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17th December 2021

Dear Paul,

Economic regulation of Heathrow Airport Limited: H7 Initial Proposals – H7 Price Control Consultation

1. **INTRODUCTION AND EXECUTIVE SUMMARY**

1.1 Thank you for the opportunity to provide comments on the "*Economic regulation of Heathrow Airport Limited ("**HAL**"): H7 initial Proposals – H7 Price Control Consultation*" (the "**Initial Proposals**").

1.2 This letter constitutes the response of Virgin Atlantic Airways ("**VAA**") to the Initial Proposals of the Civil Aviation Authority (the "**CAA**") in relation to the price control and associated regulatory framework that should be applied to HAL for H7, which it understands is intended to take effect in July/August 2022. VAA's joint venture partner, Delta Air Lines ("**Delta**"), fully endorses VAA's views expressed in this response.

1.3 VAA refers to its response to the consultation titled "*Economic regulation of Heathrow Airport Limited: H7 Initial Proposals – 2022 Charges Consultation*" dated 17 November 2021 (the **"2022 Charges Consultation Response")**. Given that there is significant overlap in the issues raised in this response with points made in the 2022 Charges Consultation Response, VAA makes reference to that response where appropriate. As outlined in the 2022 Charges Consultation Response, given that there was a short window to prepare that response, the views expressed therein represented VAA's preliminary submissions on the CAA's proposals and VAA has had some further opportunity to develop its comments on numerous matters since then. In the event that there are any inconsistencies between the responses, VAA favours the position as set out in this response.

1.4 Notwithstanding this, as the CAA will be aware, the Initial Proposals raise numerous complex issues which require careful consideration and analysis. In the circumstances where there have been consecutive regulatory deadlines to respond to, and in the limited time window provided by the CAA, VAA has endeavoured to respond as comprehensively as possible to the Initial Proposals. However, where there are certain areas pending developments or further updates on the CAA's part, VAA reserves the right to develop and/or comment further on the points made in this response, and has outlined the particular areas where this may be appropriate.

1.5 To that end, VAA notes that the CAA announced what its decision on the 2022 Charges Consultation would be on 16 December and, contrary to VAA's and other airlines' submissions, the CAA has decided to introduce a holding price cap of £29.50 (2020 prices) as the interim price cap for 2022. The CAA has stated that the formal notice of the licence change (which must contain its reasons) will be published before Christmas. VAA is disappointed by this decision and, in particular, the CAA's rejection of the analysis it commissioned from independent third parties as well as the unduly pessimistic view it has taken to forecasting. Given the timing of the CAA's announcement and the need to submit this response by 17 December, VAA has had extremely limited opportunity to take into account the CAA's announcement on 2022 charges, while putting together this response. VAA therefore fully reserves its rights in the circumstances to provide further comment on the announcement and the CAA's subsequent notice where they may be relevant to this response on the H7 charges, going forward.

<u>The CAA's statutory duties</u>

1.6 The CAA has statutory duties under s.1 of the Civil Aviation Act 2012 in relation to this H7 price control review. These include the duties to:

1.6.1 carry out its functions in a manner that will further the interests of users of air transport services, including in relation to the cost of airport operation services[1],

1.6.2 have regard to the need to promote both economy and efficiency on the part of operators of dominant airports[2],

1.6.3 have regard to the need to secure that a licence holder is able to finance its provision of airport services[3], and

1.6.4 have regard to the principle that regulatory activities should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed[4].

1.7 Ultimately, s.1 outlines that the CAA's primary statutory duty is to further the interests of consumers.

<u>The CAA's Initial Proposals fail to fulfil its primary duty to further the interests of consumers</u>

1.8 It is plain that in order to comply with its statutory duties, the CAA must objectively and carefully assess all the information reasonably available to it and take an evidence-based and objective approach to its analysis of each building block used to construct the H7 price control for HAL.

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1 S.1(1) of the Civil Aviation Act 2012.
2 S.1(3)(c) of the Civil Aviation Act 2012.
3 S.1(3)(a) of the Civil Aviation Act 2012.
4 S.1(4)(a) and (b) of the Civil Aviation Act 2012.

1.9 In this regard, the fact that HAL has not used a bottom-up method to create its business plans means that the CAA cannot simply rely on those proposals which it appears to have done numerous times in the Initial Proposals. Nor can it take the approach of trying to find the "middle ground" between the airlines' position on the one hand and HAL's position on the other. Instead, it must take an independent view based on the most robust analysis and empirical evidence available. It is only by taking this approach that the CAA can ensure it is acting in the best interests of consumers.

1.10 VAA agrees with some of the proposals put forward by the CAA's Initial Proposals, but regrets that the proposals also reflect a number of significant errors made by the CAA as to the relevant evidence and/or approach in relation to key building blocks. The CAA's fundamentally flawed approach to the key building blocks in its Initial Proposals has therefore resulted in a misinformed provisional range of between £24.50 and £34.40 for the H7 price control and a so-called "mid-point" of £29.50 (the actual mid-point is £29.45), which would represent a significant increase from the price control in Q6.

1.11 VAA strongly opposes this proposal and seeks to demonstrate, in as much detail as has been possible in the time given, why this range is a result of key errors in relation to various building blocks. Indeed, the CAA itself accepts that "*increases towards the upper end of our range could cause material consumer detriment*."[5] It is self-evident that such an increase cannot be in the interests of consumers, nor is it proportionate.

1.12 It is important to reiterate that consumers at London Heathrow are already paying the highest charges in the world. In 2020, HAL's total charges were 44% greater than the next most expensive European hub, Frankfurt. The CAA's Initial Proposals would see this gap widening even further potentially to 83% in 2022.[6]

1.13 VAA recognises and appreciates that this H7 price control review is being conducted by the CAA in particularly challenging circumstances with regards to the recovery of the aviation industry more widely, from the severe impact of the Covid-19 pandemic. While some uncertainty remains about the path to recovery, it is now possible to conduct more informed analysis and predictions than at the start of the pandemic, which the CAA has largely failed to take into account in its Initial Proposals.

<u>The CAA's primary responsibility is in relation to consumers and not HAL's financeability</u>

1.14 VAA accepts that HAL's financeability is an important factor in the CAA's considerations. However, this point should be seen in context: the CAA's duty is only to "*have regard*" to HAL's financeability but it is not responsible for it.

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5 CAA's Initial Proposals, Summary, page 8, paragraph 9.

6 Index 2020: LHR = 100, FRA = 69; index 2022: LHR = 132, FRA = 72 (charge moves £23.56 to £19.36 to the proposed £29.50, which is uplifted from 2020 prices by the ONS RPI price index (Aug 2019 to Aug 2020: 293.3/291.7 and Aug 2020 to Aug 2021: 307.4 to 293.3) https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw/mm23.

VAA reiterates that the CAA's primary duty is to further the interests of consumers [7] and ultimately the CAA is not accountable for HAL's financeability, which is dictated partly by HAL's and its shareholders' own choices as to how to run its business.

1.15 As outlined in the 2022 Charges Consultation Response, the devastating effect that the Covid-19 pandemic has had on the aviation industry has been felt by all airlines. In response to this crisis, VAA and others in the aviation industry have taken decisive action to survive, including through financial support from shareholders [redacted]. In relation to the measures that VAA has taken:

1.15.1 [redacted]

1.15.2 VAA has also received just under £700m in direct shareholder support, including 200 million in September 2020, £97 million in March 2021 further £400 million in new investment, completion of which was just recently announced on 13 December 2021, to ensure that VAA emerges from the Covid-19 pandemic in a strong financial position and to position itself for recovery.[8]

1.16 In complete contrast, HAL's shareholders have not provided any financial support by way of permanent equity and at the same time have continued to enjoy generous returns from the business. No airline has been able to pass the costs of the pandemic onto its customers and it would be unlawful for the CAA to allow the regulatory framework to be used to guarantee substantial shareholder returns. However, this appears to be the effect of some of the CAA's Initial Proposals, for example, when proposing an inflated level of WACC. The CAA must ensure that the Final Proposals do not place undue weight on the need to "*have regard*" to HAL's financeability over the CAA's primary duty to further the interests of consumers.

<u>VAA's approach to this response</u>

1.17 In light of the overarching comments above, and in order to assist the CAA in its continued consideration of the various building blocks and H7 price control ahead of the Final Proposals, this consultation response outlines VAA's position on each of the building blocks contained in the CAA's Initial Proposals, taking an appropriate 'bottom up' approach based on the evidence available and assessments of independent third parties.

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[7] Cf. *R (British Gas Trading) v GEMA* [2019] EWHC 3048 (Admin) at [14].

[8] https://www.virgin.com/about-virgin/latest/virgin-atlantic-completes-gbp400m-investment-from-virgin-group-and-delta-air.

1.18 VAA urges the CAA to take into account the evidence and analysis put forward in this response, as supported by independent third party experts (including its own) and to reconsider its views in light of the information put forward. Indeed VAA notes that the CAA has stated in the Initial Proposals, "*We are also undertaking further work on all the key building blocks and revenue drivers as part of our ongoing work on the price review and will seek to refine our estimates and projections of all these factors in determining our Final Proposals. This means, in practice, our assumptions and projections of price control building blocks are provisional and subject to change as we continue our work on the price control review*".[9]

1.19 In order to assist the CAA as far as possible, VAA has provided in this response some information which is confidential, particularly in relation to section 5 (Passenger Forecasting) and section 8 (Financeability). VAA therefore considers that an unredacted version of this response should not be disclosed in the event of any request made under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004, or otherwise. In the event that the CAA does receive such a disclosure request, VAA would expect to be informed in good time before any decision is made on disclosure and to be provided with an opportunity to make representations.

1.20 For completeness, VAA notes that the CAA's Initial Proposals contain preliminary proposals at Chapter 14 in relation to implementing outcome based regulation ("**OBR**"). VAA notes that further to the publication of the Initial Proposals, the CAA has published the "*Economic regulation of Heathrow Airport Limited: H7 Initial Proposals – Working paper on outcome based regulation*" on 19 November 2021 (the "**OBR Working Paper**"). As confirmed by the CAA on 10 December[10], the deadline to respond to the OBR Working Paper has now been extended to 12 noon on Tuesday 17 January 2022. Given that the OBR Working Paper seeks to build upon the proposals set out in the Initial Proposals and given the time available, VAA does not seek to address the topic of OBR in this response and reserves its right to comment on this issue as set out in the Initial Proposals, in its response to the OBR Working Paper.

Executive Summary

1.21 An appropriate price cap for the H7 price control period is within a range of **£11.30 - £14.72**. This is the reasonable and proportionate range for H7 when properly considering each building block used by the CAA by reference to the empirical evidence and independent analysis.

1.22 The issues identified by VAA and approach taken in relation to each building block are, are summarised as follows:

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9 CAA's Initial Proposals, Summary, page 20, paragraph 67.

10 Letter from the CAA to stakeholders dated 10 December 2021, titled "*Extending the consultation period for the H7 Initial Proposals: CAP2274 (OBR working paper) and CAP2275 (draft licence modifications)*".

1.23 **Section 2 - RAB Adjustment**:

1.23.1 VAA expresses its support for the CAA's proposal not to make further increases to HAL's RAB beyond the £300 million RAB adjustment already extended to HAL in April 2021.

1.23.2 VAA's strongly disagreed with the CAA's original decision in April 2021 to make a RAB adjustment of £300 million. While its preference would be for the adjustment granted to be reversed in a structured manner, for the same reasons it would oppose any further increase and welcomes the CAA's proposal not to take this course. In particular:

(A) HAL's request to increase very substantially the size of the RAB adjustment (amounting to a total £2.5 billion) is unwarranted and would set an unhelpful precedent that HAL may rely upon artificial RAB adjustments in future periods of uncertainty.

(B) While a RAB adjustment would mitigate regulatory depreciation, the effect of this would be to give HAL an absolute guarantee against any loss whatsoever, which VAA considers inappropriate.

(C) Affording HAL this level of guarantee neutralises any incentive it would otherwise have to maintain service quality for passengers.

(D) There are more appropriate regulatory tools available to the CAA which would have the desired effect on maintaining investor confidence without distorting the H7 WACC (as to which, see also section 3). VAA opposes the use of a Traffic Risk Sharing ("**TRS**") mechanism; however it supports the use of an up-to-date forecast to achieve the same goal.

(E) VAA considers that the financeability of HAL can be supported through other means (as to which, see also section 8). In terms of equity financeability, VAA notes the multiple examples given by the CAA of companies in the aviation industry obtaining an injection of equity. As to debt financeability, the April 2021 RAB adjustment further did not make any material improvements to HAL's credit metrics.

1.23.3 With these points in mind, VAA agrees with the CAA's assessment that a further RAB adjustment is not required and encourages the CAA to maintain this position.

1.24 **Section 3 – WACC, Traffic Risk Sharing and Risk**: VAA opposes the CAA's Initial Proposals in relation to WACC, TRS and asymmmetric risk allowance:

1.24.1 The CAA has proposed an excessive and inflated WACC range of 3.6% - 5.6%. The range should be 1.3%-2.8%, when applying proper methodology and taking an objective view of the relevant evidence to each WACC parameter, in particular the asset beta and cost of debt. This is supported by the independent expert analysis of CEPA, as appended to this response. By reference to the CEPA analysis, VAA outlines below the fundamental flaws in the approach taken by the CAA in calculating its proposed level of WACC and would urge the CAA to carefully consider and remedy these errors.

1.24.2 VAA considers that the calculation of the WACC should be developed independently, with financeability considered after. VAA also considers that its proposed range of 1.3% - 2.8% is financeable, and this is explored further in the Financeability section [redacted].

1.24.3 VAA opposes the TRS mechanism proposed by the CAA given that this risk mitigation measure has not been reflected in the WACC and would operate to provide a significant cash advance to HAL if the current passenger forecasts are beaten, which would not be returned to consumers until H8. It cannot see how this could be in the best interests of consumers.

1.24.4 VAA also strongly disagrees with the CAA's proposal for allowance for asymmetric risk; this (alongside the proposed TRS) provides unnecessary and duplicative protection to HAL in relation to the risk posed by the pandemic; such risk has already factored into the asset beta for the WACC. It is plainly irrational and disproportionate for the CAA to have proposed so many layers of protection to cater against the same risk, at the ultimate expense of consumers.

1.25 **Section 4 – Operational Expenditure ("opex") and Commercial Revenues**: VAA concludes that the estimated ranges for HAL's opex and commercial revenues are set at an inappropriate level. This is as a result of the CAA declining to give due regard to its own independent expert's advice and instead giving too much weight to HAL's significantly inflated forecasts for both opex and commercial revenues.

1.25.1 The CAA has not considered the advice it has received from CEPA/Taylor Airey ("**CTA**") in sufficient detail. The artificial ranges for both opex and commercial revenues the CAA has consequently created, based on HAL's estimate as a ceiling and CTA's estimate as a floor, are not fit for purpose. VAA is concerned that adopting this approach will mean that many of the flawed assumptions (for example, in relation to the inappropriate and generalised elasticities applied, and over-estimation of specific cost and revenue categories) underpinning HAL's estimates on both fronts are also adopted.

1.25.2 Since the 2022 Charges Consultation Response, together with the airline community, VAA has commissioned its own expert (PA

Consulting, "**PA**") to apply additional scrutiny to HAL's estimate and to test CTA's findings. PA's additional objective analysis supports nearly all of the CTA's conclusions with the exception of some minor points. With these findings in mind, VAA urges the CAA to reconsider the ranges it has proposed both in relation to opex and commercial revenues and to place greater reliance on CTA's analysis.

1.26 **Section 5 – Passenger forecasts**: VAA expresses concern at the outdated and overly pessimistic passenger forecasts which are proposed to be relied upon by the CAA. This is despite it being critical that these forecasts are accurate given the impact they will have on the H7 airport charge, and therefore the ultimate cost passed onto consumers.

1.26.1 It is noteworthy that the CAA's forecast is based on HAL's model, with few modifications. HAL has a vested interest in underestimating its passenger forecast since it is financially incentivised to exceed those forecasts. Unsurprisingly, HAL's methodology has produced a significant underestimation of what the wider industry and VAA specifically is forecasting and in those circumstances VAA does not agree that this should form the basis for the H7 airport charge. VAA has, furthermore, not had the opportunity to scrutinise HAL's model and reserves the right to comment further if this is provided. VAA also notes the promise of an updated passenger forecast alongside HAL's response to this consultation, as to which it also reserves its right to comment further.

1.26.2 In any event, VAA has revisited the industry forecasts having taken into account developments since HAL's forecast – and therefore the CAA's forecast – was produced, and sought to explain why these forecasts are more robust, balanced and realistic. VAA has also provided (in commercial confidence) some additional detail about its own planning for the forthcoming H7 period. In short, VAA argues that demand for travel will return and faster than is anticipated by HAL and the CAA, and it can be the only rational course for the CAA to follow the more realistic estimates put forward by the industry.

1.27 **Section 6 – Other Regulated Charge ("ORCs")**: VAA confirms its general support for the CAA's proposed approach. In particular, VAA agrees with adopting a marginal cost-based approach to ORCs but emphasises that any alterations to which costs are allocated to ORCs should be fully consistent with this approach.

1.27.1 Accordingly, VAA agrees with the modifications to the scope of the ORCs put forward by the CAA in its Initial Proposals (including the reallocation of fixed and allocated costs to the regulated airport charge). Consistent with the CAA's position, VAA does not however support HAL's proposal that business rates be reallocated to the ORC cost base, as these are not a marginal cost. VAA would welcome the opportunity to comment further on the proposal to address bus and coach services via individual commercial arrangements once other stakeholders have provided comment.

1.27.2 VAA further supports the proposals for enhanced governance arrangements, and in particular the amendments to the ORC framework to facilitate the inclusion of new services in the ORC cost base, and the improvements to the dispute resolution mechanisms currently in place.

1.27.3 Finally, VAA acknowledges the initial forecasts which have been provided and looks forward to considering and commenting on the further development of these in due course.

1.28 **Section 7 – Capital Plan and Incentives**:

1.28.1 VAA urges the CAA to remain firm on its position on the size of the Capital Plan for H7 and to proceed with the CAA's "Mid" Case as set out in the Initial Proposals. This is the approach that is based on the evidence available, supported by the CAA's own independent advisors and best aligned with the CAA's statutory duties. VAA agrees that flexibility to the capital envelope may be required but requires greater clarity from the CAA as to when such circumstances may arise and welcomes further engagement from the CAA on this.

1.28.2 In relation to capital incentives, VAA agrees with the CAA's proposals in relation to an ex ante approach and agrees that there should be a visible step change within the capital framework and governance which ensures that HAL is responsible and accountable for its delivery objectives and obligations. However, in relation to the proposed incentive rate, VAA disagrees with the CAA's proposals for an equitable split of an incentive rate between 20-30% for under or overspends by HAL. VAA instead proposes an incentive rate of 30% for an overspend situation with no additional bonus for an underspend situation which would represent the most reasonable approach when taking into account all relevant factors.

1.29 **Section 8 – HAL's financeability**: VAA considers that its proposal regarding the building blocks for the price control model is financeable:

1.29.1 In the first place, CEPA has determined, based on all the evidence available and a proper methodology, a reasonable range for HAL's WACC to enable HAL to cover its costs of capital. As a matter of principle, and consistent with the CMA's approach to financeability,[11] this should mean both debt and equity investors should earn sufficient returns to cover the costs of financing.

1.29.2 [redacted]

[11] See CMA, *Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, Final report*, 17 March 2021, paragraph 10.72.

[redacted]

1.29.3 VAA has also identified a number of errors in relation to the CAA's approach to financeabiltiy set out in Chapter 11 of the Initial Proposals. This includes failing to adopt an approach consistent with the CMA, by relying almost exclusively upon financial ratios in determining whether its price control model is financeable; failing to give sufficient weight to, or adequately investigate, whether HAL's shareholders should be expected to provide a cash injection; and errors in assessing the reasonable level of dividends that HAL's shareholders should be entitled to earn during the price control period.

1.30 **Section 9 - Airlines Alternative Business Plan**: The building blocks discussed in sections 2-8 are brought together in the Airlines Alternative Business Plan.

1.30.1 This represents a forward-looking model for H7 whilst taking into account appropriate adjustments for the impact of the pandemic. VAA has provided the CAA with robust and clear analysis in relation to each building block, as ultimately brought together by this model and by reference to empirical evidence and independent third party analysis in as much detail as has been possible in the time given.

1.30.2 This demonstrates how the building blocks as detailed in each section of this response, when properly calibrated, result in the proper H7 price control range of £11.30 - £14.72 which is reasonable, objective and takes into account the relevant factors.

2. RAB ADJUSTMENT

Summary

2.1 This section responds to Section 2, Chapter 6 of the CAA's Initial Proposals. VAA has previously indicated its disagreement to the CAA's approach to HAL's request to an upwards RAB adjustment, on the basis that this ultimately has a distorting effect on the calculation of the H7 price charge, and it would be inappropriate to make such an artificial adjustment.

2.2 However, although VAA's preference would be to make a structured reversal of this adjustment, it is supportive of the CAA's proposal not to make further increases beyond the £300 million RAB adjustment already made. An increase of the volume requested by HAL would be entirely contrary to consumer interests and the CAA's general duty in s.1(1) of the Civil Aviation Act 2012, and is likely only to benefit shareholders with no need for the additional funding. Any increase would therefore fail to promote economy and efficiency on the part of HAL, a matter to which the CAA is bound to have regard under s.1(3)(d) of the Civil Aviation Act 2012. HAL's suggestion in its update to its Revised Business Plan ("**RBP Update 1**")[12] that the failure to increase the adjustment will result in the inability of investors to rely on the return of historic capital invested, thereby "*materially damaging confidence in regulation and increasing risk*"[13] is not an accurate assessment of the position and fails to pay due regard to other regulatory intervention mechanisms (and expected recovery of the sector) which will mitigate uncertainty for investors.

£300 million RAB adjustment in April 2021

2.3 VAA was surprised and dismayed by the CAA's decision in April 2021 to make a £300 million upwards adjustment to HAL's RAB. While VAA recognises the impact of the Covid-19 pandemic on the operations of HAL and the need to manage the ongoing impact for consumers as the aviation sector navigates recovery, it did not agree that regulatory intervention was appropriate. This increase to HAL's RAB does not, contrary to the CAA's suggestion, incentivise HAL to maintain service quality[14] and provision of capacity in anticipation of increasing passenger traffic. Such intervention sets an unfortunate precedent that HAL may default to artificial increases to its RAB in future periods of uncertainty, neutralising incentives as to providing service quality to passengers, and offsetting the costs of events outside of all parties' control onto airlines and ultimately the consumer.

2.4 In view of these unsatisfactory consequences, and VAA's position that this intervention should never have been made, VAA's strong preference would have been for the CAA to reverse the adjustment altogether, albeit it recognises that this would need to be done in a structured manner. It further notes the CAA's comment in April 2021, repeated at paragraphs 6.14-6.15 of its Initial Proposals[15], that it would consider reducing the £300 million RAB adjustment (or making offsetting reductions to revenue) should evidence emerge that HAL had not responded appropriately, including in respect of service levels where that is within HAL's control. In that respect, VAA notes that it is incumbent on the CAA, in determining whether to modify licence conditions under the Civil Aviation Act 2012, to take its decision on the basis of up-to-date information, including any such evidence that may have come to light.

Further RAB adjustment

2.5 VAA considers the repeated request from HAL to increase substantially the size of the RAB adjustment to be inappropriate and unjustified. The adjustment sought is particularly sizeable – amounting to a total £2.5 billion. This would have wide-ranging negative impacts on the H7 price charge and how this is calculated. As indicated above, it would also set an unfortunate

12 HAL's RBP Update 1, June 2021.
13 HAL's RBP Update 1, page 29, section 3.7.
14 CAA's Initial Proposals, Section 2, Chapter 6, page 6, paragraph 6.9.
15 CAA's Initial Proposals, Section 2, Chapter 6, page 8, paragraphs 6.14 to 6.15.

precedent and disincentivise HAL from providing and maintaining proper service levels.

2.6 Against that background, however, VAA welcomes the CAA's firm clarification in its Initial Proposals that it will not make any further RAB adjustments, or related regulatory interventions.[16] VAA has considered and rejects the justifications offered by HAL for its proposed RAB Adjustment. VAA notes its position below in relation to the influence such adjustment would have on the building blocks of the H7 price charge.

2.7 VAA notes that the CAA has also considered the impact of its other proposals when considering HAL's request for a further adjustment to the RAB, comprising (i) the proposed TRS mechanism, (ii) the provision for an allowance of asymmetric risk, and (iii) a determination of a higher asset beta given the impact of the pandemic, when calculating the WACC. The TRS, allowance of asymmetric risk and inflated asset beta provide a 'triple count' of protection for HAL in light of the risks posed by the pandemic, and in fact a properly calculated asset beta in the WACC will account for this risk without need for the other mechanisms. VAA has set out below at section 3 (WACC, TRS and Risk) its position on these proposals separately.

Regulatory depreciation

2.8 HAL cites the need to mitigate significant regulatory depreciation and consequent limited return on capital which it has experienced since the onset of the Covid-19 pandemic. It claims that a RAB adjustment is necessary to support investor confidence in the regulatory framework, and complains that the RAB adjustment made to date represents but a "*small proportion of the recovery of regulatory depreciation*"[17] and therefore does not achieve the restoration of investor confidence needed.

2.9 While this may be the case, the proposed solution of a depreciation adjustment is not logical. VAA strongly agrees with the CAA that the effect of such an adjustment (particularly in relation to the larger sum requested by HAL) would be to indemnify HAL against any loss whatsoever, and that it cannot be fair to require consumers to provide this kind of unbounded protection from economic turbulence. The purpose of the Civil Aviation Act 2012 is to prevent HAL abusing its position as an operator of a dominant airport area, not to protect it against commercial risk from traffic losses.

2.10 VAA notes that there are regulatory steps the CAA could and is taking to mitigate any increased perception of risk investors have in HAL, which VAA considers will obviate the need for a RAB adjustment by reason of depreciation. To this end, VAA notes its position in relation to these regulatory interventions elsewhere in this response at section 3 (WACC, TRS and Risk).

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16 CAA's Initial Proposals, Section 2, Chapter 6, page 20, paragraph 6.72.
17 HAL RBP Update 1, page 29, section 3.7.

Impact on H7 WACC

2.11 HAL has provided calculations as to the impact of its proposed RAB adjustment on the H7 WACC, which it estimates would be 10.4% if the full increase were to be granted. This too feeds into HAL's approach to restoring and maintaining investor confidence, and mitigating any perceptions of heightened risk.

2.12 Noting the comments made by the CAA in relation to the impact of regulatory intervention on investor confidence, VAA agrees that there are other more appropriate regulatory tools through which to achieve a similarly positive outcome as to investor perception. VAA notes the suggested TRS mechanism proposed by the CAA, which VAA opposes as explained at section 3 (WACC, TRS and Risk).

Impact on revenue profiling and value of revenue re-profiling to consumers

2.13 VAA notes the CAA's statement in the Initial Proposals, "*We consider that our Initial Proposals provide for allowed revenues that are sufficient to ensure that the notionally financed company is financeable in H7*"[18]. VAA addresses the topic of financeability in more detail at section 8 below, however, it would outline that while it does not agree with the CAA's Initial Proposals for each building block and has given reasons and evidence as to why, its proposals as outlined in the Airline Alternative Business Plan (see section 9 below) are financeable.

2.14 VAA agrees with the CAA that a RAB adjustment would provide limited scope to defer revenues into future price control periods to increase financeability, and in any event even if it did result in sufficient scope to do so, this is not sufficient justification for the proposed adjustment. VAA particularly agrees that the effects of the significant size of the RAB adjustment would eclipse any flattening of price volatility as a result of re-profiling.

Impact on investment, opex and service quality

2.15 VAA is supportive of the CAA's position that a further RAB adjustment is not necessary to ensure investments are maintained at an appropriate level so as to support service quality. In April 2021, VAA opposed the previous RAB adjustment outlined by the CAA, as it would have expected any investment to be funded by HAL and its shareholders. In addition, as outlined by the CAA, even if there was a rationale for providing an adjustment to RAB previously (which VAA rejects), then that rationale is of even less merit in relation to the forward looking H7 price control when the CAA is able to address the impact of the pandemic across all the building blocks and should not be using the H7 price control to compensate HAL for historical losses. Section 4 (Opex and Commercial Revenues) sets out VAA's broader views on this building block.

18 CAA's Initial Proposals, Section 2, Chapter 6, page 14, paragraph 6.41.

Impact on cost of debt and debt financeability

2.16 VAA notes that the RAB adjustment made in April 2021 did not make any material improvements to HAL's credit metrics, and agrees with the CAA that, to the extent any limiting of gearing levels is required, this is already achieved by the adjustment made previously.

2.17 VAA further notes the CAA's analysis of the impact of the proposed adjustment on financial ratios, and in particular its conclusion that any improvements achieved would be notional.

2.18 VAA's views on HAL's financeability more broadly are set out at section 8.

2.19 Accordingly, VAA is in agreement with the CAA that the impact on this factor does not justify a RAB adjustment.

Impact on equity financeability

2.20 VAA supports the CAA's conclusions that, contrary to a further RAB adjustment, a notional entity would have the option of either reinvesting a substantial proportion of its equity return in H7 to deleverage the business and/or obtain an injection of new equity. The CAA highlights multiple examples when raising equity has been done to deleverage a business, in the last 1-18 months in the aviation sector[19], demonstrating that there should be ample other opportunity for HAL to receive equity injections, and a further RAB adjustment is not required. In addition, as the CAA notes, another reasonable option is a "*temporary period of dividend forbearance*"[20] and HAL should not just be allowed to rely on receiving further adjustments to the RAB.

2.21 As above, VAA's views on HAL's financeability more broadly are set out at section 8.

Impact on passenger shock factor

2.22 VAA notes the CAA's alternate proposal that, in place of the proposed RAB adjustment, a TRS mechanism is put in place. VAA has explained below at section 3 its opposition to the TRS mechanism proposed by the CAA, and considers that an accurate, up-to-date forecast will achieve the same goal. In any event, this brings VAA to the conclusion that a RAB adjustment is not justified on this basis either.

3. WACC, TRS AND RISK

3.1 This section responds to the CAA's Initial Proposals on (i) WACC, (ii) the TRS mechanism, and (iii) allowance for asymmetric risk as contained in chapters 1, 7 and 9 respectively. VAA deals with these proposals together in this section given that the proposals for TRS and asymmetric risk allowance have

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19 CAA's Initial Proposals, Section 2, Chapter 6, page 19, paragraph 6.67.

20 CAA's Initial Proposals, Section 2, Chapter 6, page 19, paragraph 6.66.

an inherent impact on HAL's cost of capital and must be taken into account when calculating the WACC.

WACC

Introduction and summary

3.2 As outlined in the Initial Proposals, *"the allowed WACC is a key building block of the revenue [the CAA] allow[s] HAL to earn under the price control"*[21] *and* is *"a key driver of the level of the H7 price control"*.[22] VAA recognises that the CAA must apply to some extent, exercise its own regulatory judgment when determining the WACC in a context where there is a degree of uncertainty. However, as the CAA will recognise, it is crucial that the analysis, evidence and methodology applied by the CAA in calculating the WACC parameters and ultimate figure for WACC, are as robust as possible, with good and objective justification.

3.3 As set out above, the CAA's primary statutory duty is to protect the interests of consumers. By the CAA's own recognition, if it sets the WACC too high (which would occur if the CAA maintains its stance in the Initial Proposals), this will lead to airport charges being higher than they need to be in order for HAL to compensate overseas investors.[23] This is clearly contrary to the CAA's duty to protect consumers. It is evidently in the best interests of consumers that the CAA takes a view on WACC which is best supported by the evidence, having taken into account all relevant factors objectively, including the wider risk mitigation mechanisms that the CAA has proposed. These are mechanisms which would shift the risk from HAL to airlines and passengers, without a commensurate fall in costs to reflect the transfer of risk.

3.4 By way of overarching comment on the process adopted to date, VAA is disappointed that there has been considerable delay and a lack of transparency on the CAA's part when revealing its position on the WACC. In turn, there has been delay on HAL's part and sometimes inadequate detail. On the one hand, HAL has suffered no adverse consequences for providing incomplete submissions. On the other hand, this has left airlines in a position where it has been difficult for the industry to determine what the WACC should be based on the limited information provided by HAL and the CAA. VAA is grateful now for the chance to be able to comment on the detail of the CAA's position which had not been entirely clear before. However, there is one key area in the CAA's Initial Proposals on which VAA believes further clarity is required. A determination on the risk sharing mechanisms for H7 is proposed which has a significant impact on the estimate for the WACC, and yet the CAA has not outlined the basis on which it would assess any impact of the risk sharing mechanisms.

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21 CAA's Initial Proposals, Section 2, Chapter 9, page 41, paragraph 9.1.

22 CAA's Initial Proposals, Section 2, Chapter 9, page 87, paragraph 9.264.

23 CAA's Initial Proposals, Section 2, Chapter 9, page 42, paragraph 9.8.

3.5 In relation to the substance of the CAA's Initial Proposals, VAA recognises and welcomes that the CAA used independent experts, Flint Global ("**Flint**"), to carry out analysis on the WACC parameters. However:

3.5.1 The CAA does not appear to have followed the advice of its own independent experts. Despite the fact that Flint suggested a WACC range of 3.1%-4.6% with a 3.8% mid-point (which as VAA outlines below and as supported by CEPA, is already higher than the WACC should be), the CAA's Initial Proposals put forward a mid-point vanilla WACC of 4.65% which is materially higher. There does not appear to be any reason behind this figure put forward by the CAA other than that it is the mid-point between the current WACC for Q6 and HAL's proposal. Plainly this approach lacks proper reasoning and is not backed up by independent advice, even from the CAA's own advisors.

3.5.2 In reaching its conclusion that the WACC should be 3.8%, there appear to have been errors in the methodology applied by Flint as well as relevant evidence and considerations which Flint did not take account of or factor into its analysis. This has resulted in a substantial over-estimate in the cost of capital for HAL.

3.6 Given the complexity and importance of the WACC and in order to assist the CAA in its determination of the issues at hand, VAA and other members of the airline community have worked with IATA to commission an independent expert report by CEPA to provide detailed analysis in relation to the CAA's Initial Proposals on WACC. This paper, titled "*Response to CAA H7 Initial Proposals: Cost of Capital*" dated 17 December 2021 (the "**CEPA Paper**") is appended to this response at Appendix 1 and builds on the previous CEPA paper provided to the CAA titled "*The Way Forward – Technical Appendix*", from June 2021.[24]

3.7 The CEPA Paper comprises a detailed and independent expert review of the CAA's analysis of the WACC parameters and methodology and uses this analysis to put forward a proposed range for the WACC for H7, based on evidence and independent reasoning. It identifies a number of points of error in the CAA's approach in the Initial Proposals (as well as key omissions or flaws in the analysis carried out by Flint), with explanations as to why this is the case by reference to precedents and comparators where appropriate. Finally, based on this analysis, CEPA provides an alternative range for the WACC as has already been previously highlighted to the CAA. This is a range of 1.3% - 2.8% for the vanilla WACC.[25]

3.8 VAA recognises that the range derived from CEPA's analysis does not overlap at all with the CAA's proposed range of 3.6% - 5.6%. However, the CEPA Paper provides robust analysis as to why there is good justification for its

24 CEPA, "*The Way Forward – Technical Appendix*", June 2021, available here.

25 CEPA Paper, Section 1.3, page 9.

proposed range, and concludes that the CAA's range (i) is excessively high due to errors and as outlined below, (ii) can be expected to move closer to CEPA's range following a re-consideration of the issues identified at Section 2 of the CEPA Paper. Particularly, once any further risk mitigations for HAL is factored in.[26]

3.9 VAA agrees with the reasoning and conclusions in the CEPA Paper and its proposed range for the vanilla WACC. This represents a range based on an accurate and balanced view of the evidence and comparators available, as well as an appropriate forward-looking allowance for H7, which is in the best interests of consumers.

3.10 VAA notes the CAA's assessment that CEPA's and HAL's positions are at "*opposing ends of a spectrum*" in relation to WACC.[27] While VAA and its airline colleagues have commissioned CEPA to provide this paper, it would reiterate that CEPA has been instructed to provide "*an independent estimate of the appropriate H7 cost of capital*"[28] according to its expert opinion and analyses. CEPA's, analysis, therefore should not be accorded equivalent force to that of HAL; to do so would be a "*misleading simplification*"[29]. As CEPA states, "*Our analysis is consistent with the history of regulatory precedent in the airports sector as applied by the CAA itself as well as the CMA (and previously the CC). We take account of developments in UK regulatory approaches, updated evidence on risk and interest rates and the influence of the covid pandemic. In contrast, Heathrow's approach is not at the high end of a similarly well evidenced range, it is simply unsupported by appropriate precedent and would provide an unjustified and excessive return.*"[30]

3.11 When taking a long term and overarching view of the H7 period, the WACC should be set within the range CEPA proposes of 1.3%-2.8%. VAA discusses further in section 8 below, how HAL can remain financeable at this range of WAC[redacted] In addition, VAA would reiterate that concerns over HAL's financeability are, in all the circumstances, for HAL's shareholders to resolve and not the UK consumer.

26 See in particular, CEPA Paper, section 1.2, under "*The CAA and CEPA estimates of the cost of capital are very different*".

27 CAA's Initial Proposals, Section 2, Chapter, page 45, paragraph 9.28.

28 CEPA Paper, Section 3, first paragraph.

29 CEPA Paper, page 5 under "*The CEPA approach is grounded in aviation sector precedent and references other regulated sectors as appropriate*"

30 CEPA Paper, page 5, under "*The CEPA approach is grounded in aviation sector precedent and references other regulated sectors as appropriate*"

Errors in the CAA's approach to WACC in the Initial Proposals

3.12 Further to its 2022 Charges Consultation Response, VAA maintains and reiterates that the CAA's Initial Proposals demonstrate a number of errors in its approach to evidence, methodology and judgment in determining the WACC and is contrary to the CAA's duties as outlined above. This is now further demonstrated by the CEPA Paper, which VAA urges the CAA to consider carefully.

3.13 CEPA's thorough analysis demonstrates that the CAA's Initial Proposals substantially overestimate the cost of capital for HAL.

3.14 While CEPA reaches different conclusions to the CAA on all the WACC parameters, the most significant discrepancy between CEPA's and the CAA's estimates relate to the asset beta and cost of debt.[31] Therefore, in the time available, it has focussed its more detailed analysis on the asset beta and cost of debt. CEPA identifies seven errors, and a number of sub-errors, in the H7 Initial Proposals as they relate to cost of capital. Three of those errors concern asset beta, and four concern the cost of debt and gearing.

<u>Asset beta</u>

3.15 The errors identified by CEPA concerning asset beta are as follows:

3.15.1 *Issue 1*: The CAA has overestimated empirical betas used to calculate a pre-pandemic asset beta range:

(A) *Sub-issue 1a*: The CAA and its advisers have incorrectly rounded relevant asset beta estimates,

(B) *Sub-issue 1b*: The CAA's pre-pandemic asset beta range does not overlap with regulatory precedent when accounting for the debt beta used in Initial Proposals; the rejection of a decade of precedent is not explained,

(C) *Sub-issue 1c*: The CAA has failed to consider relevant methodological approaches that support a lower beta,

(D) *Sub-issue 1d*: The CAA has incorrectly rejected evidence from suitable comparators that were used at Q6,

(E) *Sub-issue 1e*: The CAA's choice of Aena as the primary comparator is inconsistent with other evidence; it is at least as flawed as AdP, Fraport or Sydney,

(F) *Sub-issue 1f*: The CAA makes unsubstantiated and contradictory judgements on airport relative risk in order to arrive at its proposed range,

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[31] CEPA Paper, page 10.

(G) *Sub-issue 1g*: The CAA has made errors in process; the CAA have not addressed those errors that bias the asset beta upwards, and

(H) *Sub-issue 1h*: An objective view of relative risk continues to position Heathrow towards the lower end of other airports and airport groups.

3.15.2 *Issue 2*: The CAA's proposed range for the impact of the Covid-19 pandemic on beta is biased upwards:

(A) *Sub-issue 2a*: The CAA has failed 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,

(B) *Sub-issue 2b*: The CAA's primary approach gives significant power to outliers/ high-leverage points in the sample – the cross-check method is preferable and more intuitive,

(C) *Sub-issue 2c*: The CAA disregards evidence that could overcome some statistical issues around estimation – including using shorter estimation windows,

(D) *Sub-issue 2d*: The CAA does not provide any evidence consistent with a 1 in 20-year pandemic frequency or satisfactorily rule out longer frequencies,

(E) *Sub-issue 2e*: The midpoint of Covid impact estimates may not be representative,

(F) *Sub-issue 2f*: The CAA/ Flint's development of an upper bound with a pandemic duration of 30 months is speculative and overemphasises the pandemic evidence's shock effect, and

(G) *Sub-issue 2g*: The CAA approach is inconsistent with evidence on share price recovery.

3.15.3 *Issue 3*: The CAA fails to (yet) include the impact of risk mitigation measures in the asset beta:

(A) *Sub-issue 3a*: The CAA has failed to develop its own view of the impact of risk mitigations – the TRS impact on asset beta should be quantifiable, and

(B) *Sub-issue 3b*: The logic for the asymmetric risk allowance is unclear and as a result is poorly calibrated.

3.16 Those errors had the cumulative effect of inflating the CAA's pre-pandemic and post-pandemic estimates of asset beta, contributing to a difference of 100-160bps on the vanilla WACC (130-210 bps on a pre-tax WACC basis).

3.17 In light of these errors in relation to the asset beta as demonstrated by the CEPA Paper, VAA invites the CAA to correct the position by taking the steps spelled out in rows 1-3 of Table 2.4 of the CEPA report.

<u>Cost of debt and notional gearing</u>

3.18 The errors identified by CEPA concerning the cost of debt and notional gearing are as follows:

3.18.1 *Issue 4*: The decision to change the assumed debt tenor is unsupported by evidence, misapplies precedent and causes harm to consumers:

(A) *Sub-issue 4a*: Comparator airports/ airport groups, used for beta, have materially shorter term debt than the CAA's new assumption on debt tenor, and

(B) *Sub-issue 4b*: The CAA has incorrectly assumed that energy and water precedent should necessarily apply in the aviation sector.

3.18.2 *Issue 5*: The CAA's own cross-check of actual debt costs highlights the generosity of their proposed approach:

(A) *Sub-issue 5a*: The CAA's comparison of notional and Heathrow's actual debt costs are based upon different inflation assumptions,

(B) *Sub-issue 5b*: HAL'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, and

(C) *Sub-issue 5c*: HAL'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 HAL itself.

3.18.3 *Issue 6*: The CAA's approach is inconsistent, adopting a biased estimate of the real cost of debt:

(A) *Sub-issue 6a*: 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),

(B) *Sub-issue 6b*: Failure to use breakeven inflation is inconsistent with applying an index-linked premium for equivalence of debt costs, and

(C) *Sub-issue 6c*: 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.

3.18.4 *Issue 7*: The CAA's approach to estimating notional gearing is unsupported by market evidence and precedent, leading to a higher cost of capital:

(A) *Sub-issue 7a*: The CAA incorrectly ignores the implications on the cost of capital and financeability from a higher assumed notional gearing level,

(B) *Sub-issue 7b*: The notional gearing level is incompatible with the assumed level of risk in the sector and comparator levels of gearing, contrary to the CMA NERL precedent,

(C) *Sub-issue 7c*: The CAA's approach to adjusting gearing based on outturn performance is asymmetric in approach and unsupported by precedent, and

(D) *Sub-issue 7d*: 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.

3.19 Those errors lead to a difference of 100-140bps on the vanilla (and pre-tax) WACC, the majority of it driven by the cost of embedded debt.

3.20 Once again, in light of these errors as demonstrated by the CEPA Paper, VAA invites the CAA to correct the position by taking the steps spelled out in rows 4-7 of Table 2.4 of the CEPA Paper.

VAA's proposal for the WACC

3.21 In light of the evidence and appropriate analysis as contained in the CEPA Paper, VAA urges the CAA to reconsider its position in the Initial Proposals in relation to each WACC parameter, as the current position is inflated and founded on a number of fundamental errors which have generated an ultimately irrational, disproportionate and unfairly skewed WACC.

3.22 In light of the errors in the Initial Proposals, VAA agrees with CEPA that the proper range for each WACC parameter [32] should, be as follows (as compared to the CAA's range):

Parameter	CAA Low	CAA High	CEPA Low	CEPA High
Notional gearing	62%	61%	60%	60%
Risk-free rate	-1.80%	-1.80%	-2.44%	-2.44%
TMR	5.20%	6.50%	5.20%	6.00%
Asset beta – no risk mitigations	0.54	0.74	0.46	0.52

32 CAA's Initial Proposals, Section 2, Chapter 9, page 41, paragraph 9.5.

Parameter	CAA Low	CAA High	CEPA Low	CEPA High
Asset beta – partial risk mitigations[33]	0.52	0.67	-	-
Asset beta – with risk mitigations	-	-	0.38	0.48
Cost of Embedded debt	2.00%	2.00%	-0.31%	0.47%
Cost of New debt	-0.30%	-0.30%	-1.64%	-1.58%
Post-tax cost of equity	6.6%	11.8%	4.0%	6.7%
Pre-tax cost of debt	1.72%	1.73%	-0.48%	0.16%
Vanilla WACC	3.6%	5.7%	1.3%	2.8%
Pre-tax WACC	4.4%	7.1%	1.8%	3.6%

3.23 This ultimately proposes a range for the vanilla WACC at 1.3%-2.8%. VAA refers to section 3 of the CEPA Paper, which provides further explanation as to the estimate for each parameter.

3.24 VAA agrees with the CAA's consideration[34] that the following factors are relevant to determining a point estimate for the WACC: (i) the need to promote investment, both within a single price control and in the longer-term (ii) inconsistency in the choice of WACC parameters and (iii) the balance of risk within the price control package. In relation to the balance of risk, VAA opposes the risk mitigation mechanisms proposed by the CAA but agrees with the CEPA Paper that if such mechanisms are to be introduced, they must be taken into account in relation to the WACC.

3.25 Further, the CAA outlines that cross-checks on the level of WACC, including consideration of HAL's financeability, are a fourth factor inclining towards a point estimate slightly higher than the midpoint of the range. VAA agrees with CEPA's approach that, "*the cost of capital should be developed independently, with any necessary adjustments for financeability considered thereafter*"[35]. At the same time, VAA agrees in principle that financeability is an important factor when assessing the level of the WACC and outlines below at section 8 why a WACC between 1.3% - 2.8% would be financeable.

Risk Mitigation Mechanisms

3.26 In its Initial Proposals, the CAA outlines a number of risk-sharing arrangements which it proposes for H7 in light of the unforeseen uncertainty caused by the Covid-19 pandemic for both airlines and HAL. Given their intrinsic impact on the WACC, VAA discusses below the CAA's proposals on (i) a TRS mechanism

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33 This category reflects the downwards adjustment to the Covid-19 impact to reflect the impact of the TRS which is discussed further below.

34 CAA's Initial Proposals, Section 2, Chapter 9, page 84, paragraph 9.246

35 CEPA Paper, page 51, under "Financeability"

and (ii) allowance for asymmetric risk, in Chapters 1 and 7 of the Initial Proposals respectively.

3.27 In summary, the CAA wants to introduce excessive risk mitigation measures which protect HAL's shareholders in the form of TRS, a £30m per annum asymmetric risk allowance, an inflated asset beta and a 1.07% annual shock factor mechanism. In total, these new mitigation instruments could add over £530m in cost through H7. These risk mitigation mechanisms are not required as the risk of the pandemic is already reflected in the beta for the WACC. All these measures simply are not necessary and are adding cost and complexity into the settlement to protect HAL's shareholders.

3.28 At the same time, they have not been taken into account when calculating the WACC parameters, which have inflated the WACC range that the CAA has proposed. This has the effect of penalising not only the airlines but consumers who will likely have to bear the cost of these overestimates.

3.29 For the avoidance of doubt, VAA strongly agrees with the CAA's rejection of introducing a revenue risk sharing scheme. As recognised by the CAA, there is no need for such a scheme, since the revenue uncertainties fall within the normal range of commercial risk that HAL would face during a normal five-year period.

3.30 With regards to the 'S' factor, VAA considers it already covers 'safety' elements, and certainly security as far as 'COVID Secure' is concerned. The 'S' factor should have already taken into account unforeseen security costs from biological threats as well as terrorist threats. VAA welcomes greater definition by the CAA to avoid any confusion.

<u>TRS</u>

3.31 The CAA's Initial Proposals outline a proposal to introduce a TRS mechanism "*designed for the specific circumstances of the exceptional uncertainty observable at the start of H7*". [36] A TRS mechanism is not necessary (particularly if passenger forecasts are up to date) and the approach to the TRS mechanism (as proposed by CAA in the Initial Proposals) is adverse to the interests of consumers. VAA outlines these reasons below.

3.32 First, the TRS mechanism as proposed by the CAA has not been taken into account in the WACC. In its Initial Proposals, the CAA agrees that "*the TRS mechanism must lead to a transparent and evidence-based reduction in HAL's cost of capital*"[37]. However, having accepted that the proposed TRS should reduce HAL's cost of capital and is therefore a relevant consideration, the CAA has failed to take this into account in its proposed WACC range. While the CAA has described the "*difficulties we face in trying to estimate a precise impact*"[38], it does not appear to have accounted at all for any proposed TRS mechanism in its proposed WACC range, despite the fact that

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36 CAA's Initial Proposals, Section 1, Chapter 1, page 10, paragraph 1.19.

37 CAA's Initial Proposals, Section 1, Chapter 1, page 11, paragraph 1.23.

38 CAA's Initial Proposals, Section 1, Chapter 1, page 8, paragraph 1.23.

such a mechanism significantly reduces HAL's volume risk. The fact that the TRS has not been taken into account in those calculations had led to an inflated WACC and an unnecessary duplication of protection for HAL at the expense of airlines and consumers. It is clear from the Initial Proposals[39] that the CAA recognises this as the position that the airline community has consistently put forward. However, it appears to have failed to take this highly relevant consideration into account when estimating the WACC.

3.33 Secondly, VAA does not agree with the CAA's proposals in relation to HAL's RAB being updated each year to reflect a proportion of the cumulative impact of differences between outturn and the forecast of traffic levels used to calibrate the H7 price control as set out in the Initial Proposals[40]:

3.33.1 The TRS as stated by the CAA is designed to cater for the "*exceptional uncertainty observable at the start of H7*" faced by the aviation industry as a result of the pandemic and in particular to moderate uncertainty over traffic levels during H7.

3.33.2 However, the TRS mechanism that has been proposed by the CAA is currently based on an artificially low and fundamentally flawed passenger forecast that is not supported by an independent forecast from entities such as IATA or Eurocontrol (as discussed below at section 5). If the CAA fails to correct this erroneous assumption then this will result in the TRS mechanism providing significant protection to HAL in the event that these forecasts are beaten (which VAA assumes for the reasons outlined below at section 5, will be the case).

3.33.3 In addition, the TRS mechanism proposed also allows HAL to retain the benefit of passenger upside rather than returning it to consumers through reduced charges in H7. Whilst VAA agrees with the principle that adjusting for over/under-collected revenue via adjustment to RAB avoids material swings in MAY, the failure to adjust the RAB until H8 means that traffic upside originating at the start of H7 (which is expected) is likely to be compounded throughout the period. This means that the potential upside from 2022 onwards would not be returned to consumers until 2027. The principle of the TRS implies that increased traffic performance should be returned to consumers but leaves customers in 2022 subsidising travellers in 2027. This is plainly not in the best interests of consumers; it results in a significant cash advantage to HAL and a corresponding cash disadvantage to consumers over a number of years.

3.33.4 VAA estimates that the value of this over-collection of revenue (which in effect will be funded by consumers) could be well in excess of £700m depending on passenger volumes throughout H7. For

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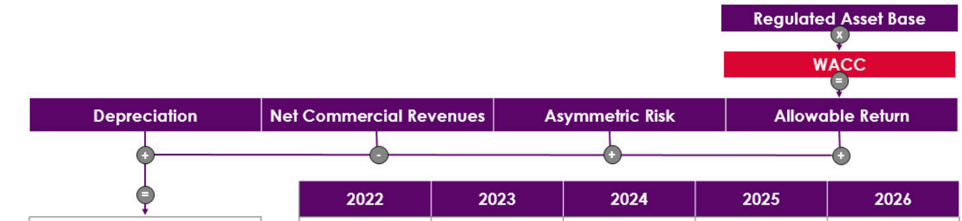
39 CAA's Initial Proposals, Section 1, Chapter 1, page 14, paragraph 1.12.

40 CAA's Initial Proposals, Section 1, Chapter 1, page 11, paragraph 1.37.

example, based on the CAA current forecast, if a 10% increase in 2022 traffic were carried through to a full traffic recovery by 2025 (1 year earlier than current forecast) VAA estimates that HAL would over-collect ~£700m of revenue. This is demonstrated by the table below:



	2022	2023	2024	2025	2026
Net Revenue Requirement	£2.3bn	£2.4bn	£2.3bn	£2.2bn	£2.2bn
÷ Traffic Forecast	45.6m	60.2m	72.0m	79.4m	82.0m
= Max Allowable Yield	**£33.92**	**£34.08**	**£34.35**	**£34.68**	**£35.00**
x Upside Traffic	50.2m	66.2m	79.2m	82.0m	82.0m
= Revenue Collected	£2.5bn	£2.6bn	£2.5bn	£2.3bn	£2.2bn
Upside Cash retained	**£0.2bn**	**£0.2bn**	**£0.2bn**	**£0.1bn**	**£0.1bn**
Cumulative HAL upside	**£0.2bn**	**£0.4bn**	**£0.6bn**	**£0.7bn**	**£0.7bn**

Note: This table is based on CAA's Upper Quartile scenario.

3.33.5 However, if these calculations were based on the Eurocontrol forecasts, then the revenue which was over-collected would be greatly in excess of £700m.

3.33.6 This ~£700m of consumer cash will be held by HAL for up to five years before being returned via adjustment to the RAB. This means only a proportion, equivalent to the WACC %, is returned via reduced allowable return in each year. As a consequence, it could take multiple quinquennia for consumers to receive back the benefit.

3.34 Thirdly, VAA notes that the CAA agrees that "*the TRS mechanism should take account of how opex and commercial revenues vary with traffic levels*"[41]. VAA strongly agrees that any TRS scheme must be based on a proper understanding of efficient opex and commercial revenues across a range of traffic scenarios. However, the TRS mechanism currently proposed by the CAA is based on flawed opex/commercial revenue estimates which is discussed at section 4 above.

3.35 The TRS mechanism proposed therefore results in a significant imbalance (or asymmetry) in risk between HAL and the consumer. There is downside protection to zero for HAL, but limited upside to the consumer due to the overall capacity constraints at LHR and given VAA and the wider airline community expect to return to flying at capacity at this airport by 2023.

41 CAA's Initial Proposals, Section 1, Chapter 1, page 11, paragraph 1.22.

VAA's proposal for TRS

3.36 For the reasons above, VAA strongly disagrees with the approach to the TRS mechanism as contained in the Initial Proposals and urges the CAA to remedy its failure to take the TRS into account when estimating the WACC parameters. This will result in a significant reduction to the WACC as outlined above.

3.37 Finally, VAA add for completeness that: (i) it agrees with the CAA[42] that any TRS mechanism should not have an adverse impact on the capital incentives put in place for HAL, and (ii) any TRS mechanism should take full account of the single till, especially as some mechanisms could lead to higher charges for airlines at times when demand is lower than expected.

3.38 On the condition that there is a significant reduction in WACC which warrants the introduction of TRS, then VAA would be willing to discuss further with the CAA as to the form of a workable and reasonable TRS mechanism that does not result in significant cash advance to HAL if the traffic forecasts are beaten.

Asymmetric risk

3.39 The CAA's proposals also include yet another measure to provide for protection of HAL against risk as a result of the pandemic, in the form of allowance for asymmetric risk.

3.40 As outlined in the CAA's Initial Proposals, the CAA had already established a method from the Q6 review to give an appropriate annual allowance for non-pandemic shocks to volume forecasts by allowing a 'shock factor' adjustment[43.] It proposes to continue to apply an annual 'shock factor' of -1.07% to the H7 traffic forecasts in light of 'non-pandemic shocks'[44].

3.41 In addition, in light of the pandemic, it also now proposes to apply an allowance for pandemic risks calculated according to (i) the estimated traffic loss HAL might encounter in a "pandemic-magnitude" event, (ii) the annual loses of profit HAL would suffer, (iii) how frequently a pandemic-magnitude event might be expected to occur, and (iv) weighing the losses of profit by the probability and adding these to HAL's H7 aeronautical revenue allowance.

3.42 VAA continues to strongly oppose the inclusion of 'shock factors' within traffic forecasts (as has previously been highlighted to the CAA). Overall, the inclusion of the 'shock factor' is irrational and disproportionate because it generally allows for a 'double count' of the risks that HAL would face, which have been accounted for already in the beta for the WACC (and currently under the CAA's proposals is also accounted for by the TRS mechanism:

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42 CAA's Initial Proposals, Section 1, Chapter 1, page 11, paragraph 1.22.

43 CAA's Initial Proposals, Section 1, Chapter 7, page 24, paragraph 7.5.

44 CAA's Initial Proposals, Section 1, Chapter 7, page 28, paragraph 7.24.

3.42.1 Asymmetric risk has been introduced as an additional component of the net revenue requirement, on the basis that shocks to forecasts are disproportionately likely to be negative. This risk is already represented within WACC via elements like the asset beta, which include a calculation of the post-pandemic asset beta. By adding it to the net revenue requirement, the proposals effectively add to HAL's allowable return and provide double protection to HAL.

3.42.2 In addition, this risk was previously accounted for in Q6 via conservative passenger forecasts. This conservatism has not been meaningfully removed from the traffic forecast: therefore additional allowance for this risk will give double protection to HAL. VAA addresses the passenger forecasts further at section 5.

3.42.3 CAA has allowed for the measure of HAL's "systematic" risk, the asset beta, to increase, specifically to allowing for pandemic like shocks, every 30 years or so. This results in a higher WACC and therefore, return to HAL's shareholders. VAA disputes that these shocks are new. Given the evidence base for a 30-year term is based on the regularity of these events happening previously, it would suggest that such risk is already baked into HAL's asset beta. Indeed, step 3 in the CAA's proposed calculation of the frequency of a pandemic-magnitude event, includes a lower bound probability that such event would occur once in every 20 years. As outlined by the CEPA paper when discussing the post-pandemic asset beta behind the WACC, such a high frequency is not consistent with the evidence and leads to placing disproportionate weight on future pandemics.[45]

3.42.4 The fact is that HAL has successfully survived the biggest shock seen in modern times without any additional shareholder support, whilst others in the industry have sought significant equity injections from shareholders. It, therefore, seems unnecessary to consider increased risk that shareholders should be protected from when the necessary resilience have been shown within the previous risk profiling. The impact of these measures is to unjustifiably increase HAL's allowable return and amount to insurance for HAL's shareholders paid for by consumers. The direct impact is extra costs for passengers to protect already secure shareholder returns.

3.43 For the reasons above, VAA would strongly urge the CAA to reconsider its proposal to provide for allowance for asymmetric risk in the H7 control period.

4. OPEX AND COMMERCIAL REVENUES

4.1 The CAA engaged two independent third parties, CTA, to undertake an assessment of HAL's estimated (i) opex and (ii) commercial revenues.[46] As is

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45 CEPA Paper, Section 2.1.1(f), page 27.

46 CTA, Review of H7 Opex and Commercial Revenues Initial Assessment and Forecasts, 13 October 2021 (the "**CTA report**").

explained in the CAA's Initial Proposals, the CAA instructed CTA to, where appropriate, challenge the evidence base underpinning HAL's forecasting assumptions and develop an alternative set of assumptions to derive a view of the efficient level of opex and commercial revenues for HAL over the H7 period.

4.2 Notwithstanding the commissioning of this independent and objective assessment of HAL's estimates for these two key components of the H7 price control calculations, to a significant degree (and particularly in relation to opex) the CAA postponed its detailed consideration of CTA's views and did not properly incorporate their recommendations into its Initial Proposals (and, VAA notes, has continued to defer fully incorporating CTA's advice into its determination of the holding price cap for 2022). This is not an appropriate approach: it is essential that the CAA has due regard to CTA's work when determining the final H7 price cap.

4.3 The CAA's apparent alternative approach is to seek an awkward and arbitrary middle ground between CTA's independent recommendations and HAL's estimates in relation to both opex and commercial revenues:

4.3.1 In relation to opex, a range has been set by the CAA to fall between a ceiling of HAL's estimate (per its updated RBP) (scaled only to reflect the CAA's amended mid-case passenger forecast estimates) and a floor of CTA's mid-case estimate (again scaled according to the CAA's mid-case passenger forecast). The range artificially falls 25% above this floor, and 25% below this ceiling.

4.3.2 In relation to commercial revenues, a similar range has been proposed, falling between a ceiling of CTA's commercial revenue projections, and a floor of HAL's commercial revenue projections (with both again scaled to the CAA's mid-case passenger forecasts).

4.4 This flawed approach not only fails to give appropriate weight to CTA's considered conclusions, but also fails properly to take into account the critical factors summarised below.

4.5 It is imperative that the CAA's determination of the final H7 price cap addresses the material errors which are manifested in HAL's forecasting approach, rather than skimming over them and adopting the artificial ranges described above. It is for the CAA under the Civil Aviation Act 2012 to determine the final H7 price cap. That means that it must exercise its own judgment on the calculation of an allowance for opex and commercial revenues, rather than adopting the views of others, or splitting the difference between competing views. The CAA has not given proper reasons for splitting the difference between the amount of the allowances calculated by HAL and CTA, and that amounts to a failure properly to exercise its statutory functions and/or irrationality. In any event equal weight cannot be given to HAL's forecasts as to those of the CAA's own independent advisers, in view of the fact that HAL (due to the risk-reward mechanism within which the opex allowance is designed) is incentivised to produce a substantially higher opex forecast. It would be irrational to do anything other than give precedence to the independent analysis the CAA commissioned to test and challenge HAL's assumptions.

4.6 With these overarching comments in mind, VAA has reviewed CTA's assessment of HAL (and its advisers') approach to calculating (i) the opex forecasts and (ii) the commercial revenue forecasts, including the supporting assumptions by reference to regulatory precedent, passenger behaviour, and the market and economic factors in play. Broadly speaking, VAA is in agreement with CTA's approach. Further to VAA's 2022 Charges Consultation Response, together with the airline community, it commissioned its own independent expert, PA, to prepare a report which applied additional objective scrutiny to HAL's assumptions, and tested the approach taken by CTA in its report. This report, titled "*Review of Cepa / Taylor Airey review of H7 Opex and Commercial Revenues*" dated 15 December 2021 ("**PA Report**") is appended to this response at Appendix 2. PA is in strong agreement with CTA on almost all fronts (with the exception of some minor points, on which it considers that further clarification from the CAA, its advisers and most notably, HAL, would be of assistance). VAA has explained its core criticisms of HAL's approach on this basis below.

4.7 Disappointingly, VAA also notes that the CAA in its announcement of 16 December has indicated that it will maintain its approach of giving equal weight to HAL and CTA's views in relation to the holding price cap for 2022. Although VAA does not comment in detail on the CAA's announcement in view of the timing (the CAA's letter having been received on 16 December), in light of the further independent advice received in broad support of CTA's view, it strongly urges the CAA to reconsider its approach when determining the final H7 price cap.

HAL's over-estimation of opex costs

4.8 CTA's overarching conclusion is that HAL has vastly overestimated its opex, with the consequent impact on its allowance further distorting the calculation of the final H7 price cap. As outlined in the CAA's Initial Proposals, "*Over the five years of the H7 period, CEPA/Taylor Airey project that HAL's Opex would be £801m lower than HAL's forecast, a difference of around 13%*"[47].

4.9 Despite the significance of this overestimation – HAL's opex forecast of £1,033m for 2022 in the RBP update exceeds the top of the range proposed by the CAA in its Initial Proposals – the CAA has not addressed this head-on in its Initial Proposals and, as described above, has instead sought to adopt a suggested range falling between HAL's forecast and CTA's estimate. Aside from this approach not engaging with CTA's recommendations at all, the range suggested by the CAA is not logical. For example and as PA also

47 CAA's Initial Proposals, Section 1, Chapter 4, page 49, paragraph 4.29.

explains in its report, if a floor is to be used, it is not clear what the basis for applying a 25% premium to the CTA estimate to create that floor is.[48] Similarly, the fact that the ceiling has been adjusted to fall 25% below HAL's estimated opex should be evidence enough that HAL's estimate is too high.

4.10 VAA further notes that the range proposed by the CAA and the methodology behind that range unhelpfully deepens the apparent chasm in approach between HAL, the CAA and the CAA's own independent advisers, rather than sensibly addressing the points raised by all parties.

4.11 Turning to the underlying approach taken by HAL to its opex forecast, VAA agrees with CTA that further analysis of HAL's assumptions reveal significant flaws. Those key issues are set out below.

HAL's calculation of input price inflation is inaccurate and illogical

4.11.1 It is not clear why HAL has sought to use RPI to calculate cost inflation, resulting in unnecessary adjustments for real price effects. VAA agrees with CTA's view (with which PA's view is also aligned) that the use of RPI as a measure of general price inflation in the economy is not appropriate (and, VAA notes, such use of RPI is not endorsed by the Office for National Statistics).[49] Since costs generally increase in accordance with CPI, and as CPI is widely recognised to be a more statistically credible measure of general price inflation,[50] CPI should be used instead. VAA notes, on this point, that the CAA has adopted this position in relation to the holding price cap for 2022. VAA endorses this approach and considers the same measure should be used for calculating the final H7 price cap.

4.11.2 CTA further concluded that HAL had failed to consider how some categories, such as people costs, may see price changes lower than the general price inflation, nor does HAL's forecast reflect the extent to which HAL faces input price pressures different from that implied by economy-wide forecasts. In response to these severe shortcomings in HAL's analysis, the CTA framework used a bespoke price series for People Costs, Utilities and Facilities and maintenance, to ensure that the input price was accurately captured.[51] VAA strongly supports CTA's revised methodology and assumptions, which are notably more realistic and balanced, and considers that these should be adopted by the CAA.

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48 PA Report, page 5.

49 ONS (2018) "Shortcomings of the Retail Prices Index as a measure of inflation". Accessible at: https://www.ons.gov.uk/economy/inflationandpriceindices/articles/shortcomingsoftheretailpricesindexasameasureofinflation/2018-03-08.

50 CTA report, page 49.

51 CTA report, page 117.

HAL overestimated the efficiency of 2019 as a baseline year

4.11.3 VAA disagrees with HAL's assumption that it operated at peak efficiency in 2019, which has been observed by CTA and echoed by PA. CTA considered the average productivity achieved in the last three years of the Q6/ Q+1 period to smooth variations in individual years (in particular opex increases in 2019) and concluded that HAL was not at the "efficiency frontier" in 2019. It is acknowledged based on the PA report that improvements were made during Q6; however, HAL's conclusion that these improvements mean that no further amelioration in efficiency can be expected in H7 is not understood. VAA in particular highlights the fact that Heathrow remains the highest cost hub airport in Europe (by a significant margin), and the opex cost per passenger remains relatively high by comparison with other large airports, as is noted in the PA report.[52]

4.11.4 CTA has adjusted HAL's 2019 opex upwards by circa £6 million, to account for removal of expansion costs and additional people cost due to the implementation of the London Living Wage. PA did not agree with this baseline adjustment, due to the fact that opex per passenger increased in 2019 by circa. 5%, and HAL has not provided clear reasons for the increase.[53]

HAL underestimated longevity of pandemic-related efficiency measures

4.11.5 HAL's assessment also failed to take into account the long-term benefits of cost control actions and other efficiency measures. While the CTA report agreed that some of the opex reductions in 2020 would be temporary, it considered that some of HAL’s pandemic-related efficiency measures could be carried forward to H7. For example, some benefits from structural organisational changes and revised contracts would be expected to be retained during H7 regardless of future passenger volume growth. Based on the PA report VAA agrees with CTA that a Covid-19 staff cost reset reduction of £25 million per annum is appropriate and reasonable.[54]

No justification for linking efficiency to capital plan

4.11.6 HAL's conclusion that it reached peak efficiency in 2019 has led it to rely upon further erroneous assumptions. In particular, it has included a very low efficiency factor of 0.1% and applied this to all costs categories except Rates and Electricity Distribution Contract. It has further proposed a 1.1% capex benefit contingent on approval of a £4.2 billion capital plan.

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52 PA Report, page 4.
53 PA Report, page 9.
54 PA Report, page 11.

4.11.7 CTA has rightly noted reservations with this approach, deriving from HAL's assertions on efficiency, and considers that the calculation of the potential 'capital substitution' effect is therefore not properly supported, either by the study commissioned from First Economics or the precedent quoted.[55]

4.11.8 VAA supports CTA's analysis and agrees that there is no justification for linking efficiency to the size of the capital plan. PA suggested the application of a lower efficiency frontier than CTA (0.5% as opposed to 1%); however, if there is sufficient evidence to support the application of a 1% efficiency frontier then PA recommends this is adopted, particularly as this would incentivise HAL to maximise efficiency improvements going into the H7 period.[56] VAA supports this position.

No evidence for elasticity assumptions in respect of staff costs

4.11.9 VAA echoes the points made in the PA report, that HAL had, concerningly, adopted a relatively simplistic and generalised approach to applying elasticity assumptions, by applying elasticity of 0.4x passenger volume to all cost categories, notwithstanding that a number of cost categories are either only loosely linked to passenger volumes or not linked at all.[57] VAA agrees with CTA that specific elasticities should be developed and applied to cost categories with regard to whether those categories are linked to passenger volume.

4.11.10 PA has reviewed CTA's more specific approach and its conclusions are aligned with CTA's.[58] VAA confirms its support for this approach, although it notes that elasticities are pegged to passenger forecasting on which it has commented further at section 5.

4.11.11 VAA notes that HAL's approach to elasticity assumptions is particularly inappropriate in the context of staff costs, which are not significantly affected by large fluctuations in traffic.

HAL distorted cost overlays

4.11.12 CTA undertook a number of modifications to the modelling cost overlays because HAL either did not provide sufficient evidence to support the level of additional costs, or provide assurance that costs included in the overlays did not overlap with business as usual activities accounted for elsewhere in HAL's forecasts. For example, HAL failed to take into account the significant opex benefits arising from capital investment (and without any need for that capital

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55 CTA report, page 18.
56 PA Report, page 15.
57 PA Report, page 10.
58 PA Report, page 10.

investment to be as material as HAL has suggested, for example, in the context of security transformation). HAL's selective approach here is well illustrated by the CTA report: "*As HAL considers the downside risk of higher opex due to lower capital spend on asset replacement, it seems inconsistent that it does not consider the upside opportunity for opex reduction arising from a considerable investment in new and more resilient assets.*"[59]

4.11.13 PA has reviewed CTA's approach and is broadly in agreement with CTA's proposals (e.g. in relation to the cost of change programme, terminal reopening, etc.).[60] One area where VAA reserves its position on PA's recommendation is in relation to the enhanced service cost overlay, as to which PA did not agree that this was justified.[61] VAA's position is reserved pending further justification for inclusion of the consequent opex increase for this.

4.12 For these reasons, it is clear that HAL's opex forecast does not present an accurate and balanced picture of opex in the H7 period. VAA re-emphasises its comments above, in that the creation of an artificial range between HAL's forecast and CTA's estimates is highly inappropriate and risks the setting of an over-inflated opex allowance. Greater weight should be given to CTA's estimate.

4.13 VAA further notes that HAL appears to have doubled down on its position in its initial response to the CAA Initial Proposals consultation. In its response, HAL disputes the credibility of the CTA forecast for opex, and yet fails to either engage in any detail or, in some cases, respond to CTA's key conclusions. For example, HAL does not engage with any of CTA's considered assessment of the value of CPI vs RPI as a price indicator, nor does it defend the unjustified link between efficiency and the size of the capital plan. Where HAL has attempted to rebut CTA's conclusions, it fails to explain its grounds for doing so or suggest alternatives. For example, HAL claims that the estimate for security staff costs is based on incorrect assumptions, and that these assumptions do not reflect the operational reality and cost impacts of the current operation, without explaining what the operational reality and costs impacts are.[62]

4.14 In response to the 2022 Charges Consultation, HAL makes the vague and unparticularised assertion that the CAA's approach to using HAL's forecast is "*poor regulatory practice*" and sets "*precedent for the wrong regulatory initiatives*".[63] In circumstances where HAL does not explain what it means by poor regulatory practice, or indeed what it considers would be appropriate regulatory practice, VAA is not in a position to respond fully. VAA reserves its

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[59] CTA report, page 19.
[60] PA Report, page 10.
[61] PA Report, page 13.
[62] HAL response to the 2022 Charges Consultation, 17 November 2021, page 14.
[63] HAL response to the 2022 Charges Consultation, 17 November 2021, page 14.

right to make further submissions on this point in the event that the CAA is minded to amend its approach in response to these unsubstantiated and unclear allegations.

Miscalculation of Commercial Revenues

4.15 As explained in VAA's earlier response to the 2022 Charges Consultation, the CAA additionally failed to take fully into account the detailed analysis provided by CTA in its report on commercial revenues. Crucially, the CTA forecast for HAL's commercial revenues is 30% higher than HAL's, a difference of £1,106 million.[64] The crux of this difference lies in CTA's informed assessment that HAL can increase average revenues per passenger through H7, based on HAL's historical performance of increasing average revenues above passenger growth rates.

4.16 By way of contrast, HAL's forecasts incorporate untenable assumptions and subjective views that serve the clear purpose of diminishing forecasts and reducing the revenue available to HAL. In the circumstances, it is irrational for the CAA to give as much credibility to HAL's suppressed figures as it has done to its own independent analysis. The significant differences in approach between HAL and CTA are outlined below.

HAL miscalculated elasticity effects

4.16.1 CTA assessed HAL's updated RBP assumptions for elasticities and concluded that adjustments are needed to certain categories. PA's review of HAL's elasticity assumptions concluded that CTA's elasticity profile was reasonable with the exception of three areas on which VAA would require further clarification and justification in order to comment.[65] These are:

(A) CTA's proposal to apply a 0.97 elasticity to Bureaux Income (noting that HAL does not propose to apply an elasticity at all) would benefit from further analysis, given the significant impact this could have.

(B) HAL's proposed application of a -2.63 elasticity to airside tax-free sales is significant and VAA agrees with CTA that the justification for this is unclear. This being said, VAA considers that further analysis is required before VAA can confirm its support for CTA's proposed revised elasticity of -1.25.

(C) CTA's proposal of a "2% management challenge" based on HAL's historical performance in terms of increasing revenues above passenger growth. While VAA understands CTA's rationale for this challenge, and welcome its inclusion, it encourages further exploration of this subject to be able to

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64 CAA's Initial Proposals, Section 1, page 65, paragraph 5.37.

65 PA Report, pages 21-22.

satisfy the CAA that everyone agrees it is an achievable and realistic target.

4.16.2 In addition, HAL provided no evidence to support its elasticity for property revenue and significantly overestimated its elasticity for other service revenue. PA's conclusions aligned with that of CTA, namely that 0.25 elasticity was more appropriate for property revenue (as opposed to 0.52 proposed by HAL), and 0.8 was more appropriate for non-aeronautical services (as opposed to 1 proposed by HAL).

HAL's retail forecasts are severely distorted

4.16.3 CTA challenges several of the assumptions underpinning the narrative to HAL's retail forecasts. HAL had applied three overlays to the forecasts to reflect the purported impact of retail tax-changes, the impact of Covid-19 on retail generally, and a decline in bureaux income relative to 2019. However, there are serious flaws with HAL's calculation of these overlays.

4.16.4 HAL's approach to estimating the impact of tax changes creates a substantial risk of double-counting and is unsupported by evidence. Regarding the size of the overlay, CTA found that "*Key assumptions that drive the size of the adjustment have not been explained or supported by any evidence*." CTA's suggested alternative results in a weighted average impact on retail concession revenues of -15.8% for 2022, increasing to -18.3% in 2026. [66] VAA agrees with this conclusion, although PA has noted that additional qualification would be beneficial on the detail behind an increase in duty free income as a result of the extension of excise duty free relief.[67]

4.16.5 The passenger profile modelled by HAL has, on its approach, resulted in an estimated £75 million loss against the baseline year, carried across into each year of the H7 period to 2026, despite its assumption that the reduction of retail revenue expected in 2022 and 2023 will return to normal levels by 2023. As is observed by PA, the basis for projecting this £75 million loss into years beyond 2023 against expectations of revenue recovery is not clear and VAA reserves its position pending further substantiation of this estimate.[68]

4.16.6 Finally, in relation to the proposed overlay to Bureaux revenue, CTA notes that "*no explanation has been provided for the size of the overlay*", and therefore CTA suggests an alternative set of assumptions to test its efficiency, the outcome of which suggests

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66 CTA report, page 31

67 PA Report, page 23.

68 PA Report, page 24.

"*that HAL's estimate may be overstated*".[69] VAA agrees with CTA's position.

Surface access revenue forecast unsupported by evidence

4.16.7 CTA also challenges HAL's calculation of its surface access revenues, noting that HAL's adjustments "*are not adequately explained, and the changes made between the original RBP and the most recent update (RBP Update 1) are in some cases counterintuitive*."[70] For example, in relation to the overlay to parking and rental income, CTA states that it "*can not determine the efficiency of HAL's proposed adjustment as there are key gaps in the logic and evidence underpinning the overlay assumptions*".[71]

4.16.8 Surface access revenue and the approach thereto should differ slightly depending on the charge concerned. For example, in relation to car parking and rental, PA has observed the resilience of this as compared with passenger volumes, and the change in attitude towards travelling to the airport as a result of the pandemic (i.e. passengers are overwhelmingly moving away from public transport to reach the airport), and suggests applying a revised elasticity of 0.9 (as opposed to 1 proposed by HAL).[72]

4.16.9 While acknowledging and understanding CTA's recommendation of alternative mode share assumptions, PA on this occasion supported HAL's proposed modal splits, based on post pandemic behaviour.[73] VAA agrees with this position.

4.16.10 In relation to rail, VAA supports CTA's challenge of HAL's assumption, which is unsupported by any evidence, that reduced ticket prices on the Heathrow Express service will maximise revenue. As recommended by PA, VAA agrees with the proposed elasticity of 1 between Heathrow Express and traffic volumes, but disagrees with the magnitude of the overlay adjustments.[74]

4.16.11 Finally, in relation to drop off charges, VAA notes the calculations made by PA and agrees that HAL has significantly underestimated the revenue which will be generated by this (by circa. 25%).[75]

HAL significantly underestimate other commercial and cargo revenues

4.16.12 HAL's forecast of its other commercial and cargo revenues is artificially low. In respect of property and non-aeronautical services, CTA scrutinised HAL's approach for calculating revenue and saw the

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69 CTA report, page 32
70 CTA report, page 34
71 CTA report, page 161.
72 PA Report, page 25.
73 PA Report, page 25.
74 PA Report, page 26.
75 PA Report, page 26.

need to make a series of adjustments to the elasticity for each (as noted above, VAA and PA agree with CTA that elasticities of 0.25 and 0.8 respectively are more appropriate).[76]

4.16.13 Perhaps most concerning is HAL's significant underestimate of its cargo revenues. Despite HAL experiencing a 650% increase in its cargo revenues between 2019 and 2020 in response to higher demand, CTA has observed that "*HAL's forecasts do not reflect the actual increase in revenues experienced in 2020 and anticipated in 2021*".[77]

4.16.14 The result is that CTA's initial forecasts for commercial and cargo revenues are a cumulative difference of £983m or 31% gap to HAL's RBP Update 1 (excluding the minimal capex overlay).[78] VAA agrees with the use of a lower elasticity of cargo revenues with respect to passenger numbers compared to HAL's approach, which leads to better reflection of the actual trends observed for cargo revenues in 2020 and 2021.

4.17 As in relation to opex, HAL's response to the 2022 Charges Consultation in respect of commercial revenues is limited in nature and ignores a significant number of the conclusions of the CAA's independent experts. For example, although HAL attempts to dispute CTA's analysis of the impact of VAT changes, it is silent on CTA's assessment of the decline of Bureaux income and the need to separately forecast retail revenue by market, which makes for a more transparent assessment of the impact of changes in the passenger mix.

CTA's independent analysis should be used to set a MAY for the H7 regulatory period

4.18 The calculation used by the CAA in the Initial Proposals to identify the appropriate 'range' for the MAY for the H7 period provided equal weighting to both HAL's RBP and the CAA's own independent analysis of opex and commercial revenues by CTA. For the reasons given above and in our earlier consultation response, this calculation is fundamentally flawed, is not sufficiently independent and therefore does not survive scrutiny.

4.19 The CAA has provided no justification for giving equal weighting to (i) HAL's RBP and updated RBP on the one hand, and (ii) its own independent analysis on the other. This is not least because the independent third party experts were commissioned by the CAA itself to test and challenge HAL's RBP and updated RBP from an objective point of view). In circumstances where analysis from independent advisers is available, that analysis should be used to determine the final H7 price cap.

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[76] PA Report, page 27.

[77] CTA report, page 35.

[78] CTA report, page 38.

4.20 VAA's broad assessment of the credibility and value of the CTA forecasts in comparison to HAL's RBP and updated RBP is supported by several key airlines, including British Airways. VAA requests that the CAA reconsiders its methodology and rationale for the development of the final H7 price cap and to ground the determination of the final H7 price cap in evidence and fact.

5. PASSENGER FORECASTING

5.1 This section responds to Section 1, Chapter 2 of the CAA's Initial Proposals. Accurate passenger forecasting is pivotal in achieving the ultimate proper pricing calculation and the effects that has on consumers. The CAA recognised this in its Initial Proposals, stating that, *"Developing appropriate forecasts of passenger numbers is a key step in allowing us to properly consider our primary statutory duty to further the interests of consumers when establishing allowances for operating costs, capex and commercial revenues that are efficient and deliver value for money."*[79]

5.2 VAA agrees. It is clearly in consumers' and airlines' primary interests to ensure that the passenger forecast is as accurate as it can possibly be, given its fundamental impact on the pricing calculation. As the Initial Proposals acknowledge, "*The underlying forecasts of passenger numbers is vital to setting an appropriate price control*".[80]

5.3 Unfortunately, however, these good intentions were not reflected in the detail of Chapter 2 of the Initial Proposals. Instead of relying upon accurate and up-to-date independent forecasts, the Initial Proposals took as their basis an outdated suite of HAL forecasts which were unduly pessimistic about travel restrictions, criticised by the CAA's own consultants and inconsistent with industry forecasting both then and now. The CAA claims that its resulting forecasts (including its "Mid" Case) are broadly in line with industry views[81], which as is explained below, is simply not correct. The use of these CAA-adjusted HAL forecasts would increase unjustifiably the airport charge across H7 (most acutely in 2022) and result in a disproportionate, unfair and substantial increase to charges being passed on to consumers. This is also contrary to the CAA's own consultation materials; VAA does not agree that the Initial Proposals take into account all relevant matters and reflect the "*best information currently available on how we should further the interests of consumers and discharge [the CAA's] other statutory duties*."[82]

5.4 VAA addresses first the approach of the Initial Proposals by reference to the HAL model, and then considers the independent and airline forecasts and why these should be adopted over and above HAL's underestimated forecasts in the calculation of the H7 price cap.

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79 CAA's Initial Proposals, Summary, page 17, paragraph 2.3.
80 CAA's Initial Proposals, Summary, page 17, paragraph 2.2.
81 CAA's Initial Proposals, Section 1, Chapter 2, page 28 paragraph 2.47.
82 CAA's Initial Proposals, Summary, page 24, paragraph 82.

5.5 For further context, VAA also provides information on its own projections and planning. Where noted, this information is provided commercially in confidence and should be kept strictly confidential within the CAA. It should in no circumstances be shared outside the CAA or published, without VAA's prior written consent. This is also true for sections marked as proprietary data.

HAL's forecast and the approach taken by the CAA's Initial Proposals

5.6 VAA notes that the CAA's Initial Proposals do not employ the CAA's own independently developed forecasting tool in order to estimate passenger volumes over the H7 period, and instead relies upon the method used by HAL to prepare passenger projections with some slight adjustments. VAA expresses general concern at this approach, given the possibility that inappropriate weight could be given to HAL's estimates in place of a properly considered and objective assessment of likely passenger volumes. VAA has not seen the detail of HAL's model which has been relied upon to produce these forecasts. It requests sight of the model and pending sight of it, it reserves its position on the detail of the methodology and, in particular, the extent to which the CAA's adjusted assumptions set out in its Initial Proposals are appropriate and sufficient.

5.7 VAA is further mindful that lower forecast passenger volumes are advantageous to HAL, given the financial incentive for HAL where it is able to over-deliver against those forecasts. Unsurprisingly, its methodology has provided an estimate which falls significantly below what VAA anticipates (see VAA's forecasts below). In these circumstances, VAA is sceptical as to the approach taken to projecting these passenger numbers and, generally speaking, considers them to be unrealistically low.

5.8 Against those summary comments, VAA has considered the analysis of the CAA's own independent advisor, Skylark, which highlights a number of shortcomings in the previous HAL forecast methodology. Subject to further review of the methodology itself (if this is made available), as an absolute minimum VAA considers it would be proportionate to adopt Skylark's recommendations in the CAA's final proposals. In particular:

5.8.1 HAL's assumption that, while slot allocation rules are suspended, unused slots will be retained by airlines and therefore go un-utilised is "*overly pessimistic*"[83], particularly in view of the fact that slots at LHR are, on a longer term view, highly valued and frequently higher yielding than slots at other airports. Instead, it is more reasonable to assume that airlines will either reallocate capacity to new profitable routes or partner airlines, or sell slots to new entrants to the LHR market.[84] Accordingly, additional scenarios taking account of this

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83 CAA's Initial Proposals, H7 Forecast Review (Passenger Forecasting), Final Report, Skylark, page 5 and page 22.

84 CAA's Initial Proposals, H7 Forecast Review (Passenger Forecasting), Final Report, Skylark, page 5 and page 22.

longer term view should be modelled. Guidance should be taken from the Summer 2022 on sale capacity (see paragraph 5.38) for LHR.

5.8.2 A more up to date GDP forecast should be used.

5.8.3 There is little evidence to support a permanent shift in business behaviour based on the supporting evidence provided by HAL, and the CAA should consider forecasts underpinned by GDP growth to be a more appropriate mechanism to capture any potential changes in business activity, especially since the consultation timeframe stretches from 2022 all the way to 2026.

5.8.4 The use of the overlay Decay Function model potentially leads to an underestimate of traffic recovery, which the CAA should challenge further.

5.8.5 Further consideration should be given as to whether weighting applied to lower-performing scenarios is appropriate, particularly if a risk sharing arrangement is ultimately agreed upon and implemented (in which case the retention of the mid-case only is recommended).

5.9 VAA cannot see any legitimate or rational basis for discounting these recommendations and note that their incorporation into the methodology will result in a more accurate forecast.

5.10 Finally, VAA is concerned that the estimates relied upon for the purposes of the Initial Proposals are (by the CAA's own admission) severely outdated and produced amidst short term uncertainty arising from a global pandemic, when prohibitive travel restrictions remained in place. They are not a reliable basis on which to calculate the H7 price cap. The twists and turns of the pandemic, and consequent abrupt shifts in policy, only underlines further the importance of an accurate and up-to-date longer-term forecast which can be relied upon for H7 calculations. Put simply, a forecast set on a short-term outlook without regard to key developments must effectively be discounted as irrelevant and it would not be rational or lawful to rely on such a forecast.

5.11 VAA notes from the HAL Investor Report[85] that HAL's consultation response will be accompanied by a further update to its passenger forecast. In the circumstance VAA reserves its right to make a further submission once it has sight of that estimate. It will be essential from the perspective of procedural fairness that airlines have an adequate opportunity to comment on that estimate. VAA anticipates, for example, that it will wish to comment on whether the methodology adopted is a rational one and produces an accurate estimate which is aligned with expectations of H7 passenger volumes. At this stage it is wholly unclear whether the same methodology will be relied upon, or whether alternate assumptions will be adopted following

[85] HAL Investor Report, December 2021, page 8.

the CAA's comments in its Initial Proposals, and recommendations it has received from Skylark.

Independent forecasts

(a) Short-term travel restrictions

5.12 Since the publishing of the underlying passenger forecast, the market dynamics have changed, due to the easing of travel restrictions into key markets for LHR, namely Europe, Canada and the United States. Structural reopening of these important markets needs to be considered, Furthermore, it needs to be noted that the temporary re-introductions of travel restrictions due to Omicron have only a very limited impact regarding the overall LHR network structure.

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5.13 [redacted]

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5.14 [redacted]

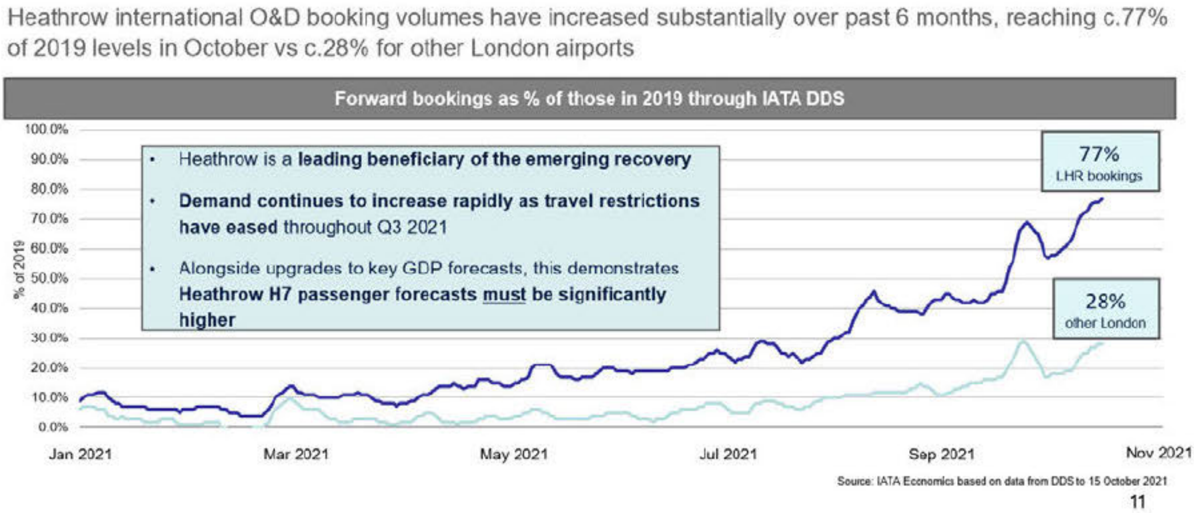
End of Confidential Section

5.15 Given the length of the H7 consultation period from 2022 to 2026 these small-scale and brief events hardly bear weight on the overall picture and should not be afforded undue significance.

(b) Increased bookings

5.16 There are, in fact, increasing numbers of bookings for all LHR flying. IATA DDS, an industry tool that collates booking information from the majority of airlines, reflects the confidence apparent in booking dynamics and volumes. The IATA DDS forward bookings have reached 77% of 2019 levels (refer to graph 2) during the course of autumn 2021, clearly indicating much higher demand levels than the 56.1% of traffic levels that the CAA envisions.

<u>Graph 2: Forward bookings for 2021 against 2019</u>



5.17 This strong consumer confidence is also reflected in the airline capacity planning for the Winter 2021 and Summer 2022 seasons.

Start of Confidential Section

5.18 [redacted]

5.19 [redacted]

End of Confidential Section

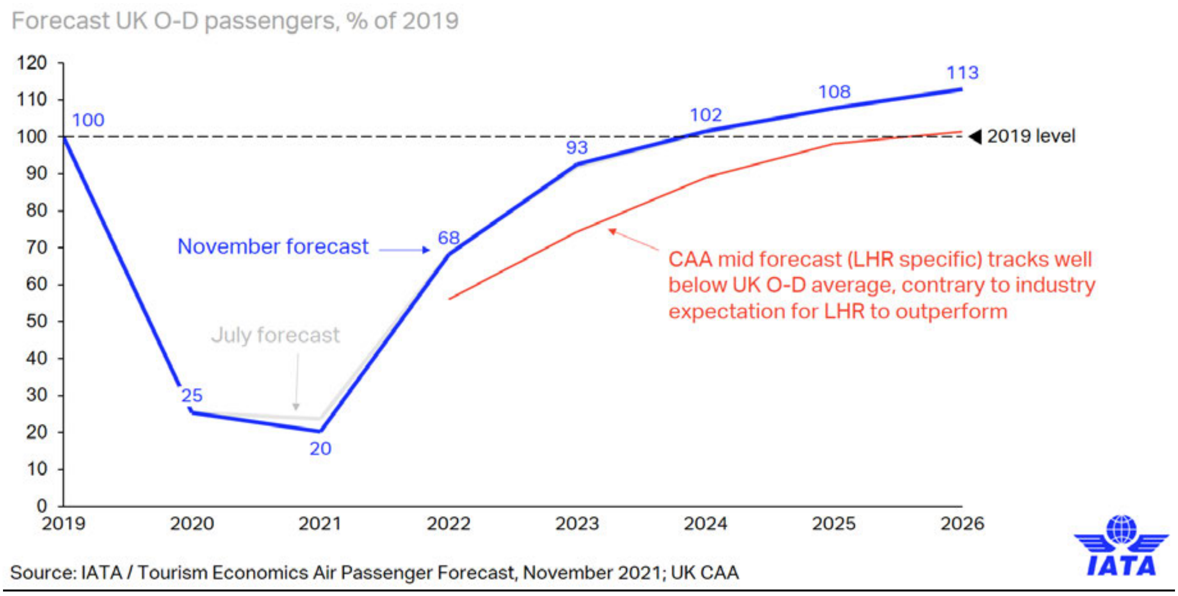
Longer term industry forecasts

5.20 Longer-term industry forecasts for UK traffic indeed foresee an earlier recovery trajectory than envisioned by the CAA. Eurocontrol forecasts a recovery to 2019 levels in 2024, with a movement recovery of 89% in 2022, as shown in Graph 3 below. Recovery for 2023 is at 96% and 2024 will see a return of 100% of all movements.

<u>Graph 3 – Recovery 2019 – 2026 (source: Eurocontrol October 21 forecast)</u>

5.21 This is in line with the IATA UK demand forecast, which also predicts a return to full demand levels by 2024, with 2023 at 93% and 2024 at 102%.

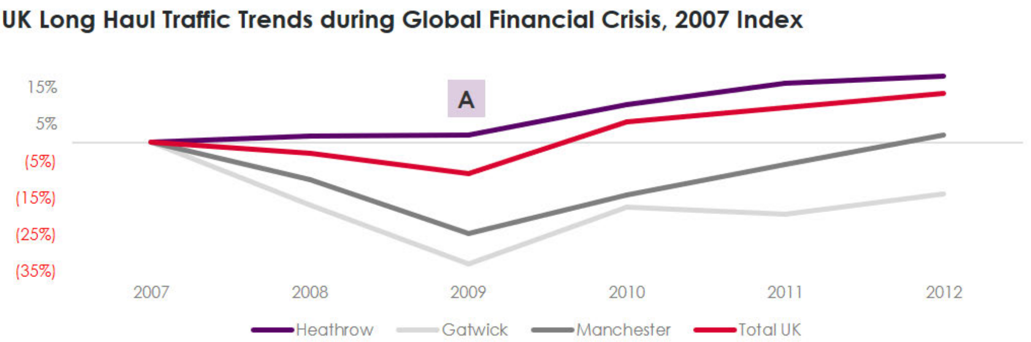
<u>Graph 4 - UK O&D passenger demand vs. 2019 (source: IATA)</u>



(c) Faster recovery of LHR

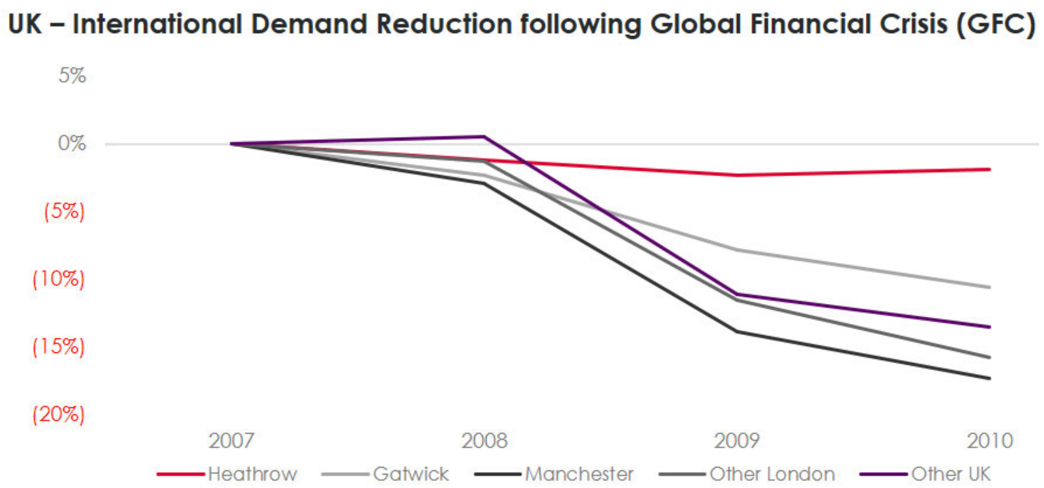
5.22 By way of comparison, the recovery structure of UK long-haul capacities in the aftermath of the Global Financial Crisis (GFC) showed that long-haul passengers at LHR rebounded materially quicker than at other airports and well above the Total UK average, as demonstrated in Graph 5 below.

Graph 5: long-haul passenger numbers at key UK airports indexed against 2007 (source: CAA passenger statistics, own graph)



5.23 A similar trend can be observed when looking at overall international demand, as demonstrated by Graph 6 below. LHR clearly outperforms the market, indicating a resilience to short and midterm demand fluctuations.

Graph 6 – International Demand reductions vs. base year 2007 (source: CAA passenger statistics)



5.24 This resilience is in line with other major European hubs. Airports with hub carriers, such as British Airways, Lufthansa, KLM or Air France (and similar) profit during periods of reduced demand from the connectivity of their hub services. Through connectivity it is possible to maintain services that otherwise would be not profitable enough to fly. Airports with a high market share of their hub-carrier (such as LHR) therefore show a slightly higher recovery rate over other airports.

5.25 For example, LHR currently has 91% of its 2019 capacity on sale vs. LGW which only has 70% of the 2019 capacity on sale.

Table 1: Recovery rates for Europe's Top 25 airports (in 2019 capacity numbers for Jan to Nov)

Size 2019	Airport	Large Hub	2022	2019	% of 2019
1	LHR	Hub	42,700,362	46,895,606	91%
2	FRA	Hub	37,606,322	42,263,023	89%
3	CDG	Hub	35,625,804	41,138,579	87%
4	IST	Hub	38,291,117	38,797,433	99%
5	AMS	Hub	35,876,164	37,840,882	95%
6	MAD	Hub	28,189,716	32,873,088	86%
7	MUC	Hub	24,176,499	29,810,389	81%
8	SVO	Hub	22,382,842	29,092,459	77%
9	BCN		25,476,807	28,823,347	88%
10	FCO		18,811,640	25,579,625	74%
11	LGW		17,196,404	24,621,564	70%
12	SAW		19,289,608	19,224,128	100%
13	VIE		17,289,069	18,863,773	92%
14	DUB	Hub	16,562,371	18,082,764	92%
15	CPH		15,268,578	18,008,031	85%
16	ORY		18,567,633	17,838,064	104%
17	ZRH		15,032,706	17,757,061	85%
18	OSL		16,382,795	17,646,268	93%
19	LIS	Hub	16,377,102	17,272,185	95%

5.26 A further driver for LHR resilience is the scarcity of slots, leading to airlines protecting their respective valuable slot portfolio at LHR. This can, for example, be seen in the fact that BA is offering 13 more destinations in 2022 than in 2019, the majority of which have been transferred from LGW [redacted]. This is also the case for VAA, which has established 8 new destinations since 2019, of which the majority have been transferred from LGW.

5.27 Capacity comparisons between on-sale capacity in the period January to November 2022 and on-sale capacity in the period January to November 2019 (extracted on 14 December 2021) reflect tactical adjustments as part of recent policy changes in connection with "red list" travel restrictions, specifically the re-introduction of the red list in late November. The airlines that provided for 80% of all 2019 (January to November) capacity at LHR currently have 93% of that 2019 capacity on sale. This indicates that airlines are assuming a degree of resilience in the market.

5.28 Furthermore, a number of airlines have also recently announced expansions at LHR. For example, 15 new airlines have entered the LHR market during the crisis. This shows that LHR remains attractive for airlines backfilling any spare or idle slots.

5.29 Notable additions in the long-haul segment include Jetblue, WestJet and Bamboo Airways. British Airways has also announced new services to Portland, USA and the resumption of Pittsburgh, USA. This is in addition to announcements of their JV partner American Airlines with new routes to Seattle and Boston. Finally, United Airlines has also announced an expansion with doubling its flights to Denver and introducing a new route to Boston. These additions reflect the overall robust expectations of prompt market recoveries.

5.30 Airlines have also reported experiencing significant and sustained recovery. For example, IAG stated that it has seen a significant recovery since Spring 2021. Delta and Air Canada have also hinted at faster-than-expected recovery, allowing them to operate at around 90% of its 2019 transatlantic capacity. This has been echoed by United Airlines which in its recent route announcement mentioned that London is its strongest performing international business destination at present. A strong recovery has also been seen by the leading gulf carriers which have expedited their recovery speed in their LHR operations (more than 80% of 2019 capacity). This serves as yet another indicator of robust global recognition of LHR as key airport worldwide.

5.31 Further, the disappearance of some competitors such as Norwegian at LGW and Thomas Cook, has led to significant capacity being withdrawn from the London market outside LHR. VAA intends to capitalise on these withdrawals and gain market share.

5.32 This seems to be also reflected by actions taken by LHR itself. LHR told the airline community at operational readiness meetings throughout November 2021 that as of December 2021, they will be back to 36-38 aircraft departures per hour between the hours of 0600 – 1100. The declared runway capacity is 38 movements per hour. Hence 36 movements would indicate a capacity of 94.7%, demonstrating that traffic is already bouncing back, providing greater levels of assurance that higher forecasts should be expected already in 2022.

5.33 These points clearly demonstrate that, applying the estimated global demand recovery rate to LHR is wrong and will result in a dangerously low passenger estimate which HAL stands to benefit from when that forecast is ultimately exceeded. Setting aside the faster recovery rate of LHR, one needs to adjust for regional differences in the recovery. Applying more granular regional forecasts onto the LHR specific destination mix would lead to a different forecast number for 2022 and beyond.

5.34 It is worthwhile to note, that regional recoveries mentioned in the IATA reports diverge over time, leading mid-term to a more uniform picture. Clearly, the fact that the CAA has failed to create its own model to forecast passenger numbers has hindered its ability to keep an up to date forecast, taking into account recent market dynamics. Had the CAA developed its own forecast for LHR, it would not have fundamentally failed in its obligations to consumers by publishing a forecast in the Initial Proposals that is based on HAL's very outdated figures. Furthermore, airlines have been unable to scrutinise HAL's forecasting methodology leading to questions about the integrity of the entire forecasting process.

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5.35 [redacted]

[redacted]

5.36 [redacted]

5.37 [redacted]

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(e) Slot allocation

5.38 Another indicator that shows a material difference between expected demand and forecast demand comes from LHR itself. As part of the slot allocation process airport capacities need to be declared; this process is managed by Airport Coordination Limited on behalf of LHR. HAL has advised on planning to load factors between 80% and 93%. Taking the lowest seat factor in this range of 80% would achieve a total of 52m passengers in Summer 2022 alone. This contradicts the CAA's position in the H7 review, and suggests an extremely busy summer is actually being anticipated by LHR.

Table 2: Load Factors for Summer 2022 (source: HAL S22 Capacity Declaration)

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%

5.39 After the slot conference for summer 2022 in Rome during the middle of November 2021, the CAA (and other stakeholders) had full visibility of the intended 2022 flying programme. Airlines have assessed demand and planned to fly 299,659 movements in Summer 2022. This is yet another indicator of solid demand expectations by the airlines. From these slot holdings the CAA can also see that the average aircraft size (at 219 seats on average per movement) has increased above over 2019 levels, indicating a total seat capacity of 65.5 million seats.

5.40 Further indications from the slots process relate to the rules for historic precedence slots for level 3 slot-controlled airports. This rule allows an airline that flies 80% of a slot series it holds in season 1 (e.g. Summer 2022) to obtain the same slot series for the subsequent equivalent season 2 (e.g. Summer 2023). This rule applied in a normal demand environment. However, during the COVID-19 pandemic a deviation from this rule was agreed by the Government and alleviations were given. For Summer 2022, it appears that HAL has not supported a further alleviation of this rule. This contradicts its H7 passenger forecast, as an alleviation would be needed for airlines to adjust their schedules to low demand environments. HAL seems to expect that airlines will fly at least 80% of their slot portfolios.

5.41 Based on these insights, key airlines support a forecast of 72 million passengers in 2022 with a return to 2019 passenger numbers in 2024 as per the table below. From 2023 onwards this is tracking the Eurocontrol, as shown in Table 3 below.

Table 3: Passenger forecast comparison (source: Airline's forecast based on Eurocontrol long-term forecast Oct 21 and CAA mid-case forecast)

M passenger per year	2022	2023	2024	2025	2026	Total
CAA mid	45.62	60.21	71.99	79.37	82.00	**339.19**
% 2019 (80.88m)	*56.1%*	*74.4%*	*89.0%*	*98.1%*	*101.4%*	*n/a*
Airlines forecast	72.0	77.7	80.9	82.5	84.1	**397.2**
% 2019 (80.88m)	*89.0%*	*96.0%*	*100%*	*102%*	*104%*	*n/a*

VAA forecasts

5.42 The independent forecasts, which as explained above are substantially higher than the forecasts calculated by the CAA, are consistent with VAA's own actions and planning. The accuracy of the forecast relied upon is particularly critical given the impact it will have on the H7 airport charge, and therefore the cost that is passed on to consumers throughout this next regulatory period. Reliance upon HAL's June 2021 estimates, even with the CAA's adjustments to HAL's methodology, suggests relatively low estimates for 2022 and beyond in direct contrast to VAA's (and other airlines') own forecasts of passenger volumes. Irrationally applying those cautious and lower passenger forecasts has the clear effect of increasing the airport charge across H7 (most acutely in 2022) and thus will result in a disproportionate, manifestly unfair and likely substantial increase to charges being passed on to consumers, to their detriment. In contrast, if the higher (and more accurate) forecasts are relied upon, this reduces the amount ultimately payable by consumers, and is more likely to reflect fairly all of the relevant circumstances. Ensuring the passenger forecasts reflect the latest available information is therefore critical to ensuring that regulatory decisions are taken in a manner which promotes the interests of consumers.

5.43 As VAA has identified above and in its response to the 2022 Charges Consultation, by applying a more up-to-date forecast, such as that supplied by IATA based on Eurocontrol forecasts in October 2021, compared to the CAA's forecast (derived from HAL's forecast created in April 2021), a far lower maximum allowable yield is derived. This can be the only rational and proportionate approach.

Start of Confidential Section

VAA forecasts

5.44 [redacted]

5.45 [redacted]

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5.49 [redacted]

5.50 [redacted]

5.51 [redacted]

5.52 [redacted]

86 [redacted]

[redacted]

5.53 [redacted]

5.54 [redacted]

5.55 [redacted]

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5.56 [redacted]

End of Confidential Section

Conclusion

5.57 The data above confirms that the forecasts relied upon by the CAA to determine its Initial Proposals are unduly pessimistic as to passenger numbers and growth, and therefore to rely upon these forecasts in its final proposals and ultimate setting of the airport charge would be irrational. VAA does not consider the existing forecasts to be an appropriate (or indeed lawful) basis on which to make a determination about charges. While VAA does not know what position other airlines are in, there is evidence that other airlines, passengers and even HAL itself are in fact proceeding on the basis of more optimistic passenger forecasts.

5.58 VAA therefore strongly urges the CAA to reconsider the forecasts relied upon in determining its final proposals, paying particular regard to whether HAL's forecasts should be relied upon at all and whether the CAA's statutory functions would be better satisfied by its own independent and objective assessment of likely passenger volumes in H7. At the very least, the forecasts ultimately relied upon should take into account relevant facts and circumstances as are apparent at the date of calculation – not one which fails to account for key developments following its preparation as would be the case on the basis of the Initial Proposals – and should incorporate the recommendations of the CAA's independent advisers.

5.59 However, as noted above, reserve its right to comment further on any updated forecast provided by HAL (or the CAA), and the methodology/model relied upon (as referred to in paragraph 5.6 above) to produce this, in due course.

6. OTHER REGULATED CHARGES

Summary

6.1 This section responds to Section 3, Chapter 13 of the CAA's Initial Proposals. As a headline comment, VAA is generally supportive of the proposed marginal cost-based approach to ORCs. VAA is strongly of the view that any modification in scope of the ORCs should be fully consistent with this approach.

6.2 Accordingly, VAA agrees that the fixed costs, allocated costs and costs for check-in facilities, IT, heating and gas should be reallocated from the ORC cost base to the regulated airport charge. Consistently with the CAA's Initial Proposals and the switch to a marginal cost-based approach, however, VAA does not support the reallocation of business rates to the ORC cost base. In relation to Bus and coach services, VAA recognises that the CAA has reserved its position pending stakeholders having an opportunity to comment on HAL's proposals (though it is inclined to move to commercial arrangements on the basis that different operators are likely to require a differentiated level of service).[87] Further to VAA's discussions with the CAA on this matter, it welcomes the opportunity to comment further on this and reserves its position on this matter.

6.3 VAA is further supportive of the proposed changes to the governance arrangements.

Marginal cost-based approach

6.4 VAA confirms its support for a transition to a marginal cost-based approach to the calculation and management of ORCs. VAA agrees that this is an appropriate and effective method through which to achieve the minimisation of price fluctuation (through better management of passenger volume fluctuations) and fair and accurate payment of ORC costs. VAA further notes the secondary benefits of such an approach, including in strengthening the governance process, the simplification of unit cost calculations, and achieving efficiencies in the approach to regulation.

Changes to the scope of the ORCs

6.5 VAA agrees with the proposed reallocation of fixed and allocated costs from the ORC cost base to regulated airport charges on the basis that these costs are generally applicable to all passengers. VAA particularly agrees that the scope of costs included within ORCs should reflect how airlines can influence these costs, as well as the actual use of the services and facilities provided.

6.6 VAA agrees with the CAA that business rates do not represent a marginal cost and that reallocating them from the regulated airport charge to ORCs

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[87] CAA's Initial Proposals, Chapter 13, paragraph 13.28.

would be inconsistent with the proposed shift in approach. VAA is in further agreement that the retention of the existing 80/20 risk-sharing arrangement is important to incentivise the negotiation of efficient revaluations of the business rates applicable with the Valuation Office.

6.7 VAA notes that HAL's original proposal in relation to the future treatment of ORCs indicated both that costs recovered through ORCs should be "*fully transparent and represent only the costs which can be influenced through collaboration between Heathrow and the airline community in-period*" and that "*the ORC is the best mechanism through which to transparently pass on costs outside of our control*"[88]. It is difficult to reconcile these two statements, and the former statement with the proposed reallocation of business rates to ORCs. As is evident from HAL's proposals, business rates are "*largely outwith Heathrow's control*";[89] they are, similarly, outside the control of the airline community. This is in fact a matter which is more directly influenced by regulation and government policy, the impact of which on the rates payable is properly managed by HAL's negotiations with the Valuation Office. In those circumstances it cannot be right that business rates are moved into a separate ORC.

Governance arrangements

6.8 The CAA's Initial Proposals detail two main changes to the governance arrangements to address weaknesses highlighted by ORC recovery during 2020. The first concerns the prompt inclusion of new services in the ORC licence condition following identification thereof and agreement thereon between the airlines and HAL. The second concerns the improvement of the dispute resolution mechanisms in the ORC licence. VAA is supportive of the CAA's proposed solutions in both cases.

6.8.1 VAA supports the CAA's proposed amendment of the ORC framework to facilitate the inclusion of genuinely new services which are appropriate for recovery through ORCs, where this is agreed between HAL and the airlines and where the addition of such services would be in the interests of consumers. VAA welcomes the flexibility that such amendments will bring in enabling consensual changes to be made in an expeditious manner.

6.8.2 VAA is further mindful of the current obstacles faced by operation of the existing dispute resolution mechanisms which have been experienced since the onset of the Covid-19 pandemic in March 2020. VAA therefore also welcomes the CAA's proposal to not only make improvements to the existing governance protocols, but also to make amendments to the ORC licence such that HAL is expressly required to agree to and comply with any such protocol, including with regard to cost allocation and pricing principles. VAA is also

88 HAL's RBP Update 1, Page 253, Section 6.1.5.

89 HAL's RBP Update 1, Page 252, Section 6.1.5.

supportive of clarity on the CAA's role in relation to any dispute, and a greater degree of CAA involvement in that regard.

6.8.3 VAA records its agreement in principle to these proposed amendments to the ORC licence and corresponding enhanced protocols, but reserves the right to provide comment on the documents in due course on the expectation that it will have an opportunity to feed into the revised ORC licence.

Forecast of ORC revenues

6.9 VAA acknowledges that the initial forecasts provided at Table 13.1 of the CAA's Initial Proposals[90] have been prepared consistently with the CAA's proposed approach (and in particular do not include business rates as proposed by HAL). However, the CAA itself notes (at 13.34) that it simply adopted HAL's forecasts of ORCs and will be developing an independent assessment of those forecasts for its final proposals.[91] VAA looks forward to considering the CAA's independent assessment and further development of the forecasts in due course, and reserves the right to comment further pending these further developments.

7. CAPITAL PLAN AND INCENTIVES

7.1 This section responds to Section 1, Chapter 3 and Section 3, Chapter 12 of the CAA's Initial Proposals. In this section, VAA outlines its position in relation to the CAA's Initial Proposals on the Capital Plan and Capital Incentives for H7, with which VAA broadly agrees, subject to the points outlined below.

<u>Capital Plan</u>

Size of the Capital Plan

7.2 VAA encourages the CAA to maintain its position on the size of the Capital Plan for H7 as set out in the Initial Proposals, which is to proceed with the CAA's "Mid" Case of £2.4 billion (which is 'similar to HAL's "Safety Only" Plan with a total cost of £2.5 billion).[92] This approach is based on the evidence available and is supported and peer reviewed by the CAA's independent expert advisors which VAA understands have also provided information and assessment of industry comparators and benchmarks when collaborating with the CAA.

7.3 As stated in s.1(1) and s.1(3)(c) of the Civil Aviation Act 2012, when considering HAL's Capital Plan, the CAA must further the interests of consumers while having regard to the need to promote economy and efficiency on the part of the licence holder in its provision of airport operation services. VAA reiterates that the Capital Plan "*should be based on clearly articulated strategies, solutions and requirements, evidenced by clear cost*

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90 CAA Initial Proposals, Section 3, Chapter 13, Table 13.1 (ORC forecast revenues).
91 CAA Initial Proposals, Section 3, Chapter 13, Page 26, Paragraph 13.34.
92 CAA's Initial Proposals, Section 1, Chapter 3, page 35, paragraph 3.25.

benefit analysis consistent with good practice";[93] this approach aligns with the CAA's statutory duties and should be maintained by the CAA.

7.4 In that context, VAA agrees with the CAA and Arcadis' shared view as set out in the Initial Proposals, in relation to the lack of requisite detail and insufficiency of the evidence provided by HAL to date in relation to its Capital Plans. Frustratingly, this has led to difficulties in assessing its validity and will ultimately delay the process in determining a fully justified and appropriate Capital Plan. Whilst VAA agrees that flexibility should be retained at the project level (particularly during the latter years of H7) integration across the other building blocks, setting specific targets and, therefore, justification on the proposals, are still not possible. This has meant that the CAA must proceed with the most rational and proportionate approach for H7 that it can, based on the evidence it has been provided with and developed to date. VAA welcomes the fact that the CAA has commissioned expert advisers, Arcadis, to work in close collaboration with and to provide advice on implementing an independent and appropriate approach particularly in these circumstances. This has led to the CAA developing a proposed "Mid" Case, which VAA agrees is the rational and proportionate approach going forward for H7. VAA sets out its reasons for this in further detail below.

7.5 There has simply been very little in the way of credible evidence to support the Capital Plan put forward by HAL and VAA agrees with the CAA's assessment that "*both the quality and depth of evidence supplied by HAL in its updated RBP are generally poor for this stage in the price control process*".[94] Since the publication of the RBP and RBP Update 1, HAL has sought to engage with VAA and the airline community in the development of the Capital Plan through the existing capital governance forums (to which the CAA have been party). Whilst VAA welcomes the continued use of capital governance forums and the engagement of the airline community, progress has been limited due to HAL continuing to provide less than adequate evidence. For example, materials provided by HAL such as its 'one pagers' have been far from effective; a one-page summary is not an adequate, proportionate or rational means of justifying a capital plan of over £4 billion over H7 (as recognised by the CAA). As outlined in the Initial Proposals, the fact that many of the capex projects envisaged will be delivered during H7 does not prevent the provision of compelling information on a substantial number of projects or the likely size of the overall programme.

7.6 Given the position in relation to the lack of adequate evidence provided by HAL and based on Arcadis' assessment, it is clear that a H7 capital envelope greater than the CAA's "Mid" Case cannot be justified (and in any event, as stated by the CAA, there is some built-in flexibility for critical security-related projects in the Capital Incentives proposals). However, as the CAA have

93 CAA's Initial Proposals, Section 1, Chapter 3, page 35, paragraph 3.23.
94 CAA Initial Proposals, Section 1, Chapter 3, page 38, paragraph 3.34.

acknowledged, this means that it has not been able to find a proper evidential basis to fully justify even its "High" Case: "*we currently do not have sufficient evidence from HAL or other sources to support any security-related capex beyond that set out in the "Safety Only" plan*"[95]. It is therefore unclear, how, if the CAA's "High" Case cannot be adequately supported by evidence, HAL's "Optimal Plan" can be justified in any way. Instead, there is currently no proper basis for the figures proposed in HAL's "Optimal Plan" at a total cost of £4.2 billion which is significantly greater than even the CAA's "High" Case of £3 billion. This position is only reiterated by Table 3.2 of Chapter 3 of the Initial Proposals which outlines how HAL's "Optimal Plan" is severely in excess of the other CAA's plans; plans which were developed based on the evidence available and Arcadis' independent expert input.[96]

7.7 As stated in the Initial Proposals, the CAA does not have sufficient evidence from HAL or other sources to support any capex beyond that set out in the "Safety Only" Plan and even then, the "Safety Only" Plan contained costs for unevidenced iH7 roll-over projects, and the "Protect Efficiency" and "Protect Revenue" allocations, for which HAL has provided "*minimal evidence*".[97] On that basis, VAA supports that the CAA removed those costs from its "Mid" Case plan, resulting in the "Mid" Case being 8% below HAL's "Safety Only" Plan.

7.8 Therefore, based on the evidence available and Arcadis' independent assessment, the CAA's "Mid" Case of £2.4 billion is the lawful, proportionate and rational approach going forward and VAA would strongly encourage the CAA to maintain its position in relation to this. As outlined in the Initial Proposals, the "Mid" Case is both in line with historical capital spend patterns at Heathrow but also in accordance with airport capex envelopes worldwide:

7.8.1 The "Mid" Case is more consistent with historical capex spends as well as the market view; HAL's spend between 2014 and 2020 averaged £520 million annually, which would be consistent with the £500 million annual spend forecast in the "Mid" Case (as evidenced (see Figure 3.2 of Chapter 3)).[98]

7.8.2 There is an apparent lack of detail in the costs assumptions made on a project by project basis that ultimately feed into the entire "Optimal Plan" that HAL have put forward. VAA, and its airline colleagues, have brought to the CAA's attention on a number of occasions throughout the H7 process the fact that costs for numerous projects cannot be justified. Instead it appears that HAL has provided

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95 CAA Initial Proposals, Section 1, Chapter 3, page 39, paragraph 3.40.

96 CAA Initial Proposals, Section 1, Chapter 3, page 40, paragraph 3.44, table 3.2 (CAA IP capex estimates, compared to HAL's scenarios).

97 CAA Initial Proposals, Section 1, Chapter 3, page 39, paragraph 3.40.

98 CAA's Initial Proposals, Section 1, Chapter 3, page 40, paragraph 3.43, Figure 3.2 (CAA IP capex estimates for all scenarios, H7) and HAL RBP Update – Capex Plan Review, Arcadis Report, 14 October 2021, page 31, section 4: Top-Down Analysis – Recommendations.

biased/excessive estimates in order to 'game' the settlement process; this is evident by it requesting such an excessive capital envelope. This is evidenced by Arcadis' identification of significant over-estimations in HAL's capital plans. This excessive cost which HAL is claiming as part of its proposed Capital Plan has been brought to the CAA's attention numerous times by VAA, as part of the airline community's response to specific capital projects (most notably the forthcoming security programme). For example, on the security programme project, HAL wants the consumer to pay £420 million for the "Regulated Security" element. On the contrary, Arcadis have provided an independent and expert valuation of this piece of work at £200 million; less than half the valuation that HAL provided.[99] This is just one example of a project which has been grossly overestimated by HAL as part of its Capital Plan and it is clear that such overestimation leading to a greater Capital Plan is simply adverse to the interests of the consumer.

7.9 It is therefore paramount that the CAA maintains its position on the size of the Capital Plan, as supported by Arcadis' independent expert analysis. Based on the evidence available, this is the most reasonable and legally defensible position for the CAA to take and would be in the best interests of consumers. An over-inflated capital plan is inherently likely to lead to unjustified higher prices and inefficiency on the part of HAL, and thus be contrary to the CAA's general duty in s.1(1) of the Civil Aviation Act 2012, as well as s.1(3)(c) of the Civil Aviation Act 2012. This approach will help to maintain an appropriate level of capex that keeps the airport safe and services running to a similar level as it has historically, while ensuring that costs in the capex are not excessive but are properly justified and based on evidence. This position is further bolstered by the CAA's proposal to maintain a flexible approach to capex through the H7 period, subject to there being a sufficiently rigorous approvals process to determine when additional capital spend should be approved. VAA's position on the flexibility of the capital envelope is outlined further below.

Proposals in relation to the flexibility of the capital envelope

7.10 Subject to the points below, VAA agrees that flexibility should be made only on the basis that the CAA has outlined; changes to the capital envelope should only be permitted where they "*are driven by a change in circumstances from the time when the H7 determination was made*".[100] VAA also agrees that prior to making a submission to the CAA for approval, HAL should be required to consult the airlines, and provide reasonably detailed information in relation to such request.

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99 HAL RBP Update, Capex Plan Review, Arcadis Report, 14 October 2021, page 14, section 3: Bottom-Up Analysis – Review.

100 CAA's Initial Proposals, Section 3, Chapter 12, page 17, paragraph 12.54.

7.11 However, it is unclear from the Initial Proposals what situations would constitute sufficient "*change in circumstances*" such that an additional capex requirement should or would be approved by the CAA. The onus should be on HAL (as recognised in the Initial Proposals) to demonstrate that these additional capex requirements are necessary and are driven by a change in circumstances from the time when the H7 determination was made. VAA strongly urges the CAA to provide further detail than is outlined in the Initial Proposals to clarify in more precise terms the circumstances and threshold required which would trigger the process for change to the capital envelope.

7.12 In addition, the process envisaged by the CAA suggests that there will be opportunity for the airlines and HAL to agree to any additional capex spend; it states, "*Where HAL and airlines are in agreement, we [CAA] would only intervene if we had a significant concern that new capex was not in consumers' interests*". [101]

7.13 However, there appears to be no explicit expectation that both parties need to agree for the capital envelope to change. VAA expects therefore the CAA to make sure that there is a requirement for both parties, acting reasonably, to agree before allowing the capital envelope. VAA also suggests that the CAA provides more specificity around how it proposes this process should take place and its expectations around, for example, the amount of time that HAL should provide when consulting with the airlines before making a submission to the CAA.

7.14 VAA anticipates that there may be situations where the airlines and HAL is unable to agree a change to the capital envelope and the CAA must make a decision. VAA therefore strongly urges the CAA to set out what it envisages to be the mechanism by which it reaches a decision if there is no agreement (which should include guidance on what the CAA would regard as a "*change in circumstances*"). This would help both airlines and HAL to inform themselves of the position of potential changes to the capital envelope going forward.

7.15 In these circumstances where further clarity is required, VAA would reiterate and welcome the CAA's statement that further engagement with the airlines should be maintained to understand and assess the H7 Capital Plan as it develops further, including engagement through existing capex governance forums.

Capital Incentives

An *ex-ante* approach across all capex categories

7.16 VAA continues to be strongly supportive of the CAA's proposed approach to introduce *ex-ante* capital incentives across the entire portfolio of capex categories. As noted in the Initial Proposals, assessments based on an *ex-post*

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101 CAA's Initial Proposals, Section 3, Chapter 12, page 17, paragraph 12.54.

efficiency framework have proven to have limitations and stronger incentives are required to protect the interests of consumers. VAA strongly supports the CAA's overall proposal to assess whether delivery obligations have been met in relation to each capex category and compare HAL's actual spending for each capex category to the final baseline, with HAL bearing a proportion of any overspending. This is a far simpler way of assessing performance and removes the subjectivity of an *ex-post* capital efficiency review.

7.17 The weaknesses of the present arrangements and need for change was particularly demonstrated by the disappointing outcome of the Q6 capital efficiency review. Further views on this were set out to the CAA in the airline community's response to the CAA's CAP1996 consultation where VAA stated, "*The Airline Community continue to express our disappointment and frustration in the outcome of the CAA's findings in the Consultation with regards to the level of capital inefficiency identified - over £200 million short from that which the Airline Community had identified in our previous feedback*[102] *and that our customers will now be expected to bear*."[103] VAA strongly encourages the CAA to maintain its stance on the need for an *ex-ante* approach across all spend categories. This is particularly given the lack of persuasive evidence from HAL that any different approach should be applied.

Delivery objectives and obligations

7.18 VAA notes that the CAA expects the airline community to work with HAL to define suitable delivery objectives and obligations for each capex category. VAA will play an active part in assisting that programme of work as VAA appreciates the long-term benefits to the consumer of a robust set of objectives that ultimately turn into obligations as it steps through the development to core process. VAA also agrees with the CAA's approach in relation to assessing whether a delivery obligation has been met. In particular, it is imperative that the burden of proof is on HAL to demonstrate it has met a delivery obligation and keep good records of delivery and VAA strongly supports this approach.

7.19 The success of this initiative rests on HAL's proactive communication of any changes to the scope, cost and risk of projects. To this end, it is essential that HAL submits Client Changes Record Sheets ("**CCRS**") well in advance and seeks to agree changes with airlines. VAA, and other airlines, will not accept retrospective CCRS and the Capital Efficiency Handbook must reinforce this. There is no guarantee that CCRS will be approved and if HAL decides to make changes without having submitted a CCRS it does so at its own risk.

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102 "*Airline Community feedback to CAA re Arcadis Capital Efficiency Report*", dated April 2020 and "*Airline Community response to CAA Consultation CAP1964*" dated November 2020.

103 LACC and AOC, Response to Economic Regulation of Heathrow – CAP1996 Q6 and Expansion Cost Assessment, dated 23 June 2021.

7.20 Fundamentally, it is in the key interests of consumers that there is a visible step change within the capital framework and governance which ensures HAL is responsible and accountable for the proper definition, delivery and reporting of costs and benefits aligned to clear and agreed strategic goals.

Incentive rate

7.21 With regards to the proposed incentive rate for under or overspends by HAL, the CAA is consulting on an equitable split of an incentive rate between 20% to 30%. VAA does not agree that this approach takes all relevant factors into account and would propose an incentive rate of 30% for an overspend situation, with no additional bonus for an underspend situation.

7.21.1 Firstly, an additional bonus for underspending is not an acceptable outcome for consumers given the existing disparity in incentive arrangements between airlines and HAL. There is no justification for awarding HAL a further bonus for delivering to plan when they are already incentivised to do so. From the completion of a project within the H7 period, HAL will be recovering a return based on the G3 figure, via the WACC, regardless of the size of the underspend, until the end of the settlement period. On an average basis, that would equate to circa 15% on the current WACC of 5.35%. Therefore, any proposed incentive rate needs to reflect the fact that HAL would already be earning a return on projects delivered on time and to budget. HAL is subject to a unique advantage in this respect: airlines, as commercial entities do not enjoy any such benefits in their relationships with their suppliers. Awarding HAL an additional bonus on an underspend would also be detrimental to consumers, as the bonus would still be added to the RAB and would deplete valuable funds available to invest in consumer enhancements.

7.21.2 Additionally, due to information asymmetry, HAL is naturally likely to hold far more knowledge than both airlines and the CAA, and the potential to take advantage of this position, should be recognised by design within the incentive. The current proposed incentive rate does not properly reflect this factual position and therefore does not properly take into account a key relevant consideration and is disproportionate.

7.21.3 Secondly, HAL stands to benefit significantly from the proposed reduction of its downside exposure in an overspend scenario to just 30% or even 20%. Under the existing *ex-post* capital review framework, up to 100% of overspend can be disallowed from the RAB, whereas under the new framework HAL will only be liable for a proportion of the overspend. This substantial limitation of HAL's liability must be captured by way of a reduction in its asset beta. There is no fairness in a structure that additionally rewards HAL in the event of underspend and yet dramatically decreases HAL's risk in the event of overspend, and VAA cannot see the basis on which airlines, as rational, commercial entities, could agree to such a proposal.

7.21.4 Thirdly, the CAA, as it will recognise, must ensure that the incentives for an overspend situation are pitched at a level that truly make a difference. Too low, and an "incentive" will not function as such by driving any behaviour change. Although the CAA is consulting on a range between 20 – 30% VAA's preference would be for an incentive rate in the case of an overspend situation to be substantially greater than that. This suggestion was made by the airline community in response to the Way Forward consultation. This is supported by both the evidence in other regulated sectors and independent analysis. For example:

(A) The Thames Tideway Tunnel implements an asymmetrical rate of 30% on underspend and 40% on overspend[104], which is a far more appropriate incentive for large-scale infrastructure projects that are undertaken at Heathrow.

(B) Furthermore, as part of an independent study on capital incentives at Heathrow, CEPA considered a 25% incentive as only being "*moderate*" and "*towards the lower end of those applied elsewhere*"[105].

7.22 An asymmetrical incentive is therefore the most reasonable approach which takes into account all proper relevant factors, as it reflects the fact that HAL already takes advantage of a return on the WACC in instances of underspend. Therefore, VAA proposes an incentive rate of 30%, where 30% is returned to airlines in the event of overspend, and HAL benefits from RAB adjustment in the event of underspend.

7.23 This asymmetry is justified because it properly reflects the net symmetrical position, when taking into account the other facts as highlighted above. Under this position, HAL would already benefit from any underspend as outlined previously but would not be excessively compensated for delivering projects under budget, as would be the case under the CAA's current proposals on incentive rates. This solution would thus enable HAL to finance its activities while properly ensuring its economy and efficiency, as required by s.1(3)(a) and s.1(3)(c) of the Civil Aviation Act 2012. VAA recognises the CAA's aim of setting a uniform incentive rate for all capex and avoiding boundary/classification difficulties, as well as creating stronger incentives for H7 than the 13% financing cost incentive, in order to drive efficiency in the interests of consumers. The revised rates proposed would meet these

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104 CEPA, "*Possible ways of implementing ex-ante efficiency incentives for Heathrow's capital expenditure*", Final Report, March 2019", page 56.

105 CEPA, "*Possible ways of implementing ex-ante efficiency incentives for Heathrow's capital expenditure*", Final Report, March 2019", page 14.

objectives as well as fairly and lawfully taking into account the relevant factors.

Timing incentives

7.24 VAA strongly supports the continued use of 'triggers' within the capital framework and remains concerned about proposals to minimise their use, particularly should any alternative mechanisms fail to properly rebate for capital which HAL is earning a return on, yet has not delivered any benefit. 'Triggers' are designed to account for late delivery of projects, not for cost overspend (though VAA notes that HAL's approach seems to reflect the latter). VAA notes this as an area for continued engagement and welcome further discussion on this topic, particularly with regards to the possible introduction of penalties for late delivery of capital projects.

7.25 The CAA's proposal that any penalties introduced would only commence twelve months after the expected completion of the project is unsatisfactory and does not help demonstrate value for consumers. VAA would encourage the CAA to review the 12-month period and as per 'triggers' the date at which penalties may be implemented should be variable dependent on the project and its complexity and should not exceed twelve months from the expected date of delivery.

Dealing with changes to HAL's capex programme

7.26 VAA has set out its views on these proposals at paragraphs 7.10 - 7.15.

Enhanced governance arrangements

7.27 As acknowledged in the CAA's Initial Proposals, it is "*vital*" that airlines retain their role in capex governance arrangements to input their expertise and to ensure that HAL delivers appropriately on its capex programme.[106] Therefore, the general approach on building on existing arrangements with enhanced governance and a more prominent role for the CAA and IFS as proposed by the CAA's Initial Proposals, continues to be welcomed by VAA.

Outstanding topics requiring further discussion and consideration

7.28 Further to the proposals set out in the Initial Proposals consultation, VAA considers there remains uncertainty around a number of key topics that need addressing, notably:

7.28.1 *Leadership & Logistics (L&L)*: VAA would like to change how these are treated within business cases, within the decision-making process, and within the reconciliation of capital spend. VAA considers these should be evaluated and challenged separately, and budgets need to be fully justified and linked to the planned Capital Plan in the subsequent year. This would be much like an ORC, on a transparent and pass through basis onto the RAB.

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[106] CAA's Initial Proposals, Section 3, Chapter 12, page 19, paragraph 12.61.

7.28.2 *Programme and Portfolio Risk*: VAA would like to explore options on managing risk within both portfolios and programmes. VAA considers the current process needs to be enhanced regarding transparency and key learnings. VAA considers that having a central risk allocation and drawdown process will improve certain aspects of managing the capital budget and reduce HAL's exposure to burdening risk in an *ex-ante* environment. The extra emphasis planning (pre-G3) and on scrutinising spend of risk monies will evolve the current Governance and Control.

8. **FINANCEABILITY**

Summary

8.1 VAA's proposed price control model, based on commercial revenues and OPEX forecast by CTA (including adjustments to incorporate the impact of higher traffic assumptions), the up-to-date passenger forecast provided by IATA based on Eurocontrol forecasts, and a WACC in the range determined by CEPA, is financeable.

8.2 In the first place, as discussed in further detail in section 3 above, the WACC range determined by CEPA is reasonable. As a matter of principle this should mean that both debt and equity investors should earn sufficient returns to cover HAL's costs of financing.

8.3 [redacted]

8.4 VAA sets out both these matters in further detail below, as well as commenting on the CAA's approach to financeability in Chapter 11 of the Initial Proposals.

VAA's proposed WACC is reasonable

8.5 As set out in section 3 above, the CEPA Paper has determined, based on all the evidence available and a proper methodology, a reasonable range for HAL's WACC (1.3% – 2.8%) to enable HAL to cover its costs of capital. Provided the WACC is within this range, HAL should in principle be financeable.

8.6 Indeed, as the CMA has recently noted in its 2021 water company price determinations final report, "*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. As a matter of principle, if the WACC is set at a reasonable level, both debt and equity investors should* *earn sufficient returns to cover the costs of financing.*"[107] In light of this, the CMA considered that financial ratio analyses are not decisive by themselves, but play a "*supporting role*" to assist consideration of whether the allowed return is in practice high enough to be consistent with an investment-grade credit quality.

[redacted]

8.7 [redacted]

8.8 [redacted]

[redacted] [redacted]

[redacted] [redacted]

[redacted] [redacted]

8.9 [redacted]

8.10 [redacted]

8.11 [redacted]

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107 CMA, *Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, Final report*, 17 March 2021 (the "**2021 water company price determinations final report**"), paragraph 10.72.

[redacted]

8.12 [redacted]

8.13 [redacted]

8.14 [redacted]

[redacted] [redacted]

[redacted] [redacted]

[redacted] [redacted]

8.15 [redacted]

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108 [redacted]

109 [redacted]

110 [redacted]

111 [redacted]

112 [redacted]

[redacted]

[redacted] [redacted] [redacted]

[redacted] [redacted] [redacted]

8.16 [redacted]

8.17 [redacted]

113 [redacted]

114 [redacted].

[redacted]

Errors in the CAA's own financeability assessment

8.18 The CAA's financeability assessment in Chapter 11 of the Initial Proposals is inconsistent with the CMA's approach to the assessment of financeability. Instead, the CAA errs by relying almost exclusively upon financial ratios in determining whether its price control model would be financeable. In addition, there are a number of other errors in in the CAA's own financeability assessment.

8.19 First, the CAA does not give sufficient weight to, or adequately investigate, whether HAL's shareholders should be expected to provide a cash injection.

8.20 The CAA acknowledges that assuming no cash injection "*means that the Initial Proposals imply different expectations for Heathrow's shareholders than many shareholders in aviation businesses, including airlines, during the last 18 months, who have injected significant new equity to support the businesses in question*".[115] Indeed, since the beginning of the COVID-19 pandemic, VAA has received just under £700m in direct shareholder support as noted in section 1 above.

8.21 The CAA also acknowledges that there is regulatory precedent for assuming a cash injection, including the CMA's determination of the NIE appeal in 2014, in which the CMA noted 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*."[116]

8.22 But the CAA ultimately conclude that there would be limited benefit in assuming an equity injection because it would have only a marginal impact on FFO to debt and PMICR, the metrics which the CAA consider are under "*most pressure*".[117]

8.23 In doing so the CAA fails to acknowledge that a cash injection would clearly reduce HAL's net debt, and therefore improve at least the net debt/EBITDA ratio. The CAA also fails to take proper account of the qualitative weight that credit rating agencies would likely place on a shareholder cash injection.[118]

8.24 Second, the CAA has erred in its assessment of dividends under its price control model. In particular, the CAA considers whether the projected notional dividends under its model were reasonable by comparing their size to the dividend payments made by HAL between 2015 and 2019.[119] VAA does not consider such a comparison to be appropriate given HAL's historical dividend payments were very high – averaging £609m per annum between

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[115] CAA's Initial proposals, Chapter 11, paragraph 11.71.

[116] CAA's Initial proposals, Chapter 11, paragraph 11.70.

[117] CAA's Initial proposals, Chapter 11, paragraphs 11.68 and 11.82.

[118] The CAA only acknowledge this by way of a footnote. See CAA's Initial proposals, Chapter 11, footnote 160 ("*While shareholder cash injection would not support credit metrics it would likely still be seen as a credit positive qualitative by rating agencies*").

[119] CAA's Initial proposals, Chapter 11, paragraphs 11.106-11.108.

2015 and 2019 despite an average profit after tax during this period of £350m per annum.[120] Such dividends cannot therefore act as a benchmark for a reasonable dividend level in the future, noting also the CAA's overriding statutory duty to further the interests of consumers, not HAL's financial position.

8.25 The CAA's assessment of a reasonable dividend is also flawed because the CAA takes no account of the assumption made of no shareholder cash injection. As noted above, the CAA acknowledge that many shareholders of airline businesses have been expected to make cash injections in light of the exceptional trading difficulties presented by the Covid-19 pandemic. Making such an assumption affords HAL's shareholders significant relief and must therefore count against the level of dividend that HAL's shareholders are entitled to earn during the price control period.

9. AIRLINE ALTERNATIVE BUSINESS PLAN

9.1 VAA has outlined above its detailed views in relation to each building block as proposed by the CAA's Initial Proposals. It has explained by reference to the evidence the areas where it either agrees with the CAA's position or disagrees. Where it disagrees, it has highlighted fundamental errors with the CAA's proposed approach, and has proposed alternative solutions to remedy those errors.

9.2 In order to assist the CAA, VAA has produced the following PCM models (as previously presented to the CAA) to reflect the impact that its proposals have on the H7 price control range. These models represent the lower and upper ends of the range for the H7 price control which is proposed by VAA, depending on the level of WACC used:

Low:

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

[120] Based on Heathrow (SP) Limited's accounts 2015-2019.

High:

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

9.3 This PCM model brings together VAA's proposals on all the building blocks and provides a full breakdown of what it suggests is the most robust, accurate and appropriate outcome for the H7 price control, as detailed above and by reference to the evidence and independent third party analysis. In summary, it is based on:

9.3.1 An adjusted RAB for £300 million according to the approach that the CAA has already taken (albeit this is an approach VAA has opposed) and no further RAB adjustment in H7, according to the Initial Proposals VAA's position set in section 2;

9.3.2 A WACC range of 1.3%-2.8% as supported by the independent analysis by CEPA and which VAA considers is financeable (indeed the upper end of the range would even provide for £800 million to £1 billion in dividends for HAL's shareholders). VAA sets out its position on this in sections 3 and 8;

9.3.3 Allowance for asymmetric risk being excluded, as per VAA's views in section 3;

9.3.4 Commercial revenues and opex as per the recommendations of the CAA's own independent experts' analysis and as supported by PA's analysis (but adjusted to accurately incorporate the impact of higher passenger traffic assumptions). VAA sets out its position on this in section 4;

9.3.5 A proper and reasonable passenger forecast based on an independent forecast from Eurocontrol and the consensus across the airline community as to what its expectations going forward are. VAA sets out its position on this in section 5;

9.3.6 The CAA's approach for ORCs which ensures that business rates remain in Aeros, which VAA agrees with, as set out in section 6;

9.3.7 An appropriate level of capital allowance in line with the evidence and the CAA’s own proposals to set a Capital Plan according to its "Mid" Case. VAA sets out its position on this in section 7;

9.3.8 VAA's proposed price control model, based on commercial revenues and opex forecast by CTA**.** the up-to-date passenger forecast provided by IATA based on Eurocontrol forecasts, and a WACC in the range determined by CEPA, is financeable. VAA sets out its views on this in section 8.

9.4 As demonstrated by the above PCM models, with all the building blocks appropriately re-calibrated according to all relevant factors and the evidence available, the appropriate range for the H7 price control of £11.30-14.72 dependent on the level of WACC:

	Low	**High**
WACC	1.3%	2.8%
Price (H7 Av)	11.30	14.72

9.5 This is clearly significantly lower than the CAA's proposed range of £24.50-£34.50 as contained in its Initial Proposals. However, VAA has demonstrated in this response why the CAA's proposed figures are based on fundamentally flawed judgment, metholodology and evidence throughout the various building blocks. These cumulative errors have resulted in a significantly flawed proposed range for the H7 price control.

9.6 In light of this, VAA has in this response, demonstrated in detail and in relation to each building block where there are errors or flaws in the CAA's analysis, judgment or evidence used; basing its response on the most up to date empirical evidence and information. VAA has provided detailed reasoning and also independent expert analysis to support these points and where errors or flaws have been identified, VAA has proposed a better approach going forward.

9.7 The range that VAA proposes represents the most appropriate figure through H7, when taking into account the impact of the pandemic but adopting a forward-looking perspective over the five-year control period. This will best ensure that consumers pay a fair rate to use the airport particularly when taking into account a properly and fairly adjusted WACC level, opex/commercial revenue estimates and passenger forecasts, while remedying any duplicative risk protection for HAL and having regard to the financeability of the notional HAL entity.

9.8 This response sets out the reasonable, proportionate and fair approach to the H7 price control. It ensures that the CAA complies with its statutory duties and in particular, its primary statutory duty. In light of this, the CAA must reconsider its position in relation to many of the building blocks as outlined in this response. This must be done in particular, to ensure that the interests of consumers are furthered and not harmed, over the H7 period.

Yours sincerely,

Virgin Atlantic Airways