Heathrow's response to the CAA's Discussion Paper on Airport Capacity Expansion (CAP 1195)

Non Confidential Version

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Making every journey better

Contents

Introduction

The prospect of capacity expansion presents a singular opportunity to better align the regulatory framework with passenger interests and priorities, and to galvanise stakeholders toward another step change in our passengers' experience of the nation's hub airport.

The CAA's Discussion Paper (DP) on Airport Capacity Expansion raises a number of significant issues many of which could have a material bearing on the development, operation and viability of any future airport capacity, whether at Heathrow or elsewhere. We welcome the CAA's DP and the consultative approach to the CAA's proposed programme of work. This document sets out Heathrow's response.

Given that the CAA's programme of work is relatively embryonic, Heathrow's comments in respect of many of the issues raised in the CAA's DP are necessarily high-level. While Heathrow's comments and observations are, at this stage, high-level, this is not a reflection of Heathrow's view of the absolute or relative importance of certain issues. Moreover, if Heathrow has not raised or addressed a particular issue in this response, it should not be inferred that Heathrow attaches no importance to the matter.

Relatedly, Heathrow's response is non-exhaustive and our comments and observations are also subject to change. As the Airport Commission (AC) process evolves new information and issues will almost certainly arise. Heathrow is keen to ensure the CAA's process also evolves to the extent that any thinking on regulatory policy captures ongoing developments, and that the process is sufficiently dynamic to incorporate new information and/or evidence, as it emerges.

In taking work forward on the regulatory policy Heathrow considers that there must be a consistent basis for discussion and a robust analytical framework. To that end, Heathrow's response outlines a number of regulatory principles (see Section 1 below), which we believe will help inform the debate and provide additional guidance in the development of future regulatory policy. We also set out an initial view of a potential regulatory framework for airport capacity expansion.

There are also a number of overarching considerations which the CAA should take into account:

- Given the potential materiality of regulation (and mechanisms within the framework) to the development of airport capacity, in advance of the AC's recommendation we encourage the CAA to continue with a considered and non-determinative approach. It would be premature for the CAA's proposed policy statement scheduled for the end of this year to set out a prescriptive approach to regulation.

- Regulatory policy will be a key consideration in the AC's thinking and will have an influence on the development of additional capacity. However, it will be one of many key issues. The CAA and other stakeholders must be careful not to assume that policy development in respect of the regulatory model for capacity expansion is simply another form of quinnquennial review, it requires a far broader perspective and must be set within the Government's overall policy framework for expansion.

- The wider context for the CAA's review is instructive, for example, the AC's objectives in respect of connectivity, safeguarding the UK's hub status and wider macro-economic factors. It is clearly important that regulation helps give effect to these types of objectives (while maintaining independence and enabling the CAA to meet its statutory duties). In short, the CAA might be considered as a “facilitator” in the process as the sector regulator.

Our response is structured as follows:

Section 1 sets out Heathrow view of the context for the CAA’s DP, this includes comments on why we consider Heathrow is the right option for capacity expansion. This is followed by Heathrow’s proposed regulatory principles.

Section 2 of the response addresses the CAA’s discussion of competition, regulation and market power, and also contains Heathrow’s initial comments on the statutory framework (and CAA’s duties).

Section 3 concentrates on financing and risk, and outlines Heathrow’s initial views on the matter of inter-generational transfers.

Section 4 of the response provides observations on the CAA’s discussion of the potential treatment of expansion costs and also contains some high-level comments on slot allocation.

Section 5 addresses other issues, constructive engagement and the CAA’s case studies and other matters.

Section 1: Options for expansion: why Heathrow is the right option

By 2015, for the first time in over 300 years, the UK will not have the leading international port or airport. The implications for UK passengers, cargo customers and the wider UK economy and society are profound. Considering the policy options to maintain the UK's hub aviation status in the world is the aim of the AC's process.

Expanding Heathrow will connect the whole of the UK to jobs and growth in a changing world economy. Heathrow will deliver greater economic benefits to the UK than any other option. It will create jobs, facilitate trade and tourism, boost spending in the wider economy and improve public finances. The benefits to the UK from expanding Heathrow are £100bn in present value terms. Expanding Heathrow would protect the existing 110,000 local jobs that depend on the airport and create 123,000 new jobs across the UK. Heathrow is ideally placed to integrate into key clusters of the UK economy as well as London and regional development plans. Economic benefits will spread across the entire UK, connecting 90% of the UK population within 3 hours to 90% of global GDP.

The UK needs a strong hub airport to maintain direct long haul connectivity for all aviation users. We have developed a detailed delivery plan that demonstrates a new runway will be operational in 2025 at a cost of £15.6 billion. It is a plan specifically designed to provide integrated hub capacity for aircraft, passengers, their bags and freight. It aims to maximise the benefits for passengers, airlines and the UK economy and minimise the local impacts of expansion. Our plan allows for flexibility in increases in terminal capacity in response to changes in demand or other market and commercial factors. It also means that excessive costs are not incurred up front, ahead of demand.

The largest wholly privately funded airport in the world

Heathrow is by far the largest wholly privately funded airport in the world with a £15 billion asset base financed through a combination of equity and debt raised in global capital markets. Only four of the world's 50 major airports are fully privately funded and Heathrow is many times larger in scale than its closest comparator - Sydney. Heathrow builds from experience, having financed £11 billion in capital investment over the last decade - a scale of investment unprecedented in privately financed airports.

A demonstrable record of shareholder support

Heathrow's shareholders represent a cross section of the world's leading private infrastructure investors and include sovereign-wealth funds, pension and investment funds and infrastructure operators. The commitment of our shareholders to the business is demonstrated by £11 billion of investment to transform the UK's hub airport in the last decade. This investment at Heathrow represents well over half of all investment in UK airports since 2000. This has been backed by new equity provided by shareholders, as well as reinvesting of cash from the operation into the business. No other UK airport has the depth and breadth of shareholders that Heathrow does.

Heathrow expansion is supported by the scale of our existing business

Heathrow is the third largest airport in the world and has the largest number of international passengers globally. The quality and resilience of demand at Heathrow unseen at other UK airports, provides a solid foundation from which to fund expansion.

The robustness of the current business and the relative predictability of cashflows brings financial resilience. This is key to supporting the financing of Heathrow expansion at a lower cost of capital than alternative proposals. This will deliver significant benefits for airlines, passengers and the UK economy.

Heathrow has successfully financed an unprecedented level of infrastructure

Heathrow is experienced in financing major investments in its business and is one of the largest issuers of corporate bonds in the UK. We have over £11 billion in bonds currently outstanding and have raised around £5 billion in debt financing since the start of 2012. Debt investors are attracted to the resilience of the business, the relative predictability of its cash flows and the strong creditor protections Heathrow provides.

Heathrow has a well-established debt financing platform that provides access to a diverse range of financing sources. Heathrow is able to regularly issue bonds and raise loans, has raised finance in five different currencies in the debt capital markets, and is able to offer funding vehicles to suit different investors' risk appetite and market conditions.

This debt financing platform has enabled Heathrow to efficiently raise funding from debt capital markets throughout the economic cycle.

Our strong investment grade credit rating improves affordability

Key to delivering an affordable cost of funding is the ability to maintain a strong investment grade credit rating. Heathrow's senior debt is rated A- and our business risk profile has the highest rating from credit rating agencies.

Expansion is estimated to double Heathrow's asset base over time. It is vital that a mechanism is in place to manage expansion risks, particularly through the construction and early operation phases, to maintain strong investment grade credit ratings. These ratings are critical to achieving predictable access to the capital markets on the required scale. This will also ensure a more attractive cost of funding, supporting affordability for all stakeholders.

Maintaining Heathrow's credit ratings, which are among the highest in the markets for a privately funded airport, gives a strong foundation from which to attract funding. It is critical that the airport maintain this foundation if it is to support private funding of national infrastructure on this scale.

Regulatory Principles

We are encouraged by the CAA's outline analytical framework and the intention to develop an information and evidence-based work programme around passenger outcomes, strategic priorities and market analysis. We also welcome the CAA's proposed approach to encouraging commercial outcomes, through constructive dialogue and other mechanisms. This will encourage greater commercial collaboration between airports and airlines, and help positively shape the regulatory and commercial landscape - to the overall long-term benefit of the passenger in terms of price and quality.

We acknowledge the CAA's desire (and need) to develop economic regulation in line with the statutory framework, and in accordance with the AC's review and any subsequent recommendation. The development and introduction of a more targeted, efficient and proportionate economic regulation framework will bring benefit to all.

Heathrow's consideration of the CAA's DP and potential future regulation has been partly informed by the application of a set of high-level regulatory principles, and our on-going analysis and research on passenger requirements and interests. While a relatively high-level analytical framework, we think it helps inform the debate and provides a suitable basis for assessment of some of the key policy issues around capacity expansion.

Heathrow's outline principles are:

Regulatory certainty

Regulatory certainty is central to any company's ability to effectively and efficiently manage the business, and Heathrow is no exception. This is essential not only for the remainder of Q6, but also through the forthcoming AC recommendations and Government consultation (to development). A lack of regulatory certainty will directly impact market and investor confidence.

Policy consistency and commitment

The CAA's programme of work on capacity expansion provides an opportunity to ensure there is greater coherence between regulatory policy and the current statute. This may mean reducing regulation in certain areas and/or creating a more flexible and agile regulatory framework, based around the RAB construct, that reflects the real risks and complexity of capacity expansion at Heathrow airport.

Proportionality

Where there is scope for competition to emerge, or competition is already in prospect, we believe regulation should be designed to further encourage and facilitate that competition. Therefore, regulatory policy needs to be framed accordingly; it must be both appropriate and proportionate. For example, in the context of additional capacity, it is proportionate to facilitate the necessary investment through an increased, but affordable, level of airport charge.

Evidence-based regulation

A better understanding of the characteristics of passenger demand (and willingness to pay) and the over-arching objectives of the AC's review process should underpin the regulatory thinking. There must be a measurable link between any proposed future economic regulation of new capacity and the downstream market (airlines and airfares). It will be important for all stakeholders to understand how the CAA's intended regulatory policy at Heathrow will actually give effect to these types of passenger outcomes. In short, a clear evidence-base should be developed such that a tangible link exists between any proposed regulatory policy at Heathrow and how this policy enables the CAA to meet its statutory duties.

Section 2: Regulation, Competition and Market Power

Additional capacity will have a material bearing on the market dynamic, both at the airport level and further downstream. To the extent that existing capacity constraints influence the competitive process, then additional capacity and supply will be a significant development in the competitive dynamic. The prospect, and eventual addition, of new capacity will give cause for a review of many of the current assumptions around barriers to entry, switching and substitutability, buyer power, catchment analysis and other factors.

Heathrow's responses to the CAA's various Q6 documents stated that, in taking work forward on any market power assessment the CAA should follow a basic "theory of harm" process. Any potential market failure or consumer detriment should be defined first in terms of the possible implications, and an assessment made as to whether this can (or should) be remedied by a form of economic regulation. Notwithstanding the different context we believe this general approach still holds.

Any indication of potential market failure or consumer "harm" should be assessed in relation to the specific market features, taking account also of the net burden of regulation. We also believe it is fundamental to the integrity of any market assessment that each of the four key steps is undertaken (market definition, an assessment of market power, an assessment of harm and finally the consideration of appropriate remedies) and that the process is not contracted, or critical conclusions will be missed.

In identifying the appropriate form(s) of remedies to solve a market failure, it is worthwhile noting that it is likely there will be a package of remedies which may cover multiple options, or variants thereof, of the options identified. Separately, we think some kind of *ex-post* regulation could be appropriate to mitigate some of the potential harms identified if the likelihood of Heathrow exploiting its market power is low, for example in the presence of countervailing buyer power and/or prospective competition.

Depending on the market dynamic, it is possible that some form of commercial arrangement, with regulation as a backstop, could be a legitimate remedy at Heathrow for some or all of the potential regulatory issues.

Frontier analysis[1]

In addition to a more 'traditional' approach to competition analysis, we believe a wider perspective of the competitive process and market dynamic is also required. In the context of derived demand and passenger interests, consideration of the potential downstream impacts from additional capacity will be central to any competition policy analysis.

Heathrow recognises the importance of mock SSNIP tests, critical loss analysis and other factors, but is keen to ensure that consideration is also given to the fundamental question of how additional supply might impact the market.

To that end, following the AC's Interim Report Heathrow commissioned Frontier Economics to assess the impact of additional capacity, in particular, the potential benefit to passengers of expanding Heathrow and/or Gatwick.

[1] Frontier Economics, The impact of airport expansion on competition and choice, 2014.

Frontier Economics determined that expanding Heathrow would allow competition to lower fares for all passengers in the London airport system. In turn, this will make the UK an even more desirable destination for foreign, domestic and transfer passengers. This would be a source of additional tourism for Britain and also create a more competitive hub, enabling larger transfer flows, connections to more destinations, more competition and even lower fares.

The research by Frontier Economics finds that:

- Removing the capacity constraint on Heathrow will deliver net benefits for passengers, even after accounting for the higher cost of construction;

- Ticket prices at Heathrow would be £95 per return ticket or 15% of average fares lower today if there were no constraint;

- By 2030, the fares at Heathrow would be £320 lower in today's prices (or 38% of the average fare) because of the increasing impact of the capacity constraint;

- Reductions in fares outweigh the extra costs to passengers of new capacity, the £320 saving relative to our initial estimate that airport charges average £24 between 2019 and 2049 compared to around £20 currently;

- Ticket prices would fall significantly more from expansion at Heathrow compared to the impact through expansion at a point-to-point airport, as excess demand is substantially higher at Heathrow. Expansion, especially at Heathrow, will increase competition and lead to lower prices across the London Airport system. The greatest competition benefits come from expanding at both Heathrow and elsewhere;

- Findings are robust even in different scenarios, including Gatwick emerging as a second hub. It is unlikely that a point-to-point airport could expand as a hub airport, because hub economics rely on maximum connectivity. Even if this scenario were to occur, the benefits to passengers in choice of destinations and fares would be substantially less from expanding at Gatwick only when compared to expanding Heathrow.

While the analysis clearly relates to downstream competitive outcomes it is based in a model of capacity expansion at Heathrow and/or Gatwick; the key point being that an increase in supply (airport capacity) is likely to have a material impact on the competitive process and passenger outcomes.

Material change in circumstance

A recommendation or statement of Government policy with respect to airport capacity would represent a material change in circumstances (MCC). As noted in the CAA's DP, previous Government policy statements regarding airport capacity, notably respective Government decisions in 2009 and 2010 were considered, by the Competition Commission and other institutions, as being an MCC.

While Heathrow recognises the likely difficulties in determining a MCC, and the potential or actual impact on competitive conditions, a material and significant change to the policy framework within which any competition assessment would be conducted, must constitute a material change in circumstance.

The prospect of additional airport capacity (supply) is already having a bearing on competitive conditions, to the extent that participants are effectively competing for additional capacity and airlines are already considering the potential options. Moreover, the potential for further competition in the market is as important a consideration as actual and subsequent changes in competitive conditions. Relatedly, Heathrow understands that the CAA's market power determination process is forward-looking and provides the basis for informing the CAA's future policy on economic regulation, it is not intended to be used as an *ex-post* test of competition or outcomes.

Therefore, if a competition assessment and the CAA's policy is to give effect to the CAA's duties in respect of promoting competition, Heathrow considers that the CAA must treat a change in policy on airport capacity as being a MCC. We do not agree that the grant of planning permission, the 'breaking of ground' or any of the later events identified by the CAA provide an appropriate reference point for consideration of whether an MCC has occurred.

Competition "for" the market and Terminal Competition

Competition for the market

The current AC process could be described as a form of competition *for* the market. The current AC process and review will determine outcomes in a number of important areas, not least of course the location of any additional airport capacity. In doing so, the AC's review process will effectively act as a proxy for the competitive process.

It will do this by recommending a location for capacity, having taken account of the technical and operational feasibility of proposals, the deliverability, the potential cost and "affordability", connectivity and other important factors. The AC's review process will also indirectly determine the range of prices (airport charge) relating to any capacity expansion.

Therefore, given that competition *for* the market is intended to generate outcomes consistent with competition *in* the market, continuing with the AC's rigorous approach to the review will help ensure that a competitive proposition emerges from the process.

If it is accepted that the AC's review is a proxy for the competitive process, the CAA need only take a residual role post the AC's recommendation and any Government policy review. Indeed, if the price of capacity expansion and other key elements are largely determined through the AC process and Government review, the CAA need only assure itself and other stakeholders that the price and other relevant elements are consistent with the CAA meeting its statutory duties.

Terminal competition

The CAA's DP also refers to terminal competition. From Heathrow's perspective, terminal competition would represent a material and adverse change in regulatory policy. It would fundamentally undermine and distort any incentive to invest in additional capacity. Moreover, if taken forward, it must imply very significant changes to the current regulatory structure, presumably the complete de-regulation of Heathrow.

Notwithstanding that any such policy can only be introduced as an *ex-post* remedy following a reference to and inquiry by the Competition and Markets Authority, it is neither financially nor economically rational.

Heathrow's proposal for capacity expansion is not 'ring-fenced', nor is it a stand-alone project or structure. Heathrow's is an integrated proposition, leveraging and building on the existing infrastructure and operations. For example, it allows for flexibility in increases in terminal capacity in response to changes in demand or other commercial factors. Similarly, Heathrow's proposition is able to exploit operational and other synergies, many or all of which would not arise under terminal competition.

From a financial perspective, it is the combination of existing shareholder support, Heathrow's investment grade credit rating and the scale of current operations that would enable the investment necessary for capacity expansion. The introduction of terminal competition would severely and negatively impact each of these factors.

Lastly, it is not at all clear how terminal competition is likely to manifest itself nor whether there would be any benefit to its introduction. Aside from the potential costs of introducing such a policy including the indirect costs associated with higher financing, loss of scale and operational synergies etc., the scope for any incremental passenger benefit would have to be very carefully assessed and quantified. It is hard to envisage a scenario where the benefit from terminal competition outweighs the costs, and are greater than the benefits arising from Heathrow's integrated proposition and on-going competition with other European and Middle Eastern hubs.

Statutory Framework and the CAA's Duties

The Civil Aviation Act 2012 (the Act), as currently drafted, provides the necessary scope and direction on how the CAA should undertake its programme of work. Moreover, and it provides the CAA with the necessary flexibility and discretion to give effect to a targeted, but balanced and proportionate regulatory framework. Heathrow believes that the Act provides sufficient scope for the CAA to address issues such as additional runway capacity.

In respect of the CAA's consideration of whether the Act presents possible barriers to investment, including that associated with additional runway capacity, there is considerable scope within the Act, and discretion in the exercise of the CAA's duties, to regulate in such a way that (efficient) investment is incentivised and facilitated.

In Heathrow's view, amendments to the current statute, to include an explicit duty to "*encourage and/or promote investment*", are not required. The statutory duties are not mutually-exclusive. The interaction between the current statutory duties and the scope for interpretation suggests that the present framework can be used to encourage the necessary investment for additional capacity.

Section 3: Financing and Risk

Any future regulatory framework must consider the critical role investors have in ensuring that additional capacity becomes a reality that benefits a competitive aviation market and the UK economy and consumer. While the CAA's primary objective must be meeting its statutory duties, this must be underpinned with appropriate incentives for investors' and shareholders' interests.

The strength of the case for airport expansion will not attract private investment without a supporting investment environment. The expansion of Heathrow is a substantially riskier investment compared with Heathrow today and necessitates new approaches to risk sharing and higher financial returns for investors. Heathrow and its shareholders welcome dialogue with the CAA and other stakeholders in order to identify and address the risks attributable to expansion and the appropriate investor returns. The shareholders "in principle" support for the expansion assumes successful resolution of these matters.

New runway capacity will require a wave of new investment with a long payback period, significantly increasing the average asset life at Heathrow. We see scope for risk over the construction period, uncertainty over future traffic and revenues, and risk relating to the future regulatory environment. These risks and uncertainties are not unique to Heathrow and will apply to any of the airport expansion proposals currently being studied by the AC.

There are, therefore, conditions that are critical for the UK in order to support investment in national infrastructure and aviation with private funds. The regulatory framework will be a key component of the wider policy decision.

Successfully attracting private investment to fund Heathrow's proposal for the expansion may require modification of the established regulatory model for airports in a number of ways, including, but not limited to, the following:

- **Regulatory structure**
  Our initial thinking on the regulatory structure assumes a continuation of a Regulated Asset Base model. However a fundamental review is required to assess risk allocation between the airport, airlines and the Government given the extensive magnitude of the investment required and it's substantially greater risk to investors compared with Heathrow today. Annex 1 sets out Heathrow's current thoughts which were submitted to the AC.

- **Investor returns**
  Even with Heathrow's large and established business, an investment over a number of decades that exposes investors to a significant demand risk is of a very different nature compared with operating and maintaining the assets of a more mature airport. In the latest regulatory period, the CAA has already materially reduced the return to investors (via the regulated WACC) to a level that has impacted the shareholders' ability to fund future investment. Our shareholders would expect a substantial revision to the WACC to account for construction and demand risk, as well as long term changes in financing costs, that reflect the risk of a greenfield development. Any view of the investment case at the moment must come with heavy caveats until there is greater visibility of the UK regulators approach to investment return.

Outline review of the CAA's categories of risk and risk strategy

Heathrow broadly agrees the various categories of risk outlined by the CAA and the proposed high-level strategic approach to the treatment of risk, tolerance, mitigation and transferring. If the CAA were to adopt such a strategy the different types, levels and treatment of risk would need careful consideration, although when applying the CAA's high-level strategy it is clear that certain categories of risk are suited to a particular strategic approach.

The table below sets out Heathrow's initial views on the CAA's proposed strategic approach relative to the different categories of risk.

Table 1: Applying the CAA's proposed strategy to different categories of risk

Types of Risk	Mitigation	Tolerance	Transferral
Demand		✓	✓
Construction		✓	✓
Cost		✓	✓
Financial	✓	✓	
Regulatory	✓		
Political			✓

Notes: demand, construction and cost risk are partly tolerated and partly transferred to airlines/passengers.

- Demand, construction and cost risk would all be shared between the airport and the airline/passengers, depending on the balance of the risk sharing schemes built into the regulatory framework, i.e. partly transferred to the airlines/passengers, with the remainder tolerated by the airport;
- Financial risk can be partly mitigated by reducing other sources of risk to the airport, e.g. reduced regulatory risk to the RAB will enable longer term financing that will reduce financial risk. Ultimately, however, any remaining financial risk will need to be tolerated by the airport;
- Regulatory risk should be mitigated through greater certainty in the regulatory framework (e.g. protection against RAB write-downs, or WACC reductions). The objective should be to largely mitigate all regulatory risk; and
- Political risk should be transferred to Government who is best able to control this risk (e.g. compensation in the event of political support being withdrawn). The objective should be to largely mitigate all regulatory and political risk to reduce end user costs.

RAB based approach

If the future regulatory framework is to continue to enable infrastructure investment it must seek to build upon the existing relatively stable and transparent regime. A key component of the current regulatory regime is the RAB based approach to economic regulation.

While the addition of new capacity at Heathrow would represent a significant financial, operational and infrastructure development, if the new capacity is regulated appropriately and proportionately, there would be no need to move away from the RAB based model. Certainly, Heathrow would not support the creation of separate IPs or SPVs.

While there may be scope for alternative approaches, in the event that economic regulation is required, we think there is considerable value in continuing to apply RAB based regulation at Heathrow. Many other options have been reviewed over time and found wanting in one aspect or another. The RAB based approach offers both regulatory certainty and policy consistency (impacting all stakeholders).

We think a fundamental shift in regulatory policy toward a new model would further increase uncertainty and risk, distort incentives to investment, and create an unnecessary burden on the regulator and the market participants, while adding no additional value. A shift in regulatory policy, which had a material adverse effect on the RAB (and by definition, Heathrow's financing structure and business), will have an adverse effect across the value chain.

Duration of any future price control (and stabilisation)

While current regulatory practice shows that a price control period of four to five years is generally adopted by sector regulators, largely on the basis of balancing the respective interests and incentives, there is clearly scope for amendment given the large scale nature of the prospective project. The current Statute and Licence allow for a more flexible (and yet targeted) approach to economic regulation. To the extent that an extended price control period were considered proportionate and appropriate, in the circumstances, then the current regulatory/licensing framework would provide a legal basis for longer price control periods.

In terms of the policy aspects, Heathrow submits that it will be economic factors that determine whether the price control period should be extended. For example, the investment horizons, and the very significant nature of existing and forecast investments at Heathrow, indicate a longer price control period than the current five years given the pricing impact and the impact upon Heathrow's incentives and ability to undertake infrastructure investment.

Key to any consideration of this issue is the different incentive properties associated with the duration of the price control. It will be important to ensure that incentives are balanced and maintained if a longer price control period is proposed. Firstly, the incentive acting on Heathrow to utilise the greater regulatory certainty and take forward significant infrastructure investments. Secondly, for Heathrow to be able to undertake efficient investments in the knowledge that these will be appropriately treated and reflected in any existing and future price control settlements.

Inter-generational Transfers

Heathrow agrees that any consideration of inter-generational transfers should be based in the CAA's statutory duties (coupled with a consideration of economic and regulatory precedent). Contrary to the CAA's assessment, Heathrow is not persuaded that there is a material conflict between different classes or generations of users.

The CAA's primary duty provides the necessary guidance and discretion for regulatory policy. The statutory duty is effectively forward-looking: *furthering the interests of passengers in respect of the range, availability cost and quality of services*, cannot be given effect instantaneously, neither is it discrete. It is a continuous process and develops over time through on-going capital investment and other means. Therefore, it is not necessarily a matter of measuring the costs and benefits between different generations, but identifying the policy which best meets the statutory duty.

The CAA's DP sets out different approaches to cost recovery and financing, e.g., AICC, revenue advancement and profiling[2]. Each of these are valuable policy tools and despite the apparent differences in how each is applied, they would appear to result in the same broad incentive structure, that is, regulatory stability, the facilitation of investment and mimicking competitive outcomes. Relatedly, both AICC and profiling could be more generally described as pre-financing to the extent that expenditure in included in the asset base before or in the year in which it is incurred.

It is economically rational (and current regulatory practice) to incentivise efficient investment through a form of "pre-financing". Moreover, it is clearly in the users' and passengers' interest to do so. For example:

- **It promotes efficiency and economy:** The purpose of additional capacity is to help alleviate congestion, facilitate competition and further improve service quality in the face of expected passenger growth at Heathrow. Capacity additions will further promote the efficient and economic operation of Heathrow and it is in the interests of users to allow prices to adjust such that prices are relatively higher prior to the capacity coming on stream and relatively lower when it is completed.

- **It incentivises efficient investment:** Disallowing any form of "pre-financing" or imposing a tighter price cap would be more likely than not to cause Heathrow (and other airports) to slow and/or reduce investment programmes with likely adverse effect on both current and future users. It may also be inconsistent with the CAA's statutory duties given the current and expected unsatisfied demand at Heathrow.

- **It is consistent with regulatory precedent:** As per the CAA's DP, there is clearly relevant precedent for a form of "pre-financing", e.g. T5 and other examples. Equally, on the related matter of commitment, given the scale of the prospective investment, establishing regulatory commitment by adopting a policy of "pre-financing" would help mitigate regulatory and financial risk and help facilitate the on-going financing of the programme.

Regulatory approach

Enabling a return on assets in the course of construction (AICC) is the CAA's current policy. Under the current approach, Heathrow earns a return on its investment throughout the development of the projects, as opposed to when the assets become operational. In addition to the matters outlined above, this approach to policy averts price volatility, mitigates "commitment" and financial risk, and injects a degree of regulatory certainty and predictability into the regulatory framework.

Heathrow's believes there are clear and tangible benefits from continuing with a policy on AICC.

- Generates appropriate investment incentives by giving regulatory certainty on capital committed and invested. Allows for funding throughout the development phase (critical where there will be an intense and significant level of capital investment);

[2] The CAA's DP states that revenue was deferred from Q4 to Q5, this is incorrect. The revenue was profiled in such a way that £300m was brought forward into Q4 (from Q5).

- It is not clear that AIO would reduce current prices relative to AICC: as although it would only remunerate developed/operational assets it would increase the cost of capital (financing costs) by increasing both the cost of equity and debt;

- AICC effectively protects future users' interest as it improves the achievability of the planned investment; and

- It reduces the volatility in prices and generates a price path profile more like the profile which might be expected in a competitive market.

Section 4: Cost Review and Cost Recovery

Options for evaluating capacity expansion costs

The CAA's DP recognises that the efficient capacity expansion costs incurred by an airport should be recovered (Chap 6, p.58). While a distinction may be drawn between the phases of cost recovery and the means by which costs are recovered, the underlying principle that all efficient costs are recovered is paramount to investor confidence and commitment.

The proposed phasing of cost recovery is also important. Subject to considerations of "affordability" and the balancing of incentives, all efficiently incurred costs should be recoverable in a timely and proportionate manner. While some form of "pre-financing" will be necessary to incentivise investment and efficient delivery, our plan is flexible and it will allow for increases in terminal capacity in response to changes in demand or other commercial factors. It also means that excessive costs would not be incurred up front ahead of passenger demand.

With respect to any CAA consideration or "validation" of the costs proposed for additional capacity, it will be important to ensure that an airport is not effectively subjected to multiple audit type processes. The proposals and associated costs could be scrutinised by the AC, the Government, the relevant planning authorities and also the CAA. In the event of a formal Constructive Engagement process there would then be a further, and possibly simultaneous, phase of scrutiny and "audit". Such an outcome is likely to be inefficient, potentially contradictory, administratively burdensome and costly.

Heathrow recognises the requirement on the CAA to ensure it effectively meets its statutory duties and that there must be a degree of regulatory scrutiny. It is a matter of striking an appropriate balance while ensuring processes remain necessary, efficient and not unduly burdensome.

Therefore, recognising that the CAA will continue to engage with both the AC and the Government throughout the process, Heathrow's preliminary view is the CAA should consider a high level review of the capacity expansion plans and costs. A high level review would maintain the CAA's independence and also provide assurance to all stakeholders that the proposals and plans are consistent with passengers' interests.

Cost recovery in practice

Heathrow broadly supports the application of the CAA's proposed principles on cost recovery. The principles of incentivisation, efficiency and risk are key ones amongst these. The principles of consistency and achievability are also important. In respect of incentivisation, Heathrow is keen to ensure that all stakeholders' incentives are balanced such that the shareholders' incentive to invest in capacity aligns with the passenger benefits arising from such an investment.

In terms of efficiency, Heathrow recognises that only efficiently incurred costs are recoverable. Inefficient investment and/or expense would not necessarily be incurred, and any *ex-post* (CAA) scrutiny of costs must be based in the information and evidence available at the time the costs were initially incurred. Risk is discussed in Section 3 of this response.

Capacity expansion cost triggers

As noted above, the proposed phasing of cost recovery is critical from a number of perspectives, not least shareholder incentives and the overall business case. While Heathrow acknowledges the presence of uncertainty, it is clear that efficient costs are currently being incurred in support of the AC's review and other activities. Moreover, a significant amount of cost is likely to be incurred well in advance of many of the CAA's proposed triggers. This is illustrated in the schematic below.

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The CAA's DP appears to dismiss the proposed trigger points 1 & 2 as being too early and inappropriate given the potential uncertainties and "highly speculative" nature of the costs. The CAA's rationale for dismissing these trigger points appears flawed, particularly in light of the fact that the AC's review has now been underway for some time (and costs to date are known or could be derived with a high-level of accuracy), and that the CAA have effectively determined, subject to approval, that Gatwick can recover up to £10m p.a. of capacity expansion related cost during Q6.

While the adoption of a specific trigger point(s) may provide a degree of clarity, some of the CAA's triggers appear to be inconsistent with the overall process and objectives set out in the introduction of the DP. For example, trigger point 5 indicates that capacity expansion cost recovery could be a function of a "*market agreed decision*", whereas the decision on the development of capacity is effectively exogenous (i.e. the AC and Government).

In Heathrow's view the point from which costs are to be recovered cannot and should not be de-coupled from a recommendation, or decision, to support a particular expansion option. The recommendation and/or decision to facilitate capacity expansion will be a definitive milestone and will trigger additional and material airport expenditure.

Moreover, a single, late trigger point would neither reflect the dynamic nature of the process nor is it likely to properly and fairly balance the incentives of key stakeholders. For example, a trigger point for cost recovery being the "*first flight from any new capacity*" would postpone the recovery of any cost toward the end of the entire process (after all planning, investment, construction and development). Such an approach, however described, would severely blunt any incentive to invest.

For the purposes of the CAA's policy statement, Heathrow believes that the CAA should first consider the treatment of the more immediate costs, those incurred in advance of the AC's recommendation and during the Q6 period. The costs incurred in advance of the AC's recommendation and through any national policy review, should be recoverable in Q6 by means of adjustment to the current price control by means of licence modification or otherwise.

The more significant potential costs likely to occur after any formal recommendation and/or decision, but within Q6, e.g. planning, property, should be added to the opening RAB for Q7 and beyond.

As to the mechanism by which these and other costs are recovered, Heathrow's view is that these and related matters should be considered in more detail as part of a wider review subsequent to any formal recommendation.

Market Dynamics and Slot Allocation

Economic regulation aims to mimic the outcome of a competitive market. This includes the dynamics of the way competitive markets deal with supply shortages.

In a competitive market, a shortage of supply causes prices to rise. This signals to suppliers that they could profitably increase supply. Existing customers pay a higher price, but effectively suppliers use the additional revenue to invest in new capacity. Unfortunately this competitive market dynamic does not normally operate at regulated airports since the price is capped.

However, under revenue profiling, regulated revenue is bought forward, so that the price paid by existing customers reflects the scarcity of capacity, and the additional revenue reduces future prices when capacity is plentiful (with adjustments to preserve present value neutrality). Revenue profiling, therefore, is a useful tool (used in the case of T5) to mimic competitive market dynamics.

In a competitive market customers frequently pay to secure future supply. The CAA's discussion paper suggests linking the financing of new capacity with the subsequent benefits to airlines of securing new slots, possibly in the form of payment by those who secure new slots to those who contributed (paragraph 8.17). This also would be a helpful tool to mimic a competitive market, as well as fairly linking those that pay with those that benefit.

Heathrow would be keen to engage with airlines and the CAA to further explore potential options around slot allocation, and also on the practicalities of how the CAA's proposal could be given effect.

Section 5: Other Issues

Constructive Engagement

As Heathrow progresses work on capacity expansion, we will continue to engage with the airline community both our current and potential future customers. Indeed, engagement with all stakeholders will be integral to the process and is something that Heathrow will undertake as standard business practice. We welcome regular, deep and ongoing engagement with current and future airline customers, both for the success of our own business and to create the best possible plans for expansion. We have already established processes to allow for airline community working groups and bilateral conversations around our plans for capacity expansion and the AC process.

In terms of the CAA's proposals on constructive engagement (CE), Heathrow recognises there may be a role for some form of CE in the capacity expansion process. It is important however, that CE is genuinely constructive, timely, efficient, adding value to the overall process and outcome. We would support such a period at the appropriate stage of the development process.

- **Commercial engagement (and 'crowding out')**

  As work is taken forward on capacity expansion there may be scope for standard commercial agreement on many aspects of the development. This could be reached through bilateral non-discriminatory agreements or multilaterally and could be given effect though the Conditions of Use, legal contracts or similar frameworks. For projects and services of the nature and scale of an expended Heathrow these may well be complex agreements that will take time to conclude. Furthermore given the uncertainties of the policy process the right time to complete such arrangements may not be for some time. Heathrow must therefore be given the opportunity and time to explore the scope for commercial agreements without risk of these being overtaken by CE, or being 'crowded out' the regulatory process.

- **The role of CE**

  Heathrow recognises that a collaborative approach on any future regulation is required. However, stakeholders must be careful not to assume that policy development in respect of capacity expansion is simply another quinnquennial review. In the event that a form of CE were to be used in any regulatory process on capacity expansion, there must be clarity that it would be restricted to capital and/or costs to be added to the RAB. It would also have to recognise the policy and planning processes, as well as existing regulatory activity.

- **Would CE replace or replicate a CAA review?**

  The CAA's DP suggest that CE would be consistent with a light-touch regulatory approach. This does not reflect Heathrow's experience during the Q6 review. It will be important for Heathrow and all stakeholders to understand the CAA's role and whether CE would replace, or effectively replicate a CAA review. If any event the CAA is required to judge Heathrow's proposals against its statutory duties, whether "agreed" through CE or not, it may be more expedient and efficient to adopt a brief process with active CAA involvement. It would also benefit both the airport and airlines if regulatory activities can be coordinated to reduce the burden and maintain the quality of engagement over a sustained period when combined with other review processes (e.g. classic 'quinnquennial' reviews).

- **Timescales and Administration**

  Other key considerations would be timing, timescales and the potential administrative burden. It is not clear from the CAA's DP whether consideration is being given to CE as part of Q6 and the more immediate RAB related costs, or to all expansion RAB related costs, or both. As to when CE might occur, careful thought (and priority) will need to be given to other milestones in this process, e.g. the AC's review and recommendation, the Government's policy review, the planning process etc. We would propose full CE only be deployed, if at all, for full scale expansion costs, at an appropriate time given both commercial considerations and the policy and planning processes.

Case studies and relevant precedent

Annex B to the CAA's DP contains a number of case studies. Although the scale and nature of the proposition for capacity expansion at Heathrow is unique, a number of the case studies are potentially relevant to Heathrow, whereas others, e.g., the previous airports system with subsidies, are not.

The table below sets out some initial comments on those case studies we consider to be more relevant to capacity expansion at Heathrow.

Table 2: Heathrow's initial comments on CAA's case studies

Case study	Commentary
Airports system	Not relevant.
Terminal 5	As per the CAA's DP, the revenue advancement carried out in Q4 has proven to be in the passengers' interest. The Regulator's commitment to the development of T5 did not negatively impact on passenger numbers and also helped to support the improvement of service quality at Heathrow.
PSDH (project for the sustainable development of Heathrow)	PSDH provides a very relevant example of precedent in respect of explicit regulator support for capacity expansion, by means of including the potential expansion related costs in the Q5 settlement. Moreover, it is interesting to note that there was explicit regulator support for capacity expansion in advance of the Government's formal announcement; the Q5 settlement began in April 2008 whereas Government support was formally notified in January 2009.
Third runway at Hong Kong International Airport (HKIA)	Not relevant.
New terminal at Dublin Airport	Not relevant.
Thames Tideway	Not relevant.

Northern Ireland gas networks	The NI gas network example does have some relevance to the potential for new capacity at Heathrow. For example, the time horizons on capacity expansion are longer than the average regulatory price control duration. As per the NI example, long-term investments will require regulatory commitment and certainty, possibly by means of adopting a higher WACC over a longer period.	
GB offshore electricity transmission	Similarly, the example provided by electricity transmission relates primarily to the extended time horizons. As per the electricity transmission example, long-term investments will require regulatory commitment and certainty, possibly by means of adopting a higher WACC over a longer period (we note also that a revenue cap is used in the regulation of electricity transmission).	
Regulated third party access arrangements for liquefied natural gas (LNG) facilities in UK	Not relevant.	

Annex 1

Overview of a potential regulatory framework for airport capacity expansion (at Heathrow)

Heathrow, along with many other UK companies under economic regulation, is subject to price control. This is set to give investors an expectation of earning the appropriate rate of return to be earned on a Regulated Asset Base over a multi-year period. For airports this period is five years, but for other sectors this varies from three years (telecoms networks), to five years (water companies), to eight years (energy networks).

To date, this model has been viewed as generally successful in the low-risk utility sectors:

- The multi-year price cap strikes a balance between protecting consumers and providing companies with an incentive to seek cost efficiencies and additional revenue opportunities within the price control period
- The RAB provides investors with a degree of assurance that regulators will honour investments – albeit with the WACC earned on the RAB adjusted in each price control period to reflect the regulator's view of the opportunity cost of capital to investors.

The RAB has allowed companies to finance asset investment programmes using relatively low-cost investment grade debt. Without the concept of the RAB, borrowing costs would likely be higher, with companies having to resort to more expensive equity financing. Consequently, it is reasonable to assume that without the RAB model, prices to consumers would be higher.

As the AC states, changes will be required to the system governing the economic regulation of airports to support the delivery of long-term options. Even the current regulatory settlement does not encourage the company to invest in the existing two runway airport. Investment in a third runway and the related infrastructure will magnify the risk to investors:

- New runway capacity will require a wave of new investment with a long payback period, significantly increasing the average asset life at Heathrow

- Construction phase risk:

  - The construction period of around 15 years increases risk relative to the airport's current capital programmes, particularly with regard to issues such as cost overruns and delays; and
  - Any lack of return from these assets during the construction phase will also add further to risk.

- Operational phase risk:

  - Operational cost risk, e.g. under-estimation of the running costs of the new facility;
  - Commercial revenue risk , e.g. new passengers may be lower spending; and
  - Traffic volume risk given the uncertain speed (ramp-up) and level of take-up of new capacity and potential greater volatility of incremental traffic.

- Financing risk
    - Airport expansion will require an unprecedented scale of access to UK and international bond markets for a privately-financed transport infrastructure business. It will be initially unclear what depth the UK corporate bond market has to meet this demand, and what returns will be required on this debt and supporting equity.
- Regulatory risk:
    - Apparently arbitrary decisions by the regulator to reduce the WACC in future price control periods or impose RAB write-downs.

The length of the investment payback period magnifies each of these risks - particularly the regulatory risk after the investment has been made. The AC should be aware that these issues are not unique to expansion at Heathrow. They would apply equally, if not more so, to Gatwick, and would be extreme in the case of a new build airport in the Thames Estuary. These risks are more easily managed by the airport and airlines within an expanded existing hub airport at Heathrow than they would be at any other location.

The stabilisation period

At the point at which investment is committed, Heathrow will enter a period of heightened risk for all the factors listed above (and possibly others), requiring measures by the regulator to mitigate this level of risk. This period will start from the point of committing the first significant investment, for at least 15 years. This is roughly the period for construction and for operational, commercial revenue and aeronautical revenue risk to become clear, although the average asset life will be longer. We refer to this time as the 'stabilisation period'. This stabilisation period in particular will require a fundamental change to the approach of regulation to mitigate the heightened risk to providers of capital.

The stabilisation period will be a significant challenge for financing the project. Under the existing regulatory model, all risk is borne by the airport for the full five years of each regulatory period. Since risk will increase as described above, a reallocation of risk between airport and airlines must take place in order to achieve an acceptable balance.

These concerns affect how the existing regulatory regime should be adapted. In order to allow investment, we believe that the regulatory environment needs to include a number of commitments:

- Retention of RAB based regulation;
- A guarantee that all efficiently incurred capital expenditure (including development costs) is included in the RAB, with safeguards to prevent write-downs;
- Clarity and necessary assurances that surface access infrastructure outside the airport would be funded by the Government;
- Recognition that long term investment in major new airport infrastructure requires greater certainty on the long term return to shareholders, with implications for the structure of the regulatory period;
- A mechanism to provide investors with a longer visibility horizon for the WACC;
- Adoption of a higher WACC to cover the additional risks of capacity expansion; and
- Mitigation of the heightened risk to the airport with additional measures. These could include revenue and cost risk sharing between the airport and the airlines.

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