Airports Commission

Comments on published short and medium term proposals

Heathrow Airport Limited

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This document sets out Heathrow's comments upon the short and medium term option proposals submitted to and published by the Airports Commission.

Content:

Heathrow's Response

Heathrow is pleased to respond to the Airport Commission's summary options to support the most effective use of existing runway capacity over the short and medium term.

There is no quick or easy way to address the UK's aviation hub capacity crisis. Only a hub airport with at least three runways can deliver the economic growth we need to compete globally. Heathrow is the UK's only hub airport, and worthwhile capacity gains in international connectivity will only be secured by building on its capacity with as little delay as possible.

We believe that any further marginal short-term improvements that we can bring to the efficiency of Heathrow's runways should be used primarily to make the airport more resilient, rather than to expand the schedule. To remain competitive as a leading global hub, Heathrow must also continue to improve the passenger experience. More punctual and predictable journeys will enable business passengers to make better use of their valuable time. Faster, more reliable connections will allow Heathrow to attract the transfer passengers that make its network viable.

Heathrow is working hard, in partnership with airlines and air traffic control (ATC), to improve operational performance and efficiency that will deliver passenger benefits. Heathrow supports the modernisation of air traffic management in the UK and supports the CAA's Future Airspace Strategy through membership of the FAS Deployment Steering Group, FAS itself being an enabler of the European ATM Masterplan. Heathrow is also a member of the Single European Sky Air Traffic Management Research programme (SESAR) Joint Undertaking charged with delivery of the ATM Masterplan. This means that Heathrow is actively engaged with airlines, the air navigation service provider and regulators both in the UK and Europe in operating an ATM initiative programme to deliver the benefits which can be summarized as:-

- Improvements to the availability and operability of airspace capacity
- Reductions in flight safety incidents
- Greater cost efficiencies for airlines
- Minimised environmental impact

Consistent with our submission on Short and Medium Term Measures to the Commission in May, Heathrow requests the Commission's support for a package of measures that will maintain hub competitiveness while reducing noise impact. The Commission's support will be most valuable in relation to the following measures:
- Redesigning the airspace local to Heathrow and the London Terminal Manoeuvring Area.
- Introducing runway alternation when the airport is operating with aircraft landing or taking off heading east.
- Introducing measures assessed during the recent Operational Freedoms trial.
- Putting an end to the routine use of both runways for arrivals between 06.00 and 07.00.
- Changing the policy of concentrating aircraft on only a few flight paths to one of using a greater number of routes in a pattern that provides predictable periods of respite from aircraft flying overhead.
- Reassessing the policy of 'first come, first served'.
- Ending the policy of westerly preference.

Where work on these and other initiatives is under way and corresponds to proposals summarized by the Commission, these are marked by the letters HAOE, Heathrow Airfield Operational Efficiency.

This document is intended to be read in the context of the following Heathrow publications:
- One Hub or None
- Best Placed for Britain
- A Quieter Heathrow
- A New Approach

This document does not include all the details that were included in our Short and Medium term Options submission in May. It should also be considered in conjunction with our previous submissions to the Airports Commission in response to its discussion documents and Heathrow's Short and Medium Options submission and Long Term Options submission.

Airport Operations Options

Application of the alternation regime on easterly operations (HAOE)

This suggestion formed part of Heathrow's submission and is recommended for endorsement by the Airports Commission. The runway alternation provided during westerly operations provides local communities with predictability of respite from aircraft noise and therefore this would be of equal value to those communities to the west of the airport. In order to do this, a change in taxiway to runway infrastructure is required to handle the daily departure schedule. Heathrow has submitted a planning application to the local authority which is due to be heard in October.

Removal or change to the westerly preference criteria (HAOE)

Heathrow supports the removal of westerly preference to enable air traffic control to select the most appropriate runway direction based on the prevailing surface wind conditions and the wind direction and strength on the approach to the runway, therefore this measure would enable a more equitable distribution of noise impacts for local communities.

Use of displaced thresholds

Heathrow recognizes that increased height on approach has a beneficial impact on noise and will be working on the concept of displaced thresholds as part of our Noise Action Plan.

Introduction of displaced thresholds is unlikely to be achievable in the short or medium term, but may be achievable in the 2020s. Heathrow has included displaced thresholds as part of our submission on long term options. It is likely to require changes in ground infrastructure as the position of the current rapid exit taxiways (RETs) are calculated on aircraft landing at the current touch down zones (TDZs), allowing sufficient distance to brake to a speed at which it is safe to vacate the runway. Alterations to the threshold positions would result in alterations to the TDZs and therefore the RETs. Any attempt to operate displaced thresholds without new infrastructure would result in reduced capacity. In addition to this, changed thresholds would have an impact on runway holding points (for departures) and localised sensitive areas both of which would also have an impact on capacity.
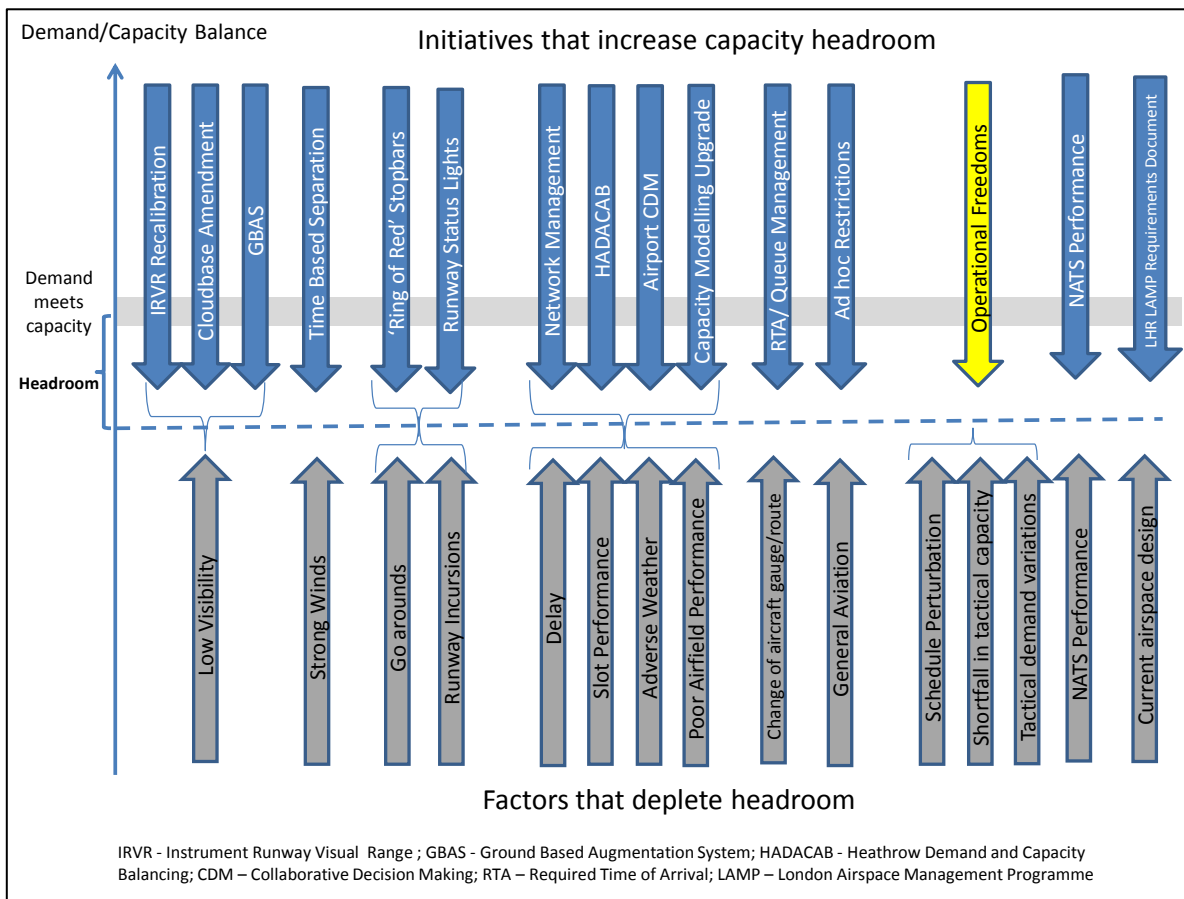
Putting an end to the routine use of both runways for arrivals between 06:00 and 07:00 (HAOE)

Heathrow supports this approach. This would redistribute existing flights to deliver new periods of respite from early morning noise for local communities, while improving hub competitiveness by making more passenger connections viable. The proposal would smooth out the early morning arrivals schedule to avoid schedule bunching caused by the transition from the night time operating regime based on runway landing times to the daytime operation based on stand arrival times. A trial would be required to prove the concept. However, a significant reduction in the concurrent use of both runways for arrivals in the early morning would be anticipated. The implications of this piece of work will mean that there will be a number of arrivals brought forward into the 0500hrs to 0559hrs period, the number to be determined through a trial, and that, if proved acceptable, will lead to an amendment of the Department for Transport's Night Jet Policy.

Introducing Operational Freedoms (HAOE)

This was part of Heathrow's submission. Operational Freedoms is part of our ATM Improvement programme designed to address impacts to the resilience of the airport and provide sufficient headroom in the flying schedule to deal with fluctuations in arrivals and departures. In the future, Heathrow sees that Operational Freedoms as described in the submission can play a part in a

focussed and targeted way to recover from significant disruption rather than become part of the day to day running of the airport. The diagram below shows the range of factors which cause the headroom available within the schedule to become depleted. 'Headroom' is another way of expressing the degree to which the airport is resilient through its ability to handle schedule and other variations in the demand and capacity balance. The diagram also demonstrates the context in which Operational Freedoms might be utilised.

Demand/Capacity Balance

Initiatives that increase capacity headroom

Demand meets capacity

Headroom

IRVR Recalibration · Cloudbase Amendment · GBAS · Time Based Separation · 'Ring of Red' Stopbars · Runway Status Lights · Network Management · HADACAB · Airport CDM · Capacity Modelling Upgrade · RTA/ Queue Management · Ad hoc Restrictions · Operational Freedoms · NATS Performance · LHR LAMP Requirements Document

Low Visibility · Strong Winds · Go arounds · Runway Incursions · Delay · Slot Performance · Adverse Weather · Poor Airfield Performance · Change of aircraft gauge/route · General Aviation · Schedule Perturbation · Shortfall in tactical capacity · Tactical demand variations · NATS Performance · Current airspace design

Factors that deplete headroom

IRVR - Instrument Runway Visual Range ; GBAS - Ground Based Augmentation System; HADACAB - Heathrow Demand and Capacity Balancing; CDM – Collaborative Decision Making; RTA – Required Time of Arrival; LAMP – London Airspace Management Programme

Mixed Mode

Heathrow is not advocating the use of mixed mode as a short-term measure to increase capacity. While we recognise that determining the right balance between the economic and environmental impacts of additional flights is ultimately a decision for Government, we believe that the incremental capacity delivered by full mixed mode comes at a significant cost to the local community as it would end periods of respite from noise, without providing a real solution to the UK's shortage of hub capacity. We believe that more intensive use of two runways at Heathrow should only be considered as part of a transitional plan towards a third runway. Any transitional plan should recognise the importance of respite to local residents.

Airport Collaborative Decision Making (A-CDM) (HAOE)

Heathrow and its customer airlines, air traffic control and ground handlers are very supportive of the implementation of A-CDM as it allows NATS and Eurocontrol to make the best use of airspace and runway capacity within the UK and Europe. In addition, Heathrow supports the wider use of A-CDM throughout the London Terminal Manoeuvring Area (LTMA) airports as it would provide accurate strategic and situational awareness in the most congested piece of airspace in Europe.

Linking all airfields to air traffic management for information exchange

Heathrow believes that electronic messaging and exchange forms are a useful pre-cursor to introduction of A-CDM. This initiative would allow smaller airfields to connect and exchange information with regional air traffic control and the Network Manager at an earlier stage than possible through A-CDM. Through membership of the FAS Deployment Steering Group, Heathrow is assisting in bilateral discussions with NATS and Eurocontrol to progress the availability of suitable tools to enable this.

National and local capacity management cells

Following the winter of 2010/11, Heathrow instigated the creation of the Heathrow ATM Demand and Capacity Group (HADACAB), a representative group of airport stakeholders whose objective is to decide the degree of demand reduction required when available capacity is constrained, for example when a runway is out of use for maintenance, snow clearing or other form of disruption. Failure to balance demand with capacity always results in significant delays and/or operational cancellations. It became apparent however that, during the eruption of the Grimsvoetn volcano in 2011, capacity reduction at one airport alone is not sufficient to balance capacity across the LTMA, and in fact there is a dis-incentive to reduce capacity unilaterally. For this reason, Heathrow supports the maintenance of capacity management cells linked in to the Network Manager in Brussels.

Reduced engine taxi

Heathrow promotes this procedure to reduce emissions and improve air quality. Most airlines already use reduced engine taxiing for taxi in. On taxi out BA are in the process of implementing single engine taxiing for their Airbus short haul fleet.

Use of electric vehicles airside

We are committed to continuing to support the deployment of cleaner airside vehicle technology at Heathrow and expect the percentage of 'cleaner-powered' vehicles to increase in the coming years.

Traffic light systems for aircraft to maximise runway utilisation

Pilot reaction times and runway performance varies by airline and by individual pilot. An initiative that helps to improve performance should be encouraged and supported. Technology is one area to investigate, but may not be the solution in the short term due to costs/complexity/safety issues especially given current reliance on voice communications - improved/consistent airline/pilot performance should be the focus.

More use of remote stands

Heathrow does not support this proposal. Passengers expect pier service. Heathrow is tasked with delivering 95% pier service by the airlines and the CAA. Lower levels of pier service would be unattractive to passengers and make Heathrow less competitive versus other European and Middle East hubs, and in any case Heathrow has no space for more remote stands.

Airspace Operations Options

<u>Airspace Restructuring (HAOE)</u>

Heathrow has commenced work on airspace redesign to ensure that the future operation can be enabled by departure and arrival procedures matched to modern aircraft performance and aircraft navigational capability. The Heathrow community are party to a joint requirements document submitted to NATS to ensure that the London Airspace Management Programme (LAMP) is fully aligned to the desire to ensure that aircraft operations are efficient, make best use of capacity, are safe and expose the local community to the least possible environmental impact.

The change to airspace design is seen as a key enabler for resilience at Heathrow and we would wish to implement new airspace within a five year timeframe, following full consultation with the local community.

<u>Civil/Military Airspace Optimisation</u>

Following successive reductions in the UK's military capability, the amount of airspace devoted to the services is not commensurate with use and so it makes sense for such airspace to be redefined and flexibly used for civil aviation purposes. Whilst military airspace is not in the immediate vicinity of Heathrow, apart from Northolt's ATZ, its presence both in the UK and in Europe serves to compromise direct routing using too much fuel and exacerbating delay. Heathrow supports progressing the development of more flexible use.

<u>Creation of a known-surveillance environment</u>

This is not an issue for Heathrow as the classification of airspace surrounding the airport ensures that all traffic is suitably equipped and electronically visible to the air traffic controllers. Heathrow supports the mandatory carriage of Mode 'S' transponders and accurate navigational capability to ensure that best use of the airspace resource is made.

<u>Reassessment of the baseline Air Traffic Control (ATC) rules</u>

An ATC rule that should be changed in the short to mid term is the practice of 'first come, first served' to be replaced by both 'best equipped, best served' and 'serve by schedule'.
In the example provided by the Airports Commission, the rules that are referred to relate to separation distances between aircraft and the proposal that, by reducing them, increased capacity can be derived. Whilst such a reduction would logically increase the capacity, there would be a commensurate loss in safety margins which could result in an increased number of 'airproxes'. Heathrow recommends that the Commission evidences a broader adoption of elements of the Future Airspace Strategy and SESAR initiatives before such a reduction could be contemplated. An example of a FAS initiative which would need to be in place is PBN, Performance Based Navigation, an initiative that exploits available technology to enable more efficient use of airspace. There would need to be 100% equipage of aircraft and full utilisation to ensure navigational accuracy.

<u>Incentivisation of flights arrival punctuality instead of departure punctuality</u>

Heathrow agrees that performance metrics are required against arrival punctuality. Of significant importance to Heathrow is to "operate the plan", this means we have the right incentives against both arrival and departure and we operate to schedule more regularly than today. See 'Arrival Queue Management'. We do not believe that a wholesale swing from a focus on departure punctuality to one of arrival punctuality would work and may indeed produce another clutch of perverse behaviours in the same way as before. An example of where an arrivals target is in play is

the cut over between night time operations and daytime operations at Heathrow. Here we see arrivals with slots in the 0600 hour reaching the vicinity of Heathrow and then being forced to hold in the stack thereby creating the bunching that forces the airport to use both runways for arrivals.

Redefining the triggers for the application of Low Visibility Procedures (LVP) (HAOE)

Heathrow is actively working with NATS and the airlines to assess the safety case associated with LVP operations and the triggers (in particular cloud ceiling). LVP is safety critical and so progress in this area has to be measured. We are also conducting research and development as part of the SESAR programme, looking to certify Ground Based Augmentation Systems (GBAS) to CATII/CATIII standards which will eventually replace the use of ILS in low visibility and improve the landing rate so that LVPs cause less disruption to airlines' schedules.

Steeper climb outs/continuous climb departure (CCD) (HAOE)

Heathrow is supportive on this approach which will be integrated into the LAMP design. This in turn is part of the CAA's Future Airspace Strategy and also within the SESAR programme; Heathrow is supportive of and contributing to work to redefine standards in this area.

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

This forms part of the Heathrow submission. We see airspace change and restructure as a key enabler for resilience at Heathrow and want to implement a new airspace design within the five year timeframe set out. We aim to run a series of trials starting in late 2013 to test out the feasibility of these concepts.

Arrival Queue Management (HAOE)

This also forms part of the Heathrow Submission. We believe that a dynamic tool could be used to take account of weather, arrival schedules and aircraft wake vortex category to produce an optimised landing order, making best use of available runway capacity. The tool needs to be dynamic to ensure that the vagaries of wind direction and speed are taken into account. This is also part of the CAA FAS and also within the SESAR programme, Heathrow is supportive and contributing to work to in this area.

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

Heathrow and its customer airlines are working with NATS to implement TBS within the next two years. TBS will provide a resilience benefit in strong winds but will not provide additional capacity in nominal wind conditions (5-10kts headwind). Microwave Landing Systems (MLS) is operational at Heathrow and allows for 2-4 extra landings per hour versus the equivalent ILS system but only specific fleets are equipped to use it. Therefore, the future lies in the certification of GBAS as previously described. Heathrow expects GBAS CATII/III certification to occur in the next five years and eventually replace dependency on ILS and MLS for CAT III operations by 2030.

Steeper approaches into airports, including both continuous and stepped. (HAOE)

Heathrow is supportive of steeper approaches into airports as a means to reduce the noise burden around airports. We see the first step as moving the angle of the approach from the current value of 3.0 degrees to 3.2 degrees as feedback from airlines indicates that this could be achievable in the short term without impact on capacity or the stability of aircraft on the approach. This proposal would require further detailed work and impact assessment before trialling as all 86 airlines operating at Heathrow would have to change their procedures to ensure consistent application of

the steeper approach. Approach angles steeper than 3.2 degrees would require more detailed research but appear feasible given the installation of GBAS. It should also be noted that operations below weather minima would limit the approach angle, as will continued use of the currently installed ILS system.

Dual approaches to a single runway

Heathrow does not view this to be a viable short / medium term option. Heathrow believes that this would require major changes to airfield lighting and infrastructure, for example new rapid exit taxiways (RETS), together with associated airspace and ATC procedures. Consequently, delivery of this proposal would only be viable over the longer term. The proposal may theoretically have the potential to offer a benefit, however the resulting operation would be significantly more complex than today.

Multiple approaches to a single runway to guarantee respite (HAOE)

This forms part of Heathrow's airspace redesign work and it is suggested that this would and could supplement the current practice of alternation to provide respite for local communities. These approaches could consist of variable procedures to secure respite and would require all aircraft to be equipped to take advantage of technology that would be required to achieve it, namely (GLS/RNAV/RNP) as key enablers. Heathrow acknowledges that aircraft would still need to be established on the centreline of the runway during the final phases of the approach however much work is underway, both in the Airfield Operational Efficiency and 'Quieter Heathrow' workstreams to address those communities nearer to the airport.

Independent parallel approaches at Heathrow (HAOE)

The Heathrow submission is supportive of this approach and again aircraft technology (GLS/RNAV/RNP) would be a key enabler here. The use of independent parallel approaches would be targeted at smoothing out the sequence and bunching of arriving traffic as opposed to gaining capacity, and would supplement those occasions when TEAM was required.

New Service Concepts (HAOE)

There are a number of concepts which Heathrow propose to evaluate and assess through collaboration with our airlines throughout Q6. It is essential that the service concepts are aligned with the principles of 'operating to the plan' published by the airport and based on the daily schedule.

Linking airspace slot management to airport slots

Heathrow has recently responded to a consultation letter from the Director of Airspace Policy on the subject matter to confirm that we are very supportive of the principles. We support the principle of matching the flight plan filed to the airport slot (as applied during the Olympics and is a function of A-CDM). The proposal needs further clarity around the roles and responsibilities of the service and how it would interact with the Network Manager as that body acquires responsibility for 'Flight Plan and Slot Consistency' as the first of the 'European Centralised Services'.

Optimised departure separation using advanced aircraft navigational technology (HAOE)

Heathrow included this proposal as part of its wider airspace redesign initiative and recognises the benefit that PBN can deliver for departure capability. Currently the safety regulator requires departure routes to be split by 45 degrees to achieve early separation. However with PBN, Heathrow anticipates that aircraft equipped with modern navigational capability can be shown to

have become 'established' on a divergent departure track at far narrower angles than today and can be said to have achieved procedural, and hence safe, separation from the preceding departure.

Slot Scheduling Options

Return to direct Government control regarding the allocation of slots
This would contravene the existing UK and European slot legislation. The government has appointed ACL to be the UK's coordinator and should exercise its management of the delegated powers to ensure transparency in the dealings on slots. ACL's mandate is to make best use of scarce capacity. Over recent seasons, slots have been allocated that enable new long-haul destinations such as Guangzhou and Manila. Allocation of slots to enable new domestic destinations is extremely challenging as the scarcity and specific timing of available slots at Heathrow would not enable a viable schedule. History also tells us that Government intervention in slot allocation doesn't work. Government intervention in slot allocation is unlikely to increase slot allocation to emerging markets or domestic markets, and may have the perverse effect of making less efficient use of capacity.

Use of Public Service Obligation (or other means) to safeguard UK regional access to Heathrow

As the UK's only hub, we recognise the importance of direct access into Heathrow from airports throughout the UK. As a result of the capacity constraints at Heathrow, the number of UK airports served from Heathrow has declined to seven in 2013. This compares to 21 UK airports that are currently served by flights to and from Schiphol Airport in Amsterdam. This discrepancy means that the relative competitive position of the UK's hub is harmed.

The market decides the most efficient network from a given airport. This has led to very efficient use of Heathrow's scarce capacity. Public Service Obligations (PSOs) would result in less efficient use of capacity and may result in weaker connectivity.

The use of PSOs is governed by EU regulations and the circumstances in which they can be used are controlled. PSOs can only be used to safeguard access to a city or region not a particular airport and would therefore not be appropriate to use to safeguard access to Heathrow specifically. We are not aware of any other appropriate means by which access can be safeguarded.

The most effective way to safeguard, and indeed to improve, access to Heathrow from UK regions and nations is to increase the capacity of the airport through the construction of a third runway. In its submission to the Airports Commission on long-term options for increasing capacity, Heathrow has also committed to work with airlines and government to deliver better air and rail links between UK regions and Heathrow.

Designate different airports to serve different types of traffic

This proposal would undermine the hub and drive airlines to overseas competitor hubs. If network airlines could operate sustainable, profitable operations from point to point airports then they would be doing so today. In the ten years that Heathrow has been full, Gatwick has failed to deliver sustainable connections to long-haul business destinations. Airlines that have been unable to access slots at Heathrow have tried and failed to make long-haul flights from Gatwick work. A total of 20 long-haul airlines have withdrawn from Gatwick in the last five years.

Government intervention to determine or restrict certain forms of access has the potential to undermine the scope for, and development of, airport (and airline) competition.

Reduce capacity declaration at airports to ensure the efficient utilisation of slots

Reducing the capacity declaration does not support a more efficient utilisation of slots, and instead makes less efficient use of scarce capacity. The work on the effective management of arrivals and departures should instead be the priority.

As Heathrow already operates at 98% of capacity, a reduced capacity declaration would mean that any slots which fail 80:20 would not be able to be recycled. This would severely restrict the ability for airlines from essential emerging markets to launch routes to Heathrow.

Changes to market based slot allocation mechanisms

Heathrow supports an efficient market in slots. For many years there has been an active secondary slot market at Heathrow. This secondary market supports efficient use of scarce capacity. However, the introduction of auctions for unallocated slots would not necessarily enhance market efficiency provided that secondary slot trading is allowed to occur. In Heathrow's view the bigger issue is the possibility of inefficient use of slots by some airlines wishing to retain them for strategic reasons.

Financial incentives to use slots for routes to emerging markets

Slot access is the largest barrier to new routes from Heathrow and is the principle cause of delay to new route launches. Whilst financial incentives to operate these initially-loss-making routes would be welcomed by some airlines, this cannot replace the requirement for competitively-timed airport slots. If this incentive were to be offered (i.e. paid for) by the airport via discounts to aero charges they would have to be structured so as to not be anti-competitive. In addition, if they form part of the existing aeronautical charges regime at Heathrow, incumbent airlines would in effect be paying for the incentive in the form of higher charges.

Operation of an optimised, daily service plan

This is a key part of the Heathrow vision for Q6.

Regulatory Options

End Economic regulation of airports

It is not clear how an end to economic regulation of airports would affect the supply of short to medium term airport capacity. Under the existing regime economic regulation acts to cap the average airport yield per passenger of airports deemed to have significant market power. Regulated airports, therefore, already have the incentive to seek ways to optimise passenger numbers since this will directly contribute to both aeronautical and commercial revenues.

Arguably airports could have more freedom to develop their own investment and commercial strategies, but again it is not clear why these strategies could not be carried out under the existing regime if they can be shown to be in the interests of existing and future passengers. The current economic regulatory regime does not prevent airports from offering financial incentives to boost traffic where there is spare capacity, within the well established parameters of competition law.

Reduce landing charges at Heathrow and Gatwick

To continue to improve passenger experience, and operating performance, and replace out dated infrastructure Heathrow needs further investment. £10b has already been invested over the previous decade. In the absence of the additional capacity that would enable growth in passenger numbers and fund this investment, Heathrow needs to both increase charges and operate more efficiently.

The existing regulatory regime is meant to provide airports with an expectation to earn sufficient revenue to cover the costs of airport operation and investment. Reducing landing charges below this level would compromise any incentive to invest. Therefore, rather than increasing the supply of airport capacity, reducing landing charges would in fact reduce the incentive for future investment.

Spare capacity exists at south east airports other than Heathrow. These airports are free to set charges to attract new traffic, as evidenced by the recent deals at Stansted for Ryanair and easyJet. The same rationale does not apply to Heathrow because we are already full.

Prohibit certain aircraft types (e.g. freighters) from congested airports.

Freighters represent only 0.5% of Heathrow traffic. Heathrow already applies a local rule restricting access to new freighter operations.

Ban general and business aviation from congested airports

Heathrow has recently introduced restrictions on the availability of ad-hoc slots to provide resilience to the operation. General aviation now represents 0.2% of Heathrow flights. As Heathrow operates closer and closer to the ATM cap over time the number of slots made via ad-hoc will depend on the number of slot handbacks.

Remove restrictions on usage of general aviation airfields

Heathrow has no comment on this.

Streamline planning process for new airport infrastructure

Heathrow supports this proposal. Particular consideration should be given to the strategic importance and national value of hub airport infrastructure for the UK.

Establish an independent noise regulator

It is not clear that establishment of an independent noise regulator will assist short and medium term airport capacity. In Heathrow's response to the Airports Commission's Discussion Paper on noise Heathrow provided views on this concept more broadly.

Border control reforms

Border control does not operate as a constraint on short and medium term capacity.

Minimum aircraft size rules at congested airports

Heathrow has recent experience in this area with the consultation on minimum wake vortex rules which was rejected by the airlines. This would suggest that regulatory action is required to introduce such a rule. However, any such action should recognise that a combination of both smaller and

larger aircraft types are required for a hub to operate effectively e.g. smaller short haul aircraft provide the transfer passenger feed to enable larger aircraft to operate on long haul routes.

Air Passenger Duty (APD) Options

Heathrow strongly opposes the concept of differential rates of APD for airports outside of the London and the South-East for the following reasons:

1. Outside of Heathrow, there is still significant capacity available in the South-East, which negates the need to encourage passengers to use airports outside of the region. It would create a distortion in the UK aviation market, which is widely acknowledged to be one of the most competitive and efficient in the world.
2. Heathrow passengers already pay a disproportionate percentage of APD due to high charges for long haul and business passengers. Given that the capacity constraint at Heathrow has forced regional passengers to fly via Schiphol, differential regional APD would have the perverse effect of supporting the Dutch economy at the expense of the UK's.
3. All UK airports support jobs and growth, whether it is through connections to other UK regions or links to China, India and other major economies that can only be provided by a hub like Heathrow. As a hub airport supporting airline networks, Heathrow competes against the other EU hubs (in Amsterdam, Frankfurt, Madrid and Paris); it does not compete against other UK airports which rely on point-to-point services. Consequently, penalising passengers who fly on routes out of Heathrow would have a damaging effect on the competitiveness of the UK economy overall.
4. Higher rates of tax at London airports in general, or at Heathrow specifically, will not create more flights to other airports in the UK. Airlines would move their services to other EU hubs, not other UK airports.
5. Current APD levels have a detrimental impact on airports in London and the South-East as well as regional airports.
6. Differential rates of aviation taxation have been successfully challenged under European Commission rules in other EU countries.
7. There is no evidence that a differential rate of APD in the regions would promote more balanced economic growth.

Air Services Agreements

In principle, Heathrow is supportive of a pro-competitive policy and greater liberalisation of air services agreements (ASAs), including the extension of fifth freedom rights to other airports serving the London area. However, given Heathrow's status as the UK's only hub airport, and the very different characteristics of London's point-to-point airports, we believe that such liberalisation would not have a material impact on the main objective of maintaining the UK's aviation hub status. We expect it would do very little or nothing to alleviate current congestion or meet future demand for access to Heathrow by the world's network airlines.

Surface Transport Options

<u>"Code sharing" between airlines and rail operators:</u>

Heathrow would support proposals for code sharing and/or further integration of ticketing, where they benefit airlines, airport passengers and other users of the public transport network, and are underpinned by a sensible business case.

<u>Expansion of the UK high speed rail network:</u>

Heathrow supports HS2, the development of the UK's high speed rail network and providing a <u>direct connection</u> to the hub airport. This is in line with European best practice at Frankfurt, Paris and Amsterdam.

<u>Provision of direct high speed rail services to more continental destinations:</u>

Heathrow supports further development of the UK/European high speed rail network, directly connected to Heathrow, the UK's hub airport and integrated transport hub.

<u>HS2 spur to Heathrow:</u>

Heathrow supports the DfT policy to provide a direct link to Heathrow, served by an on-airport station, which will provide a fast <u>direct connection</u> to catchments around the UK.

<u>Enhanced rail links between existing airports:</u>

Heathrow support the principle of providing improved rail connections to and from Heathrow to support its operation as an integrated transport hub, in addition to improved rail connections to and from other airports. However, improving rail capacity between airports will not replace the need for increasing runway capacity and the idea of connecting airports to create a 'virtual hub' does not meet the needs of transfer passengers. A 'virtual hub' can never be competitive with the strong single hubs in Amsterdam, Paris or Frankfurt.

<u>Other improvements to road and rail networks to improve access to Heathrow:</u>

- 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 Heathrow
- 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)

We support the suggested rail improvements to Heathrow (e.g. Piccadilly Line Upgrade, Western Rail Access, Southern Rail Access and HS2), as they all appear in our strategy set out in our long term submission to the Commission.

Our strategy is public transport-led and does not require any significant capacity upgrades to the wider road network. However, we would support improvements to the wider road network to

remove pinch points and solve capacity issues such that background growth in traffic does not impact on air passenger journeys.

We do not support off-airport terminal facilities or remote baggage processing in downtown London (this was introduced for Heathrow Express (this was operated by Heathrow Express from 1998-2001and subsequently removed). It is not in the best interests of passengers and airlines, for example due to the impact on airline cost base (through split operations) and security considerations. Check-in is not the issue, runway capacity is.

Heathrow also supports HS2 serving the airport directly via an on-airport station, rather than a remote facility on the Great Western mainline. Heathrow's Master Plan is built around its 'public transport spine' with rail/tube services designed to serve all major terminals (T2, T5 and T6). This is in line with European best practice, with Paris, Amsterdam and Frankfurt all having HS2 stations on-airport.

HS2 Ltd proposals indicate that an on-airport station at T5 was its preferred location. Heathrow supports the HS2 station sitting on-airport on the public transport spine, so that easy connections can be made between HS2, rail, tube and air.

In principle, Heathrow would support the Piccadilly Line proposal above, subject to an assessment of the discrete passenger/employee catchment this proposal was seeking to serve.

Heathrow does not support a high speed link to Northolt.

<u>Remodelling of Gatwick Airport Station:</u>

No comment.

<u>Enhancement of Gatwick Express:</u>

No comment.

<u>Other improvements to existing road and rail networks to improve access to Gatwick:</u>

- 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

We support the principle of providing improved rail connections to and from other airports. However, improving rail capacity between airports will not replace the need for increasing runway capacity and the idea of connecting airports to create a 'virtual hub' does not meet the needs of transfer passengers.

<u>Improvements to existing road and rail networks to improve access to Stansted:</u>

- West Anglia Main Line improvements including four 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

No comment.

Take Crossrail/Crossrail 2 to Stansted:

No comment.

Restored Whitacre Link to improve access to Birmingham airport:

No comment.

Other surface transport improvements relating to Birmingham airport:

- 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)

No comment.

Rename "Birmingham International" station to "Birmingham Airport":

No comment.

Range of road and rail improvements to improve access to other airports:

No comment (no details available).

Check in/bag drop at rail stations:

See comments in section above "Other improvements to road and rail networks to improve access to Heathrow".

Develop an integrated surface transport strategy:

Heathrow strongly supports the development of an integrated infrastructure strategy. If the UK economy is to compete effectively with our leading European rivals then an integrated transport hub should be at the heart of this strategy. An integrated transport strategy should include a strong, globally competitive single aviation hub, in combination with surface transport, particularly rail.

Options for financial incentives to promote behavioural change

Route development funds to promote new routes:

A subsidy is no substitute for the market strength that a hub provides in supporting new routes.

Higher landing charges at congested airports:

This approach would make the UK's hub airport uncompetitive with overseas competitor hubs, potentially resulting in a loss of connectivity.

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

No comment

"Fly local" marketing campaign:

No comment

Traffic Distribution Rules

Please refer to our response to the option: "Designate different airports to serve different types of traffic"

Night flight and Enhanced Mitigation options

Night flights:

Heathrow provided views on this topic in response to the Government's consultation on the night flights regime which closed in April 2013. We summarise Heathrow's views below.

The majority of night flights at Heathrow are early morning long-haul arrivals, which are an important part of operations at an international hub airport like Heathrow and generate significant economic benefits the UK. There is significant demand for early morning long-haul arrivals which cannot be met under the current night flights regime. We also recognise that the noise generated by aircraft taking off and landing at Heathrow is a particular concern in the early hours of the morning, and late at night. The balance between the economic benefits of night flights and their costs is rightly one for the Government to strike.

Heathrow are taking a range of steps to reduce the noise impacts of night flights and plan to continue to do so. We reward airlines for flying quieter planes, and penalise those that do not. The A380 was designed specifically to fall into one of the quietest categories in Heathrow's 'quota count' (QC) noise classification system for night operations. As a result, the A380's noise footprint is around 40% smaller than the aircraft it typically replaces – and these planes are now being used by several airlines for their early morning arrivals at Heathrow. The use of quieter aircraft at night means that the average QC per night movement has fallen by 20%. We expect use of new, quieter aircraft in the early morning to continue to increase.

Beyond this work Heathrow have also pioneered new procedures for aircraft landing at Heathrow which reduce the noise experienced under the flight path. For example we have completed a joint trial with BA, HACAN and NATS of 'noise relief zones' for early morning arrivals over London that alternate week to week. We are now working with community groups to consider next steps for that trial, as well as planning further trials including, for example, steeper approaches.

As a result of new technology and operational improvements, the area around the airport exposed to noise at night has been reduced by 24% over the course of the current regime.

Given that the Airports Commission will be making significant recommendations on the future capacity in the UK, we recommended to the Government that the Commission should conclude its work before the Government introduces a new night flights regime. In the interim, we recommended that the current movement and QC limits remain unchanged.

<u>Development of planning restrictions and Section 106 agreements around airports:</u>

These proposals deal with two separate but related topics. The first is planning restrictions and the second compensation. We deal with them in turn below.

- Planning

The past 20 years have seen on-going residential development and population growth within Heathrow's noise footprint, even as the area of that footprint has become smaller. The number of households within the airport's 2010 57dBA noise contour was 16% higher than lived in that same area in 1991. Similarly the number of households within the airport's 2011/12 48dBA 6.5hr night contour was 20% more than lived in that same area in 1991[i]. Hounslow, the local authority most exposed to noise from Heathrow, has experienced a rapid increase in population. According to the 2011 census, Hounslow's population has increased by 20%, or 42,000 people, in the ten years since 2001[ii]. This pattern looks set to continue into the future. In Hounslow's long-term plan there are areas earmarked for residential development which could increase the number of households within Heathrow's noise footprint by a further 6%[iii].

Land-use planning has historically sought to limit housing development in noisy areas so at face value this data could be seen as a failure of planning policy. However it is also evidence that many are not concerned by noise, or feel that the benefits of living close to a major international hub outweigh the downsides. 70% of property owners within Heathrow's '55 Lden' noise contour have purchased their property within the last fifteen years. This suggests that people are readily able to sell their houses and equally that others are willing to buy. Thus individuals are able to make a choice in balancing their own priorities.

It is also important to fully debate how a longer-term strategic approach to land-use planning around airports could be used to reduce noise impacts. We are proactively seeking to engage with Local Authorities and Government on this issue. There is a need for clear government guidance to enable local authorities, working with airport operators, to establish robust policies which protect residents from high noise areas and ensure that the improvements in aircraft technology translate into lower levels of population exposure.

- Compensation

Heathrow currently provides a wide ranging set of compensation schemes for residential and community buildings as well as assistance with relocation. There are important elements in a noise management strategy. Over 41,000 residential properties and almost 70 community buildings are eligible for insulation.

At the start of 2013 we launched a pilot 'Quieter Homes' scheme to trial improvements to our residential noise insulation. Those improvements include an assessment process where each property is given a statement of need, providing a wider range of products, increasing the contribution offer and giving residents a choice of potential suppliers.

Other major airports fund their insulation schemes in a variety of ways. Many of the larger schemes are financed directly by the Government or via a specific passenger surcharge. These schemes have typically been directly linked to additional capacity at the airport. At Heathrow, schemes are currently financed through our operating expenditure and meet or exceed the guidance set by the Government.

As part of an agreed solution to the UK's need for greater hub capacity, we would be pleased to work with the Commission and with Government to develop an appropriate insulation and compensation scheme.

Incentivise quieter aircraft through landing charges:

Such a regime is already in place at Heathrow. The aircraft that airlines operate at Heathrow are on average around 15% quieter than the total global fleets of those airlines[iv], influenced in part by our variable landing charges to incentivise quieter planes. In 2010 Heathrow significantly increased the gap in charges between noisier and quieter aircraft. We apply three different charging categories for Chapter 4 aircraft. Aircraft in this chapter represent around 97% of all operations at Heathrow[v], so distinguishing between the noisier and quieter aircraft in this Chapter is important.

Introduce higher night time landing charges:

Overall, differential landing changes represent only one factor among many which determine the fleet purchase and utilisation strategies of aircraft operators. It is likely that the Quota Count (QC) system plays a more significant role in the short-term in influencing the choice / noise of aircraft operated at night. The QC system plays an important role in influencing aircraft design. The new Airbus A380, for example, was designed specifically to fall into one of the quietest QC categories for night operations at Heathrow[vi].

Nonetheless, differential landing charges are a signal that the airport operator can send on the importance of noise, and we believe they continue to be a useful measure. Heathrow will continue to monitor and amend our own charging structures to provide the right incentive for quiet aircraft.

Implement a quota count system for daytime air traffic movements and/or extend the quota count system to other airports:

Heathrow already operates within a 480k Air Traffic Movement cap and uses landing charges to incentivise quieter aircraft. The aircraft that airlines operate at Heathrow are on average around 15% quieter than the total global fleets of those airlines and the area within Heathrow's noise footprint has fallen by 90% since the 1970s even though the number of flights has nearly doubled. Consequently we consider that the introduction of a quota count system for daytime flights would not add value as a short or medium term measure. In principle we are supportive of exploring this concept as part of a future noise management regime/noise envelope linked to additional capacity at Heathrow. The concept requires significant further study.

Introduction of a comprehensive noise compensatory regime at airports:

See comments above on compensation.

Development of a noise envelope concept:

Heathrow support the development of a noise envelope concept. Heathrow believe that a noise envelope can be developed that recognises future improvement in technology and shares them appropriately between the airport and its local communities. We look forward to the discussion paper expected from the CAA later this year. If a Heathrow option is short-listed we will identify a noise envelope approach(es) for local consultation.

Based on data provided by ERCD which compared the CACI population databases from 1991 and 2011 for the 2010 57dBA and 2011/12 48dBA 6.5hr noise contours

[ii] Hounslow Council Website:
http://search.hounslow.gov.uk/highlight.aspx?aid=418946&pckid=68946230&rn=1&sp_id=1916497123&lid=144628766&highlight=census+#firsthighlight

[iii] Research undertaken by Heathrow based on the "Local Plan Policy Options 2015-2030" issued by Hounslow Borough Council.

[iv] Research commissioned by Heathrow and undertaken by Mckinsey & Co. in 2012 compared the Heathrow fleet composition in with the global fleet composition and total fleet of airlines operating at Heathrow

[v] Based on Heathrow Traffic Charging System noise database and movements.

[vi] Heathrow Airport, 2013, *A Quieter Heathrow* - Airbus case study, p19. The A380 was specifically designed to meet the Heathrow night restrictions which prohibited the scheduling of QC4 aircraft at night.