (b) increasing it so that a 10 knot easterly (tailwind) would be needed before the switch were made away from westerly to easterly operations.</p>
<p><u>Use of displaced thresholds:</u> This would allow aircraft to land further towards the centre of the runway, meaning that their approach paths would be higher and therefore less noisy than at present when entering the airport perimeter. This measure has been proposed in relation to London Heathrow but could be considered in relation to other airports in the UK.</p>
<p><u>Putting an end to the routine use of both runways for arrivals between 06:00 and 07:00:</u> This would see a redistribution of existing flights in the early morning arrival period permitting an increased number of arrivals in the 05:00 – 06:00 period in order to reduce the use of both runways for arrivals in the early morning period to mitigate community disturbance.</p>
<p><u>Introducing measures assessed during the recent Operational Freedoms trial at Heathrow including 'early vectoring' to improve departure rates; tactically using both runways for arrivals when there are delays and using the southern runway for the arrival of A380s and for Terminal 4 arrivals:</u></p> <p>These measures were trialled as part of the Operational Freedoms trial in 2012/13 at Heathrow to enable a more flexible approach to the operation of the runway infrastructure. The original objective of the operational freedoms trial was to test the way in which changes to operational practices might have a beneficial effect on the reduction in delays experienced by users, improvement in flight punctuality and the increased resilience of the flying schedule.</p> <p>The specific measures proposed are as follows:</p> <p>'Early vectoring' - Aircraft departing from Heathrow follow set departure routes (known as Noise Preferential Routes or NPRs). The choice of departure route used by aircraft is mostly decided on their destination. Those</p>

heading to Scandinavia for example will use northerly departure routes whereas those destined for southern Europe will use southerly departure routes. Due to the fact that the majority of the destinations served by Heathrow are destined towards the South, this can often cause delay on departure. 'Early vectoring' was the procedure tested during the trial which saw departures using southerly departure routes being redirected from the departure route earlier than is usual. This meant the separations between aircraft could be reduced from two minutes to one minute on these southerly departures.

Tactically using both runways for arrivals – Heathrow's runways are operated in segregated mode where one runway is used for arrivals and the other for departures. When the build-up of arriving aircraft results in severe delays, Air Traffic Control is allowed to land aircraft on both runways. This is known as Tactically Enhanced Arrivals Mode (TEAM). This measure was only used when specific trigger conditions were met. For information on these triggers please refer to Heathrow Airport's website at: <http://www.heathrowairport.com/noise/noise-in-your-area/operational-freedoms-trial>

Using the southern runway for the arrival of A380s and for Terminal 4 arrivals – The A380 is the biggest aircraft that operates at Heathrow. Due to the vortex it produces, aircraft behind it have to allow a greater distance when coming in to land. This can lead to a delay in the arrivals programme. This measure would take A380s out of the arrival sequence to land on the designated departure runway so as not to disrupt the arrival flow. The use of the southern runway for Terminal 4 arrivals is intended to reduce the time needed for aircraft to taxi to the terminal on arrival as Terminal 4 is situated south of the southern runway. This could potentially reduce ground noise and emissions and avoid the need to cross the southern runway therefore reducing disruption.

Mixed mode at Heathrow:

Introduction of mixed mode operations for Heathrow runways. This would allow both runways to be used for both arrivals and departures as opposed to current operations where a single runway is currently used for arrivals and the other for departures. This measure has been proposed in two forms: to increase capacity at Heathrow (which would necessitate additional planning condition to allow for more aircraft movements) and to increase resilience (not necessitating a change to the number of aircraft movements allowed under the planning rules applied at Heathrow) either as a tactical solution when delays reach certain levels or as a full time measure.

Airport Collaborative Decision Making (A-CDM):

This measure is about partners (airport operators, aircraft operators/ground handlers, ATC and the Network Operations) working together more efficiently and transparently in the way they make decisions and share data. At an airport level, the A-CDM system would aim to improve the overall efficiency of operations with a particular focus on aircraft turn around times and the pre-departure sequence. One of the main outputs of the A-CDM process is intended to be more accurate information about aircraft Target Take Off Times which could then be used across the European Air Traffic Management Network to plan air traffic movements further into the system.

Linking all airfields to air traffic management for information exchange:

This measure would support the implementation of simple interfaces for electronic data exchange between smaller airports and the air traffic management network to ensure air traffic managers across the network have as complete a picture as possible of current and near term operations.

National and local capacity management cells:

This proposal supports the establishment of airport bodies representing the range of airport stakeholders. The aim of these bodies is to manage demand levels and prioritise access to airports and airspace to minimise the impact of adverse conditions.

Reduced engine taxi:

This measure would involve aircraft taxiing to and from the runway using a reduced number of engines. This has the potential to reduce fuel burn and therefore emissions such as carbon dioxide and nitrogen oxides.

Use of electric vehicles airside:

This proposal supports the use of electric vehicles for airside operations to decrease the emissions associated with ground operations.

Traffic light systems for aircraft to maximise runway utilisation:

This measure has been proposed to reduce the time taken for aircraft to exit the taxi way onto the runway by providing aircrew with an indication that their air traffic control clearance is imminent through a traffic light system. This would allow them to initiate final checks and power settings and thus move onto the runway sooner than would otherwise be the case as it is suggested that there is a small delay incurred due to the reaction time between air traffic control giving an instruction to proceed and the aircrew enacting that decision.

More use of remote stands:

This measure proposes the use of additional remote stands away from the main terminal areas to provide additional parking space for aircraft to reduce congestion on the busiest parts of the airfield.

Airspace Operations options

Airspace restructuring:

These measures support the implementation of major programmes, including the Single European Sky (SES) / Single European Sky Air Traffic Management Research (SESAR), Future Airspace Strategy (FAS), the London Airspace Management Programme (LAMP) and the more specific airspace changes that underpin them. The Single European Sky (SES) initiative was established to simplify and harmonise airspace structures across Europe. As part of the Single European Sky initiative, SESAR (Single European Sky ATM Research) represents its technological dimension. In the UK and Ireland NATS are setting out a plan to modernise airspace by 2020 in the Future Airspace Strategy part of which includes the London Airspace Management Programme. These programmes are intended to redesign airspace structures to exploit aircraft abilities to fly precise and efficient trajectories using performance based navigation.

Civil/military airspace optimisation:

This measure proposes the reprioritisation of access to airspace from military to civil operations. Currently airspace is structured so that military authorities have control of some areas where weapons testing occurs from time to time for example. Under current arrangements within the so called flexible use of airspace, this airspace is released for civil use when it is not required by the military. Decisions to release airspace for civil use are taken by military authorities. This measure would impose a limit on military operations that impinge on civil traffic, effectively releasing the airspace for more civil use.

Creation of a known-surveillance environment:

This would lead to the definition of areas of airspace within which all aircraft must carry technology which identifies them and makes them visible to air traffic control all of the time.

Reassessment of the baseline Air Traffic Control (ATC) rules:

This measure proposes a change in the baseline ATC rules governing for example the separation distances between aircraft, to optimise airspace and airport capacity and runway throughput.

Incentivisation of flights' arrival punctuality instead of departure punctuality:

This would move the main performance incentive from on-time departure to on-time arrival to align the objectives of individual airlines to those of the overall system more than at present. Currently the main incentive for airline performance is focused on departures, measured as the time that the aircraft leaves its stand compared to its scheduled time. This incentive can cause perverse behaviours that compound to the detriment of the system as a whole. These behaviours include: (i) excessive buffers in schedules, to ensure on-time arrival in time for on-time or early departure. This can cause bunching in arrivals that leads to delay that leads to increased buffers in the schedule; (ii) early push-back from stand that can cause queues in the airport perimeter and departure delays.

Redefining the triggers for the application of low visibility procedures (LVP):

This measure would lead to improved planning for reduced runway visibility due to fog and cloud at an early stage to improve resilience against low visibility. Low visibility procedures are enacted when either the runway visible

range or cloud ceiling are below minima defined on an airport-by-airport basis. There is currently no differential between LVP caused by reduced runway visual range (fog) and low cloud ceiling. Pre-emptive action is taken, usually the day before, to manage disruption due to the application of LVP. This action is based on the weather forecast and can lead to changes in the number of aircraft that are allowed to land and take off from the runway.

Steeper climb outs / continuous climb departure (CCD):

This measure would see aircraft departing at steeper angles of ascent so that the aircraft reaches higher altitudes earlier, potentially reducing their noise footprint.

Distributing departure routes within noise preferential route (NPR) swathes:

This would change the policy of concentrating aircraft on only a few flight paths to one of using a greater number of routes in a pattern that could provide additional predictable periods of respite from aircraft flying.

Arrival queue management:

This measure has been proposed to address the management of inbound delay. At present Air Traffic Control manage holding delays in two forms: (i) holding on the ground at the origin airport arranged through Eurocontrol through 'Air Traffic Flow Management'; and (ii) holding in the air. This occurs in four stacks which are used to buffer inbound aircraft to Heathrow. This measure proposes the absorption of delays associated with sequencing for access to runways further upstream on the aircraft's flight path thereby reducing the need for more localised holding in stacks or through extended approach paths.

Enhanced processes against weather disruption through the use of Time Based Separation (TBS) and through the use of alternative navigational technology:

Inbound delays are exacerbated during periods of bad weather when the number of aircraft able to land on the runway is reduced, this is principally because of the need to maintain safe separation between approaching aircraft in an arrivals stream. In high (head) winds and low visibility, the separation between aircraft needs to be increased: in the first case to maintain the separation standards defined in terms of distance between aircraft; and in the second case to ensure the safe functioning of the precision guidance system (the Instrument Landing System – ILS) for approaching aircraft to guide them to land on a runway. In busy airports the number of arrivals are packed together to allow for maximum runway throughput. As such, they are more prone to weather disrupting their operations. This measure would address the impacts of high winds on runway throughput by moving to a process based on separations in time between successive aircraft in the sequence (time-based separations) rather than distance based separation as at present. This would allow for the arrival traffic to be reduced to a lesser extent than currently occurs. This measure also supports the transition to a microwave landing system (MLS) already used by British Airways, instead of the current instrument landing system (ILS). MLS is considered to perform better in all weather conditions than ILS.

Steeper approaches into airports, including both continuous and stepped:

This measure would increase the height of aircraft as they make their final approach to the airport, thereby reducing noise. Approach paths could either

<p>be at a continuous approach angle (between 3.2 and 3.5 degrees) or be stepped at different angles (with a steeper intermediate approach followed by the standard 3 degree airport approach).</p>
<p><u>Duel approaches to a single runway:</u> This would use differential approach path angles to reduce the separation needed because of aircraft wake vortex constraints, thereby increasing the arrival flow on the runway.</p>
<p><u>Multiple approaches to a single runway to guarantee respite:</u> This measure would allow for a change to the policy of concentrating aircraft on only a few flight paths to one of using a greater number of routes in a pattern which could provide predictable periods of respite from aircraft flying.</p>
<p><u>Independent parallel approaches at Heathrow:</u> This measure supports the use of both runways simultaneously for arrivals at Heathrow, allowing independent parallel approaches that would maximise arrival runway throughput. At present when both runways are used for arrivals, the air traffic stream on one runway is dependent on the traffic stream on the other. This means that aircraft must be offset from each other, meaning that the arrival flows are not optimised.</p>
<p><u>New service concepts:</u> Currently queues of aircraft are managed on a first-come, first-served basis. This can sometimes result in behaviours which are detrimental to the performance of the systems as a whole, e.g. in incentivising flights to be at the front of the queue, for example when the airport opens after the night period or after periods of disruption. This can cause bunching and increased aircraft queue lengths on arrival particularly at busy airports like Heathrow. This measure would result in the application of the most appropriate method of aircraft queue management, selected from 'first come first served' (as at present), 'on-time, first-served' (where priority is given to flights that are on-time) or best equipped, best served (where priority would be given to the most capable aircraft).</p>
<p><u>Linking airspace slot management to airport slots:</u> This measure proposes the management of airport and airspace slots linked, strategically in terms of capacity declaration but also tactically, as was applied to the London airport system during the London 2012 Olympic Games.</p>
<p><u>Optimised departure separation using advanced aircraft navigational technology:</u> Currently, aircraft fly along standard instrument departure routes (SIDS) that are defined as the centreline of established noise preferential routes. SIDS are single routes and departing aircraft using the same SID fly in sequence along the route with their minimum separations as defined by the air traffic control baseline rules. For a constant stream of aircraft departing down the same SID, these separation rules are a constraining factor on the frequency of departures. This measure is seeking to offset the angle between SIDS so that the departures no longer need to fly in sequence down one SID. This would effectively relax the required minimum separation required therefore increasing the frequency that aircraft can depart the runway. Most aircraft are now equipped with advanced navigational capability which means they can accurately navigate routes without extensive air traffic control intervention.</p>

This concept would require airspace change and potentially a redefinition of noise preferential routes (NPR) but could enable aircraft to be dispersed within the NPR rather than being concentrated on the centreline as at present.

Slot/Scheduling options
<p><u>Return to direct Government control regarding the allocation of slots:</u> The measure proposes Government asserting control over the allocation of slots at UK airports, distributing them in accordance with its assessment of the national interest.</p>
<p><u>Use of Public Service Obligation (or other means) to safeguard UK regional access to Heathrow:</u> This measure proposes the use of Public Service Obligations or, alternatively, financial or regulatory instruments to ensure the continuance of flights from UK regions into Heathrow Airport.</p>
<p><u>Designate different airports to serve different types of traffic:</u> This measure would use Traffic Distribution Rules (or other mechanisms) to allocate certain categories of flight (e.g. short-haul, long-haul, domestic, general aviation) to specific airports.</p>
<p><u>Reduce capacity declaration at airports and ensure the efficient utilisation of slots:</u> This measure would provide a lower capacity declaration at airports, to manage down congestion over time (or prevent airports reaching full capacity) so as to minimise the impacts of congestion on resilience. The proposal would be for a greater focus to be provided on the efficient utilisation of slots through the slot allocation process.</p>
<p><u>Changes to market based slot allocation mechanisms (e.g. slot auctioning or slot rentals):</u> This would change the systems for slot allocation to permit more diverse market-based solutions, such as slot auctions, allowing the system to better respond to changes in demand.</p>
<p><u>Financial incentives to use slots for routes to emerging markets:</u> This option would provide financial incentives for airlines to use slots to provide new routes to emerging markets rather than serving existing “thick” routes, with a view to enhancing connectivity to these regions.</p>
<p><u>Operation of an optimised, daily service plan:</u> This measure proposes operating to an optimised daily service plan to produce, ensure compliance with and deliver an optimal on-the-day arrival and departure schedule based on accurate predictions of runway throughput rates.</p>

Regulatory options
<p><u>End economic regulation of airports:</u> This would see the end of the Civil Aviation Authority's economic regulation of airports, with a particular view to allowing the consequent rise in landing charges at the most congested airports to redistribute traffic around the network.</p>
<p><u>Reduce landing charges at Heathrow and Gatwick:</u> This proposal would introduce a tougher cap on landing charges at these airports via the regulatory framework with the intention of reducing ticket prices for passengers and driving operating efficiencies.</p>
<p><u>Prohibit certain aircraft types (e.g. freighters) from congested airports:</u> This measure would require aircraft whose perceived need to use a "hub" airport is lower than others to use airports other than Heathrow.</p>
<p><u>Ban general and business aviation from congested airports:</u> This would prevent general and business aviation flights from using Heathrow (and potentially Gatwick), with the intention of improving capacity usage at those airports.</p>
<p><u>Remove restrictions on usage of general aviation airfields (e.g. to allow for scheduled flights):</u> This measure would remove the restrictions that some airfields primarily serving the general aviation community currently operate under, allowing them to accommodate scheduled flights, relieving pressure elsewhere in the network.</p>
<p><u>Streamline planning process for new airport infrastructure:</u> This is proposing a reform to the UK's planning laws to accelerate the process for delivering new airport infrastructure.</p>
<p><u>Establish an independent noise regulator:</u> This measure would lead to the creation of an independent body responsible for the regulation of aircraft (and potentially other sources of) noise, to introduce transparency and consistency into the system.</p>
<p><u>Border control reforms:</u> A number of measures have been proposed, including reforms to the UK's visa system, an increase in the number of border control staff at airports, and the provision of US border-control facilities in UK airports.</p>
<p><u>Minimum aircraft size rules at congested airports:</u> This measure would prohibit small aircraft from using the most congested airports via licence condition.</p>

Air Passenger Duty (APD) options
<p><u>Reduce or abolish Air Passenger Duty:</u> This would reduce the level of Air Passenger Duty (or remove it altogether) to increase the financial viability of routes connecting the UK to new destinations.</p>
<p><u>Increase Air Passenger Duty:</u> This measure proposes an increase in Air Passenger Duty (or the introduction of equivalent new taxation) to reduce the demand for flying.</p>
<p><u>Devolve to Scottish and Welsh Governments:</u> This would allow the devolved administrations to set the rate of Air Passenger Duty that would be applied at Scottish and Welsh airports.</p>
<p><u>Apply to transfer passengers:</u> This proposal would change the rules surrounding Air Passenger Duty so that it applies to passengers connecting via UK airports without leaving the “airside” area of the airport.</p>
<p><u>Regional variation of Air Passenger Duty:</u> This would apply a lower rate of Air Passenger Duty at airports outside of London and the South East.</p>
<p><u>Variation of Air Passenger Duty by airport congestion:</u> This measure would seek to apply a higher rate of Air Passenger Duty at highly congested airports, which could be used to offset a lower rate elsewhere.</p>
<p><u>Temporary Air Passenger Duty reduction or “holiday” for new routes:</u> This proposal would make passengers using new routes exempt from Air Passenger Duty for an initial period (perhaps 2 years) or apply a reduced rate.</p>

Air Services Agreements

Liberalisation of bilateral air services agreements to support the granting of Fifth freedoms at regional airports:

This proposal would lead to the reduction or removal of the restrictions associated with air services agreements for air services travelling from an origin airport through a UK airport and on to third airport, where either or both of the origin airport or final destination is outside of the UK.

Liberalisation of bilateral air services agreements on a bilateral or unilateral basis:

This measure would reduce or remove the restrictions associated with bilateral air services agreements for point-to-point services between the UK and third countries, on a bilateral or unilateral basis.

Surface Transport options
<p><u>“Code sharing” between airlines and rail operators:</u> This would enable the sale of integrated tickets which combine both air and rail portions into a single ticket and journey plan.</p>
<p><u>Expansion of the UK high speed rail network:</u> This measure proposes the construction of new high speed lines between UK cities to provide an alternative to domestic air travel.</p>
<p><u>Provision of direct high speed rail services to more continental destinations:</u> This measure would lead to the introduction of high speed rail services between London (and potentially other UK cities) and continental cities beyond Paris and Brussels, to provide an alternative to short haul flights.</p>
<p><u>HS2 spur to Heathrow:</u> This proposes building a spur from HS2 into Heathrow Airport to improve the airport’s surface access, particularly from non-London urban centres.</p>
<p><u>Enhanced rail links between existing airports:</u> These measures would be delivered through either the construction of new lines, or alterations to existing surface patterns to provide direct rail connections between existing London & South East airports, facilitating a “virtual hub” concept.</p>
<p><u>Other improvements to road and rail networks to improve access to Heathrow:</u> A range of proposals were submitted. These include:</p> <ul style="list-style-type: none"> • Complete planned Piccadilly line upgrade • Create central London downtown air terminal adjacent to a key railway station • Enable London Waterloo to Heathrow rail services from Eurostar platforms to T5 • Relocate Heathrow’s bus and coach station to an intermodal interchange on the motorway network • Great Western Main Line western connection to LHR • Enhanced highway capacity between the South West and Heathrow (e.g. M4, M3, A3) • Improvements to M25 corridor to ensure not a constraint on access • A Piccadilly line service to Park Royal to interchange with Central Line • New high speed rail station and terminal adjacent to the Great Western Main Line • High speed monorail to Northolt (to support as a reliever airport)
<p><u>Remodelling of Gatwick Airport Station:</u> This proposes improvements to the station, with a particular view to improving accessibility for passengers with luggage.</p>
<p><u>Enhancement of Gatwick Express:</u> This would lead to the reintroduction of the “dedicated” Gatwick Express service (without the onward journey to Brighton) and the provision of more suitable rolling stock.</p>

<p><u>Other improvements to existing road and rail networks to improve access to Gatwick:</u></p> <p>A range of proposals were submitted, including:</p> <ul style="list-style-type: none"> • Additional platform at Redhill to support more services to Reading • Incremental Brighton Main Line capacity enhancements • Old Oak Common interchange for linking Gatwick to HS2 • Increased Lower Thames Crossing capacity • Direct rail services between Gatwick and other London and South East airports
<p><u>Improvements to existing road and rail networks to improve access to Stansted:</u></p> <p>A range of proposals were submitted, including:</p> <ul style="list-style-type: none"> • West Anglia Main Line improvements including 4 tracking in Lea Valley to allow for an increase in services and to achieve maximum 30 minute rail travel time to Stansted from central London • Reinstate rail link to Braintree to connect STN to GEML (and services on that line north or south to Felixstowe, Harwich and Thames Ports) • Route improvements on the A120/M11 and West Anglian railway line if there is expansion beyond current permitted levels • Direct rail services between Stansted and other London and South East airports
<p><u>Take Crossrail/Crossrail 2 to Stansted:</u></p> <p>This measure is seeking to modify the existing Crossrail scheme or the proposed Crossrail 2 scheme so that it serves Stansted airport.</p>
<p><u>Restored Whitacre Link to improve access to Birmingham airport:</u></p> <p>This would lead to the reintroduction of services on the (disused) Whitacre Link to enable better rail access to Birmingham Airport from different directions.</p>
<p><u>Other surface transport improvements relating to Birmingham airport:</u></p> <p>A range of proposals were received, covering heavy and light rail and roads. These include:</p> <ul style="list-style-type: none"> • Improved HS2 interchange with Birmingham Airport • Birmingham Gateway Project • Coventry-Nuneaton line improvements • London Midland speed enhancements (Project 110) • Upgrades to enable 59 minute journey time Euston-Birmingham Airport • Whitacre Link • Midland Metro to Airport; • M42/Junction 6 improvements • Birmingham New Street station baggage drop off (check in facilities)
<p><u>Rename “Birmingham International” station to “Birmingham Airport”:</u></p> <p>This measure proposes to rename station to facilitate journey planning for users unfamiliar with the airport.</p>
<p><u>Range of road and rail improvements to improve access to other airports:</u></p>

<p>Proposals covering road and rail access to a number of other airports, including (but not limited to): Bristol, Bournemouth, Cardiff, Edinburgh, Glasgow, London City, Luton, Manchester, Manston, Newcastle, Southampton and Southend.</p>
<p><u>Check in/bag drop at rail stations:</u> This measure would provide facilities for passengers to conduct check-in and bag-drop activities at stations serving airports, reducing the need for terminal capacity.</p>
<p><u>Develop an integrated surface transport strategy:</u> This measure would see transport planning strategy methodologies adapted to make more account of the needs of airports and users of aviation.</p>

Options for financial incentives to promote behavioural change

Route development funds to promote new routes:

This measure would be intended to promote increased connectivity providing financial support for the introduction of new routes for a certain period of time (likely 2 years) after their introduction.

Higher landing charges at congested airports:

This would lead to the introduction of a congestion charging element into landing charges at the busiest airports, to incentivise airlines to make greater use of other, less congested airports.

Market non-London cities as destinations in their own right:

This measure proposes a marketing campaign to promote inbound tourism to non-London UK cities, balancing demand for aviation capacity away from London and the South East.

“Fly local” marketing campaign:

This measure proposes the launch of a marketing campaign to promote the use of local airports for journeys where they offer a viable alternative.

Night flight and Enhanced Mitigation options
<p><u>Night flights:</u> A range of measures have been proposed in relation to the night flights regime at Heathrow, Gatwick and Stansted airports seeking to increase, decrease or maintain the current number of air transport movements at the relevant airports.</p>
<p><u>Development of planning restrictions and Section 106 agreements around airports:</u> This measure supports the development of clear guidance on the planning, policy and compensatory action that would be considered appropriate to address significant environmental and community effects at the local level around airports.</p>
<p><u>Incentivise quieter aircraft through landing charges:</u> This would see quieter aircraft being incentivised through a variable landing charge regime which saw louder aircraft being charged higher landing charges than quieter aircraft.</p>
<p><u>Introduce higher night time landing charges:</u> This proposal would see the introduction of a variable landing charge regime which charged night aircraft movements higher landing charges than those operating during the daytime.</p>
<p><u>Implement a quota count system for daytime air traffic movements and/or extend the quota count system to other airports:</u> This measure proposes an expansion in the current use of QC categories as a method for incorporating noise management into airport capacity management. The QC system allows each night flight to be individually counted against an overall noise quota (or noise budget) for an airport according to the QC rating (i.e. the noisiness) of the aircraft used. This measure would extend this QC system to day time operations.</p>
<p><u>Introduction of a comprehensive noise compensatory regime at airports:</u> This would lead to the development of an agreed noise compensatory package based on best practice across all airports.</p>
<p><u>Development of a noise envelope concept:</u> This measure proposes the definition of a noise envelope around airports within which aviation growth could be managed with consideration for technology and operational changes leading to a reduction in noise impacts per plane.</p>

Traffic Distribution Rules

Promote “reliever airports” concept:

This would provide support and/or financial incentives to encourage the growth of airports providing dedicated support for the business and general aviation markets, with the potential additional benefit of reducing the use of congested airports for this traffic.

Promote use of Northolt to accommodate some Heathrow traffic:

This measure would make further use of RAF Northolt to accommodate some small aircraft that would otherwise use Heathrow, providing a fast, regular surface transport link (and potentially road improvements) between the two airports.

More ambitious versions of this proposal would see the runway at Northolt lengthened (to allow for use by larger aircraft) and realigned (to reduce conflicts with Heathrow’s airspace).

Introduction of a helicopter link between Heathrow and Gatwick airports:

This proposal is seeking to remove restrictions in place to allow for a fast and frequent helicopter link between Heathrow and Gatwick airports to facilitate a virtual hub concept.