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17th December 2021

British Airways Response to CAP2265
Economic regulation of Heathrow Airport Ltd
H7 Initial Proposals

Thank you for the opportunity to respond to your latest consultation on the Economic Regulation of Heathrow; we set out below our views on the Civil Aviation Authority's ("CAA") proposals and implications for the wider policy environment.

Executive Summary

Heathrow is a regulated monopoly, yet charges are already 44% higher than at any other equivalent major airport, and the CAA's Initial Proposals will only exacerbate this situation.

At the heart of the issue are a misalignment of incentives, which has resulted in unconstrained growth of the Regulatory Asset Base ("RAB") alongside financial engineering that it has substantially removed all equity from the business. This situation cannot continue and is not in the best interests of consumers.

The CAA has made errors in its proposals for a range of £24.52 to £34.41 (CPI-real 2020p) by failing to use its advisors' analysis for operating expenditure and commercial revenues in full, using passenger numbers that are irrational based upon external evidence, introducing excessive additional risk protections for Heathrow and then failing to reflect those risk protections in the cost of capital, whose component parts have been calculated using novel methods and weighted upwards in error.

The regulatory regime must set the correct incentives, deliver clarity over risk allocation, compensate appropriately for that risk allocation, and provide protection for consumers from the excesses of extreme leverage, along with assurance that a resilient airport will operate for the benefit of consumer. This needs to be supported by proper regulatory protections ring-fencing and obligations on directors to ensure Heathrow can finance its functions.

We present evidence that the airport charges should be in a range of £11.30 to £14.72 (CPI-real 2020p), based upon an evidenced 1.3% to 2.8% vanilla WACC, removal of the asymmetric

risk allowance, restoration of analysis performed by CEPA/TA on operating expenditure and commercial revenues, scaled for passenger numbers that are informed by independent Eurocontrol forecasts.

The CAA must develop a price control that constrains Heathrow's monopoly instincts, and ensures Heathrow is run efficiently, working in the best interests of consumers. A light touch regime is inappropriate given the significant incentive issues that exist, and the CAA must ensure that it uses appropriate tools to establish incentives that are calibrated in a manner consistent with the evidence.

CAP2265 is incredibly important as it will inform the foundations upon which the H7 regulatory period will be established. The CAA's consultation materials touch on a huge number of complex and very detailed considerations that must be thoroughly assessed during this consultation process. Given this and to ensure a robust response, this consultation response adopts substantially the same structure as the CAA's consultation materials with a few additional sections to highlight BA's position.

The structure is as follows:

1. Introduction
2. Our range for Initial Proposals
3. Overall approach to regulation (CAP2265 Chapter 1)
4. Passenger forecasts (CAP2265 Chapter 2)
5. Capital expenditure (CAP2265 Chapter 3)
6. Operating expenditure (CAP2265 Chapter 4)
7. Commercial revenues (CAP2265 Chapter 5)
8. Regulatory asset base (CAP2265 Chapter 6)
9. Allowance for asymmetric risk (CAP2265 Chapter 7)
10. Financial framework (CAP2265 Chapter 8)
11. Weighted average cost of capital (CAP2265 Chapter 9)
12. Treatment of taxation (CAP2265 Chapter 10)
13. Calculating a price cap and financeability (CAP2265 Chapter 11)
14. Capital efficiency incentives (CAP2265 Chapter 12 & Appendix H)
15. Other regulated charges (CAP2265 Chapter 13)
16. Outcomes Based Regulation (CAP2265 Chapter 14)
17. Q6 capital expenditure efficiency review (CAP2265 Appendix E)
18. Early expansion costs (CAP2265 Appendix F)
19. Financial resilience and ring-fencing (CAP2265 Appendix G)
20. Consultation process
21. Regulatory framework

Our main points are as follows:

Introduction

- a) Heathrow holds monopoly power due to an absence of effective economic competition, yet Heathrow's charges are already more expensive than any comparable global airport, and the CAA proposes increasing charges further; this

results in a situation where regulation protects Heathrow's investors at the expense of consumers, and Heathrow is able to extract further monopoly rents with the protection of inappropriate and dated RPI indexation

- b) As a result, the H7 Initial Proposals are not in consumer interest, and it is not evident that the CAA has sufficiently considered many issues that sit at the heart of the Heathrow monopoly problem; the regulatory toolkit is out of date and does not appear an appropriate solution for the challenges presented by Heathrow's substantial market power
- c) Specifically, the RAB incorporates significant inefficient capital expenditure that has delivered no benefits to consumers, whose incorporation therefore violates the requirement in CAA12 for regulation to ultimately deliver a price control that replicates the outcomes of a competitive market; this is compounded by indexation using a discredited measure of inflation, and confusion over what exactly the CAA is regulating – average revenue, total revenue, or rate of return – given the introduction of TRS and asymmetric risk allowances
- d) Ultimately, the proposed risk environment suggests a far lower cost of capital than proposed by the CAA, and incentives over service quality are insufficiently linked to operating expenditure and activities over which Heathrow has influence and control; regulatory innovations such as competitive bidding for cost of capital and operating expenditure could remove the need for such combative periodic reviews in future, and in addition, the CAA must justify whether a five year control remains appropriate for the incentives rather than considering it a fait accompli

Our range for Initial Proposals

- e) The CAA's range of £24.53 to £34.41 in 2020 prices is an irrational starting point for H7 Initial Proposals; it is based on inappropriate evidence and data sets prepared by Heathrow, fails to take into account independent analysis prepared by CTA, fails to consider airline plans for future flying activity, and relies upon an inappropriately elevated WACC and an inappropriate asymmetric risk allowance
- f) CTA have prepared analysis for the CAA, which conservatively estimates operating expenditure and commercial revenues; given the lack of transparency and therefore credibility in Heathrow's business plan, it is irrational for the regulated company's lobbying position to form any basis of Initial Proposals, even if it will ultimately be reconciled at Final Proposals
- g) Furthermore, the CAA has made an error by not developing its own, independent passenger forecasts, and by introducing a simple uplift to Heathrow's forecasts for Initial Proposals, and has erred since the output is inconsistent with independent forecasts available from Eurocontrol and planned airline flying activity
- h) Finally, the CAA has irrationally developed a range for WACC that is skewed to the upside and inappropriately discounts evidence where the WACC should be lower across multiple parameters, whilst incorporating an asymmetric risk allowance in

error; we have therefore recalculated the range based upon corrections for all the above

- i) Step 1 to reflect the true midpoint of the CTA analysis reduces the range to between £20.85 and £26.97 in 2020 prices, with a midpoint of £23.91; step 2 to introduce appropriate passenger forecasts reduces the range further to between £16.87 and £21.91 in 2020 prices, with a midpoint of £19.39; step 3 to remove the asymmetric risk allowance and reflect our WACC range reduces it to between £11.30 and £14.72 in 2020 prices, with a midpoint of £13.01

Overall approach to regulation

- j) The starting point for regulation is to ask what problems regulation is trying to solve for, and ensure as a result that the incentive properties of the price control are clearly and consistently developed across its constituent parts; it is clear to us that the ultimate aim of economic regulation is to mimic a competitive market, yet the CAA's Initial Proposals appear to protect Heathrow's monopoly power with inadequate incentives, which in the case of the RAB are out of control
- k) In particular, the CAA must ask itself what the purpose of its TRS is and what problem it is trying to solve; it is clear that such a mechanism would significantly reduce Heathrow's risk exposure, therefore the incentives related to its design become more important in order to ensure efficient outcomes are incentivised in operating expenditure and commercial revenues, which are instead undermined by the CAA's proposal to remove all Heathrow's risk exposure outside a central band
- l) As a result, we propose an alternative approach to the TRS, eliminating fraught discussions over forecasts that will always turn out to be incorrect, and focusing on the invested capacity of the airfield reflected in the existing infrastructure; this is underpinned by CTA's analysis of operating expenditure and commercial revenues, whilst ensuring Heathrow is subject to consistent incentives at any out-turn volume
- m) Finally, we agree with the CAA that there should be no automatic re-opener mechanisms included within the licence, and that Heathrow's proposals would undermine regulatory judgement; we also challenge the assumptions that support the extension of the S-Factor to health and safety costs, which lack clear definition and undermine Heathrow's efficient incentives as a result

Passenger forecasts

- n) Passenger forecasts are vital to the overall economics of the airport and to driving the appropriate levels of operating expenditure and commercial revenues necessary for and effective incentive for provision of services by Heathrow; it is therefore of critical importance that passenger forecasts are developed in a robust manner that is consistent with the incentives across the price control
- o) Unfortunately, the CAA's assessment of Heathrow's forecast passenger volumes and the CAA's adjustments to it are fundamentally flawed and based on numerous,

significant errors; both the CAA and Heathrow forecasts rely on inaccurate and unreliable methodologies and fail to take into account all relevant information, evidence and materials presented by the airline community throughout this consultation process, compounded by a lack of modelling transparency

- p) This is particularly relevant when considering independent forecasts of traffic recovery and airline plans for restoration of their networks in 2022, which are supported by information on forward held bookings that we have shared with the CAA, and the slot rules that will be in place from this summer 2022 and throughout the remainder of the H7 price control
- q) The CAA must revisit its assessment of forecast passenger volumes over the H7 period, taking into account all of the evidence before it; failure to do so will mean that any decisions taken on the operating costs and commercial revenues for the H7 regulatory period will be based on an error of fact

Capital expenditure

- r) We agree with the CAA that Heathrow's capital plans lacks a clear vision, and are at odds with the fact that there is no requirement for any significant programme of works during this price control; in addition, Heathrow needs to provide far greater transparency over its capital procurement process, which should be based upon open tendering and competitive market outcomes supported by the CAA's new capital efficiency incentives
- s) We agree with the CAA's baseline size of capital programme, which is in keeping with Heathrow's historic ability to delivery; in addition, the development of a bottom-up assessment of efficient costs is appropriate to ensure that capital efficiency incentives have effect, and we will support the CAA in its development of this assessment towards Final Proposals
- t) Nevertheless, we urge the CAA to scrutinise project management ("L&L") costs, which have not been addressed in these Initial Proposals; to ignore this significant amount of expenditure at this periodic review would be an error

Operating expenditure

- u) The CAA must only include efficient operating expenditure in the H7 price control, and as a result must finalise the analysis started by CTA to fully develop its estimates on a bottom-up basis; these must be baselined at an appropriate value, excluding all Expansion costs, but included the benefit of any restructuring that has taken place in response to the pandemic
- v) Furthermore, this analysis must ensure Heathrow is appropriately incentivised to become more efficient over the course of the H7 price control, which ensures that consumers benefit from increasing efficiency and productivity in line with that expected in a competitive market environment, and fulfilling the CAA's duties as established in CAA12

- w) Heathrow's business plans have continued to avoid revealing sufficient detail for the CAA to accurately determine the precise efficiency of its operating expenditure, and as a result, the CAA should consider whether its licence conditions related to transparency are sufficient at present to ensure that Heathrow delivers all required information

Commercial revenues

- x) An accurate determination of commercial revenues are also extremely important to ensuring that the H7 price control represents an efficient airport charge; the single till nature of regulation ensures that revenues raised through associated activities at the airport contribute to the revenue requirement, and reduce the resulting aeronautical charge
- y) The CAA must finalise its analysis started by CTA to fully develop estimates for commercial revenues on a bottom-up basis, and this analysis must ensure Heathrow is appropriately incentivised to become more efficient over the course of the H7 price control, which ensures that consumers benefit from increasing efficiency and productivity in line with that expected in a competitive market environment, fulfilling the CAA's duties as established in CAA12
- z) We also cautiously welcome the CAA's design for the partial pass-through of the Terminal Drop-Off Charge ("TDOC"), though seek more information on how the sharing arrangement has been calculated, which must be tied to an analysis of commercial revenue generation in car parks, whilst also reflecting the near zero marginal cost to Heathrow of charging through the TDOC

Regulatory asset base

- aa) The RAB is significantly elevated at present, resulting in higher charges than at other, comparable airports, but the makeup of the RAB is not clear once investments are incorporated; we remain opposed to the inclusion of Expansion costs in the form proposed along with the CAA's £300m RAB adjustment, however we welcome the CAA's decision to reject Heathrow's request for a further £2.5bn RAB adjustment, rejection of its arguments surrounding regulatory depreciation, and a decision therefore not to make any further adjustments
- bb) We welcome the CAA's conclusions as to why a further £2.5bn RAB adjustment is inappropriate, but note that a similar analytical framework applied to the £300m RAB adjustment would not in fact support its introduction, and the logic applied is irrational when compared to later financeability analysis; in particular, it appears the notional company's gearing did not reach the 70% level expected and in any event, credit rating agencies do not make decisions on financial metrics alone
- cc) Finally, we observe that Heathrow's promised additional investment in 2021 has not materialised, and has not incentivised service quality, particularly where Heathrow have consistently sought to seek alleviation from SQRB failures

throughout the pandemic; since the adjustment has not reduced the cost of capital, we call on the CAA to invoke the additional protections that were promised

Allowance for asymmetric risk

- dd) Incentives across the price control are important when considering asymmetric risk, and the capacity limitation of 480,000 ATMs per annum must be considered in light of the Expansion project and nature of the ANPS, which remains current law; Heathrow must remain incentivised to raise efficiency and productivity in all circumstances, and just as the current pandemic has prompted restructuring, so must any future shock scenario
- ee) The CAA's assessment of asymmetric risk needs a more robust framework, and ultimately we believe all risks are incorporated in the asset beta within the cost of capital calculation; a degree of asymmetry is not necessarily undesirable, and must be viewed in the context of what the price cap is trying to incentivise, particularly given the proposed TRS also provides a de-risking of downside scenarios
- ff) We disagree with the CAA's focus on adjusting revenue outcomes through its application of these mechanisms, and disagree that different shocks can be distinguished from the asset beta; we disagree with the use of a shock factor for non-pandemic shocks, which we believe duplicates the effect of the TRS and is not supported by sufficient independent evidence
- gg) We also disagree with the CAA's application of a revenue allowance for pandemic shocks, which duplicates other mechanisms and whose introduction has insufficient justification; applied as a revenue adjustment, it could potentially undermine incentives across the price control

Financial framework

- hh) The notional company and its supporting assumptions form an essential part of the regulatory framework and financing incentives; we agree that the notional company should remain the basis of the price control, but it is our view that the CAA should review these assumptions in more detail at this periodic review to ensure they remain appropriate
- ii) We believe the notional company's gearing assumptions should be set at a level that represents the most efficient cost of capital achievable as a target financial structure, supported by comparator analysis, and particularly given the evidence that gearing has been elevated for a number of years; we disagree that a resumption of dividend payments is a necessary condition of the price control, and further that the CAA should consider licence obligations to replace equity paid out as excessive dividends to support required financial resilience
- jj) Finally, we note that regulatory depreciation plays an important role in the price control, and that the CAA should not rely upon Heathrow's proposed depreciation schedule without setting out a more detailed rationale; we do not accept the

treatment of the £300m RAB adjustment differently than the rest of the RAB, though support the CAA's rejection of the necessity of a further RAB adjustment to support an alternative depreciation profile

Weighted average cost of capital

- kk) Heathrow's cost of capital must be set in a manner that reflects the risk to which it is exposed, and the resulting WACC must be consistent with the significant risk mitigations introduced, particularly through the Traffic Risk Sharing mechanism; it is not appropriate to adjust for perceived financeability concerns before actually estimating what the cost of capital should be before those adjustments, which might otherwise inappropriately impact regulatory precedent
- ll) Ultimately, the cost of capital should not be set as the result of a trade-off between Heathrow's arguments and those of airlines, but on the basis of robust methodology and clearly rationalised expert judgement; as a result of a clear lack of consistency between these proposals and previous precedent or clear rationale for departure, we observe a number of errors within the cost of capital calculation that combine to result in an irrational WACC range
- mm) These are particularly surrounding the asset beta, cost of debt and notional gearing, and furthermore note that the reduced risk environment resulting from proposed TRS and asymmetric risk allowance are not reflected in the WACC that has been proposed; our re-calculation of the WACC based upon removal of the asymmetric risk allowance and a 1.3% - 2.8% vanilla range result in a £11.30 to £14.72 charge (CPI real 2020p)

Treatment of tax

- nn) Although the focus of H7 is no longer on Expansion, we believe a post-tax approach remains in the interests of consumers, which would allow a standalone revenue allowance distinct from the calculation of WACC; we encourage the CAA to further its understanding of Heathrow's taxation, including a fuller understanding of capital allowances that stem from consumers' funding of assets
- oo) We agree that a tax uncertainty mechanism would protect consumers from excessive costs and capture drivers of tax allowances that are beyond Heathrow's control; this is preferable to a pass-through mechanism since it retains incentives for efficiency, though query whether a revenue adjustment may be more appropriate in the H8 period, and that the rate for the calendar year in 2023 should be blended between 19% and 25% to account for the change at the start of the tax year
- pp) Finally, we support a tax clawback mechanism, but highlight that Heathrow takes allowances at FGP TopCo Ltd, the ultimate parent company of all Heathrow's entities, and benefits from additional financing at ADI Finance 1 & 2 amongst other financing entities; it would therefore be an error to assume that Heathrow (SP) Ltd captures all the financing activities of Heathrow, and in any event, the CAA should

introduce a licence obligation similar to Ofgem to submit an annual tax reconciliation between the notional and actual liability per the latest Group Corporation Tax return

Calculating a price cap and financeability

- qq) Financeability is established primarily by setting the correct WACC, and we do not support the CAA's approach that targets allowing the notional entity to achieve an A- credit rating by the end of H7; we agree with the CAA that Heathrow's "acceptability testing" approach is not robust, though whilst we agree that reprofiling revenues on the basis of flat charges helps assist the analysis of Initial Proposals, the nature of any PO adjustment needs to ensure it is supported by appropriate economic logic
- rr) We remain sceptical that any depreciation profiling has an effect on credit ratings, therefore regulatory levers should only be used with a view to preventing excessive charges from constraining the recovery of traffic volumes; we note that credit rating agencies look through to the longer term characteristics of the sector and the airport, therefore it would be an error to focus excessively on individual financial metrics in making a financeability assessment
- ss) We do not agree that targeting BBB+ for individual credit ratings is necessary, given the buffer available before falling below BBB-, and further believe that the CAA has misapplied the logic of the WBS in determining BBB+ as the appropriate target credit rating; this is particularly the case as it appears more cost effective to maintain a lower credit rating for longer, and demonstrate our 1.3% - 2.8% range is therefore financeable if such lower target ratings were used in a financeability assessment
- tt) We fundamentally disagree that a resumption of dividend payments is a necessary criteria for equity financeability, drawing attention to the widespread effects of the pandemic on the sector and other investors who invest based upon capital appreciation; we note that the TRS supports the equity financeability in any case, and that it is reasonable to assume notional de-gearing over the course of the price control
- uu) We also call on the CAA to be more involved in the setting of the rate card, which has become contentious this year due to the interactions with the implementation of the 2022 holding cap
- vv) In support of the airlines' view on the financeability of our proposals, the airline community have received a report from Houlihan Lokey that analyses financeability; we reference this report in addition to our own analysis, which supports our view that airline proposals are credible within our range of real, vanilla WACC of 1.3% - 2.8%

Capital efficiency incentives

- ww) We are highly supportive of the CAA's capital efficiency incentives, which must be introduced in full to ensure Heathrow's capital programme is subject to appropriate obligations on its delivery; the CAA must not be undermined by Heathrow's inability to provide sufficient information to set these incentives, and we are supportive of licence obligations that ensure additional information is provided to support the governance process and application of this incentive
- xx) Nevertheless, the existing governance process must be strengthened to ensure oversight is effective, and that it is both fully adhered to and complements capital efficiency incentives; we agree with the CAA that ex ante incentives remain appropriate given the relatively low risk nature of the H7 capital programme compared to Thames Tideway Tunnel, and must apply over the entire of the capital programme including pre-G3 expenditure, though with the exception of rollover projects that have passed G3 and the Crossrail contribution
- yy) We agree with the CAA's example of delivery objectives and how these will evolve to become delivery obligations, though caution that draft obligations should be delivered before Final Proposals; in addition, the CAA should consider more frequent assessment of delivery obligations to avoid concentrating this activity at the H8 periodic review
- zz) We support the CAA in applying an incentive rate, though following the example of Thames Tideway Tunnel, which uses 30% on underspend and 40% on overspend, believe this should be stronger than 25% proposed by the CAA; it would be appropriate to consider an asymmetric rate to ensure the right outcomes are delivered for consumers, and may also be relevant to consider a funding cap on specific capex categories
- aaa) We support the application of timing incentives, though disagree with the application of bonuses for early delivery where there are no clear consumer benefits of doing so; trigger mechanisms remain important for some projects to ensure they are delivered on time where critical, and an additional incentive over delayed capex categories would also be appropriate as a result
- bbb) We support the CAA's new reporting requirements, though caution against its involvement being "light touch", since greater involvement is likely to be requirement to ensure that reconciliation is both effective and well-informed by the events over the price control

Other regulated charges

- ccc) ORCs are not provided on a commercial basis, yet are consumed in a way that is not directly correlated with passenger numbers; this distinction is important, since Heathrow still holds monopoly power over the provision of these services, therefore the CAA must ensure these remain appropriately scrutinised with additional licence obligations where appropriate

- ddd) We support the restructuring of charges proposed by the CAA, moving to a marginal cost basis, but caution that new ORCs should not be introduced that are part of Heathrow's determined cost base for H7; for this reason agree with the CAA that business rates should not be moved to ORCs, but support the introduction of separate, new governance over business rates in future
- eee) We agree with the removal of certain ORCs for H7, where the original rationale for inclusion is no longer relevant, though this must be supported by appropriate OBR measures to ensure those services are delivered to an appropriate standard; we are willing to consider the removal of bus and coach services from ORCs if supported by appropriate evidence by Heathrow and the CAA
- fff) Governance of ORCs is our priority, and we believe the CAA needs to be more closely involved to support the development of an effective, new protocol; we also believe forecasts for ORC revenues should be closely related to the operating expenditure analysis, such that they match the same costs assumed in the single till, and support the introduction of OBR measures to support the service quality delivery of those services where appropriate

Outcome based regulation

- ggg) We comment further on OBR in our response to the working paper that we will submit in January 2022; our comments in this section should therefore be viewed as preliminary until we have further considered the interaction of measures and targets under the CAA's Initial Proposals
- hhh) We support the CAA's introduction of OBR to ensure consumers' interests are furthered through the regulatory regime; we remain concerned that Heathrow's proposals for OBR will undermine service delivery, and it is critical that OBR continues to support airlines' operational delivery of services for consumers through understanding marginal cost of critical services, delivers continuous improvement, and is consistent with the capital programme and analysis of operating expenditure and commercial revenues within the price control
- iii) We believe outcomes should be more specific, as are those specified by Ofwat in PR19, and whilst the OBR will be subject to evolution in H7 cannot rely upon self-modification provisions in the licence for such an important incentive; whilst it may be difficult to distinguish where responsibility lies in some cases, this difficult task must be undertaken to ensure measures exist over all critical areas of Heathrow's operation, similar to how such analysis is performed by Ofcom and Ofgem
- jjj) Financial incentives are what makes Heathrow responsive, and we do not believe reputational measures have the same effect on Heathrow's incentives, and therefore support the CAA's rejection of some of Heathrow's measures where they have no bearing on delivery of its licence obligations; nevertheless we believe it is critical for ORCs and other key areas of expenditure to be covered by OBR measures in full, particularly where there is a clear and longstanding problem in service delivery, such as in PRM service

- kkk) We believe measurement should be at as granular level as possible to recognise the effect upon individual passenger outcomes, and avoid averaging effects that introduce a concept of acceptable failure or grouping in the case of vehicle control posts; in addition, we believe that measurement should be based upon the time that assets are required rather than a whole 24hr period, which at present undermines the delivery of outcomes when they are required e.g. the availability of a serviceable jetty for a particular arrival or departure
- lll) We believe that the information requirements for OBR should be supported by an appropriate licence obligation, and that it is appropriate for certain asymmetry in the OBR where certain outcomes are more desirable, or it is not appropriate to incentivise an increase in performance above the baseline level; we agree that knife edge rebates therefore remain appropriate

Q6 capital expenditure efficiency review

- mmm) We continue to present evidence that Heathrow's Q6 capital programme was more inefficient than judged by the CAA, and whilst welcoming an interim assessment of £12.7m inefficiency on the cargo tunnel project, believe this should rationally be far higher as a result of our evidence
- nnn) In addition, we agree that roll-over projects should be assessed no later than the end of H7 and urge the CAA to ensure that it is fully involved in the update of the Capital Efficiency Handbook; it would not be appropriate to rely upon the regulated company to update such an important aspect of the regulatory mechanism

Early expansion costs

- ooo) We observe that Heathrow have unilaterally withdrawn from the expansion project, and are not therefore supportive of the CAA's final decision on its treatment of expansion costs, specifically the disapplication of risk sharing and incorporation of Category C costs into the RAB
- ppp) We are also opposed to the CAA policy on wind down and appeal costs, but support the CAA's preliminary assessment of inefficiency for costs incurred to February 2020, subject to comments on specific line items

Financial resilience and ring fencing

- qqq) In general, we support the CAA's ring-fencing and financial resilience proposals, though remain concerned that the WBS could result in a conflict of interest between investors and consumers in certain circumstances
- rrr) We support the information requirements set out by the CAA as being reasonable, balanced and pragmatic, but believe they should be enhanced in some areas to allow the CAA to better fulfil its obligations, and more closely prescribed in others such that the CAA has better oversight should circumstances change

Consultation process

- sss) We are concerned that Initial Proposals are not sufficiently developed to serve as a basis for the H7 price control, and from a process and consultation perspective do not believe the CAA can or should proceed directly to Final Proposals as a result; it is clear that incentives are neither calibrated across the building blocks, nor analysis completed in a manner consistent with the CAA's previous consultations and statements, and therefore it would be an error for these proposals to directly form the basis of the H7 price control
- ttt) In particular, the CAA has been delayed by Heathrow's business plan delivery, and relied too heavily on failed Constructive Engagement, following which the CAA has failed to drive the process forward to allow sufficient engagement on many aspects of its Initial Proposals; some areas of inconsistent with regulatory policy that has been previously set out or has not been signalled at all in advance of the publication of these Initial Proposals
- uuu) In addition, airline evidence has not been taken into account in some areas where it is particularly critical that the incentives work to control Heathrow's monopoly instincts; as a result, the CAA must consider a second set of Initial Proposals and a delay to Final Proposals to allow these matters to be properly and fully considered, and as a result, it would be an error for the CAA to proceed directly to Final Proposals on the basis of the presently published timetable

1. Introduction

- 1.1. Monopoly situations have been defined as the "absence of competition"¹, and this is the exact position held by Heathrow, where the absence of effective economic competition has been demonstrated both by Heathrow's longstanding dominance and also the continued concentration of traffic at Heathrow during course of the current pandemic²
- 1.2. Nobody seriously doubts that Heathrow is the UK's dominant airport, yet the CAA's Initial Proposals fail to sufficiently constrain its monopoly power; in the absence of effective economic competition, this monopoly power could foster anticompetitive behaviour, since unconstrained, Heathrow would be able to increase prices without losing customers
- 1.3. However, rather than protecting consumers by ensuring charges are comparable to those of a competitive market, the CAA's Initial Proposals leverage Heathrow's monopoly power to achieve a significant price hike, raising charges far beyond those of any comparable airport; this might be the formulaic outcome of the

¹ Fisher, I., 1923

² [CAA UK Airport Data 2021](#)

existing building block model, but is not a common sense outcome that would be the result if Heathrow faced real economic competition

- 1.4. Competition is critical since competitive forces are the only viable way to constrain monopoly power, and the intent of regulation in the UK has been to use incentives that mimic competitive forces until competition arrives; this is especially important since, “firms in uncompetitive markets need not compete to improve old products or tinker to create new ones”³, and otherwise Heathrow would be motivated to further raise prices and degrade service quality
- 1.5. This is recognised by the CAA’s general duty under CAA12, which specifies that its duties must be carried out “in a manner which it considers will promote competition in the provision of airport operation services”⁴; this is reinforced by the explanation that the “ultimate aim of economic regulation is, as far as is possible, to replicate the outcomes of a competitive market”⁵
- 1.6. It is for this reason that the CAA’s attempt to study “affordability” is a fundamental error; not only is such analysis at odds with the duties set out in CAA12, but this effectively uses Heathrow’s monopoly position itself to justify an elevated level of charges that balance the Price Control Model using the current building blocks, despite such charges not being justifiable under a competitive market outcome
- 1.7. Proceeding down this regulatory path could suggest potential regulatory capture of some form, since the whole point of economic regulation is to introduce incentives that challenge Heathrow’s monopoly power; this is particularly the case where that power confers an ability to raise charges without losing customers, but that charge is at odds with what Heathrow would be able to charge were effective economic competition to exist
- 1.8. This is little different than Heathrow’s attempt to restore its business valuation at the expense of consumers by marking up the RAB to remove the effect of the pandemic; the fundamental problem is that the tools used to determine the price control simply do not work where they result in outcomes that are significantly at variance to those of a competitive market
- 1.9. As a result, the CAA needs to re-think its approach to regulation to ascertain what it is trying to achieve, and develop new tools where required to ensure that its approach is consistent with those of a competitive market; it is irrational to use the existing building blocks approach formulaically where Initial Proposals clearly fail a gross error check of what regulation should be trying to achieve based upon the duties in CAA12

Comparator airports

³ [Khan, L, Amazon’s Antitrust Paradox](#)

⁴ [Civil Aviation Act 2012, Section 1, CAA’s General Duty, para 2](#)

⁵ [Explanatory Notes to Civil Aviation Act 2012, para 36\(b\)](#)

- 1.10. Airports do not operate in a competitive marketplace, and to a large extent most airports hold local monopolies within their local geographic areas; this is problematic since “competition between airports and between airlines is crucial for consumers, growth and jobs”⁶
- 1.11. Regulators treat this problem using different models of economic regulation under different legal jurisdictions, but ultimately aim to control airport charges in a manner that prevents airports with significant market power from abusing their position; the CAA should rationally cross check Initial Proposals against similar global airports to establish a benchmark and ensure the results of their analysis are reasonable, yet this is absent in the CAA’s Initial Proposals

Table 1.1: ✂⁷



- 1.12. This widely available analysis of global airport charges demonstrates the existing wide gap between airport charges at Heathrow and those at other similar airports with comparable facilities; the most notable difference being that with Frankfurt, Paris, Amsterdam, Madrid, Gatwick and Dublin, which also host similar network airlines as their main customers
- 1.13. Further afield, Osaka, Tokyo, Miami, Hong Kong, Singapore, Los Angeles, Dubai and Beijing also host major network airlines and offer comparable facilities to Heathrow; every single one of these airports charges significantly less than Heathrow, and the level of charges proposed in H7 Initial Proposals compromises airline competitiveness on a number of levels
- 1.14. Our analysis suggests Heathrow’s charges were already 44% greater than comparable European airports in 2020, and the CAA’s Initial Proposals would raise this gap to near 85% in 2022; this clearly demonstrates how the CAA’s Initial Proposals are in error by failing a broad comparison with other regulated airports that provide a proxy for how a competitive market for airport services might look
- 1.15. However, this level of charges is a more fundamental problem for network airlines such as ourselves, who have built and developed a hub at Heathrow that aims to attract transfer traffic, supporting the range and breadth of our network, offering an exponential increase in connection possibilities for consumers at better times than would otherwise be the case, and significantly raising the efficiency of flying passengers between multiple markets
- 1.16. The nature of competition faced by airlines has long been underestimated by many, and has incorrectly focussed upon specific flown routes rather than considering the actual ultimate markets that are being served by network airlines; competition is

⁶ [Comments by Margerethe Vestager in relation to the decision of the European Commission to recover €8.5 million of illegal state aid, 2nd August 2019](#)

⁷ ✂

fierce between airlines aiming to route passengers through their own home hubs and deliver them to their desired onward destination, such that a consumer flying from – for example – Newcastle to Bangalore could route through many different hubs to reach their final destination

- 1.17. 30% of passengers using Heathrow are connecting between flights, with some passengers treating connecting services as a reasonable substitute for non-stop services, and others using connections as the only available means to reach their destination; the complexity of this should not be underestimated, nor the detrimental effect upon it of inefficient cost increases from suppliers
- 1.18. Airlines do not in general have significant pricing power in the markets in which they operate, and rely upon the efficiency of their network to be able to compete effectively; the high price elasticity of demand means that it is the airlines operating at Heathrow who are compromised in the first instance by excessive airport charges, since economic profit is reduced or entirely removed
- 1.19. Consumers are subsequently affected by a reduction in connection possibilities as networks are reconfigured to reflect the increased cost environment; consumer harm as a result of airport charges can therefore be insidious and arise over time, being clear only when a hub loses its leading position
- 1.20. We are also concerned that the CAA seems less concerned by its proposed rise in Heathrow's charges since the airport is in a supplier relationship with airlines rather than a direct relationship with consumers; this would be an error, and we have often been frustrated by the opacity of airport charges, where Heathrow uses the structure of the rate card to limit rises in headline in Passenger Service Charges ("PSC") by raising movement, noise and parking charges instead
- 1.21. All costs are ultimately borne by consumers, and in the competitive markets in which airlines operate, any increase in airport charges will ultimately have consumer consequences; this has been highlighted by the European Commission in its action against car parts suppliers, where a cartel to support increased prices would ultimately have resulted in higher price paid for cars by consumers⁸
- 1.22. In the case of airport charges of this scale, this could result in significant lost opportunities for airlines that would have otherwise benefited consumers; for example, if £700m in value was transferred to Heathrow in a single year as a result of the 2022 holding cap decision, this could have financed £1.4bn of new aircraft purchased under a 50% geared Enhanced Equipment Trust Certificate ("EETC")⁹, representing nearly thirty A321s based upon a £50m valuation
- 1.23. This not only compromises airlines' ability to re-fleet to meet net zero goals, but reduces the ability of airlines to open up new destinations and remain competitive

⁸ [European Commission: Commission fines car parts suppliers of € 18 million in cartel settlement, 29th September 2020](#)

⁹ [See United Airlines Series 2020-1 EETC Investor Presentation for indicative structure](#)

against European peers in the future; the loss of leadership this represents could have a significant effect on the UK economy

- 1.24. For example, reduced employment would weigh on the prospects for the economy, particularly where businesses choose to locate in other countries with greater connectivity; the network effects of global connectivity ripple throughout the economy and drive long-term productivity, wealth and job opportunities, and these are absent if network airlines are unable to function effectively
- 1.25. Fundamentally, excessive charges at Heathrow compromise our ability to compete in global markets, and will hinder the development of connections to the detriment of consumers; it would be an error for the CAA not to take this into account, and ensure that airport charges represent a likely competitive outcome

The regulatory toolkit

- 1.26. Only having understood the problem can the CAA ultimately ask what regulatory tools are required to address the issues; it would be irrational to remain complacent and apply previous methodologies when the result of the analysis produces airport charges that are extreme compared to global peers
- 1.27. The CAA state that in its previous consultation, “we confirmed that we intend to set a five-year price control for H7, calculated on the basis of the continued use of a “single till” covering commercial and regulated revenues, a RAB and allowed return/cost of capital, and assumptions about passenger numbers, operating and capital costs and commercial revenues (key price control “building blocks”)”¹⁰
- 1.28. However, this approach is in error where the CAA has not taken sufficient steps to ensure that the outcome is reflective of what might be the case in a competitive market for airport services; whilst we have previously agreed that maintaining the incentive nature of regulation is appropriate, we question whether the regulatory tools at the heart of the price control remain appropriate given the level of airport charges in H7 Initial Proposals
- 1.29. As the independent regulator, the CAA has latitude to modify its approach to regulation where it is clear that the results are not compatible with its duties as set out in legislation; none of the RPI-X model, the RAB or the notional company form any part of CAA12, and where they are failing to deliver outcomes that are comparable to those that would result from competitive markets, the CAA must take stock and reconsider its approach
- 1.30. Ultimately, the CAA must ensure that its approach provides a path to promote competition in the provision of airport operation services, yet the approach set out in Initial Proposals incorrectly leans on Heathrow’s monopoly power to protect the integrity of its existing approach; this is a back to front approach that fails to grasp

¹⁰ CAP2265B, H7 Initial Proposals: Section 1: Overall approach and building blocks, para 1.1

the ultimately intent of economic regulation – to replicate the outcomes of a competitive market

- 1.31. Unless the CAA asks itself the key question – what it is trying to achieve with regulation – and unless it asks this question of itself repeatedly in light of new information, the CAA will foster suboptimal outcomes; merely protecting the perceived financeability of the notional company is not the purpose of regulation, and this is particularly so when it results in airport charges so far in excess of those at comparable airports that host network airlines
- 1.32. Supporting higher airport charges with the protection of regulation is not the purpose of a regulatory regime, and it is incumbent on the CAA to reassess what it is trying to achieve and how those aims are best achieved with regulatory tools in the current economic environment

The RPI-X model and indexation

- 1.33. The RPI-X approach was originally designed with the intention of ensuring a real terms price decrease over time, driving recently privatised monopolies with chronic inefficiency problems to become more productive, and replacing their reliance upon the Exchequer for funds with the discipline of private investment
- 1.34. RPI continues to be used as an indexation approach using an underlying model established in terms of real prices, intended to remove inter-temporal differences between current and future consumers; however the use of a measure that is not only discredited but will be removed by 2030 due to its significant measurement problems is now questionable
- 1.35. RPI has now reached 7.1%¹¹ yet the CAA has failed to progress a move to alternative indices despite our repeated comments on this topic; this is detrimental to consumers since the measure is plainly incorrect, and will continue to drive airport charges up significantly above any reasonable level based upon actual inflation
- 1.36. Furthermore, given the size of Heathrow and its effect on the economy, the use of a higher than necessary inflation target actually risks driving up underlying inflation itself; Heathrow represents a significant portion of the economy by virtue of its size, and the use of any inflation measure might ideally remove its effect from the statistics to avoid a self-reinforcing loop in the underlying statistics where the output of regulation also comprises an input to inflation
- 1.37. It also seems appropriate to consider whether any indexation should take place whatsoever; no other company in the economy faces protection from inflation in a competitive market environment, and instead base their business planning on nominal forecasts that seek to achieve real-terms cost reductions over time through initiatives such as costs-flat and zero-based budgeting approaches

¹¹ [Office for National Statistics, RPI all items index \(CHAW\)](#)

- 1.38. Inflation protection seems instead to protect regulated companies from facing the full force of competitive pressure that could be a more appropriate way of ending the chronic inefficiency at the heart of many formerly state-owned businesses; this is particularly important where in labour-intensive areas of the business, Heathrow is both exposed to Baumol's cost disease¹², but contributory to it by driving up wages in the wider economy, again feeding back through its own indexation
- 1.39. As a result, despite a lack of productivity gains in its own business, it remains protected by indexation from the effect of wage inflation rather than forcing a reckoning where labour productivity has to rise in response to increasing costs in the labour market; this effect has been known about for 300 years¹³, yet the CAA's Initial Proposals do not address such fundamental economic incentives

The Regulated Asset Base

- 1.40. Following privatisation, the newly privatised utilities significantly reduced capital expenditure and constrained operating expenditure to pay dividends in the 1990s, and it became clear that the regulatory model required stronger incentives to drive investment in capital projects, whilst ensuring appropriate levels of operating expenditure were maintained to deliver service quality
- 1.41. This led to the development of the Regulatory Asset Base as a mechanism to log up the cost of capital investment, and represent investment that had yet to be paid for and was to be charged to future consumers; additionally, service quality incentives were introduced to maintain operating expenditure at appropriate levels to deliver the required service quality as envisaged in the settlement
- 1.42. Conceptually, the idea that the regulated company could recover its total average costs rather than the marginal costs as in a competitive market had a certain logic where there is neither a path to future competition nor was the regulated company in control of the capital budget; this is not the case at Heathrow, and the CAA needs to have a mechanism that removes the RAB over time or breaks it into its constituent parts should competition emerge in any form
- 1.43. Nevertheless, the RAB has grown unabated since its introduction, and has instead introduced the perverse incentive on Heathrow to find any means to inflate its size; without any check on its growth, it has risen to £17bn, comprising inefficient expenditure that forms no useful function or derives any consumer benefit
- 1.44. This is particularly the case with the Expansion project now that Heathrow has unilaterally withdrawn from the project, which has also highlighted fundamental questions over the use of the regulatory regime to achieve ends that differ from likely competitive outcomes for which economic regulation is a proxy; without

¹² Baumol, William J.; Bowen, William G., Performing Arts, The Economic Dilemma: a study of problems common to theater, opera, music, and dance, 1966

¹³ Smith, A., An Inquiry into the Nature and Causes of the Wealth of Nations

legislative underpinning for a RAB, its use in this manner for Expansion might appear to contravene the intent of CAA12

- 1.45. Its existence has resulted in Heathrow being reliant its continuation to extract monopoly rents and recoup excessive and inefficient investment under the protection of regulatory regime; whilst Heathrow might argue that investment has been necessary for terminal infrastructure, this fails to answer either a gross error check of why Heathrow is more expensive than at any other airport, or why its sunk costs justify an charging outcome that simply would not arise in a competitive market for airport services
- 1.46. As with any incentive, the CAA needs to ask what regulatory problem the RAB is trying to solve as part of this price control, and whether it remains an appropriate tool given how the incentives have actually influenced behaviour in reality; it would be irrational not to address such a fundamental question following Heathrow's transparent motivations to undermine ex ante regulation and inflate the RAB during this pandemic

Risk and the cost of capital

- 1.47. It is particularly important to answer these questions, since the RAB has never been used as intended as facility to pre-fund capital investment before charges arise, and instead capital expenditure has been funded from current charges; it is notable funding capital expenditure in this manner markedly reduces the risk to which Heathrow is exposed during construction, which must be reflected in appropriate utility-like cost of capital
- 1.48. As a result, whilst we welcome new ex ante capital efficiency incentives, more is required to ensure incentives properly controlled; there is little risk in reality stemming from assets that have already been constructed, and this is clearly reflected by the financial engineering undertaken to raise leverage against the RAB, which suggest the CAA might better consider a split cost of capital to reflect the relatively riskless nature of assets incorporated in the RAB
- 1.49. Additionally, regulated companies have long been able to arbitrage the cost of capital and game the financing incentive, leveraging up businesses to substantially remove all equity, since the Capital Asset Pricing Model ("CAPM") based upon fixed gearing assumptions has proven an inadequate incentive to control actual behaviour, and is based upon several flawed assumptions such as perfectly competitive capital markets and symmetrical distribution of risk
- 1.50. This is particularly important since even the CMA appear surprised in recent appeals that the WACC changes with different levels of gearing, yet this has been common knowledge to regulated companies for over twenty years, leading to a substantial removal of equity in many regulated companies with no mechanism to require its return should it actually be needed as a result of shocks

- 1.51. Significant fortunes have been built upon the basis that the CAPM fails to reflect real world¹⁴, and the fact that core assumptions are built upon hypothetical market structures result in it being continually overestimated by regulators across industries; regulator needs to find a new approach that results in price discovery of the WACC, and not react by introducing new allowances to correct perceived asymmetry problems that do not exist in real capital markets
- 1.52. The CAA therefore need to inform themselves more fully as to the significant financial engineering that has taken place such that they are aware of where value has been extracted and financial resilience significantly eroded; significant balance sheet repair is ongoing in the UK regulated water industry to restore equity resilience, a return of which to the business should be mandated by CAA to ensure regulated business can cater for unforeseen events
- 1.53. The CAA needs to better understand the actual overall risk environment, and if costs are to be passed through more fully to consumers, it is clear that Heathrow's actual risk environment has diminished and should be closer to that of utilities; the addition of a Traffic Risk Sharing ("TRS") scheme further moves the regime away from a pure volume-based control towards a form that should attract significantly lower cost of capital
- 1.54. There remains no justification for maintaining an elevated cost of capital with Traffic Risk Sharing in place and where the costs of financing through debt capital markets have continued to decline over time; financeability analysis separate from the WACC remains fundamentally flawed by focus on credit ratings analysis that detracts from the reality that the WACC is by definition a financeable outcome

Incentives over outcomes

- 1.55. As noted earlier, service standards are important for the smooth functioning of airport, and the regulatory regime must ensure that Heathrow spends appropriate levels of operating expenditure to deliver services to the required standard; this is achieved by calibrating incentives over operating expenditure amounts, set at levels consistent with the service quality targets required, and controlled with service quality standards that focus upon areas within Heathrow's control
- 1.56. The CAA must ask itself whether its new Outcomes Based Regulation ("OBR") regime meets that objective, by ensuring it delivers incentives for Heathrow to spend the correct amount to deliver the specified outcomes; it is neither acceptable for the CAA to base its OBR regime upon the regulated company's proposals without ensuring that it understands the assets in detail, nor to undermine the incentive by failing to calibrate it to the operating expenditure environment
- 1.57. It is particularly important that the CAA understands its role should not be to take Heathrow's proposed operating expenditure plans, but challenge them both

¹⁴ See Graham, B., The Intelligent Investor, and many similar investors such as Warren Buffett

through benchmarking and other analysis to establish efficiency, using these as a basis for service quality and outcome based incentives; without doing so, the CAA would have erred as the incentive will be wholly ineffective

- 1.58. Ultimately, it is airlines who own the customer relationship, and receive feedback from customers when things do not go to plan; it would be an error for the CAA to ignore airline input as to what is important for delivery of the services that are required, and the CAA cannot expect aspects of airport service to be delivered by "commercial negotiation" that is impossible to achieve from a monopoly provider of airport services
- 1.59. It is important that the CAA always bears in mind that Heathrow has a captive set of customers – both airlines and our passengers – that do not have leverage over Heathrow that would be expected in a normal commercial negotiation; therefore it would be an error not to consider all services including those levied under Other Regulated Charges ("ORCs") as being subject to Heathrow's monopoly power
- 1.60. It is worth noting that service quality standards are not achieved by inflating the RAB by an arbitrary £300m, since the RAB has nothing to do with operating expenditure, and the CAA has made an error in considering that such an adjustment would incentivise Heathrow (it did not)
- 1.61. Finally, the CAA must take a fuller overview of what activities Heathrow undertakes and ensure that these are calibrated across the price control; it is the regulator's role to understand the business that it is regulating in depth to support its judgement, and it would be an error to rely solely upon regulatory submissions and lobbying by the regulated company to support its regulatory proposals

Incentives and length of price control

- 1.62. In addition, the length of the price control and the nature of periodic reviews has received little scrutiny, and the issues that are now apparent surrounding forecasting needs to be addressed against the incentives they will establish for a number of years; there is little point in setting incentives for five years where they will be ineffective in latter years of the control, and the length of the price control should be adjusted to reflect the incentives that can be established at this review
- 1.63. We have previously suggested that shorter price control periods are not long enough to allow incentives to play out, and that longer price control periods could result in those incentives becoming stale; whilst this remains true in general, given the output of the CAA's Initial Proposals, there needs to be a rethink as to what the CAA is trying to achieve with the price control, and how it is best addressed with a five year control period in this specific case
- 1.64. A different length of price control could be more appropriate where periodic reviews are replaced with competitive bidding for cost of capital, and Heathrow's operations are broken up along with the RAB to reflect different specialist activities whilst fostering the development of competition, perhaps between terminals

- 1.65. This situation is fully catered for within CAA12, yet there has been no progress towards developing a regulatory regime where elements of competition can be used more directly to replace the periodic review process; given the difficulty of this periodic review where Heathrow has failed to fully engage in a constructive process of engagement and held back information from the CAA, a more competitive bidding process would be a vast improvement on the current review
- 1.66. The CAA must fully justify how its approach is best suited to the circumstances we face at this periodic review, and the circumstances that have developed within the review, rather than continuing to formulaically apply its existing building blocks; it would be an error not to set out a more detailed reasoning in a way that would allow scrutiny of its approach to take place

Form of price control

- 1.67. Finally, the CAA needs to determine whether its average revenue cap remains the most appropriate way of incentivising Heathrow to be efficient at any out-turn level of traffic; the pandemic has exposed the difficulty of forecasting traffic for a five-year period, and in the manner they are derived, leads to incentives to game the forecast and under-estimate its effect, particularly by Heathrow
- 1.68. This is important, since a single till with a high fixed cost base leads to exponentially increases in charges even with a small decline in passenger numbers; this is not a desirable outcome, but instead a discussion needs to take place to understand what a more optimal cost structure could be and whether that should be incentivised under regulation
- 1.69. The single till itself is of critical importance, since revenue earned from those captive passenger should rightly contribute to the cost base of the airport and lower charges; nevertheless, due to the relatively fixed cost nature of the airport, lower passenger numbers result in exponential increases in charges as revenues are lost but operating expenditure falls more slowly
- 1.70. It is for this reason that we have advocated setting the TRS mechanism based upon the invested capacity of the airport, and ensuring that Heathrow is held to account against an efficient level of operating expenditure and commercial revenues at the out-turn passenger number that results, rather than establishing an incentive for operating expenditure and commercial revenue that could be wildly incorrect¹⁵
- 1.71. It is important to note that Heathrow does not deliver volume itself in any form, but is instead expected to meet demand that is delivered by airlines operating at Heathrow; the incentive therefore needs to be correctly calibrated in order to ensure Heathrow is incentivised to operate efficiently at any level of out-turn passenger numbers in relation to activities that sit within its control

¹⁵ British Airways response to CAP2139: H7 Way Forward

Future forms of regulation

- 1.72. Ultimately, competitive forces are the only true antidote to monopoly, and as reinforced by CAA12, the “ultimate aim of economic regulation is, as far as is possible, to replicate the outcomes of a competitive market”¹⁶; since competition is the only viable solution to the monopoly problem, it is competition that must inform the CAA’s regulatory solutions to the problem of Heathrow’s monopoly
- 1.73. It is important to rebut the suggestion from the CAA that Heathrow and airlines might come to some form of agreement to bring H7 periodic review to a conclusion, removing the requirement for the CAA to undertake the necessary analysis and implementation of a regulatory price control; this is unrealistic, particularly at the most expensive airport of its type in the world, and suggests the CAA would rather avoid the difficulty of the role it is tasked with undertaking
- 1.74. The scale of Heathrow charges which stand in stark contrast to these comparable airports further undermines the CAA’s position, suggesting in a number of areas that light touch regulation is appropriate; this would be a fundamental error, since there is neither a competitive market to hold Heathrow to account, nor has Heathrow been sufficiently constrained in the past, demonstrated by the size of the RAB
- 1.75. The CAA cannot escape its duty to perform the required analysis to ensure consumers are not harmed by monopoly pricing power of Heathrow, and the pandemic offers a prime opportunity to step back and reassess what the CAA is trying to achieve in regulation, and ensure it an appropriate framework exists that is fit for the future

Conclusion

- 1.76. Heathrow holds monopoly power due to an absence of effective economic competition, yet Heathrow’s charges are already more expensive than any comparable global airport, and the CAA proposes increasing charges further; this results in a situation where regulation protects Heathrow’s investors at the expense of consumers, and Heathrow is able to extract further monopoly rents with the protection of an inappropriate and dated RPI indexation
- 1.77. As a result, the H7 Initial Proposals are not in consumer interest, and it is not evident that the CAA has sufficiently considered many issues that sit at the heart of the Heathrow monopoly problem; the regulatory toolkit is out of date and does not appear an appropriate solution for the challenges presented by Heathrow’s substantial market power
- 1.78. Specifically, the RAB incorporates significant inefficient capital expenditure that has delivered no benefits to consumers, whose incorporation therefore violates the requirement in CAA12 for regulation to ultimately deliver a price control that

¹⁶ [Explanatory Notes to Civil Aviation Act 2012, para 36\(b\)](#)

replicates the outcomes of a competitive market; this is compounded by indexation using a discredited measure of inflation, and confusion over what exactly the CAA is regulating – average revenue, total revenue, or rate of return – given the introduction of TRS and asymmetric risk allowances

- 1.79. Ultimately, the proposed risk environment suggests a far lower cost of capital than proposed by the CAA, and incentives over service quality are insufficiently linked to operating expenditure and activities over which Heathrow has influence and control; regulatory innovations such as competitive bidding for cost of capital and operating expenditure could remove the need for such combative periodic reviews in future, and in addition, the CAA must justify whether a five year control remains appropriate for the incentives rather than considering it a fait accompli
- 1.80. We incorporate by reference our previous consultation responses related both to the H7 consultation and Heathrow's requested RAB adjustment; we also intend to response to Heathrow's updated business plan that was supposed to have been delivered in August 2021, but which we understand was submitted in December 2021, though we have not yet had sight of this document

2. Our range for Initial Proposals

- 2.1. We set out below our revised range for Initial Proposals, incorporating our view of how the CAA should have considered the CEPA / Taylor Airey ("CTA") analysis, removing the allowance for asymmetric risk, and further incorporating our proposed passenger forecasts alongside the WACC range developed by CEPA for the airline community
- 2.2. It is our view that Initial Proposals should have rationally incorporated only the CAA's actual, independent positions in several areas; as a result, we believe the range developed is irrational since it does not incorporate fully independent regulatory positions, but avoids making necessary decisions based upon analysis
- 2.3. This is particularly as a result of using an inferred operating expenditure and commercial revenue positions for the top of the range based upon Heathrow's business plan, alongside the CAA's simple uplift of Heathrow's passenger forecast numbers; neither of these positions represent independent regulatory positions, and these positions should be more fully developed at this stage to allow credible proposals to be presented
- 2.4. We do not see any analysis that supports the CAA's upper and lower quartiles being appropriate bookends for the range presented for Initial Proposals, and view the CTA analysis as the only true, independent source that should have been used; the range therefore appears entirely irrational as a basis for Initial Proposals
- 2.5. In addition, the CAA's passenger numbers have been developed as an uplift of Heathrow's passenger modelling; whilst the CAA identifies a number of pertinent

issues with Heathrow's model, the uplift does not appear to be based upon a re-run of the model with Heathrow's errors removed

- 2.6. Finally, the cost of capital is significantly elevated in the CAA's analysis, and further fails to take into account risk reduction mechanisms included for H7; this includes the TRS proposed, but should not include the asymmetric risk allowance, which we have removed as a result

Use of CEPA Taylor Airey analysis vs Heathrow business plan

- 2.7. Given the lack of transparency and therefore credibility in Heathrow's business plan, it is irrational for the regulated company's lobbying position to form any basis of Initial Proposals, even if it will ultimately be reconciled at Final Proposals
- 2.8. The CAA have already identified significant shortcomings in Heathrow's various business plans, which means it is irrational for the CAA to not follow its own advisors' preliminary analysis; this is particularly the case as CTA conservatively use Heathrow's figures and elasticities as holding numbers for particular line items where they have yet to find appropriate evidence to develop their own forecasts
- 2.9. Whilst we recognise that CTA have had limited direct engagement with Heathrow, and expect more detailed engagement is to follow, the CTA analysis remains valid based upon the information provided by Heathrow; it would be an entirely inappropriate regulatory outcome if Heathrow were to avoid appropriate price controls being placed upon it through intransigence and failure to disclose appropriate information
- 2.10. This is highlighted further by the CAA's assessment of compliance with scenarios, which are particularly relevant to an assessment of operating costs and commercial revenues, especially where significant elements of infrastructure might be non-operational, and was a key requirement set out in the CAA's business plan guidance
- 2.11. The CAA's guidance to Heathrow required it to "link revenues and costs clearly to recovery scenarios for passenger numbers, taking account of recent developments including, in particular, the impact of the Covid-19 pandemic"¹⁷
- 2.12. However, the resulting RBP fell short of this requirement, and was judged non-compliant, since "the traffic scenarios HAL has developed (low, mid, and high) are not well integrated across the plan", and "they do not clearly drive differences in scenarios across the building blocks"¹⁸
- 2.13. The CAA assessment further concluded that "it is not clear how the traffic scenarios are integrated with the opex, capex and commercial revenue forecasts",

¹⁷ [CAP1940 Economic regulation of Heathrow: policy update and consultation, Appendix E, para 11, criterion C02](#)

¹⁸ [CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria C02](#)

and “furthermore, there is no evidence of disaggregation into markets where appropriate (e.g. Commercial Revenues)”¹⁹

- 2.14. Having established these gross inadequacies, it is irrational that the CAA should partly rely on Heathrow’s RBP update numbers in any form; given the commitment in its own process to develop its own forecasts for both operating costs and commercial revenues, the CAA should rely upon the forecasts developed by CTA, since this analysis removes biases introduced by Heathrow and revises the forecasts where evidenced analysis is available
- 2.15. Given the lack of objective evidence presented to support many of its contentions, and given CTA strip out subjectivity (but on a conservative basis, and only where evidence allows), the Initial Proposals can only be robust where CTA’s initial work is used as a basis for Initial Proposals
- 2.16. Furthermore, the application and use of an upper and lower quartile to that range remove transparency from the Initial Proposals (contrary to the principles of section 1(4) of CAA12²⁰ regarding regulated activities), as the underlying calculation of that range and the scaling of the parameters is unclear between Heathrow’s RBP update and the CTA analysis at the CAA midpoint passenger numbers
- 2.17. This is particularly the case as Heathrow’s RBP update position has been inferred due to the use of different passenger forecasts by the CAA; the “ceiling” of the range is not therefore appear a direct output of Heathrow’s RBP update position but a CAA interpretation, which introduces further subjectivity and potential for error to the calculation of this range
- 2.18. This is compounded by the presentation of analysis in 2020 CPI-deflated prices, whereas both the CAA’s Price Control Model (“PCM”) and the CTA model that supports its analysis of operating costs and commercial revenues operate in 2018 RPI-deflated prices; whilst there may be good reason for doing so, the inadvertent effect has been to obscure the mechanics behind the calculation of the range
- 2.19. We therefore ask the CAA to rely on its own analysis and that of its advisors to form the basis of appropriate and evidence-based H7 proposals; whilst there remains more work for CTA to perform before Final Proposals, it is clear that its analysis to date has been conservative and is therefore appropriate for Initial Proposals
- 2.20. This is particularly the case since where an evidence base has not yet been established and Heathrow’s numbers remain in place as a holding position for elements of the CTA analysis; the CAA’s range has therefore artificially skewed its own analysis and risks undermining its own process as a result

¹⁹ Ibid.

²⁰ Civil Aviation Act 2012

- 2.21. As noted by the CAA, "an appropriate allowance for opex furthers the interests of consumers by ensuring that airport charges are calculated by reference only to an efficient level of costs"²¹
- 2.22. The CAA's range of £24.53 to £34.41 in 2020 prices is therefore the wrong starting point for determining an appropriate range for H7 Initial Proposals; the CAA's range should not be based upon the regulated company's lobbying position, but centred around the CTA analysis (at appropriate passenger volume forecasts), which fulfils the duties of CAA12 to base economic regulation upon efficient costs
- 2.23. This is reinforced by the Explanatory Notes to CAA12, which state that "the CAA would not be required to adjust regulatory decisions in order to take account of an operator's particular financing arrangements or put the interests of users at risk by making them pay for an inefficient operator's financing decisions"²²
- 2.24. This is reiterated by the observation that "the requirement to have regard to those needs reflects the fact that the ultimate aim of economic regulation is, as far as is possible, to replicate the outcomes of a competitive market"²³
- 2.25. In our view, the CAA's use of £29.50, being the midpoint of this skewed range, as the 2022 holding cap fails to satisfy these requirements of CAA12, and we therefore propose that this range should be recalculated to remove the effect of Heathrow's RBP update

Step 1: Implementing CTA's analysis at its midpoint

- 2.26. Our first step has been to update the PCM to base H7 solely upon the midpoint of the CTA analysis for operating expenditure and commercial revenues; it is only by removing the effect of Heathrow's lobbying position expressed through its business plans that we can determine an efficient charge
- 2.27. The CTA analysis has been modelled based upon the report²⁴ that is set out as part of the CAA's H7 Initial Proposals; we have been separately provided with the model, which sets out transparently the alterations that have been made to Heathrow's RBP update to arrive at the CTA proposals for operating costs and commercial revenues
- 2.28. We have used this model to re-run the CTA analysis, initially using the CAA mid passenger volumes to show a like for like comparison; the output of this is set out as follows

Table 2.1: CTA analysis at CAA mid passenger numbers

²¹ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.2](#)

²² [Civil Aviation Act 2012, Explanatory Notes to Section 1, para 36a](#)

²³ Ibid.

²⁴ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021](#)

Scenario 2: CAA Mid passenger growth

Opex, £ 2018 RPI real		2022	2023	2024	2025	2026
1	People	229.7	243.2	251.8	248.9	242.2
2	Operational costs excl. insurance	209.8	232.1	246.6	251.0	249.5
3	Insurance	15.6	15.9	16.0	16.2	16.4
4	Facilities maintenance costs	137.6	148.0	155.7	159.6	159.9
5	Rates costs	112.5	112.0	111.1	110.1	109.0
6	Utility costs excl. distribution contract	51.2	57.2	60.9	62.4	63.9
7	Distribution contract	29.6	29.6	27.0	26.1	26.2
8	General expenses incl. consultants & marketing, gen ex & interco	97.6	104.6	109.4	111.4	110.7
9	Surface access initiatives	8.3	8.6	9.1	10.9	10.5
10	Overlays	16.7	14.8	12.4	9.6	6.7
Total		908.8	966.0	1,000.0	1,006.2	994.9

Commercial Revenues, £ 2018 RPI real		2022	2023	2024	2025	2026
1	Retail	233.3	316.2	384.5	427.3	445.6
2	Bureaux	10.4	12.4	13.5	13.5	12.7
3	Surface Access	98.7	125.7	137.4	155.3	161.9
4	Service	35.8	44.4	51.6	56.3	58.4
5	Rail	76.5	96.1	100.9	110.5	114.5
6	Property	112.8	117.7	121.5	122.8	124.1
7	Other	0.7	1.0	1.2	1.3	1.4
8	Intercompany	0.0	0.0	0.0	0.0	0.0
9	Terminal drop-off charge	57.6	67.8	75.0	92.5	89.5
10	Red Terminal	16.0	6.3	0.0	0.0	0.0
Total		641.9	787.8	885.6	979.4	1008.1

Other Revenues, £ 2018 RPI real		2022	2023	2024	2025	2026
1	Cargo revenue	52.2	35.7	22.0	13.3	10.3
2	ORC revenue	266.7	280.7	287.7	289.3	289.1

- 2.29. We have therefore used this output from the CTA model within the CAA's PCM (whose inputs are in 2018 RPI real prices); using the same flat profiling of charges across the H7 period as the CAA, we have recalculated the CAA's range for Initial Proposals using both the CAA's passenger number and the CAA's 3.6% and 5.6% vanilla WACC figures
- 2.30. This is to ensure that for this step 1, we initially show a like for like comparison with the CAA Initial Proposals; note that we subsequently make alterations below to introduce more appropriate passenger forecasts and WACC numbers for the H7 period, and remove the asymmetric risk allowance

Table 2.2: 3.6% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	958	1,023	1,067	1,084	1,082	5,215
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	631	665	696	684	673	3,349
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,547	2,632	2,660	2,683	2,683	13,206
Non-aero (inc ORCs)	£'m CPI-real 2020	(958)	(1,131)	(1,252)	(1,367)	(1,411)	(6,119)
Non aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(55)	(38)	(24)	(14)	(11)	(142)
Net revenue requirement	£'m CPI-real 2020	1,534	1,463	1,384	1,302	1,261	6,945
Passengers	m ppa	45.62	60.21	71.99	79.37	82.00	339.19
Unprofiled yield per pax	£'m CPI-real 2020/pas	33.63	24.30	19.23	16.40	15.38	20.47
Profiled yield per pax	£'m CPI-real 2020/pas	20.55	20.65	20.82	21.02	21.21	20.85

Table 2.3: 5.6% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	958	1,023	1,067	1,084	1,082	5,215
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	982	1,051	1,115	1,097	1,079	5,323
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,898	3,018	3,080	3,096	3,089	15,181
Non-aero (inc ORCs)	£'m CPI-real 2020	(958)	(1,131)	(1,252)	(1,367)	(1,411)	(6,119)
Non aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(55)	(38)	(24)	(14)	(11)	(142)
Net revenue requirement	£'m CPI-real 2020	1,885	1,849	1,804	1,714	1,667	8,919
Passengers	m ppa	45.62	60.21	71.99	79.37	82.00	339.19
Unprofiled yield per pax	£'m CPI-real 2020/ pas	41.33	30.70	25.05	21.60	20.33	26.30
Profiled yield per pax	£'m CPI-real 2020/ pas	26.59	26.71	26.92	27.18	27.43	26.97

- 2.31. This revised range ultimately reveals the output of the CAA's own advisors' analysis with the CAA's upper and lower bound WACC applied; this is a credible starting range for H7 Initial Proposals based upon transparent and evidence-based analysis where it is available (as is required by CAA12)
- 2.32. This analysis suggests that the CAA's greatest possible range for H7 Initial Proposals should have been no more than £20.85 to £26.97 in 2020 prices, with a midpoint of £23.91; this uses the true midpoint output of the CTA analysis of Heathrow's efficient cost base and commercial revenue generation potential
- 2.33. The CTA analysis clearly needs further development for Final Proposals to incorporate additional independent analysis and remove Heathrow's holding numbers from some line items; however, given the inappropriate positions taken by Heathrow in all its business plans, including the RBP update, we can only see additional analysis further reducing the airport charge below the level calculated above at like for like passenger numbers
- 2.34. Our subsequent analysis of the key outputs of the PCM for both debt and equity financeability show comparable outputs of key metrics used by the CAA to determine financeability; we reiterate that CAA12 only requires the CAA to have regard to financeability²⁵ in a manner that is consistent with furthering the interests of consumers²⁶, represented by the notional company, and that this is primarily achieved by setting an appropriate WACC

Step 2: Updating passenger forecasts

- 2.35. We continue to believe that the CAA has made an error by not developing its own, independent passenger forecasts, and has developed an uplift to Heathrow's forecasts for Initial Proposals that are irrational given independent forecasting information that is available
- 2.36. At a simple comparison level, the CAA's revised passenger forecasts are significantly below other the recovery profiles of other forecasts available in the industry; this under-forecasting is particularly problematic at Heathrow, since traffic has tended to concentrate at Heathrow both during the pandemic and over time

²⁵ [Civil Aviation Act 2012, Section 1, CAA's General Duty](#)

²⁶ As explained by the CAA in [CAP2265C H7 Initial Proposals: Section 2: Financial issues, para 11.3](#)

- 2.37. As a result, the CAA's mid case analysis of 338.2m passenger risks being too low for determining an appropriate range for H7 Initial Proposals; as with operating expenditure and commercial revenues, the CAA's forecast needs urgent updating to take account of both independent forecasts of passenger volumes and upgraded economic fundamentals that drive passenger traffic
- 2.38. We therefore propose that the CAA's range should be further recalculated based upon evidence available today; a number of independent forecasts of traffic exist, and we have developed an initial, simplistic revision to Heathrow passenger forecasts on the basis of Eurocontrol's revised STATFOR forecast
- 2.39. This forecast was released in October 2021, and reflected significant positive economic news that was released during summer and autumn; this is demonstrated by the uprating of that forecast as compared to the same forecast in May 2021

Chart 3.4: Eurocontrol UK traffic forecasts: May vs Oct 2021 as % of 2019

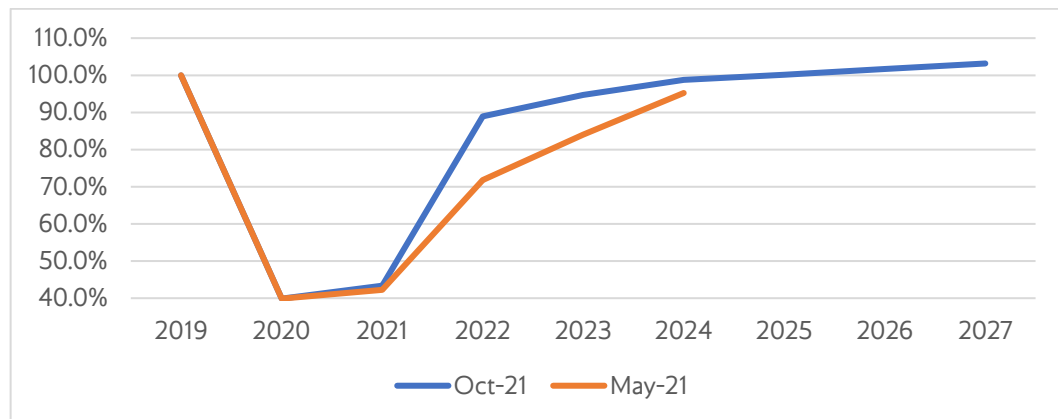


Table 3.5: Forecast Heathrow traffic profile from Eurocontrol mid-case Europe

m passenger per year	2022	2023	2024	2025	2026	Total
% 2019 (80.88m)	89.0%	96.0%	100%	102%	104%	n/a
Revised mid	72.0	77.7	80.9	82.5	84.1	397.2

- 2.40. In order to update the PCM on a consistent basis, we have first generated a further, revised output from the CTA model to update operating expenditure and commercial revenues for these new, higher passenger volumes
- 2.41. We have not changed any other assumptions within the CTA model so as to ensure a like-for-like comparison to the CAA's H7 Initial Proposals and avoid undue complexity; any subsequent CAA update to passenger forecasts should strictly consider the mix of passenger traffic based upon origin and destination of traffic

Table 2.6: CTA model output using our passenger numbers

Opex, £ 2018 RPI real					
	2022	2023	2024	2025	2026
1 People	264.8	264.2	261.6	252.0	244.2
2 Operational costs excl. insurance	244.6	254.7	257.9	255.0	252.1
3 Insurance	15.6	15.9	16.0	16.2	16.4
4 Facilities maintenance costs	159.4	162.2	162.9	162.1	161.6
5 Rates costs	112.5	112.0	111.1	110.1	109.0
6 Utility costs excl. distribution contract	59.8	62.8	63.7	63.4	64.6
7 Distribution contract	29.6	29.6	27.0	26.1	26.2
8 General expenses incl. consultants & marketing, gen ex & interco	113.0	114.7	114.4	113.1	111.8
9 Surface access initiatives	8.3	8.6	9.1	10.9	10.5
10 Overlays	16.7	14.8	12.4	9.6	6.7
Total	1,024.4	1,039.6	1,036.2	1,018.5	1,003.0
Commercial Revenues, £ 2018 RPI real					
	2022	2023	2024	2025	2026
1 Retail	360.9	404.2	430.4	443.7	456.8
2 Bureaux	16.1	15.9	15.1	14.0	13.0
3 Surface Access	155.7	162.1	154.4	161.4	166.1
4 Service	50.2	54.1	56.5	58.0	59.6
5 Rail	107.7	117.3	110.5	113.9	116.9
6 Property	112.8	117.7	121.5	122.8	124.1
7 Other	1.2	1.3	1.4	1.4	1.4
8 Intercompany	0.0	0.0	0.0	0.0	0.0
9 Terminal drop-off charge	91.0	87.5	84.3	96.2	91.8
10 Red Terminal	16.0	6.3	0.0	0.0	0.0
Total	911.5	966.3	974.0	1011.4	1029.6
Other Revenues, £ 2018 RPI real					
	2022	2023	2024	2025	2026
1 Cargo revenue	21.5	15.1	11.4	9.6	7.7
2 ORC revenue	266.7	280.7	287.7	289.3	289.1

2.42. We have again used this output from the CTA model within the CAA's PCM (whose inputs are in 2018 RPI real prices); using the same flat profiling of charges across the H7 period as the CAA, we have recalculated the CAA's range for Initial Proposals using the CAA's 3.6% and 5.6% vanilla WACC figures

Table 2.7: 3.6% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	982	1,051	1,115	1,097	1,079	5,323
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	3,020	3,096	3,118	3,109	3,098	15,441
Non-aero (inc ORCs)	£'m CPI-real 2020	(1,242)	(1,321)	(1,347)	(1,402)	(1,434)	(6,745)
Non aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(23)	(16)	(12)	(10)	(8)	(69)
Net revenue requirement	£'m CPI-real 2020	1,756	1,759	1,759	1,697	1,655	8,627
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	24.39	22.66	21.75	20.57	19.68	21.72
Profiled yield per pax	£'m CPI-real 2020/ pas	16.63	16.71	16.84	17.01	17.16	16.87

Table 2.8: 5.6% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	982	1,051	1,115	1,097	1,079	5,323
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	3,020	3,096	3,118	3,109	3,098	15,441
Non-aero (inc ORCs)	£'m CPI-real 2020	(1,242)	(1,321)	(1,347)	(1,402)	(1,434)	(6,745)
Non aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(23)	(16)	(12)	(10)	(8)	(69)
Net revenue requirement	£'m CPI-real 2020	1,756	1,759	1,759	1,697	1,655	8,627
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	24.39	22.66	21.75	20.57	19.68	21.72
Profiled yield per pax	£'m CPI-real 2020/ pas	21.60	21.70	21.88	22.08	22.29	21.91

- 2.43. The output of this analysis suggests that the CAA's range for H7 Initial Proposals could be further revised to £16.87 to £21.91 in 2020 prices, suggesting a midpoint of £19.39; this more realistic passenger forecast is not unreasonable based upon the evidence we present in this response
- 2.44. This further revised range is not an unreasonable outcome given the capacity plans that airlines have published; this is a credible range for H7 Initial Proposals should they be updated to incorporate the positive economic environment that will arise when we emerge from the pandemic and travel restrictions are finally eased
- 2.45. Raising passenger forecasts has a clear effect of reducing the airport charge across H7; ensuring the passenger forecasts reflect the latest available information is critical to ensuring that consumer interests are maximised
- 2.46. Furthermore, updating passenger forecasts will only ensure that financeability of the notional company is enhanced; greater passenger numbers significantly enhance commercial revenue generation with a far smaller increase in operating expenditure required to support operations and service quality, due to the high proportion of relatively fixed costs
- 2.47. Passenger forecasts do however need to be realistic to avoid the notional company financeability being compromised, therefore it is important that the CAA take into account a range of external evidence of why this is the case, rather than relying upon Heathrow's pessimistic modelling, even after applying a relatively simple uplift

Step 3: Updating the WACC and removing asymmetric risk allowance

- 2.48. Our final step has been to update the PCM to remove the asymmetric risk allowance and recalculate the range based upon the vanilla WACC of 1.3% to 2.8% that CEPA has developed for the airline community²⁷; this is based upon credible evidence and is supported by our financeability analysis set out later in this response

Table 2.9: 1.3% vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	223	252	282	277	273	1,306
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,232	2,268	2,258	2,262	2,265	11,286
Non-aero (inc ORCs)	£'m CPI-real 2020	(1,242)	(1,321)	(1,347)	(1,402)	(1,434)	(6,745)
Non-aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(23)	(16)	(12)	(10)	(8)	(69)
Net revenue requirement	£'m CPI-real 2020	968	932	899	851	823	4,471
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	13.44	12.00	11.11	10.31	9.78	11.26
Profiled yield per pax	£'m CPI-real 2020/ pas	11.14	11.19	11.28	11.39	11.50	11.30

Table 2.10: 2.8% vanilla WACC

²⁷ As set out in the CEPA paper submitted alongside the AOC/LACC response to this consultation

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	474	518	560	551	542	2,646
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,483	2,534	2,536	2,537	2,535	12,625
Non-aero (inc ORCs)	£'m CPI-real 2020	(1,242)	(1,321)	(1,347)	(1,402)	(1,434)	(6,745)
Non aero revenues bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	-	-	-	-	-	-
Cargo revenue	£'m CPI-real 2020	(23)	(16)	(12)	(10)	(8)	(69)
Net revenue requirement	£'m CPI-real 2020	1,219	1,198	1,177	1,125	1,092	5,811
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	16.93	15.43	14.55	13.63	12.98	14.63
Profiled yield per pax	£'m CPI-real 2020/ pas	14.51	14.58	14.69	14.83	14.97	14.72

- 2.49. The output of this analysis suggests that the CAA's range for H7 Initial Proposals could be further revised to £11.30 to £14.72 in 2020 prices, suggesting a midpoint of £13.01 in 2020 prices
- 2.50. This WACC reflects the CAA's reduced risk environment proposed for H7, particularly the inclusion of a Traffic Risk Sharing ("TRS") scheme that significantly reduces Heathrow's risk exposure should a pandemic-like event recur; as a result, the CAA should consider Heathrow a much lower risk asset, with a more utility-like cost of capital

Conclusion

- 2.51. The CAA's range of £24.53 to £34.41 in 2020 prices is an irrational starting point for H7 Initial Proposals; it is based on inappropriate evidence and data sets prepared by Heathrow, fails to take into account independent analysis prepared by CTA, fails to consider airline plans for future flying activity, and relies upon an inappropriately elevated WACC and an inappropriate asymmetric risk allowance
- 2.52. CTA have prepared analysis for the CAA, which conservatively estimates operating expenditure and commercial revenues; given the lack of transparency and therefore credibility in Heathrow's business plan, it is irrational for the regulated company's lobbying position to form any basis of Initial Proposals, even if it will ultimately be reconciled at Final Proposals
- 2.53. Furthermore, the CAA has made an error by not developing its own, independent passenger forecasts, and by introducing a simple uplift to Heathrow's forecasts for Initial Proposals, and has erred since the output is inconsistent with independent forecasts available from Eurocontrol and planned airline flying activity
- 2.54. Finally, the CAA has irrationally developed a range for WACC that is skewed to the upside and inappropriately discounts evidence where the WACC should be lower across multiple parameters, whilst incorporating an asymmetric risk allowance in error; we have therefore recalculated the range based upon corrections for all the above
- 2.55. Step 1 to reflect the true midpoint of the CTA analysis reduces the range to between £20.85 and £26.97 in 2020 prices, with a midpoint of £23.91; step 2 to introduce appropriate passenger forecasts reduces the range further to between £16.87 and £21.91 in 2020 prices, with a midpoint of £19.39; step 3 to remove the

asymmetric risk allowance and reflect our WACC range reduces it to between £11.30 and £14.72 in 2020 prices, with a midpoint of £13.01

3. Overall approach to regulation (CAP2265 Chapter 1)

- 3.1. Further to the points set out in our introduction above, the CAA needs to consider its approach to the regulatory regime as a whole, setting out what it is trying to achieve with regulation, and how those aims manifest in airport charges; the Expansion project and the pandemic have exposed a number of shortcomings in the model that is used at present, and debate is likely to be ongoing after this periodic review to ascertain the most appropriate model
- 3.2. Ultimately CAA12 sets out the duties²⁸ of the CAA, yet provides little prescriptive guidance on how to implement those duties; this broad latitude afforded by legislation therefore obligates the CAA to set out its thinking across a range of topics to support the framework that is implemented
- 3.3. It is clear that a formulaic application of the previous framework at each periodic review would be irrational, given the latitude afforded in the UK for independent regulatory agencies to develop the framework in response to developments within the sector and drawing upon innovations in other industries
- 3.4. Therefore, the CAA must ask fundamental questions of itself to ensure its direction continues to support its duties in CAA12; Ofwat²⁹ and Ofgem³⁰ have previously set out extensive methodologies in response to searching questions presented by sustainability, incentives and risk, yet the CAA's process has neither yet similarly addressed the overarching questions of what fundamental problems it is trying to solve, nor expressed its proposed solutions to the same depth as other regulators

Overall form of price control

- 3.5. At its heart, monopoly infrastructure must contribute to the competitiveness of the British economy; it is in the interests of consumers that Heathrow thrives, and is incentivised to invest efficiently in infrastructure for the long-term rather than acting as a short-term profit maximiser
- 3.6. This requires the active involvement of the CAA as regulator to develop and refine incentives to meet that challenge; it would be irrational for the regulator to allow a situation to develop where regulation merely provides regulatory protection for the monopolist's position at the expense of consumers
- 3.7. However, the CAA's Initial Proposals appear instead to provide this regulatory protection for Heathrow's monopoly position, where an airport that was already

²⁸ [Civil Aviation Act 2012, General Duties, Section 1](#)

²⁹ [Ofwat, Delivering Water 2020: Our final methodology for the 2019 price review](#)

³⁰ [Ofgem, RIIO-ED2 Sector Specific Methodology Decision: Overview](#)

the most expensive in the world³¹ is permitted to become more expensive by formulaic application of the existing building blocks³²; the CAA must ask itself searching questions as to how this situation has arisen, despite Heathrow operating to the same capability as comparable airports that have far lower charges

- 3.8. Whilst we fundamentally agree with the CAA that “without the price control and associated incentive arrangements there would be a risk of excessive prices, a lack of investment and/or declining service standards”³³, we disagree that as proposed, these Initial Proposals adequately protect consumers from the risk of abusive conduct or sufficiently encourage improvements in efficiency
- 3.9. As a result, the CAA should set out its core principles for the H7 price control, addressing fundamental questions of risk allocation, incentive structure and form of control, and how Initial Proposals appropriately address these key questions for which the five-year control, RAB and single till building blocks might be the answers
- 3.10. It is relevant that RPI-X has been superseded in other industries since “light touch” regulation has demonstrably failed to work in the best interests of consumers; elsewhere, Ofwat has come under fire for allowing debt and charges to balloon whilst dividend payments have soared, a situation comparable to that of Heathrow, and its regulatory regime has become more hands-on over time as a result
- 3.11. Furthermore, Storm Arwen recently exposed shortcomings of electricity companies³⁴, placing additional pressure on Ofgem following the placement of Bulb into Special Administration³⁵ that followed the collapse of several other UK domestic energy companies
- 3.12. It is therefore clear that regulation in the UK is not working to protect consumers adequately, regulators need to be more involved, and greater focus needs to be placed on working to core principles with regulators designing structures to address the actual economic issues that result
- 3.13. In particular, Heathrow’s balance sheet deserves far greater scrutiny than it has been given to date, where near 100% gearing from a Whole Business Securitisation (“WBS”) is materially divergent from regulatory assumptions and optimal capital structures that should deliver resilience with appropriate levels of equity in place
- 3.14. Furthermore, the RAB no longer solely reflects efficient capital investment that has yet to be repaid by future consumers, and has itself been inflated to current levels by perverse corporate finance incentives that must now be reversed; consumers

³¹ [Jacobs, Review of Airport Charges, 2020](#)

³² CAP2265B Section 1: Overall approach to regulation, para 1.1

³³ CAP2265B Section 1: Overall approach to regulation, para 1.2

³⁴ [Ofgem announces review into the networks’ response to Storm Arwen and secures agreement from companies to provide more compensation for those affected, 3rd December 2021](#)

³⁵ [Department for Business, Energy & Industrial Strategy, Bulb Energy Limited: consent to apply for a Special Administration Regime, 24th November 2021](#)

cannot be placed in a situation where even a moderate real-terms decline of the RAB is near impossible due to financeability constraints

- 3.15. It is for this reason that the RAB should be interrogated in detail and the regulatory balance sheet restated based upon Heathrow's pro-forma balance sheet; there is no reason that Expansion costs that have delivered no benefits to consumers should be incorporated into the RAB, particularly as Heathrow has unilaterally abandoned the Expansion project
- 3.16. We are not clear as to the CAA's precise rationale "to continue to facilitate the benefits for consumers that accrue from a five-year price control for the H7 period"³⁶; incentive regulation relies upon costs being divorced from pricing for a period of time to allow incentives over operating expenditure and commercial revenues to play out over a sufficient period of time
- 3.17. It is a question of incentives as to whether that remains most appropriate for the price control, and whilst it is not untrue that "stability in the regulatory regime and airport charges which enable both HAL and the airlines (that serve consumers at Heathrow airport) to plan their businesses for the benefit of consumers"³⁷, it would be irrational to consider this the primary driver in choosing a five year price control
- 3.18. Instead, the CAA should consider how incentives can best be developed to ensure that consumers benefit from increased efficiency and productivity over time; it may be relevant to consider more frequent updates to the price control and introduction of improved incentives over operating expenditure and commercial revenues to ensure competitive tendering is fully incentivised and flows to consumers quicker than at periodic reviews
- 3.19. This could suggest the elimination of periodic reviews and where building blocks are updated where required to maintain consistency of incentives or in response to particular events; in theory, Heathrow is a good example of an asset that could be developed into a system operator model, with terminal infrastructure separated from runways and taxiways to allow the development of greater competitive forces
- 3.20. Such an introduction of competition is envisaged in CAA12, and would be in keeping with the CAA's duties to develop competition where possible; this further underscores why financeability is a secondary duty as in such circumstances, the RAB would have to be broken down into its constituent parts, and preventing competition from developing to ensure financeability would be in direct conflict with the CAA's primary duties at the heart of CAA12
- 3.21. These issues must be considered extensively where "vertically integrated infrastructure companies are unbundled, and competition is introduced"³⁸ and "the

³⁶ CAP2265B Section 1: Overall approach to regulation, para 1.6

³⁷ Ibid.

³⁸ [Stern, J., The role of the regulatory asset base as an instrument of regulatory commitment, Centre for Competition and Regulatory Policy, City University London, March 2013](#)

RAB has to be reconsidered and is typically reallocated"³⁹; this is particularly important where in other sectors "proposals, particularly for vertical unbundling and increased upstream competition, have been received with considerable hostility by the water companies and also by investors"⁴⁰, particularly motivated by the high gearing that many regulated companies have in place

- 3.22. This is particularly problematic since where the RAB is used as a condition of "debt covenants, there is enormous hostility by companies and financial institutions to anything that could trigger a material change determination from the ratings agencies and debt holders"⁴¹; as a result, muddled thinking about the RAB can further ossify the hold of the existing owner and prevent the development of competition in direct contravention of the requirements of CAA12

Incentive structure

- 3.23. Fundamentally, the CAA must ask itself if the incentives it sets are working as intended, and how it can best establish an incentive for Heathrow to deliver capacity using an appropriate price cap; it is of central importance for the CAA to set out what it believes it is trying to incentivise and whether this is still best achieved using regulatory structure that caps average revenue per passenger
- 3.24. This is particularly important where Heathrow provides infrastructure but where it is airlines that actually deliver passengers volumes through the airport via their own route networks; Heathrow plays no role in designing or delivering these networks, yet plays an important facilitation role in providing terminal and runway capacity to passenger and cargo airlines along with associated security and other services
- 3.25. It is this insight that informs our proposals for the starting point of the price control, which is based upon the invested capacity of the airport, and upon which volumes might be better baselined initially for any sharing arrangements to apply below that capacity; consumers have paid for infrastructure to meet a capacity that is reflected in the RAB, and Heathrow should not be compensated more than is necessary for its provision
- 3.26. Using this as an initial baseline, then setting out efficient levels of operating expenditure and commercial revenues for out-turn traffic using the elasticities developed through the analysis the CAA has commissioned from CTA, would allow a price control to be developed that is efficient at any out-turn traffic level, ensuring Heathrow is incentivised to operate more efficiently at all times in any out-turn scenario
- 3.27. The CAA suggest that "in practice this approach would require hypothetical forecasts of the efficient costs and commercial revenues for an airport operating at full capacity, together with assumptions or projections about how these costs

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

and revenues would vary for different levels of traffic below full capacity"⁴²; however it is our view that the CAA has not properly considered our proposal, and it is exactly the role of the regulator to determine how the single till is scaled

- 3.28. Furthermore, the CTA analysis of operating expenditure and commercial revenues is scalable by design, and should be able to accurately forecast those parameters both at full capacity and at levels below full capacity; in addition, the CAA's own Initial Proposals set out forecasts for these parameters at different forecast passenger numbers
- 3.29. Our proposal simply removes the requirement to set a fixed allowance for operating expenditure and commercial revenues, and instead establishes an efficient level for any out-turn traffic volume that diverges from the initial baseline using the elasticities developed by CTA
- 3.30. Rather than solely using a TRS mechanism to avoid the hard task of forecasting traffic for the next five years, the CAA already has the necessary information to determine what efficient operating expenditure and commercial revenues should be at any out-turn volume through the CTA analysis of those areas
- 3.31. As a result, rather than trying to achieve false precision with traffic forecasting, and since CTA's analysis has already determined appropriate elasticities; consumers should not have to pay to incentivise the use of the infrastructure that they have already funded, and baselining the price control at the invested capacity of the airfield would entirely remove any perverse incentive to game traffic forecasting

Purpose of risk sharing mechanisms

- 3.32. The introduction of a risk sharing mechanism for the H7 price control will, as stated by the CAA, "reduce the risk of significant gains or losses for HAL that could arise from changes in passenger numbers over which it has only limited control"⁴³; in comparison to the Q6 price control, this will therefore result in a clear and significant reduction in the risk to which Heathrow is exposed
- 3.33. However, as we have noted above, the CAA needs to address a more fundamental question as to specifically what it is trying to incentivise through a price control based upon a price cap that is volume based and applies to average revenue per passenger; introducing a Traffic Risk Sharing ("TRS") mechanism clearly reduces Heathrow's risk exposure (and raises the risk exposure of consumers)
- 3.34. The risk environment must be reflected appropriately in the cost of capital, for which there must be a price for the reduction in risk held by the regulated company; ex ante incentives are wholly undermined if Heathrow is to be compensated ex post for risks it has taken, and the whole edifice of incentive regulation would crumble if Heathrow were incentivised for a risk it was not actually exposed to

⁴² CAP2265B Section 1: Overall approach to regulation, para 1.24

⁴³ CAP2265B Section 1: Overall approach to regulation, para 1.32

- 3.35. We therefore agree that this “could directly benefit consumers through lower charges”⁴⁴ but we have not yet seen the evidence that this has been incorporated by the CAA; as a result, its implementation appears to be in error since this is not fully and accurately accounted for in the cost of capital
- 3.36. This is why it is so important to get the calibration of incentives correct, and appropriately reflect that risk in the cost of capital with which Heathrow is compensated; the CAA’s Initial Proposals are irrational at present as the risk issue is not adequately addressed in the cost of capital, despite significant new protections being introduced through TRS mechanisms
- 3.37. Ultimately, if Heathrow wishes to be compensated for volume risk in full through the cost of capital, it needs to fully absorb changes in volume of a similar scale to this current pandemic in future; furthermore re-openers must only be incorporated if they are explicitly priced ex ante into the cost of capital, since this would simply be a further risk mitigation mechanism
- 3.38. This is particularly important, since the CAA’s observation that “HAL has limited control”⁴⁵ over passenger volumes directly calls into question why consumers are paying for full volume-based regulation with its significantly higher cost of capital, and providing an incentive for Heathrow over which it has limited control
- 3.39. As a result of the CAA’ proposals, the form of regulation proposed has moved along the spectrum of regulation, and in providing greater certainty for investors, is a degree closer to rate of return regulation than full incentive regulation; it is not clear how facilitating “the certainty and advantages a five-year price control for the H7 period”⁴⁶ delivers a benefit to consumers where they are now more exposed to risk and continue to pay for the privilege of reducing Heathrow’s risk exposure
- 3.40. In particular, we disagree that doing so helps “to clarify the risks that HAL is expected to bear during that period”⁴⁷; as we have explained in our previous responses to CAA consultations on Heathrow’s proposed RAB adjustment, the risks Heathrow was expected to bear in Q6 were abundantly clear, and investors received the appropriate compensation for full exposure to those volume risks
- 3.41. Now that the pandemic has exposed the fact that investors were happy to take the upside but attempted to engineer an ex post adjustment of the price control to avoid the downside, there needs to be a fuller assessment of the appropriate risk exposure to which Heathrow’s investors are exposed
- 3.42. Fundamentally, the TRS mechanism results in a significantly lower risk environment to which Heathrow is exposed, and we agree with the CAA that it limits “the risks

⁴⁴ CAP2265B Section 1: Overall approach to regulation, para 1.6

⁴⁵ CAP2265B Section 1: Overall approach to regulation, para 1.6

⁴⁶ CAP2265B Section 1: Overall approach to regulation, para 1.32

⁴⁷ Ibid.

that HAL might see significant gains or losses depending on the pace of the recovery in passenger traffic volumes"⁴⁸

- 3.43. However, this statement of the CAA is at odds with its overall assessment of the risk environment, and we therefore disagree that the CAA can rationally conclude the introduction of a TRS would merely "avoid unnecessary upward pressure on HAL's cost of capital"⁴⁹
- 3.44. It is clear to us that the introduction of a TRS has resulted in a significant reduction in the risk environment compared to Q6, therefore, rather than merely limiting any upward pressure, Heathrow's cost of capital should reduce significantly to reflect the reduction of risk, since the TRS provides greater stability of returns to investors
- 3.45. It is our view that this cost of capital should be comparable to or below that of UK utilities; we discuss the measurement of the cost of capital further in the section related to the cost of capital within this response
- 3.46. The CAA has also referred to risk sharing mechanisms in the context of being able "to moderate the impact of general uncertainty (and not just extreme events)"⁵⁰; however solving for forecasting uncertainty is not the same as altering the risk environment and does not therefore need to be directly linked to risk sharing
- 3.47. This particularly motivation demonstrates why consideration of the fundamental principles are so important to ascertain the purpose of regulation; if provision of capacity needs to be incentivised, and operating expenditure and commercial revenues can be scaled on the basis of CTA's analysis, baselining the price control upon today's invested capacity could offer more appropriate solution, since traffic can be scaled for any out-turn volume to determine what would have been efficient
- 3.48. As a result, the need to forecast volumes of passengers or traffic with false precision becomes unnecessary, and the opportunity of the regulated company to understate forecasts is entirely removed; it appears irrational not to seek solutions to these fundamental questions to best inform the design of new mechanisms
- 3.49. Ultimately, we welcome incentive regulation where it delivers benefits for consumers, but CAA need to step back and assess whether that remains best delivered by a "five-year price control for the H7 period"⁵¹; this may no longer be the case if CAA proposals are unable to implement effective incentives
- 3.50. It is not clear whether a five year control remains the most appropriate mechanism to deliver incentives if the CAA is unable to calibrate incentives for operating expenditure and commercial revenues around the TRS; in order to truly mitigate the forecasting uncertainty, the design needs to be able to forecast hypothetical

⁴⁸ CAP2265B Section 1: Overall approach to regulation, para 1.6

⁴⁹ CAP2265B Section 1: Overall approach to regulation, para 1.32

⁵⁰ CAP2265B Section 1: Overall approach to regulation, para 1.7

⁵¹ CAP2265B Section 1: Overall approach to regulation, para 1.6

efficient costs and revenues at different levels, which should be achievable through completion of CTA's work on those areas

- 3.51. It would therefore be an error to design a TRS solely around "an assessment of efficient costs and revenues for a realistic "central case" traffic forecast"⁵², since at any other level of traffic, the incentive would be ineffective; unless the sharing rate is calibrated to the elasticities of operating expenditure and commercial revenues, incentive regulation would not be particularly effective, and it could further be an error to lock onto a five year price control as the only answer
- 3.52. Stability of charges is important, but this should not be at the expense of what might result in a competitive market for airport services and which is required by CAA12, and is particularly important at present; as a result, the design of the price control could become a protective moat for Heathrow to avoid effective incentives that mimic competitive forces

Form of risk sharing

- 3.53. It is important to understand why the CAA is undertaking traffic volume or revenue risk sharing, and the effect both on incentives and general risk environment; we agree with the CAA that "revenue risk sharing would reduce HAL's incentives to optimise commercial revenues"⁵³, and further that "revenue risk sharing could distort HAL's incentives on decisions which have implications for both commercial revenues and opex"⁵⁴
- 3.54. We further agree with the CAA that "a special adjustment might be required if HAL were to restructure, outsource or bring back in-house any of its commercial activities in a way that leads to artificial changes in its recorded revenues"⁵⁵; given the basis of regulation is not revenue but volumes, it would be a fundamental error to undermine existing incentives through introduction of revenue-based sharing
- 3.55. Furthermore, we agree with the CAA that risk sharing (if implemented) should be based around the single till approach and centred around current volume-based regulation; nevertheless, we are concerned that excess simplicity may undermine incentives in error, and fail to ensure that Heathrow remains efficient at any out-turn volume that results
- 3.56. It is clear that Heathrow's proposal, rather than risk sharing, has been an attempt to offload tail risks to consumers, leaving its business unimpeded within an 8% band of its forecasts that is claimed represent "normal" deviations from forecasts; we agree with the CAA that such a proposal would be an error, since it would introduce perverse incentives that would undermine the consumer interest

⁵² CAP2265B Section 1: Overall approach to regulation, para 1.24

⁵³ CAP2265B Section 1: Overall approach and building blocks, para 1.17

⁵⁴ Ibid.

⁵⁵ Ibid.

The CAA's proposed TRS mechanism

- 3.57. We agree with the CAA that "the TRS mechanism should be based on cumulative deviations between forecast and outturn traffic levels during H7"⁵⁶; it is particularly important that the TRS is consistent with the aim of ex ante incentive regulation to allow those incentives to play out over the course of the price control
- 3.58. The alternative would be to cause prices to move erratically, and the TRS would not be effectively operating to mitigate the longer-term risk to which Heathrow is exposed; we therefore agree with the CAA that doing so "could cause a degree of unhelpful instability in the level of airport charges"⁵⁷
- 3.59. Nevertheless, we are unclear why the CAA has proposed that such calculations are performed "excluding the correction factor"⁵⁸; it would be an error to exclude these factors from TRS without specifying the rationale for doing so, and this is particularly important to consider where the correction factor serves to compensate consumers for over-collection against average revenue per passenger in previous years
- 3.60. Excluding the correction factor could therefore have the effect of causing consumers to over compensate Heathrow if passengers are below forecast, as they would not have been recompensed the correction factors (k-factor, cumulative capex adjustment or other pass-through costs) in full against the out-turn passenger numbers as compared to the value of those adjustments when they were set, with the converse occurring if passenger numbers rise above forecast
- 3.61. This is all the more important as these correction factors as set in-year by Heathrow at the annual rate card consultations by reference to its own forecast passenger numbers for the following year, rather than by reference to the CAA's determined passenger forecast for that respective year; this anomaly could cause a significant misalignment of incentives if not properly considered
- 3.62. Furthermore, we disagree that it is the RAB that "should be updated each year to reflect a "running total" of cumulative deviations to date during H7"⁵⁹; the purpose of the RAB is to incorporate expenditure that has not yet been paid by current consumers, and further to our later comments on the RAB, believe this would be in error since it would further cloud the purpose of the mechanism
- 3.63. This is particularly the case since the CAA has not considered the effect that a reversal of such deviations might have on Heathrow's financing position; whilst Heathrow may be able to raise more debt financing on the basis of an increase in the RAB, generated by a single year deviation from baseline, it would also have to

⁵⁶ CAP2265B Section 1: Overall approach and building blocks, para 1.20

⁵⁷ CAP2265B Section 1: Overall approach and building blocks, para 1.20

⁵⁸ CAP2265B Section 1: Overall approach and building blocks, para 1.37

⁵⁹ CAP2265B Section 1: Overall approach and building blocks, para 1.21

manage with a reduction in the RAB should forecasts exceed baseline, which would not appear to be consistent with a resilient price control

- 3.64. The use of the RAB in this manner is not therefore prudent and would be in error, since it distorts incentives for which the RAB exists, and further ties the regulatory outcome to Heathrow's particularly financing arrangements, in contravention of CAA12; this is not dissimilar to the CAA's reliance upon the WBS in matters of financial resilience, which we comment on further in that section of our response
- 3.65. We therefore contend that the CAA is irrational in using the RAB itself for such issues, particularly since it does not work for the first year of H8, and relies upon a form of adjustment at the start of H8 that is unknown at present⁶⁰; this underlines the undeveloped design of the TRS, which needs urgent attention before Final Proposals
- 3.66. Nevertheless, we agree with the CAA that the TRS should not result in an adjustment to charges in a "similar way to the "development capex" adjustment"⁶¹; this would lead to a perverse outcome where charges rise just as airlines are trying to rebuild networks and traffic, a situation not dissimilar to the price rises proposed by the CAA in these Initial Proposals
- 3.67. As described, the CAA's proposal does not appear to be consistent with its earlier narrative, and where it states that it proposes for the "cumulative impact of differences between forecast and outturn traffic levels will then be calculated as the difference between cumulative allowed revenues calculated using outturn traffic levels and forecast traffic levels"⁶², we believe this is in error since exclusions related to ORCs and other pass-through costs have not been specified
- 3.68. In addition, we cannot see any calculation to support the CAA's suggested "40 to 60 per cent for differences in cumulative allowed revenues of up to 10 per cent, and 90 to 100 per cent for differences in cumulative allowed revenues of more than 10 per cent"⁶³
- 3.69. In order to ensure these support an effective incentive, these must be tailored to CTA's analysis of operating expenditure and commercial revenues, otherwise the proposed sharing rate will skew the incentives, as opposed to reducing the strength, where even the CAA notes "some weakening of incentives is almost unavoidable with a risk sharing mechanism"⁶⁴
- 3.70. The CAA are correct that our previous proposal would not "easily lend itself to different degrees of risk sharing, such as stronger risk sharing for more extreme

⁶⁰ CAP2265B Section 1: Overall approach and building blocks, para 1.39

⁶¹ Ibid.

⁶² CAP2265B Section 1: Overall approach and building blocks, para 1.37

⁶³ Ibid.

⁶⁴ CAP2265B Section 1: Overall approach and building blocks, para 1.22

outcomes"⁶⁵; this is deliberate as we believe it would be an error for Heathrow to be more fully insulated against extreme outcomes

- 3.71. This goes to the heart of the issue as to what the TRS is trying to achieve; and ability to moderate for general forecasting uncertainty is one thing, but insulating Heathrow from more extreme events is quite another, and the CAA's proposed cost of capital does not at present reflect this purpose
- 3.72. We also believe that the CAA is in error to suggest that if they "were to base the TRS mechanism on forecasts excluding the shock factor, this would lead to a risk of consumers paying twice for those shocks that HAL has already been compensated for through the use of the shock factor"⁶⁶
- 3.73. Including a shock factor artificially reduces the baseline passenger numbers, which transfer the risk of such shocks to consumers before risk sharing takes place; the application of risk sharing on top of this adjustment further transfer risk to consumers, and the CAA must remove this shock factor in order to accurately calibrate the TRS
- 3.74. Importantly, the CAA has not presented any robust justification for this risk transfer in the design of the TRS, and this is a fundamental error as a result; the cost of capital parameters assume full exposure to the entire risk environment and the distributions measured by market parameters are not curtailed in any form
- 3.75. Nevertheless, if the CAA is to introduce a TRS, and that TRS is reflected through a significant reduction in the cost of capital, we agree that moderate risk sharing should be implemented from the baseline passenger forecast used to determine the H7 price control; there is no case for no risk sharing within a central band, since this would fundamentally not be risk sharing and distort Heathrow's incentives
- 3.76. This is important so as to ensure incentives effective for any deviation from central forecast, and welcome the CAA's application of "risk sharing to all deviations from the forecasts"⁶⁷, since we remain opposed to dead bands in any form; this approach ensures efficient operating expenditure and commercial revenues across a range of traffic scenarios that may result during the H7 period, and maintains appropriate and consistent incentives across all single till building blocks
- 3.77. We reject Heathrow's assertions that dead bands could "foster both closer commercial cooperation with airlines and commercial incentives"⁶⁸; particularly given behaviour witnessed in the 2022 rate card consultation, which is indicative that consumer interest could be further undermined if dead bands were to exist

⁶⁵ CAP2265B Section 1: Overall approach and building blocks, para 1.24

⁶⁶ CAP2265B Section 1: Overall approach and building blocks, para 1.38

⁶⁷ CAP2265B Section 1: Overall approach and building blocks, para 1.7

⁶⁸ CAP2265B Section 1: Overall approach and building blocks, para 1.9

- 3.78. On the other hand, we believe the CAA is in error to introduce “stronger risk sharing in an outer band, which we propose should start when cumulative traffic levels in H7 are more than 10 per cent higher or lower than our forecast”⁶⁹ this would not only result in significant incentive issues approaching the change in sharing rate, as we note above, but also result in consumers compensating Heathrow excessively through the cost of capital, despite an outcome more similar to utility-like rate of return regulation
- 3.79. We are opposed to protecting Heathrow solely from more extreme events with stronger risk sharing at larger deviations from forecast; this is incompatible with the intent of incentives related to regulation based on an average price cap, and significantly reduces Heathrow’s risk exposure, for which consumers still appear to be compensating Heathrow in the cost of capital in the CAA’s initial Proposals
- 3.80. Extreme events remain within set of all possible volume out-turn scenarios, and cannot be discounted as having no value to consumers holding those risks despite resulting in large risk transference demonstrated by pandemic; at heart, the CAA’s proposals significantly alter where real equity risk is held, and it is unacceptable to transfer this risk to consumers without reflecting this in the cost of capital
- 3.81. In addition, we have previously presented evidence of the incentive problems created through introduction of differential sharing rates in our previous responses; these clearly demonstrate the fundamental trade-off between incentive regulation, and the fact that outside the central band, the CAA’s proposals operate more like rate of return regulation
- 3.82. Furthermore, where Heathrow’s incentives are close to the floor of its band, it has an incentive to undertake risky activity and at the ceiling to avoid meeting capacity and exiting the central band; this problem set out in numerous academic books and papers in reference to regulatory sharing schemes⁷⁰⁷¹
- 3.83. The CAA would therefore be in error to disregard our concerns over having a differential sharing rate by creating a central and outer band, and particularly to disregard the incentive it would place upon Heathrow to avoid entering the outer band on the upside by artificially restricting capacity, which would be in contravention of CAA12 duties
- 3.84. These are real concerns that stem from the behaviour of other companies under such mechanisms, and cannot be dismissed lightly, particularly given the CAA’s inexperience in implementing such mechanisms; in particular, the CAA do not

⁶⁹ CAP2265B Section 1: Overall approach and building blocks, para 1.36

⁷⁰ Decker, C. *Modern Economic Regulation: An Introduction to Theory and Practice*. 2015, Chapter 5, Section 4, “Hybrids and adaptations to traditional price regulation”

⁷¹ In particular, Sappington, D. (2002). Price regulation. In M. Cave, S. Majumdar, & I. Vogelsang (Eds.), *The handbook of telecommunications economics. Volume I: Structure, regulation, and competition* (pp. 225-293). Amsterdam: Elsevier Science Publishers

appear to fully appreciate the Crew-Kleindorfer effect and Heathrow's incentive as monopolist to set high tariffs associated with low volumes to minimise actual costs

- 3.85. The CAA is therefore in error to suggest that the "proposed risk sharing factor in this band is 90 to 100 per cent"⁷², particularly since the CAA is correct that this will "provide HAL with a relatively high level of protection from the impact of further traffic changes"⁷³, but is incompatible with "a modest incentive to generate additional traffic"⁷⁴, as this will have been entirely removed at this rate of sharing
- 3.86. The central issue is that the CAA do not appear to be aware of the very real incentive effects created by their proposals, and have irrationally designed a mechanism that is in conflict with the incentives that should be at the heart of an average revenue cap price control, and further mispriced its effect in the cost of capital calculations; this misalignment of incentives is a fundamental error that must be corrected before Final Proposals

Re-opening conditions in licence

- 3.87. We agree with the CAA that policy guidance may be more appropriate than a formal re-opener for dealing with other uncertainties that might occur in future; this is important as it ensures the CAA is permitted to retain regulatory judgement to deal with such matters in the round, rather than formulaically applying adjustments that deal with matters in isolation
- 3.88. Incentive regulation relies upon allowing the price control to play out in a way that ensures the most efficient outcomes result and proxy those of a competitive market, were one to exist; we therefore agree with CAA that there would be limited certainty through such a mechanism proposed by Heathrow due to the need for "specificity and certainty in licence conditions"⁷⁵ would further create incentive issues when approaching such a limit (similar to those described earlier in relation to the sharing boundaries under the proposed TRS)
- 3.89. We note that Heathrow's RAB adjustment request was an obvious attempt to force a reopening of the underlying Q6/iH7 licence dressed up as change in CAA policy toward the opening H7 RAB; Heathrow's suggestions remain deeply one-sided as it proposes a mechanism that allows Heathrow to "apply for an adjustment to the price control following a material change of circumstances"⁷⁶
- 3.90. This gives the CAA limited scope to assess any particular situation, where a sixty-day period for response may be insufficient (or excessive) in the circumstances, undermining ex-ante incentives and resulting in effective ex-post rate of return regulation; instead of introducing further complexity through re-openers, we

⁷² CAP2265B Section 1: Overall approach and building blocks, para 1.36

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ CAP2265B Section 1: Overall approach and building blocks, para 1.8

⁷⁶ CAP2265B Section 1: Overall approach and building blocks, para 1.11

should ask what form of regulation results in the most optimal consumer outcomes delivered through the lowest possible cost infrastructure for a specified quality

- 3.91. Particularly post-Brexit, there is now a greater latitude to evolve regulatory regimes if they result in better consumer outcomes, whilst ensuring the public interest duty of regulators is strengthened based upon the underlying legislation; rather than falling for Heathrow's obvious attempts to manipulate aspects of regulation in favour, consumers need the CAA to lead an informed debate over the regulatory regime in general after H7 periodic review is complete
- 3.92. However, for the time being at this H7 periodic review, the CAA must ensure the result remains consistent with the nature of regulation that protects consumers from monopolies who are incentivised to abuse their power, and its price control is consistent with the result that would emerge were competitive forces to exist; wholesale insulation from individual line items of cost are inconsistent with this objective, and remove the incentive for efficiency to develop

Other uncertainty mechanisms

- 3.93. As a result of the above, we do not wholly agree with the CAA that "there may be a case for including specific arrangements to deal with revenues or costs that are particularly uncertain"⁷⁷ or even that "the case for such arrangements is strongest for revenues or costs that are material and wholly or largely outside of HAL's control"⁷⁸
- 3.94. The reason we do not agree entirely with the CAA is that where such mechanisms are used, there must be a clearly defined rationale for their exclusion from the general incentive for efficiency; it is easy to portray a cost as outside one's control, but the reality is likely to be more complex, and may involve choices made by the business to become more exposed to, or not to restructure to reduce or remove exposure to that particular liability due to other incentives that may be present
- 3.95. The CAA suggest that the "strength of any pass-through or similar mechanism should depend on the extent to which HAL should be able to exercise at least some control over the relevant revenue or cost"⁷⁹, but this is inconsistent with its subsequent statement that Heathrow could "take action to mitigate the impact of any potential change"⁸⁰; it is this complexity that is hard to ascertain as an outsider to the business, and why removing an efficiency incentive could be suboptimal
- 3.96. It is for this reason that the CAA must be abundantly clear that the incentive would be undermined by the continued inclusion of such a cost in its price control in order to justify the exclusion of any particular cost; any business faces numerous costs that are not directly within our control, such as business rates, but the business can

⁷⁷ CAP2265B Section 1: Overall approach and building blocks, para 1.29

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

be structured to reduce charges, for example by more efficiently using commercial spaces to avoid excessive business rates exposure

- 3.97. The removal of the incentive for efficiency by making a charge pass-through could therefore be an error as it would significantly undermine the integrity of the price control should Heathrow not be incentivised to be as efficient as possible; it is for this reason that we disagree with the CAA that there should be an “expanded S-factor, which in H7 will cover changes in health and safety requirements as well as security requirements”⁸¹
- 3.98. There is no clarity over what “an expansion of the current ‘S factor’ in the price control formula (which allows a partial pass-through of costs resulting from changes to security standards) to cover costs arising from changes to health and safety standards”⁸² might actually be limited to; every business has to face health and safety standards, and it would be an error for the CAA to consent to this amendment without considering the serious incentive issues that could result
- 3.99. Our previous experience of the transition of Hold Baggage Screening to the responsibility of Heathrow from airlines – albeit through a separate mechanisms – has been a wholesale inflation of costs as Heathrow was able to pass through costs in full; as a result, there has been no incentive to control costs, with wage inflation spiralling and activities redefined to qualify as pass-through costs
- 3.100. There is therefore demonstrable evidence of the way in which Heathrow is likely to respond to such an incentive, particularly one that if poorly defined, could lead to capture of much routine maintenance activity in a highly regulated airport environment; we therefore believe it would be a serious error for the CAA to allow the S-Factor mechanism to be developed in the manner proposed
- 3.101. In addition, we query how the current S-Factor has been scrutinised by the CAA at this periodic review; whilst we agree with the CAA that a dead band would be appropriate in order to retain some form of incentive, which itself should also be increased by inflation, it is not clear what the baseline security costs are to which it refers, whether health and safety costs relate to changes in legislation, guidance or simply what Heathrow specifies relates to health and safety expenditure
- 3.102. Should the existing S-Factor apply to staff security costs, we note these have decreased significantly during 2020 restructuring, yet 90% of those savings have not been passed through to airlines as it seems should have been the case as suggested in Q6 final proposals⁸³; in the absence of Heathrow providing detailed information of its operating expenses at this periodic review, it is not clear at all what costs the S-Factor in the CAA’s Initial Proposals refers to

⁸¹ CAP2265B Section 1: Overall approach and building blocks, para 1.41

⁸² CAP2265B Section 1: Overall approach and building blocks, para 1.15

⁸³ CAP1103, Section 2: Form of regulation, para 2.41

- 3.103. We note Heathrow's proposals for other uncertainty mechanisms, many of which appear to be attempts to create cost pass-through mechanisms to escape incentive regulation over its entire cost base, and agree with the CAA in its rejection of these additional pass-through cost proposals
- 3.104. Nevertheless, we note the CAA's position that "work on the development of a revised regulatory framework should resume if there were to be a sufficiently strong likelihood of progress on expansion resuming"⁸⁴; given the absence of either any work on Expansion, or any prospect of a resumption of such work that would meet the 2030 deadline for delivery of Expansion under the ANPS, we take this as further evidence of Heathrow's unilateral withdrawal from the project

Conclusion

- 3.105. The starting point for regulation is to ask what problems regulation is trying to solve for, and ensure as a result that the incentive properties of the price control are clearly and consistently developed across its constituent parts; it is clear to us that the ultimate aim of economic regulation is to mimic a competitive market, yet the CAA's Initial Proposals appear to protect Heathrow's monopoly power with inadequate incentives, which in the case of the RAB are out of control
- 3.106. In particular, the CAA must ask itself what the purpose of its TRS is and what problem it is trying to solve; it is clear that such a mechanism would significantly reduce Heathrow's risk exposure, therefore the incentives related to its design become more important in order to ensure efficient outcomes are incentivised in operating expenditure and commercial revenues, which are instead undermined by the CAA's proposal to remove all Heathrow's risk exposure outside a central band
- 3.107. As a result, we propose an alternative approach to the TRS, eliminating fraught discussions over forecasts that will always turn out to be incorrect, and focusing on the invested capacity of the airfield reflected in the existing infrastructure; this is underpinned by CTA's analysis of operating expenditure and commercial revenues, whilst ensuring Heathrow is subject to consistent incentives at any out-turn volume
- 3.108. Finally, we agree with the CAA that there should be no automatic re-opener mechanisms included within the licence, and that Heathrow's proposals would undermine regulatory judgement; we also challenge the assumptions that support the extension of the S-Factor to health and safety costs, which lack clear definition and undermine Heathrow's efficient incentives as a result

4. Passenger forecasts (CAP2265 Chapter 2)

- 4.1. As noted by the CAA, the "number of passengers using Heathrow airport is vital to the overall economics of the airport and to driving the appropriate levels of

⁸⁴ CAP2265B Section 1: Overall approach and building blocks, para 1.31

operating and capital costs necessary for the effective provision of airport operating services by Heathrow”⁸⁵

- 4.2. Furthermore, it is important to note that Heathrow’s passenger forecasts have significantly outperformed assumptions made at its Q6 periodic review, landing above the CAA’s forecasts by 5.2%⁸⁶ but crucially outperforming Heathrow’s own forecasts submitted at the Q6 periodic review by an even greater degree
- 4.3. Nevertheless, as we set out below, the CAA has made fundamental errors in its assessment of passenger volumes, and this will lead to an inefficient determination of operating expenditure and commercial revenues as a result; this is particularly the case when combined with the CAA’s proposed TRS mechanism, which is intrinsically tied to passenger volume forecasts, yet is incorrectly calibrated to ensure efficient outcomes at all out-turn passenger volumes
- 4.4. Whilst it is important to understand the effect of the pandemic on passenger volumes, this must be considered as the extraordinary impact of government policies, which were not internationally coordinated and that ultimately constrained underlying demand; it would be irrational to suggest the same impact would occur in future in response to different diseases whose vector, transmissibility and mortality may be entirely different
- 4.5. This is particularly important, where the effect of depressing volumes in this price control would be to over-reward Heathrow’s investors for a risk they are not prepared to hold, as demonstrated by its RAB adjustment request in 2020; given there is no formal regulatory mechanism to ensure funds remain available within the regulated company, over-rewarding investors by depressing volumes is fundamentally an irrational approach to forecasting passenger volumes

Transparency of modelling

- 4.6. In our response to the CAA’s CAP2139 consultation⁸⁷, we set out a key concern over CAA’s reliance upon Heathrow’s passenger modelling – albeit with modifications – to form a core part of the price control; these concerns are heightened following Heathrow’s RBP update, which does not reflect recent market developments
- 4.7. As noted by the CAA, its CAP2139 consultation set expectations that “HAL’s forecasts should evolve in response to new information on the likely course of the recovery”⁸⁸; this was written in April 2021, yet the core modelling for the CAA’s H7 Initial Proposals are based upon dated economic forecasts from April 2021⁸⁹ that have not themselves been updated to reflect recent events

⁸⁵ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.1](#)

⁸⁶ Ibid. para 2.5

⁸⁷ [British Airways response to CAP2139, para 5.11](#)

⁸⁸ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.9](#)

⁸⁹ As noted in [Heathrow Revised Business Plan – update 1, June 2021, p81](#)

- 4.8. This is contradictory, and the CAA has restricted its room for manoeuvre through lacking the facility to independently produce forecasts for Heathrow; we recognise that the CAA has applied adjustments to Heathrow's models and requested changes be made on its behalf⁹⁰, yet this fundamentally does not permit transparency over forecasting, which remains under the control of Heathrow, the company that is the subject of independent regulation
- 4.9. We remain in the position that Heathrow continues to refuse access to its models despite the requests of the airline community, therefore we are not in a position to assess the veracity of Heathrow's modelling methodology and remain wholly reliant on the CAA's assessment of their suitability; this behaviour is inconsistent with the principles set out in section 1(4) of CAA12, which recognises that regulated activities should be carried out in a way that is transparent
- 4.10. We note the CAA's comment that "the use of these models to create scenarios involves a number of difficult judgements"⁹¹, and whilst we note that Steer have reviewed the H7 models building on the Q6 methodology⁹², those consultants were employed by Heathrow directly, rather than in a role to provide independent assurance over the modelling suite
- 4.11. Fundamentally, Heathrow's modelling has been built to support advocacy for its position at this H7 periodic review; since the independence of such a key parameter is critical for the price control, we still question whether this approach is appropriate, particularly where changes result in such material variances

Issues with Heathrow's modelling

- 4.12. Nevertheless, the CAA has made a number of adjustments to Heathrow's forecasting approach that attempt to remove inappropriate interventions by Heathrow that serve to depress the forecast; we agree with the CAA that these adjustments must be made to Heathrow's forecasting approach, but without being able to see the model, cannot conclude whether more are required
- 4.13. In particular, we are not clear how exactly the CAA has calculated its uplift to Heathrow's figures; whether this is by using Heathrow's models itself or separately calculating an adjustment, the CAA's proposals lack transparency as we cannot validate its adjustments in any meaningful way
- 4.14. A good example of this is the asymmetric distribution adjustment; being embedded within Heathrow's model, we cannot observe what has been done within the Monte Carlo ("MC") modelling to cause this asymmetry, which has the effect of causing Heathrow's median that informs the P50 variable to diverge from the mode of the distribution; are there any further modelling techniques that have material effect

⁹⁰ As noted in [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.10](#)

⁹¹ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.23](#)

⁹² As noted in footnote to [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.23](#)

that are not directly observable, for example where in relation to market share constraints, "HAL typically applies manual adjustments to Heathrow passengers, ATMs or seats per ATM, that feed into the SM to ensure that they do"⁹³

- 4.15. Aside from other limitations of MC analysis noted by Skylark⁹⁴, this particular adjustment appears to result from Heathrow's application of scenarios, which themselves have been assigned arbitrary weightings⁹⁵ but whose "number of outputs selected from each scenario is chosen to match the scenarios weighting"⁹⁶
- 4.16. This leads to a result, where Skylark recommend that "the CAA should consider whether the lower scenarios are weighted appropriately"⁹⁷, noting that "the CAA is reliant on HAL's outputs from the MC analysis, which is then subject to an amendment to remove the bias introduced by the use of asymmetric variable distributions"⁹⁸; however no proper analysis has been undertaken to ensure there are no other biases within Heathrow's modelling
- 4.17. Despite the assessment from Skylark on the combining and weighting of reference scenarios – the CAA "have not made changes to this approach and have applied it in the same way as HAL"⁹⁹, despite its influence on the final P-values; this does not support a "fair bet" as Heathrow claim, but calls into question the appropriateness of the assessment and decision not to make changes, and undermines incentives by ensuring regulation guarantees easy returns
- 4.18. This is fundamentally in error, since we are clear that such an approach skews forecasts to the downside, and provides further evidence that the CAA's approach has not robustly removed all such effects to develop these Initial Proposals; to continue this approach would be irrational as a result of the evidence that this approach is not robust, a point we highlighted in response to Heathrow during Constructive Engagement in 2020
- 4.19. We also remain opposed to the use of a shock factor in modelling for passenger forecasts; we consider that this is an error as it double counts risk incorporated within the asset beta of the WACC, and maintain our position that this should be removed along with the new asymmetric risk allowance; with pandemic risks removed through a TRS, a new allowance for asymmetric risk and the shock factor, it is an error for Heathrow not to have a WACC comparable to regulated utilities
- 4.20. Furthermore, since the passenger volume forecast is linked to the other building blocks that form the incentive, the operating expenditure and commercial revenue

⁹³ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.36](#)

⁹⁴ Skylark note Monte Carlo's "value in the regulatory settlement is questionable as risk elements are considered outside of the passenger forecast" per [CAP2266D: CAA H7 Forecast Review: Final Report, October 2021, p28](#)

⁹⁵ For detailed objection, see Airline Community response to Heathrow's Revised Business Plan

⁹⁶ [CAP2266D: CAA H7 Forecast Review: Final Report, October 2021](#)

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.43](#)

environment will be affected by setting the forecasts at a level inconsistent with the likely demand environment; the effects across the price control must be considered, since shocking the forecasts otherwise adds significant incentive complications and fundamental errors

- 4.21. The CAA's advisors highlight further multiple issues with Heathrow's modelling, such as the use of a decay function overlay model; those advisors comment that "the appropriateness of this as an overlay model adjustment is questionable"¹⁰⁰, noting as we later highlight that the actual out-turn traffic data matches a different recovery scenario than has been selected by Heathrow

Heathrow and CAA passenger forecasts

- 4.22. As a result, the CAA is in error to state that "HAL's broad approach to forecasting appeared reasonable"¹⁰¹, and it would be irrational based upon the evidence set out above for the CAA to "base our approach around HAL's suite of forecasting models"¹⁰²; the CAA's approach is irrational since applying adjustments to Heathrow's models or requesting Heathrow to make changes does not get to the heart of the issue that Heathrow's modelling contains inherent bias, when such modelling is developed by the regulated company itself
- 4.23. The CAA states that "we consider that HAL's forecasting approach allows the impact of the covid-19 pandemic on passenger numbers to be reflected in a consistent and transparent way"¹⁰³, but the CAA does not set out any evidence to demonstrate that this is the case; this is in error since we contend that Heathrow's approach has not been transparent, particularly since:
- Significant new mechanisms have been introduced to account for the pandemic and resulting government restrictions
 - Significant alterations are understood to have been made since Q6 in response to developments since the last periodic review
 - The model was new at the last periodic review, and has demonstrably underperformed compared to out-turn volumes before the pandemic
 - It is unclear what consistency the CAA are trying to achieve when significant changes have been made to the model anyway
- 4.24. Risk and incentives are at the heart of the price control, yet the CAA have not considered how to deal with those risks on a consistent basis in its proposals; the CAA states that "we note HAL's views on the risk of a future pandemic and agree that this should be accounted for in the price control"¹⁰⁴, though the CAA sets out neither a link to the risk exposure that Heathrow is exposed to as a result of the

¹⁰⁰ [Ibid.](#)

¹⁰¹ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.9](#)

¹⁰² [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.10](#)

¹⁰³ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.14](#)

¹⁰⁴ [Ibid.](#)

proposed TRS, nor any assessment of what it is trying to incentivise across the price control through other building blocks linked to passenger volume forecasts

- 4.25. As a result, this leads the CAA to irrational conclusions on where to account for the risk of a pandemic, the application of a shock factor in relation to other risks, and the measurement of the resulting risk in the cost of capital; as previously noted, asymmetries are valid outcomes where they incentivise the development of infrastructure to meet demand
- 4.26. This is particularly important since the CAA include a muddled explanation that “we consider that it is valid to account for non-pandemic downside asymmetric shocks in the demand forecast and we note that the way we estimate the WACC in Chapter 9 takes account only of systematic risk and not downside asymmetric risks”¹⁰⁵; this is a fundamental error since the cost of capital should incorporate measurement of all and every risk to which Heathrow is exposed
- 4.27. Despite the significant limitations noted in the Skylark report and in our response to previous CAA consultations, the CAA continued to judge in error that “we consider that HAL’s suite of models represents a reasonable approach to modelling in the difficult and uncertain circumstances of covid-19”¹⁰⁶; the fact that Heathrow’s model and the CAA’s forecast diverge significantly from external assessment of traffic recovery seem to trouble the CAA, who decide in error that “to use HAL’s models as the basis for our passenger forecast for Initial Proposals”¹⁰⁷

Airline proposed forecast volumes

- 4.28. The Skylark report notes that “as a result, there is an argument that if a Eurocontrol forecast is used as a guide, the year of return levels should therefore be adjusted to 2024 to reflect the more accurate (so far) scenario, bringing it in line with the other updated forecast sources”¹⁰⁸; as a result, we have performed this simple analysis in our adjustments to the PCM below

Table 4.1: Forecast Heathrow traffic profile from Eurocontrol mid-case Europe

m passenger per year	2022	2023	2024	2025	2026	Total
% 2019 (80.88m)	89.0%	96.0%	100%	102%	104%	n/a
Revised mid	72.0	77.7	80.9	82.5	84.1	397.2

- 4.29. The CAA’s business plan guidance to Heathrow set out a requirement for it to take account of “scenarios or forecasts of economic activity, both for the UK economy as a whole and for the economies of the key passenger destinations served by air transport services from Heathrow”¹⁰⁹

¹⁰⁵ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.16](#)

¹⁰⁶ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.23](#)

¹⁰⁷ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.24](#)

¹⁰⁸ [CAP2266D: CAA H7 Forecast Review: Final Report, October 2021](#)

¹⁰⁹ [CAP1940 Economic regulation of Heathrow: policy update and consultation, Table E.1](#)

- 4.30. However, the CAA's assessment of the RBP update revealed only partial compliance with these requirements, stating that "there is a lack of transparency over how HAL demand forecasts are integrated", and "there is no evidence of disaggregation of passenger forecasts into markets where appropriate"¹¹⁰
- 4.31. At a simple comparison level, the CAA's revised passenger forecasts – themselves an update of Heathrow's modelling – show the CAA forecasts are significantly below other forecast recovery profiles in the industry; this is particularly the case at Heathrow, at which traffic has tended to concentrate during the pandemic, and the CAA is further in error to state that its forecasts are "broadly in line with other industry views (ACI and Eurocontrol)"¹¹¹, since those forecasts remains far more optimistic than the CAA
- 4.32. As a result, the CAA's mid case analysis of 338.2m passenger risks being too low for determining an appropriate range for H7 Initial Proposals; as with operating expenditure and commercial revenues, the CAA's forecast needs urgent updating to take account of both independent forecasts of passenger volumes and upgraded economic fundamentals
- 4.33. In our view, the H7 Initial Proposals and 2022 holding cap are significantly elevated as a result of depressed, erroneous passenger forecasts. Any decision taken based on those will be fundamentally flawed. We therefore propose that the CAA's range should be further recalculated to account for the unambiguously more optimistic outlook for 2022 prevailing, based upon evidence available today

Other independent forecasts and recovery profiles

- 4.34. Considering other available forecasts, the CAA's analysis remains more pessimistic than Airports Council International ("ACI") and Eurocontrol forecasts, a fact portrayed in its own consultation¹¹², which compared CAA forecasts to April 2021 ACI and Eurocontrol projections for recovery of passenger numbers; these alternate forecasts themselves have since been updated to incorporate significant new information
- 4.35. Eurocontrol's October 2021 update to its forecasts¹¹³ replaced its May 2021 forecast, using updated traffic trends and economic growth, which incorporated three scenarios for the impact and timing of recovery

Chart 4.2: Eurocontrol 7-year forecast for Europe 2021-2027¹¹⁴

¹¹⁰ [CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria](#)

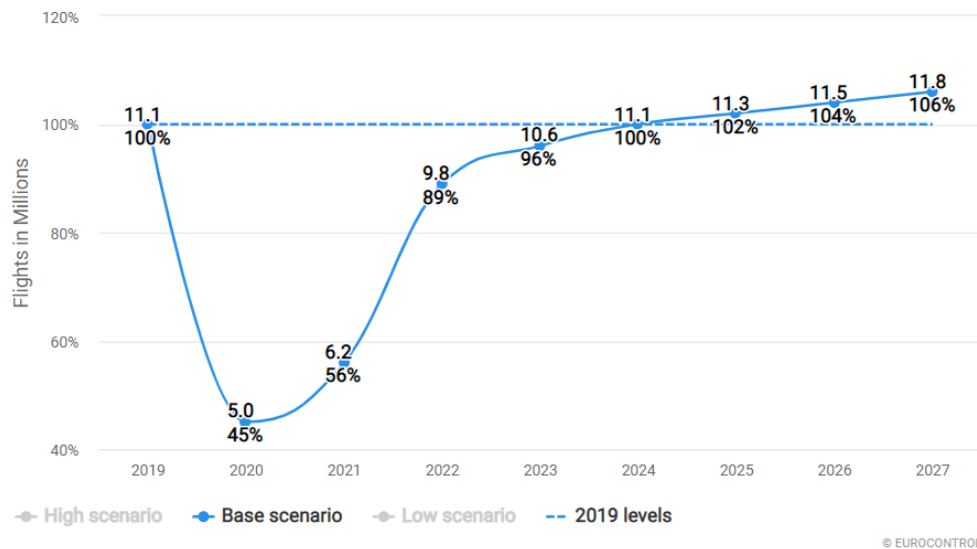
¹¹¹ [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, para 2.47](#)

¹¹² [CAP2265B H7 Initial Proposals: Section 2: Passenger forecasts, figure 2.6](#)

¹¹³ [Eurocontrol forecast update 2021-2027](#)

¹¹⁴ Ibid.

EUROCONTROL 7-year forecast for *Europe 2021-2027
Actual and future IFR movements, % traffic compared to 2019



- 4.36. Eurocontrol set out short-term traffic scenarios at the end of 2021 in the same report¹¹⁵, and supplement this analysis with a comprehensive assessment¹¹⁶ of the pandemic impact on a regular basis; these further demonstrate that actual traffic recovery is tracking near its previously presented Scenario 1
- 4.37. This Scenario 1 forecast a recovery in traffic volumes based upon a vaccine delivered in 2021¹¹⁷; Heathrow has instead selected Scenario 2 (vaccine 2022/recovery 2025) as a guide in its forecasting¹¹⁸, which is fundamentally in error since it is not based upon the out-turn analysis tracked by Eurocontrol

Chart 4.3: Eurocontrol recovery scenarios and 4-year forecast for Europe 2021-2024¹¹⁹

¹¹⁵ Ibid. p9

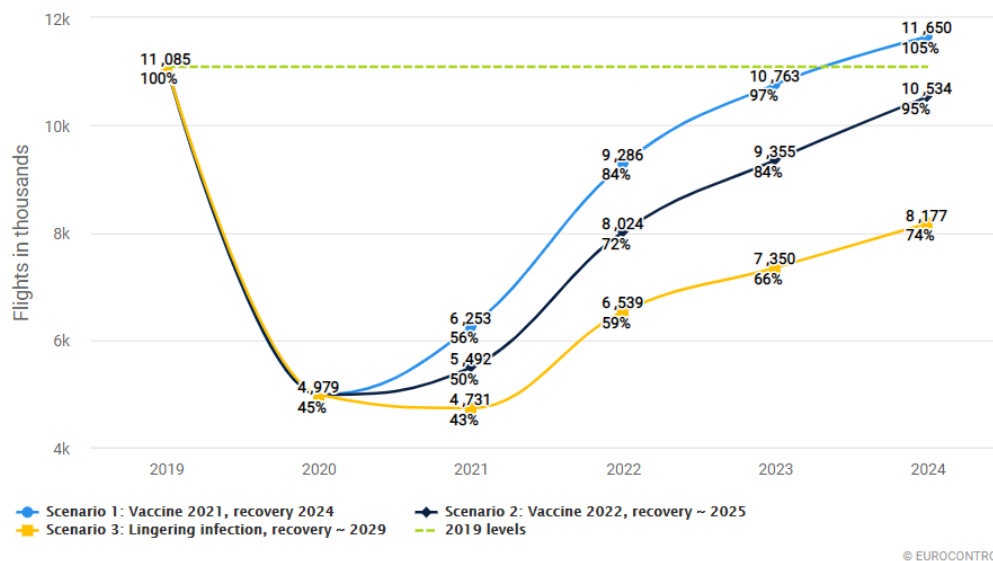
¹¹⁶ [Eurocontrol Covid-19 impact on the European air traffic network](#)

¹¹⁷ [Eurocontrol 7-year forecast 2021-2027 summary presentation, p4](#)

¹¹⁸ [CAP2266D: CAA H7 Forecast Review: Final Report, October 2021, p25](#)

¹¹⁹ [Eurocontrol 4-year forecast 2021-2024](#)

EUROCONTROL STATFOR 4-year forecast for *Europe 2021-2024
Actual and future IFR movements, % traffic compared to 2019



- 4.38. In addition, Eurocontrol's baseline forecast for Gross Domestic Product ("GDP") had been updated in its 7-year forecast using Oxford Economics August 2021 GDP data, an upward revision from its March 2021 forecast, and the same underlying economic data provider as used by Heathrow, which means underlying Heathrow's model needs updating to reflect most recent available information
- 4.39. As a result, the Eurocontrol baseline scenario now forecasts a recovery to 2019 levels by the end of 2023 driven by a reliable vaccine and roll-out that reaches herd immunity levels within Europe¹²⁰; furthermore, the aviation-specific impact has been updated, with key changes being limited travel restrictions, and North Atlantic flows restarting during November 2021, supported by passenger confidence and pent-up demand
- 4.40. Eurocontrol also forecasts that business travel will now return to pre-pandemic levels in 2023, and other global flows will recover over the course of 2022¹²¹; the gloomy 2022 forecasts suggested by Heathrow and the CAA are therefore incompatible with those used across a large portion of the industry
- 4.41. As part of its October forecasts, which then revised its base case to match this Scenario 1, Eurocontrol have continued to track activity against actuals; whilst Omicron had a moderate effect on volumes in December, we believe this likely to be reversed once if government restrictions are subsequently eased based both upon its prevalence and low likelihood of hospitalisation
- 4.42. This demonstrates the importance of taking the latest available information to determine passenger volumes, removing the effect of short-term restrictions that

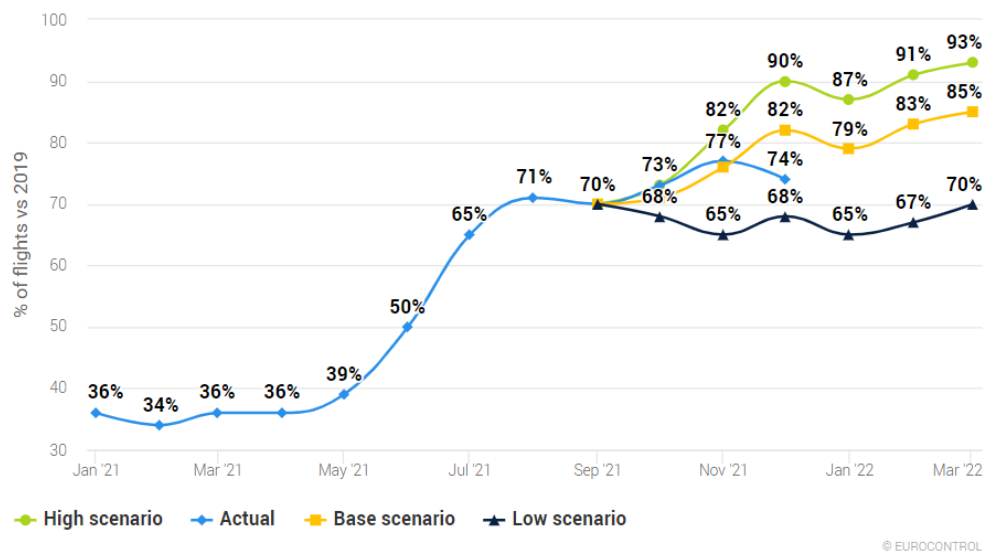
¹²⁰ Ibid. p8

¹²¹ Ibid.

artificially depress market sentiment, and ensuring instead that the real, underlying demand plays a central role in setting the price control

Chart 4.4: Eurocontrol October revised short term traffic scenarios¹²²

EUROCONTROL short-term traffic scenario for *Europe until March 2022
Traffic as a % of 2019

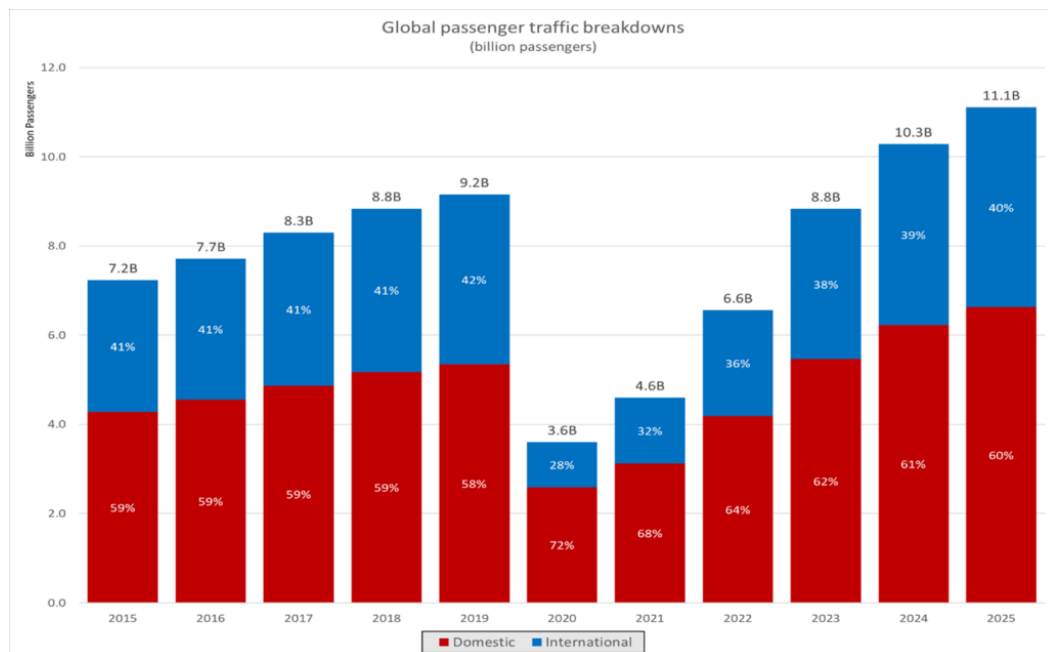


4.43. Even ACI's more dated forecasts – that have had a tendency to under-estimate passenger volumes – demonstrate a global recovery by 2024, significantly in advance of both Heathrow and the CAA's passenger forecasts, and which would be expected to be better at Heathrow due to the inherent strength of demand and concentration of demand at Heathrow

Chart 4.5: ACI medium-term global passenger traffic by type¹²³

¹²² [Eurocontrol 7-year forecast 2021-2027](#)

¹²³ [Airports Council International, Impact of Covid 19 on the airport business, October 2021](#)



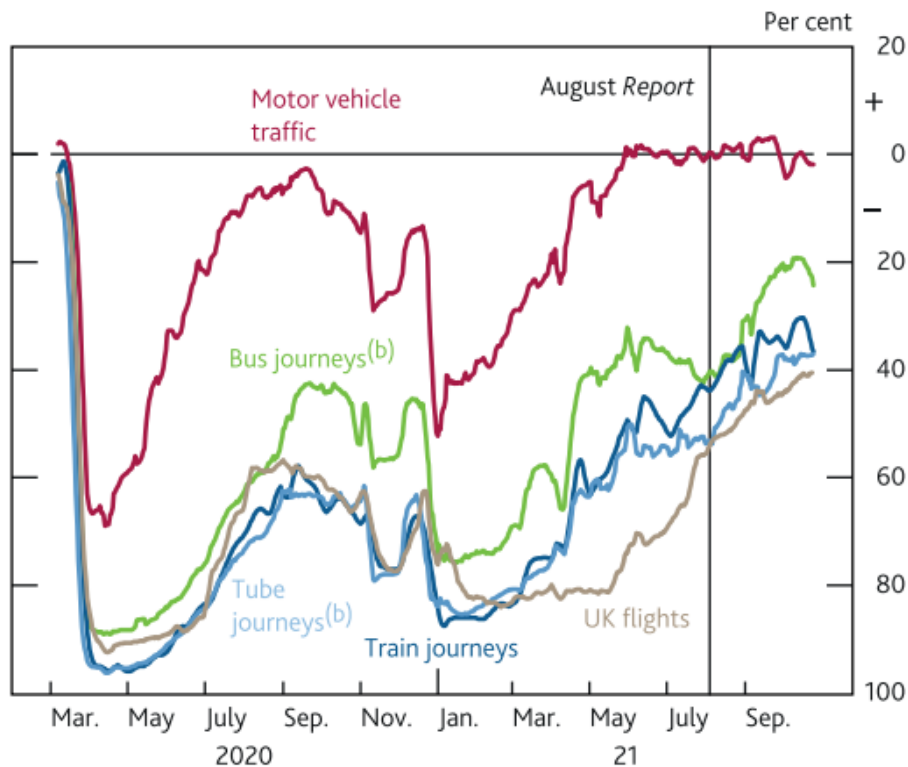
- 4.44. The increased pace of recovery across the economy has been picked up by the Bank of England in its November 2021 Monetary Policy Committee report, in which it states under the heading “some service sectors are still expected to grow strongly”, that “some of these sectors have been relatively slow to recover from the pandemic, so still have considerable scope for growth”¹²⁴
- 4.45. Further, they state under the heading that “the consumer services recovery reflects growing confidence”, that “increasing spending on services also reflects some normalisation of the pattern of demand”¹²⁵

Chart 4.6: Bank of England: Public transport use and flights¹²⁶

¹²⁴ [Bank of England, Monetary Policy Report November 2021, p24](#)

¹²⁵ Ibid. p25

¹²⁶ Ibid. p24



Sources: Department for Transport, Eurocontrol, ONS and Bank calculations.

- (a) Seven-day moving averages to 25 October for Department for Transport data and 24 October for flights data. Data are not seasonally adjusted. All data are shown relative to normal levels.
 (b) The number of tube journeys is based on Transport for London data and the number of bus journeys does not include London buses.

- 4.46. Nevertheless, this is not all recent economic news, and many forecasters identified the likely recovery in 2022 earlier in the year; for example, KPMG's June 2021 forecast for the UK economy stated that "air transport is set for... strong growth in 2022, with output expected to reach 72% of pre-COVID level by the end of next year"¹²⁷
- 4.47. Underpinning much of the current optimism in the aviation sector for 2022 are the updated GDP forecasts, which as we note above use a significantly dated April 2021 input set within the Heathrow model; this needs material upward revision as GDP forecasts of 2022 have improved through the course of 2021, as the CAA was advised by its consultants in their report accompanying this consultation
- 4.48. That report stated "given the variability in forecasts throughout the pandemic, the CAA should request for HAL to provide the most up to date GDP forecasts"¹²⁸; unfortunately, this has not been included in the H7 Initial Proposals, and as a result, the 2022 holding cap is inappropriately elevated in error due to aged data

¹²⁷ [KPMG UK Economic Outlook, p5](#)

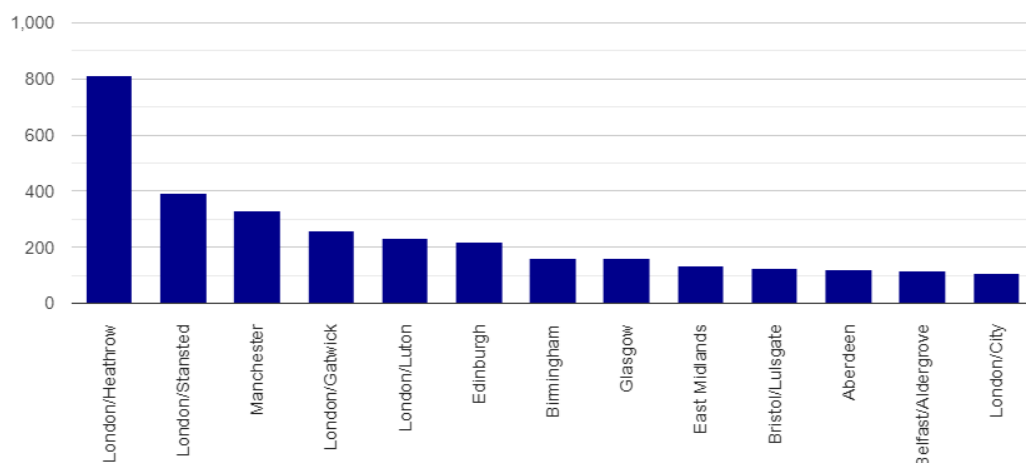
¹²⁸ [CAP2266D: CAA H7 Forecast Review: Final Report, October 2021](#)

- 4.49. This is particularly important as GDP data has been updated over the course of 2021, as the strength of the economic recovery has become apparent and has continued to do so after Oxford Economics' April GDP forecasts were released; to fail to reflect this economic strength would protect Heathrow's investors at the expense of consumers in error, particularly as those investors are protected against inflation through the continued, inappropriate use of RPI as an indexation measure
- 4.50. As the International Monetary Fund noted, "outturns for first quarter global GDP were stronger than anticipated, reflecting continued adaptation of economic activity to the pandemic"¹²⁹, and beyond 2022, "advanced economy output is forecast to exceed pre-pandemic medium-term projections"¹³⁰; given this positive economic sentiment, it would be irrational for the CAA not to incorporate this in the baseline economic information to determine passenger volume forecasts

Demand for air travel

- 4.51. This emerging recovery is reflected in traffic across the UK, and is concentrated at Heathrow; Eurocontrol's traffic data is an important reference point for the pace and shape of the recovery, which supports its use as the basis of an alternative and credible forecast, particularly as it is used by the CAA for NATS En-route plc
- 4.52. Heathrow continues to dominate UK traffic rankings, and is now rapidly rising up the rankings of European airports as government restrictions have eased; the recovery continues to show enduring strength as the US travel markets have re-opened and passenger traffic returns to key markets served by airlines from Heathrow

Chart 4.7: UK airport flights breakdown: Monday 15th November 2021¹³¹

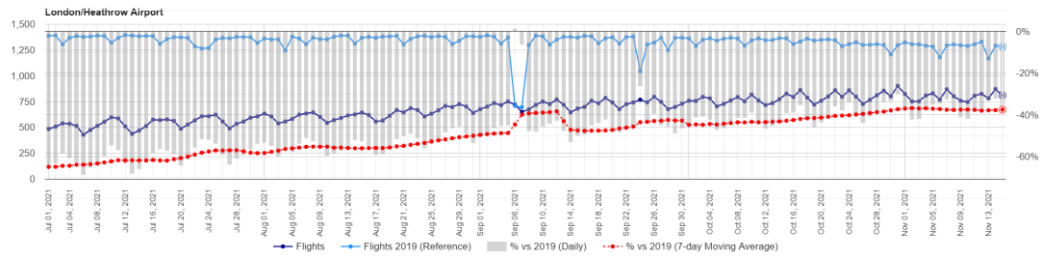


¹²⁹ [IMF World Economic Outlook, October 2021, p1](#)

¹³⁰ Ibid. p xv

¹³¹ [Eurocontrol UK daily airport traffic dashboard, accessed Tuesday 16th November 2021](#)

Chart 4.8: Heathrow flights: Jul 2021 to date vs 2019¹³²



4.53. ✂

4.54. ✂

Chart 4.9: ✂¹³³

✂

4.55. This short-term strength is supported by the capacity that is already on sale for this winter season, driving Heathrow's rapidly improving performance, before even considering airline plans for Summer 2022 that are reflected in our next section

Chart 4.10: ✂¹³⁴

✂

4.56. ✂

Chart 4.11: ✂¹³⁵

✂

4.57. ✂

4.58. ✂

Chart 4.12: ✂¹³⁶

✂

¹³² [Eurocontrol Heathrow traffic dashboard, accessed Tuesday 16th November 2021](#)

¹³³ ✂

¹³⁴ ✂

¹³⁵ ✂

¹³⁶ ✂

- 4.59. This market re-opening reality is in direct contradiction to the portrayal of market re-opening that is set out in Heathrow's RBP update and previous business plans; as such, the CAA should disregard Heathrow's position in relation to constraints on passenger volumes in 2022, as this is clearly not the emerging reality
- 4.60. This is significant as contrary to Heathrow's projections of decline, the World Travel and Tourism Council in association with Oxford Economics has noted that the travel and tourism sector is "on track to exceed pre-pandemic levels in 2022"¹³⁷; this position is asserted by numerous airlines and tour operators who delivery passenger volumes through airports, and whose views would be an error to ignore
- 4.61. Furthermore, in the US, "the outlook is even more rosy for 2022, with the travel sector in the U.S. expected to grow by another 28.4%, reaching nearly \$2 trillion of the U.S. economy for a contribution exceeding pre-pandemic levels"¹³⁸, and "the U.S. opening its borders and easing restrictions to major source markets such as the UK and the EU will provide a massive boost to economies on both sides of the Atlantic"¹³⁹

Airport slots and airline plans

- 4.62. Heathrow and CAA forecasts are fundamentally in error as they are incompatible with the slot rules in place at Level 3 slot-controlled airports; in normal times, these require airlines to operate slots 80% of the time during the period allocated in the previous equivalent season in order to maintain traffic rights
- 4.63. This results in historical precedence as determined by the coordinator, who allocates historic slots at Level 3 slot-controlled airports, and those slots confer the right to operate on a specific date and time for the season; the slot planning calendar is relatively rigid as a result of global coordination that is required to ensure that allocation is consistent, and that airports and airlines can plan at both ends of their proposed routes
- 4.64. The various deadlines built into the process of slot coordination in and around the IATA slot conference – which took place in Rome 16th to 20th November for Summer 2022 – mean that the CAA should have good visibility over airlines' planned operations; we can continue to provide the CAA with relevant information regarding our plans and reiterate that it would be an error for the CAA to ignore what airlines are planning, since it is our business that delivers the passenger volumes through Heathrow
- 4.65. Alleviations of the rules to maintain historic precedence were previously in force during the pandemic, when airlines were unable to fly due to government restrictions; however, these are being restored into Summer 2022, and

¹³⁷ [WTTC Travel Recovery Survey Summary, 12th November 2021](#)

¹³⁸ Ibid.

¹³⁹ Ibid.

indeed airports have been lobbying for its return to support airline recovery¹⁴⁰, Heathrow does not support their further alleviation and this position is in direct contradiction to Heathrow's and the CAA's H7 passenger forecasts as a result

- 4.66. At such low levels of passenger volumes suggested by the CAA and Heathrow, far greater alleviations would need to be in place in order to avoid significant airline failures; as a result, the CAA's forecasts are fundamentally in error, since they are incompatible with the slot regime emerging for Summer 2022 in particular, and in the early years of H7 in general
- 4.67. Airlines have submitted plans for Summer 2022 to the ACL, the coordinator of slots at Heathrow, and these suggest a significant programme of flying has been planned, which supports demand for 299,659 movements in that season alone; the CAA should note that airlines are planning to use larger aircraft – 219 seats on average – and total seat capacity of 65.5m has been specified for Summer 2022 season network plans

Chart 4.13: Heathrow Summer 2022 Initial Coordination Report¹⁴¹



- 4.68. In addition, Heathrow are communicating a forecast of load factors between 80% and 93% through this ACL process, which implies significant passenger traffic through Heathrow now slots are more fully utilised¹⁴²; this is in direct contradiction to its position in the H7 periodic review, and suggests an extremely busy summer is actually being anticipated by Heathrow

¹⁴⁰ [Business Traveller, "Coalition calls for restoration of 'use it or lose it' airport slot rules", 10th November 2021](#)

¹⁴¹ [ACL: Heathrow Initial Coordination Report, Summer 2022](#)

¹⁴² [Heathrow: Summer 2022 declaration appendices, p6](#)

Chart 4.14: Heathrow Summer 2022 declaration appendices¹⁴³

Load Factors Summer 22										
S22 Declared	T2 Domestic	T2 CTA & International	T2 Combined	T3 International		T4 International		T5 Domestic	T5 International (& Domestic Departure)	
Day of Week	A	A	D	A	D	A	D	A	A	D
1	89%	88%	89%	87%	91%	90%	90%	87%	87%	86%
2	83%	85%	87%	85%	90%	90%	88%	83%	86%	83%
3	80%	85%	87%	83%	91%	86%	88%	82%	86%	83%
4	81%	86%	91%	86%	89%	89%	90%	80%	87%	85%
5	85%	87%	90%	90%	92%	89%	90%	83%	89%	88%
6	86%	90%	92%	90%	93%	91%	90%	87%	90%	89%
7	89%	91%	91%	90%	92%	90%	89%	85%	89%	88%

- 4.69. Recent airline announcements reinforce the intent to fly significantly more capacity in 2022, with our parent company IAG confirming a significant recovery has been underway since the summer, with plans to operate 100% of BA pre-pandemic capacity on the North Atlantic by Q3 2022¹⁴⁴, and restoring 90% of BA operations by Q3 2022¹⁴⁵; the same presentation further demonstrates the strength of our forward bookings following the US reopening announcement
- 4.70. Additionally, Virgin Atlantic have announced plans to grow in 2022¹⁴⁶ and other large-scale operators into Heathrow are reporting similar patterns; in its recent Q3 report¹⁴⁷, Lufthansa has announced new bookings reaching 80% of 2019 with a particularly strong demand on business travel, echoed by United highlighting London as its most booked international destination for business, alongside wider announcements of increased operations and a new route into Heathrow¹⁴⁸
- 4.71. Air Canada and Delta similarly have commented on a faster-than-expected rebound is driving optimistic expectations for 2022¹⁴⁹ with plans to operate 90% of its 2019 transatlantic capacity¹⁵⁰ and we note the likes of Emirates¹⁵¹ and Qantas¹⁵² have pulled forward operating plans. Furthermore, we continue to see airlines take opportunities to operate into Heathrow next year, Bamboo airlines' recent announcement¹⁵³ being an example of such.

¹⁴³ [Heathrow: Summer 2022 declaration appendices, p6](#)

¹⁴⁴ [IAG Q3 2021 Results Presentation](#)

¹⁴⁵ Ibid.

¹⁴⁶ [Shai Weis, Virgin Atlantic CEO, 11th November 2021](#)

¹⁴⁷ [Lufthansa Group Q3 2021 Financial Results](#)

¹⁴⁸ [Simple Flying, United Airlines Growing London-Heathrow With New Boston Link, 28th October 2021](#)

¹⁴⁹ [Air Canada Q3 2021 Financial Results](#)

¹⁵⁰ [Business Insider, Delta is resuming 12 more international routes as the US opens to vaccinated travellers, 13th November 2021](#)

¹⁵¹ [Emirates to recruit 6,000 operational staff over next six months to support accelerated recovery, 25th October 2021](#)

¹⁵² [Travel Weekly, Qantas brings forward international flights relaunch, 15th October 2021](#)

¹⁵³ [Travel Weekly, Bamboo Airways confirms Vietnam-London flights, 3rd November 2021](#)

- 4.72. This demonstrates that traffic is returning to Heathrow in advance of other airports, and that transatlantic routes are even more focussed on hubs during the recovery from the pandemic in advance of other airports, driving the return of substantial A380 operations at Heathrow

Conclusion

- 4.73. Passenger forecasts are vital to the overall economics of the airport and to driving the appropriate levels of operating expenditure and commercial revenues necessary for and effective incentive for provision of services by Heathrow; it is therefore of critical importance that passenger forecasts are developed in a robust manner that is consistent with the incentives across the price control
- 4.74. Unfortunately, the CAA's assessment of Heathrow's forecast passenger volumes and the CAA's adjustments to it are fundamentally flawed and based on numerous, significant errors; both the CAA and Heathrow forecasts rely on inaccurate and unreliable methodologies and fail to take into account all relevant information, evidence and materials presented by the airline community throughout this consultation process, compounded by a lack of modelling transparency
- 4.75. This is particularly relevant when considering independent forecasts of traffic recovery and airline plans for restoration of their networks in 2022, which are supported by information on forward held bookings that we have shared with the CAA, and the slot rules that will be in place from this summer 2022 and throughout the remainder of the H7 price control
- 4.76. The CAA must revisit its assessment of forecast passenger volumes over the H7 period, taking into account all of the evidence before it; failure to do so will mean that any decisions taken on the operating costs and commercial revenues for the H7 regulatory period will be based on an error of fact

5. Capital expenditure (CAP2265 Chapter 3)

- 5.1. Capital expenditure is a core building block of the price control; since the RAB must represent efficient capital expenditure that has been incurred to be charged to future consumers, the capital plan itself can only represent expenditure that is both required for the airport's maintenance and development, and is an efficient estimate of what will be required to achieve the vision for the airport over the course of H7
- 5.2. Unfortunately, Heathrow's plans for capital expenditure do not stem from any clear vision of airport development over the course of H7, and instead represent a maximum possible expenditure to ensure the forecast RAB is elevated, whilst providing inadequate detail to allow capital efficiency incentives to be determined
- 5.3. It is important to note that there is no requirement for any significant capital expenditure over the course of this price control, and we have not identified any

particular major programme of works (for example, new terminals) that need to be undertaken; this is why the capital budget for this price control must be more constrained than in the past to reflect the focus on maintaining current assets and delivering safety, security and compliance

- 5.4. As a result, airline proposals for a lower capital plan that is focussed around these priorities are not a result of airlines attempting to excessively constrain the capital budget to artificially drive down the airport charge, but a reflection of what is truly necessary following the end of significant building programmes from Q4 to Q6; we are disappointed that Heathrow has been unable to justify the rationale for its increased capital programme, which exposes the lack of any robust Plan B for airport development should Expansion have stopped
- 5.5. Nevertheless, we should ensure there is facility to increase the capital programme should the post-pandemic recovery profile result in a significantly different vision emerging, or new opportunities and requirements arising during the course of H7; this does not mean that poorly-defined capex allowances should be incorporated into the price control at this periodic review, but that the CAA needs to ensure we have a mechanism that accommodates a different profile of expenditure should it be required
- 5.6. We note that such a mechanism appears to have been considered in the capital efficiency incentives, and we therefore urge the CAA to ensure this is fully developed and will operate as advertised should it be required

Transparency and procurement

- 5.7. We understand that HAL are revising their procurement strategy for H7 and look forward to the opportunity to provide feedback and engage in its implementation; it is essential that the procurement process builds confidence with airlines and the CAA that Heathrow has sought the best value for money options available, and offer sufficient opportunity for challenge and scrutiny where required
- 5.8. Similar to developments at other regulated companies such as Thames Tideway Tunnel, the CAA should consider a path to ensuring that the capital programme can be provided on a more competitive basis; this would ensure that the capital programme represents a more efficient level of expenditure, whilst driving out unnecessary expenditure
- 5.9. Even if bidding is internal, this must be fully transparent to ensure that consumers are achieving best value for money and prevent a clear conflict of interest; it is particularly important that measures are introduced that prevent related parties from advantageous bidding for projects, especially given the size and scale of related party transactions since 2006 amounting to £1.984bn to one particular owner of Heathrow¹⁵⁴

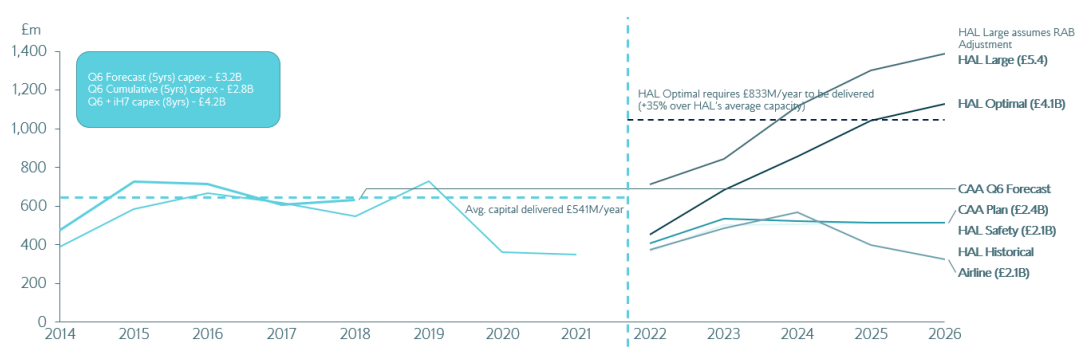
¹⁵⁴ [FGP TopCo Ltd, Annual Report and Accounts 2006-2020, Note 33, Related Party Transactions](#)

- 5.10. There is no reason for capital not to be more transparent, particularly since Heathrow is a monopoly, and consumers should be assured that they are receiving the best value for money from suppliers; given the issues we observe around Heathrow, it would be irrational for the CAA not to act and ensure transparency requirements are in line with those of other regulators
- 5.11. In particular, it is clear that devolved regulation has broken down, and we welcome the CAA's greater involvement through the introduction of capital efficiency incentives; we are keen to ensure that we develop an effective and collaborative procurement process, and the CAA must ensure that it fosters such an outcome
- 5.12. As a minimum, we expect greater clarity on quality standards used to support scope of projects, benchmarking of key cost inputs, transparent request for tenders through a public tendering portal, and full transparency of any capital proposals; we can no longer accept misleading, inaccurate or poorly-developed logic to drive capital decisions, and better transparency of procurement is required as a result
- 5.13. It would therefore be useful and in the spirit of transparency for a new oversight group to be established that might ensure better airline and CAA oversight of Heathrow's procurement practices; this Procurement Reference Group would then be able to ensure world class delivery of capital projects
- 5.14. We would like to seek greater understanding of Heathrow's tendering process, to understand both how Delivery Integrators are selected and other potential suppliers chosen; other regulated and non-regulated infrastructure companies regularly post public information on tenders, and we aim to have greater visibility over the process to ensure the selection process drives the best value for money
- 5.15. Furthermore, we would like to understand what information is sent out to suppliers to enable them to tender for projects, and whether that meets industry standards to drive optimal costing at each relevant stage of the process to be developed given the risk management in place and contract structure used
- 5.16. We would also value the right to audit a certain number of projects each year across capex categories or programmes to ensure best practice standards have been used, for example that benchmarking has been effective and risk management has been appropriate for that category; in addition, it would be useful for airlines to be able to embed specialists within project teams to ensure optimal outcomes result, in keeping with best practice at other global airports
- 5.17. Finally, we would like to better understand Heathrow's specifications for contracts to ensure that they remain in keeping with industry standards, and are not over or under specified, resulting in out turn costs that are not consistent with the risk management approach in use; we support Heathrow contracting work in ways that is packaged to exploit synergies, improve efficiency and reduce costs, but need to understand how this is best achieved in future

Baseline size of capital programme

- 5.18. We agree with the CAA's approach to setting a baseline for capital expenditure; we further agree that this needs to be efficient, and that "capex estimates for H7 that are properly evidenced and justified, support the safe and secure operation of the airport and support our assessment of the financeability of the price control"¹⁵⁵
- 5.19. We also agree that this approach needs to be consistent with that used to develop capital efficiency incentives, along with providing flexibility for changing circumstances¹⁵⁶; it is not appropriate that it should incorporate poorly-evidenced capital allowances that might inappropriately elevate the airport charge and result in charges that are inefficient
- 5.20. We agree that the Q6 capital programme of £3.2bn delivered a number of significant enhancements to Heathrow's assets, including some early Expansion costs; as a result, we cross-check Heathrow's capital requirements against those

Figure 5.1: Heathrow Q6 and H7 capital programmes



- 5.21. This shows that Heathrow's proposed H7 capital plan would amount to expenditure of £833m per year, far outstripping its past performance in Q6 and extension periods that averaged £541m per year; it is unrealistic that such amounts could be spent without any major programmes of work required in the post pandemic recovery period
- 5.22. As a result, this fails a simple gross error check against reasonable expectations of the size of the capital programme; we therefore support the CAA's approach to "ensure that credible independent estimates of efficient spending could be developed"¹⁵⁷ in preparation for these Initial Proposals
- 5.23. Furthermore, we welcome the CAA's agreement with our views that "the H7 capital plan should be based on clearly articulated strategies, solutions and requirements, evidenced by clear cost benefit analysis consistent with good practice"¹⁵⁸ and that "the "one pager" summaries provided by HAL, including the summaries submitted

¹⁵⁵ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.3

¹⁵⁶ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.4

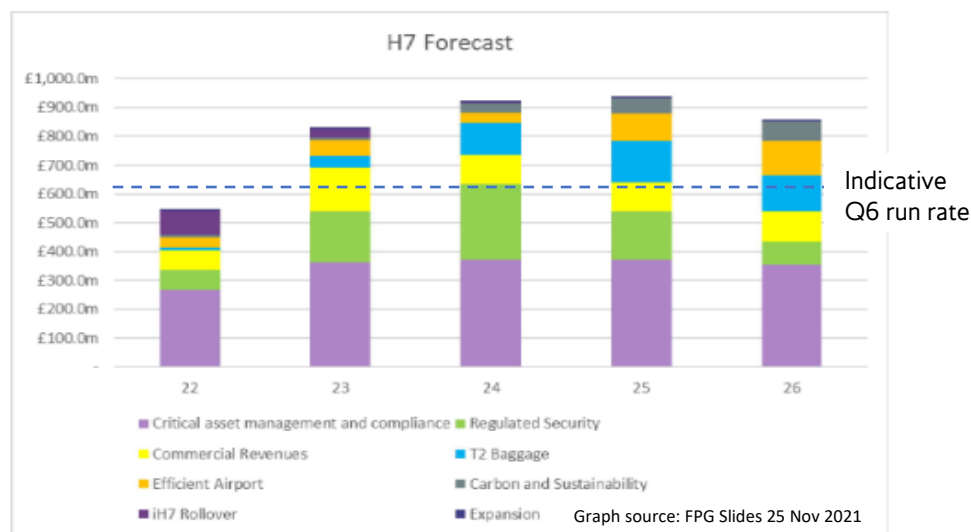
¹⁵⁷ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.13

¹⁵⁸ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.23

as part of its updated plan, are simply inadequate for the purposes of justifying a capital plan of over £4 billion over H7"¹⁵⁹

- 5.24. We note that Heathrow has brought further iterations of its capital plan to airline governance meetings over the past month; these still indicate a capital plan that is significantly at odds with Heathrow's demonstrated ability to deliver, and remain unrealistic as a result

Figure 5.2: Heathrow capital plan, FPG forum 25th November 2021



- 5.25. We will continue to work with Heathrow through the deep dive sessions that have been scheduled for January to understand the detail of their RBP Update 2 proposals; we will be able to provide the CAA with further feedback on the RBP Update 2 capital portfolio once these sessions have been held

CAA approach

- 5.26. We support the CAA's approach to developing its Initial Proposals, which has "entailed bottom-up assessment of efficient costs for projects and programmes, primarily through analysing the basis for disaggregated costs by project/programme and appropriate supporting evidence provided by HAL"¹⁶⁰
- 5.27. Nevertheless, due to fact that "the evidence base does not contain sufficient detail on the build-up of costs to allow us to produce robust bottom-up estimates for any of the programmes or projects in the updated RBP"¹⁶¹, we agree with the CAA's approach to take a "top-down approach to our Initial Proposals for capex"¹⁶²

¹⁵⁹ Ibid.

¹⁶⁰ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.30

¹⁶¹ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.36

¹⁶² Ibid.

- 5.28. This is reasonable, proportionate and evidence-based, particularly where the CAA conducted a “detailed assessment of any elements of the plan that were sufficiently well developed”¹⁶³, and for more discretionary elements focussed “efforts on understanding whether HAL has made the case for the programmes in terms of the potential benefits they would bring”¹⁶⁴
- 5.29. The assessment of capital expenditure developed with Arcadis¹⁶⁵ provides useful comparative analysis that supports the CAA’s development of forecasts; we endorse this approach to producing forecasts, particularly where this is fully integrated with the development of the OBR framework and operating expenditure analysis within the price control
- 5.30. We therefore welcome the CAA’s evidenced approach to developing its three scenarios; we look forward to working with Heathrow and the CAA to developing estimates for capital expenditure that are more robust for Final Proposals
- 5.31. Nevertheless, we see no mention of how project management costs related to capital expenditure are incorporated into project costs; Leadership and Logistics (“L&L”) costs are presently a fixed percentage addition to all projects, yet have received no scrutiny despite repeated airline requests to investigate in more depth
- 5.32. It would be an error not to address L&L costs in more depth for H7 both to ensure efficiency and that they are reflective of actual costs related to those projects; without doing so, capital efficiency incentives will be entirely undermined as Heathrow continues to operate inefficiently in its project management

Conclusion

- 5.33. We agree with the CAA that Heathrow’s capital plans lacks a clear vision, and are at odds with the fact that there is no requirement for any significant programme of works during this price control; in addition, Heathrow needs to provide far greater transparency over its capital procurement process, which should be based upon open tendering and competitive market outcomes supported by the CAA’s new capital efficiency incentives
- 5.34. We agree with the CAA’s baseline size of capital programme, which is in keeping with Heathrow’s historic ability to delivery; in addition, the development of a bottom-up assessment of efficient costs is appropriate to ensure that capital efficiency incentives have effect, and we will support the CAA in its development of this assessment towards Final Proposals
- 5.35. Nevertheless, we urge the CAA to scrutinise project management (“L&L”) costs, which have not been addressed in these Initial Proposals; to ignore this significant amount of expenditure at this periodic review would be an error

¹⁶³ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.32

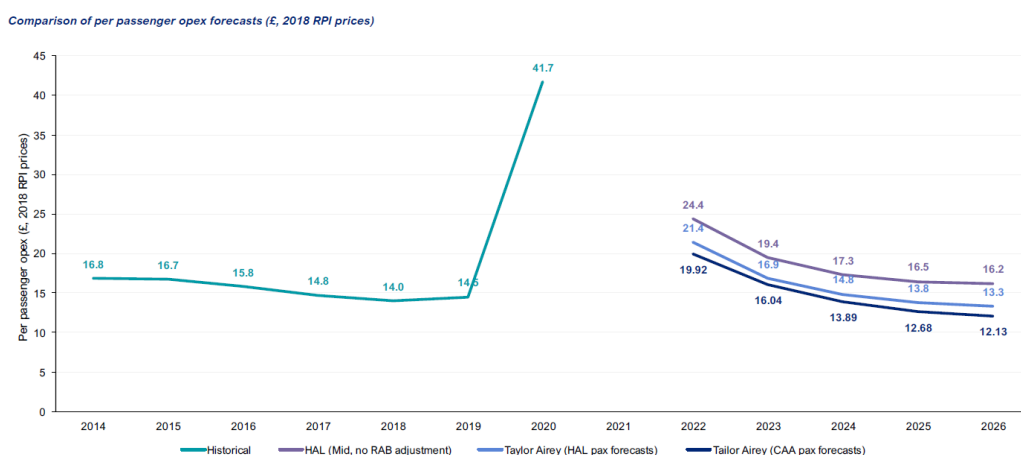
¹⁶⁴ CAP2265B: Chapter 3, Assessment of capital expenditure, para 3.33

¹⁶⁵ [CAP2266B: Capex plan Review, Arcadis, 13th October 2021](#)

6. Operating expenditure (CAP2265 Chapter 4)

- 6.1. Operating expenditure analysis is extremely important for the price control, since an accurate determination of efficient costs leads to an efficient airport charge for consumers; it is therefore of critical importance that the CAA fully assess operating expenditure, and that sufficient time is allowed to ensure that this analysis is completed on a bottom-up basis for Final Proposals
- 6.2. This is particularly important that the CAA take the correct baseline for operating expenditure, where before the pandemic, Heathrow “was able to reduce its opex base in real terms from £1.3bn in 2014 to £1.2bn in 2019 (2018 prices)”¹⁶⁶; in addition, Heathrow has further reduced its operating expenditure through restricting in response to the pandemic, facilitated in part by a “cost of change” adjustment, but also further restructuring activity to minimise cash burn
- 6.3. It is particularly important that the CAA exclude from operating expenditure any amounts related to the Expansion project, which may have been capitalised on the RAB and must not be double-counted as a result; it is not clear to us that the CAA has yet managed to fully reconcile these costs, and it is important for the CAA to do so before Final Proposals to avoid cost duplication, which would be an error
- 6.4. Heathrow’s position is clearly not credible, particularly considering the results of per passenger forecasts of operating expenditure below; the CAA must finalise its work with CEPA and Taylor Airey (“CTA”) to ensure operating expenditure is efficient and only incorporates necessary costs for the H7 price control

Figures 6.1: Comparison of Heathrow and Taylor Airey opex forecasts¹⁶⁷



Note: Both HAL and the CAA have developed High, Mid, Low pax forecasts for the H7 period. We use the Mid pax forecast for figures presented above.

¹⁶⁶ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.4](#)

¹⁶⁷ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p128](#)

CTA analysis included with Initial Proposals

- 6.5. In order to establish an appropriate level of operating expenditure, the CAA commissioned CEPA and Taylor Airey ("CTA") to perform an assessment of Heathrow's operating costs and commercial revenues by "reviewing HAL's forecasts and gathering relevant evidence (such as comparators and benchmarks) to support the assessment"¹⁶⁸
- 6.6. This assessment is described further, where CTA "relied mainly on HAL's top-down forecasting approach to develop an independent view of opex and commercial revenue but, where appropriate, made an independent assessment of the key assumptions driving the forecasts"¹⁶⁹
- 6.7. This CTA analysis of operating costs and commercial revenues is a useful first step for the H7 Initial Proposals; it has built upon Heathrow's top-down methodology using a similar approach to Heathrow, and considered scenarios based upon appropriate drivers of the business, but has yet to build costs from the bottom up, which must be performed to correctly determine the allowance
- 6.8. As a result, this is only the first step to determining the appropriateness of Heathrow's various business plans, and we have a reasonable expectation that H7 Final Proposals will ultimately use "bottom-up opex analysis to assess the appropriateness of the top-down forecasts that HAL has proposed"¹⁷⁰
- 6.9. Having taken this approach, it is unclear why the CAA has allowed its initial proposals to be unduly influenced by Heathrow's RBP update through the development of a range based upon two scenarios: "HAL's updated RBP projections (scaled to CAA passenger forecasts) define one end of the range and CEPA/Taylor Airey's mid case the other"¹⁷¹; this is a manifest error as the CAA's Initial Proposals are as a result partly determined by Heathrow's unmodified and therefore unchallenged position
- 6.10. It is crucial to note that CTA state that for their analysis, "we have attempted to produce a balanced set of forecasts not relying too much on overly optimistic or overly conservative assumptions", and that "we have also attempted to make our efficiency challenges credible and deliverable within the timeframe available to HAL"¹⁷²; this further reinforces its credibility as the basis for H7 Initial Proposals
- 6.11. Furthermore, as recognised by CTA, inherent uncertainty will be managed through other mechanisms across the H7 price control, including the proposed TRS; there

¹⁶⁸ [CAP2265A H7 Initial Proposals - Summary, para 59](#)

¹⁶⁹ Ibid.

¹⁷⁰ Ibid. para 2.28

¹⁷¹ [CAP2265A H7 Initial Proposals - Summary, para 60](#)

¹⁷² [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p43](#)

is therefore no need to duplicate the effect of such mechanisms by artificially raising the range for H7 Initial Proposals towards Heathrow's RBP update figures, ultimately unnecessarily raising the level of the 2022 holding cap

- 6.12. The CTA analysis for operating expenditure has been developed specifically to "develop an alternative set of assumptions to derive a view of the efficient level of opex for HAL over the H7 period"¹⁷³
- 6.13. This is complemented by the work in commercial revenues, where "CEPA/Taylor Airey scrutinised the evidence base underpinning HAL's key forecasting assumptions and presented alternative assumptions to propose a view of the efficient level of commercial revenues for the H7 period"¹⁷⁴
- 6.14. We set out below some relevant views of their analysis within the relevant sections on operating expenditure and commercial revenues, particularly where it is relevant to demonstrating why Heathrow's RBP update numbers are an inappropriate basis for the CAA's H7 Initial Proposals

Heathrow's business plans and CAA guidance in H7 consultations to date

- 6.15. In April 2017, the CAA set out its business plan guidance for Heathrow stating "forecast costs should combine the evaluation of past performance with realistic assumptions about the scope for increased efficiency in the future"; this continues "where practicable costs should be market-tested or benchmarked, and baseline assumptions clearly explained"¹⁷⁵
- 6.16. The CAA additionally stated in the same publication that "business plans should be high-quality, clear, robust, and well justified by supporting evidence"¹⁷⁶; nevertheless, Heathrow developed an Initial Business Plan ("IBP") that failed to take this guidance into account
- 6.17. Heathrow claimed in its IBP that it had produced "a robust and detailed evidence base to produce an elasticity which links a change in passenger volumes to a change in total operating costs both in the short and long run"¹⁷⁷
- 6.18. The CAA noted that this approach was a deviation from that used for Q6, as Heathrow had used "a "top-down" forecasting method for opex and commercial revenues which projected opex and revenues forward from a base year using estimated elasticities for passenger growth, rather than the "bottom up" approach used for the Q6 price control"¹⁷⁸

¹⁷³ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.26](#)

¹⁷⁴ [CAP2265B H7 Initial Proposals: Section 5: Commercial revenues, para 5.31](#)

¹⁷⁵ [CAP1540 Guidance for Heathrow Airport Limited in preparing its business plans for the H7 price control, Table 1: Business Plan Criteria](#)

¹⁷⁶ Ibid, para 10

¹⁷⁷ [Heathrow Initial Business Plan – detailed plan, December 2019, p216](#)

¹⁷⁸ [CAP1940 Economic regulation of Heathrow: policy update and consultation, para 2.6](#)

- 6.19. Having failed to deliver an IBP in accordance with its guidance, the CAA then set expectations for Heathrow's subsequent business plans, which noted that "we expect that opex forecasts for H7 should be capable of reflecting significant changes in the levels of staff between terminals and activities"¹⁷⁹
- 6.20. Furthermore, the CAA noted that "HAL's Regulatory Accounts include opex at a more disaggregated level than in the IBP", and therefore required "the RBP, therefore, to contain opex estimates for each planning scenario at a level of detail that facilitates understanding of changes in relevant activities, and supports the objectives and principles above"¹⁸⁰
- 6.21. The CAA therefore set out guidance to Heathrow that "HAL's approach to planning for costs and revenues should be integrated and closely linked to passenger volume scenarios" such that "the RBP should provide scenario-based estimates for traffic, costs and revenues at a suitable level of disaggregation such that the estimates can reflect variations in demand responses and cost drivers for each scenario"¹⁸¹
- 6.22. This was described further in the criteria for operating expenditure and commercial revenues, that "forecasts should be fully explained, taking account of past performance, the impact of measures to address the impact of the Covid-19 pandemic and expected operational efficiency and commercial revenue generation"¹⁸²
- 6.23. The CAA's rationale for this particular criteria was that "the top down forecasting approach of the IBP provided limited information on actual planned work or what HAL intended to deliver during the H7 price control period," therefore "to assess HAL's forecasts properly, we need HAL to provide more information in support of its investment plan"¹⁸³
- 6.24. The CAA further state that "we consider that disaggregated estimates of opex and commercial revenues would facilitate a more detailed understanding of HAL's forecasts" with an example that "for opex, our assessment of staff costs would consider changes in staffing levels (including staff mix) that HAL has assumed over time."¹⁸⁴
- 6.25. Heathrow subsequently stonewalled this particular requirement for their Revised Business Plan ("RBP"), stating that "our cost estimate should be considered in the context of what is a reasonable allowance for an efficient airport of Heathrow's size and characteristics, rather than a detailed bottom-up forecast of how we will

¹⁷⁹ [CAP1940 Economic regulation of Heathrow: policy update and consultation, para 2.19](#)

¹⁸⁰ Ibid.

¹⁸¹ Ibid., para 2.22

¹⁸² Ibid., Table E.4, Criterion C16

¹⁸³ Ibid.

¹⁸⁴ Ibid.

run the business. Indeed, in these unprecedented times, forecasting using bottom-up detail is likely not to be the best approach to ensure an overall efficient envelope of costs is reached”¹⁸⁵

- 6.26. This approach was echoed in its commercial revenue forecasts, in which Heathrow stated that its “H7 forecast is derived from a 2019 baseline, applying drivers with elasticities calculated using an evidenced-based methodology”¹⁸⁶
- 6.27. Heathrow argues that this “represents a change of approach from the bottom-up approach taken in Q6 but is consistent with IBP and BBU regulatory submissions”, and that “following investigation of the model, this simpler forecasting methodology for H7 allows us to forecast in a more robust way using proven drivers of commercial revenue and avoids introducing complications from the addition of spurious detail”¹⁸⁷
- 6.28. This may have been consistent with its previous submissions, yet was contrary to the specific requirements of the CAA in its business plan guidance, both in CAP1540 and reiterated in clearer terms in CAP1940, particularly in relation to the requirement for detail and evidence presented on a consistent basis that was linked clearly across its business plan¹⁸⁸
- 6.29. The CAA subsequently assessed Heathrow’s approach to its RBP, and found it only partially compliant with its business plan guidance, stating “HAL relies on a driver-based forecasting methodology which has been heavily challenged by airlines with a number of additional downside overlays”, where “Covid-19 and other large policy impacts are not fully explained”¹⁸⁹
- 6.30. It continued that a reconciliation between the RBP and Heathrow’s Regulatory Accounts “does not provide sufficient information to reconcile the two breakdowns of opex and commercial revenues at a granular level”, with “historical data beyond 2019 only set out in the accompanying opex and commercial revenues driver-based forecasting model”¹⁹⁰
- 6.31. The CAA further critiques the Heathrow RBP model, noting that “HAL needs to provide further evidence to support its assumption that its 2019 base year is efficient”, “has not provided sufficient assurance that the adjustments that it made to the 2019 opex base year are appropriate”, “has provided limited justification for upward cost overlays and has not provided analysis to support the adjustments

¹⁸⁵ [Heathrow Revised Business Plan – detailed plan, December 2020, p212](#)

¹⁸⁶ Ibid. p301

¹⁸⁷ Ibid.

¹⁸⁸ [CAP1940 Economic regulation of Heathrow: policy update and consultation, Table E.4, Criterion C16, C17 & C18](#)

¹⁸⁹ [CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria C16, C17 & C18](#)

¹⁹⁰ Ibid.

that it has proposed", and "sequencing of some of the key forecasting assumptions could create risks of either double counting or exclusions"¹⁹¹

- 6.32. Given the damning CAA conclusion that "in many areas HAL has provided insufficient evidence to justify its key forecasting assumptions and some items have not been adequately explained"¹⁹², it is entirely inappropriate for the CAA to rely on Heathrow's numbers in any form; doing so fundamentally undermines the CAA's proposed modification and risks any decision taken by the CAA being unjustified, unreasonable and founded in errors of fact.
- 6.33. Heathrow's forecasts for operating expenditure are simply unreasonable, as demonstrated by the CAA observation that "HAL has projected average opex per passenger in H7 of £18.21 compared to £14.51 in 2019"¹⁹³; this does not pass common sense analysis, particularly where opex per passenger remains above 2019 levels in 2026, despite a return of passenger volumes and significant restructuring that has taken place during the course of the pandemic
- 6.34. This is particularly the case where the CAA notes its next steps will be to develop "robust projections of opex for our central passenger traffic forecast"¹⁹⁴ and where "work on elasticities will be particularly important for our understanding of the relationship between passenger traffic and opex levels"¹⁹⁵
- 6.35. The CAA also commits where available to using "bottom-up opex analysis to assess the appropriateness of the top-down forecasts that HAL has proposed"¹⁹⁶, and "commission expert independent advice to support our assessment"¹⁹⁷
- 6.36. We note that Heathrow has contended that top-down analysis is "aligned with regulatory precedent in other sectors – other regulators such as Ofgem and Ofwat have been using this type of approach since the 1990s as they focus on benchmarking total expenditure using a top-down approach"¹⁹⁸
- 6.37. This is disingenuous since such approaches differ significantly across sectors: for example, the totex-based approach in Ofwat's PR19 determinations¹⁹⁹ is quite unlike Heathrow's approach; more importantly, the use of econometric modelling is better suited for use by the regulator itself when measuring efficiency performance across more than one company under its own regulatory regime

¹⁹¹ [CAP2139 Consultation on the Way Forward, para 2.21](#)

¹⁹² Ibid. para 2.22

¹⁹³ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.15](#)

¹⁹⁴ [CAP2139 Consultation on the Way Forward, para 2.24](#)

¹⁹⁵ Ibid. para 2.27

¹⁹⁶ Ibid. para 2.28

¹⁹⁷ Ibid. para 2.31

¹⁹⁸ [Heathrow Initial Business Plan – Detailed Plan, December 2019, p216](#)

¹⁹⁹ [Ofwat: PR19 Final Determinations: Securing cost efficiency technical appendix](#)

- 6.38. Furthermore, as noted by the CAA²⁰⁰, Ofwat require templated tables to be completed specifying a level of detail that must be provided; this far exceeds the information provided by Heathrow in its business plans through its top-down modelling to date²⁰¹
- 6.39. Given the comparators used by Heathrow to determine efficiency are not regulated by the same regulator, do not operate in the UK context, and have operations that diverge significantly (dual till and inclusion of ground handling operations), we dissuade the CAA from inappropriate reliance on those datapoints, which would be in error if not comparing like for like
- 6.40. Finally, on the basis of the CTA analysis and information yet to be revealed by Heathrow, we fundamentally disagree with the CAA and believe it is a manifest error for the CAA to conclude that “we consider that HAL has provided a reasonable level of detail on opex in its updated RBP and this has been an improvement from the level of information included in the RBP and earlier IBP. This means that the updated RBP contains sufficient detail to enable a certain degree of bottom-up assessment of opex for H7”²⁰²; this is clearly incorrect based upon the evidence set out by CTA

CTA’s initial analysis of Heathrow’s business plan

- 6.41. Heathrow’s forecasting approach is one that is likely to lead to operating expenditure being over-stated and an unreasonably large allowance resulting; CTA has disaggregated the steps taken by Heathrow, but whilst taking a similar top-down approach, have identified a number of issues with Heathrow’s evidence
- 6.42. For example, CTA state that “we have identified a number of issues with the evidence HAL has provided around the efficiency of the 2019 base”, and “the logic underpinning the inclusion of overlays is not provided and the evidence around the size of overlays requested is not always sufficiently substantiated”²⁰³
- 6.43. CTA go on to say, “each overlay takes away from the relatively simple forecasting approach originally adopted”, and “a more robust, transparent approach would have been to do a full bottom-up assessment”²⁰⁴; this is particularly the case “where, for certain categories of cost or revenue that are affected by substantial step changes, the costs/revenues are built up based on the new operating structure”²⁰⁵

²⁰⁰ [CAP1940 Economic regulation of Heathrow: policy update and consultation, Appendix E, para 8](#)

²⁰¹ [Ofwat: Delivering Water 2020: Our methodology for the 2019 price review: Updated guidance for the final business plan data tables](#)

²⁰² [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.24](#)

²⁰³ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p46](#)

²⁰⁴ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p47](#)

²⁰⁵ Ibid.

- 6.44. We are pleased that the CTA analysis has started to unpick some of the major issues we saw with Heathrow's operating expenditure forecast, in particular the efficiency of 2019 as a base year for the analysis; this demonstrates on a like for like basis "that HAL's opex would be £801m lower than HAL's forecast, a difference of around 13%"²⁰⁶
- 6.45. We therefore welcome the CTA analysis, and agree that cost inflation should increase with CPI rather than RPI, that Heathrow's 2019 performance did not represent frontier efficiency, and agree that pandemic response efficiencies will carry forward – particularly organisational changes and contract revisions
- 6.46. Furthermore, there is no justification for efficiency being linked to the size of the capital plan, and are pleased that CTA has developed detailed modelling of staff costs since Heathrow's elasticities were not supported by the evidence
- 6.47. Finally, we welcome the modifications to cost overlays to remove the effect where there was insufficient evidence to support those additional costs, or that they were accounted for elsewhere in Heathrow's plans
- 6.48. CTA's changes are evidence-based yet remain conservative where insufficient information exists; for example, adjustments related to expansion have raised concerns over the lack of clarity in their treatment, where "accounts may disguise inconsistencies or double counting"²⁰⁷, though pending further assessment, the adjustment is retained in line with Heathrow's proposals
- 6.49. Given these modification and that Heathrow's disclosures remain both deliberately opaque and subjective, we are unclear what the CAA's justification is for creating "a "ceiling" of the opex estimates from HAL's updated RBP, scaled to CAA "mid case" passenger forecasts", and "a "floor" of the CEPA/Taylor Airey "mid case" scenario"²⁰⁸; this is a manifest error that has not been sufficiently evidenced
- 6.50. Given the conservative yet robust nature of the CTA analysis, their analysis is entirely reasonable as an initial midpoint for analysis, particularly given the clear omissions from the operating expenditure position in Heathrow's RBP update that CTA are clearly unable to rely upon
- 6.51. This is particularly in light of the fact that employee costs disclosed under regulatory accounts are inflated by 7.5% due to the employment of all staff through a Shared Services Agreement with LHR Airports Ltd²⁰⁹, an entity which ultimately falls under the Group of companies controlled by FGP Topco Ltd; we raised this

²⁰⁶ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.29](#)

²⁰⁷ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p58](#)

²⁰⁸ [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.33](#)

²⁰⁹ [LHR Airports Ltd, Annual Report and Financial Statements for the year ended 31 December 2020, Accounting Policies, p25](#)

matter in our response to CAP2139²¹⁰ but cannot see that this has been yet been definitively addressed in the H7 Initial Proposals

- 6.52. We estimate that this could amount to an annual over-statement of operating costs of £27.1m in Heathrow's regulatory business plans based upon the £388m employee costs consolidated at FGP Topco Ltd²¹¹, though this will depend on the specific accounting treatment and method of consolidation at Group level
- 6.53. We therefore request that the CAA to re-consider its methodology and rationale for the development of a range to base the H7 Initial Proposals upon a basis of evidence and fact; it would be irrational not to finalise CTA's analysis and produce a fully-formed and bottom-up analysis of Heathrow's cost base as the basis of H7 Final Proposals, and an error to base the allowance on anything other than detailed analysis that has been signalled as a requirement throughout earlier consultations
- 6.54. Finally, we also consider it is an error for the CAA to propose that "our Initial Proposals have retained HAL's forecasts of these costs of between £20 and £25 million (nominal)"²¹²; the pension deficit was supposed to have been closed already, and there has been insufficient transparency from Heathrow as to the options it has considered to close this deficit in future, included for example buy out or buy in options, which must be considered to determine the most efficient cost

Conclusion

- 6.55. The CAA must only include efficient operating expenditure in the H7 price control, and as a result must finalise the analysis started by CTA to fully develop its estimates on a bottom-up basis; these must be baselined at an appropriate value, excluding all Expansion costs, but included the benefit of any restructuring that has taken place in response to the pandemic
- 6.56. Furthermore, this analysis must ensure Heathrow is appropriately incentivised to become more efficient over the course of the H7 price control, which ensures that consumers benefit from increasing efficiency and productivity in line with that expected in a competitive market environment, and fulfilling the CAA's duties as established in CAA12
- 6.57. Heathrow's business plans have continued to avoid revealing sufficient detail for the CAA to accurately determine the precise efficiency of its operating expenditure, and as a result, the CAA should consider whether its licence conditions related to transparency are sufficient at present to ensure that Heathrow delivers all required information

²¹⁰ [British Airways response to CAP2139, para 8.19](#)

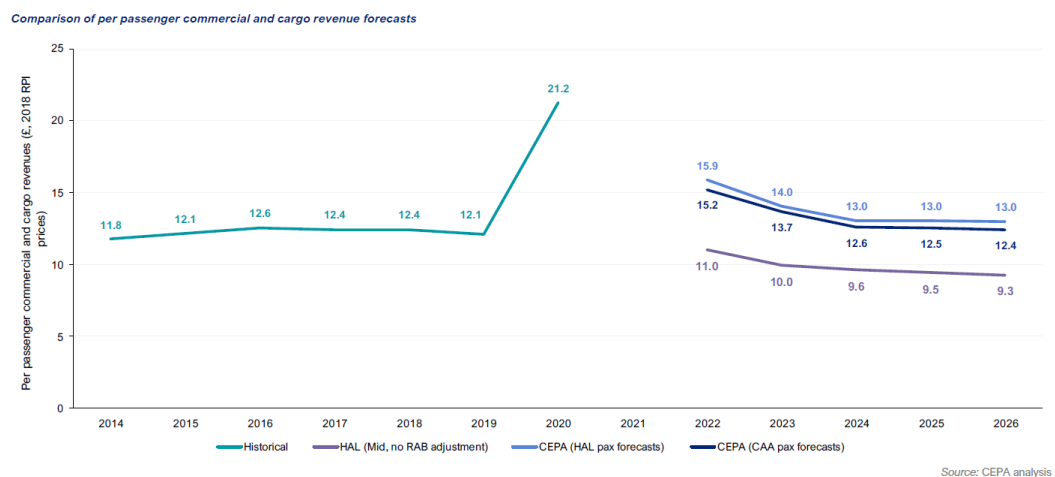
²¹¹ [FGP Topco Ltd, Annual Report and Financial Statements for the year ended 31 December 2020, Note 2: Operating Costs, p153](#)

²¹² [CAP2265B H7 Initial Proposals: Section 4: Operating expenditure, para 4.43](#)

7. Commercial revenues (CAP2265 Chapter 5)

- 7.1. Similar to operating expenditure, an accurate determination of commercial revenues are also extremely important to ensuring that the H7 price control represents an efficient airport charge; the single till nature of regulation ensures that revenues raised through associated activities at the airport contribute to the revenue requirement, and reduce the resulting aeronautical charge
- 7.2. It is particularly important that incentives over commercial revenues continue to be effective and benefit consumers through reduced airport charges, since these revenues are largely raised from captive audiences, being those very same consumers, airlines and other aviation businesses operating at Heathrow who are responsible for delivering related services to those consumers
- 7.3. Heathrow has been extremely successful at raising commercial revenue generation over recent price control periods, and this fact must be recognised in the CAA's price control to ensure that the benefit is captured by consumers, and the benefits of its monopoly position are not simply passed unchallenged to investors
- 7.4. However, similar to operating expenditure, Heathrow's position is not credible, particularly considering the results of per passenger forecasts of commercial revenues below; the CAA must finalise its work with CEPA and Taylor Airey ("CTA") to ensure commercial revenues are efficient and incorporate all revenue raising opportunities presently identified and known for the H7 price control

Figures 6.1: Comparison of Heathrow and CEPA revenue forecasts²¹³



Heathrow's business plans and CAA guidance in H7 consultations to date

- 7.5. The CAA's assessment of Heathrow's commercial revenue forecasts follows a similar pattern to that of operating expenditure, where they note Heathrow

²¹³ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p184](#)

"combines key revenue drivers, such as passengers and utilised terminal area, with revenue elasticities to forecast H7 revenues"²¹⁴

- 7.6. Similar to operating expenditure, the CAA also notes Heathrow "uses a percentage "overlay" approach for commercial revenue forecasts to account for impacts which cannot be accounted for in the elasticity-based approach"²¹⁵
- 7.7. The CAA critique continues to note that "certain categories of commercial revenues are not well suited to top-down analysis" and "an example of this is retail revenue which depends on passenger mix (a bottom-up input) as well as other factors"²¹⁶
- 7.8. However, most damning is the assessment that "we also note that the elasticities applied to certain revenue drivers appear to be informed primarily by expert internal knowledge and/or judgement rather than objectively verifiable evidence", and "for example, the evidence to support the property revenue forecasting approach is very limited"²¹⁷
- 7.9. As a result, the CAA's conclusion is that the "overlay approach which implements a specified percentage reduction to account for potential negative impacts in H7 is also not well supported by appropriate evidence", and "our initial assessment is that each of the proposed impacts needs to be further developed with detailed bottom-up evidence on the relative impact of the underlying drivers"²¹⁸
- 7.10. The CAA then commits to "developing robust projections of commercial revenues for our central passenger traffic forecast"²¹⁹, "considering any adjustments/normalisations for our Initial Proposals"²²⁰ for the 2019 base year, "bottom-up analysis where practicable and appropriate (including building on relevant analysis by the airlines) to complement the work on elasticities"²²¹
- 7.11. In doing so, the CAA notes that "we intend to commission expert independent advice to support our assessment"²²² and crucially that whilst there is uncertainty in forecasting, "uncertainty can be partly mitigated in the risk sharing approach"²²³
- 7.12. Having judged Heathrow's operating expenditure and commercial revenue forecasts not to have met the CAA's business plan requirements, combined with a lack of detail or any substantive evidence base, it is a manifest error for the CAA to then use Heathrow's RBP update in any form for Initial Proposals, ultimately

²¹⁴ [CAP2139 Consultation on the Way Forward, para 2.32](#)

²¹⁵ Ibid. para 2.32

²¹⁶ Ibid. para 2.37

²¹⁷ Ibid. para 2.37

²¹⁸ Ibid. para 2.38

²¹⁹ Ibid. para 2.43

²²⁰ Ibid. para 2.45

²²¹ Ibid. para 2.45

²²² Ibid. para 2.48

²²³ Ibid. para 2.49

raising the level of the 2022 holding cap above the CTA analysis commissioned by the CAA

- 7.13. This failure to meet a reasonableness test is mirrored in its RBP update forecasts for commercial revenues, which “translates into projected average commercial and cargo revenue per passenger in H7 of £9.75 compared to £12.12 in 2019”²²⁴; this is despite evidence in Heathrow’s own presentations to other forums that pre passenger commercial revenues remain at similar or higher levels to those prior to Covid
- 7.14. Our views on commercial revenues are similar to those in operating expenses, where we see forecasts from Heathrow that incorporate unevidenced and subjective views that serve to suppress forecasts and reduce revenues available to the single till for the H7 period

CTA analysis included with Initial Proposals

- 7.15. As noted above, the CAA commissioned CTA to assess operating expenditure and commercial revenues; these robustly and correctly challenge Heathrow’s assumptions using evidence to develop an initial forecast of commercial revenues for the H7 period, which must now be finalised for Final Proposals to ensure that commercial revenue forecasts meet the guidance the CAA themselves provided to Heathrow in developing business plans
- 7.16. As a result, it would be irrational and in error for the CAA not to finalise this work in full, and ensure that a robust evidence base is in place to support an efficient airport charge that fully benefits from the commercial revenue generation potential of Heathrow; this is the only reasonable response to Heathrow’s unevidenced business plans, which fail to present transparent and justifiable analysis
- 7.17. For example, CTA state in relation to property revenues that “the source of the elasticity estimate is not explained”²²⁵, and in rail revenues that “HAL claims it would like to maintain the yield per passenger throughout the period, though separate overlays have been applied to account for reduction in yield and passenger volumes due to the pandemic and Crossrail”²²⁶
- 7.18. Although many such observations have been seen by CTA, their analysis remains conservative for this report, and comments suggest further adjustments are necessary that would have the effect of raising forecasts revenues further
- 7.19. For example, CTA state that, “HAL’s inclusion of the management challenge within its retail elasticity figure creates an upward bias to the estimate of the pure retail

²²⁴ [CAP2265B H7 Initial Proposals: Section 5: Commercial revenues, para 5.26](#)

²²⁵ [CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p136](#)

²²⁶ Ibid.

- elasticity", and "we have not adjusted HAL's retail elasticity estimate, but we expect this may need to be reviewed for our final forecasts"²²⁷
- 7.20. This is reflected in CTA's modelling of passenger mix in retail, replacing Heathrow's overlay that CTA describe as introducing "evidence around geographic variation in spend per passenger is not fully consistent"²²⁸
- 7.21. CTA's observations are consistent across categories of commercial revenue, with specific comments on parking and rental income demonstrating that Heathrow's overlays are not based upon any objective evidence; CTA state that "we cannot determine the efficiency of HAL's proposed adjustment as there are key gaps in the logic and evidence underpinning the overlay assumptions"²²⁹
- 7.22. CTA have instead created a model that can "automatically adjust to changes in passenger mix assumptions", and "to do this, we have broken retail revenue to a more granular level than is available within HAL's forecasts"²³⁰
- 7.23. Most egregious is Heathrow's modelling of changes to the taxation regimes, where CTA state that "no detail has been provided around the loss due to changes in passenger behaviour, and how it interacts with the store reorganisation and VAT absorption impacts"²³¹
- 7.24. CTA note in particular that "the multiple overlays applied to account for the direct effect on removing airside tax free shopping on retail concession income, creates a material risk of double counting"²³²
- 7.25. This lack of concrete evidence is highlighted by the observation that "it is not clear where the assumption around the loss in VAT refund income comes from – this should be a relatively simple observation from HAL's accounting system, but in the material presented over the past year, we have been provided three different estimates"²³³; this is a clear indication that Heathrow is avoiding disclosure
- 7.26. Heathrow's estimates are not only inconsistent but lack a basis of objective evidence; contrary to their suggestion, the CTA analysis shows that far better per passenger performance is likely over the course of H7 than is reflected in Heathrow's unevidenced business plans
- 7.27. In light of the CTA verdict that "key assumptions that drive the size of the adjustment have not been explained or supported by any evidence", it is therefore

²²⁷ Ibid. p138

²²⁸ Ibid. p145

²²⁹ Ibid. p161

²³⁰ Ibid. p146

²³¹ Ibid. p148

²³² Ibid.

²³³ Ibid.

entirely appropriate that CTA “propose an alternative approach”²³⁴ as the basis of their evidenced forecasts

- 7.28. We support the adjustments made by CTA, and agree with the application of a management stretch challenge, application of a consistent elasticity framework for changes in the taxation regime, and explicit modelling of the impact of geographical mix on retail revenues, taking into account varying estimated spend per passenger between market segments
- 7.29. Furthermore, we agree with the use of a lower elasticity of cargo revenues compared to Heathrow’s approach, alternative mode share assumptions, and challenging Heathrow’s assumption that prices on Heathrow Express might fall
- 7.30. We therefore request that the CAA re-consider its methodology and rationale for the development of a range, base H7 price control upon a basis of evidence and fact; it would be a manifest error not to finalise the analysis already performed by CTA, and this must be performed before Final Proposals as a result

Terminal drop off charge

- 7.31. We cautiously welcome the CAA’s design for the partial pass-through of the Terminal Drop-Off Charge (“TDOC”); we agree with the CAA that it needs “to consider how best to regulate this new charge in order to protect consumers’ interests given the material level of uncertainty around volumes”²³⁵, but are unclear how the proposed 35% is calculated in order to ensure incentives are effective
- 7.32. Due to forecasting uncertainty over these revenues, we welcome a sharing mechanism in principle, and an outcome where “if the revenue is greater than forecast, airport charges would reduce by approximately two thirds of this difference”²³⁶ appears reasonable for consumers; however, it is not clear how this sharing rate has calculated, and it would irrational for the CAA not to set out its rationale in more detail, particularly given the incentive effects that are at stake
- 7.33. This is particularly important given the forecasting uncertainty and errors identified by the CAA in Heathrow’s modelling of surface access to Heathrow; since post-implementation evidence is likely emerging following its introduction on 1st November 2021, it could be an error not to now use such information to better-calibrate this incentive using data from its operation in practice
- 7.34. In addition, during discussions over the TDOC – which airlines continue to believe is only a charge a monopoly provider can implement, and therefore, similar to Other Regulated Charges, could be an error not to be regulated in full – it was noted that that Heathrow would have an unfettered ability to raise this charge since

²³⁴ Ibid. p149

²³⁵ CAP2265B Section 5: Commercial revenues, para 5.46

²³⁶ Ibid.

it would be treated as a commercial revenue unless the CAA acted to moderate this incentive in some form

- 7.35. Furthermore, the design of the TDOC appears to conflict between any purported sustainability goal and the financial incentive to raise revenues; given Heathrow provides no additional services in exchange for a TDOC and that the marginal cost of an additional car is therefore zero, we ask the CAA to set out what it thinks should be and is being incentivised in this case
- 7.36. This is particularly the case, since Heathrow does nothing to attract any additional cars through the forecourt; nevertheless, Heathrow does manage car parks at present under commercial revenues, and this linkage also has an incentive effect on the TDOC and its pricing level, which would be an error not to acknowledge
- 7.37. Furthermore, any charges levied on consumers at Heathrow directly or indirectly should ideally be regulated to reflect Heathrow's monopoly position, and we believe it could be an error for the CAA "not to require HAL to formally agree any charge increase in advance with the CAA or airlines"²³⁷; whilst we welcome the proposal for notification should charges rise above 10% of baseline levels, this could be inadequate to ensure oversight of the incentive
- 7.38. In addition, the inclusion of a re-opener mechanism that might adjust the price control if legislation were introduced "that would prevent HAL from levying a terminal drop-off charge"²³⁸ might appear reasonable, but the CAA would be in error not to reflect such mechanisms in the cost of capital
- 7.39. Finally, we agree that the application of risk sharing adjustments "through a new term in HAL's licence with an in-period true up through the K-factor"²³⁹ appears appropriate; this would allow consumers to benefit sooner from any over-collection and contribute to any under-collection to the benefit of the single till

Conclusion

- 7.40. An accurate determination of commercial revenues are also extremely important to ensuring that the H7 price control represents an efficient airport charge; the single till nature of regulation ensures that revenues raised through associated activities at the airport contribute to the revenue requirement, and reduce the resulting aeronautical charge
- 7.41. The CAA must finalise its analysis started by CTA to fully develop estimates for commercial revenues on a bottom-up basis, and this analysis must ensure Heathrow is appropriately incentivised to become more efficient over the course of the H7 price control, which ensures that consumers benefit from increasing

²³⁷ Ibid.

²³⁸ Ibid.

²³⁹ Ibid.

efficiency and productivity in line with that expected in a competitive market environment, fulfilling the CAA's duties as established in CAA12

- 7.42. We also cautiously welcome the CAA's design for the partial pass-through of the Terminal Drop-Off Charge ("TDOC"), though seek more information on how the sharing arrangement has been calculated, which must be tied to an analysis of commercial revenue generation in car parks, whilst also reflecting the near zero marginal cost to Heathrow of charging through the TDOC

8. Regulatory asset base (CAP2265 Chapter 6)

- 8.1. The Regulatory Asset Base ("RAB") is an important component of Heathrow's price control, and ultimately represents the cost of investments yet to be paid for by future consumers; the CAA states it "allows the recovery of investment on a smoothed basis over an extended period, allowing for stability in charges and the financing of new investment"²⁴⁰, however it is necessary to stand back and question whether this remains the most appropriate description of its use in future
- 8.2. We are currently in a position where the RAB is significantly elevated, which results in airport charges that are far in excess of those at comparable airports; this is itself demonstrable evidence that material inefficient expenditure has been incorporated in the RAB in the past, and it is incumbent upon the CAA to reverse this trend, limiting the RAB growth to only efficient investment in the interests of consumers
- 8.3. This is compounded by the continued indexation of the RAB to RPI rather than CPI or CPIH, a transition that will be required in any case before 2030²⁴¹²⁴²; in the long run, the use of RPI results in higher airport charges than would otherwise be the case resulting from an estimated 0.9% to 1.0% wedge between RPI and CPIH
- 8.4. Given Heathrow's motivations to inappropriately inflate the RAB, either through inefficient capital expenditure or extreme requests for ex post RAB adjustments, the CAA should step back and consider whether the RAB remains an appropriate instrument in its current form
- 8.5. Specifically, with the advance of the new nuclear RAB model, which will be enshrined in new legislation²⁴³ to support the development of new nuclear electricity generating capacity in the UK, the CAA should ensure its use of the RAB remains consistent with other regulators, and remains in the interest of consumers
- 8.6. It is particularly important that the CAA ensure that the RAB retains its credibility, and ensure that it is not used inappropriately for matters that do not relate to

²⁴⁰ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.1

²⁴¹ [Financial Times, "UK to stop using RPI inflation measure in 2030". 25th November 2020](#)

²⁴² [HM Treasury, A Response to the Consultation on the Reform to Retail Prices Index \(RPI\) Methodology, 25th November 2020](#)

²⁴³ [UK Parliament, Nuclear Energy \(Financing\) Bill 2021-22](#)

capital expenditure; the loss of volumes during the pandemic has nothing to do with the return of the RAB through depreciation, which becomes an inseparable part of the airport charge and the range of possible outcomes once the price control has been established ex ante

- 8.7. We furthermore want to understand why the RAB is not based upon historic cost accounting of assets and cannot be interrogated in any detail once it has been built up through capital expenditure incurred; in addition, there are a number assets at the airport that would appear to be assets in perpetuity (such as runway beds) and have similar characteristics to assets treated as such by other regulators
- 8.8. The matter of accounting for the assets that comprise the RAB is extremely important, and it would be a fundamental error to ignore the significant issues that result from not interrogating the RAB in detail; this is particularly important since "the role of the RAB as a commitment device is a consequence of the quality of its implementation rather than from the definition of the RAB per se"²⁴⁴
- 8.9. In addition, it does not seem appropriate that investment to develop commercial revenues is incorporated into the RAB during the price control yet additional income from commercial revenue projects leaks outside the single till until the next periodic review; given Heathrow is remunerated on commercial terms for new facilities and can also charge those through the RAB, there appears to be a misalignment of incentives that results in consumers paying twice
- 8.10. This brings into question how the depreciation schedule is established, especially where this is performed by reference to specific assets in many other regulated industries; for example, Ofcom used accelerated depreciation of BT's copper assets in its Wholesale Fixed Telecoms Market Review 2021-2026²⁴⁵ to promote migration to full-fibre services through regulation
- 8.11. This could be an important lever for the CAA to use to promote investment in more sustainable assets, and run off older assets that are no longer required; without being able to make this distinction, the CAA may find fewer tools at its disposal to meet sustainability challenges of the future
- 8.12. Ultimately, Heathrow cannot simultaneously claim a high cost of equity whilst having the protection of a RAB, particularly where that protection is enhanced by the introduction of a TRS; this suggests extremely low risk on the existing RAB and a very low utility-based cost of capital should result, which could potentially be split between assets that have been completed and those under construction

Opening RAB for H7

²⁴⁴ [Stern, J., The role of the regulatory asset base as an instrument of regulatory commitment, Centre for Competition and Regulatory Policy, City University London, March 2013](#)

²⁴⁵ [Ofcom, Wholesale Fixed Telecoms Market Review 2021-2026](#)

- 8.13. As noted in the section on Expansion costs in this response, we remain opposed to the inclusion of all Category B and C costs incurred by Heathrow within the RAB; it remains our view that Heathrow has unilaterally withdrawn from the Expansion project, therefore the appropriate risk sharing should apply to Category B costs and it would be an error to incorporate them in full
- 8.14. In addition, Heathrow incurred Category C costs at its own sole risk before they were consulted upon by the CAA, and as a result, there was little to no airline oversight of these costs as they were incurred; it would also be an error both to apply the policy for Category B costs to Category C, and to include them in the RAB as a result of these facts
- 8.15. Finally, we remain opposed to the inclusion of the CAA's £300m RAB adjustment in the RAB; we cover the reasons why this is an error below, but believe it is an inappropriate use of the RAB given the ex-ante nature of the underlying Q6 price control in place at the time of this pandemic, and is unrelated to capital expenditure requirements of consumers, and therefore results in inefficient airport charges

£300m RAB adjustment

- 8.16. We remain opposed to RAB adjustments, since this remains an inappropriate use of the RAB, resulting in charges that are neither based upon an investment that has been delivered efficiently for customers, nor a liability that was for consumers to bear, based upon the allocation of risks set ex ante at the Q6 periodic review
- 8.17. Our opinion remains that the RAB is a mechanism for logging up of efficiently incurred capital expenditure to form the basis of charges in future regulatory periods; it is a mechanism for ensuring that the business can earn a reasonable return on its sunk capital expenditure, and its indexation suggest a very low cost of capital should be the appropriate result

The RAB adjustment does not support debt finance

- 8.18. The CAA stated that it considered the adjustment would "help avoid a higher cost of debt finance for HAL that could increase charges to consumers in the future"²⁴⁶; the CAA has made an error in its decision, as the RAB adjustment does not support debt finance in the manner suggested
- 8.19. In the financeability section of Initial Proposals, the CAA observe that a "RAB adjustment does not materially influence whether or not HAL is financeable under the notional financial structure"²⁴⁷, it is therefore irrational for the CAA to have concluded that "intervention that was needed at that time to further the interests of consumers"²⁴⁸

²⁴⁶ CAP2140 paragraph 4

²⁴⁷ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.9

²⁴⁸ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.8

- 8.20. In addition, the CAA observe that “a RAB adjustment does not significantly support cash flow which is the key constraint on the notional company achieving a reasonable investment grade credit rating the early years of H7”²⁴⁹; this therefore directly contradicts the CAA’s conclusion that this intervention was made to “help avoid a higher cost of debt finance for HAL that could increase charges to consumers in the future”²⁵⁰, and is irrational as a result
- 8.21. Finally, the CAA suggest that “in taking this decision, we took note of the weight that credit rating agencies place on their qualitative assessment of the regulatory framework and the possible benefits of signalling support for the notional company being able to access investment grade finance”²⁵¹; however we have not identified any credit ratings reports that placed any weight on this £300m RAB adjustment
- 8.22. Our conversations with the various ratings agencies have revealed that they view the airport sector as investment grade due to its long-term attributes, with volume reductions being essentially ignored due to their temporary nature; in terms of ratings downgrades, they would only take limited action in response to short-term events that did not affect the underlying creditworthiness of the asset class
- 8.23. Their view was that traffic outlook was a more important factor in its analysis of the longer-term prospects for any individual airport, and that the short-term impact of recovery in 2022 and 2023 was limited as the medium to long term outlook was more important; clearly H7 has a bearing in terms of cashflow availability, but this is again a long-term assessment
- 8.24. This view that credit ratings are determined by more than financial metrics alone is supported by the CMA, who observe that “while financial ratios play an important role in the assessment of credit ratings, these are not applied mechanistically by agencies, nor in isolation from a wide range of other relevant factors”²⁵²
- 8.25. In support of this, S&P note that “we assess airports over a longer-term horizon due to their essential infrastructure status and often regulated earnings”, and in its analysis of Heathrow’s actual finances note that “HFL reprofiled a proportion of its existing interest rates and inflation swaps and completed a series of new interest rate swap transactions. This will help reduce interest payments over the next few years, supporting the company’s credit metrics while traffic levels recover”²⁵³
- 8.26. In particular, where certain ratios are under pressure in 2022, the CMA observe that “the interaction between regulatory concepts and accounting concepts affects

²⁴⁹ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.9

²⁵⁰ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.9

²⁵¹ Ibid. para 6.10

²⁵² [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.94](#)

²⁵³ [S&P Global Ratings, Heathrow Funding Class A 'BBB+' And Class B 'BBB-' Ratings Taken Off CreditWatch Negative And Affirmed; Outlook Negative, 4th March 2021](#)

the values of credit ratios"²⁵⁴, and as a result, "the point value of a single credit ratio at a particular point in time is not likely to be determinative in itself of the conclusion on financeability"²⁵⁵

- 8.27. It would therefore be an error to place undue emphasis on financial metrics to assess key credit metrics when instead "the WACC should be the primary factor in the redetermination in determining whether an efficient firm which meets its cost and outcome targets can finance its functions"²⁵⁶
- 8.28. The CAA also estimated that gearing of the notional company would have increased to just over 70% in 2021 from 60% prior to Covid-19 as a result of the fall in demand²⁵⁷; this estimate was in error, since the actual profile of gearing in the notional company has progressed from 60% in 2019 to a peak of 64.8% in 2021 and 65.5% in 2022²⁵⁸
- 8.29. A £300m adjustment to a £17bn RAB represents just 1.8% of the balance, and such and adjustment cannot have had a sufficiently material effect to prevent a credit rating downgrade; in any case, peak gearing does not appear to have actually reached 70% in 2021, therefore we believe this calculation was in error
- 8.30. As a result, the CAA's further justification for the £300m RAB adjustment is in error, where "we also noted that peak notional gearing levels were high relative to certain thresholds used by credit rating agencies"²⁵⁹; credit rating agencies do not make decisions on financial metrics alone, these metrics do not appear to have been as high as the CAA envisaged, and we cannot see any evidence therefore that this specific adjustment was required

The RAB adjustment did not fund additional investment during 2021

- 8.31. The CAA stated that it considered the adjustment would "fund additional investment by HAL during 2021"²⁶⁰; the CAA has made an error in its decision, as the RAB adjustment does not fund capital expenditure in the manner suggested
- 8.32. The CAA further justify this would "provide Heathrow with the incentive to make investments and spend money to deliver good customer outcomes during the recovery of traffic volumes"²⁶¹; however, capital expenditure is incentivised by incorporation into the RAB, therefore granting a RAB adjustment achieves nothing to incentivise additional investment than already exists without the adjustment

²⁵⁴ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.91](#)

²⁵⁵ Ibid.

²⁵⁶ Ibid. para 10.89

²⁵⁷ CAP2140 paragraph 4.12

²⁵⁸ CAA Price Control Model, shared with airlines alongside CAP2265

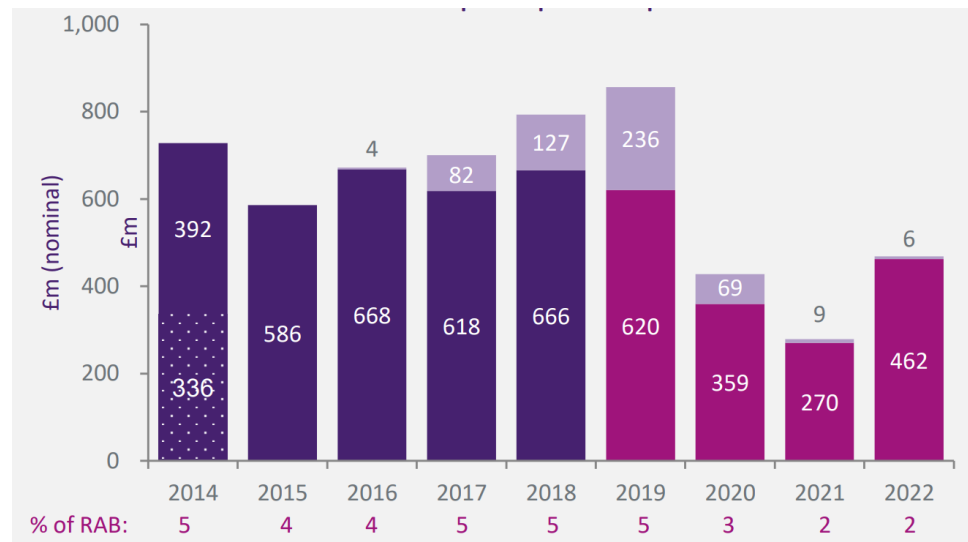
²⁵⁹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.9

²⁶⁰ CAP2140 paragraph 4

²⁶¹ CAP2140 paragraph 4.22

8.33. Furthermore, we have seen no further, additional capital expenditure planned or delivered in 2021 as a result of the RAB adjustment, with forecast capital expenditure for 2021 being even lower than 2020 at just £270m compared to £359 in 2020 in Heathrow's latest investor presentation; the fact is that the RAB adjustment has failed to incentivise Heathrow whatsoever

Figure 8.1: Heathrow forecast capital expenditure profile²⁶²



8.34. This is exemplified by the current proposal to de-scope of half of the Terminal 4 Hold Baggage Screening project for cost saving reasons; Heathrow seems to want to inflate the RAB without doing the necessary hard work of actually spending money, highlighted by its comment in the same investor presentation that "in 2022, the RAB forecast assumes a full RAB adjustment of £2.5bn (2018p)"²⁶³

The RAB adjustment did not help incentivise service quality and capacity

8.35. The CAA stated that it considered the adjustment would "maintain service quality and provide necessary capacity in the event of a stronger than expected recovery in passenger traffic"²⁶⁴; the CAA has made an error in its decision, as the RAB adjustment does not fund operating expenditure in the manner suggested

8.36. The RAB is wholly unrelated to operating expenditure, and the CAA's justification for the use of a RAB adjustment that would ensure Heathrow is "taking proactive steps to prepare for a higher than expected increase in passenger traffic"²⁶⁵ is an error, since there is no mechanism that allows the provision of a RAB adjustment to incentivise operating expenditure

²⁶² [Heathrow \(SP\) Ltd and Heathrow Finance plc, Investor Report December 2021, section 2](#)

²⁶³ Ibid. Section 5

²⁶⁴ CAP2140 paragraph 4

²⁶⁵ CAP2140 paragraph 4.22

- 8.37. Instead, we face significant service quality issues at present, with insufficient airport capacity available for our planned flying programme since Heathrow has to date refused to commit to any plan for the re-opening of Terminal 4; we also understand from other airlines that the Terminal 2 check-in area is frequently overcrowded due to lack of capacity as too many airlines are operating from a single facility
- 8.38. In addition, we face significant resilience issues in the baggage system due to lack of maintenance on Hold Baggage Screening machines, lengthy queues at the Border resulting in frequent congestion in the terminals, and a PRS service that remains significantly under-staffed with serious service quality issues resulting and lengthy delays for our customers

The RAB adjustment has not reduced the cost of capital

- 8.39. The CAA stated that it considered the adjustment would “the benefits to consumers from a lower cost of capital and greater service quality in H7...outweigh these costs from the RAB adjustment”²⁶⁶; the CAA has made an error in its decision, as the RAB adjustment has not reduced the cost of capital in the CAA’s H7 WACC
- 8.40. The CAA advertised the £300m RAB adjustment as being a positive adjustment that would allow “consumers to benefit from a lower cost of capital in H7”²⁶⁷; we see no reference to the RAB adjustment in the CAA’s analysis of cost of capital in these Initial Proposals to support this statement
- 8.41. We have a reasonable expectation that these H7 Initial Proposals should be able to demonstrate that both this RAB adjustment – along with any further adjustment and other measures introduced to control risk within the H7 – should be clearly and transparently attributable to a WACC reduction and net reduction of consumer charges, an expectation clearly set out in the CAA’s publication²⁶⁸
- 8.42. Nevertheless, we can see no evidence that this adjustment has been considered within the WACC, and therefore can only conclude that the CAA has made an error in its Initial Proposals for cost of capital

The CAA has not invoked promised additional protections

- 8.43. The CAA noted that it would consider “reducing the £300m RAB adjustment or making offsetting reductions to revenue”²⁶⁹ should evidence emerge of Heathrow failing to deliver on an appropriate quality of service in 2021; given the service quality issues we are not facing at Heathrow, now is the right time to consider whether these commitments have been met

²⁶⁶ CAP2140 paragraph 31

²⁶⁷ CAP2140 paragraph 5

²⁶⁸ CAP2140 paragraph 3.62

²⁶⁹ CAP2140 paragraph 32

- 8.44. In addition, we have previously noted that Heathrow has persuaded the CAA that it intends to make additional investment of c.£230m (£218m in capex and £9m in opex)²⁷⁰ should it have appropriate incentives; we now call on the CAA to act given abundant evidence that Heathrow has not made any additional capital investment, and in fact has reduced its capital investment in 2021 compared to 2020
- 8.45. The CAA required Heathrow to take “proactive steps to prepare for a higher than expected increase in passenger traffic”²⁷¹, yet Heathrow has been reluctant to open capacity in advance of airline plans to grow schedules, resulting in protracted delays in opening Terminal 3, and no plans to re-open Terminal 4 at present
- 8.46. Furthermore, there have been no attempts to address significant bottlenecks that exist in the infrastructure, and service providers have not been held to account to alleviate emerging issues, particularly in the PRS area; it is an indictment of the strength of the SQRB incentives that despite these issues, Heathrow has not triggered any significant rebates as a result of its failure to address service quality
- 8.47. As a result, we believe the CAA has made an error to suggest it has reached an initial view “that HAL has re-opened terminal capacity in a way that has allowed airline demand to be met, and that service quality performance has been good when measured against the metrics”²⁷²
- 8.48. In light of the numerous ongoing issues faced by airlines at Heathrow, we believe it is irrational for the CAA to conclude that “we propose to retain the £300 million targeted RAB adjustment and do not set out proposals to reduce or reverse this amount”²⁷³; we therefore believe this decision is an error

Further RAB adjustment to H7 opening

- 8.49. We reiterate our view that there is no case for the recovery of historical depreciation, and welcome the statement that the CAA “disagree[s] with Heathrow that it is a fundamental principle of UK regulation that companies are guaranteed a recovery of regulatory depreciation”²⁷⁴; we agree that “no explicit protection for regulatory depreciation was built in to the regulatory regime for airports in CAA12 (the Civil Aviation Act 2012) or Q6/iH7”²⁷⁵
- 8.50. Furthermore, we note that there is technically no regulatory depreciation used to calculate charges in iH7, with the CAA stating during the consultation to implement that licence modification, that “depreciation is not used to calculate the charges for iH7 since the charges are specified by the commercial agreement”, and that

²⁷⁰ CAP2140 paragraph 4.15

²⁷¹ CAP2140 paragraph 4.22

²⁷² CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.16

²⁷³ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.18

²⁷⁴ CAP2140 paragraph C39

²⁷⁵ CAP2140 paragraph 3.24

"these figures will be needed to determine the opening RAB balance for the start of the H7 price control period"²⁷⁶

- 8.51. We reiterate our point that regulatory depreciation is neither separable from the other building blocks of a price control ex-post once it has been set, nor is it not appropriate to later attempt to distinguish between them when Heathrow is remunerated through the WACC to hold volume risk on the revenue requirement in aggregate
- 8.52. We therefore welcome the CAA's conclusion that "we are not persuaded that it is necessary or appropriate to retrospectively correct for historical shocks – including in relation to the non-recovery of regulatory depreciation – unless this was explicitly provided for in the regulatory regime or was clearly in the interests of consumers."²⁷⁷
- 8.53. Nevertheless, we are disappointed that the CAA has deemed it necessary to provide "an allowance for asymmetric risk to ensure that the price control remains a "fair bet""²⁷⁸, and further that it has determined it necessary to set out "a higher asset beta (and so higher WACC) in recognition of the likelihood of heightened risk perceptions by investors even after taking into account the above two regulatory mechanisms"²⁷⁹
- 8.54. In addition, the WACC fails to consider the specification of the TRS, which results in a significantly reduced risk environment that is not reflected in the asset beta and resulting cost of capital; none of these are necessary interventions to "support investor confidence in the regulatory framework and help ensure that HAL remains financeable"²⁸⁰
- 8.55. Whilst we agree that investor expectations play some role in required returns, and further welcome the CAA view that they "do not consider that a RAB adjustment would provide a material additional benefit to consumers in terms of reducing the cost of capital"²⁸¹, we are concerned that the CAA made an error over its £300m RAB adjustment since it also notes a "if the RAB adjustment was presented as a one-off intervention that was unlikely to be repeated under any circumstances, it might not have any effect on investors' forward-looking perceptions of risk"²⁸²

Further RAB adjustment for revenue profiling

²⁷⁶ CAP1769, para C5

²⁷⁷ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.30

²⁷⁸ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.31

²⁷⁹ Ibid.

²⁸⁰ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.32

²⁸¹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.36

²⁸² CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.34

- 8.56. We agree with the CAA that “a RAB adjustment is either necessary or sufficient for deferring revenues through a depreciation adjustment”²⁸³; there is no logical reason to undertake a RAB adjustment that raises airport charges, only to permit a deferral of those same increased charges to future periods
- 8.57. This is no justification for a RAB adjustment, and we agree with the CAA that “the benefit to consumers of NPV-neutral reprofiling of revenues is likely to be small compared to the scale of the RAB adjustment that would be required to facilitate it”²⁸⁴

Further RAB adjustment for service quality and investment

- 8.58. We agree with the CAA that a further RAB adjustment is not necessary, and disagree with Heathrow that it would be “necessary to allow for an appropriate level of investment, opex or service quality in H7”²⁸⁵
- 8.59. We agree with the CAA that “under normal circumstances, we would expect such investments to be funded by HAL and its shareholders”²⁸⁶, but reiterate that the CAA has made an error in relation to its £300m RAB adjustment when they “considered that it was prudent and in consumers’ interest to advance targeted funding to support investment projects needed within a short space of time in 2021, and ahead of the H7 price control review”²⁸⁷
- 8.60. This is since the CAA’s assumed that “the high peak levels of notional gearing expected in 2021, which exceeded certain thresholds considered by credit rating agencies”²⁸⁸ was an error, as demonstrated by the lower gearing levels that resulted, and our observations concerning financeability that we set out in that section
- 8.61. In addition, we find the CAA’s rationale for targeted funding irrational, particularly where the CAA states that it does not intend to substitute actual capital expenditure incurred into the £300m RAB adjustment²⁸⁹, meaning that actual capital expenditure in 2021 resulted in the RAB rising further by that amount
- 8.62. Nevertheless, we agree with the CAA that “HAL’s proposed further RAB adjustment does not constitute targeted funding to support specific investment projects, but rather is based on the principle that it should be remunerated for historical losses”²⁹⁰, and at heart, “investors should be willing to commit capital to

²⁸³ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.43

²⁸⁴ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.47

²⁸⁵ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.49

²⁸⁶ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.50

²⁸⁷ Ibid.

²⁸⁸ Ibid.

²⁸⁹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.17

²⁹⁰ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.51

the business providing that they expect in future, on average, to earn their required return”²⁹¹

- 8.63. We agree with the CAA that a rational investor would not “react to the past crystallisation of risks, and the consequent non-recovery of regulatory depreciation in 2020 and 2021, by reducing investment and shortening the time horizons of their investments”²⁹²; this is a particularly important, and the centrality of rational expectations to decision-making are a fundamental part of Professor David Begg’s body of work²⁹³, an economic luminary was until recently a member of Heathrow’s Board of Directors
- 8.64. We agree with the CAA that investors “make decisions based on the forward-looking balance of risk and return, taking into account the protections available to them”²⁹⁴, however we note that “this includes the existence of a TRS mechanism that will significantly insulate them from volume risk in future”²⁹⁵, furthering our expectation of a significant fall in the cost of capital

Further RAB adjustment for debt financeability

- 8.65. We agree with the CAA that a further RAB adjustment is not “necessary to manage the peak in HAL’s gearing”²⁹⁶, but disagree that this even required the £300m RAB adjustment already announced; our financeability analysis and observations in the CAA’s Price Control Model (“PCM”) demonstrate that it was not necessary
- 8.66. Nevertheless, we agree with the CAA’s analysis that demonstrates a £2.5bn RAB adjustment would not deliver any particularly substantive improvement in credit ratings, particularly where “credit rating agencies may look beyond the temporarily depressed metrics”²⁹⁷; however, we do not consider that this would lead to a one notch improvement on the basis that credit ratings agencies would look through the current pandemic to the longer-term business prospects of Heathrow
- 8.67. We further welcome the comment that “we would not necessarily view a notional entity that was rated BBB to be unfinanceable”²⁹⁸, and ask why the BBB metrics were not instead used for financeability analysis; we consider this point further in our assessment of financeability, and also point out that yet another notch at BBB-remains below BBB as buffer above non-investment grade ratings
- 8.68. It is particularly important to note that Heathrow’s proposed further £2.5bn RAB adjustment allows a deferral of value derived from regulatory depreciation in its

²⁹¹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.52

²⁹² CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.53

²⁹³ Begg, D (1982) *The Rational Expectations Revolution in Macroeconomics*, Deddington, Oxford, Publisher: Philip Allan

²⁹⁴ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.53

²⁹⁵ Ibid.

²⁹⁶ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.57

²⁹⁷ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.60

²⁹⁸ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.62

business plan; this would clearly undermine these short-term financial metrics and place them back in a position similar to that as if that additional RAB adjustment had not taken place

- 8.69. It is therefore illogical for Heathrow to advocate a RAB adjustment in support of short-term financial metrics, which has no effect on short-term financial metrics; this exposed the true motivation to undermine ex ante incentive regulation and achieve an ex post adjustment to its business value at the expense of consumers

Further RAB adjustment for equity financeability

- 8.70. We agree with the CAA that without a RAB adjustment, the notional entity would have to "reinvest a substantial proportion of its equity return in H7 to deleverage the business following the increase in gearing driven by the impact of the covid-19 pandemic"²⁹⁹; it is entirely appropriate that "the scale of deleveraging required implies that there would need to be only very limited notional dividend payments in the early years of H7"³⁰⁰
- 8.71. We support the CAA's view that equity remains financeable in the absence of a full RAB adjustment, and comment further in our section on financeability; in addition, we agree with the CAA that a "period of dividend forbearance is reasonable, providing that the overall allowed return is in line with the WACC"³⁰¹, but draw attention to our observation in that section that many investors do not require dividends where those are reinvested in the business to support future returns
- 8.72. Alternatively, it would not be unreasonable to assume an equity injection to support de-leveraging in the notional company and we agree with the CAA's observations³⁰² that this is reasonable based upon many other businesses that have raised equity during the pandemic, supporting an assumption of financeability as any equity is reinvested in the notional company; on the other hand, we note that an equity injection may be more expensive for consumers and therefore a suboptimal choice for these Initial Proposals

Calculation of H7 opening RAB

- 8.73. For the reasons stated in our section in this report related to Expansion and the Q6 capital efficiency review, we believe the CAA's calculation ³⁰³for the opening H7 RAB is in error; Category C costs should not be included, and the risk sharing mechanism for Category B costs have not been applied to account for Heathrow's unilateral withdrawal from the Expansion project

²⁹⁹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.65

³⁰⁰ Ibid.

³⁰¹ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.66

³⁰² CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.67

³⁰³ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.74

- 8.74. We also reiterate our view that the £300m RAB adjustment is also an error, and that this should not be incorporated into the RAB; furthermore, we note that Heathrow is unlikely to spend the forecast £308m in 2021, and that even this number is clear evidence that promised additional investment as a result of the £300m RAB adjustment has failed to materialise

Roll-forward of the H7 RAB

- 8.75. We note the CAA's intended calculations³⁰⁴³⁰⁵ of the closing RAB each year in H7 and at the end of H7, and query whether there are a number of items that have been omitted in error; we expect that there should be mention here of the capital efficiency incentives that would affect the calculation, along with any ex post review of specified, large programmes
- 8.76. In addition, we draw attention to our comments on the tax uncertainty and tax clawback mechanisms, which might be better applied as a revenue adjustment for H8; it is important that the RAB is used in its intended manner for capital investment that benefits consumers, and the economic logic of any entry or deduction should therefore be fully scrutinised

Conclusion

- 8.77. A The RAB is significantly elevated at present, resulting in higher charges than at other, comparable airports, but the makeup of the RAB is not clear once investments are incorporated; we remain opposed to the inclusion of Expansion costs in the form proposed along with the CAA's £300m RAB adjustment, however we welcome the CAA's decision to reject Heathrow's request for a further £2.5bn RAB adjustment, rejection of its arguments surrounding regulatory depreciation, and a decision therefore not to make any further adjustments
- 8.78. We welcome the CAA's conclusions as to why a further £2.5bn RAB adjustment is inappropriate, but note that a similar analytical framework applied to the £300m RAB adjustment would not in fact support its introduction, and the logic applied is irrational when compared to later financeability analysis; in particular, it appears the notional company's gearing did not reach the 70% level expected and in any event, credit rating agencies do not make decisions on financial metrics alone
- 8.79. Finally, we observe that Heathrow's promised additional investment in 2021 has not materialised, and has not incentivised service quality, particularly where Heathrow have consistently sought to seek alleviation from SQRB failures throughout the pandemic; since the adjustment has not reduced the cost of capital, we call on the CAA to invoke the additional protections that were promised

³⁰⁴ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.79

³⁰⁵ CAP2265C: Chapter 6, The H7 Regulatory Asset Base, para 6.80

9. Allowance for asymmetric risk (CAP2265 Chapter 7)

- 9.1. Under an average revenue yield price cap regime, the regulator sets a constraint on the average revenue per unit earned by the firm; this is the approach that has been used to date by the CAA at Heathrow, with Heathrow bearing all the risks of deviation from passenger forecast numbers once they have been set
- 9.2. As a result, the risks of demand volatility have historically fallen entirely upon Heathrow, resulting in higher than anticipated profits if demand is greater than forecast, and the converse if demand falls below that forecast; it is important to consider a number of features of Heathrow's price control that have bearing on how this risk allocation might be allocated in future
- 9.3. Firstly, the single till nature of the price control means that Heathrow's total revenue is significantly high than the aeronautical revenue requirement; this has resulted in a particularly powerful incentive to develop commercial revenues that are unconstrained by the price cap, which has been historically demonstrated by the strength of Heathrow's commercial revenue development over time
- 9.4. Nevertheless, this plays an important role in ensuring the expense of the airport is reduced in the aeronautical revenue requirement, resulting in per passenger airport charges that are less extreme than otherwise might be the case as a result of the inflated nature of the RAB; since per passenger earnings from commercial revenues are limited only by the creativity of Heathrow's commercial team, there are many additional upside cases that might result in future that must be remain incentivised to benefit consumers at future periodic reviews
- 9.5. Secondly, whilst Heathrow is currently limited by planning constraints to 480,000 Air Traffic Movements ("ATMs") per annum, it has not only yet to reach this threshold in current operation, but is clearly incentivised to deliver new capacity under the Airports National Policy Statement ("ANPS") that remains in force to deliver new capacity, which itself would result in an increase to this planning threshold
- 9.6. Heathrow's apparent unilateral withdrawal from this project – which we discuss further in our discussion of Expansion costs – should not therefore penalise consumers, since Heathrow is fully incentivised to efficiently build new infrastructure that would be rewarded through growth of the RAB and be remunerated in airport charges at the determined cost of capital
- 9.7. Thirdly, the range of downside possibilities is a reflection of its chosen cost structure, which it has portrayed as being relatively fixed in nature; there is no constraint on Heathrow from renegotiating with its workforce and suppliers to develop a more flexible cost base that would limit its downside potential by ensuring its cost base is more scalable in nature
- 9.8. Fourthly, a focus upon the variation in traffic forecasts is not consistent with an assessment of potential outcomes, which are typically assessed by other regulators

through a more robust analytical framework; we note that CEPA have suggested such a framework for Ofwat's PR24³⁰⁶, which ensures such assessment are made in the round against the entire price control

- 9.9. In light of such assessments, it may become apparent that whilst there is an asymmetry across the price control, it is how this risk arises that is just as important to understand; for example, under an ex-ante Return on Regulated Equity ("RoRE") approach, P10 and P90 can be informative on potential asymmetry, but it is just a snapshot at one point of the chart which ignores how the risk evolves over probabilities up to that point"³⁰⁷
- 9.10. It is difficult therefore to look at the individual risk related to traffic in isolation without considering the entirety of the price control, and the approach taken to this asymmetric risk allowance is focused on a single particular risk rather than taking consideration of aggregate risk to achieve greatest benefit to consumers
- 9.11. Finally, it should be noted that the full spectrum of risk possibility is measured in a company's beta; it is true that any company's outperformance is limited by the nature of its existing infrastructure, but that there is no constraint on Heathrow further developing its infrastructure in a manner that is both efficient and provides further consumer benefits that can be supported by airline customers
- 9.12. Ultimately therefore, the CAA can only consider risk within the context of the overall price control package, and the incentives that Heathrow has placed upon it through its various building blocks; it is within that context that we comment further on the CAA's proposals for an asymmetric risk allowance
- 9.13. We therefore disagree with the CAA and consider in error its assertion that "forecasts should be set in a way such that the expected opportunities for HAL to out-perform are broadly matched against the risk that HAL could under-perform"³⁰⁸; this is since this presupposes an outcome that out-turn outcomes must be symmetrical without consideration of the merits or demerits of certain asymmetric outcomes that could be in the best interests of consumers
- 9.14. For example, the application of asymmetric penalties under OBR – such as those determined by the CMA for PR19³⁰⁹ – are a perfectly reasonable outcome that would ultimately lead to an asymmetric outcome for the price control as whole; as a result of applying an asymmetric risk allowance, the CAA risks undermining many other incentives applied across the price control to individual building blocks

³⁰⁶ [CEPA, Allocation of Risk, prepared for Ofwat, 18th June 2021, p29](#)

³⁰⁷ Ibid. p68

³⁰⁸ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.2

³⁰⁹ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 7.312](#)

- 9.15. We further suggest that the CAA has made an error in stating that “it is appropriate to consider adjustments for these asymmetric risks”³¹⁰ based upon its observation that “historical experience suggests that the risks that HAL could encounter sudden downside shocks to traffic are not likely to be accompanied by an equal and offsetting set of possible upside events”³¹¹
- 9.16. We do not consider that this is a sufficiently justified reason for inclusion of either an asymmetric risk allowance or a shock factor to passenger volume forecasts, since Heathrow is subject to regulation under an average revenue yield price cap regime; this naturally results in variation of its out-turn volume and returns from that used to determine the price control that is fully described by its cost of capital
- 9.17. Any reallocation of risk must be fully justified, with the rationale for determining a particular risk allocation expressed, and the benefit of placed those risks on consumers fully assessed in a manner consistent with the overall price control; we therefore view the CAA’s conclusions as an error, since these basic questions have not be adequately answered
- 9.18. We have commented extensively on problems related to incentives and risk in previous replies to CAA consultations over the course of the H7 periodic review, which we draw attention to and incorporate by reference in this particular response; ultimately, the CAA must ensure that the entire price control has a balanced package of incentives that avoid perverse consequences resulting

Asymmetry in the price control

- 9.19. There are many forms of asymmetry that exist in any price control, not least the vast information asymmetry that exists between regulated company and regulator; Ofgem have identified a range of structural asymmetries that exist³¹², as evidenced by continued general outperformance of price controls by regulated companies
- 9.20. In addition, it may remain appropriate to structure an element of asymmetry within the OBR framework, an approach considered by the CMA in its assessment of the Output Delivery Incentives (“ODI”) for PR19, where it noted “some of the incentive rates nevertheless create a downside risk against expected performance, which should be considered as part of the overall balance of risk in the price control”³¹³
- 9.21. For example, failure-only penalties within the ODI structure at PR19, such as supply interruptions, were determined by the CMA as acceptable asymmetry, which is subsequently assessed in the round through the cost of capital; we believe it is an error to apply asymmetry either through a “shock factor” or an additional revenue

³¹⁰ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.3

³¹¹ Ibid.

³¹² [Ofgem, RIIO-2 Final Determinations - Core Document, para 11.29](#)

³¹³ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 7.315](#)

allowance for asymmetry that inappropriately de-risks Heathrow's returns compared to that cost of capital

- 9.22. As a result, we believe the CAA has made an error in its assessment that asymmetry within the package is a problem, and should consider the CMA's view that "a package of asymmetric incentives should be considered as part of an 'in-the-round' assessment of the package, including the cost of capital"³¹⁴; it should be further noted that use of an average revenue yield price cap regime that offers volume risk is inherently limited by the existing infrastructure in any company regardless
- 9.23. General asymmetries within the price control would arguably be taken into account when considering the cost of capital, which the CMA consider has been their approach with PR19, noting "our conclusions on the cost of capital and financeability take into account the effects of the overall package of PCs and ODIs, including the scale of risk faced by the companies and the asymmetry of the package of ODIs"³¹⁵
- 9.24. In addition, the CAA has proposed a Traffic Risk Sharing mechanism ("TRS") that significantly removes downside risk within the price control, placing it upon consumers, though without a corresponding reduction in the cost of capital for doing so; we believe this is irrational as it is inconsistent with the fact that a TRS exposes consumers to a proportion of the same downside and upside risks that Heathrow has held to date, yet the changed balance of risk has not been reflected in the cost of capital
- 9.25. In particular, we believe the CAA are incorrect to suggest that Heathrow is not "compensated in full for bearing demand risks through the allowed return"³¹⁶, since this would be a direct contradiction of the CMA comment for PR19 that "in setting the allowed return, our duty is to consider whether investors in a notional company, acting efficiently, have a reasonable expectation of a return equal to its WACC"³¹⁷
- 9.26. Furthermore, the CMA continue that "our assessment is that those investors would also take into account structural asymmetry in the package of incentives when considering expected returns on investment"³¹⁸; we therefore consider that it would be an error for the CAA to further compensate Heathrow for an asymmetric risk that would have been priced into investors' expectations
- 9.27. Given the way in which the CAA has consistently tended towards higher estimates within the cost of capital and its financeability analysis as noted by CEPA in its

³¹⁴ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 9.1395](#)

³¹⁵ Ibid.

³¹⁶ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.14

³¹⁷ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 9.1339](#)

³¹⁸ Ibid.

analysis³¹⁹ submitted alongside the AOC/LACC response to this consultation, we believe it would be an error for the CAA to apply additional allowances that are neither appropriate nor fully justified

- 9.28. Ultimately, moving towards a hybrid cap insulates Heathrow from a degree of risk that an average revenue yield price cap offers, and the CAA must also consider whether any perceived asymmetry from volume shocks is in fact offset by the requirement to have an incentive under CAA12 to develop capacity to meet demand, which is met under a pure average revenue yield price cap
- 9.29. The risk of outcomes different than those assumed when the price control is set is at the heart of a price cap that is based upon volumes; the incentive will not only be weakened but must be substantially re-priced in the cost of capital as all this de-risking activity inevitably moves the regulatory regime on the path towards a revenue based price cap
- 9.30. As a result of all this de-risking activity, consumers might rightly ask whether a utility-like cost of capital is not a more appropriate outcome given the significantly reduced risk to which Heathrow will be exposed in H7; it is illogical that Heathrow would retain an inflated cost of capital despite the application of a shock factor, asymmetric risk allowance and TRS, which in combination reduce risk significantly
- 9.31. It would furthermore be a perverse outcome if the price control were to tacitly reinforce Heathrow's obvious decision to unilaterally abandon its Expansion project by embedding that assumption within the regulatory regime; Heathrow now has a clear right to resurrect that project should it wish to do so, following its successful appeal at the Supreme Court³²⁰

Form of allowance for asymmetric risk

- 9.32. We noted the CAA's options for three possible adjustments to provide an allowance for asymmetric risk; on the basis of our previous comments, we believe both "a downward adjustment to our central case H7 traffic forecasts"³²¹ and "to add an amount to HAL's H7 revenue entitlement to offset the loss of revenue that HAL might expect to suffer during the H7 period as a result of downside shocks"³²² would both be in error
- 9.33. Furthermore, we believe that such risks are already incorporated into the H7 cost of capital, such that a further adjustment "to reflect the asymmetric risks faced by investors in the calculation of the allowed return price control building block"³²³ would also be in error

³¹⁹ CEPA: Response to CAA H7 Initial Proposals – Cost of capital, December 2021

³²⁰ [The Supreme Court, R \(on the application of Friends of the Earth Ltd and others\) \(Respondents\) v Heathrow Airport Ltd \(Appellant\), 2020](#)

³²¹ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.16

³²² Ibid.

³²³ Ibid.

- 9.34. At its heart, the CAA's approach is irrational in aiming to "provide HAL with an identical expected amount of revenue in each year of the H7 period"³²⁴ this focuses inappropriately upon a single risk in isolation and effectively removes all downside risk related to traffic volumes from Heathrow in its entirety; a focus on revenue undermines the incentives that are central to the volume-based price control, which is not based upon any guaranteed revenue allowance, and is therefore inconsistent with the price control as a whole
- 9.35. Given that market data prices in all information available, including "low impact" and "high impact" shocks, we fail to see the distinction between these and "everyday" variances that are all incorporated into the asset beta information derived from comparators and priced within the cost of capital
- 9.36. It is particularly important that the CAA decided not to make an adjustment for perceived asymmetry at the Q6 periodic review, and noted that they were "not persuaded that it was necessary or practical to allow for the "skewedness" of returns within the calculation of the WACC"³²⁵; it is therefore irrational to both state that "nothing that has happened since the start of Q6 causes us to alter this assessment"³²⁶ whilst simultaneously introducing a new allowance for asymmetry
- 9.37. This is accentuated by the fact that a like-for-like WACC for H7 based upon the Q6 calculation would range from 1.6% to 2.8% (real, vanilla)³²⁷, yet the CAA's analysis of cost of capital has consistently chosen higher individual parameters across the board that suggest its previous statement that this assessment on the WACC has not changed since Q6 is inconsistent with choices made in the WACC

Calibration of allowance: non-pandemic shocks

- 9.38. We continue to disagree with the logic for the application of a "shock factor" to the H7 traffic forecasts; consistent with our arguments at the Q6 periodic review, which we incorporate by reference, we believe this would be an error due to the lack of evidence that "unadjusted forecasts represent upwardly-biased estimates of outturn traffic volumes"³²⁸
- 9.39. This is particularly relevant as in the core years of Q6 that used forecasts set by the CAA, there was significant outperformance of those traffic forecasts; given investors were prepared to pay an enterprise value in excess of the RAB, this clearly gives rise to an investor expectation that Heathrow would significantly outperform its settlement, which was the case until the start of the pandemic

³²⁴ Ibid. para 7.17

³²⁵ Ibid. para 7.21

³²⁶ Ibid.

³²⁷ CEPA: Response to CAA H7 Initial Proposals – Cost of capital, December 2021

³²⁸ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.24

- 9.40. As a result, we believe it would be an error to suggest that it would “improve the accuracy of our forecasts, since history suggests that at least one such shock can reasonably be expected to occur in H7”³²⁹; the evidence presented is insufficient to support such conclusions, which are consequently irrational
- 9.41. This is particularly important with the introduction of the TRS, which is specifically designed to improve the accuracy of forecasts given the difficulty presented by the current uncertainty; at a minimum, it would be an error not to remove the shock factor from the forecasts of passenger revenues as it is unnecessary in the presence of a TRS
- 9.42. This is even more irrational, since the CAA has not presented its own evidence of demand shocks or additional analysis of Heathrow’s evidence, noting that “HAL has estimated demand shocks for the Q6 forecast based on the historical averages of demand shocks dating back to 1991”³³⁰; this continues that “we have decided to use this as the basis for our Initial Proposals (as while it is difficult to predict the exact timing of such shocks they are likely enough to improve the accuracy of the forecast for the period)”³³¹
- 9.43. It is not sufficient for a price control to rely upon unchallenged evidence from the regulated company, which is motivated to reduce the passenger forecast to raise its average revenue yield at the periodic review; it would therefore be an error to rely upon this without further analysis that supports both the rationale for its application and the basis of evidence used in its calculation
- 9.44. Furthermore, we do not agree with the evidence that such a shock has not been built into market expectations of risk, therefore it is our view that such an adjustment provides false assurance of accuracy of the passenger forecasts whilst reducing the overall accuracy of risk assessment within the price control

Calibration of allowance: pandemic shocks

- 9.45. We do not agree with the application of an allowance for pandemic-related shocks, and furthermore believe the CAA’s calculation is an error that is not sufficiently robust to incorporate into the price control; the calculation steps set out³³² are not integrated with the rest of the price control and fail to account for numerous other incentives across other building blocks, which would be undermined if applied
- 9.46. The first step³³³, by calculating the traffic loss that Heathrow might expect to encounter, is entirely predicated upon a Government response that is in line with that taken during this pandemic; there have been numerous other outbreaks of

³²⁹ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.19

³³⁰ CAP2265B: Chapter 2, Passenger forecasts, para 2.40

³³¹ Ibid.

³³² CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.25

³³³ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.27

pandemic disease in the past century³³⁴, with far fewer or no Government travel restrictions in many cases

- 9.47. This is particularly important, as much of the reduction in passenger numbers has been as a result of Government action to restrict travel or implement testing regimes, therefore formulaically applying the reduction in passenger numbers experienced in this pandemic would be irrational and result in an over-estimate of the impact; a simply comparison of this pandemic to the 2009 H1N1 when no significant travel restrictions resulted demonstrates this disparity
- 9.48. The second step³³⁵, to calculate annual losses in profit resulting from a pandemic-magnitude event, is also in error since this has been applied to already depressed passenger numbers that are restricted in Heathrow's underlying model by application of its supply constraint model; this therefore double counts the impact of a pandemic that has already been incorporated into the base passenger forecast
- 9.49. Furthermore, this analysis is not sufficiently robust as it is a simple calculation of profit rather than analysis of notional company RoRE, and therefore fails to consider the evolution of the notional company in the same way that this has been considered for the opening H7 notional company balance sheet
- 9.50. This inconsistency therefore undermines the analysis, which is compounded by the use of the upper and lower quartile ranges that incorporate Heathrow's discredited analysis of operating expenditure and commercial revenues; as a result, this over-estimates the effect on profitability and over-estimates the effect on Heathrow's profitability, further compounding the error of this analysis
- 9.51. We agree with the CAA that "it is also important to account for the protection that the new TRS mechanism will offer"³³⁶, noting that the proposals on TRS relate to passenger volume deviations³³⁷ rather than amounts related to revenue losses; this calculation therefore appears to be in error as the proposed TRS does not relate to revenue losses
- 9.52. Furthermore, whilst we understand why an indicative value might be based upon 50% and 95% sharing rates, we note that a 90% - 100% sharing of traffic deviations essentially removes all downside risk from Heathrow below the 10% central band, and additionally once traffic is restored offers consumers no upside opportunity above the 10% band unless further capacity is built
- 9.53. This underscores the fact that any such mechanism duplicates what has been remunerated in the WACC, has likely already incorporated into the shock factor, and has been further de-risked through the TRS; it would therefore be irrational to introduce this further mechanism to the price control

³³⁴ [US Centers for Disease Control and Prevention, Past Pandemics](#)

³³⁵ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.29

³³⁶ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.30

³³⁷ CAP2265B: Chapter 1, Overall approach to regulation, para 1.32

- 9.54. The third step³³⁸, to estimate the frequency of pandemic magnitude events, is also in error since it makes no distinction between the magnitude of the effect on the travel industry or distinguish between different Government responses; as we note above, there have been numerous other outbreaks of pandemic disease in the past century³³⁹, with far fewer or no Government travel restrictions in many cases
- 9.55. The question should therefore be to ask what the frequency of Government responses of this magnitude in response to a pandemic might be, and it is our view that this should be far less than "a probability that sits between a 1-in-20-year and 1-in-50-year range"³⁴⁰; in addition, the CAA have not presented a robust evidence base to support the assertion that "this translates into a probability of 3.5% of a new pandemic-magnitude event beginning in any given year, starting from 2023"³⁴¹
- 9.56. Finally, the fourth step³⁴², to weigh the profits identified in step two by the probability identified in step three is irrational, since it introduces additional complexity by smoothing the revenue allowance across every year of H7; furthermore, its application as a revenue allowance whilst the TRS is applied as a RAB adjustment results in inconsistent treatment of uncertainty mechanisms and could potentially undermine incentives across the price control as a result

Conclusion

- 9.57. Incentives across the price control are important when considering asymmetric risk, and the capacity limitation of 480,000 ATMs per annum must be considered in light of the Expansion project and nature of the ANPS, which remains current law; Heathrow must remain incentivised to raise efficiency and productivity in all circumstances, and just as the current pandemic has prompted restructuring, so must any future shock scenario
- 9.58. The CAA's assessment of asymmetric risk needs a more robust framework, and ultimately we believe all risks are incorporated in the asset beta within the cost of capital calculation; a degree of asymmetry is not necessarily undesirable, and must be viewed in the context of what the price cap is trying to incentivise, particularly given the proposed TRS also provides a de-risking of downside scenarios
- 9.59. We disagree with the CAA's focus on adjusting revenue outcomes through its application of these mechanisms, and disagree that different shocks can be distinguished from the asset beta; we disagree with the use of a shock factor for non-pandemic shocks, which we believe duplicates the effect of the TRS and is not supported by sufficient independent evidence

³³⁸ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.33

³³⁹ [US Centers for Disease Control and Prevention, Past Pandemics](#)

³⁴⁰ CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.34

³⁴¹ Ibid.

³⁴² CAP2265C: Chapter 7, Allowance for asymmetric risk, para 7.36

- 9.60. We also disagree with the CAA's application of a revenue allowance for pandemic shocks, which duplicates other mechanisms and whose introduction has insufficient justification; applied as a revenue adjustment, it could potentially undermine incentives across the price control

10. Financial framework (CAP2265 Chapter 8)

- 10.1. The financial framework is an important basis for the assessment of the notional company, and it is important to revisit assumptions at each periodic review to ensure they remain appropriate to the circumstances; as a result there are certain key considerations that need to be taken into account when determining the financial framework, since these have a direct bearing on both the cost of capital and the ongoing financing incentive for the H7 period
- 10.2. The CAA should consider whether its assumptions remain appropriate given the evidence of what gearing has been achieved by the company, and what is an appropriate level of financial resilience that should be incorporated; it would be an error not to revisit underlying assumptions to ensure that previous analysis to determine those structures are still supported by the evidence

Notional financial structure

- 10.3. It is important that the notional company is established on an efficient basis, such that consumers face a charge that is as low as reasonably as possible; the heart of the issue is the question of whether the assumed mix of debt and equity used for the notional company is appropriate, and represents the lowest cost of capital achievable
- 10.4. As we have previously stated³⁴³, notional gearing should be informed by an efficient notional capital structure that itself represents the lowest WACC achievable³⁴⁴; this is not mere theory, but what is seen in practice with the financial engineering that has taken place at Heathrow, replacing equity with lower cost debt
- 10.5. The CAA's statement that "corporate finance theory suggests that the cost of capital is largely unaffected by gearing"³⁴⁵ is therefore in error, since it fails to consider the effect of taxes on optimal level of gearing and the fact that the CAA's own WACC calculations result in rising WACC at higher levels of gearing
- 10.6. Corporate finance theory only suggests that firm value is unaffected by the level of gearing in the absence of transaction costs and differential rates of taxation; whilst Modigliani and Millers' original theorem³⁴⁶ would suggest the irrelevance of

³⁴³ [British Airways response to CAP2139, Section 14.24](#)

³⁴⁴ Ogier, T., Rugman, J & Spicer, L, "The real cost of capital", FT Prentice Hall, Chapter 5, p122

³⁴⁵ CAP2265C: Chapter 8, The financial framework, para 8.28

³⁴⁶ [Modigliani, M. and Miller, M.H., The Cost of Capital, Corporation Finance and the Theory of Investment, The American Economic Review, Vol. 48, No. 3 \(Jun 1958\), pp. 261-297](#)

capital structure, it instead demonstrates that capital structure does matter when those underlying assumptions are violated

- 10.7. This is corrected in their subsequent paper³⁴⁷, which demonstrates the typical advantage of leverage, which reduces liability to corporation tax since interest payments are tax deductible; these advantages therefore need to be assessed properly and suggest that it would be irrational not to use the cost of capital to choose the optimal level of gearing
- 10.8. It would be irrational therefore not to reassess whether the current notional structure remains the appropriate target throughout the H7 period, since this could result in consumers paying more through the cost of capital than otherwise could be the case; whilst it is of note that Heathrow's owners had consistently targeted c.86.55% leverage before the pandemic, and are now operating at a level of 90.4%³⁴⁸, this is only an indication that resulting WACC is too generous rather than that the notional company gearing should itself be set at this level
- 10.9. We agree with the CAA that it remains important that "actual choices remain the responsibility of HAL, its directors and shareholders"³⁴⁹; otherwise, this "could weaken the incentive on HAL to manage its finances prudently and could lead to consumers underwriting particular risks that HAL's directors and shareholders have decided to take"³⁵⁰
- 10.10. Nevertheless, we believe it would be appropriate for the CAA to justify the assumption that 60% target remains appropriate by testing whether that is the lowest cost of capital achievable by the notional company; it is important that the path to returning to that target for the notional capital structure by the end of H7 is achieved by the lowest cost means available
- 10.11. We also question the assumption that the notional gearing should be elevated at all at this periodic review; it is not typical to adjust notional gearing for out-turn performance, and it would appear to raise the cost of capital under the CAA's assumptions as a result
- 10.12. We support the CAA's analysis that reducing debt through reinvestment of dividends is more appropriate than an equity injection in achieving the target financial structure for the notional company, should that be the lowest cost means of achieving the target gearing; we have set out in our analysis of financeability why this remains justified and dividends are unnecessary to signal equity financeability
- 10.13. As a result, we do not necessarily agree with the CAA that "a resumption of dividend payments in 2023 or 2024 would be consistent with our statutory

³⁴⁷ [Modigliani, M. and Miller, M.H., Corporate Income Taxes and the Cost of Capital: A Correction, The American Economic Review Vol. 53, No. 3 \(Jun 1963\), pp. 433-443](#)

³⁴⁸ [Heathrow \(SP\) Ltd, Q3 results, p21](#)

³⁴⁹ CAP2265C: Chapter 8, The financial framework, para 8.9

³⁵⁰ Ibid. para 8.10

duties”³⁵¹ due to the clear evidence that many investors are comfortable reinvesting dividends for capital growth; for example, should the Expansion project be restarted as required by the ANPS, this could require years of dividend reinvestment to achieve the pace of investment required to deliver by 2030

- 10.14. We are further concerned that the CAA considered that “in the event of a future global pandemic or other major shock, the notional entity would likely still experience pressure on liquidity”³⁵²; this may be irrational as assumptions over the appropriate capital structure do not appear to be consistent with the significant reduction in risk proposed through development of the TRS, a new asymmetric risk allowance, and existing shock factor to forecasts
- 10.15. It is therefore concerning that there is no mechanism provided to ensure that “amounts recouped over the years through the allowance for asymmetric risk”³⁵³ would not have been disbursed as dividends; if this additional allowance is truly required, it suggest there should be a mechanism to ensure these amounts remain available as equity within the business to ensure consumers are not exposed to increased risk in future
- 10.16. Therefore, despite the additional risk protections that reduce risk to investors, consumers appear to remain just as exposed to risk in the event of a similar shock; this does not appear to be in the best interests of consumers, but appears to work instead to entirely to de-risk investors at the expense of consumers
- 10.17. Therefore, whilst in theory we agree with the CAA that investors would “have been funded so that they would be able to provide cash support in the event of a pandemic/shock (effectively repaying the amounts in respect of asymmetric risk allowance)”³⁵⁴, there is no effective mechanism to compel this to be the case; we therefore ask whether there should be such a licence obligation in light of the fact that Heathrow’s investors have failed to inject equity during this pandemic³⁵⁵
- 10.18. As a result, this assumption that companies would be forced to put money back into equity in future carries no weight, since the practical reality is impossible to enforce; this is further compounded by interpreting financeability through analysis of credit ratings rather than to enforce the restoration of the notional balance sheet when it is actually required
- 10.19. Ultimately, the CAA needs to analytically set out its reasoning for the 60% notional gearing assumption to remain relevant; it may be that “lower gearing would also have the disadvantage of being less tax efficient, which could ultimately mean

³⁵¹ CAP2265C: Chapter 8, The financial framework, para 8.31

³⁵² CAP2265C: Chapter 8, The financial framework, para 8.33

³⁵³ Ibid.

³⁵⁴ Ibid. para 8.34

³⁵⁵ Purported equity instead raised as Floating Rate Notes through ADI Finance 2 Ltd, listed as follows: [The International Stock Exchange, ADI Finance 2 Ltd GBP750,000,000 Floating Rate Notes due 2027, and GBP38,343,457.55 Interest Notes due 2023](#)

higher costs for consumers”³⁵⁶, but this assumption of the CAA is an error under the WACC calculations they have used, since in this case, the WACC rises with debt contrary to theoretical assumptions

10.20. It is our view that it would be irrational not to perform this analysis and ensure therefore that the notional company gearing assumption does indeed represent the basis of an efficient financing assumption, cross-checked against comparators; this is particularly important since, as noted by the CMA, “it would be illogical and contrary to the interests of NERL’s customers to assume a higher gearing if it were to result in a higher cost of capital”³⁵⁷

10.21. The comparator analysis of notional gearing is important, since where those comparators have different levels of gearing, there are legitimate concerns that arise with the de-gearing and re-gearing of equity betas; as a result “in situations where there is a material difference between actual and notional gearing, regulators should carefully consider the specific method for re-levering”³⁵⁸

Regulatory depreciation

10.22. The starting point of analysis for regulatory depreciation should be the nature of the underlying assets that comprise the RAB; we comment further on the nature of these assets in our comments on the RAB alongside our view that some are better considered as assets in perpetuity, which informs our view of the appropriate run-off profile of the RAB

10.23. The appropriate profile of regulatory depreciation is also clearly interlinked with the notional gearing assumption and the question of financeability of the debt that therefore supports that assumed leverage; in principle, whilst it is not unreasonable to approach the question initially based upon the projected profile of accounting depreciation of the underlying assets, further considerations need to be taken into account to ensure this is an appropriate profile for regulatory depreciation

10.24. We agree with the CAA that the depreciation schedule should not be adjusted to support perceived financeability concerns³⁵⁹, though this is based upon our observation that credit rating agencies commonly reverse out NPV-neutral reprofiling adjustments – a matter that was first raised by the CAA themselves in its previous consultation³⁶⁰

10.25. We further highlight that this is supported by the CMA view that “we doubt the extent to which accelerating cash flows from future periods can improve the credit

³⁵⁶ CAP2265C: Chapter 8, The financial framework, para 8.35

³⁵⁷ [CMA Final report, NATS \(En Route\) Plc/CAA Regulatory Appeal, para 11.116](#)

³⁵⁸ [UKRN, Estimating the cost of capital for implementation of price controls by UK regulators, March 2018](#)

³⁵⁹ CAP2265C: Chapter 8, The financial framework, para 8.33

³⁶⁰ [CAP2139, Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward, Chapter 3, Financial framework, para 3.52](#)

quality of a regulated business, as there is no change in the revenues available to meet financing obligations over time”³⁶¹

- 10.26. Nevertheless, the depreciation schedule needs further interrogation to ensure that it remains appropriate, particularly given that it “reflects the projected accounting depreciation based on HAL’s accounting policies”³⁶²; it is particularly important that the CAA does not simply accept Heathrow’s proposals, particularly where it has does not include any depreciation over the CAA’s £300m RAB adjustment³⁶³
- 10.27. This is a particularly important point, as the CAA has not set out any rationale for treating the £300m RAB adjustment differently than any other portion of the RAB; there is no rational justification that has been set out for treating this addition as an asset in perpetuity, particularly if this increment is subsequently depreciated in future
- 10.28. As a result, we believe it is irrational for the CAA to make this decision without considering the policy implications for doing so, and the approach to using Heathrow’s proposed depreciation schedule unamended without reference to regulatory policy choices makes this depreciation schedule highly questionable; the purpose of depreciation must be fully considered in a manner consistent with that set out by numerous academic regulatory economists³⁶⁴
- 10.29. The subsequent size of the RAB is not a relevant question for depreciation policy, and whilst there may be a relevant gross error check to consider whether depreciation is consistent with current investment requirements, the regulated assets that are required to support the regulatory settlement and are incorporated into the RAB determine its ultimate size
- 10.30. The CAA has not therefore justified its chosen depreciation profile based upon any particular regulatory requirement, and this error should be corrected in Final Proposals; if the result of the regulatory settlement produces a perverse outcome in terms of affordability, this might warrant an adjustment, but unlike Heathrow, we are reluctant to take an opportunistic view on this point, since we can only make such an assessment when the building blocks have been finalised correctly
- 10.31. Finally, we support the CAA is its rejection of Heathrow’s assertions that a further RAB adjustment is required to support any “deferral” of depreciation; depreciation should neither be double charged in the manner Heathrow suggests only to be added again to the RAB, nor should the firm’s value through the RAB be written up without corresponding efficient capital investment having taken place

³⁶¹ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.83](#)

³⁶² CAP2265C: Chapter 8, The financial framework, para 8.36

³⁶³ CAP2265C: Chapter 8, The financial framework, para 8.40

³⁶⁴ [Stern, J., The role of the regulatory asset base as an instrument of regulatory commitment, Centre for Competition and Regulatory Policy, City University London, March 2013](#)

10.32. As a result, Heathrow's proposals ride roughshod over many established principles of regulation and debauch the use of the RAB; we encourage the CAA to continue to see through such regulatory innovations to see the true motivations that lie behind them

Conclusion

10.33. The notional company and its supporting assumptions form an essential part of the regulatory framework and financing incentives; we agree that the notional company should remain the basis of the price control, but it is our view that the CAA should review these assumptions in more detail at this periodic review to ensure they remain appropriate

10.34. We believe the notional company's gearing assumptions should be set at a level that represents the most efficient cost of capital achievable as a target financial structure, supported by comparator analysis, and particularly given the evidence that gearing has been elevated for a number of years; we disagree that a resumption of dividend payments is a necessary condition of the price control, and further that the CAA should consider licence obligations to replace equity paid out as excessive dividends to support required financial resilience

10.35. Finally, we note that regulatory depreciation plays an important role in the price control, and that the CAA should not rely upon Heathrow's proposed depreciation schedule without setting out a more detailed rationale; we do not accept the treatment of the £300m RAB adjustment differently than the rest of the RAB, though support the CAA's rejection of the necessity of a further RAB adjustment to support an alternative depreciation profile

11. Weighted average cost of capital (CAP2265 Chapter 9)

11.1. Risk is at the heart of the calculation of cost of capital, and an accurate assessment would comply with the view that investors "consider expected return a desirable thing and variance of return an undesirable thing"³⁶⁵; it is upon this insight that measured risk by reference to volatility that the Capital Asset Pricing Model ("CAPM")³⁶⁶ was developed by Sharpe and others

11.2. This centrality of risk to the measurement of returns means that higher expected returns is required to compensate where a higher risk exists over those returns; most importantly therefore for Heathrow, a lower risk exposure as a result of mechanisms to reduce the specific risk of Heathrow will lower the required return

³⁶⁵ [Markowitz, H., Portfolio Selection, The Journal of Finance Vol. 7, No. 1 \(Mar 1952\), pp. 77-91](#)

³⁶⁶ [Sharpe, William F. \(1964\). "Capital asset prices: A theory of market equilibrium under conditions of risk". Journal of Finance. 19 \(3\): 425-442](#)

- 11.3. Whilst therefore we agree with the CAA that there is an element of “judgment taking account of the evidence and analysis”³⁶⁷, it would be irrational to apply this judgement in a manner inconsistent with that previously applied; the latitude permitted does not therefore justify the CAA to make estimate of each parameter that are skewed such that an overly generous cost of capital results
- 11.4. It is in this light that we believe the CAA’s Initial Proposals are irrational and are an overly generous assessment of WACC, since our consultants have identified numerous areas where evidence indicating a higher allowance has been preferred over evidence indicating a lower allowance, and insufficient justification provided for doing so, particularly when compared with comparable estimates at Q6
- 11.5. Taken together, these over-estimates are consistent with the CAA placing undue weight on short-term financeability considerations that over-compensate Heathrow for the risks it faces; given a gross error check that considers the WACC represents the risks faced by Heathrow, which have been demonstrably reduced through the introduction of a TRS at this periodic review and hence be substantially lower than at Q6, we believe this results in a potential error by the CAA
- 11.6. We incorporate by reference CEPA’s report on the H7 cost of capital, prepared for the airline community, and submitted alongside the AOC/LACC response to these H7 Initial Proposals; we summarise key points from that report as follows

Process

- 11.7. We are concerned with how certain aspects for determining the cost of capital for H7 have been developed; considering the approach taken by other regulators, the CAA has been slow to reveal its positions, and when revealed, those positions have lacked substance in some cases, glossing over some key factors that are important in determining the WACC
- 11.8. This has resulted in high level judgement replacing a concerted effort to unravel complexity and consider how an impact might be quantified, for example, how to capture the impact of the pandemic on the asset beta, being the long term estimate of airport risk that cannot be diversified
- 11.9. Even at this late stage the CAA has not indicated its conclusion on the WACC impact of the numerous risk sharing mechanisms that it proposes for H7; whilst it suggests that it will take these into account as part of setting a point estimate, the CAA does not indicate the basis on which that assessment might be made
- 11.10. However, risk sharing is a fundamental issue for consumers, and taking on more risk must logically result in a material reduction to the WACC and consequently airport charges; otherwise it is unlikely to find support; the CAA’s approach must therefore take account of its duties and the established good practice and transparency that is expected from a regulatory body

³⁶⁷ CAP2265C: Chapter 9, Weighted Average Cost of Capital (“WACC”), para 9.6

- 11.11. In addition, the CAA has relied heavily on Heathrow's submissions in a reactive rather than proactive fashion; despite Heathrow's submissions frequently being incomplete, heavily delayed and lacking transparency, the CAA has allowed Heathrow to have multiple bites at the cherry, with no consequences resulting from poor quality submissions, and inappropriate reliance placed on information they contain

Financeability

- 11.12. Heathrow has elected to be highly geared, which has directly benefited its shareholders, but consumers should not be expected to pay for choices that result in reduced resilience to financial shock, and doing so would be contrary to the requirements of CAA12; whilst reduction in the real cost of capital places pressure on financeability metrics, we do not consider it appropriate to develop a cost of capital that is predicated on Heathrow's financeability
- 11.13. WACC should be calculated by the CAA first drawing on relevant precedent and latest data, the result of which is the prime determinant of financeability, and it would be an error to make corrections for financeability prior to developing this WACC range; this is important as adjusting the cost of capital for financeability concerns is just one solution to any perceived issues, with the downside that doing so risks establishing an unnecessarily high cost of capital for future price controls
- 11.14. It is particularly relevant that airlines and other aviation businesses have had to look to shareholders for further borrowing to ensure their ongoing viability; the CAA's approach in adjusting the WACC for perceived financeability issues tends towards an assertion that consumers alone should bear the cost, consistent with Heathrow's position expressed through its business plans and regulatory responses

Treatment of Heathrow's evidence

- 11.15. While the CAA has rightly rejected some of the more extreme arguments proposed by Heathrow, we have concerns that it has been drawn into developing a range that intentionally sits between airlines (supported by CEPA) and Heathrow; we consider that trading between the positions of airlines and Heathrow may have led to the CAA to reject or mischaracterise arguments we have made
- 11.16. This includes the value of shorter beta estimation periods in understanding the possible evolution of future betas following shock events, where the CAA has suggested that airlines are proposing to draw on this evidence more heavily; in addition, there is also a reference³⁶⁸ that suggests airlines propose placing no weight on post-pandemic evidence: this is not the case
- 11.17. CEPA's work for the airlines has been carried out independently, and we have been informed that their advice would not differ if it had been provided to the CAA;

³⁶⁸ CAP2265C: Chapter 9, Weighted Average Cost of Capital ("WACC"), para 9.28

indeed, CEPA have worked closely with the CAA to try to reach common ground on methodological choices and on the judgements that inevitably must be made

Duties

- 11.18. The CAA needs to carefully consider its duties in developing the Final Proposals; the regulator must ensure that the consumer is protected and that stakeholders can understand the stable and predictable approach undertaken
- 11.19. Whilst uncertainty remains, passengers numbers have been increasing and markets opening up; as the uncertainty starts to dissipate, the CAA should look to take an approach that is best supported by evidence, and not an approach that gives a particular answer on the WACC, particularly once we consider the risk mitigation mechanisms proposed that shift risk from Heathrow to airlines and passengers
- 11.20. The airline community has employed CEPA to consider the issues relating to the cost of capital and associated financial issues, reviewing the CAA's proposals on risk, and engaged with the CAA through the H7 process; CEPA's latest report has been submitted alongside the AOC/LACC response, which forms the basis of our response to this section, and it should be read alongside our previous submissions

Cost of Capital

- 11.21. British Airways supports the positions set out within the CEPA report, in particular a vanilla WACC range of 1.3% - 2.8%; CEPA has raised a series of questions about the approach that the CAA has adopted and we anticipate that the regulator will respond in detail to those points either before or as part of its final determination
- 11.22. Considering the CAA's range, we CEPA identify that it has elected to aim up on many parameters to the extent that it excludes evidence that would result in lower parameter estimates; each of those decisions ultimately impacts passenger charges, and stepping back from the detailed calculations to consider the results in the round, there appears to be a clear lack of consistency with previous precedent, without any strong rationale for departure
- 11.23. As a result, the CAA's WACC calculation is irrational in aggregate, and the CEPA report expands on these concerns, raising a series of issues and questions that the British Airways as part of the airline community at Heathrow will expect the CAA to answer

Asset beta

- 11.24. The CAA's assessment is in error since it has overestimated empirical betas used to calculate a pre-pandemic asset beta range by:
- Incorrectly rounding relevant asset beta estimates

- Using a pre-pandemic asset beta range that does not overlap with regulatory precedent when accounting for the debt beta used in Initial Proposals, whilst the rejection of a decade of precedent is not explained
 - Failing to consider relevant methodological approaches that support a lower beta
 - Incorrectly rejecting evidence from suitable comparators that were used at Q6
 - Choosing Aena as the primary comparator, which is inconsistent with other evidence
 - Making unsubstantiated and contradictory judgements on airport relative risk in order to arrive at its proposed range
 - Making errors in process; the CAA have not addressed those errors that bias the asset beta upwards
 - Failing to develop proper relative risk analysis, where an objective view of relative risk continues to position Heathrow towards the lower end of other airports and airport groups
- 11.25. The CAA's assessment is further in error since its proposed range for the impact of the Covid-19 pandemic on beta is biased upwards by:
- Failing to interrogate evidence provided to it regarding the long-term pandemic impact on beta and relies exclusively on an approach to 'reweighting' betas that exacerbates other technical issues
 - Giving significant power to outliers / high-leverage points in the sample – the cross-check method is preferable and more intuitive
 - Disregarding evidence that could overcome some statistical issues around estimation – including using shorter estimation windows
 - Not providing any evidence consistent with a 1 in 20-year pandemic frequency or satisfactorily rule out longer frequencies, and in particular the fact that a pandemic does not necessarily result in a particular government response that result in travel restrictions
 - Using a midpoint of Covid impact estimates that may not be representative
 - Developing an upper bound with a pandemic duration of 30 months that is speculative and overemphasises the pandemic evidence's shock effect
 - Using an approach that is inconsistent with evidence on share price recovery.

11.26. Additionally, the CAA's assessment it fails to (yet) include the impact of risk mitigation measures in the asset beta:

- Has failed to develop its own view of the impact of risk mitigations – the TRS impact on asset beta should be quantified
- Using a logic for the asymmetric risk allowance that is unclear and as a result is poorly calibrated

Cost of debt

11.27. The CAA has reached conclusions that are in error since the decision to change the assumed debt tenor is unsupported by evidence, misapplies precedent and causes harm to consumers:

- Comparator airports / airport groups, used for beta, have materially shorter-term debt than the CAA's new assumption on debt tenor
- The CAA has incorrectly assumed that energy and water precedent should necessarily apply in the aviation sector

11.28. The CAA has reached irrational conclusions where the CAA's own cross-check of actual debt costs highlights the generosity of their proposed approach:

- The CAA's comparison of notional and Heathrow's actual debt costs are based upon different inflation assumptions
- Heathrow's actual debt costs are 3.60% at end-June 2021, compared to 4.83% from the CAA's notional approach at the same point in time – the similarity between actual and notional debt costs does not exist today
- Heathrow's actual debt interest costs at 3.60% - a figure that is significantly above that quoted to debt investors – is potentially a conservative view of the notional company's debt costs, given the inclusion of junior debt and higher levels of gearing for Heathrow itself

11.29. Finally, the CAA's approach is irrational as it is inconsistent, adopting a biased estimate of the real cost of debt:

- There is an absence of clear justification why the CAA takes the lowest inflation figure available i.e. OBR forecasts (leading to the highest real cost of debt)
- Failure to use breakeven inflation is inconsistent with applying an index-linked premium for equivalence of debt costs

- The CAA's approach to the halo effect and an index-linked premium shows the asymmetric and inconsistent approach adopted throughout the cost of capital by the CAA
- Using an unweighted mean assumption for inflation over H7 misestimates the real cost of new debt

Notional gearing

11.30. As additionally noted in our comments on the financial framework, the CAA's approach to notional gearing is unsupported by market evidence and precedent, leading to a higher cost of capital:

- The CAA incorrectly ignores the implications on the cost of capital and financeability from a higher assumed notional gearing level
- The notional gearing level is incompatible with the assumed level of risk in the sector and comparator levels of gearing, contrary to CMA NERL precedent
- The CAA's approach to adjusting gearing based on outturn performance is asymmetric in approach and unsupported by precedent
- The effect of this approach is to no longer set an independent forward-looking cost of capital; underperformance in the past price control leads to a higher cost of capital in the next price control

Traffic Risk Sharing

11.31. As set out above, the CAA's Traffic Risk Sharing ("TRS") are not fully developed in the form proposed within Initial Proposals, and we cannot yet agree to its structure and effect given:

- There has not been an evidenced, corresponding, and appropriate reduction in the WACC despite the clear reduction this brings in relation to Heathrow's volume risk; the CAA should not be sidestepping the provision of its views here simply because estimating the impact is challenging
- As set out further in the CEPA report, we believe that such an intervention brings the level of risk that HAL is exposed to closer to levels of the water and energy companies and the WACC should reflect this risk exposure
- The proposed TRS structure results in a significant asymmetry in risk between Heathrow and the consumer; there is downside protection to zero for Heathrow but limited upside to the consumer due to the existing capacity constraints at Heathrow, which Heathrow controls through its clear decision to unilaterally withdraw from the Expansion project

- We note in this context that we expect to return to 2019 passenger levels by 2023 (as set out further in our evidence on passenger forecasting), and that Heathrow will have a significant cash advantage given the additional revenue will not be returned to consumers until H8; such a position is clearly at odds with the CAA's duty to consumers

11.32. We comment further on this in the relevant section of our response

Asymmetric Risk

11.33. The CAA has proposed the introduction of an asymmetric risk allowance on the basis of a desire to address the low frequency, high impact shocks not already accounted for within its passenger forecasting shock factor; having considered the arguments put forward we believe the inclusion is unjustified, particularly given the implications of this for future control periods

11.34. This new allows appear to seek to eliminate all downside risk on Heathrow firstly by placing costs onto the consumer through a fixed ex-ante allowance, secondly through the beta term being unadjusted, and thirdly through the costs imposed when the risk does materialise, without an appropriate reflection within the cost of capital of such a policy

11.35. We comment further on this in the relevant section of our response

Conclusion

11.36. Heathrow's cost of capital must be set in a manner that reflects the risk to which it is exposed, and the resulting WACC must be consistent with the significant risk mitigations introduced, particularly through the Traffic Risk Sharing mechanism; it is not appropriate to adjust for perceived financeability concerns before actually estimating what the cost of capital should be before those adjustments, which might otherwise inappropriately impact regulatory precedent

11.37. Ultimately, the cost of capital should not be set as the result of a trade-off between Heathrow's arguments and those of airlines, but on the basis of robust methodology and clearly rationalised expert judgement; as a result of a clear lack of consistency between these proposals and previous precedent or clear rationale for departure, we observe a number of errors within the cost of capital calculation that combine to result in an irrational WACC range

11.38. These are particularly surrounding the asset beta, cost of debt and notional gearing, and furthermore note that the reduced risk environment resulting from proposed TRS and asymmetric risk allowance are not reflected in the WACC that has been proposed; our re-calculation of the WACC based upon removal of the asymmetric risk allowance and a 1.3% - 2.8% vanilla range result in a £11.30 to £14.72 charge (CPI real 2020p)

12. Treatment of taxation (CAP2265 Chapter 10)

- 12.1. It is important the taxation is treated in a manner which ensures incentives remain on Heathrow to properly manage their taxation affairs; there are undoubtedly benefits to reviewing this approach for H7 in light of developments that have taken place since Q6 and to ensure new information is incorporated into the price control
- 12.2. It is clear that using a pre-tax WACC that grosses up the cost of equity by the prevailing corporate tax rate does not fully incentivise Heathrow, since this fails to capture significant benefit that is achieved through the "tax shield" that results from the significant additional leverage afforded by Heathrow's Whole Business Securitisation structure
- 12.3. It is therefore appropriate to consider alternative mechanisms, which ensure the incentives remain effective and are updated to move to a pass-through type mechanism that would be similar to the approach taken in other regulated utility sectors, and was recommended to Ofwat for PR19 by the National Audit Office³⁶⁹
- 12.4. We reject Heathrow assertions that tax allowances should not be changed on the basis of the Competition Commission's statement at Q5³⁷⁰; this would not preclude changes if there were good reason to do so, and it is our view that due to regulatory developments in other sectors that it remains prudent for the CAA to review its approach at each periodic review
- 12.5. Nevertheless, we agree with the CAA that it is important that such an allowance reflects a "reasonable approach to estimating the tax allowances for the H7 price control period to ensure that consumers are directly protected from excess costs"³⁷¹; we agree that new mechanisms have considerable merit, and we note that we have previously supported the CAA's approach to this topic³⁷², contrary to the comment in these Initial Proposals³⁷³

Expansion and the post-tax approach

- 12.6. We note the CAA's comment that expansion is "no longer a relevant factor"³⁷⁴ for the H7 price control, and refer to our comments on Expansion in the relevant section where this seems at variance with the conclusion drawn by the CAA on Heathrow's position
- 12.7. Furthermore, we consider that whilst Expansion is no longer a consideration, the rationale for considering a post-tax approach remains particularly important for

³⁶⁹ [National Audit Office \(2015\), The Economic Regulation of the Water Sector](#)

³⁷⁰ [Competition Commission, Heathrow Airport Ltd and Gatwick Airport Ltd price control review Report, Appendix F, p4](#)

³⁷¹ CAP2265C: Chapter 10, Treatment of tax, para 10.26

³⁷² [British Airways response to CAP2139, Section 17](#)

³⁷³ CAP2265C: Chapter 10, Treatment of tax, para 10.18

³⁷⁴ Ibid. para 10.16

consumers, who continue to fund significant, large infrastructure projects at Heathrow

- 12.8. There would therefore seem to be significant advantages to “setting a tax allowance in line with the forecast corporation tax payments estimated in our financial model”³⁷⁵; in order to develop a standalone revenue allowance distinct from the WACC calculation that supports a post-tax approach, it would require the CAA to develop a deeper understanding of Heathrow’s corporation tax liabilities
- 12.9. We believe the CAA should develop such a deeper understanding, as it is to the benefit of consumers that value resulting from a particular taxation strategy should be captured by consumers at the periodic review in order to reset the incentives; in addition, capital allowance remain an important consideration even without Expansion
- 12.10. Nevertheless, we disagree with Heathrow that the pre-tax approach is necessarily “a more transparent approach, because the actual tax payable may not be settled until many years after the tax year in question has passed”³⁷⁶; this suggests that any accrual based accounting is also too hard to understand, which is patently untrue when it remains the basis of Generally Accepted Accounting Principles (“GAAP”)
- 12.11. In addition, its argument against the post-tax approach based upon a “need to make assumptions about when it is efficient to claim capital allowances”³⁷⁷ might be resolved through the creation of a notional capital allowances pool balances, which could “ensure that consumers continue to benefit from tax relief in respect of the asset expenditure they have funded”³⁷⁸

Tax uncertainty mechanism

- 12.12. We agree with the CAA that, at present, the “existing pre-tax approach does not consider the impact on the allowance of any differences arising from changes in the statutory rate of corporation tax”³⁷⁹; therefore, “this means the tax allowance could result in either over or under remuneration of HAL’s tax liabilities as a result of changes to tax rates that are wholly outside management control”³⁸⁰
- 12.13. We agree with the CAA that a tax uncertainty mechanism “could protect consumers from excess costs and ensure allowances were sufficient to support Heathrow in financing its duties”³⁸¹; this would capture significant drivers of the taxation allowance that is beyond company control

³⁷⁵ Ibid. para 10.5

³⁷⁶ Ibid. para 10.9

³⁷⁷ Ibid. para 10.15

³⁷⁸ [Ofgem, Decision - RIIO-2 Final Determinations – Finance Annex \(REVISED\), February 2021 p91](#)

³⁷⁹ CAP2265C: Chapter 10, Treatment of tax, para 10.20

³⁸⁰ Ibid.

³⁸¹ Ibid. para 10.28

- 12.14. This may be a better approach than a pass-through mechanism, which could reduce the incentive for Heathrow to be tax efficient and make customers bear taxation risks, which should properly be in the control of Heathrow; this is a similar concern to that expressed by Ofwat in rejecting such a pass-through approach at PR19
- 12.15. We therefore agree with the CAA that this would “allow for the tax allowance more closely to align with actual tax costs while retaining the benefits of the current arrangements and not undermining the incentives on HAL’s management to manage its tax affairs efficiently”³⁸²
- 12.16. Nevertheless, we question why such an adjustment should be made to the RAB rather than as a revenue adjustment to H8; a revenue adjustment approach has been used by Ofwat where “any adjustment required will be made at PR24 and would affect companies’ allowed revenue over the 2025-2030 period”³⁸³
- 12.17. We agree with the calculation method, where “a difference between the tax allowance calculated for the pre-tax WACC for H7 and the revised tax allowance that would have resulted from using the actual statutory corporation tax rates that HAL experienced during H7”³⁸⁴
- 12.18. We further note that the CAA has modelled using rates in its PCM of 19% for 2022, then 25% for 2023 to 2026³⁸⁵; given the tax year starts in April and the 25% rate applied from 1st April 2023³⁸⁶, it may be more appropriate to model a blended rate of c.23% in 2023 to reflect the calendar year effect on Heathrow’s profits chargeable to corporation tax (“PCTCT”)
- 12.19. The notional company should also take account of other factors that affect Heathrow’s effective tax rate³⁸⁷, along with the tax credits arising from losses accumulated during 2020 and 2021; this is particularly important since Heathrow’s effective tax rate will be reduced over the coming years as a result, and accounting for this would be consistent with the CAA’s treatment of losses within the notional company since 2019

Tax clawback mechanism

- 12.20. At present, Heathrow benefits from a significantly greater “tax shield” than is assumed in the notional company structure, as a result of its Whole Business Securitisation (“WBS”) structure; this affords Heathrow’s owners a significant

³⁸² Ibid.

³⁸³ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 11.4](#)

³⁸⁴ CAP2265C: Chapter 10, Treatment of tax, para 10.29

³⁸⁵ Ibid. para 10.40

³⁸⁶ [HMRC Policy Paper, Corporation Tax charge and rates from 1 April 2022 and Small Profits Rate and Marginal Relief from 1 April 2023, published 3rd March 2021](#)

³⁸⁷ [Heathrow \(SP\) Ltd, Q3 2021 results, taxation, p9](#)

reduction in Corporation Tax as a result of the greater interest costs reducing PCTCT due to the increased overall leverage

- 12.21. We therefore agree with the CAA that a tax clawback mechanism "would share these benefits with consumers and help ensure that our tax allowance aligns more closely with actual tax costs while retaining the benefits of the existing approach"³⁸⁸.
- 12.22. However, whilst the CAA is correct that "Heathrow (SP) Ltd consolidates different parts of the core Heathrow operations including both Heathrow Funding Ltd, where activities regarding regulated airport bond financing occur, and Heathrow Airport Limited (HAL) which is the licensee"³⁸⁹, there is additional financing above Heathrow (SP) Ltd that needs to be taken into account
- 12.23. It would therefore be an error not to consider FGP TopCo Ltd in this mechanism, since this is the entity that consolidates the entire Heathrow Group, including some additional operational entities such as LHR Airport Ltd, Heathrow Airport Holdings Ltd, and entities with financing activities such as ADI Finance 1 and 2 Ltd, from which £750m in Floating Rate Notes³⁹⁰ (and **not** equity) were issued in 2020
- 12.24. This is also relevant, since as previously highlighted in our responses to the CAA's consultations on Heathrow³⁹¹, the Group Ratio Rule might be applied at the level of FGP TopCo Ltd rather than lower consolidation groups, and it is incumbent on the CAA to ensure that consumers benefit from the application of such allowances where available
- 12.25. As a result, it would be in error for the CAA to suggest that Heathrow (SP) Ltd "captures the financing activities of the regulated airport and the whole business securitisation and would reflect any relevant transactions across its subsidiaries that could impact its tax position"³⁹²
- 12.26. As for the uncertainty mechanism, we agree that such a calculation method could work³⁹³, but again question why such an adjustment should be made to the RAB rather than as a revenue adjustment to H8; we also would seek to better understand the justification for a 50% sharing rate, which should arguably be higher as the entire value would have been captured by consumer if the notional company debt was in fact set at a higher level
- 12.27. In order to enforce this effectively, we suggest that the CAA should introduce an additional licence obligation to support the requirement for information, similar to

³⁸⁸ CAP2265C: Chapter 10, Treatment of tax, para 10.30

³⁸⁹ Ibid. para 10.22

³⁹⁰ [The International Stock Exchange, ADI Finance 2 Ltd GBP750,000,000 Floating Rate Notes due 2027, and GBP38,343,457.55 Interest Notes due 2023](#)

³⁹¹ [British Airways response to CAP2139, Section 17](#)

³⁹² CAP2265C: Chapter 10, Treatment of tax, para 10.22

³⁹³ Ibid. para 10.31

that implemented by Ofgem “to introduce an annual requirement for companies to submit an annual tax reconciliation between the notional allowance and actual tax liability per their latest Corporation Tax returns”³⁹⁴

- 12.28. However, the heart of the issue is the question of whether the assumed mix of debt and equity used for the notional company is appropriate, and represents the lowest cost of capital achievable; as we have previously stated³⁹⁵, notional gearing should be informed by an efficient notional capital structure that itself represents the lowest WACC achievable³⁹⁶

Conclusion

- 12.29. Although the focus of H7 is no longer on Expansion, we believe a post-tax approach remains in the interests of consumers, which would allow a standalone revenue allowance distinct from the calculation of WACC; we encourage the CAA to further its understanding of Heathrow’s taxation, including a fuller understanding of capital allowances that stem from consumers’ funding of assets
- 12.30. We agree that a tax uncertainty mechanism would protect consumers from excessive costs and capture drivers of tax allowances that are beyond Heathrow’s control; this is preferable to a pass-through mechanism since it retains incentives for efficiency, though query whether a revenue adjustment may be more appropriate in the H8 period, and that the rate for the calendar year in 2023 should be blended between 19% and 25% to account for the change at the start of the tax year
- 12.31. Finally, we support a tax clawback mechanism, but highlight that Heathrow takes allowances at FGP TopCo Ltd, the ultimate parent company of all Heathrow’s entities, and benefits from additional financing at ADI Finance 1 & 2 amongst other financing entities; it would therefore be an error to assume that Heathrow (SP) Ltd captures all the financing activities of Heathrow, and in any event, the CAA should introduce a licence obligation similar to Ofgem to submit an annual tax reconciliation between the notional and actual liability per the latest Group Corporation Tax return

13. Calculating a price cap and financeability (CAP2265 Chapter 11)

- 13.1. It important for the CAA to follow the notional approach to assessing financeability of Heathrow on a forward-looking basis for the H7 price control; only by doing so does this ensure the financing incentive has sufficient strength, and that consumers are not funding additional risks that Heathrow and its investors have been compensated to bear

³⁹⁴ [Ofgem, Decision - RIIO-2 Final Determinations – Finance Annex \(REVISED\), February 2021 p91](#)

³⁹⁵ [British Airways response to CAP2139, Section 14.24](#)

³⁹⁶ Ogier, T., Rugman, J & Spicer, L, “The real cost of capital”, FT Prentice Hall, Chapter 5, p122

- 13.2. Whilst it is important that the CAA *have regard* to the financeability of Heathrow, we note that “the duty to have regard to these matters does not, individually or collectively, override”³⁹⁷ the duty to carry out its functions in a manner that “will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services”³⁹⁸, and “in a manner which it considers will promote competition in the provision of airport operation services”³⁹⁹
- 13.3. Furthermore, CAA12 notes that “the financing duty does not require the CAA to ensure the financing of regulated airports in all circumstances, for example the CAA would not be required to adjust regulatory decisions in order to take account of an operator’s particular financing arrangements or put the interests of users at risk by making them pay for an inefficient operator’s financing decisions”⁴⁰⁰
- 13.4. We therefore fundamentally disagree with Heathrow “that a stable and investable H7 framework which can deliver in the interests of consumers requires a financeability policy that enables “actual HAL” (not the notional entity) to return to achieving an A- credit rating by the end of H7”⁴⁰¹; this would be an error in law if the CAA were to be persuaded otherwise by Heathrow
- 13.5. We agree with the CAA that this is a period of uncertainty, and that the pandemic could cause further disruption to the industry, which would require the CAA to be responsive to the situation as it evolves; we support an approach that enables this responsiveness, however reiterate that the general duty to consumers will always remain the priority as required by CAA12
- 13.6. Ultimately, the CMA’s starting point for financeability appears to be most appropriate, and they note that “if the WACC is set at a level which properly reflects the cost of debt and cost of equity for the investors in the sector, both debt and equity investors will earn sufficient returns to cover the costs of financing, and therefore the companies will be financeable”⁴⁰²

Range for Initial Proposals

- 13.7. We believe it has been a fundamental error to present Initial Proposals on the basis of a range that is heavily influenced by Heathrow’s business plans; this has prevented us from being able to clearly scrutinise the CAA’s underlying analysis of the building blocks, and has also influenced the CAA’s analysis of financeability

³⁹⁷ [Civil Aviation Act 2012, Explanatory Notes to Section 1](#)

³⁹⁸ [Civil Aviation Act 2012, General Duties, Section 1](#)

³⁹⁹ Ibid.

⁴⁰⁰ [Civil Aviation Act 2012, Explanatory Notes to Section 1](#)

⁴⁰¹ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.12

⁴⁰² [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.72](#)

- 13.8. The CAA has made this error by having a range in the first place, and basing that range upon operating cost and commercial revenue analysis that uses Heathrow's inferred numbers at the top end of a range and independent CTA analysis that it commissioned at the bottom end of the range, then simply developed upper and low quartile numbers between the two in order to present Initial Proposals
- 13.9. We do not see any analysis that supports these quartiles are being appropriate bookends for the range, and view the CTA analysis as the only true, independent source that should have been used for Initial Proposals; the range therefore appears entirely irrational to us as a basis for Initial Proposals
- 13.10. In addition, the CAA's passenger numbers have been developed as an uplift of Heathrow's passenger modelling; whilst the CAA identifies a number of pertinent issues with Heathrow's model, the uplift does not appear to be based upon a re-run of the model with Heathrow's error removed
- 13.11. This lack of independent modelling undermines the basis of the CAA's range as a result, calling into question the basis of the figures that sit behind the range; we have developed simple passenger forecasts for Heathrow based upon the Eurocontrol Statfor Europe forecast from October 2021, which when also applied to the CTA analysis suggests significantly different figures should have been used
- 13.12. Finally, we have developed an alternative range with WACC figures that are supported by analysis performed by CEPA on behalf of the airline community at Heathrow; all these adjustments have been developed using the CAA's PCM and – at this stage – a flat profiling of charges to ensure like for like comparison
- 13.13. This results in a range of between £11.30 and £14.72 in CPI real 2020 prices for H7; it is this range that should be subject to the financeability analysis referred to by the CAA, since these are credible numbers based upon building block analysis that is independent of the regulated company

Profile of revenues

- 13.14. We agree with the CAA that Heathrow's approach of using acceptability testing research is not robust⁴⁰³, and consider it wholly inappropriate given Heathrow's position as a monopoly supplier of airport services
- 13.15. In particular, we highlight that Heathrow's acceptability testing was assessed by FTI Consulting for the CAA, where it was noted that "Yonder notes from its qualitative discussions that passengers struggled to attach a value to the PSC"⁴⁰⁴, "the options presented did not test the linkage between PSC and service improvements"⁴⁰⁵, and

⁴⁰³ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.33

⁴⁰⁴ CAP2266E: FTI Consulting, HAL Consumer Acceptability Testing, Appendix 4, HAL Updated Business Plan, October 2021, p8

⁴⁰⁵ Ibid.

that “wider contextual information, such as the PSC at other similar airports, does not appear to have been provided to respondents”⁴⁰⁶

- 13.16. As a result, FTI observe that “the prior lack of understanding of the PSC suggests that caution should be used when relying on and interpreting the results of the acceptability testing”⁴⁰⁷, and further that “It is unsurprising that consumers value service improvements, particularly given that it appears consumers were not asked to consider the cost of receiving a better service”⁴⁰⁸
- 13.17. Given the difficulty of willingness to pay analysis in discovering revealed preferences – as further noted in the OBR section of our response – we agree with FTI that such analysis is not robust, and note the CMA observation that “stated willingness to pay tended to be substantially higher than revealed willingness to pay, which highlighted the difficulties of relying on customer surveys to estimate willingness to pay”⁴⁰⁹
- 13.18. It remains our view that it is important that the CAA assess the building blocks of the price control individually before considering financeability or affordability; this is since the price control can only be considered in the round, and considering such adjustments before finalising the rest of the analysis might lead respondents to advocate a profile of revenues that is unrealistic or inappropriate
- 13.19. As a result, profiling cannot be effectively considered in the round until those building blocks have been fully set, therefore it is difficult to fully comment on any profiling adjustments until such time; profiling of revenues is standard practice for a five year ex ante price control, and this should be done with consideration to the fact that we face a difficult period of recovery from the pandemic in aviation
- 13.20. We do not suggest that the CAA would consider using reprofiling of revenues to justify the inappropriate setting of building blocks, but instead that justification for PO adjustments and the profile should stem from an assessment of the whole price control package and the underlying cashflows required to support the settlement
- 13.21. For example, a large PO adjustment was required at the start of earlier Heathrow price controls to support the cashflow requirements of a relatively large capital programme that resulted in the development of two new terminals; we see no such requirement at this stage for such large capital programmes
- 13.22. We agree with the CAA that analysis of the price control on the basis of a flat profile of charges is not unreasonable at this stage since it could allow the effect of the building blocks to be scrutinised without the additional complication of rising or falling price paths, however the appropriate profile will ultimately depend upon

⁴⁰⁶ Ibid.

⁴⁰⁷ Ibid. p12

⁴⁰⁸ Ibid. p14

⁴⁰⁹ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 7.294](#)

whether the profile of charges implied by not having a PO of any form results in an unrealistic gradient when applied to the 2021 maximum allowable yield of £23.53

- 13.23. We also agree with the CAA that “large increases in airport charges in 2022 could constrain the recovery in services at Heathrow as airlines and/or passengers reduced demand for AOS during this critical year in the recovery of the sector”⁴¹⁰; however, incentive regulation is always determined on the basis of a price path profiled over the five years of the price control to ensure incentives play out
- 13.24. We further agree with the CAA that “a material increase in the cost base that airlines face may act to impede the recovery in aviation services following the pandemic”⁴¹¹; it could undoubtedly lead to more marginal routes becoming uneconomic, and therefore impact the restoration of services across our network, and therefore in a manner that fails to further the interests of consumers
- 13.25. Therefore, it would be economically logical – and the likely outcome in a competitive market – for charges to be restrained in the early years of the price control; it also remains important for that charges are predictable in order to allow long-term network and fleet planning to take place
- 13.26. Nonetheless, the appropriate level of a PO adjustment to support affordability depends upon the output of the final analysis of the building blocks; we agree with the CAA that it would be detrimental to consumers to “fund very significant real price rises”⁴¹² at the top end of the CAA range, and we consider financeability at more reasonable levels of airport charges further in our analysis below
- 13.27. We note that unlike other regulators, the CAA does not regulate the rate card at present, and our planning is affected by the dynamics of the rate card that sits below the maximum allowable yield; significant changes in the rate card in Heathrow’s annual consultations can undermine the economics of certain aircraft in our fleet, and drive our business planning to a more reactive strategy that is suboptimal for our long term business planning
- 13.28. We would advocate that the CAA assume greater responsibility for the rate card in order to avoid the issues that have resulted this year; we consider these further in our previous response to the 2022 holding cap⁴¹³

Opinion of credit rating agencies

- 13.29. We reiterate our observation that credit rating agencies commonly reverse out NPV-neutral reprofiling adjustments – a matter that was first raised by the CAA

⁴¹⁰ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.56

⁴¹¹ Ibid. para 11.57

⁴¹² CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.59

⁴¹³ British Airways response to CAP2265E, 2022 Holding Cap

themselves in its previous consultation⁴¹⁴ – and highlight that this is supported by the CMA view that “we doubt the extent to which accelerating cash flows from future periods can improve the credit quality of a regulated business, as there is no change in the revenues available to meet financing obligations over time”⁴¹⁵

- 13.30. It is for this reason that we are cautious about depreciation profiling between price control periods for financeability reasons; the way in which this is viewed by credit rating agencies is likely to therefore have little effect upon credit ratings assessments, leaving it only really a question of affordability that cannot be determined until the building blocks are more developed
- 13.31. Nevertheless, were airport charges to actually remain at levels suggested by the CAA range, representing a significant further elevation of charges compared to Heathrow’s peer group, against which they are already 44% more expensive, the CAA should consider using such regulatory levers to ensure such charges do not constrain the recovery of services at Heathrow
- 13.32. We agree with the CAA that formulaically, with lower volumes in 2022, when revenues are profiled to result in flat per passenger airport charges, this will tend to worsen credit metrics in 2022 compared to unprofiled charges⁴¹⁶; nevertheless, credit ratings agencies are focussed on the long term characteristics of the asset and the sector when determining their ratings, which allows them to look through disruption in the near term to focus on the long-term nature of the asset
- 13.33. Our informal conversations with the various ratings agencies have revealed that they view the airport sector as investment grade due to its long-term attributes, with volume reductions being essentially ignored due to their temporary nature; in terms of ratings downgrades, they would only take limited action in response to short-term events that did not affect the underlying creditworthiness of the asset class
- 13.34. Their view was that traffic outlook was a more important factor in its analysis of the longer-term prospects for any individual airport, and that the short-term impact of recovery in 2022 and 2023 was limited as the medium to long term outlook was more important; clearly H7 has a bearing in terms of cashflow availability, but this is again a long-term assessment
- 13.35. In addition, they commented that a TRS mechanism would improve the creditworthiness of an individual airport, since it would result in a de-risking of the cashflow generation of the airport; this supports our understanding that a TRS should result in a material reduction in the WACC as a result

⁴¹⁴ [CAP2139, Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward, Chapter 3, Financial framework, para 3.52](#)

⁴¹⁵ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.83](#)

⁴¹⁶ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.35

- 13.36. This view that credit ratings are determined by more than financial metrics alone is supported by the CMA, who observe that “while financial ratios play an important role in the assessment of credit ratings, these are not applied mechanistically by agencies, nor in isolation from a wide range of other relevant factors”⁴¹⁷
- 13.37. In support of this, S&P note that “we assess airports over a longer-term horizon due to their essential infrastructure status and often regulated earnings”, and in its analysis of Heathrow’s actual finances note that “HFL reprofiled a proportion of its existing interest rates and inflation swaps and completed a series of new interest rate swap transactions. This will help reduce interest payments over the next few years, supporting the company’s credit metrics while traffic levels recover”⁴¹⁸
- 13.38. In particular, where certain ratios are under pressure in 2022, the CMA observe that “the interaction between regulatory concepts and accounting concepts affects the values of credit ratios”⁴¹⁹, and as a result, “the point value of a single credit ratio at a particular point in time is not likely to be determinative in itself of the conclusion on financeability”⁴²⁰
- 13.39. It would therefore be unreasonable, unjustified and an error of fact to place undue emphasis on financial metrics to assess key credit metrics when instead “the WACC should be the primary factor in the redetermination in determining whether an efficient firm which meets its cost and outcome targets can finance its functions”⁴²¹ as the CMA has stated

Debt financeability

- 13.40. We agree with the CAA that, since “we are no longer focusing on capacity expansion but instead the recovery of the two runway airport from the impact of the covid-19 pandemic, our analysis of debt financeability suggests that returning to an “A-” credit rating during the course of H7 is not a priority for the notional entity”⁴²²
- 13.41. We reiterate our understand that there is no obligation in law or licence for Heathrow to hold an investment grade credit rating, and as a result, the CAA should in line with its duties target the most efficient notional structure to benefit consumers
- 13.42. We further agree with the CAA that “to have a high degree of confidence that the notional entity would be rated A- by the end of H7 would be costly for

⁴¹⁷ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.94](#)

⁴¹⁸ [S&P Global Ratings, Heathrow Funding Class A 'BBB+' And Class B 'BBB-' Ratings Taken Off CreditWatch Negative And Affirmed; Outlook Negative, 4th March 2021](#)

⁴¹⁹ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.91](#)

⁴²⁰ Ibid.

⁴²¹ Ibid. para 10.89

⁴²² CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.37

consumers"⁴²³, and we see no compelling reason why such a credit rating should be targeted as a result

- 13.43. We agree with the analysis of the CAA's advisors that there is abundant liquidity available in the market for issuers with BBB or BBB+ ratings, and note that the average credit spread resulting from a downgrade from A to BBB remains historically low⁴²⁴
- 13.44. Given this, we are unclear why the CAA has proposed that "the H7 price control should pave the way towards it achieving a credit rating at least at the top of this range"⁴²⁵, in reference to a rating of BBB or BBB+; it seems irrational to "have assessed the credit metrics of the notional company against the threshold required for a BBB+ credit rating"⁴²⁶ whilst having "assessed its ability to raise sufficient debt for H7 at BBB"⁴²⁷
- 13.45. We disagree with the rationale for this one notch uplift from BBB should be reflective of "the one notch uplift of HAL's whole business securitisation"⁴²⁸, since this confuses the actual and notional company and applies the adjustment in error in the wrong direction
- 13.46. Heathrow benefits from a higher credit rating as a result of its Whole Business Securitisations ("WBS") that applies to its real financing costs, therefore the notional company should be able to withstand assessment at the lower (or demonstrably the most efficient) credit rating, allowing the real company to actually raise debt at a higher level
- 13.47. The way in which financeability has been assessed is illogical and irrational, and instead serves to deliver Heathrow's demand that it should be permitted to achieve an A- credit rating in its real company structure; this aim is expressed in its investor report, where it states a desire to return "to A- as soon as possible"⁴²⁹, but achieving this is not the purpose of incentive regulation and it would therefore be an error of law for the CAA to interpret its financeability duty in this manner
- 13.48. Given Heathrow does not have an obligation to maintain an investment grade credit rating – unlike water companies where headroom in credit ratios was therefore advisable to maintain BBB+/Baa1⁴³⁰ – it is illogical and irrational as well as being contrary to the CAA's duties under CAA12 to provide additional margin within this assessment, since even BBB- remains within investment grade parameters;

⁴²³ Ibid.

⁴²⁴ [Insight Investment, Thoughts for 2022, December 2021, p8](#)

⁴²⁵ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.65

⁴²⁶ Ibid. para 11.66

⁴²⁷ Ibid.

⁴²⁸ Ibid.

⁴²⁹ [Heathrow December 2021 Investor Report, p13](#)

⁴³⁰ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 10.97](#)

Debt issuance

- 13.49. We agree with the CAA that Heathrow should have very little requirement for further issuance in 2022 and 2023; we note that Heathrow have recently disclosed in its investor report that it has “£4 billion in committed but undrawn loan facilities and term debt as well as cash resources held at the Security Group and Heathrow Finance at 30 November 2021”⁴³¹
- 13.50. Regardless, Heathrow’s motivation remains to pay further, excessive dividends to investors – evidenced by cashflows available to investors in its financial models supporting its business plans – on the back of its proposed £2.5bn (2018p) RAB adjustment that has been rejected by the CAA, financed by the issuance of £3bn in new debt; this is inappropriate and unwarranted by the position of the notional company
- 13.51. We welcome the CAA’s recognition of this being the prime reason for Heathrow’s projected levels of debt issuance⁴³², and continue to urge the CAA to see through Heathrow’s analysis, which is clearly not in the interests of consumers; it would be irrational to follow Heathrow’s proposals, and this clearly has a bearing on other aspects of Heathrow’s business plans, which cannot be trusted as a result
- 13.52. We therefore agree with the CAA’s conclusion that it would be a “more cost-effective option for consumers would be for HAL to maintain a lower credit ratings for a period of time”⁴³³; furthermore, given the notional entity’s requirement to raise £1.9bn over the course of H7, we agree with the CAA that “it is not clear that there is any need to access non-GBP debt markets”⁴³⁴
- 13.53. Whilst we agree that the WBS is likely to enhance the credit rating of the most senior debt, the effect of the creditor protections is to enhance the ability of the real company to raise additional leverage against the operating cashflows of the company
- 13.54. Therefore, it is important to note that where “structural creditor protections provided by the covenants contained in its financing platform produce a one notch uplift in the rating assigned by credit rating agencies”⁴³⁵, Heathrow has through the WBS a ready-made mechanism to raise additional debt at enhanced credit ratings, undermining its argument that it needs a higher credit rating at the notional company in order to raise ongoing leverage

Notional gearing

⁴³¹ Ibid.

⁴³² CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.39

⁴³³ Ibid. para 11.40

⁴³⁴ Ibid. para 11.41

⁴³⁵ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.14

- 13.55. We have commented extensively on assumptions used to assess the notional company as a result of the pandemic in our previous response to the CAA concerning Heathrow's proposed RAB adjustment; we agree with the Competition Commission in its assessment that "if shareholders were able to withdraw large sums in periods with strong cash flow, it was reasonable they should also be willing to supply finance in periods of weaker cash flow"⁴³⁶
- 13.56. The purpose of equity is to share in the risks and rewards of ownership, which are fully described in the cost of capital; the notional capital structure must be set in a manner that ensures the financing incentive is not undermined as a result

Assessment of debt financeability

- 13.57. We have recalculated the CAA's metrics using the PCM with CTA operating expenditure and commercial revenues, our revised passenger forecasts, and using the 1.3% - 2.8% vanilla real WACC set out in the analysis performed by CEPA for the airline community; this is presented before making any further alterations either described above or to any other building blocks
- 13.58. This demonstrates that our WACC range intersects with the range of financeability outcomes presented in the CAA's range for H7 Initial Proposals; this demonstrates that the financeability of our proposals should not be any more challenging than that of the CAA's proposals

Figure 13.1: FFO to net debt

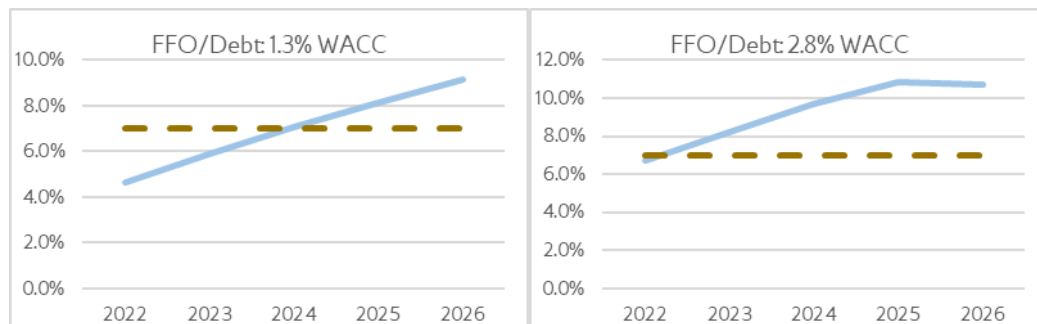


Figure 13.2: net debt to EBITDA

⁴³⁶ [Competition Commission, Northern Ireland Electricity Limited price determination, 26th March 2014, para 17.100](#)

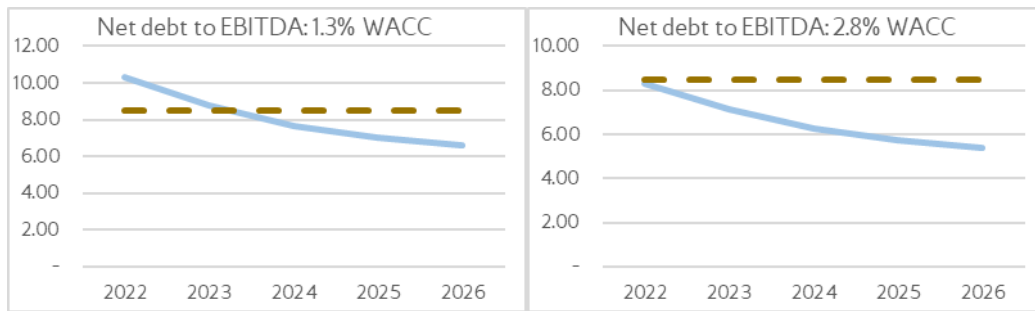


Figure 13.3: PMICR

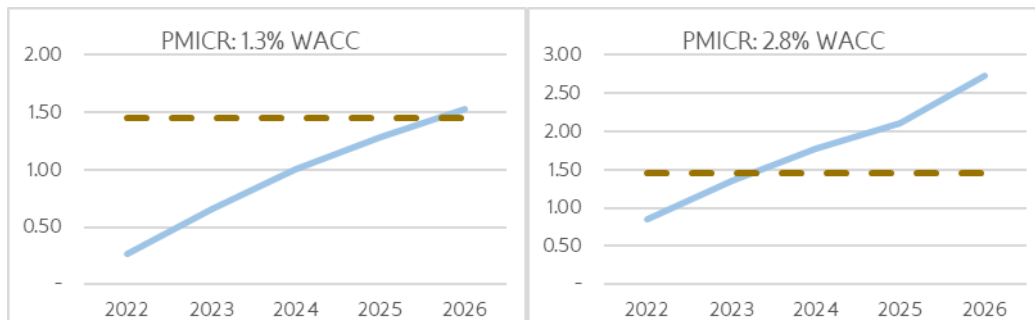
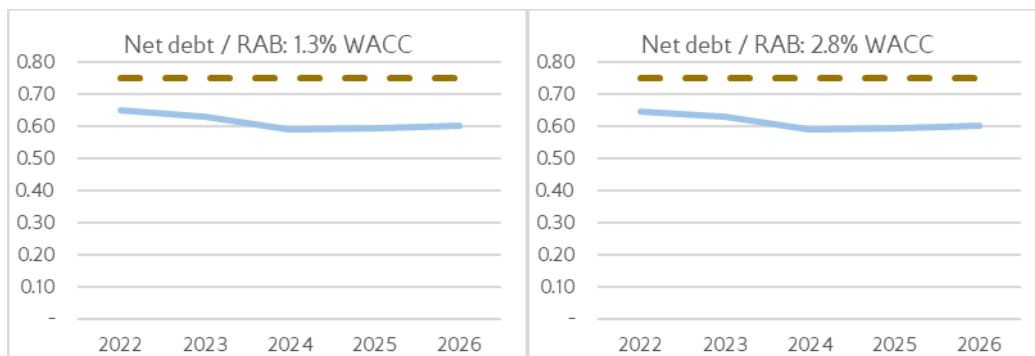


Figure 13.4: net debt to RAB



13.59. Similar to the CAA, we consider that the “strong trajectory in credit metrics over the H7 period means that the overall profile is such that the notional entity ought to be able to achieve a credit rating that would allow it to issue cost effect debt when required”⁴³⁷

13.60. However, we note that BBB+ offers two notches of buffer within investment grade, and given that our financeability analysis at 2.8% vanilla real WACC indicates similar financial metric characteristics to the CAA’s analysis, using BBB financial metrics should support the financeability of our proposed WACC range in full

13.61. Furthermore, we note the CAA’s observation that the Post Maintenance Interest Cover Ratio (“PMICR”) metric represents “a measure of an entity’s ability to cover

⁴³⁷ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.77

interest payments after allowing for maintenance of the regulated assets"⁴³⁸, yet that in the context of a £2.6bn capex programme compared to £4.8bn of regulatory depreciation, "capex forecast provides a better indication of required maintenance expenditure than the regulatory depreciation charge"⁴³⁹

13.62. Therefore, we agree with the CAA that the PMICR metric "will give a more negative impression of post-maintenance cash interest cover than will be the case in reality"⁴⁴⁰; given extremely large capital programmes in the recent past, it is only natural that this metric might be strained in periods with low capital programmes, and it would be perverse and irrational if the PMICR dictated capital expenditures that were not actually required during this price control period

13.63. In any scenario, we agree with the CAA that the restoration of dividends in the latter years of H7 supports debt financeability; we agree with the CAA that equity injections would not necessarily improve these particular financial metrics⁴⁴¹, however if ever utilised, have previously set out analysis⁴⁴² that suggests the assumption that 5% would be an error as an allowance for equity issuance, particularly given Heathrow is a private company

13.64. We agree with the CAA that a TRS mechanism would "reduce the business risk profile of the notional entity"⁴⁴³; in simple terms, this is achieved by reducing uncertainty over future cashflows, even if those are received in future periods

13.65. It is as a result of this that we believe the TRS should demonstrate a significant reduction in the WACC, since the risk environment is clearly reduced as a result; it would be an error for the CAA not to reflect this risk reduction in the WACC

Stress testing

13.66. We note the CAA's stress testing of the Initial Proposals against particularly low passenger forecasts⁴⁴⁴; we agree that such scenarios would lead to difficulties with financial metrics as presented, however these are unrealistic outcomes, and it would be irrational to draw conclusions on financeability from them

13.67. This is reinforced by the CAA's comments that "it is hard to reliably gauge what credit rating the notional entity might achieve were passenger numbers to turn out at the levels assumed in the stress test"⁴⁴⁵

⁴³⁸ Ibid. para 11.78

⁴³⁹ Ibid. para 11.79

⁴⁴⁰ Ibid.

⁴⁴¹ Ibid. para 11.81

⁴⁴² [British Airways response to CAP2098, para 7.8.14.6](#)

⁴⁴³ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.84

⁴⁴⁴ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.89

⁴⁴⁵ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.91

- 13.68. This is particularly the case, since the proposed TRS would offset the impact of such scenarios by recompensing Heathrow by providing future cashflows to replace those that do not arise within H7; as a result, we agree with the CAA that the "TRS mechanism would support the value of the business"⁴⁴⁶
- 13.69. We disagree with the CAA that this would not support debt financeability in a stressed scenario (unless the CAA means the short term financial metrics), since based upon our discussions with credit ratings agencies, they would value such a mechanism to provide long-term certainty; it is this long-term focus that is the basis of their credit ratings, and it would therefore be a mistake to focus excessively on short-term credit metrics to understand the effect of such a crisis
- 13.70. This is borne out by the facts of the current pandemic, and the CAA astutely observes that "HAL has retained an investment grade rating to date despite experiencing even lower levels of demand"⁴⁴⁷ than those modelled in this stress testing scenario
- 13.71. It is therefore important that the CAA also consider the empirical evidence that Heathrow with its WBS structure has been able to retain a high investment grade credit rating despite the effect of this pandemic; this is largely as a result of the strong credit characteristics of the sector combined with the credit-enhancing qualities of the WBS on the relevant senior secured classes of debt
- 13.72. It is our view that Heathrow has undermined the CAA's ability both to calibrate the TRS and study stress testing in more depth, by failing to engage in scenario analysis as part of its business plan and updates; this would have allowed the CAA to assess the variability of its cost structure more fully, including an assessment of the effect of opening and closing terminal facilities, which has been a feature of this pandemic

Equity financeability

- 13.73. We echo the CAA's caution in using metrics that may result in "misleading inferences regarding equity returns"⁴⁴⁸, and furthermore agree that it is appropriate that "shareholders will generate the bulk of their return in the second half of the price control period"⁴⁴⁹
- 13.74. Return on Regulated Equity ("RoRE") and Internal Rate of Return ("IRR") analysis may provide a form of cross check on the WACC assumptions used, but we believe it would be an error for any such metrics to drive a determination of equity financeability in isolation
- 13.75. Our understanding of RoRE analysis is that it is typically used to understand the financial impacts of risk exposure between P10 and P90 outcomes in other

⁴⁴⁶ Ibid. para 11.92

⁴⁴⁷ Ibid. para 11.91

⁴⁴⁸ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.101

⁴⁴⁹ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.102

sectors⁴⁵⁰, and it would be irrational to place any great weight upon a more limited analysis in the CAA's Initial Proposals; this is particularly the case given IRR analysis provides a contrary indication as the equity financeability, and the running yield offers returns significantly in excess of historic FTSE100 dividend yields

- 13.76. We disagree however with the CAA's view that "a resumption of dividend payment by the notional company in the H7 period would be an important signal to shareholders that would help to demonstrate equity financeability"⁴⁵¹; it remains our assertion a company's value is not affected by its dividend policy⁴⁵², and it would be an error to assume that dividend payments were an absolute requirement for equity financeability in H7 where balance sheet repair will be important
- 13.77. There are many long-term investors in infrastructure who take no dividends from the business, preferring to re-invest in future capacity and enhance the long-term value of their business; it is entirely appropriate for the notional company not to pay dividends, particularly in light of the substantial balance sheet rebuilding required following the pandemic and seen across the aviation industry
- 13.78. Indeed, Berkshire Hathaway does not pay dividends, preferring instead to reinvest those dividends in the abundant opportunities it sees in the market; in addition, a major subsidiary – Berkshire Hathaway Energy – pays no dividends due to the business's present requirements, where in the long-run Berkshire Hathaway "believe the added investment will be appropriately rewarded"⁴⁵³
- 13.79. It is incompatible with the scale and nature of the crisis in the aviation sector that Heathrow would be paying significant dividends before the end of H7, particularly where balance sheets across the rest of the industry are projected to be under repair for many further years
- 13.80. Ultimately, as Ofwat note "equity has an important role in addressing financeability constraints and where we see notional gearing within the financial model straying materially above the opening assumption, we propose to take steps to reduce this to a level consistent with the opening level, by the end of the price control period"⁴⁵⁴
- 13.81. This goes on to note that that "additional equity may be in the form of retained earnings or further capital raising"⁴⁵⁵, and "as noted above, at PR19 we restricted the dividend for companies with real RCV growth in excess of 10%"⁴⁵⁶

⁴⁵⁰ [CEPA, Allocation of risk, prepared for Ofwat, 18th June 2021](#)

⁴⁵¹ Ibid. para 11.105

⁴⁵² Brealey, R. A., Myers, S. C., & Allen, F. (2006). Principles of corporate finance, 8th edition. New York: McGraw-Hill International

⁴⁵³ [Berkshire Hathaway, Annual Letter to Shareholders, 2020](#)

⁴⁵⁴ [Ofwat, PR24 and beyond: Discussion paper on risk and return, December 2021](#)

⁴⁵⁵ Ibid.

⁴⁵⁶ Ibid.

- 13.82. Such a view is supported by Ofgem, who state that “we continue to consider it reasonable to assume some notional de-gearing in some sectors, and our notional gearing assumptions reflect the analysis undertaken at Draft Determinations”⁴⁵⁷, and “this does therefore assume £1.8bn of notional equity issuance across sectors, with associated equity issuance cost allowances, at the start of the price control”⁴⁵⁸
- 13.83. We agree with the CAA that “the TRS also facilitates a five-year price control which in turn provides some predictability and certainty which we expect investors would welcome during a time of widespread uncertainty in the aviation sector⁴⁵⁹; as a result, the TRS clearly supports equity financeability by lowering its risk exposure
- 13.84. We therefore expect the CAA’s analysis “that shareholders are the main beneficiaries of the TRS since it would support the value of the business if traffic volumes were to fall”⁴⁶⁰ to be incorporated into its analysis of the cost of capital, since it is clearly the case that Heathrow is exposed to lower risk as a result

Conclusion

- 13.85. Financeability is established primarily by setting the correct WACC, and we do not support the CAA’s approach that targets allowing the notional entity to achieve an A- credit rating by the end of H7; we agree with the CAA that Heathrow’s “acceptability testing” approach is not robust, though whilst we agree that reprofiling revenues on the basis of flat charges helps assist the analysis of Initial Proposals, the nature of any P0 adjustment needs to ensure it is supported by appropriate economic logic
- 13.86. We remain sceptical that any depreciation profiling has an effect on credit ratings, therefore regulatory levers should only be used with a view to preventing excessive charges from constraining the recovery of traffic volumes; we note that credit rating agencies look through to the longer term characteristics of the sector and the airport, therefore it would be an error to focus excessively on individual financial metrics in making a financeability assessment
- 13.87. We do not agree that targeting BBB+ for individual credit ratings is necessary, given the buffer available before falling below BBB-, and further believe that the CAA has misapplied the logic of the WBS in determining BBB+ as the appropriate target credit rating; this is particularly the case as it appears more cost effective to maintain a lower credit rating for longer, and demonstrate our 1.3% - 2.8% range is therefore financeable if such lower target ratings were used in a financeability assessment
- 13.88. We fundamentally disagree that a resumption of dividend payments is a necessary criteria for equity financeability, drawing attention to the widespread effects of the

⁴⁵⁷ [Ofgem, RIIO-2 Final Determinations – Finance Annex \(REVISED\), para 5.29](#)

⁴⁵⁸ [Ofgem, RIIO-2 Final Determinations – Finance Annex \(REVISED\), para 5.29](#)

⁴⁵⁹ CAP2265C: Chapter 11, Calculating a price cap and financeability, para 11.114

⁴⁶⁰ Ibid. para 11.112

pandemic on the sector and other investors who invest based upon capital appreciation; we note that the TRS supports the equity financeability in any case, and that it is reasonable to assume notional de-gearing over the course of the price control

13.89. We also call on the CAA to be more involved in the setting of the rate card, which has become contentious this year due to the interactions with the implementation of the 2022 holding cap

13.90. In support of the airlines' view on the financeability of our proposals, the airline community have received a report from Houlihan Lokey that analyses financeability; we reference this report in addition to our own analysis above, which supports our view that airline proposals are credible within our range of real, vanilla WACC of 1.3% - 2.8%

14. Capital efficiency incentives (CAP2265 Chapter 12 & Appendix H)

14.1. We continue to support the CAA's introduction of capital efficiency incentives for H7; as we have noted in previous consultation responses, the ability to assess performance against ex ante baselines and delivery obligations established in advance allow a more transparent assessment of Heathrow's capital efficiency

14.2. We support in full the CAA's assessment of H7 capex incentives framework against the CAA's duties⁴⁶¹, and agree the result will be that Heathrow will have "clearer and stronger incentives to drive efficiency in its capex during the regulatory period, which will over time lead to lower charges for airport users"⁴⁶²

14.3. Ultimately, the main objective for the CAA in setting capital efficiency incentives along with developing a risk sharing approach is to put the maximum incentive on investors (and minimum risk on consumers and taxpayers, in furtherance of the CAA's duties under CAA12) subject to ensuring that Heathrow could be financed at an efficient cost of capital

Development of capex incentives

14.4. We agree with the CAA that it is important to have "appropriate incentives for HAL to make capital investments efficiently"⁴⁶³, and that ex ante incentives "where HAL shares a proportion of the benefits of delivering capex projects below budget and experiences a proportionate disbenefit for any over-spend against budget is the best way to create such incentives"⁴⁶⁴ are the best available means to do so

⁴⁶¹ CAP2265E: Appendix H, Draft assessment of proposed H7 capex incentives framework against the CAA's duties

⁴⁶² Ibid.

⁴⁶³ CAP2265D: Chapter 12, Capex incentives, para 12.1

⁴⁶⁴ CAP2265D: Chapter 12, Capex incentives, para 12.2

- 14.5. We remain frustrated that Heathrow has provided “insufficient information to allow for detailed scrutiny to date”⁴⁶⁵, and urge the CAA to urgently correct this to ensure sufficient information is provided to enable a proper assessment of capital efficiency; it would be detrimental to consumers and contrary to the CAA’s duties if incentives were not placed over Heathrow’s capital programme purely as a result of its failure to provide the necessary information to the CAA
- 14.6. We therefore support the CAA’s expectation for Heathrow to provide additional information, and strongly support the “possibility of stronger licence obligations on HAL to ensure that at the very least HAL has clear obligations to provide robust information”⁴⁶⁶; it is clear to us that Heathrow acts in ways to avoid such scrutiny over many areas, and urge the CAA to apply this obligation to all and any information it may require in the future in addition to the capital processes
- 14.7. We further agree with the CAA that the current ex post capital efficiency framework “has limitations including that it tends to be difficult due to the time elapsed since the investment was made and the normal information asymmetry between regulated company and regulator”⁴⁶⁷, and strong incentives will “protect the interests of consumers from the increased costs that they would otherwise face were HAL to make inefficient capex investments”⁴⁶⁸
- 14.8. As a result, establishing a “cost baseline, the associated outputs and the rules for dealing with variances and changing the arrangements are typically fixed before the project begins”⁴⁶⁹ are critical steps to ensuring this incentive is effective; the CAA must not veer from its course to ensure consumers are better protected in future in accordance with its duties under CAA12

Existing framework

- 14.9. We welcome the CAA’s aim to retain “key aspects of the current capex governance arrangements”⁴⁷⁰ that work well, including airline engagement with Heathrow during the governance process and the role of Independent Funds Surveyor (“IFS”) as expert independent review, along with the core and development framework that allows for flexibility within the capital process
- 14.10. Nevertheless, we highlight to the CAA that certain aspects of the governance regime are not fully adhered to at present, and Heathrow should have obligations placed upon it to ensure it fully adheres to the process as described; we remain supportive of the CAA having an enhanced role during the introduction of capital efficiency incentives as a result

⁴⁶⁵ CAP2265D: Chapter 12, Capex incentives, para 12.3

⁴⁶⁶ CAP2265D: Chapter 12, Capex incentives, para 12.4

⁴⁶⁷ CAP2265D: Chapter 12, Capex incentives, para 12.9

⁴⁶⁸ Ibid.

⁴⁶⁹ CAP2265D: Chapter 12, Capex incentives, para 12.11

⁴⁷⁰ CAP2265D: Chapter 12, Capex incentives, para 12.12

- 14.11. In addition, the CAA should ensure that licence obligations to provide information cover the capital governance process in full, both to ensure that airlines receive the information they require in order to make informed judgements and set delivery obligations, and the CAA has the information it requires in order to verify those obligations at reconciliation
- 14.12. Whilst the existing core and development framework does offer a useful means for accommodating uncertainty, we disagree with Heathrow that this alone is sufficient to accommodate uncertainty across H7⁴⁷¹; were an excessive and ill-defined capex programme incorporated into the H7 price control, the broad capex envelope would be incorrect, and the airport charge inflated based upon capital commitments that Heathrow has not yet rigorously defined
- 14.13. Furthermore, we are not clear what Heathrow has in mind with its proposed qualitative licence condition⁴⁷², particularly where such mid-period modifications are unlikely to be in the consumer interest; nevertheless, we agree with the CAA that a separate mechanism beyond the existing core and development framework is likely to be required to address significant changes to the capital envelope in H7
- 14.14. We therefore welcome the CAA's proposal to "strengthen the change control arrangements to better address significant changes in HAL's overall capex programme"⁴⁷³; this is particularly important to ensure that subsequent developments within a project do not result in arbitrary change of delivery obligations after they have been set at G3

Enhanced governance arrangements

- 14.15. As projects progress through H7, we believe it would be useful for the CAA to fulfil an enhanced role that explicitly approves changes to baselines and assists in changes to delivery obligations post-G3; these are both likely to be contentious areas where Heathrow and airlines are unlikely to agree
- 14.16. We support the CAA's proposals for reconciliation of each capex category that have met their delivery obligations to the final baseline, with the difference applied to the RAB; for those projects that have not met their delivery obligations, the expenditure needs to be treated differently to reflect the failure to provide agreed obligations regardless of the level of spending
- 14.17. We agree that new arrangements are required to accommodate significant changes in capex requirements⁴⁷⁴, including new initiatives that respond to changing external circumstances; we therefore support the CAA's development of a new mechanism to manage changes around the overall capex envelope for H7

⁴⁷¹ CAP2265D: Chapter 12, Capex incentives, para 12.18

⁴⁷² Ibid.

⁴⁷³ CAP2265D: Chapter 12, Capex incentives, para 12.21

⁴⁷⁴ CAP2265D: Chapter 12, Capex incentives, para 12.54

- 14.18. We will continue to work with the CAA on the treatment of risk allowances and capital overheads, but are opposed to the continued blanket application of a single “leadership and logistics” allowance; this creates an opportunity for regulatory gaming if opex can be capitalised within projects
- 14.19. In general, airlines need to give approval for capital to be added to the RAB through the existing Gateway process at G3, however, governance is structured such that airlines only generally engage in G0 to G3 of the 8 Gateway Lifecycle, except where projects are under IFS assurance, in which case on-going reporting and greater visibility is provided
- 14.20. We recommend that the Gateway process is updated in a number of key areas to ensure it is compatible with future capital requirements; in addition, airlines are in the process of compiling a standard list of due diligence questions that will need to be answered by Heathrow as projects and programmes are taken through the governance process in future
- 14.21. Our recommendations for areas that require improvement within the existing governance process are as follows:
- A clear problem statement defined at G0, setting out clear objectives, expected cost, benefits and scope, in order to allow the initial decision whether to proceed to be made
 - A clear acknowledgement that airlines have the right to refuse to proceed with a project having considered all the information presented and shared
 - Commitment to improve the granularity and detail of a business case with each gateway, leading to the delivery obligations being set at G3
 - A clear account of options that have been considered both in terms of the actual project deliverables, the approach to be taken and associated costs and impact, including a do-nothing option
 - Clarity over which elements of the project will be awarded to a preferred supplier under a framework agreement, and outside such agreement a clear strategy for competitive tendering of the project at G1
 - Clarity over the design standards that a project is being delivered to, whether these are legislative or Heathrow’s own standards, including visibility over what they are, and the cost of delivering to anything over and above the appropriate minimum requirement
 - A joint CAA, airline and Heathrow review of the outcomes of the project to determine whether the benefits have been realised; airlines are not currently involved in this activity

- An improved change control process, requiring airline approval, for changes to project scope, approach, timescale, benefits or costs, and which links transparently to the delivery objective and baseline established at G3 such that the capital efficiency incentives are not undermined; at present, this process is largely used for retrospective budget changes
 - More regular joint reviews of the project pipeline; working with HAL to prioritise the next phase of projects; this is particularly important where tranches of projects need to be undertaken together, and greater oversight of progress towards delivery of a capex category is therefore required
 - Recognition that airline priorities may differ from Heathrow, and projects that deliver capabilities required by airlines need equivalent attention to those which may be of greater priority to Heathrow
 - The management of the risk budget within a project needs greater transparency, along with how the allowance is allocated and spent based upon risks that materialise, as this is only visible under IFS assured projects
 - A clear ability for airlines to decline to proceed with a particular project on the basis that it is either not required or does not meet airline needs
 - A clear understanding of what scope is required and specified, including where Heathrow require a standard greater than minimum compliance requirements
- 14.22. This demonstrates a clear requirement for the CAA to be involved in working with Heathrow and airlines to update the governance documentation and the capital handbook in order to be fit for H7
- 14.23. In addition, we believe that additional reporting requirements should support delivery of capital efficiency incentives, such that airlines and the CAA have clear visibility of progress throughout the price control
- 14.24. Transparency would be enhanced by annual reporting obligations, including, but not limited to:
- Delivery obligations that have been set in period, by project and capex category
 - Progress of for each capex category against agreed delivery obligations and G3 baselines
 - For completed projects or tranches, an progress assessment of their outcomes and benefits delivered against the delivery obligations and G3 budget
 - For each capex category, the budget that has been approved following a G0 (actual budget approval and EAC allocation) for projects within Development

- For each capex category, the budget that has moved from Development to Core following a G3 to demonstrate the evolution of the G3 baseline
 - For each capex category, tracking of the actual spend against the approved budgets
 - Utilisation of risk allowance by project or capex category
 - Contracts awarded by value by contractor
- 14.25. It may also be useful for the CAA to consider assessing whether a delivery obligation has been met on individual projects as they progress, or on asset maintenance projects on an annual basis; this will avoid the situation where the review of delivery obligations becomes not dissimilar to the current ex post arrangements, with significant disputes arising when assessments are performed many years after project completion
- 14.26. We support the CAA taking a proportionate approach⁴⁷⁵ to assessing delivery obligations, however note that this assessment is key to the incentive being effective and holding its advertised strength; we believe it would be a mistake to apply a "light touch"⁴⁷⁶ approach in general, particularly in an areas where have been significant disagreements between Heathrow and airlines on many recent projects
- 14.27. In particular, the Heathrow's record-keeping has been demonstrably below standard during review of the expansion project, and we do not have faith that relevant records will be maintained in a way that that can assure the CAA that a light touch regime would be appropriate

Capex categories

- 14.28. We agree that the overall capital envelope should be split into capex categories, and include projects with common outputs or objectives alongside similar levels of risk and controllability; a clear indicative baseline for each capex category will enable changes to be tracked within period and clearly lead to the final baseline
- 14.29. It is critical that each capex category has a specific, measurable, achievable, realistic and timely statement, resulting in a clear delivery objective, that most of the capex programmes proposed by Heathrow are suitable for ex ante capex incentives, and have similar levels of risk and controllability; we further agree that Heathrow's asset management programme can be broken down into separate categories to better meet the CAA definitions and allow delivery objectives to be set
- 14.30. We disagree with Heathrow's analysis that suggests only certain capex categories should be subject to ex ante incentives⁴⁷⁷; it is clear that all categories of capex

⁴⁷⁵ CAP2265D: Chapter 12, Capex incentives, para 12.43

⁴⁷⁶ CAP2265D: Chapter 12, Capex incentives, para 12.44

⁴⁷⁷ CAP2265D: Chapter 12, Capex incentives, para 12.16

should be properly planned and reasonably controlled by Heathrow, and by advancing a view that certain categories cannot be planned and controlled suggests that Heathrow should not be undertaking expenditure in such categories, since this would not be in the interests of consumers to be exposed to such risks

- 14.31. In particular, we agree with the CAA that Heathrow “has not made a strong case that different capex categories warrant different treatment”⁴⁷⁸, and also that there is the risk of regulatory gaming should different rates or treatment apply to different categories of capex, resulting in additional complexity to implement
- 14.32. In particular, we note that Thames Tideway is a complex tunnelling project for which capex efficiency incentives are applied across the whole project; we agree with the CAA⁴⁷⁹ that the Jacobs report submitted by Heathrow draws the wrong conclusions, and that Heathrow’s assets are both relatively new compared to other industries and confined to a single operational site, reducing complexity compared to some other industries
- 14.33. We therefore agree with the CAA⁴⁸⁰ that splitting the Asset Management and Future Ready airport categories into further categories would better reflect the definition of capex categories by ensuring the risk and controllability characteristics within a category are more comparable
- 14.34. We support the CAA’s rationale for this breakdown, noting the observation from Arcadis that “location types would have similar controllability levels by HAL and although the works in these locations would differ, the risk profile would be similar”⁴⁸¹; nevertheless, we would consider a view that alternative categorisation based upon works or asset type could also work, should Heathrow present a case for more efficient work under such a categorisation ensuring that it does not result a high number of smaller capex categories
- 14.35. Nevertheless, it is important the division of capex categories does not result in misalignment of delivery objectives such that Heathrow is unable to efficiently exploit synergies (or is disincentivised from doing so where appropriate); we have yet to see a detailed list of projects that would be aligned to these new proposed capex categories, so reserve judgement until we see Heathrow’s proposed projects
- 14.36. In addition, the CAA should also consider the application of risk management within each capex category, and how overheads for Leadership and Logistics (“L&L”) are applied; whilst we continue to advocate application of actual L&L costs attributable to particular projects rather than a blanket percentage applied to all projects by value, the CAA should note the different level of difficulty and involvement of each capex category warrants revision of this area

⁴⁷⁸ CAP2265D: Chapter 12, Capex incentives, para 12.23

⁴⁷⁹ CAP2265D: Chapter 12, Capex incentives, para 12.26

⁴⁸⁰ CAP2265D: Chapter 12, Capex incentives, para 12.27

⁴⁸¹ CAP2266E: Arcadis, HAL RBP update review of capex categories and delivery objectives, October 2021, p28

- 14.37. In addition, the makeup of L&L needs to be fundamentally reassessed, since the current percentage applied now bears no relation to the actual expenditure; the current blanket application of a single percentage is no longer appropriate in this capital environment
- 14.38. We therefore would support the CAA's list of proposed capex categories⁴⁸² or, as noted earlier, an alternative based upon work type pending further information from Heathrow to populate the list of projects and develop an indicative baseline for asset management capex categories; we agree with the exclusion of the £78m Crossrail contribution, which we understand to be a fixed formula amount deferred from Q6
- 14.39. We note the CAA's view that "transitional projects should be excluded from any indicative capex category baselines"⁴⁸³ where already started and materially underway before the start of H7 i.e. have advanced beyond G3
- 14.40. We observe that some projects are currently being replanned entirely, with little visible work having taken place to date, and consider it may be appropriate in cases where a significant change has occurred that Heathrow is additionally held accountable under modified capex efficiency incentives for projects that need to be replanned after G3 within the H7 period, in order to ensure the revised project budget is appropriately incentivised
- 14.41. Regardless, it is important that projects that have not yet advanced to G3 are incorporated in the H7 capital efficiency incentive in full; it is not appropriate that projects within Heathrow's £418m⁴⁸⁴ set of continued investments that have not passed G3 should be treated differently from any other expenditure
- 14.42. We would like to clarify to the CAA that the T4 Hold Baggage Screening project has passed its G3 and hence will be subject to an ex-post review as a Q6 project; however, discussions are in progress regarding Heathrow's proposal to de-scope one side of the system from the original project, therefore, if this infrastructure is required in the future during H7, it must be delivered under a new business case and subject to ex-ante review

Delivery objectives and obligations

- 14.43. We agree with the way in which the CAA has set out examples of delivery objectives in the Initial Proposals; we expect that delivery objectives for a capex category will include clear assumptions, metrics and tangible outcomes that allow the objective to be used effectively to define the incentive and set the indicative baseline to be used in the assessment of capital efficiency

⁴⁸² CAP2265D: Chapter 12, Capex incentives, table 12.2

⁴⁸³ CAP2265D: Chapter 12, Capex incentives, para 12.32

⁴⁸⁴ CAP2265D: Chapter 12, Capex incentives, para 12.33

- 14.44. We will be ready to engage with Heathrow when its RBP Update 2 is released and help define these delivery objectives across the capex categories along with the CAA and its advisors; airlines have been working with Heathrow to jointly define these, though this work is ongoing at present
- 14.45. The delivery objective needs to outline the purpose of the category and what Heathrow are planning to achieve within it for the requested budget; each objective should have its key assumptions set out, for example, passenger throughput, processing times or other key parameters that will be important when assessing whether the delivery objective is achievable
- 14.46. The proposed budget for each capex category should not directly form part of the delivery objective; the budget allocation is instead the initial baseline for that capex category, and it would be inappropriate for that budget to form part of the stated objective itself
- 14.47. Setting appropriate delivery obligations to cover projects that contribute to a capex category is one of the most critical aspects of the capex efficiency incentive framework, which allows the framework to have real effect and hold Heathrow to account for the delivery of those projects
- 14.48. We fundamentally disagree with Heathrow that the OBR framework provides an incentive for Heathrow to deliver capex efficiently in the asset replacement programmes⁴⁸⁵, since OBR is focussed on operational delivery of services rather than capital or operating expenditure efficiency per se, and agree with the CAA's assessment⁴⁸⁶ that it is inappropriate to do so
- 14.49. SQRB and OBR measures do not provide any measure of protection against capital cost over-runs, and as a result, capital expenditure has entered the RAB unimpeded despite previous, significant cost over-runs on key projects with SQRB measures in place to subsequently control for service quality
- 14.50. We expect delivery obligations on simple and repeatable projects to be more tightly defined than for projects that are innovative and one-off in nature; nevertheless, for all projects, we expect delivery obligations to be clear and well-defined, specified in line with the SMART criteria⁴⁸⁷ required by the CAA, and be clearly linked to the delivery objective for that particular capex category
- 14.51. As a result, we agree with the CAA that Heathrow's Programme Mandate one-pagers do not set out objectives in a way that meets the definition and criteria required to set delivery objectives
- 14.52. Furthermore, should it not be possible for Heathrow to specify objective or draft delivery obligations for capex categories or specific projects, we question whether

⁴⁸⁵ CAP2265D: Chapter 12, Capex incentives, para 12.18

⁴⁸⁶ CAP2265D: Chapter 12, Capex incentives, para 12.35

⁴⁸⁷ CAP2265D: Chapter 12, Capex incentives, para 12.37

such projects should be included within any H7 capex category; it is important that the H7 capital programme only contains well-defined investments that meet consumer requirements, and is not used to carve out an inappropriate allowance to artificially elevate the airport charge to the detriment of users of airport services

- 14.53. As a result, we question whether the CAA might inadvertently undermine the incentive should they allow Heathrow not to deliver draft obligations at this periodic review; the CAA's suggestion that "where HAL cannot define a draft delivery obligation, include an indicative date during H7 when it expects the capex categories to be sufficiently developed"⁴⁸⁸ may therefore be a mistake if the CAA is to only set a capital allowance based upon clear consumer requirements, and there must be no expenditure under that capex category until the delivery obligation is set within a specified timeframe following the start of H7
- 14.54. We noted the CAA's requirements that each delivery obligation should reflect outputs, quality and timing requirements, and reiterate our expectation that where relevant, each project should detail its impact on Heathrow's operating costs (including those that are ORC-related), specific benefits arising to stakeholders, impact on OBR measures where relevant, key milestones in delivery, impact on performance measures and key assumptions used
- 14.55. We agree that these should be agreed jointly between Heathrow and airlines, however important that there is CAA input through an enhanced role as these obligations are defined alongside the capex baselines in the H7 period; this process must allow sufficient time to enable airline feedback to be incorporated and airline internal governance processes to be followed
- 14.56. We therefore support the CAA's approach to setting delivery obligations, which should be at the relevant G3 for typical, large projects; for certain capex categories where activity is grouped into tranches of projects, Heathrow propose use of programme governance that might complete the existing Gateway process
- 14.57. The CAA should consider whether this is appropriate in cases where simple, repeatable and low value projects are grouped together under a common tranche of projects; this may help avoid Gateway governance becoming clogged where delivery objectives are similar for asset management categories, but should not undermine the strength of the incentive
- 14.58. Clearly the delivery objective should become a delivery obligation at the latest when the first project to deliver that capex category passes through any Gateway governance, with the delivery obligation for each project contributing to that of the overall capex category
- 14.59. In approaching this first project, there is a process that needs to take place to enable the draft delivery objective for each capex category to become an

⁴⁸⁸ CAP2265D: Chapter 12, Capex incentives, para 12.39

obligation and commitment; this process will require CAA involvement to ensure it remains on track and compatible with the reconciliation process at the end of H7

- 14.60. In addition, there needs to be sufficient programme oversight to ensure capex categories remain on track, which should enable the CAA and airlines to monitor progress of capex categories, contribution of projects towards the baseline, and provide early warning of any lack of progress towards delivery of the obligations
- 14.61. This assessment of delivery obligations will be important to ensuring the incentive remains effective and has sufficient strength, particularly where an adjustment is required to baseline if a delivery objective has not been met through a particular project or capex category
- 14.62. It is also important that the baselines established at G3 are the result of competitive market tendering or a framework agreement that itself has been competitively tendered; it is not acceptable that the baseline can be established by anything other than a competitive tendering process based upon appropriate contracts that are compatible with the incentives in place, and the adoption of any other baseline at G3 would be irrational

Incentive rate

- 14.63. We disagree with the CAA that 25% is an appropriate incentive on Heathrow; given that the baseline should be defined at G3 on the basis of competitive tenders, which appropriately assess the project scope and risk, we see no reason why a similar incentive rate to Thames Tideway Tunnel ("TTT") should not be implemented, being 30% on underspend and 40% on overspend
- 14.64. We are currently in a position where the RAB is significantly elevated, which results in airport charges that are far in excess of those at comparable airports; this is itself demonstrable evidence that inefficient expenditure has been incorporated in the RAB in the past, and it is incumbent upon the CAA pursuant to its duties under CAA12 to reverse this trend, limiting the RAB growth to a level in line with actual outputs produced
- 14.65. Heathrow's contention that it already delivers capex efficiently⁴⁸⁹ is unreasonable when the facts are considered as to the inflation of the RAB and the level of airport charges compared to comparable international airports
- 14.66. Given a 25% had previously be mooted by the CAA's advisors⁴⁹⁰ in relation to the expansion project where costs were more uncertain – a complex project for which there was a desire to avoid mis-setting the incentive – it is clear this situation is no longer relevant; a stable two-runway airfield with no new major infrastructure

⁴⁸⁹ CAP2265D: Chapter 12, Capex incentives, para 12.18

⁴⁹⁰ [CEPA, Possible ways of implementing ex-ante efficiency incentives for Heathrow's capital expenditure, March 2019, p14](#)

requirements should be well-understood by Heathrow as its owner and long-term custodian of the assets

- 14.67. As a result, a stronger incentive rate is not only appropriate but desirable to ensure that the Heathrow's information advantage is not used against airlines to game this new incentive and set excessively high baselines; without a strong incentive in place, the CAA risks allowing continued RAB appreciation in a manner inconsistent with the outcomes delivered
- 14.68. The CAA state that 25% "would not make HAL an outlier compared to cost efficiency incentives placed on other energy and water network companies"⁴⁹¹, yet CEPA describe 25% as being "towards the lower end of those applied elsewhere"⁴⁹²; therefore the CAA's justification for stating that a 20-30% range is moderate does not follow from the analysis and amounts to an error of fact
- 14.69. Indeed, the CAA's own previous consultation have noted that at one extreme, "a 25 per cent incentive rate currently applies to Network Rail's renewals and enhancement expenditure (see section 12 of ORR, "Periodic Review 2013: Final determination of Network Rail's outputs and funding for 2014-19", October 2013)"⁴⁹³
- 14.70. This continues to note that "by contrast, Ofwat is proposing totex cost sharing rates of between 35 and 65 per cent for the period from 2020 to 2025, with a narrower range of 50 to 65 per cent applying to underperformance (see section 9 of Ofwat, "Delivering Water 2020: Our final methodology for the 2019 price review", December 2017)"⁴⁹⁴
- 14.71. These ranges suggest a moderate incentive based upon comparisons with other UK regulators' incentives would lie in the 40% range, which is a level supported by that used for overspend on TTT; Heathrow's suggestion of a 15% figure⁴⁹⁵ is neither supported by any reasonable analysis of the incentive strength, nor is appropriate given it wishes to avoid this incentive over the large proportion of its expenditure
- 14.72. The CAA note further that a 30% incentive would lead to a comparable RORE assessment to that set out in the April 2018 consultation; this consultation concluded that "the broad types of incentive described above would not make HAL an outlier compared with the incentives currently placed on energy and water network companies"⁴⁹⁶, therefore a 30-40% range would not be unreasonable

⁴⁹¹ CAP2265E: Appendix D, Capex efficiency incentives, para D22

⁴⁹² [CEPA, Possible ways of implementing ex-ante efficiency incentives for Heathrow's capital expenditure, March 2019, p14](#)

⁴⁹³ [CAP1674: Economic regulation of capacity expansion at Heathrow: working paper on the cost of capital and Incentives, p36](#)

⁴⁹⁴ [Ibid.](#)

⁴⁹⁵ CAP2265D: Chapter 12, Capex incentives, para 12.17

⁴⁹⁶ [CAP1658: Economic regulation of capacity expansion at Heathrow: policy update and consultation, p62](#)

- 14.73. We note the CAA's comment that "HAL has presented some reasonable evidence that the incentive rates seen in other sectors (in the region of 40-50%) are unlikely to be appropriate for H7"⁴⁹⁷, however this appears to be an error, since a review of this report⁴⁹⁸ shows no evidence that any analysis was conducted or presented to the CAA on what particular rate – if any – was appropriate
- 14.74. Instead this report advocated that few ex ante capital efficiency incentives should be introduced at Heathrow, and the conclusions of this report have been refuted by the CAA elsewhere in this consultation; the report does not "illustrate that HAL will face challenges in managed costs to a budget"⁴⁹⁹, but presents subjective opinions, and it would be irrational for the CAA to interpret this as factual evidence, particularly given its duties as an independent regulator to prevent Heathrow from abusing its dominant market position
- 14.75. It is also important to consider another observation from that particular consultation⁵⁰⁰, that the distribution of outcomes based upon underspend and overspend from a study⁵⁰¹ of 258 transport infrastructure projects suggest cost outcomes that range between -25% and +45% at the 10th and 90th percentiles
- 14.76. As a result, there is an asymmetric range of possible outcomes, and a differential incentive rate might be appropriately applied on underspend vs overspend similar to TTT; this would help to ensure the incentive is effective in preventing cost overruns and incentivise more efficient expenditure, particularly where there is a more limited range of out-turn underspend below baseline
- 14.77. Bearing in mind the ultimate aim of the capital efficiency incentive is to place the maximum incentive on investors (and minimum risk on consumers and taxpayers) subject to ensuring that Heathrow could be financed at an efficient cost of capital, it does not appear to logically follow that a symmetrical 25% incentive meets the efficiency objective derived through the cost of capital, calibrated to the remainder of the price control; ultimately this incentive needs to be balanced to ensure appropriate consumer protections are in place as per CAA12
- 14.78. The CAA's analysis does not suggest this particular logic has been followed, and instead suggests that a 20-30% incentive is appropriate since Heathrow has overspent or underspent on projects by an average of +/- 20-30% in the past; however, the calibration of the incentive is entirely unrelated to the percentage range of the underspend or overspend, and it would be a mistake to use this range as justification for the incentive rate

⁴⁹⁷ CAP2265D: Chapter 12, Capex incentives, para 12.47

⁴⁹⁸ Jacobs, H7 capital efficiency, June 2021 – presented to Extraordinary IFS Working Group, 27th July

⁴⁹⁹ CAP2265D: Chapter 12, Capex incentives, para 12.47

⁵⁰⁰ Ibid., p60

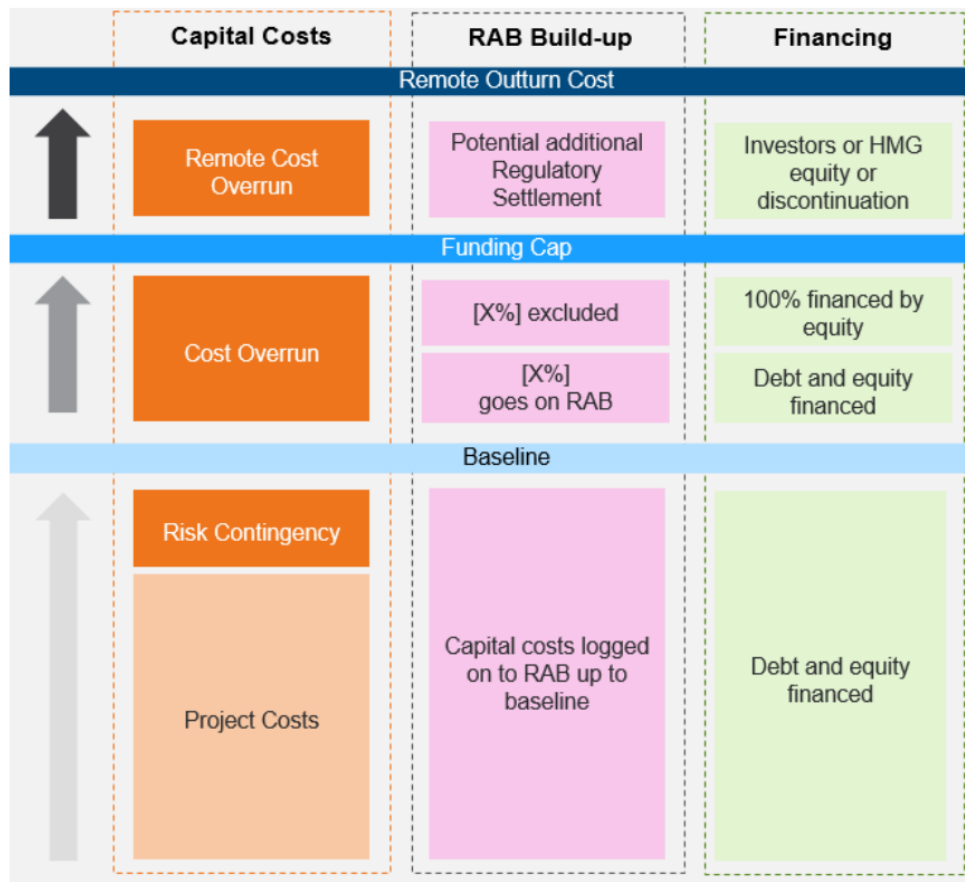
⁵⁰¹ [See Figure 1 in Flyvbjerg B, Holm M and Buhl S, "How common and how large are cost overruns in transport infrastructure projects?", Transport Reviews, 2003](#)

- 14.79. The development and core capex framework means that the indicative baseline for the capex category may evolve as a result of further G3 projects being approved during the course of the price control; if this is deemed as providing forecasting risk protection for Heathrow, then the incentive needs to be significantly stronger than the CAA suggests
- 14.80. Furthermore, we agree with the CAA that the portfolio for H7 comprises less risk and more controllable capex programmes compared to those expected at the time of the CAA's previous assessment of incentive rates; as a result of this greater controllability, the incentive must logically be more powerful to account for the fact that Heathrow should now be able to establish its G3 baselines on a more accurate basis than under an expansion scenario
- 14.81. We agree with the CAA that the incentive rate should be uniform⁵⁰² across all capex as a result, avoiding boundary or classification issues, and avoiding complexity in the operation of the incentive
- 14.82. Further to this, it may be appropriate to consider the introduction of funding caps in relation to particular capex categories; this may only be useful on particular capex categories (such as T2 baggage and regulated security) where the capex category relates to a specific deliverable rather than a multitude of different projects that may evolve over the course of the price control
- 14.83. The application of this is set out in the Department for Business, Energy & Industrial Strategy ("BEIS") consultation on a RAB model for new nuclear projects⁵⁰³, where its advantages include limiting exposure to consumers and driving value for money

Figure 14.1: Potential RAB risk sharing in nuclear construction

⁵⁰² CAP2265D: Chapter 12, Capex incentives, para 12.47

⁵⁰³ [Department for Business, Energy & Industrial Strategy, RAB model for nuclear: consultation on a RAB model for new nuclear projects, 2019](#)



14.84. We are unclear on the CAA's logic as to why the incentive rate would not apply to pre-G3 development capex incurred by Heathrow⁵⁰⁴; this would be irrational as the incentive rate should apply across all expenditure, otherwise there is an opportunity to re-define certain expenditure as pre-G3 when it should typically be incorporated at a later stage

14.85. This will result in a risk of regulatory gaming to the detriment of consumers, and we do not believe the incentive rate should be disappplied to pre-G3 expenditure as a result; we are concerned that the CAA may not be aware that development capex incurred before G3 is still incorporated into the G3 budget for the project when it all becomes core capex, and its inclusion can only lead to greater cost certainty for the project

14.86. The only case where disapplication of pre-G3 expenditure would be logical is if a project is not taken forward for whatever reason, and its contribution towards the baseline would result in a perverse outcome through inflation of the out-turn final baseline for a particular capex category

Trigger mechanisms

⁵⁰⁴ CAP2265D: Chapter 12, Capex incentives, para 12.48

- 14.87. We agree that timing incentives are an important element of the overall capex efficiency incentive package; they will clearly strengthen the incentive for Heathrow to operate efficiently and avoid cost overruns if applied in an appropriate manner and should continue to operate the same manner as at Q6, being applied immediately following the late delivery of key projects
- 14.88. Furthermore, we agree that since capital efficiency incentives will incorporate a timing requirement as part of the delivery obligation, that the current trigger mechanism needs to be updated; as a result, they should only apply to “exceptional, material and complex projects where timing is important for consumers”⁵⁰⁵
- 14.89. However, we continue to disagree that the application of a modest reward for delivery (at 10% of the penalty calculation) is appropriate⁵⁰⁶; where the CAA proposes that this only applies where there are clear benefits to consumers, we seek clarification of how this benefit to consumers would be measured
- 14.90. The CAA should appreciate that timing trigger payments are only made up to the point at which the project is actually delivered, compensating for the period of late benefit realisation; this is distinct from the capital efficiency incentive that considers overall capital efficiency to the delivery obligation and agreed baseline
- 14.91. The trigger is not therefore double-jeopardy, but serves as compensation for the delay in benefits being realised; relying on the time factor in the delivery obligations will not deliver the same immediate compensation to the airlines and the consumer for the non-delivery of benefits as expected, particularly where this is only applied at reconciliation some years later
- 14.92. We reiterate our example of projects that require a timing trigger could include those upon which a follow-on project is dependent; an asset delivered early must deliver clear benefits to consumers of early completion either through delivery of a new capability or facilitation of subsequent projects
- 14.93. Alternatively, the early delivery of Regulated Security, but for which trained personnel are not ready and available to operate the asset, provides no consumer benefit until the organisation is capable of delivering the service through the asset; investment that remain idle when delivered early should not be rewarded
- 14.94. We welcome the CAA’s continuation of the existing arrangements for deciding whether a project should be triggered, including its involvement in making that decision where Heathrow and airlines are unable to agree
- 14.95. British Airways notes its expectation to extend the triggers on projects not yet delivered by 31st December 2021, and have approached Heathrow to ensure this is in place and that they do not automatically expire at the end of 2021; we believe

⁵⁰⁵ CAP2265E: Appendix D, Capex efficiency incentives, para D33

⁵⁰⁶ CAP2265D: Chapter 12, Capex incentives, para 12.50

this is likely to apply to Magenta and the Terminal 4 HBS project in addition to the Main Tunnel project alone

- 14.96. We have since reached agreement with Heathrow at Capital Portfolio Board that triggers on these three projects will continue into H7, and this has been noted in the minutes at that forum; however, the proposals also need to accommodate the addition of triggers to other projects that have not yet completed, such as the project for the replacement of the Track Transit System ("TTS") cars

Delayed capex categories

- 14.97. The CAA's proposals for applying a penalty for later delivery of capex categories⁵⁰⁷ appears proportionate, particularly to avoid circumstances where the delivery obligations of underlying projects fail to protect against the late delivery of the overall capex category; we therefore agree that this should be applied to create a strong incentive on Heathrow to avoid lengthy delays in delivery
- 14.98. Such a mechanism would be particularly useful for capex categories such as T2 baggage, where delay of the overall capex category would lead to worse consumer outcomes, but where individual projects that comprise the category may meet their delivery obligations in isolation
- 14.99. As a result, difficult but important capex categories will be appropriately incentivised with a strong incentive to delivery on time; nevertheless, a 12-month delay for such a capex category would already have a significant effect on consumers for certain projects
- 14.100. Consider for example a programme of works in a terminal that was designed to alleviate a key capacity constraint, which manifested itself particularly at the peak of every summer season; a 12-month delay in such a capex category would result in yet another summer of operational disruption, and if originally scheduled for delivery in the first half of any given year, even a 6-month delay would likely impinge on that same demand peak
- 14.101. It may therefore be appropriate to implement a capex category penalty for delay after six months, ratcheting up from say 50% in 10% increments every six months until it reaches 100% of the trigger penalty calculation; this would focus efforts on initiating the appropriate projects to ensure completion of the capex category
- 14.102. It would seem appropriate that this is considered at reconciliation of the capex category baselines for H7 and therefore also applied as a RAB adjustment; calculating the penalty based upon the agreed date of delivery between Heathrow and airlines for a particular capex category seem to be a more logical way to implement any penalty, rather than accruing from 12 months after the end of the reconciliation backstop date in December 2027

⁵⁰⁷ Ibid.

Reconciliation

- 14.103. We will continue to engage with the CAA and Heathrow on the process for reconciliation; we support the inclusion of indicative calculations in Heathrow's licence⁵⁰⁸ that would provide certainty for airlines on how the process would apply in practice
- 14.104. We support the CAA's proposal⁵⁰⁹ to include new reporting requirements to support transparency of capex performance, which should be at least annual on the basis of the information we set out above, and to allow proper monitoring of adjustments made to each capex category baseline; in addition, we support the inclusion of updated guidance over the annual regulatory accounts
- 14.105. However, we believe there may be advantages to ensuring that the work required to reconcile capex categories is performed more promptly after completion of the capex category or key projects within that category, particularly to ensure that the delivery obligations for specific projects have been met and the passage of time does not obscure whether or not this has been achieved
- 14.106. This will ensure that Heathrow is held to account by knowing earlier whether it is meeting its obligations or not, and this assessment should therefore be performed on a more timely basis than the end of the price control; this should be possible as each major tranche of a larger capex category is completed, or for more simple capex categories, on an annual basis
- 14.107. Ultimately, this will not change the CAA's calculation of the reconciliation or when this is ultimately applied, but will ensure that the reconciliation process can be practically managed on an ongoing basis throughout the price control

Conclusion

- 14.108. We are highly supportive of the CAA's capital efficiency incentives, which must be introduced in full to ensure Heathrow's capital programme is subject to appropriate obligations on its delivery; the CAA must not be undermined by Heathrow's inability to provide sufficient information to set these incentives, and we are supportive of licence obligations that ensure additional information is provided to support the governance process and application of this incentive
- 14.109. Nevertheless, the existing governance process must be strengthened to ensure oversight is effective, and that it is both fully adhered to and complements capital efficiency incentives; we agree with the CAA that ex ante incentives remain appropriate given the relatively low risk nature of the H7 capital programme compared to Thames Tideway Tunnel, and must apply over the entire of the capital programme including pre-G3 expenditure, though with the exception of rollover projects that have passed G3 and the Crossrail contribution

⁵⁰⁸ CAP2265D: Chapter 12, Capex incentives, para 12.64

⁵⁰⁹ CAP2265D: Chapter 12, Capex incentives, para 12.65

- 14.110. We agree with the CAA's example of delivery objectives and how these will evolve to become delivery obligations, though caution that draft obligations should be delivered before Final Proposals; in addition, the CAA should consider more frequent assessment of delivery obligations to avoid concentrating this activity at the H8 periodic review
- 14.111. We support the CAA in applying an incentive rate, though following the example of Thames Tideway Tunnel, which uses 30% on underspend and 40% on overspend, believe this should be stronger than 25% proposed by the CAA; it would be appropriate to consider an asymmetric rate to ensure the right outcomes are delivered for consumers, and may also be relevant to consider a funding cap on specific capex categories
- 14.112. We support the application of timing incentives, though disagree with the application of bonuses for early delivery where there are no clear consumer benefits of doing so; trigger mechanisms remain important for some projects to ensure they are delivered on time where critical, and an additional incentive over delayed capex categories would also be appropriate as a result
- 14.113. We support the CAA's new reporting requirements, though caution against its involvement being "light touch", since greater involvement is likely to be requirement to ensure that reconciliation is both effective and well-informed by the events over the price control

15. Other regulated charges (CAP2265 Chapter 13)

- 15.1. Heathrow is a regulated monopoly, and the provision of ORCs is of key importance to the operation of the airport; the distinguishing feature of ORCs is that they are not consumed in direct relation to passenger volumes, and Heathrow's Market Power Determination makes no distinction between these services and any others provided to ensure provision of airport operation services
- 15.2. It would be a fundamental error to suggest that ORCs are provided on a commercial basis, particularly since these are established as cost pass-through mechanisms where airlines have little ability to control service standards, and this has the potential to impact consumers negatively; for example, Heathrow's recent renewal of the contract for services to Passengers with Restricted Mobility ("PRM") shut out airlines from such negotiations and removed many critical service standards, resulting in significant degradation of performance and airline oversight
- 15.3. Along with the lack of any regulatory incentives over PRMs above basic ECAC standards, the provision of colleague car parking, the bus service between those facilities and terminals, and numerous other services have no standards applied through regulatory incentives, and airlines have no commercial leverage to negotiate a service standard beyond what Heathrow provide of their own volition;

it would be an error for the CAA not to consider all services Heathrow provides as being those of a monopoly, which therefore require regulatory intervention

- 15.4. We are therefore clear that OBR measures should cover many ORCs, as Heathrow continues to hold monopoly pricing power and is able to use this power in effect to extract a rent that in aggregate is likely to exceed the maximum yield set by the CAA after the price control has been set through provision of such services separately from the airport charge
- 15.5. ORCs are in urgent need of significant efficiency and service quality incentives, with Heathrow management actions lacking transparency over how contracts are formulated with service providers; in particular, given the significant value paid by airlines through a cost pass-through mechanism, airlines need greater corporate governance oversight of such costs to be assured of their efficiency
- 15.6. These include the need to fully understand internal controls over their formulation, assurance through the audit of the ORC trading statements, and rights to conduct operational due diligence of specific services to ensure that efficiencies are identified and driven out of the cost base on an ongoing basis

Restructuring of charges

- 15.7. We agree with the CAA that “removing fixed and allocated cost elements from the ORCs where practicable and reasonable would provide for greater stability and efficiency of pricing arrangements”⁵¹⁰; ultimately, marginal cost pricing of ORCs ensures that large fixed cost elements do not cause inappropriate spikes in pricing when passenger numbers fall, a key issue that has arisen due to the pandemic
- 15.8. In addition, we agree with the CAA that the “benefits of IT services, heating and gas are in general spread across all passengers and so there is no compelling reason why these should be recovered separately from airport charges”⁵¹¹, and we agree that “similar considerations apply to the operating costs of providing check-in desks and automated check-in terminals”⁵¹²
- 15.9. However, we are not yet convinced that there should be “greater flexibility to include new ORCs within the H7 period to ensure transparency and collaborative governance of the costs and revenues of these services when they are introduced”⁵¹³; if costs form part of Heathrow’s determined costs for the H7 price control, it would be inappropriate if these are later charged separately as they would remain part of the determined cost base that established single till airport charges

⁵¹⁰ CAP2265D: Chapter 13, Other regulated charges, para 13.17

⁵¹¹ CAP2265D: Chapter 13, Other regulated charges, para 13.22

⁵¹² Ibid.

⁵¹³ CAP2265D: Chapter 13, Other regulated charges, para 13.23

- 15.10. Such a provision could therefore undermine the incentive over operating expenditure to drive ongoing efficiency; were new ORCs to be developed, we would have to be assured that those costs were both appropriate for inclusion as ORCs, and had a clear rationale that was in the consumer interest to do so
- 15.11. We therefore welcome the CAA proposal that they would “check that the services in question are genuinely new services and that it will be appropriate to recover these costs through ORCs”⁵¹⁴; this should provide appropriate protection
- 15.12. For example, a new ORC for cargo services introduced during H7 could otherwise undermine the incentive to drive efficient operations and costs at cargo-related control posts – depending upon how the ORC cost base was established – and further result in Heathrow recovering the cost base a second time with it already having been determined as operating expenditure through the single till incentive
- 15.13. We also note that despite its rejection by airlines, which was recognised in Heathrow’s revised business plan, that winter resilience services remain within the CAA’s “potential to include” category; we query whether this is an error, and should be removed from the CAA’s proposals

Business rates

- 15.14. We welcome the CAA position that “we do not agree with the proposal to move business rates from the airport charges into ORCs”⁵¹⁵; whilst we have consistently stated that business rates require improved governance with appropriate specialist property personnel in attendance to determine appropriate valuations, we disagree with Heathrow that business rates meet the definition of an ORC
- 15.15. Furthermore, we agree with the CAA that including such a large sum of fixed costs “could lead to similar problems with under recovery to those experienced over the last two years if there is another significant downturn in passenger volumes”⁵¹⁶
- 15.16. We note the CAA’s intent to “retain the existing 80/20 risk sharing arrangement to incentivise HAL to negotiate efficient revaluations with the Valuation Office”⁵¹⁷ and the view that “this incentive would be in the longer-term interests of both airlines and consumers”⁵¹⁸
- 15.17. We are not clear what the basis for this continued incentive is, since the risk sharing arrangements were designed on the basis that a rates revaluation exercise was about to begin at the Q6 periodic review, and airlines disagreed with Heathrow about the level of rates to be included in the single till calculations; the alternative

⁵¹⁴ CAP2265D: Chapter 13, Other regulated charges, para 13.30

⁵¹⁵ CAP2265D: Chapter 13, Other regulated charges, para 13.25

⁵¹⁶ CAP2265D: Chapter 13, Other regulated charges, para 13.25

⁵¹⁷ CAP2265D: Chapter 13, Other regulated charges, para 13.26

⁵¹⁸ Ibid.

would be to remove all pass-through elements and incorporate the entire cost base within the main airport charge

- 15.18. Since there is no such disagreement at this H7 periodic review, we are not clear as to the rationale for the incentive, and whether this is now more appropriately incorporated into Heathrow's operating expenditure in full
- 15.19. Regardless of this, we recognise that a residual amount of £6m is allocated to third parties through ORC mechanisms through the CAA's proposals; this remains appropriate where third parties are consuming services and are not subject to airport charges

Bus and coach services

- 15.20. We are unclear why bus and coach services were ever included within ORCs, and many such services that are provided to parties other than airlines and their handlers appear more suited to commercial agreements; nevertheless, changing the treatment of such items requires them to be forecast within commercial revenues such that they are modelled appropriately
- 15.21. This further supports the requirement for CTA to perform bottom-up analysis of Heathrow's operating costs and commercial revenues, such that all known items are included within the single till forecasts for H7; we are not supportive of allowing items to be moved out of ORCs without consistent modelling across all other building blocks
- 15.22. We seek further information from Heathrow on this proposal, and as a result are opposed pending sufficient justification and until we can assess more information on how Heathrow intends to develop its services for bus and coach operators so as to ensure this is both appropriate and in the interests of consumers

Governance

- 15.23. We welcome the CAA's recognition that governance surrounding ORCs has been difficult during the pandemic, and in particular that this "has highlighted some weaknesses in the governance arrangements and dispute resolution mechanisms"⁵¹⁹; we agree with the CAA that this requires an improved governance protocol, though caution that this may be difficult to achieve by agreement
- 15.24. We note that the current licence only requires Heathrow to "agree a consultation protocol and to publish the cost allocation system and pricing principles"⁵²⁰, and therefore agree with the CAA that a change to the licence to "explicitly require HAL to agree and comply with the governance protocol, including the cost allocation and pricing principles"⁵²¹ would be a valuable addition

⁵¹⁹ CAP2265D: Chapter 13, Other regulated charges, para 13.31

⁵²⁰ Ibid.

⁵²¹ Ibid.

- 15.25. In doing so, we welcome the CAA's intent to establish for itself an "appropriate role in determining disputes, which should allow for effective dispute resolution and a targeted and proportionate approach to regulation"⁵²²; it is important that the CAA plays a more active role where disputes arise, otherwise the machinery of governance might grind to a halt
- 15.26. We believe the CAA also needs to guide and be involved in the development of any new governance protocol; given the disputes over the past two years, and Heathrow's interpretation of that protocol, which was at odds with that of airlines and the CAA, it is unlikely that Heathrow and airlines will find agreement on necessary revisions from that established at Q6
- 15.27. Only through greater involvement of the CAA will the protocol develop in a way that ensures effective governance is in place for H7; it is particularly important to appreciate that Heathrow otherwise has no incentive to allow greater scrutiny of its operating expenditure than absolutely necessary

Forecasts of ORC revenues

- 15.28. We note that the CAA has used Heathrow's forecasts for ORC revenues, adjusted for business rates, which have been excluded; in addition, we note the CAA's commitment to "develop an independent assessment of these forecasts for final proposals"⁵²³; any such assessment should be commenced as soon as possible to ensure these forecasts are robust and Final Proposals are not delayed
- 15.29. This is of critical importance so as to ensure that assumptions for ORC in the single till forecasts for H7 are calibrated both to the operating expenditure required to deliver the service, and appropriate efficiency incentives that should result in declining costs over time
- 15.30. We maintain our position that OBR measures should cover all appropriate ORCs to ensure that service quality is incentivised at all times; we note many ORCs do not at present have service quality incentives that ensure service delivery to the appropriate quality, and their introduction remains a priority for us

Conclusion

- 15.31. ORCs are not provided on a commercial basis, yet are consumed in a way that is not directly correlated with passenger numbers; this distinction is important, since Heathrow still holds monopoly power over the provision of these services, therefore the CAA must ensure these remain appropriately scrutinised with additional licence obligations where appropriate

⁵²² Ibid.

⁵²³ CAP2265D: Chapter 13, Other regulated charges, para 13.34

- 15.32. We support the restructuring of charges proposed by the CAA, moving to a marginal cost basis, but caution that new ORCs should not be introduced that are part of Heathrow's determined cost base for H7; for this reason agree with the CAA that business rates should not be moved to ORCs, but support the introduction of separate, new governance over business rates in future
- 15.33. We agree with the removal of certain ORCs for H7, where the original rationale for inclusion is no longer relevant, though this must be supported by appropriate OBR measures to ensure those services are delivered to an appropriate standard; we are willing to consider the removal of bus and coach services from ORCs if supported by appropriate evidence by Heathrow and the CAA
- 15.34. Governance of ORCs is our priority, and we believe the CAA needs to be more closely involved to support the development of an effective, new protocol; we also believe forecasts for ORC revenues should be closely related to the operating expenditure analysis, such that they match the same costs assumed in the single till, and support the introduction of OBR measures to support the service quality delivery of those services where appropriate

16. Outcomes Based Regulation (CAP2265 Chapter 14)

- 16.1. Service quality measures are critical to the price control; they ensure that the regulated company faces a commitment to spend money to meet the service quality outcomes specified by the regulator, and that the operating expenditure allowance is not inappropriately constrained in order to drive up investor returns at the expense of consumer outcomes
- 16.2. It is critical as a result that the OBR regime links directly to the CAA's analysis of operating expenditure and commercial revenues, ensuring that key areas of expenditure are identified, and that the level of expenditure is calibrated to the required service outcomes; this reinforces the requirement that measure focus upon services provided by Heathrow as the regulated entity
- 16.3. This requires the CAA to have a strong understanding of how the airport operates in order to avoid a situation where the regime is ineffective, drive unintended behaviour by focussing on the wrong area, or can be circumnavigated by the regulated company; Southern Water⁵²⁴⁵²⁵⁵²⁶ is only the most prominent recent example of regulatory failure that the CAA must seek to avoid
- 16.4. For example, Heathrow does not have sufficient focus on the domestic arrivals transfer desk, resulting in extensive queues in a very small and constrained area; as a result, airlines have attempted to map the entire passenger journey – departing,

⁵²⁴ [Financial Times, "Southern Water fined record £90m for dumping raw sewage", 9th July 2021](#)

⁵²⁵ [Financial Times, "Southern Water hit by £126m penalty for 'serious failures'", 25th June 2019](#)

⁵²⁶ [Financial Times, "Southern Water staff convicted of obstructing sewage probe", 27th August 2019](#)

transfer and arriving – in order to understand the various contact points with Heathrow that passengers and cargo might encounter

- 16.5. In addition, cleanliness measures only extend to front of house areas, resulting in extremely filthy conditions for our staff in some areas of the airport and particularly back of house corridors; this demonstrates a natural focus on the incentives that the CAA have placed upon them, and demonstrates the urgency of approaching OBR from a customer journey perspective supported by the requirement for airlines to deliver for consumers, rather than a narrow focus on delivery to targets
- 16.6. We therefore urge the CAA to consider the points raised by the airlines throughout the OBR process, and ensure that the OBR incentives are appropriate for the operating environment we require to deliver service to customers

Development of the incentive

- 16.7. We agree with the CAA that the consumers' interests are furthered by ensuring that the services Heathrow provides "meet their needs in terms of their range, availability, continuity and quality"⁵²⁷; the current regime of service quality rebates and bonuses ("SQRB") is essential for ensuring that Heathrow's operating expenditure is not inappropriately reduced after the allowance has been set
- 16.8. We support the evolution of the SQRB scheme to one that is focussed upon outcomes received in terms of level of service, and believe this outcomes based regulation ("OBR") approach should serve to focus Heathrow's efforts more directly upon delivery of service outcomes as opposed to simply inputs
- 16.9. Nevertheless, we are extremely concerned that OBR measures proposed by Heathrow could lead to service delivery being undermined, particularly if these remove focus on key operational inputs that are required for airlines to deliver service to customers; as a result, we will engage fully with the CAA in the OBR working paper⁵²⁸ to ensure OBR targets are appropriate and support our operation
- 16.10. We are particularly concerned that Heathrow has taken a consistent approach of attempting to undermine the effectiveness of the proposed OBR regime through its inappropriate focus on "willingness to pay" analysis to justify unnecessary investment that would inflate the RAB and make charges even more expensive
- 16.11. Fundamentally, such an analysis is flawed due to the hypothetical nature of the exercise, based upon the fact that it is not measuring actual willingness to pay in practice; this hypothetical bias undermines the efficacy of such an approach, particularly where there is neither an incentive nor test of actual willingness to pay

⁵²⁷ CAP2265D: Chapter 14, Outcome based regulation, para 14.1

⁵²⁸ [CAP2274: Working paper on outcome-based regulation](#)

- 16.12. As we note above, it is particularly important that the regime calibrates the incentive to ensure the level of operating expenditure remains appropriate to service quality, driving efficiency whilst not compromising consumer outcome
- 16.13. We note that Ofwat used a methodology that dictated companies “should not propose top-down, calculated outperformance and underperformance payment rates derived from a pre-set Return on Regulated Equity (“RoRE”) range or amount of revenue”⁵²⁹, but “should use forecast efficient marginal cost levels in their estimates of incremental cost in the underperformance payment formula”⁵³⁰
- 16.14. Heathrow’s contention that generosity of the scheme is irrelevant to the analysis is fundamentally incorrect; to meet the requirements of CAA12, the scheme must be designed around the intent to assure consumer outcomes that reflect a reasonable assessment of the inputs required, plus additional stretch to drive continuous improvement to reflect required efficiency gains over time
- 16.15. It is particularly important that where capital is invested to deliver greater service quality outcomes, that the OBR measures are updated to reflect those promises that have been made through the capital investment process
- 16.16. For example, the significant investment in Regulated Security should deliver a step change in capability that allows significantly improved targets to be introduced over queuing and satisfaction measures, and there must be a mechanism so to ensure this is updated and reflected mid-period without waiting until the H8 periodic review
- 16.17. We note that the CAA is not “proposing to change HAL’s maximum potential exposure to rebates, which is currently 7% of airport charges revenues”⁵³¹; we have no particular view on whether this should be higher or not, but ultimately wish to ensure that the incentive remains effective over particular measures and targets, ensuring that appropriate operating expenditure is incentivised to meet the appropriate service quality outcome required
- 16.18. It would be a mistake if this 7% figure were not allocated based upon fundamental analysis that ensures Heathrow is incentivised to deliver; it would be an error to set an incentive whereby it is more profitable to fail the incentive than deliver to the specified quality of service

Outcomes

- 16.19. We note that the CAA proposes to accept Heathrow’s outcomes, with justification that these are broad enough to cover Heathrow or airline proposed outcomes, and are supported consumer research and the Consumer Challenge Board (“CCB”)

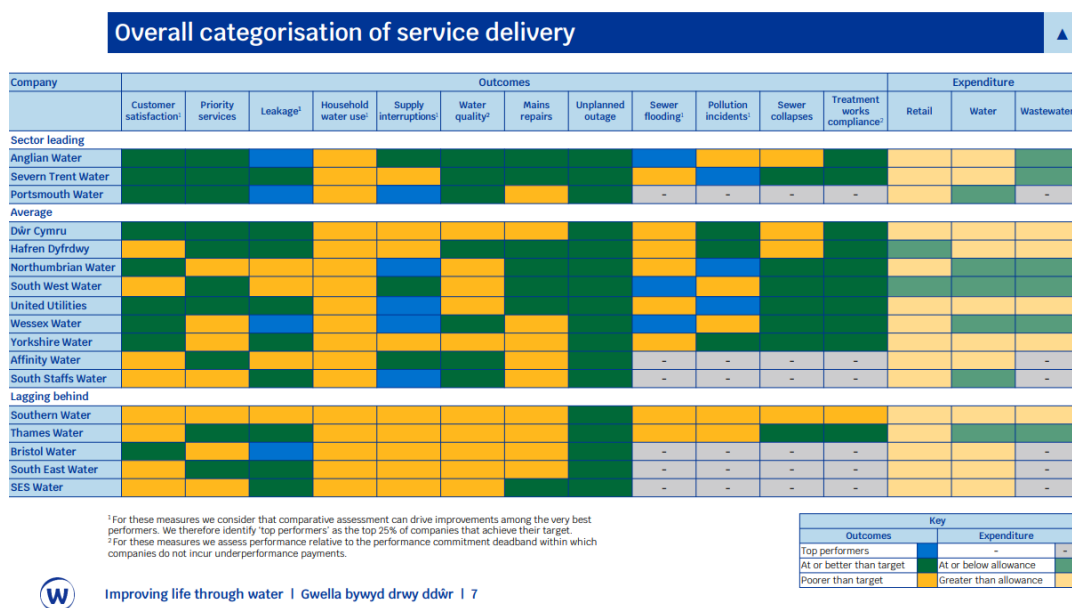
⁵²⁹ [Ofwat, Technical appendix 1: Delivering outcomes for customers, January 2019, p10](#)

⁵³⁰ Ibid.

⁵³¹ CAP2265D: Chapter 14, Outcome based regulation, para 14.47

16.20. We continue to express concern that the outcomes are not specific enough for use in the OBR framework, and do not sufficiently appreciate the entire value chain of operations that are required to deliver airport services directly or indirectly to consumers; we contrast this with the clear outcomes set as part of Ofwat's outcome delivery performance commitments⁵³²

Figure 16.1: Ofwat overall categorisation of service delivery, 2020-2021⁵³³



16.21. We believe that these are far more robust outcomes upon which to base a regulatory framework, and continue to highlight to the CAA the risk of undermining regulation where consumer outcomes are not set on the basis of tangible and concrete outcomes that consumers value in practice

16.22. We are concerned that current proposed outcomes are essentially defined by the regulated company, which serve to make incentives as weak as possible and undermine the incentive for service delivery; it would be an error to rely upon Heathrow's definitions where these do allow the OBR framework to place appropriate incentives on Heathrow to deliver quality service outcomes

16.23. For example, the definition of Ofwat's outcomes rely far more upon detailed analysis of what is required to produce safe drinking water and process wastewater safely, resulting in specific and concrete metrics that stem from each outcome; it would be a mistake to use Heathrow's proposals, which do not achieve what Ofwat's outcomes do

16.24. The CAA seems to suggest that it does not really matter if the outcomes themselves are woolly, since "the role of outcomes is to help identify overarching

⁵³² [Ofwat, Service delivery report 2020-2021](#)

⁵³³ Ibid.

aspects of airport operation services that are most important to consumers, which can then be reflected in a more detailed set of measures"⁵³⁴

- 16.25. Whilst it is true that the measures rather than the high level outcomes are included in Heathrow's licence with associated targets and incentives, it somewhat undermines the development of the OBR framework if outcomes are deemed less relevant than the measures themselves; we note that Ofwat states "providing a truly excellent customer experience for customers is fundamental for maintaining trust and confidence"⁵³⁵, which demonstrates how the outcomes are defined helps to prioritise the measures that sit below them
- 16.26. We also note how in the market within which Heathrow operates, this is not dissimilar to Openreach's provision of services to other retail companies, and that "a customer's experience of these services depends on many factors including access and maintenance of Openreach's network" whilst "for the most part, however, this is invisible to customers of fixed broadband services"⁵³⁶, underscoring the importance that must be placed on a robust understanding of the operational environment in developing outcomes and measures
- 16.27. Outcomes are therefore critical, and it is fundamental for the OBR regime that the CAA understands the whole value chain at the airport through which airlines operate their business and whose delivery Heathrow facilitates; H7 incentives risk being misaligned if this entire value chain is not intimately understood by the CAA
- 16.28. As a result, we think it is irrational for the CAA to "consider it better to take account of particular views and evidence when deciding which measures to adopt, rather than attempting to refine HAL's broader outcomes"⁵³⁷; if particular outcomes only have a small number of measures associated with them, it is problematic as it suggests the wrong outcome may have been targeted for inclusion
- 16.29. Nevertheless, we agree with the CAA that there should "scope to further develop the outcomes framework over time and, if appropriate, introduce additional measures"⁵³⁸, though we caution against reliance upon the self-modification provisions of the licence in order to achieve this; we reiterate this point below with further reasoning as to why reliance upon this provision would be an error

Measures and service provision

⁵³⁴ CAP2265D: Chapter 14, Outcome based regulation, para 14.39

⁵³⁵ [Ofwat, Delivering Water 2020: Our methodology for the 2019 price review Appendix 3: C-MeX and D-MeX, p3](#)

⁵³⁶ [Ofcom, "Improving broadband and landline standards, a review of how Ofcom's service quality rules have affected Openreach's service level performance", 6th May 2000, para 2.5](#)

⁵³⁷ CAP2265D: Chapter 14, Outcome based regulation, para 14.40

⁵³⁸ Ibid.

- 16.30. It is important that measures hold Heathrow to account for the specific services it provides to consumers and airlines, and we are not keen to see wider reputational measures undermine the regime such that the incentive is ineffective; we agree therefore with the CAA that there is an appropriate balance to be struck and issues need to be addressed on a case-by-case basis in this regard
- 16.31. In particular, we are pleased to see the CAA's recognition that services provided to airlines that ultimately support our provision of services to consumers is an important element of the framework; this role of facilitation is particularly critical in many areas of our customer-facing operation at Heathrow
- 16.32. However, the CAA must ensure it has a full understanding of where responsibilities lie in order to ensure appropriate incentives are in place; this is particularly relevant to departures and arrivals management, which the CAA describes as being difficult to identify "the boundaries of HAL's responsibility and also the fact that overall punctuality is affected by many other factors and at many different stages of consumers' journeys"⁵³⁹
- 16.33. This is no different than the challenge Ofcom faces in regulating Openreach, where responsibility may lie at many different points in the network⁵⁴⁰; nevertheless, Ofcom's analysis used econometric analysis to isolate the effect of its service standards on Openreach's performance, demonstrating that the CAA could perform similar analysis for Heathrow
- 16.34. Furthermore, Ofcom also noted that whilst Openreach had never breached compliance based upon annual averages for many metrics⁵⁴¹, that actual service levels were below minimum standards within many individual months; it could however be proven that as Ofcom increased minimum service levels, performance rose due to the incentive to perform under the scrutiny offered by the regime
- 16.35. It is important to note that whilst it is difficult to isolate Heathrow's direct responsibility on – for example – overall punctuality, Heathrow is directly accountable for many contributory activities that facilitate punctuality, such as passenger and staff security, immigration, TTS, departure and transfer baggage system, escalators, gates, jetties, wayfinding, airfield management, road network and passenger information
- 16.36. It is inappropriate that Heathrow would not have measures over all contributory aspects that have been identified as being in their control, and which as a result cause punctuality challenges for airlines, impacting the customer journey

⁵³⁹ CAP2265D: Chapter 14, Outcome based regulation, para 14.23

⁵⁴⁰ [Ofcom, "Improving broadband and landline standards, a review of how Ofcom's service quality rules have affected Openreach's service level performance", 6th May 2000](#)

⁵⁴¹ Ibid. para 3.22

- 16.37. We will provide further, detailed feedback on each of the measures alongside additional comments on the targets proposed by the CAA in our response to the OBR working paper

Reputational measures

- 16.38. We are in general opposed to the use of reputational measures, particularly where these do not protect consumers from failure to meet committed service quality levels; these may in some cases serve simply to use regulatory tools inappropriately to fulfil a public relations role, and undermine scrutiny of the relevant performance for regulatory purposes that should be within Heathrow's control
- 16.39. However, where these measures offer a useful reputational incentive to improve performance in areas that are underperforming at present, there may be value in developing them in limited areas; Heathrow must have a demonstrable role in coordination of such activities to be acceptable as measures, and the CAA should have a clear target in mind for performance maintenance or improvement to avoid such proposed measures being little more than meaningless flimflam
- 16.40. The CAA should also consider reputational incentives from the converse standpoint, as Ofgem has done, that financial incentives are not appropriate to all outcome measures; in particular, that financial incentives should not be applied to outcomes outside the regulated company's control⁵⁴²
- 16.41. For example, in agreeing with Heathrow's measure considering "ease of access" to the airport, we ask if the CAA has considered the incentive effects of establishing the new Forecourt Access Charge ("FAC"); our passengers simply want to access the terminal on a timely basis without hassle, yet a lengthy queue reliably extends from Terminal 5 back to the M25 on Monday and Tuesday morning in normal times
- 16.42. The CAA should therefore ask how the FAC interacts with incentives across the price control, and where FAC is little more than a means of capturing a monopoly rent from a captive audience
- 16.43. Consumers would value a concrete financial incentive that encourages Heathrow to act to reduce queuing prior to the forecourt; for example this might then incentivise Heathrow to open an arrivals level lane for drop-off at peak times to alleviate the pressure on the departures forecourt
- 16.44. We therefore agree with the CAA in its rejection of measures that have no bearing on Heathrow's provision to airport operation services and exclusively cover airline activities; however, we disagree with the CAA that measures should not extend to services such as Fast Track and Other Regulated Charges ("ORCs")

Measures over Other Regulated Charges

⁵⁴² [Ofgem, 'Consultation on Strategy for the Next Transmission and Gas Distribution Price Controls – RIIO-T1 Outputs and Incentives', supplementary annex, 17th December 2010](#)

- 16.45. Heathrow is a regulated monopoly, and the provision of ORCs is of key importance to the operation of the airport; the distinguishing feature of ORCs is that they are not consumed in direct relation to passenger volumes, and Heathrow's Market Power Determination makes no distinction between these services and any others provided to ensure provision of airport operation services
- 16.46. The fact that some airlines may have previously had a commercial agreement for the provision of Fast Track services does not change the fact that Heathrow is the sole monopoly provider of these services; it would be an error to assume that commercial terms can therefore control the monopoly power Heathrow holds, particularly where airlines have had significant disagreements with Heathrow over restoring its provision during the pandemic recovery period
- 16.47. It is also important to note that Heathrow sells individual Fast Track access as a product directly to consumers from its website; without measures to support service standards, there is nothing to prevent Heathrow selling excessively and causing a detrimental impact on service standards as a result
- 16.48. We therefore disagree with the CAA that OBR should not be extended to cover "optional" services provided on a "commercial" basis, as Heathrow continues to hold monopoly pricing power and is able in effect to extract a rent that in aggregate is likely to exceed the maximum yield set by the CAA after the price control has been set through provision of such services separately from the airport charge
- 16.49. It would be a fundamental error to suggest that ORCs are provided on a commercial basis, particularly since these are established as cost pass-through mechanisms where airlines have little ability to control service standards; as noted above in relation to Heathrow's recent renewal of the contract for services to Passengers with Restricted Mobility ("PRM"), Heathrow shut out airlines from such negotiations and removed many critical service standards, resulting in significant degradation of performance and airlines oversight
- 16.50. As we explain in the ORC section of our response, these services are in dire need of significant efficiency and service quality incentives, with Heathrow management actions lacking transparency and opacity over how contracts are formulated with service providers

Measures over key areas of expenditure

- 16.51. We agree with the CAA that baggage performance and provision of check in facilities are key areas of focus for airlines; however, we are concerned that the CAA does not appreciate the extent of our reliance upon departure gate facilities provided by Heathrow, which are comparable to check in facilities even where self-boarding functionality is not installed (and also that has already been installed and is in service across a significant part of the airport)

- 16.52. We are also concerned that the CAA may not appreciate Heathrow's central role in determining the performance management of NATS in delivery of its services to manage aircraft on the ground; this critical incentive means that perverse outcomes may arise where – for example – aircraft may be held on stand to accommodate an air traffic control slot, delaying inbound aircraft from using that stand (which is additionally charged as parking time to the airline)
- 16.53. Given the renewal of the contract with NATS for five years in October 2021⁵⁴³ and the management of that contract sits with Heathrow, we are concerned that the delay to the whole H7 periodic review may have resulted in a missed opportunity to ensure this particular contract renewal incorporated measures that could have improved air traffic management at Heathrow
- 16.54. At a minimum for the performance of its duties under CAA12, the CAA should acquaint itself with the particular features of this contract that may impact upon the incentives it places upon Heathrow for the H7 period; it would not be in the consumer interest that such a core part of Heathrow's service delivery avoids appropriate scrutiny, and would amount to a failure by the CAA to perform its duties under CAA12

Measurement frequency

- 16.55. We reiterate the CAA's observation that moving averages mask variability in performance, and note that as a result under the current SQRB regime, on days when disruption occurs, this rarely manifests itself as a failure of existing measures; the performance of Heathrow with just £11m⁵⁴⁴ of rebates paid since the inception of Q6 demonstrates the need to recalibrate what is now a weak incentive
- 16.56. Consumers are impacted by the disruption they individually experience, and it is cold comfort that Heathrow might perform on average over a smoothed period of time when that individual's outcomes have been compromised
- 16.57. To be clear, we do not believe that the H7 price control should be designed to drive an impossible level of performance that automatically results in significant rebates over the course of the price control, but a strong incentive with additional continuous improvement over time, whose calibration will be demonstrated by the existence of occasional rebates and management action to improve performance in response to learnings
- 16.58. Specifically, we refute Heathrow's suggestion that variability of monthly performance means that it is acceptable that some consumers will face worse performance during the month; service quality should be viewed as the minimum acceptable standard required to deliver the service performance that consumers fund, primarily through operating expenditure element of the price control

⁵⁴³ [NATS lands Heathrow 5-year contract extension, 18th October 2021](#)

⁵⁴⁴ [Heathrow Regulatory Accounts, 2014 to 2020](#)

- 16.59. We therefore continue to advocate performance measures that reflect individual consumer outcomes where reasonable, such as daily, hourly or even more frequent measurement to the level of the individual consumer where appropriate, and welcome the CAA's acknowledgement of the need to consider these further
- 16.60. Nevertheless, we note that Heathrow propose rebates that are calculated as one twelfth of the annual maximum, and have "justified this proposed change on the ground that it would the problem of weakened incentives once Heathrow has paid a particular rebate six times in a year"⁵⁴⁵
- 16.61. We agree with the CAA that Heathrow's proposal could be a mistake, and that maintaining rebates calculated as one sixth of the annual maximum (under a monthly rebate regime) would retain stronger incentives that outweigh the theoretical disadvantage of weaker incentives that result if Heathrow were to have triggered the rebate six times in one year
- 16.62. Nevertheless, any move to more frequent measurement as proposed by airlines would require this allocation of rebates to be modified to ensure that the incentive retains its effect; we would not want to inadvertently undermine the effectiveness of incentives with our proposals, and it is not our intention that should be the case

Development of targets

- 16.63. We caution that reliance upon the self-modification criteria for later introduction of measures would be a mistake, since it is not in the interests of the regulated company to agree to any changes in the power of its incentives; we note that Ofcom has recommended that such changes are phased to ensure the regulated company can adjust, and become more stretching over time⁵⁴⁶
- 16.64. This has been proven by the fact that Q6 licence had a requirement to measure queue times at an individual passenger level, which has not yet been delivered as it is not in Heathrow's interests to do so; the reliance upon self-modification to manage changes to incentives would be an substantial error by the CAA
- 16.65. There is undoubtedly regulatory risk in trying to introduce too many changes at the same time, particularly where the business is in a state of significant change; nevertheless, we are concerned that the licence provisions may not allow development of targets over the course of H7, particularly given the lack of use of the self-modification provision in Q6
- 16.66. This is particularly demonstrated by the perverse outcome resulting from the lack of any SQRB measurement of some security control posts in Q6; a regulated business will never agree to increased scrutiny and incentive strength over its business, and it is unrealistic for the CAA to expect Heathrow and airlines to agree

⁵⁴⁵ CAP2265D: Chapter 14, Outcome based regulation, para 14.35

⁵⁴⁶ [Ofcom, "Improving broadband and landline standards, a review of how Ofcom's service quality rules have affected Openreach's service level performance", 6th May 2000, p2](#)

any changes to the OBR regime – the CAA is obliged to act as regulator, and must take the necessary steps to perform its duties under CAA12

- 16.67. We will engage further in our response to the CAA's working paper on proposed targets, but reiterate that the RAB adjustment and Heathrow "optimal" capital expenditure plan are completely unrelated to the key incentives that need to be established under the price control for service quality
- 16.68. It would be an error for the CAA to incorporate any of Heathrow's business plan based upon its alarmist analysis that suggests this is dependent upon a RAB adjustment, which itself has been categorically rejected by the CAA; we do not have any faith that the arguments stemming from the RAB adjustment represent any more than an egregious attempt to game regulation

Information requirements

- 16.69. Furthermore, we challenge the CAA notion that it is Heathrow who should be recording and retaining "suitable" data "to allow for different options to be examined thoroughly"⁵⁴⁷; this is an error, as the CAA needs to stipulate what data needs to be collected in order for the options to be assessed properly and thoroughly, and ensure it has sight of this data on a monthly basis, similar to how Ofgem, Ofwat and Ofcom collect information on the businesses they regulate
- 16.70. Without a specific licence obligation to record and share specific information, this proposal would have no effect, and will continue the situation where Heathrow has an information advantage over the CAA and airlines; as a result, it would be an error not to define this more clearly in Heathrow's licence
- 16.71. Without specifying what data should be measured, how frequently and how it should be delivered to the regulator for scrutiny, there is a risk that Heathrow will obfuscate and avoid either collecting or sharing the data it has access to; it is neither realistic nor appropriate that Heathrow and airlines will be able to agree targets for the CAA to implement, and airlines are reliant upon the CAA both to understand Heathrow's business and precisely how the incentive links to operating expenditure
- 16.72. Airlines do not have access to the detail of Heathrow's operating expenditure or sight of the detailed information collected by Heathrow at present; nevertheless, we are aware of many areas where Heathrow has a large databank of information that results in a fundamental asymmetry, where Heathrow is fully aware of what lies behind its operational processes – the CAA must require that Heathrow share all existing information with airlines and the CAA in these areas in order to develop its incentives effectively and in a manner that allows airlines to be genuinely informed and engaged throughout the process

⁵⁴⁷ CAP2265D: Chapter 14, Outcome based regulation, para 14.29

16.73. For example, Heathrow has highlighted its data collection activities as a result of forming its Airports Operations Centre ("APOC"), stating "in order to plan effectively for security queues APOC monitored traffic flow on the M25 and arrival times of the Heathrow Express train service"⁵⁴⁸, and "social media comments relating to service quality at the airport were tracked and relayed to operational staff within six minutes"⁵⁴⁹

Interpretation of data

16.74. We agree that many targets would need to be reset and the underlying data examined to ensure that the incentive is appropriate; however the CAA should ensure it understands the reasons for any volatility of the underlying data – for example, are rostering practices for security staff based upon inappropriate and outdated agreements that need to be revised to better meet peaks and troughs of demand at security checkpoints?

16.75. In addition, the CAA must understand how such incentives on passenger security queue times interact with commercial revenue raising incentives, where Heathrow earns demonstrably greater value from customers in minutes immediately following security; it would be inappropriate for airlines to excessively fund an incentive that duplicates the existing incentive on Heathrow to maximise commercial revenues, and further demonstrates why OBR must be tailored to ensure consistent incentives across Heathrow's price control

16.76. Ultimately, queue measurement was a requirement of the Q6 licence, which Heathrow has deflected and avoided installing in order to avoid being held accountable to the incentive that was supposed to be in place in 2014; it is disappointing that Heathrow's arguments to avoid being held accountable have delayed the implementation of the incentive as envisaged at the Q6 periodic review, and we are concerned that Heathrow is attempting to further delay the implementation of the incentive at this review

Asymmetry and incentive strength

16.77. Asymmetry of the scheme is also irrelevant, and Heathrow's views on this matter reveal its desire to use bonuses as a means of raising its revenue potential above the maximum yield set by the CAA⁵⁵⁰; this is incompatible with the purpose of the regime, and speaks to a fundamental misalignment of incentives that already exist in the Q6 price control, an issue which if continued could manifest itself in future in corporate governance issues that are incompatible with the consumer interest⁵⁵¹

⁵⁴⁸ [Competition and Markets Authority, BAA airports: Evaluation of the Competition Commission's 2009 market investigation remedies, 16th May 2016, para 5.39](#)

⁵⁴⁹ Ibid.

⁵⁵⁰ We understand that bonuses are at present incorporated into the cap, as originally intended when introduced in Q5; should this understanding be at variance with the Q6 settlement, we believe that

⁵⁵¹ [Financial Times, "Southern Water staff convicted of obstructing sewage probe", 27th August 2019](#)

- 16.78. CEPA have noted in their advice to Ofwat for PR24 that “there is no requirement for the allocation of each individual risk to be a ‘fair bet’; rather this is a constraint on the overall package”⁵⁵²; furthermore, the CMA set out several potential reasons to favour asymmetric incentives⁵⁵³
- 16.79. Indeed, Ofwat target upper quartile service quality performance (and **not** average performance) in PR19⁵⁵⁴ as an appropriate level of performance to achieve a financial performance in line with the settlement; in addition, full compliance is required in a couple of key performance commitments in order to avoid rebates and penalties
- 16.80. At heart, the regulatory regime should support the ability for Heathrow to deliver service quality in all reasonable circumstances; just as it would be unacceptable for water companies to propose that 5% of customers might receive water that fails to meet safe drinking levels, we also believe it is unacceptable and contrary to the objectives of CAA12 for the regime to be designed in a manner that would allow significant numbers of customers to experience outcomes that are incompatible with the service quality intended
- 16.81. It is particularly relevant that PR19 does not permit companies to “propose additional enhancement expenditure or submit cost adjustment claims to enable them to reach the committed performance levels”⁵⁵⁵; we do not support Heathrow’s view that standards should fall under a “safety only” capital plan (which is actually focussed on asset management and maintenance of service quality), and it would be entirely inappropriate to reduce service standards as a result given the primary incentive for the regime relates to operating expenditure
- 16.82. There is no evidence to suggest that Heathrow’s £2.8bn RAB adjustment is required or appropriate justification for maintenance of the existing service standards; the RAB adjustment and its “optimal” capital expenditure plan are completely unrelated to the key incentives that need to be established under the price control for service quality, and significant new capital expenditure is unlikely to be required during H7, which will be defined by recovery from the pandemic
- 16.83. We note when setting target levels that other regulators have observed that beyond a compliance level, it can be more profitable for the regulated company to pay compensation than to provide the specific level of service⁵⁵⁶, and the CAA must work to avoid this perverse economic incentive arising; this is of critical importance to ensuring that the incentive is calibrated appropriately, and demonstrates how it has to link to the operating expenditure used in its provision

⁵⁵² [CEPA, Allocation of Risk, prepared for Ofwat, 18th June 2021](#)

⁵⁵³ [CMA Final report, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, para 7.128](#)

⁵⁵⁴ [Ofwat, Technical appendix 1: Delivering outcomes for customers, January 2019](#)

⁵⁵⁵ [Ofwat, Technical appendix 1: Delivering outcomes for customers, January 2019, p8](#)

⁵⁵⁶ [Ofcom, Fixed Access Market Review 2014, volume 1](#)

16.84. As a result, when determining targets, the CAA would be advised to access the copious information that Heathrow has collected over the years on all the present measures and many other aspects of its operation; other regulators collect this information to be able to perform detailed econometric analysis that allow incentives to be effectively calibrated, without which OBR will be a missed opportunity to ensure incentives are effective and appropriate for H7

Knife edge rebates

16.85. We continue to reject Heathrow's assertions that sliding scale targets should be introduced, and refer to our previous comments on this in past consultation responses; suffice to say that as proposed by Heathrow, sliding scale targets represent a significant reduction in incentive strength where the top end of the sliding scale is set at the same point as the current knife edge target

16.86. As a result, we agree with the CAA that knife edge targets are simpler and more transparent, rebates are clearer and less complex, and the pass or fail threshold "supports the reputational element of the OBR framework, and avoid the notion of acceptable failure"⁵⁵⁷

16.87. Heathrow's contention that it will no longer have the incentive to deliver service quality once it has missed a target is not credible, since failure would not materialise as a result of the knife-edge nature of the incentives, but as a result of averaging over the course of a number of days, weeks or months; Heathrow's position is not credible as it is incompatible with its continued desire to average targets over as long a period as possible to avoid rebate payments where possible

16.88. Furthermore, we agree with the CAA that Heathrow's position is supported by weak evidence that does not justify either sliding scale or the payment of bonuses above the relevant target; notwithstanding our issues with stated preferences in WTP analysis as set out above, we agree that Heathrow has not set out any specific levels of performance that are particularly important in support of its proposals

Allocation of rebates

16.89. We agree with the CAA that allocating rebates and bonuses based upon a mapping against ranked consumer research findings is inappropriate; we reiterate our view that incentives need to be tailored to the operating expenditure requirements, and should further be scaled to ensure compliance and avoid a situation where it could be more profitable for Heathrow to breach such service quality targets

16.90. We oppose Heathrow's proposed incentives, since these are based upon consumer research findings that we strongly disagree with; Heathrow's study is neither robust nor statistically sound due to its reliance upon the specific questions that were asked, and we agree with the CAA that these would have likely influenced the

⁵⁵⁷ CAP2265D: Chapter 14, Outcome based regulation, para 14.32

outcomes that have been stated, and that this is particularly the case given queuing is one thing that typically most irritates consumers

- 16.91. The CAA should evaluate the allocation of value towards certain rebates and bonuses based upon its analysis of operating expenditure requirements and a detailed understanding of where performance improvement needs to be driven; we draw attention to the way in which Ofwat designed its PR19 service quality measures⁵⁵⁸ and focussed them upon areas that are either critical or require focussed improvement over the course of the price control
- 16.92. Nevertheless, it does not appear unreasonable to take a prudent approach to allocation of rebates at the start of H7, particularly to avoid undermining incentives that work at present during the Q6 period; we therefore welcome the CAA's approach to "take a high-level overview of the pattern of rebates, including what should change compared with the current allocation of rebates"⁵⁵⁹, though caution that the CAA cannot rely upon self-modification provisions to update the incentive as new evidence comes to light during H7

Continuous improvement

- 16.93. We support the CAA's desire to introduce further measures over the course of H7 as part of a continuous improvement programmes, and note the failure to include certain control posts⁵⁶⁰ in the Q6 measures has resulted in the under-utilisation of assets that have been funded through capital expenditure
- 16.94. However, this should additionally result in the target for certain measures becoming more demanding over the course of the price control; this would truly mimic the effect of competition on measures, which is the most fundamental intent of economic regulation as enacted through CAA12
- 16.95. We will engage with the subsequent working paper on OBR, but we note the CAA comment in relation to the self-modification provision whilst "we may propose a minor change to the scope of this provision, we do not intend to specify particular timescales for reviews or decisions, or to specify a particular process that must be followed for changes that are agreed between HAL and airlines"⁵⁶¹
- 16.96. We believe this would be a mistake, since the incentive on the regulated company will be not to agree to any changes should the incentive be weak, and to seek all and every means to remove an incentive that is challenging; this asymmetry is natural, but as we have noted repeatedly, the CAA cannot rely upon self-modification to change the licence in H7

⁵⁵⁸ [Ofwat, Technical appendix 1: Delivering outcomes for customers, January 2019](#)

⁵⁵⁹ CAP2265D: Chapter 14, Outcome based regulation, para 14.47

⁵⁶⁰ See airline community control post analysis, 2021

⁵⁶¹ CAP2265D: Chapter 14, Outcome based regulation, para 14.51

- 16.97. We also note the CAA comment that “it is for the parties themselves to decide if a particular process (such as an annual review) should be adopted, and the nature and scope of any discussions”⁵⁶²; we also believe this would be an error, since the role of CAA as regulator and arbiter is essential to ensuring that the OBR is appropriately tailored to drive the objectives of the CAA
- 16.98. Whilst we note the CAA’s desire to ensure that such continuous improvement “does not undermine the current structure of five-yearly price control reviews and should not exposure stakeholders to additional risk”⁵⁶³, we believe this is a mistaken view of how risk materialises; it is particularly important that incentives have sufficient strength particularly where information is largely collected by the regulated company
- 16.99. As the price control progresses, and it becomes apparent that certain measures lack the appropriate strength that was intended, it does not increase risk on the company to reset the target over that incentive; on the contrary, it restores risk to where it was originally intended to have been set
- 16.100. We favour an annual review process that ensures Heathrow, airlines and the CAA have full visibility over the evolution of OBR in its infancy, ensuring all parties are fully informed when the H8 periodic review arises; a single mid-period review of OBR would be insufficient to ensure timely implementation of key H7 measures for which data is still being gathered, and risks undermining OBR effectiveness
- 16.101. Were the CAA to commit to annual reviews of OBR in a similar manner to Ofwat’s annual review of outcomes service and delivery⁵⁶⁴, this would ensure the CAA is better equipped with information to effectively regulate Heathrow, and be able to use appropriate powers to intervene where Heathrow is not acting in the best interests of consumers
- 16.102. As noted by Ofwat⁵⁶⁵, transparency and provision of information ensures they and other stakeholders can hold companies to account; in the absence of more frequent reviews, the CAA risk leaving Heathrow to its own devices, which would be a mistake when there is the combination of “a number of significant changes to the SQRB framework and also the uncertainty created by the impact of the covid-19 pandemic”⁵⁶⁶
- 16.103. In addition, if investments were made that resulted in new measures being required, it would be a mistake to wait until a mid-period review to ensure the asset was under effective monitoring from its date of delivery; we refer again to the peculiar case of the control post completed in early Q6 that has no measures

⁵⁶² Ibid.

⁵⁶³ CAP2265D: Chapter 14, Outcome based regulation, para 14.52

⁵⁶⁴ [Ofwat, Service and delivery 2020-2021](#)

⁵⁶⁵ [Ofwat, Monitoring and assuring delivery](#)

⁵⁶⁶ CAP2265D: Chapter 14, Outcome based regulation, para 14.53

attached to it despite having been completed early in Q6, which is a waste of money as a result

16.104. We believe reviews should be annual as a minimum, since otherwise, the ability of the CAA to update the OBR regime for certain information that may not be apparent at present may be constrained; the CAA's examples⁵⁶⁷ of areas to which such a review may be limited to appear extensive but may not cover the heart of an issue that develops in future

16.105. In addition, it may also be appropriate to revisit the overall level of rebates and bonuses, particular if significant new information came to light that suggested underlying operating expenditure had not been assessed correctly, and therefore that the incentive had been set too low

Bonuses

16.106. We remain opposed to the use of bonuses in general, particularly where these result in outperformance payments that are not linked to Heathrow's obligations as licence holder; in particular we do not believe bonuses as currently proposed are appropriate given they are neither calibrated to any particular improved consumer or environmental outcome, nor is there appropriately evidenced consumer support for such payments

16.107. We view the Ofwat guidelines for bonuses to be a more appropriate means of judging when such payments are appropriate; these are described as where "outperformance payments are for strong outperformance and not for carrying out the "day job", demonstrate there are benefits from improved performance, and provide evidence of customer support for its proposed outperformance payment"⁵⁶⁸

16.108. As a result, we cannot yet support the CAA's allocation of 1.44% towards bonuses, particularly given two of the Q6 measures are no longer proposed for H7, leaving just cleanliness and wayfinding measures in place; the CAA should not be seeking to fill the bonus pot with inappropriate measures if there is not a demonstrable consumer benefit that can tangibly be incentivised through the application of a bonus

16.109. It would be an error to simply maintain a bonus allocation of 1.44% without having identified a specific consumer need to service quality improvement, and irrational to allocate it in a way that is not compensation for strong outperformance

Conclusion

16.110. We comment further on OBR in our response to the working paper that we will submit in January 2022; our comments in this section should therefore be viewed

⁵⁶⁷ CAP2265D: Chapter 14, Outcome based regulation, para 14.54

⁵⁶⁸ [Ofwat, Technical appendix 1: Delivering outcomes for customers, January 2010, p9](#)

as preliminary until we have further considered the interaction of measures and targets under the CAA's Initial Proposals

- 16.111. We support the CAA's introduction of OBR to ensure consumers' interests are furthered through the regulatory regime; we remain concerned that Heathrow's proposals for OBR will undermine service delivery, and it is critical that OBR continues to support airlines' operational delivery of services for consumers through understanding marginal cost of critical services, delivers continuous improvement, and is consistent with the capital programme and analysis of operating expenditure and commercial revenues within the price control
- 16.112. We believe outcomes should be more specific, as are those specified by Ofwat in PR19, and whilst the OBR will be subject to evolution in H7 cannot rely upon self-modification provisions in the licence for such an important incentive; whilst it may be difficult to distinguish where responsibility lies in some cases, this difficult task must be undertaken to ensure measures exist over all critical areas of Heathrow's operation, similar to how such analysis is performed by Ofcom and Ofgem
- 16.113. Financial incentives are what makes Heathrow responsive, and we do not believe reputational measures have the same effect on Heathrow's incentives, and therefore support the CAA's rejection of some of Heathrow's measures where they have no bearing on delivery of its licence obligations; nevertheless we believe it is critical for ORCs and other key areas of expenditure to be covered by OBR measures in full, particularly where there is a clear and longstanding problem in service delivery, such as in PRM service
- 16.114. We believe measurement should be at as granular level as possible to recognise the effect upon individual passenger outcomes, and avoid averaging effects that introduce a concept of acceptable failure or grouping in the case of vehicle control posts; in addition, we believe that measurement should be based upon the time that assets are required rather than a whole 24hr period, which at present undermines the delivery of outcomes when they are required e.g. the availability of a serviceable jetty for a particular arrival or departure
- 16.115. We believe that the information requirements for OBR should be supported by an appropriate licence obligation, and that it is appropriate for certain asymmetry in the OBR where certain outcomes are more desirable, or it is not appropriate to incentivise an increase in performance above the baseline level; we agree that knife edge rebates therefore remain appropriate

17. Q6 capital expenditure efficiency review (CAP2265 Appendix E)

- 17.1. Whilst we welcome the CAA's affirmation of a £12.7m inefficiency in relation to cargo tunnel inefficiency, we incorporate by reference our previous consultation responses that suggest this amount should be higher and that additional, clear inefficiency exists on other projects; we believe it would be irrational not to

consider the evidence of extreme overspend that has resulted from the projects on which we have presented evidence

- 17.2. We agree that a further review no later than the end of H7 for roll-over projects, including but not limited to the main and cargo tunnel projects, is appropriate to ensure that further developments are captured within any efficiency review
- 17.3. We remain of the view that there is clear, additional inefficiency on these specific projects, which have yet to deliver any benefits for consumers, and note the repeated attempts by Heathrow to work around governance where it is not in its interests to follow the prescribed change control processes on certain projects, including the development of "pseudo-G3" processes
- 17.4. It is incumbent upon the CAA to ensure that it is at the heart of any process to revise the Capital Efficiency Handbook; this is an essential tool for ensuring efficiency project delivery, and is clearly therefore a central part of the regulatory regime
- 17.5. We recognise that the updated Capital Efficiency Handbook for H7 will need to reflect both revisions to the existing Project Gateway Lifecycle as well as incorporate a Programme Management Lifecycle; the CAA should be aware that Heathrow are planning to use both to manage the H7 capital portfolio
- 17.6. As a result, this cannot be left to Heathrow and airlines to discuss in isolation without appropriate guidance from the CAA, since certain changes could nullify the effect of some capital efficiency incentives; in addition, the CAA's involvement would significantly develop understanding at the regulator as to how capital is governed in practice at Heathrow

Conclusion

- 17.7. We continue to present evidence that Heathrow's Q6 capital programme was more inefficient than judged by the CAA, and whilst welcoming an interim assessment of £12.7m inefficiency on the cargo tunnel project, believe this should rationally be far higher as a result of our evidence
- 17.8. In addition, we agree that roll-over projects should be assessed no later than the end of H7 and urge the CAA to ensure that it is fully involved in the update of the Capital Efficiency Handbook; it would not be appropriate to rely upon the regulated company to update such an important aspect of the regulatory mechanism

18. Early expansion costs (CAP2265 Appendix F)

- 18.1. The Airports National Policy Statement ("ANPS") requires Expansion to be delivered by 2030, yet Heathrow is not now making any progress towards this target; in our view, this comprises unilateral withdrawal from the project, since any

resumption of the project is unlikely to be able to deliver Expansion by the deadline set in the ANPS

- 18.2. Given this reality that Heathrow have unilaterally abandoned the runway expansion project, we draw attention to the consequence of this on the risk sharing provisions related to expansion costs and require that the ex-ante risk sharing values are applied appropriate to capital expenditure and are deducted from the RAB
- 18.3. We therefore ask the CAA how it has come to the conclusion in its section related to early expansion costs that "expansion...remains paused"⁵⁶⁹, since this is inconsistent with the facts on the ground; the entire project has been wound up with no activity whatsoever that could facilitate delivery of the expansion project in the timescales stipulated by the Airports National Policy Statement ("ANPS")
- 18.4. We are clear that Category C costs were incurred at Heathrow's sole risk, since they had not been consulted upon at the time they were incurred; we believe it would be an error to apply the Category B policy to those cost categories, particularly since they were not subject to any airline oversight at the time they were incurred, and it was Heathrow's choice to incur them on an early basis
- 18.5. We note the CAA's response to our previous comment on this matter that "we do not consider that there is the compelling evidence required that HAL has unilaterally withdrawn from the planning process for that element of the policy to apply"⁵⁷⁰, and ask what analysis the CAA has performed to come to this particular conclusion
- 18.6. Given the lack of project team, absence of activity and apparent lack of financing available to undertake the expansion project following the pandemic, we can only conclude that Heathrow has unilaterally withdrawn from the expansion project, and would be keen to understand how the CAA has reached a different conclusion
- 18.7. In addition, Heathrow's forecast passenger numbers are incompatible with any activity on Expansion occurring within the H7 price control between 2022 and 2026; it is impossible to deliver the runway to the ANPS requirement of 2030 without starting work now, therefore this should be interpreted as de facto unilateral withdrawal from the project
- 18.8. Heathrow may well continue to state publicly that they have only "paused expansion"⁵⁷¹, but the reality of the situation is incompatible with the CAA's subsequent statement that "we consider that it would not be sensible or efficient, or in the interests of consumers, for HAL to be actively pursuing expansion at this time"⁵⁷², since the timescales required by the ANPS preclude it being able to start expansion within the required deadline for delivery of runway capacity

⁵⁶⁹ CAP2265E: Appendix F, Early expansion costs, para F1

⁵⁷⁰ CAP2265E: Appendix F, Early expansion costs, para F14, note 20

⁵⁷¹ CAP2265E: Appendix F, Early expansion costs, para F19

⁵⁷² Ibid.

- 18.9. The CAA should put a stop to this situation, and put a hard stop on expenditure entering the RAB on the basis that Heathrow have unilaterally withdrawn from the project; it would not be acceptable for any further money to enter the RAB that relates to Expansion after this point in time, and it would be irrational for the CAA to allow anything otherwise
- 18.10. Nevertheless, we agree with the CAA that the reporting requirements on Heathrow were neither excessive nor disproportionate, and in fact believe they could and should have been greater to achieve cost assurance; PWC had already identified insufficient controls surrounding the accounting for these costs in its earlier review⁵⁷³, and we remain concerned that there could still be duplication of these costs in the baseline operating expenditure for H7

CAA policy on recovery of early expansion costs

- 18.11. However we are concerned that the CAA has decided to finalise policy that states "risk sharing arrangements, recovery caps for costs incurred in 2020 and 2021, enhanced reporting requirements and a new licence condition on governance arrangements are no longer necessary or appropriate and will, therefore, not apply to these costs"⁵⁷⁴
- 18.12. The disapplication of existing risk sharing arrangement and the extension of policy to Category C costs – incurred at Heathrow's sole risk prior to the onset of the pandemic – is inappropriate; this undermines the incentive on Heathrow to deliver projects on an efficient basis, is therefore contrary to the objective and duties of CAA12, and undermines incentive regulation as an ex post adjustment
- 18.13. As noted in our previous consultation responses, Heathrow appears to have ended up in exactly the position described in the CAA's letter to the Department for Transport ("DfT") where "once HAL has spent significant sums...hold out would become a riskier strategy for HAL to pursue"⁵⁷⁵ and that "if this were to happen soon then HAL would risk not recovering all of its planning costs"⁵⁷⁶
- 18.14. The effect of the CAA's final decision is to nullify its assurances to the DfT that such a circumstance would not only be unlikely, but would be mitigated by policy developed for the new price control; Heathrow incurred these costs without policy being yet developed, fully aware of the risk that they would not be recoverable as a result, and writing these off as the equity risk that they should be would be far more appropriate than incorporating them into the RAB in any form

Wind down and appeal costs

⁵⁷³ [PWC, Independent planning cost review: Heathrow Expansion Programme covering period of 2018](#)

⁵⁷⁴ CAP2265E: Appendix F, Early expansion costs, para F28

⁵⁷⁵ [CAA letter to DfT, dated 30th April 2018](#)

⁵⁷⁶ Ibid.

- 18.15. Wind down costs are incurred when projects are wound down; we submit that this is further affirmation of our view that Heathrow has unilaterally withdrawn from the expansion project, and it would be perverse to add these costs to the RAB where they are abundantly related to the closure of the project
- 18.16. Furthermore, it would be counterintuitive to allow Supreme Court appeal costs to be added to the RAB whilst also allowing wind down costs to be added, and any other mechanism available for the CAA to compel Heathrow to progress the project; the ultimate effect of the CAA's policy is to ensure that Heathrow has incurred no equity risk related to the expansion project, whilst the ANSP remains in force and Heathrow shows no intention to continue work
- 18.17. Had Heathrow a more resilient actual financing structure with a lower level of gearing, work might have been able to progress as it has at other airports during the pandemic (Helsinki, Dublin and others have continued expansion projects); CAA policy has in this case simply transferred equity risk to consumers yet delivered no consumer benefit whatsoever, which is entirely inconsistent with the balance sought to be achieved in CAA12

Interim property hardship scheme

- 18.18. We agree with the CAA that the interim property hardship scheme ("IPHS") fulfils a legal obligation on the CAA and Heathrow under the ANPS, and when the ANPS was reinstated, the IPHS scheme was required to be in place
- 18.19. Since its reinstatement, there has been limited activity, and in the absence of any expansion activity due to Heathrow's unilateral withdrawal, we do not expect many costs to be actually incurred under the IPHS
- 18.20. Nevertheless, we continue to support the fulfilment of Heathrow's legal obligations to the DfT that were restored through the decision of the Supreme Court to reinstate the ANPS, but highlighting the lack of actual expansion activity at present

Costs incurred to February 2020

- 18.21. We support the CAA's work in determining the efficiency of costs incurred to February 2020, noting that we neither have any greater visibility of these costs, nor any ability to provide evidence; we are therefore reliant upon the CAA review to find appropriate evidence to support its conclusions on the topic
- 18.22. We urge the CAA to reject Heathrow subjective assertions that the costs were incurred efficiently, and agree that these relate to different costs and different time periods than previously reviewed by the IPCR
- 18.23. It is a shame that the CAA did not have capital efficiency incentives in place at the time these costs were incurred in order to determine efficiency or otherwise against agreed cost baseline and specific outcome deliverables; in the absence of

such a mechanism, the CAA's approach⁵⁷⁷ does not appear unreasonable, though we are unclear whether the 15% used is a simple average across overspend categories

18.24. It is unclear from the information presented whether this analysis should instead have been weighted differently to individual categories based upon value, and further information would be useful to determine how the CAA's application of the 15% average was appropriate

18.25. Specifically, we nevertheless support the following disallowances:

- Financial management: £0.661m
- Masterplan design: £0.295m
- Major commercial acquisitions: £0.4m – related to the farm site, we remain concerned that this purchase has not been made, and in the absence of any detailed analysis of H7 commercial revenues, cannot see revenue generation incorporated into the price control despite inclusion of this cost
- Colleague costs: £1.34m
- Ground investigation: £0.6m
- Programme leadership: £1m – though we remain concerned over the full £6.5m and what exactly it was used for
- Terminal aprons: £0.4m – though we do not understand why the full £2.6m has not been disallowed if there is neither a budget for the work, nor evidence that it was required prior to DCO; if this was required by airlines in advance of expansion, this would have been a standard project approved in the Gateway process similar to the Terminal 5+ project, not part of expansion costs
- Motorways: £0.4m

Conclusion

18.26. We observe that Heathrow have unilaterally withdrawn from the expansion project, and are not therefore supportive of the CAA's final decision on its treatment of expansion costs, specifically the disapplication of risk sharing and incorporation of Category C costs into the RAB

18.27. We are also opposed to the CAA policy on wind down and appeal costs, but support the CAA's preliminary assessment of inefficiency for costs incurred to February 2020, subject to comments on specific line items

⁵⁷⁷ CAP2265E: Appendix F, Early expansion costs, table F5

19. Financial resilience and ring-fencing (CAP2265 Appendix G)

- 19.1. The financial resilience of Heathrow is of core importance to British Airways; we are reliant upon Heathrow to provide the right airport capacity that allows our business to operate unimpeded, and its financial circumstances should be no barrier to delivering its licence obligations, particularly in extreme circumstances
- 19.2. Nevertheless, unforeseen circumstances do arise, as demonstrated in the aviation sector by the current pandemic; as Heathrow's regulator, the CAA must assure itself that Heathrow is able to meet its licence obligations in the most extreme circumstances, otherwise regulation risks being ineffective when most required
- 19.3. Ensuring appropriate capitalisation of regulated businesses has come under recent renewed focus as a result of the issues in the supply of domestic energy in the United Kingdom; as a result of difficulties caused by the rise in wholesale gas prices, commentators have suggested that "energy market has in effect been operating without much in the way of prudential regulation"⁵⁷⁸
- 19.4. This was particularly significant in the recent case of Bulb, where the "reality is Bulb probably didn't have the balance sheet to follow the paint-by-numbers template provided by the regulator for protection consistent with the assumptions in the price cap"⁵⁷⁹; this was further compounded by the fact that "Bulb was too large to be handled by the supplier of last resort system that has cleared up over 20 failures since August"⁵⁸⁰
- 19.5. We draw attention to comments from more experienced observers that "Ofgem has not properly regulated the supply companies, allowing licensed businesses to trade without due regard to the possibility that wholesale prices might rise, and therefore failing to do proper scrutiny of the companies' business plans"⁵⁸¹
- 19.6. It is therefore incumbent upon the CAA to ensure that its proposals for H7 are consistent with prudential regulation, and that regulatory judgement does not place undue faith in assurances from management and investors; such assurances can only be truly tested in times of extreme stress, and as a result, the regulatory regime must ensure effective resilience in those most extreme cases

Whole business securitisations

⁵⁷⁸ [Financial Times, "Energy's Buffett moment shows a market in need of re-regulation", 20th September 2021](#)

⁵⁷⁹ [Financial Times, "Poor regulation, not price cap, to blame for energy market mayhem", 25th November 2021](#)

⁵⁸⁰ Ibid.

⁵⁸¹ [Prof. Sir Dieter Helm, "Luck is not an energy policy – the cost of energy, the price cap and what to do about it", 6th December 2021](#)

- 19.7. We note the CAA's comment that "HAL's credit quality and financial stability is enhanced by the arrangements in its "financing platform"⁵⁸²: this does not fully describe the effect of a Whole Business Securitisation ("WBS"), which could in fact reduce financial stability if investors take advantage of increased issuing capacity to originate excessive levels of debt
- 19.8. It is important to note the role that securitisation played in the Global Financial Crisis ("GFC") of 2007, where leverage simply served to magnify the risk of the underlying asset itself; there remains as a result an increased risk of a change of control event, and the licence should anticipate potential issues that might arise in such circumstances
- 19.9. Ultimately, a WBS structure – which was a UK innovation in the 1990s – uses provisions of UK insolvency law to facilitate administrative receivership over the assets of the originator; whilst this attempts to preserve value of the asset through its continued operation – thus aligning consumer and creditor interests to an extent – this does not guarantee behaviour will remain aligned in all circumstances
- 19.10. Since the assets require continued management to generate ongoing cashflow, a WBS affords creditors with the generally unfettered right to appoint an administrative receiver to manage the company for the benefit of creditors; this is important, since alignment with the consumer interest cannot be assumed, and the CAA would have no power to prevent appointment of an unacceptable receiver
- 19.11. It cannot be the right outcome of regulation to rely upon a mechanism designed to channel funds to creditors in extreme scenarios to operate in the best interests of consumers; the CAA would be in error to rely upon the vicissitudes of an administrative receiver appointed by creditors to operate the airport in a manner consistent with the CAA's duties to the consumer
- 19.12. In fact, as noted by Fitch, "while the WBS legal framework is likely to enhance the rating of the most senior debt, it may do so at a cost to potential subordinate tranches"⁵⁸³, and furthermore that "although for WBS ratings, the analysis depends on the secured creditors' right to appoint an administrative receiver, it is acknowledged that, in the context of a WBS, this mechanism remains largely untested from an operating perspective"⁵⁸⁴
- 19.13. Fitch continue to note that "the analysis also assumes that the secured creditors will take necessary and timely action in their own interests to benefit from this legal mechanism (e.g. providing an indemnity to the administrative receiver)"⁵⁸⁵; it is concerning therefore that the CAA do not consider greater protections than proposed are necessary to provide assurance in extreme circumstances

⁵⁸² CAP2265E: Appendix G, Financial resilience and ring fencing, para G2

⁵⁸³ [Fitch Ratings, UK Whole Business Securitisation Rating Criteria, 3rd July 2020, p13](#)

⁵⁸⁴ Ibid.

⁵⁸⁵ Ibid.

- 19.14. We nevertheless agree with the CAA that additional protection is required for consumers, since the WBS is primarily aimed at protecting creditor interests, and although those additional protections should not “provoke an expensive and disruptive refinancing”⁵⁸⁶, but that yet greater protection could be required to ensure the administrative receiver operates in the best interests of consumers

Special Administration

- 19.15. We continue to advocate the introduction of a Special Administration regime as advised by the Cave review⁵⁸⁷, which has been proven compatible with WBS structures in places at UK regional water companies, and would provide greater protection that the asset would be operated in accordance with consumers best interests, the current Civil Aviation Act 2012 (“CAA12”) lacks this feature, fundamentally undermining effective incentives
- 19.16. Instead, consumers are exposed to Heathrow’s Whole Business Securitisation (“WBS”) structure, whose incentives are at variance with the CAA’s ability to effectively regulate Heathrow in the interests of consumers; rather than compelling Heathrow to inject necessary equity that has been removed, Heathrow has attempted to get consumers to fund its own equity risks
- 19.17. In the absence of a Special Administration regime, with the lack of a fully ring-fenced assets and legally-enforceable duties on directors to ensure resources are in place to protect the asset, we have seen Heathrow simply raise yet more debt and sell a position onto high yield investors through offshore financial exchanges
- 19.18. Directors must be incentivised to ensure that Heathrow is never compromised and combined with ring-fencing and Special Administration provide assurance to consumers that services will continue, and quality is not compromised whatever the circumstances
- 19.19. This is to the detriment of the RAB, which should be properly insulated from activities that take place outside of the ring-fenced business, and allow a Special Administrator to transfer the asset to a new owner at a value that remedies what has been removed through financial engineering; Special Administration is the quid pro quo for the RAB that allows other owners and operators to take over effectively in the event of the financial failure of the current owner
- 19.20. This is particularly important at present in the aforementioned case of Bulb, which was “too large to be handled by the supplier of last resort system”; it is not a relevant consideration that Heathrow has a functioning WBS at present, but that the existence of a Special Administration regime would create additional options for the regulator in times of extreme stress

⁵⁸⁶ CAP2265E: Appendix G, Financial resilience and ring fencing, para G40

⁵⁸⁷ [Report of the independent panel on airport regulation, January 2009](#)

- 19.21. The underlying legislation across most other UK sectors incorporates such a regime⁵⁸⁸, and we would support its introduction through appropriate means in the future to provide further consumer protection; this is the case in the regional water industry regulated by Ofwat⁵⁸⁹, where WBS structures are also used extensively
- 19.22. We also note that this is a core part of the new nuclear RAB legislation proposed to deliver new generation capacity in the UK, whose explanatory notes state that “implementing special administration is intended to reduce the risks of consumers being deprived of the intended benefits from financing the building of a nuclear power plant using a RAB model should a relevant licensee nuclear company become insolvent”⁵⁹⁰
- 19.23. In addition, it is the in the run-up to administration that Special Administration is so important, since it introduces incentives designed to prevent the operation being undermined, and protect consumers by insulating the business from activities that exist outside the ring-fence, and to protect the RAB that can then pass to a subsequent owner; any detriment in the run-up to administration can also be formally made up, such as in the case of Welsh Water

Financial and operational certificates

- 19.24. We agree with the CAA that there is a significant information asymmetry between the regulator and regulated company, and this could expose the consumer to increased risk of unforeseen circumstances should issues arise in future
- 19.25. We disagree with Heathrow that the going concern basis of the annual accounts should be the sole mechanism to determine the future financial and operating stability of the airport; we note that Bulb along with many other recently-failed energy companies also provided such a statement along with parent support guarantees, which proved worthless in times of actual financial distress⁵⁹¹
- 19.26. Nevertheless, the detailed requirements for consideration of a going concern basis have applicability for the CAA’s financial and operating certification; when considering the longer period appropriate for the regulatory certificates, those detailed requirements of the Financial Reporting Council⁵⁹² and additional disclosures required for UK Listing Rules⁵⁹³ may provide a template upon which the CAA could further build robust certification

⁵⁸⁸ [UKRN, Cost of Capital – Annual Update Report, December 2020, p24](#)

⁵⁸⁹ [Ofwat, Review of processes and procedures for when a company may be in financial distress, p2](#)

⁵⁹⁰ [UK Parliament, Nuclear Energy \(Financing\) Bill 2021-22](#)

⁵⁹¹ [Financial Times, “Poor regulation, not price cap, to blame for energy market mayhem”, 25th November 2021](#)

⁵⁹² [Financial Reporting Council, Going Concern and Liquidity Risk: Guidance for Directors of UK Companies, 2009](#)

⁵⁹³ [Financial Conduct Authority: UK Listing Rules](#)

- 19.27. It is particularly important that the CAA consider the level of transparency resulting from complex leveraged financial structures such as WBS; as noted by Ofwat⁵⁹⁴, these structures reduce external visibility over financial flows, and could serve to reduce the regulator's ability to identify financial distress in certain circumstances
- 19.28. Whilst we continue to support the separation of the certificates to ensure that financial and operational matters carry equal weight, it is important to ensure that those certificates provide information that is actually useful to the CAA
- 19.29. For example, the Bank of England Prudential Regulation Authority ("PRA") requires firms to disclose "immediately if it becomes aware, or has information which reasonably suggests, that [subsequently listed conditions] may have occurred or may occur in the foreseeable future"⁵⁹⁵
- 19.30. Similar language would reinforce the requirement to report certain financial and operational aspects promptly to the CAA, ensuring it is fully informed of circumstances and can fulfil its regulatory functions in keeping with events

Provision of information

- 19.31. We are disappointed that the CAA believes there is little regulatory benefit to produce and submit more information than at present; this is particularly the case as we understand there have been occasions in the past two years where the CAA has not been privately informed of certain events prior to their public disclosure e.g. during aspects of the debt consent solicitation process
- 19.32. As described by the CAA⁵⁹⁶, the level of disclosure proposed could result in a situation where Heathrow choose its particular level of disclosure based solely upon its choice to draw the CAA's attention to a particular matter; the disclosure of such matters should not be limited to those chosen by the regulated company, and Heathrow should be required to deliver greater transparency to the CAA, who itself can then make an assessment on the relative seriousness of an issue
- 19.33. This is particularly important given the CAA's observation of information asymmetry between Heathrow and the CAA; we note that other UK regulators require the provision of greater levels of information, which would be an appropriate approach to ensuring Heathrow is effectively scrutinised by the CAA
- 19.34. We reiterate our point that financial market disclosures are intended for investors involved in a WBS, whose interests may not be aligned with consumers in extreme circumstances, therefore the CAA's principle that it would "only require additional information in limited circumstances, otherwise relying on materials currently produced for market participants"⁵⁹⁷ is insufficient to fulfil CAA12 duties

⁵⁹⁴ [Ofwat, Review of processes and procedures for when a company may be in financial distress, p2](#)

⁵⁹⁵ [Bank of England, PRA rulebook for CRR firms, para 2.1](#)

⁵⁹⁶ CAP2265E: Appendix G, Financial resilience and ring fencing, para G30

⁵⁹⁷ CAP2265E: Appendix G, Financial resilience and ring fencing, para G42

19.35. Nonetheless, we agree with the CAA's proposed licence requirement to require Heathrow to inform the CAA when it has released information to market participants; as drafted though, this requirement does not capture all information the Heathrow released to investors, which should incorporate all and any information provided to or by:

- Investors of listed debt
- Investors of non-listed debt
- Investors of offshore debt
- Credit rating agencies
- Reports of those credit rating agencies

19.36. A simple requirement to notify when information is placed on the investor website fails to capture a number of other key pieces of information, particularly those related to other financing entities operational in jurisdictions outside the United Kingdom; the £750m Floating Rate Notes at ADI Finance 2, listed in the Channel Islands being one key example⁵⁹⁸

19.37. Furthermore, we are aware that Heathrow has not placed some of the latest credit research on its website, including the latest Moody's report on Heathrow Finance plc issued on 25th October 2021; this lack of transparency is entirely inappropriate in the circumstances

19.38. The CAA would be advised therefore to follow the lead of the PRA in ensuring that it is notified immediately or within prescribed timescales to ensure that it is aware of certain information that has material bearing upon Heathrow

Ultimate controller obligation

19.39. We agree with the CAA that this obligation is important to ensuring that consumer interests are not undermined by actions taken elsewhere in the corporate structure; the WBS structure makes this particularly relevant, and the CAA should enhance this obligation to ensure that it can cater for a change of control event

19.40. Change of control could occur either in a merger and acquisition scenario, administrative receivership over the assets of the originator, or even the purchase by one investor of another's share in the current TopCo to result in majority ownership and resulting in a change of ultimate controller; the CAA's proposals should therefore accommodate such a scenario

Additional provisions

19.41. We note that further provisions included in previous CAA consultations are no longer under consideration, and in particular that the CAA have stopped "work on

⁵⁹⁸ [The International Stock Exchange, ADI Finance 2 Ltd, £750m Floating Rate Notes due 2027](#)

credit rating obligations and cash/dividend lock ups because these were most relevant to the previous challenges of expansion”⁵⁹⁹

19.42. Given this CAA acknowledgement that Heathrow have unilaterally abandoned the runway expansion project, we draw attention to the risk sharing provisions of expansion costs and require that at a minimum, the ex-ante Expansion risk sharing values appropriate to capital expenditure are applied and this expenditure is deducted from the RAB

19.43. We note that other regulators have taken a more interventionist approach to ensuring that the board are aware of their obligations, for example, with the Bank of England PRA setting out corporate governance responsibilities⁶⁰⁰; the CAA would be well advised to consider additional requirements from other regulators that service to enhance consumer protection, securing resilience and service delivery particularly at times of stress

Conclusion

19.44. In general, we support the CAA’s ring-fencing and financial resilience proposals, though remain concerned that the WBS could result in a conflict of interest between investors and consumers in certain circumstances

19.45. We support the information requirements set out by the CAA as being reasonable, balanced and pragmatic, but believe they should be enhanced in some areas to allow the CAA to better fulfil its obligations, and more closely prescribed in others such that the CAA has better oversight should circumstances change

20. Consultation process

20.1. We are concerned that these Initial Proposals are not sufficiently developed to allow scrutiny of the CAA’s position in advance of Final Proposals; this is particularly the case should the timetable remain as proposed with Final Proposals being released in March or April 2022

20.2. The price control must represent a calibrated set of incentives that allows the CAA to replicate the effect of a competitive environment on Heathrow, and as a result the individual proposals must both be fully justified and internally consistent; the CAA’s Initial Proposals contain a number of figures and mechanisms that have not yet been fully consulted upon, or the basis of the figures used not fully set out

20.3. As a result, the CAA must consider how it can recover the process to ensure that the H7 periodic review represents a fully consulted set of proposals, with the rationale for all incentives set out in full for ultimate benefit of consumers; it may therefore be appropriate for the CAA to consider a further set of Initial Proposals,

⁵⁹⁹ CAP2265E: Appendix G, Financial resilience and ring fencing, para G10

⁶⁰⁰ [Bank of England Supervisory Statement SS5/16: Corporate Governance: Board responsibilities](#)

and at a minimum, the timescale to Final Proposals must be reconsidered to allow analysis to be finalised, particularly bottom-up analysis by CTA

Setting incentives

- 20.4. The CAA must ensure that it sets incentives in advance of the price control that ensure Heathrow is held to account at the start of the price control, and that the incentive is consistent across the control having been set on a transparent basis; it is not clear that the CAA has done so when it is setting policy retrospectively in certain areas (e.g. Expansion costs)
- 20.5. In addition, the CAA's proposals must be established in a manner that is consistent with incentives in other areas, and it is not clear that this is the case in these Initial Proposals (e.g. sharing rate for TRS vs elasticity of operating expenditure and commercial revenues, reflection of risk in cost of capital, and policy for regulatory depreciation)
- 20.6. From a process perspective, this amounts to an error where the CAA has failed to be consistent across the building blocks of the price control, resulting in a lack of calibration in its Initial Proposals; the CAA cannot allow itself to be timed out from setting incentives to meet its general duty to consumers, and has been in error not to have repeatedly set out clear statements of intent across the building blocks throughout this periodic review

Business plans

- 20.7. The CAA has set out its requirements for Heathrow's business plans in a number of consultations, and specified the information that it requires in order to be able to set a price control; however, Heathrow has continued to produce business plans that fail to meet these requirements, delivered them substantially late, and there has been no concrete action from the CAA to counter what would appear to be a clear case of regulatory gaming to avoid scrutiny of its business
- 20.8. Whilst the failure of Expansion and Heathrow subsequent unilateral withdrawal could be considered an unforeseen event, it exposed a lack of vision for the existing assets, and the absence of a masterplan for their development; even if Expansion had continued, Heathrow would have been operating many of the existing assets for decades during an Expansion process, therefore it is not an excuse that revisions to the business plan in 2020 should have taken so long
- 20.9. As a result, the CAA has been held hostage to Heathrow's failure to develop an appropriate regulatory business plan, rather than the CAA driving Heathrow in order to keep the periodic review on track; this is particularly disappointing as it is consumers who ultimately suffer from a lack of evidenced business plans that can allow effective incentives to be put into place

Constructive Engagement

- 20.10. The process for constructive engagement was particularly unproductive during this periodic review, stemming in part from Heathrow's top-down approach to business planning – in contravention to the CAA's requirements – but also from a failure of the CAA to act when the process became clearly unproductive
- 20.11. This was particularly a consequence of Heathrow's clear motivation to set a position that undermined incentives and over-bid for its allowance rather than to engage in an effective and productive discussion of what might be necessary to set the incentive
- 20.12. In particular, Heathrow used the emergence of OBR to justify outlandish positions supported by heavily biased consumer research in an attempt to break the regulatory constraint that would reflect a price control settlement that replicated a competitive outcome were effective competition to exist
- 20.13. As a result, the CAA suggested it would host tri-partite discussions on particularly important topics to drive the process, however these failed to emerge, replaced instead with a limited number of one-way presentations of material already set out in consultations that failed to get to the heart of the important issues
- 20.14. Furthermore, rather than develop its positions and frequently delivering updates to airlines and Heathrow, the CAA appeared to want to wait until Heathrow and airlines positions emerged before revealing its positions, which frequently appeared to be mid-way between those held by Heathrow and airlines; as a result, this has made all parties unhappy as the CAA's role is not to arbitrate between parties but to make decisions in the best interests of consumers
- 20.15. The CAA's general duty to consumers places it in a position where it should have its own independent positions developed early in order to effectively counter Heathrow's incentives to carve out an unreasonable allowance and undermine incentives on its behaviour; airlines are a bonus in the process compared to other regulated industries, and airlines' incentives will be more generally aligned to consumers where they allow airlines to more effectively compete
- 20.16. In addition, the CAA needs to be the ultimate champion of consumers in economic matters rather than placing reliance on airlines alone to be able to fully challenge Heathrow's assertions, and must develop a price control that is in the consumers' best interests by performing the work required to demonstrate its adherence to its general duty in CAA12
- 20.17. It is the CAA that has the expertise to see through to the detailed economic arguments and perform the required analysis, and cannot outsource this role to airlines, who whilst we play an essential role in expressing what is required, we are not resourced with the same breadth and depth of expertise in regulatory economic matters to effectively challenge Heathrow alone
- 20.18. The CAA needs to drive the periodic review rather than allow the regulated business to dictate the agenda and process; whilst it is Heathrow's business to

operate, in the absence of effective economic competition, the CAA must consider the constraints a competitive market – if one existed – would place on Heathrow, and drive the process to get to the heart of the relevant incentives that must therefore result

Regulatory policy

- 20.19. We are concerned that some areas of regulatory policy have not been fully consulted upon in advance of Initial Proposals, and that as a result, the incentive is not fully consistent across the price control; whilst we agree with the CAA that the pandemic has resulted in extraordinary events, and that it is appropriate to respond dynamically as a result, there are elements that are a complete surprise to us
- 20.20. We were particularly disappointed that the April 2021 consultation on the Way Forward included little substantive information on the CAA's direction for this price control; as a result, Initial Proposals has been the first occasion that the CAA has revealed its position on many areas of the price control, and this has inhibited a full discussion and scrutiny of its position until now as a result
- 20.21. We are concerned that these Initial Proposals should now lead to Final Proposals that have not been fully scrutinised by all parties, and might lead to significant changes in incentives without being fully and consistently reflected across every element of the price control
- 20.22. For example, there has been no previous discussion of any asymmetric risk allowance as part of this H7 price control, and its inclusion would therefore be irrational without significant consultation due to the extreme change in the incentives that result; similarly, the CAA's proposals for regulatory depreciation do not seem to follow any specified regulatory policy and amount to just five paragraphs of discussion in these proposals
- 20.23. In addition, there are many elements of the cost of capital calculation where regulatory judgement has been applied irrationally in a way that elevates the cost of capital in a manner that has not been previously signalled, and suggests an inherent bias against an appropriate, low WACC that should emerge in order for the price control to be consistent with other incentives
- 20.24. This includes debt indexation, which has been little mentioned in this periodic review, but results in a significant change in the way that the cost of debt is measured on an ongoing basis; it would be an error for the CAA to include such mechanisms without significant consultation prior to Initial Proposals
- 20.25. Finally, the range proposed for Initial Proposals that formed the basis of the 2022 holding cap decision was a complete surprise to us; in basing Initial Proposals upon Heathrow's business plan in part through the use of quartiles, this fundamentally debauched the basis of these Initial Proposals such that they are simply not reflective of the CAA's emerging position or result in the basis of a number that has been effectively consulted upon

20.26. Nevertheless, we note that the CAA has consulted extensively on the capital efficiency incentives that it proposed, and whilst we set out our arguments in relation to the sharing rate that has been proposed as part of these Initial Proposals, we remain in general supportive of the CAA's significant and ongoing consultation in this particular area

Airline information

20.27. The operating expenditure at Heathrow delivers services that directly or indirectly result in consumer outcomes, yet those consumers use Heathrow as a result of being our customers using our networks, and it is airlines that are held accountable when airport services are not delivered

20.28. As a result, it is of critical importance that the CAA listens to airlines to understand how we need the airport to work; whilst we do not have access to the detail of Heathrow's operating expenditure, the CAA must incentivise that expenditure to be delivered in the correct areas to allow us to deliver a service consistent with that sold to our customers

20.29. In particular, we are concerned that our representations in relation to Outcomes Based Regulation have not been appropriately considered, and that the CAA has not sufficiently developed its understanding of the operational environment in order to be able to progress to calibrate and implement such a significant change to the regulatory regime

20.30. In the case of OBR, the CAA's proposed outcomes, measures and targets do not appear to support consumers outcomes that are consistent with our operating requirements, and do not appear to have taken any account of the numerous issues we have raised throughout the process as to how the existing incentives perform in practice

20.31. It would be an error not to take airline information into account, particularly where we have set out clear examples of the current incentives being ineffective, and the CAA continues to undermine outcomes by failing to take the time to understand in detail how an airport operation works in practice, removed from Heathrow's bluster expressed through its biased attempts at consumer research

20.32. For the record, it would be useful for the CAA to confirm whether information we have provided has in fact been read, and engaged with on a sincere basis; it would be irrational not to fully consider our submissions or to consider Heathrow's submissions with a higher weight than those of airlines

Conclusion

20.33. We are concerned that Initial Proposals are not sufficiently developed to serve as a basis for the H7 price control, and from a process and consultation perspective do not believe the CAA can or should proceed directly to Final Proposals as a

result; it is clear that incentives are neither calibrated across the building blocks, nor analysis completed in a manner consistent with the CAA's previous consultations and statements, and therefore it would be an error for these proposals to directly form the basis of the H7 price control

20.34. In particular, the CAA has been delayed by Heathrow's business plan delivery, and relied too heavily on failed Constructive Engagement, following which the CAA has failed to drive the process forward to allow sufficient engagement on many aspects of its Initial Proposals; some areas of inconsistent with regulatory policy that has been previously set out or has not been signalled at all in advance of the publication of these Initial Proposals

20.35. In addition, airline evidence has not been taken into account in some areas where it is particularly critical that the incentives work to control Heathrow's monopoly instincts; as a result, the CAA must consider a second set of Initial Proposals and a delay to Final Proposals to allow these matters to be properly and fully considered, and as a result, it would be an error for the CAA to proceed directly to Final Proposals on the basis of the presently published timetable

21. Regulatory framework

21.1. The CAA duties are set out in section 1 of the Civil Aviation Act 2012 ("CAA12" or the "Act"). It provides that the CAA must "carry out its functions under this chapter [Chapter One: Regulation of Regulation of Operators of Dominant Airports] in a manner which it considers will further the interests of users of airport transport services regarding the range, availability, continuity, cost and quality of airport operation services" and must do so "in a manner which it considers will promote competition in the provision of airport operation services". Sub-section 3 provides that in performing its duties, the CAA must have regard to, amongst other things:

- a) the need to secure that a licence holder can finance its provision of airport operation services (although the CAA is not required to ensure the financing of regulated airports in all circumstances);
- b) the need to secure that all reasonable demands for airport operation services are met;
- c) the need to promote economy and efficiency on the part of the licence holder in its provision of airport operation service; and
- d) the principles set out in sub-section 4, namely that regulatory activities should be carried out in a way that is transparent, accountable, proportionate and consistent, and only targeted at cases in which action is needed.

21.2. In relation to paragraphs (b) and (c) above, the explanatory notes to the Act states that one would expect these needs to be met in a competitive market where airport operators provide the services demanded by passengers at minimum cost.

The requirement to have regard to these needs reflects the fact that the aim of the economic regulation of airports is, as far as is possible, to replicate the outcomes of a competitive market

21.3. Sections 14 to 21 concern the granting of licences by the CAA to dominant airports. Pursuant to Section 18, a licence may include:

- a) such conditions as the CAA considers necessary or expedient having regard to the risk that the holder of the licence may engage in conduct that amounts to an abuse of substantial market power in a market for airport operation services (or for services that include airport operation services), and
- b) such other conditions as the CAA considers necessary or expedient having regard to the CAA's duties under Section 1.

21.4. More specifically, Section 19(2) states that "A licence must include such price control conditions as the CAA considers necessary or expedient having regard to the risk referred to in Section 18(1)(a)"

21.5. It is against this regulatory framework that any decisions on the H7 regulatory period must be made

Yours sincerely,



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