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British Airways Response to CAP2265
Economic regulation of Heathrow Airport Ltd
Holding Cap for 2022

Thank you for the opportunity to respond to your latest consultation on the Economic Regulation of Heathrow: H7 Initial Proposals ("CAP2265"); we set out below our views on the Civil Aviation Authority's ("CAA") proposals and implications for the wider policy environment.

Executive Summary

Heathrow's current price control ends on 31st December 2021. A final decision on licence modifications for a new five-year control period for H7 will not be made until mid-2022. Without any further action by the CAA, no price control will apply to the airport charges levied by HAL from 1st January 2022 until the licence modifications to implement the H7 price control have effect. As already acknowledged by the CAA, the absence of a price cap condition creates very significant risks for users of airport services and airlines.

We are therefore, in principle, supportive of the imposition of a "holding cap". However, it is fundamental that the figure of any holding cap is appropriate, justified and in accordance with the Civil Aviation Act 2012 ("CAA12" or "Act") and the Airport Charges Regulations 2011 ("ACR2011" or "Regulations").

We consider that the price cap condition proposed in CAP2265 does not satisfy this. The proposed holding cap, based on a maximum revenue yield per passenger of £29.50, is inappropriate and fails to satisfy the requirements of the Act and the Regulations for the reasons detailed in this response. Most notably, the proposed holding cap:

a) is based on inaccurate and unreliable evidence and data sets, and indicates that the CAA has failed to take into account all relevant information, evidence and materials presented by airlines in advance of this proposed licence modification;

b) does not have regard to / is not commensurate to the risk that HAL may engage in conduct that amounts to an abuse of substantial market power;

c) does not promote economy and efficiency on the part of HAL in its provision of airport services at the airport;

d) is inappropriately weighed in favour of HAL and puts HAL's interests ahead of the interests of airlines and users of airport transfer services; and

e) fails to take into account the principles of section 1(4) which require regulatory activities to be carried out in a manner that is transparent, accountable, proportionate and consistent.

Given the above, the CAA must reconsider all of the evidence and analysis before it, as well as the responses received from airlines as part of this consultation, in order to arrive at a revised holding cap figure that is more appropriate, more defensible and in compliance with the requirements of the Act and the Regulations.

As is demonstrated by this response, a review of up to date data confirms that a more appropriate range for determining a new price cap condition falls somewhere between £16.87 to £21.91 in 2020 prices. If the CAA insists upon adopting a midpoint, this derives a holding cap figure of £19.39.

Regulatory Framework

The CAA duties are set out in section 1 of the Act. It provides that the CAA must "*carry out its functions under this chapter [Chapter One: Regulation of Regulation of Operators of Dominant Airports] in a manner which it considers will further the interests of users of airport transport services regarding the range, availability, continuity, cost and quality of airport operation services*." Section 3 provides that in performing its duties, the CAA must have regard to, amongst other things:

a) the need to secure that a licence holder can finance its provision of airport operation services;

b) the need to secure that all reasonable demands for airport operation services are met; and

c) the need to promote economy and efficiency on the part of the licence holder in its provision of airport operation service.

The Explanatory Notes to the Act further clarify that *"Subsection (3) lists a number of matters to which the CAA must have regard in performing its duties under subsections (1) and (2). The duty to have regard to these matters does not, individually or collectively, override the section 1(1) and (2) duty"*

Sections 14 to 21 concern the granting of licences by the CAA to dominant airports. Pursuant to Section 18, a licence may include:

- such conditions as the CAA considers necessary or expedient having regard to the risk that the holder of the licence may engage in conduct that amounts to an abuse of substantial market power in a market for airport operation services (or for services that include airport operation services), and

- such other conditions as the CAA considers necessary or expedient having regard to the CAA's duties under Section 1.

More specifically, Section 19(2) states that "A licence must include such price control conditions as the CAA considers necessary or expedient having regard to the risk referred to in Section 18(1)(a)".

It is against this regulatory framework that any decision on the Proposed Holding Cap must be made.

It is therefore incumbent on the CAA to fully scrutinise Heathrow's business and draw independent conclusions on its business in order to establish an appropriate level for the price control.

Given the limited time available to respond to this particular consultation on the 2022 holding cap, and the numerous issues that result from the CAA's decision to implement a range for the H7 Initial Proposals, **this response should be considered a summary of our major objections at this stage**; as a result, we do not rule out providing further information of analysis in our December response in respect of the final proposals for H7 and beyond

The key reasons for our position and the main points that we want to get across are as follows:

a) The CAA has a duty to ensure that the 2022 holding cap is set at the appropriate level, reflecting the direction of its economic analysis and the latest available evidence and information

b) Consumers must be protected from 1st January 2022 through provisions that prevent Heathrow from imposing excessively high charges, as the existing price control condition falls away on 31st December

c) Heathrow has simultaneously refused to engage in consultation based upon the CAA's proposed £29.50 holding cap, whilst also refusing to publish a rate card for 2022 that will inevitably attract a consumer backlash

d) The range for the H7 Initial Proposals, and as a result, the proposed 2022 holding cap, should be revised materially downward to reflect the current evidence and analysis

e) A lower price cap means a fairer, less burdensome reconciliation and means that the risk of under or over recovery will not borne solely by airlines and customers

f) Given current uncertainties, reconciliation will be critical; rather than causing charges to yo-yo in 2024, any reconciliation of the 2022 holding cap could be solved by profiling future charges over the remainder of the price period; we believe that this solution better solves for inter-temporal fairness

g) We propose that the range for H7 Initial Proposals should be recalculated to remove the effect of Heathrow's RBP update, reflect CEPA/Taylor Airey's present analysis, and reflect updated Eurocontrol traffic forecasts; this could result in an initial range of £16.87 to £21.91 in 2020 prices, which at the midpoint suggests the £29.50 holding cap could cause Heathrow's revenue to be inflated £728m in 2022

Further details are set out in our response below which is structured as follows:

- This front section sets out the background and regulatory framework pursuant to which any decision on the proposed licence modification must be made

- Sections 1, 2 and 3 detail the failings by the CAA and HAL to date that have led to this scenario whereby an interim holding cap is necessary pending the outcome of the H7 proposals. The points that we make are matters that we intend to also raise HAL directly and are provided here for completeness and full transparency.

- Sections 4, 5 and 6 concern the setting of the interim holding cap and presents our evidence and arguments as to why the holding cap proposed in CAP2265 is inappropriate and fails to meet the requirements of the Civil Aviation Act 2012 ("CAA12" or "Act") and the Airport Charges Regulations 2011 ("ACR2011" or "Regulations").

- Sections 7 onwards explains why the information and data that undermines the proposed holding cap is inappropriate and presents alternative analyses as to why a holding cap closer to HAL's current price cap condition (i.e. £19.36) is more appropriate.

1. Background to Initial Proposals and 2022 holding cap

1.1. We **agree with CAA that the H7 periodic review is being conducted in particularly challenging circumstances**; these include uncertainty over Heathrow's third runway expansion project that have led to its apparent unilateral withdrawal[1], along with the ongoing Covid-19 pandemic that has artificially limited global travel

1.2. Nevertheless, the CAA's **progression of this periodic review has been repeatedly compromised by Heathrow's conduct and behaviour throughout**, which have included demands to be made whole for unearned revenue – that would have

[1] "Death knell for Heathrow's third runway as Spanish investor cuts off funding", Sunday Telegraph, 30th October 2021

upended the ex-ante nature of UK regulation – and repeatedly late delivery of business plans that are a necessary requirement to support the CAA's analysis

1.3. As noted by the CAA, setting a price control is one of the CAA's core functions under the Civil Aviation Act 2012 ("CAA12"); the CAA is under a duty to impose a price cap condition where it considers necessary or expedient taking into account the risk of conduct that amounts to an abuse of market power, and further "**airport operators must be subject to economic regulation where they fulfil the Market Power Test** as set out in CAA12"[2]

1.4. As a result of the delay to the H7 periodic review and the likely delay to publication of Final Proposals until H1 2022, we agree that it is necessary to implement a holding cap of some form; **without such a holding cap in place, consumers would be at risk of exposure to airport charges that could amount to abusive behaviour**, and the CAA would be at risk of not be acting in accordance with its duties due to the absence of a price condition from 1st January 2022

1.5. While it is clear that interim arrangements are required before H7 is finalised, and that implementation of a holding cap is the next best alternative to CAA's final determination, it is **critically important that consumers are not harmed, financially or otherwise, as a result of implementation of such holding cap** driven by Heathrow's delay and manipulation of the regulatory process

1.6. The CAA's previous communications and consultations[3] set out a clear extended timetable to deliver Final Proposals in December 2021 in order to ensure a new price control condition was in place on 1st January 2022; **this has been compromised by Heathrow's repeated and unacceptable failure to deliver its business plans on time**

1.7. Regardless of any further delay to the process or date of actual implementation of the cap, a **new price control condition must be effective from 1st January 2022** to avoid the risk that Heathrow might "engage in conduct that amounts to an abuse of substantial market power"[4] by imposing unduly high charges until the H7 periodic review has been finalised and implemented

1.8. This **risk is highlighted by the correspondence between Heathrow and the CAA that is set out in this consultation**, in which the CAA reports Heathrow to have said "if an interim cap is required, it should be based on the level it has set out in the recent ACR2011 consultation: £37.60 per passenger," and "HAL notes that no changes could be made to this price without an additional consultation under the ACR2011, which it states it has no plans to undertake"[5]; this is the behaviour of a monopoly trying to use its market power to its material benefit

[2] CAP2265D H7 Initial Proposals, Section 3: Incentives and other issues, para A6
[3] Including, but not limited to CAP2139 Consultation on the Way Forward
[4] Civil Aviation Act 2012, Section 18, Licence conditions
[5] CAP2265D H7 Initial Proposals, Section 3: Incentives and other issues, para 15.16

1.9. In order to mitigate this risk, **we therefore agree with the CAA that a holding cap should be implemented for 2022, but such holding cap needs to be set at an appropriate level**; nevertheless, we will provide evidence in subsequent sections as to why the economic analysis suggests that this holding cap should be set at a significantly lower level

1.10. We note the CAA's comment that should charges in 2022 be unduly high, this "**could also create or exacerbate a conflict between the interests of "present consumers" travelling during the first part of 2022 and "future consumers" travelling later in the H7 period**"[6]; furthermore, "present consumers could experience materially higher charges while future consumers somewhat lower charges because of the impact of any "truing up" arrangements"[7]

1.11. This is why it is **incumbent upon the CAA to ensure that the 2022 holding cap is set at the appropriate level**, reflecting the direction of its economic analysis to date and the latest available information on the likely trajectory of passenger volume recovery from the pandemic

<u>In summary:</u> Failure to impose a price cap condition on HAL would amount to a breach by the CAA of its duties under the Act. We agree that a holding cap should therefore be imposed. However, any holding cap must be appropriate taking into account the requirements of the Act and the Regulations. For the reasons set out within this response, the proposed holding cap fails to satisfy this requirement

2. Process of licence modification

2.1. The process of implementation of any licence modification is set out in CAA12[8], and requires certain steps to take place, as set out in the CAA's consultation[9]; we acknowledge that **our later analysis sets out information that would suggest the 2022 holding cap should be set at a significantly lower level**

2.2. The significant divergence in views as to an appropriate holding cap need to be resolved and a decision must be taken as soon as possible to ensure sufficient controls are in place pending the outcome of the final H7 proposals; **the price control condition must have effect from 1st January 2022 regardless of implementation date**, and be backdated as a result

2.3. Any further delay by another consultation would **lead to a delay to the implementation of any licence modification**

[6] CAP2265E H7 Initial Proposals, Appendices, para C7
[7] Ibid.
[8] Civil Aviation Act 2012, Section 22, Modifying licence conditions and licence area
[9] CAP2265E H7 Initial Proposals, Appendices, appendix C

2.4. The **CAA would therefore be well advised to consider the effect of any further delay to implementing a 2022 holding cap**, also taking into account that a decision may be appealed thus further delaying the coming into force of any modification.[10]

2.5. Key to this process is the need to minimise adverse impacts on customers and in particular ensuring they are **protected from 1st January 2022 through provisions that prevent Heathrow from imposing excessively high charges**, and "engage in conduct that amounts to an abuse of substantial market power"[11]

In summary: This licence modification process is the appropriate means for implementing a price cap condition on HAL and should be resolved as a matter of urgency, without further delay, to avoid a scenario whereby there is no price control on HAL and significant impact on customers.

3. Heathrow's 2022 rate card

3.1. **Heathrow has a clear statutory obligation to consult annually on airport charges, as set out in ACR2011[12]. However, the consultation process deployed by Heathrow to date has been meaningless** given its insistence on basing the consultation solely on a 2022 charge of £37.60, and structuring charges around this number.

3.2. Not only is this number without foundation, basis or support in economic regulation, its size made it **near impossible to assess the effect of its structure of charges on our business as a result**. Adding to this, HAL has claimed exceptional circumstances to avoid fulfilling its obligations to actually publish a rate card for 2022

3.3. As a result, **no information is available to airlines to update the appropriate Passenger Service Charge ("PSC") applied to advance ticket sales for travel in 2022**; furthermore, Heathrow has suggested that it will not publish a 2022 rate card until the completion of this CAA consultation process

3.4. As a result of collecting an incorrect PSC – based upon the difference between that levied today and possible structure based upon Heathrow's September consultation but at the level of the CAA's £29.50 holding cap – **airlines could face shortfalls of hundreds of millions in PSC not collected**

3.5. To levy Heathrow's charges that were not published at the time of booking would be costly, time consuming and confusing for customers; as a result, changes in charges would be unlikely to be collected, and **this would further weigh down airline finances as a result of Heathrow's clear desire to avoid public scrutiny of its proposed levels of PSC**

[10] As set out in Civil Aviation Act 2012, Schedule 2, section 13
[11] Civil Aviation Act 2012, Section 18, Licence conditions
[12] Airport Charges Regulations 2011, Annual consultations

3.6. **Airlines are already liable for all movement, parking and noise-based charges**, yet this failure by Heathrow is an attempt to make airlines financially responsible for a portion of charges that should normally be collected through PSC based upon an appropriate rate card that would normally be published in the preceding October

3.7. **It does not financially harm Heathrow not to publish a new rate card for 2022**; given that PSC is collected by airlines at point of sale but paid to Heathrow upon completion of travel. Heathrow faces zero financial risk as a result from its decision not to publish a 2022 rate card

3.8. At the date of submission of this response, **British Airways is selling tickets through 6th November 2022,** and as a direct result of Heathrow's failure to publish a 2022 rate card, is uncertain whether it is collecting the appropriate PSC ticket charge for all tickets currently being sold; the financial implications for airlines increase with every sale based upon an unknown difference between the PSC of today and 2022

3.9. Since Heathrow would normally have published the rate card for the following year by October 31st, this allows airlines to update charges and collect the correct PSC ticket charge for future sales well in advance of when ticket sales are likely to be made; Heathrow's strategy of hiding behind the "exceptional circumstances" process is a **blatant attempt to prevent a likely a consumer backlash against its exorbitant airport charges and its proposed 2022 PSC charges**

3.10. This is to the detriment of consumers who should neither be paying a PSC based upon an inflated charge, nor one artificially elevated through Heathrow's attempted brinksmanship with airlines and their delicate financial position. **This is another clear demonstration of Heathrow's abuse of its monopoly market power and further underpins the importance of implementing a suitable holding cap pending the outcome of H7 so as to avoid the risk of further conduct by HAL that amounts to abuse of substantial market power. Failure to do so would be contrary to CAA12 and ACR2011.**

4. Basis of 2022 holding cap

4.1. While we agree with the CAA's proposal to implement a 2022 holding cap for the reasons stated above, our analysis shows that the basis of the proposed holding cap is flawed and **raises serious questions about the process adopted to scrutinise and evaluate Heathrow's business plans, draw independent conclusions**, and implement an appropriate airport charge

4.2. **It was our understanding that the CAA's H7 Initial Proposals would be implemented as the basis of the 2022 holding cap**, a position that did not appear unreasonable considering the many issues that had been highlighted by the CAA with Heathrow's various business plans in previous consultations, and the intent of the CAA to engage consultants to develop its own projections as a result

4.3. Given the lack of transparency in Heathrow's business plans, it is **unreasonable for the regulated company's lobbying position as any basis of an actual charge**, even if only used for a holding cap that will ultimately be reconciled with the CAA's Final Proposals, and this was never raised as a consideration by the CAA prior to publication of the H7 Initial Proposals – proposals that have been redefined in a manner that has caused them to result in an inflated range and 2022 holding cap

4.4. Having established gross inadequacies in Heathrow's business plans, it would seem irrational that the CAA should partly rely Heathrow's RBP update numbers in any form; given the **commitment in its own process to develop its own forecasts** for both operating costs and commercial revenues, the CAA's Initial Proposals should sit independently of Heathrow's proposals

4.5. **Heathrow is already, by far, the world's most expensive airport for airlines and consumers**; using analysis from ✂[13], our calculations are that Heathrow's charges are already 44% more expensive than the most expensive comparable European hub

4.6. At the top end of the CAA's range of £24.53 to £34.41 (in 2020 prices), this represents a **near 80% increase in airport charges paid by airlines and consumers** compared to the £19.36 levied in 2021, and a near 50% increase above the 2021 price cap before capital rebates and k-factor adjustments

4.7. We strongly believe that increases in airport charges to this extent will significantly damage the post pandemic recovery of the aviation sector and will have material downside impact on capacity available in the short term, particularly when airlines have been discounting fares to stimulate demand; **the best way to protect the recovery is to lower airport charges to the benefit of consumers, as opposed to inflating them to the benefit of Heathrow's shareholders.** It would also fail to ensure economies and efficiencies on behalf of HAL.

4.8. CAA's duty under the Act as independent regulator, and the purpose of economic regulation, is to prevent operators with substantial market power from abusing their dominant market positions and levying inflated charge to protects consumers; without being based upon the CAA's independent analysis, **the proposed £29.50 holding cap is an inappropriate charge that is not in the consumer interest due to the potential overcollection that will result**, as set out in our later analysis

4.9. The development of a range that incorporates Heathrow's discredited business plans, and the selection of the midpoint of that range as an arbitrary holding cap for 2022 gives **the impression that £29.50 has been selected as the least unpalatable number for all parties that the CAA could propose**; however, the fact that this number does not have an analytical fact base supported by the work of the CAA and its advisors means that it cannot be acceptable as a holding cap as it fails to fulfil the requirements of CAA12

13 ✂

4.10. The CAA's role is not to stakeholder manage through H7 Initial Proposals, but rather to use facts, data and supporting materials available to it to make the best possible decision in the interest of consumers; the **proposed £29.50 holding cap does more for the interests of Heathrow's shareholders than it does for UK consumers and is therefore inconsistent with the CAA's overarching duty to carry out its functions under the Act in a manner that will further the interests of users of airport transport services**. We urge the CAA to revisit its proposal based on the evidence we set out below

4.11. We will respond more thoroughly to the CAA's H7 Initial Proposals in our December submission to this consultation but should be clear that **the range for the H7 Initial Proposals and proposed 2022 holding cap should be revised materially downward to reflect the evidence and analysis**; the evidence presented within this response demonstrates why this is clearly the case.

In summary: The basis for the proposed holding cap, including consideration of a range, is flawed. It is based on inaccurate evidence and data sets and the CAA has failed to take into account all relevant information, evidence and materials as demonstrated throughout this response.

5. Setting an unnecessarily high holding cap impacts Britain's competitiveness

5.1. As has been set out throughout this submission, **there are many aspects of the detailed analysis that demonstrate that the 2022 holding price cap should be set lower than the CAA's Initial Proposals** – and indeed should be reduced from today's position

5.2. British Airways believes that there are **significant risks, importantly not just to its own business, but also to the health of the overall UK aviation sector**, from setting a price cap too high

5.3. As set out in the previous section, **Heathrow is already the most expensive hub airport in the world**[14] and increasing charges further will only make the UK a less competitive place to do business

5.4. **British Airways has to price to the market in the competitive environment in which it operates at Heathrow** alongside over 80 other airlines, in addition to European carriers that are competing for the same customers connecting through their own network hubs

5.5. Higher airport charges result in reduced margins for British Airways and lower profitability (at a time when the airline is recovering from multi-billion pound

[14] ✄

losses); in turn **this means less choice for consumers as we could be forced to consider reducing capacity or frequency in response** to excessive cost increases

5.6. Operating fewer services could allow British Airways to maintain its network breadth overall and consolidate costs into fewer flights, but **frequency provides a significant consumer benefit which we want to supply to meet our customers' needs** but also need to supply in response to the market

5.7. Such **choice is of particular benefit to business travellers** who need not just flexibility but often also want the ability to travel without requiring an overnight stay, **although it is also important to leisure travellers** seeking a choice of departure and arrival times, especially if they are travelling by surface transport from further away in the UK or connecting from other UK airports

5.8. Similarly, **reducing capacity by operating smaller aircraft can reduce choice**, including if we are forced to reduce the number of cabins and types of ticket available to compensate for increased costs

5.9. **There is a risk that domestic connections would be particularly affected by increases in costs**, since the increases proposed by HAL and by the CAA Initial Proposals tend to represent a larger proportion of the fare; a simple review of available fares shows that it could result in an increase of between 20% and 30% on many of the fares available online[15] over the next two weeks for flights to Belfast or Glasgow and Edinburgh

5.10. While threats to domestic connections are concerning, **the greatest risk from even higher prices at Heathrow is to the UK's international hub connectivity**; as the CAA understands, hub and spoke operations allow airlines to offer greater numbers of destinations and frequency by combining point to point traffic with connecting traffic to give sufficient numbers of passengers to make routes viable and to start new routes

5.11. IATA's, recent Hub Connectivity report showed that in 2019, London was the most connected city in the world; **this connectivity is dependent on there being a range of destinations and frequency**, which in considerable part are provided at Heathrow by British Airways

5.12. However, **the UK's aviation recovery has been slower than at other European hubs due to government restrictions that are now finally being eased**; as a result, Heathrow had fallen from the number one ranked airport by flights in Europe in 2019 to number six in Eurocontrol's rankings[16]

5.13. British Airways aims to win back connecting traffic, but faces a **challenge when other European hubs can offer more a more compelling proposition through competing hub airlines due to lower airport charges;** a further increase in charges

[15] BA.com visited 16th November 2021
[16] Eurocontrol Comprehensive Assessment 11 Nov 2021

at Heathrow simply makes this task harder by increasing operating costs for British Airways in a way not seen at those alternative hubs in particular in Frankfurt, Amsterdam and Paris, but also in the Middle East for long haul connections

5.14. This **impact is likely to be exacerbated by the fact that connecting journey fares are usually lower than direct services** as customers trade off travel options, and as a result, any cost increase represent a greater proportion of revenues, which will have immediate and obvious impact on British Airways' financial results

5.15. **The overall impact of reduced hub connectivity is to make routes that rely on connecting traffic less viable and new routes harder to establish;** British Airways is keen to play its part in connecting Britain to new trade partners and vital international markets for UK consumers, whether for business or leisure

5.16. However, increased charges affect the profitability of new routes and compromise our ability to introduce a new spoke on the network, which will take even longer to establish than it might otherwise; as a result, **airline networks at Heathrow risk becoming more concentrated, focussed on established routes where returns are more certain**

5.17. This **lack of competitiveness risks economic damage to the UK** not just to its home airlines; British Airways has previously demonstrated to the competition authorities that each aircraft based at Heathrow supports 300 jobs in the aviation industry, but if Heathrow loses hub connectivity and becomes only the end point of flights serving other hubs, it risks those aircraft and associated jobs moving to hubs elsewhere

5.18. The **potential downside risk is worsened when the downstream impacts of aviation are considered**; ICAO reports that for every direct job in aviation another 5.4 are created through indirect, induced and catalytic (including in tourism) activity[17]

5.19. **Heathrow's proposed price increases are not simply a risk to one company in British Airways but to the strength of the UK as an international trading nation; a**s ICAO states, there is increasing evidence that air connectivity growth stimulates productivity, research and development (R&D), foreign direct investment and fosters trade specialization[18]

5.20. The **opportunities generated from these activities provide UK consumers with wider benefits beyond travel**, in contrast, weakening them means less connectivity and fewer consumer benefits

In summary: Implementing a holding cap that is too high risks significantly undermining the financeability of airlines and risks airlines having to make

[17] ICAO Aviation Benefits Report 2019

[18] *Ibid*, p. 13

significant changes to their air transport services contrary to the interests of customers.

6. Reconciliation of 2022 holding cap

6.1. While we welcome in principle the CAA's proposal to implement a 2022 holding cap, we believe that it is critical that such **holding cap should be in place no longer than is absolutely necessary**, and CAA should take all necessary action to ensure that Heathrow rapidly implements the CAA's H7 Final Determinations at the appropriate time

6.2. As previously noted, we are clear in our belief that it is in the consumer interest that **the 2022 holding charge should be revised materially downward to reflect the evidence and analysis**, resulting in the lowest possible charge

6.3. Should the 2022 holding cap be set unnecessarily high, and the charge be modified downwards in CAA's Final Determinations – as we expect based on the evidence available to us and shared here with the CAA – then **consumers and airlines will be burdened with both financing Heathrow's operations without any return – financial or otherwise – and subsidising future customers' use of airport infrastructure**

6.4. Conversely, **Heathrow faces no financial risk as a result of setting the 2022 holding charge unnecessarily high**; in fact, Heathrow is invested in ensuring that the 2022 holding cap is set at the highest possible level to maximise short term cashflow, and has no concerns with consumers taking on this obligation that would otherwise be held by its shareholders

6.5. That said, **we recognise that there needs to be methodology to reconcile any over or under collection of charges** as a result of the implementation of the 2022 holding cap

6.6. We **do not believe that it is appropriate for any reconciliation of over collection of charges by Heathrow be only returned to consumers using the k-factor (i.e. n+2)** mechanism, as to do so would again result in consumers financing Heathrow's operations through an interest free loan for 2 years; Heathrow should not be permitted to hold excess funds any longer than is absolutely necessary

6.7. Further, **we are concerned that a material change in the charge (as compared to the 2022 holding cap) could result in significant single year variation** in the charge in 2024, resulting in consumers today essentially funding the use of airport infrastructure in the future

6.8. Indeed, this risk has been identified by the CAA already, as noted by the observation that, "**present consumers could experience materially higher charges**

while future consumers somewhat lower charges because of the impact of any "truing up" arrangements"[19]

6.9. Instead, we propose that – having set the 2022 holding cap at the correct level based upon our analysis below – **any reconciliation of over collection of charges by Heathrow should be solved in-year; should this prove impractical, it could instead be solved by a downward profiling adjustment to the price path of future charges over the remainder of the price period**

6.10. We believe that **this solution ensures that consumers will equally benefit from the return of any excess funds**, lowering those in all future years of the price period, and absorbing the reconciliation more optimally and equitably than is possible by using the k-factor

6.11. This solution **would not only have no detrimental effect on Heathrow's financeability in 2022, but would enhance it over the course of H7**

In summary: As is evident from this consultation response, the proposed holding cap is too high and risks a significant over-recovery by HAL that will ultimately require truing up. It is inappropriate to place this burden solely on airlines and customers. Reducing the proposed holding cap will reduce the risk of significant over-recovery while also spreading the risk and burden of any over or under recovery more appropriately amongst HAL and the airlines, and place both parties in a fairer position when it comes to reconciling any interim charges against the Final Proposals.

7. The calculation of the CAA range for H7 Initial Proposals

7.1. The **CAA commissioned CEPA and Taylor Airey ("CTA") to perform an assessment of Heathrow's operating costs and commercial revenues** by "reviewing HAL's forecasts and gathering relevant evidence (such as comparators and benchmarks) to support the assessment"[20]

7.2. This assessment is described further, where **CTA "relied mainly on HAL's top-down forecasting approach to develop an independent view of opex and commercial revenue** but, where appropriate, made an independent assessment of the key assumptions driving the forecasts"[21]

7.3. Having taken this approach, it is **unclear why the CAA has allowed its initial proposals to be unduly influenced by Heathrow's RBP update through the development of a range** based upon two scenarios: "HAL's updated RBP

[19] CAP2265E H7 Initial Proposals, Appendices, para C7
[20] CAP2265A H7 Initial Proposals - Summary, para 59
[21] Ibid.

projections (scaled to CAA passenger forecasts) define one end of the range and CEPA/Taylor Airey's mid case the other"[22]

7.4. In April 2017, the CAA set out its business plan guidance for Heathrow stating "forecast costs should combine the evaluation of past performance with realistic assumptions about the scope for increased efficiency in the future"; this continues "where practicable **costs should be market-tested or benchmarked, and baseline assumptions clearly explained**"[23]

7.5. The CAA additionally stated in the same publication that "business plans should be high-quality, clear, robust, and well justified by supporting evidence"[24]; nevertheless, **Heathrow developed an Initial Business Plan ("IBP") that failed to take this guidance into account**

7.6. **Heathrow claimed in its IBP that it had produced "a robust and detailed evidence base** to produce an elasticity which links a change in passenger volumes to a change in total operating costs both in the short and long run"[25]

7.7. The **CAA noted that this approach was a deviation from that used for Q6**, as Heathrow had used "a "top-down" forecasting method for opex and commercial revenues which projected opex and revenues forward from a base year using estimated elasticities for passenger growth, rather than the "bottom up" approach used for the Q6 price control"[26]

7.8. Having failed to deliver an IBP in accordance with its guidance, the CAA then set expectations for Heathrow's subsequent business plans, which noted that "**we expect that opex forecasts for H7 should be capable of reflecting significant changes in the levels of staff between terminals and activities**"[27]

7.9. Furthermore, the CAA noted that "HAL's Regulatory Accounts include opex at a more disaggregated level than in the IBP", and **therefore required "the RBP, therefore, to contain opex estimates for each planning scenario at a level of detail that facilitates understanding of changes in relevant activities**, and supports the objectives and principles above"[28]

7.10. The CAA therefore set out guidance to Heathrow that "HAL's approach to planning for costs and revenues should be integrated and closely linked to passenger volume scenarios" such that "the RBP should provide scenario-based estimates for traffic, costs and revenues **at a suitable level of disaggregation such**

[22] CAP2265A H7 Initial Proposals - Summary, para 60
[23] CAP1540 Guidance for Heathrow Airport Limited in preparing its business plans for the H7 price control, Table 1: Business Plan Criteria
[24] Ibid, para 10
[25] Heathrow Initial Business Plan – detailed plan, December 2019, p216
[26] CAP1940 Economic regulation of Heathrow: policy update and consultation, para 2.6
[27] CAP1940 Economic regulation of Heathrow: policy update and consultation, para 2.19
[28] Ibid.

that the estimates can reflect variations in demand responses and cost drivers for each scenario"[29]

7.11. This was described further in the criteria for operating expenditure and commercial revenues, that "**forecasts should be fully explained, taking account of past performance, the impact of measures to address the impact of the Covid-19 pandemic and expected operational efficiency and commercial revenue generation**"[30]

7.12. The CAA's rationale for this particular criteria was that "the **top down forecasting approach of the IBP provided limited information on actual planned work or what HAL intended to deliver** during the H7 price control period," therefore "to assess HAL's forecasts properly, we need HAL to provide more information in support of its investment plan"[31]

7.13. The CAA further state that "we consider that **disaggregated estimates of opex and commercial revenues would facilitate a more detailed understanding of HAL's forecasts**" with an example that "for opex, our assessment of staff costs would consider changes in staffing levels (including staff mix) that HAL has assumed over time."[32]

7.14. **Heathrow subsequently stonewalled this particular requirement for their Revised Business Plan ("RBP")**, stating that "our cost estimate should be considered in the context of what is a reasonable allowance for an efficient airport of Heathrow's size and characteristics, rather than a detailed bottom-up forecast of how we will run the business. Indeed, in these unprecedented times, forecasting using bottom-up detail is likely not to be the best approach to ensure an overall efficient envelope of costs is reached"[33]

7.15. This approach was echoed in its commercial revenue forecasts, in which Heathrow stated that its "H7 forecast is derived from a 2019 baseline, applying **drivers with elasticities calculated using an evidenced-based methodology**"[34]

7.16. Heathrow argues that this "**represents a change of approach from the bottom-up approach taken in Q6 but is consistent with IBP and BBU regulatory submissions**", and that "following investigation of the model, this simpler forecasting methodology for H7 allows us to forecast in a more robust way using proven drivers of commercial revenue and avoids introducing complications from the addition of spurious detail"[35]

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[29] Ibid., para 2.22
[30] Ibid., Table E.4, Criterion C16
[31] Ibid.
[32] Ibid.
[33] Heathrow Revised Business Plan – detailed plan, December 2020, p212
[34] Ibid. p301
[35] Ibid.

7.17. This may have been consistent with its previous submissions, yet was **contrary to the specific requirements of the CAA in its business plan guidance**, both in CAP1540 and reiterated in clearer terms in CAP1940, particularly in relation to the requirement for detail and evidence presented on a consistent basis that was linked clearly across its business plan[36]

7.18. The CAA subsequently assessed Heathrow's approach to its RBP, and found it only partially compliant with its business plan guidance, stating "**HAL relies on a driver-based forecasting methodology** which has been heavily challenged by airlines with a number of additional downside overlays", **where** "**Covid-19 and other large policy impacts are not fully explained**"[37]

7.19. It continued that a reconciliation between the RBP and Heathrow's Regulatory Accounts "**does not provide sufficient information to reconcile the two breakdowns of opex and commercial revenues at a granular level**", with "historical data beyond 2019 only set out in the accompanying opex and commercial revenues driver-based forecasting model"[38]

7.20. The CAA further critiques the Heathrow RBP model, noting that "HAL needs to **provide further evidence to support its assumption that its 2019 base year is efficient**", "has **not provided sufficient assurance that the adjustments that it made to the 2019 opex base year are appropriate**", "has **provided limited justification for upward cost overlays and has not provided analysis to support the adjustments** that it has proposed", and "sequencing of some of the key forecasting assumptions **could create risks of either double counting or exclusions**"[39]

7.21. Given the damning CAA conclusion that "in many areas HAL has provided insufficient evidence to justify its key forecasting assumptions and some items have not been adequately explained"[40], **it is entirely inappropriate for the CAA to rely on Heathrow's numbers in any form. Doing so fundamentally undermines the CAA's proposed modification and risks any decision taken by the CAA being unjustified, unreasonable and founded in errors of fact.**

7.22. Heathrow's forecasts for operating expenditure are simply unreasonable, as demonstrated by the CAA observation that "HAL has projected average opex per passenger in H7 of £18.21 compared to £14.51 in 2019"[41]; **this does not pass common sense analysis, particularly where opex per passenger remains above**

[36] CAP1940 Economic regulation of Heathrow: policy update and consultation, Table E.4, Criterion C16, C17 & C18
[37] CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria C16, C17 & C18
[38] Ibid.
[39] CAP2139 Consultation on the Way Forward, para 2.21
[40] Ibid. para 2.22
[41] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.15

2019 levels in 2026, despite a return of passenger volumes and significant restructuring that has taken place during the course of the pandemic

7.23. This is particularly the case where the **CAA notes its next steps will be to develop "robust projections of opex for our central passenger traffic forecast"**[42] and where "work on elasticities will be particularly important for our understanding of the relationship between passenger traffic and opex levels"[43]

7.24. The **CAA also commits where available to using "bottom-up opex analysis** to assess the appropriateness of the top-down forecasts that HAL has proposed"[44], and "**commission expert independent advice to support our assessment**"[45]

7.25. We **note that Heathrow has contended that top-down analysis is "aligned with regulatory precedent in other sectors** – other regulators such as Ofgem and Ofwat have been using this type of approach since the 1990s as they focus on benchmarking total expenditure using a top-down approach"[46]

7.26. This is **disingenuous since such approaches differ significantly across sectors**: for example, the totex-based approach in Ofwat's PR19 determinations[47] is quite unlike Heathrow's approach; more importantly, the **use of econometric modelling is better suited for use by the regulator itself when measuring efficiency performance across more than one company under its own regulatory regime**

7.27. Furthermore, **as noted by the CAA[48], Ofwat require templated tables to be completed specifying a level of detail that must be provided**; this far exceeds the information provided by Heathrow in its business plans through its top-down modelling to date[49]

7.28. Given the **comparators used by Heathrow to determine efficiency are not regulated by the same regulator, do not operate in the UK context, and have operations that diverge significantly** (dual till and inclusion of ground handing operations), we dissuade the CAA from inappropriate reliance on those datapoints

7.29. The CAA's assessment of Heathrow's commercial revenue forecasts follows a similar pattern, where they note **Heathrow "combines key revenue drivers, such as passengers and utilised terminal area, with revenue elasticities** to forecast H7 revenues"[50]

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[42] CAP2139 Consultation on the Way Forward, para 2.24
[43] Ibid. para 2.27
[44] Ibid. para 2.28
[45] Ibid. para 2.31
[46] Heathrow Initial Business Plan – Detailed Plan, December 2019, p216
[47] Ofwat: PR19 Final Determinations: Securing cost efficiency technical appendix
[48] CAP1940 Economic regulation of Heathrow: policy update and consultation, Appendix E, para 8
[49] Ofwat: Delivering Water 2020: Our methodology for the 2019 price review: Updated guidance for the final business plan data tables
[50] CAP2139 Consultation on the Way Forward, para 2.32

7.30. Similar to operating expenditure, the **CAA also notes Heathrow "uses a percentage "overlay" approach** for commercial revenue forecasts to account for impacts which cannot be accounted for in the elasticity-based approach"[51]

7.31. The CAA critique continues to note that "**certain categories of commercial revenues are not well suited to top-down analysis**" and "an example of this is retail revenue which depends on passenger mix (a bottom-up input) as well as other factors"[52]

7.32. However, most damning is the assessment that "we also note that the elasticities applied to **certain revenue drivers appear to be informed primarily by expert internal knowledge and/or judgement rather than objectively verifiable evidence**", and "for example, **the evidence to support the property revenue forecasting approach is very limited**"[53]

7.33. As a result, the CAA's conclusion is that the "overlay approach which implements a specified percentage reduction to account for potential negative impacts in H7 is also **not well supported by appropriate evidence", and "our initial assessment is that each of the proposed impacts needs to be further developed with detailed bottom-up evidence** on the relative impact of the underlying drivers"[54]

7.34. The CAA then commits to "**developing robust projections of commercial revenues for our central passenger traffic forecast**"[55], "considering any adjustments/normalisations for our Initial Proposals"[56] for the 2019 base year, "bottom-up analysis where practicable and appropriate (including building on relevant analysis by the airlines) to complement the work on elasticities"[57]

7.35. In doing so, the CAA notes that "we intend to commission expert independent advice to support our assessment"[58] and crucially that **whilst there is uncertainty in forecasting, "uncertainty can be partly mitigated in the risk sharing approach**"[59]

7.36. Having judged Heathrow's operating expenditure and commercial revenue forecasts not to have met the CAA's business plan requirements, combined with a lack of detail or any substantive evidence base, **it is inappropriate for the CAA to then use Heathrow's RBP update in any form for Initial Proposals**, ultimately raising the level of the 2022 holding cap above the CTA analysis commissioned by the CAA

[51] Ibid. para 2.32
[52] Ibid. para 2.37
[53] Ibid. para 2.37
[54] Ibid. para 2.38
[55] Ibid. para 2.43
[56] Ibid. para 2.45
[57] Ibid. para 2.45
[58] Ibid. para 2.48
[59] Ibid. para 2.49

7.37. **Heathrow's RBP update forecasts show little change in this approach, and fail a simple gross error check for reasonableness**; as noted by the CAA, "over the course of the H7 period, HAL is projecting that opex will increase in each year from 2021 and return close to 2019 levels by 2026, despite passenger numbers in HAL's modelling being lower than in 2019"[60]

7.38. **This failure to meet a reasonableness test is mirrored in its RBP update forecasts for commercial revenues**, which "translates into projected average commercial and cargo revenue per passenger in H7 of £9.75 compared to £12.12 in 2019"[61]; this is despite evidence ✄ that pre passenger commercial revenues remain at similar or higher levels to those prior to Covid

7.39. Given the lack of transparency and therefore credibility in Heathrow's business plan, it is **unreasonable for the regulated company's lobbying position as any basis of an actual charge**, even if only used for a holding cap that will ultimately be reconciled with the CAA's Final Determinations

7.40. Having identified these significant shortcomings in Heathrow's various business plans, it is unreasonable for the CAA to not follow its own advisors' preliminary analysis; this is **particularly the case as CTA use Heathrow's figures and elasticities as holding numbers for particular line items where they have yet to find appropriate evidence** to develop their own forecasts

7.41. Whilst we recognise that CTA have had limited direct engagement with Heathrow, and expect more detailed engagement is to follow, the CTA analysis remains valid based upon the information provided by Heathrow; it **would be an entirely inappropriate regulatory outcome if Heathrow were to avoid appropriate price controls being placed upon it through intransigence and failure to disclose appropriate information**

7.42. This is **highlighted further by the CAA's assessment of compliance with scenarios, which are particularly relevant to assessment of operating costs and commercial revenues**, especially where significant elements of infrastructure might be non-operational, and was a key requirement set out in the CAA's business plan guidance

7.43. The CAA's guidance to Heathrow required it to "**link revenues and costs clearly to recovery scenarios for passenger numbers, taking account of recent developments** including, in particular, the impact of the Covid-19 pandemic"[62]

7.44. However, the **resulting RBP fell short of this requirement, and was judged non-compliant**, since "the traffic scenarios HAL has developed (low, mid, and high) are

[60] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.16
[61] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 5.26
[62] CAP1940 Economic regulation of Heathrow: policy update and consultation, Appendix E, para 11, criterion C02

not well integrated across the plan", and "they do not clearly drive differences in scenarios across the building blocks"[63]

7.45. The CAA assessment further concluded that "it is not clear how the traffic scenarios are integrated with the opex, capex and commercial revenue forecasts", and "furthermore, there is **no evidence of disaggregation into markets where appropriate (e.g. Commercial Revenues).**"[64]

7.46. Having established these gross inadequacies, it is unreasonable that the CAA should partly rely on Heathrow's RBP update numbers in any form; given the **commitment in its own process to develop its own forecasts** for both operating costs and commercial revenues, the CAA should rely upon the forecasts developed by CTA, **since this analysis removes biases introduced by Heathrow, and revises the forecasts where evidenced analysis is available**

7.47. Given the lack of objective evidence presented to support many of its contentions, and given CTA strip out subjectivity (but on a conservative basis, and only where evidence allows), the **Initial Proposals can only be robust where CTA's initial work is used as a basis for the holding cap**

7.48. Furthermore, the **application and use of an upper and lower quartile to that range remove transparency from the Initial Proposals (contrary to the principles of section 1(4) of the Act regarding regulated activities)**, as the underlying calculation of that range and the scaling of the parameters is entirely unclear between Heathrow's RBP update and the CTA analysis at the CAA midpoint passenger numbers

7.49. This is particularly the case as Heathrow's RBP update position appear to have been inferred due to the use of different passenger forecasts by the CAA; the **"ceiling" of the range does not therefore appear to be a direct output of Heathrow's RBP update position but a CAA interpretation**, which introduces further subjectivity and potential for error to the calculation of this range

7.50. This is compounded by the presentation of analysis in 2020 CPI-deflated prices, whereas both the CAA's Price Control Model ("PCM") and the CTA model that supports its analysis of operating costs and commercial revenues operate in 2018 RPI-deflated prices; whilst there may be good reason for doing so, **the inadvertent effect has been to obscure the mechanics behind the calculation of the range**

7.51. We therefore **ask the CAA rely on its own analysis and that of its advisors to form the basis of the 2022 holding cap**; whilst there is more work for CTA to perform, it is abundantly clear that its analysis has been conservative; this is particularly the case since where an evidence base has not yet been established, Heathrow's numbers remain in place as a holding position

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[63] CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria C02
[64] Ibid.

7.52. **Only by doing this can an appropriate, evidence-based incentive for the 2022 holding cap be implemented;** without this, the CAA will have artificially skewed its own analysis and created a material cashflow disadvantage to consumers whilst allowing a material cashflow advantage to Heathrow and its shareholders until the holding cap is reconciled with Final Determinations, and risk undermining its own process as a result

7.53. As noted by the CAA, "an **appropriate allowance for opex furthers the interests of consumers by ensuring that airport charges are calculated by reference only to an efficient level of costs**"[65]

7.54. The CAA's range of £24.53 to £34.41 in 2020 prices is therefore the wrong starting point for determining an appropriate range for H7 Initial Proposals; the **CAA's range should not be based upon the regulated company's lobbying position, but centred around the CTA analysis** (at appropriate passenger volume forecasts), which fulfils the duties of CAA12 to base economic regulation upon efficient costs

7.55. This is reinforced by the Explanatory Notes to CAA12, which state that "the CAA **would not be required to adjust regulatory decisions** in order to take account of an operator's particular financing arrangements **or put the interests of users at risk by making them pay for an inefficient operator's financing decisions**"[66]

7.56. This is reiterated by the observation that "the requirement to have regard to those needs reflects the fact that **the ultimate aim of economic regulation is, as far as is possible, to replicate the outcomes of a competitive market**"[67]

7.57. In our view, the CAA's use of £29.50, being the midpoint of this skewed range, as the 2022 holding cap fails to satisfy these requirements of CAA12, and **we therefore propose that this range should be recalculated to remove the effect of Heathrow's RBP update**

7.58. In subsequent sections, we set out our arguments that this **range should then be further updated to reflect realistic passenger forecasts for 2022 that should feasibly have been considered at Initial Proposals** given the mid-October release

7.59. Finally we also propose a revised range for the weighted average cost of capital ("WACC"), which at present **does not reflect the risk environment proposed for H7, particularly the inclusion of a Traffic Risk Sharing ("TRS") scheme** that significantly reduces Heathrow's risk exposure

In summary: The CAA's range of £24.53 to £34.41 in 2020 prices is the wrong starting point for determining an appropriate range for H7 Initial Proposals. It is

[65] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.2
[66] Civil Aviation Act 2012, Explanatory Notes to Section 1, para 36a
[67] Ibid.

based on inappropriate evidence and data sets prepared by HAL and fails to take into account independent analysis prepared by CTA (as to appropriate passenger volume forecasts etc.). Any decision taken on the basis of this information will be fundamentally flawed and will fail to meet the requirements of the Act to base economic regulation upon efficient and economic costs

8. Updating the PCM to incorporate the CTA analysis

8.1. The CTA analysis has been modelled based upon the report[68] that is set out as part of the CAA's H7 Initial Proposals; we have been separately provided with the model, which **sets out transparently the alterations that have been made to Heathrow's RBP update to arrive at the CTA proposals** for operating costs and commercial revenues

8.2. We have therefore **used the output from the CTA model at the CAA mid passenger volume, and used this as the input to the CAA's PCM** (whose inputs are in 2018 RPI real prices); using the same flat profiling of charges across the H7 period as the CAA, we have recalculated a range at both a 3.6% and 5.6% vanilla, real WACC

8.3. This is **to ensure that we provide a like for like comparison with the same WACC range and passenger volumes as the CAA Initial Proposals**; note that we subsequently make alterations to other parameters in the sections below to introduce more appropriate passenger forecasts for the H7 period

Table 1: CTA analysis at CAA mid passenger numbers

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

Scenario 2: CAA Mid passenger growth

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

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

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

8.4. The output of this analysis suggests that the **CAA's greatest possible range for H7 Initial Proposals should have been no more than £20.85 to £26.97 in 2020 prices, suggesting a midpoint of £23.91**; this reveals the true output of the analysis of Heathrow's efficient cost base and revenue generation potential, albeit at an artificially lower passenger forecast, which we consider in a later section

8.5. The **effect of the CAA's proposed £29.50 holding cap vs the £23.91 is a £255m revenue overcollection in 2022** if applied to the CAA's 45.62m 2022 passenger forecast; having shown that the CTA analysis represents efficient operating expenditure and commercial revenue generation, this would result in an inefficient airport charge for the 2022 holding cap

8.6. The output of the CAA's PCM is as follows, calculated using the same real, vanilla WACC at 3.6% and 5.6%, calculated **using the same upper and lower bound gearing, cost of equity and cost of debt inputs used by the CAA** within the PCM to develop its H7 Initial Proposals; neither these nor any other parameters have been altered

8.7. This **revised range is ultimately the output of the CAA's own advisors' analysis** with the CAA's upper and lower bound WACC applied; this is a credible starting range for H7 Initial Proposals based upon transparent and evidence-based analysis where it is available (as is required by the Act)

Table 2: 3.6% real, vanilla WACC

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

Table 3: 5.6% real, vanilla WACC

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

8.8. We consider the CTA analysis further in the section below, but **struggle to see how any input other than that from the CTA model could be considered appropriate for the H7 Initial Proposals**, and ultimately the 2022 holding cap

8.9. This analysis clearly needs development for Final Proposals to remove Heathrow's holding numbers from some line items, but **given the inappropriate positions taken by Heathrow in all its business plans**, including the RBP update, can only see additional analysis further reducing the airport charge below the level we have calculated

8.10. Furthermore, we have analysed financeability of the notional company within the PCM model based upon these changes; intuitively, **if operating costs and commercial revenues are set correctly as part of the price control, then varying them to reflect concrete analysis does not change the conclusions of any financeability analysis**

8.11. Indeed, **our analysis of the key outputs of the PCM for both debt and equity financeability show no change to key metrics used by the CAA to determine financeability**; we reiterate that CAA12 only requires the CAA to have regard to financeability[69] in a manner that is consistent with furthering the interests of consumers[70], represented by the notional company

8.12. We highlight also that ✄, which will have the impact of significantly reducing actual ✄ costs in 2022 to near zero

[69] Civil Aviation Act 2012, Section 1, CAA's General Duty
[70] As explained by the CAA in CAP2265C H7 Initial Proposals: Section 2: Financial issues, para 11.3

8.13. Furthermore, ✄; **it would be disappointing if the CAA had been persuaded of some real cashflow requirement in 2022 that neither existed in reality, nor was based upon the CAA's own analysis** when developing the range for H7 Initial Proposals, skewing it upward by Heathrow's RBP update as a result

8.14. The CAA PCM fundamentally demonstrates that the notional company is financeable using operating expenditure and commercial revenues derived from the CTA analysis; **the CAA owes no duty to Heathrow's real financing position and even if the 2022 holding cap is fully reconciled in some form through the H7 Final Determinations, this still results in an artificially-engineered cashflow advantage** to Heathrow that is not warranted by the economic fundamentals and building blocks of regulation

9. CTA approach

9.1. The **CTA analysis of operating costs and commercial revenues is an appropriate first step for the H7 Initial Proposals**; it has built upon Heathrow's top-down methodology using a similar approach to Heathrow, and considered scenarios based upon appropriate drivers of the business

9.2. Clearly, **this is only the first step to determining the appropriateness of Heathrow's various business plans**, and we have a reasonable expectation that H7 Final Proposals will ultimately use "bottom-up opex analysis to assess the appropriateness of the top-down forecasts that HAL has proposed"[71]

9.3. It is crucial to note that **CTA state that for their analysis, "we have attempted to produce a balanced set of forecasts not relying too much an overly optimistic or overly conservative assumptions**", and that "we have also attempted to make our efficiency challenges credible and deliverable within the timeframe available to HAL"[72]; this **further reinforces its credibility as the basis for H7 Initial Proposals**

9.4. Furthermore, as recognised by CTA, inherent uncertainty will be managed through other mechanisms across the H7 price control, including the proposed TRS; **there is therefore no need to duplicate the effect of such mechanisms by artificially raising the range for H7 Initial Proposals towards Heathrow's RBP update figures**, ultimately unnecessarily raising the level of the 2022 holding cap

9.5. The **CTA analysis for operating expenditure has been developed specifically** to "develop an alternative set of assumptions **to derive a view of the efficient level of opex for HAL over the H7 period**"[73]

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[71] Ibid. para 2.28

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

[73] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.26

9.6. This is **complemented by the work in commercial revenues**, where "CEPA/Taylor Airey scrutinised the evidence base underpinning HAL's key forecasting assumptions and presented alternative assumptions **to propose a view of the efficient level of commercial revenues for the H7 period**"[74]

9.7. Whilst we will comment further on the CTA analysis as part of our response to the H7 Initial Proposals, **we set some relevant views of their analysis within each section below, particularly where it is relevant to demonstrating why Heathrow's RBP update numbers are an inappropriate basis for the CAA's H7 Initial Proposals**

10. Operating expenditure

10.1. Heathrow's forecasting approach is one that is likely to lead to operating expenditure being over-stated and an unreasonably large allowance resulting; CTA has disaggregated the steps taken by Heathrow, but **whilst taking a similar top-down approach, have identified a number of issues with Heathrow's evidence**

10.2. For example, CTA state that "we have **identified a number of issues with the evidence HAL has provided around the efficiency of the 2019 base**", and "the logic underpinning the inclusion of overlays is not provided and the evidence around the size of overlays requested is not always sufficiently substantiated"[75]

10.3. CTA go on to say, "each overlay takes away from the relatively simple forecasting approach originally adopted", and "**a more robust, transparent approach would have been to do a full bottom-up assessment**"[76]; this is particularly the case "where, for certain categories of cost or revenue that are affected by substantial step changes, the costs/revenues are built up based on the new operating structure"[77]

10.4. We are **pleased that the CTA analysis has started to unpick some of the major issues we saw with Heathrow's operating expenditure forecast**, in particular the efficiency of 2019 as a base year for the analysis; this demonstrates on a like for like basis "that HAL's opex would be £801m lower than HAL's forecast, a difference of around 13%"[78]

10.5. We **therefore welcome the CTA analysis**, and agree that cost inflation should increase with CPI rather than RPI, that Heathrow's 2019 performance did not represent frontier efficiency, and **agree that pandemic response efficiencies will carry forward** – particularly organisational changes and contract revisions

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[74] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 5.31
[75] CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p46
[76] CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p47
[77] Ibid.
[78] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.29

10.6. Furthermore, there is no justification for efficiency being linked to the size of the capital plan, and are **pleased that CTA has developed detailed modelling of staff costs** since Heathrow's elasticities were not supported by the evidence

10.7. Finally, we **welcome the modifications to cost overlays to remove the effect where there was insufficient evidence to support those additional costs**, or that they were accounted for elsewhere in Heathrow's plans

10.8. **CTA's changes are evidence-based yet remain conservative where insufficient information exists**; for example, adjustments related to expansion have raised concerns over the lack of clarity in their treatment, where "accounts may disguise inconsistencies or double counting"[79], though pending further assessment, the adjustment is retained in line with Heathrow's proposals

10.9. Given these modification and that Heathrow's disclosures remain both deliberately opaque and subjective, **we are unclear what the CAA's justification is for creating "a "ceiling" of the opex estimates from HAL's updated RBP**, scaled to CAA "mid case" passenger forecasts", **and "a "floor" of the CEPA/Taylor Airey "mid case" scenario**"[80]

10.10. Given the conservative yet robust nature of t**he CTA analysis, this is entirely reasonable as an initial midpoint for analysis**, particularly given the clear omissions from the operating expenditure position in Heathrow's RBP update that CTA are clearly unable to rely upon

10.11. This is particularly in light of the fact that **employee costs disclosed under regulatory accounts are inflated by 7.5% due to the employment of all staff through a Shared Services Agreement with LHR Airports Ltd**[81], an entity which ultimately falls under the Group of companies controlled by FGP Topco Ltd; we raised this matter in our response to CAP2139[82] but cannot see that this has been yet been definitively addressed in the H7 Initial Proposals

10.12. We **estimate that this could amount to an annual over-statement of operating costs of £27.1m in Heathrow's regulatory business plans** based upon the £388m employee costs consolidated at FGP Topco Ltd[83], though this will depend on the specific accounting treatment and method of consolidation at Group level

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79 CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p58

80 CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 4.33

81 LHR Airports Ltd, Annual Report and Financial Statements for the year ended 31 December 2020, Accounting Policies, p25

82 British Airways response to CAP2139, para 8.19

83 FGP Topco Ltd, Annual Report and Financial Statements for the year ended 31 December 2020, Note 2: Operating Costs, p153

10.13. We therefore **ask the CAA to re-consider its methodology and rationale for the development of a range to base the H7 Initial Proposals upon a basis of evidence and fact**

11. Commercial revenues

11.1. Our **views on commercial revenues are similar to those in operating expenses, where we see forecasts from Heathrow that incorporate unevidenced and subjective views** that serve to supress forecasts and reduce revenues available to the single till for the H7 period

11.2. **For example, CTA state in relation to property revenues that "the source of the elasticity estimate is not explained**"[84], and in rail revenues that "HAL claims it would like to maintain the yield per passenger throughout the period, though separate overlays have been applied to account for reduction in yield and passenger volumes due to the pandemic and Crossrail"[85]

11.3. Although many such observations have been seen by CTA, their **analysis remains conservative for this report, and comments suggest further adjustments are necessary** that would have the effect of raising forecasts revenues further

11.4. For example, CTA state that, "HAL's inclusion of the management challenge within its retail elasticity figure creates an upward bias to the estimate of the pure retail elasticity", and "**we have not adjusted HAL's retail elasticity estimate, but we expect this may need to be reviewed for our final forecasts**"[86]

11.5. This is reflected in CTA's modelling of passenger mix in retail, replacing Heathrow's **overlay that CTA describe as introducing "evidence around geographic variation in spend per passenger is not fully consistent**"[87]

11.6. CTA's observations are consistent across categories of commercial revenue, with specific comments on parking and rental income demonstrating that Heathrow's overlays are not based upon any objective evidence; **CTA state that "we cannot determine the efficiency of HAL's proposed adjustment as there are key gaps in the logic and evidence underpinning the overlay assumptions**"[88]

11.7. **CTA have instead created a model that can "automatically adjust to changes in passenger mix assumptions**", and "to do this, we have broken retail revenue to a more granular level than is available within HAL's forecasts"[89]

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[84] CAP2266A: Review of H7 Opex and Commercial Revenues: Initial Assessment and Forecasts, CEPA Taylor Airey, October 2021, p136
[85] Ibid.
[86] Ibid. p138
[87] Ibid. p145
[88] Ibid. p161
[89] Ibid. p146

11.8. Most egregious is Heathrow's modelling of changes to the taxation regimes, where CTA state that "**no detail has been provided around the loss due to changes in passenger behaviour, and how it interacts with the store reorganisation and VAT absorption impacts**"[90]

11.9. CTA note in particular that "the multiple overlays applied to account for the direct effect on removing airside tax free shopping on retail concession income, **creates a material risk of double counting**"[91]

11.10. This lack of concrete evidence is highlighted by the observation that "it is not clear where the assumption around the loss in VAT refund income comes from – **this should be a relatively simple observation from HAL's accounting system, but in the material presented over the past year, we have been provided three different estimates**"[92]; this is a clear indication that Heathrow is avoiding disclosure

11.11. **Heathrow's estimates are not only inconsistent but lack a basis of objective evidence**; contrary to their suggestion, the CTA analysis shows that far better per passenger performance is likely over the course of H7 than is reflected in Heathrow's unevidenced business plans

11.12. In light of the CTA verdict that "key assumptions that drive the size of the adjustment have not been explained or supported by any evidence", it is therefore **entirely appropriate that CTA "propose an alternative approach"[93] as the basis of their evidenced forecasts**

11.13. We **support the adjustments made by CTA**, and agree with the application of a management stretch challenge, application of a consistent elasticity framework for changes in the taxation regime, **and explicit modelling of the impact of geographical mix on retail revenues**, taking into account varying estimated spend per passenger between market segments

11.14. Furthermore, we **agree with the use of a lower elasticity of cargo revenues compared to Heathrow's approach**, alternative mode share assumptions, and challenging Heathrow's assumption that prices on Heathrow Express might fall

11.15. We therefore **ask the CAA to re-consider its methodology and rationale for the development of a range to base the H7 Initial Proposals upon a basis of evidence and fact**

12. Passenger forecasting model

[90] Ibid. p148
[91] Ibid.
[92] Ibid.
[93] Ibid. p149

12.1. As noted by the CAA, **the "number of passengers using Heathrow airport is vital to the overall economics of the airport** and to driving the appropriate levels of operating and capital costs necessary for the effective provision of airport operating services by Heathrow"[94]

12.2. Furthermore, Heathrow's passenger forecasts have significantly outperformed assumptions made at its Q6 periodic review, falling above the CAA's forecasts by 5.2%[95] but **crucially outperforming Heathrow's own forecasts submitted at the Q6 periodic review by an even greater degree**

12.3. **In our response to the CAA's CAP2139 consultation[96], we set out a key concern over CAA's reliance upon Heathrow's passenger modelling** – albeit with modifications – to form a core part of the price control; these concerns are heightened following Heathrow's RBP update, which does not reflect recent market developments

12.4. As noted by the CAA, its CAP2139 consultation set expectations that "HAL's forecasts should evolve in response to new information on the likely course of the recovery"[97]; this was written in April 2021, yet **the core modelling for the CAA's H7 Initial Proposals are based upon dated economic forecasts from April 2021[98] that have not themselves been updated to reflect recent events**

12.5. This is contradictory, and the **CAA has restricted its room for manoeuvre through lacking the facility to independently produce forecasts** for Heathrow; we recognise that the CAA has applied adjustments to Heathrow's models and requested changes be made on its behalf[99], yet this fundamentally does not permit transparency over forecasting, **which remains under the control of Heathrow, the company that is the subject of <u>independent</u> regulation**

12.6. We remain in the position that **Heathrow continues to refuse access to its models despite the requests of the airline community**, therefore we are not in a position to assess the veracity of Heathrow's modelling methodology and remain wholly reliant on the CAA's assessment of their suitability. This behaviour is inconsistent with the principles set out in section 1(4) of the Act which recognise that regulated activities should be carried out in a way that is transparent.

12.7. We **note the CAA's comment that "the use of these models to create scenarios involves a number of difficult judgements**"[100], and whilst we note that Steer have

[94] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.1
[95] Ibid. para 2.5
[96] British Airways response to CAP2139, para 5.11
[97] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.9
[98] As noted in Heathrow Revised Business Plan – update 1, June 2021, p81
[99] As noted in CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.10
[100] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.23

reviewed the H7 models building on the Q6 methodology[101], those consultants were employed by Heathrow directly, rather than in a role to provide independent assurance over the modelling suite

12.8. Fundamentally, Heathrow's modelling has been built to support advocacy for its position at this H7 periodic review; **since the independence of such a key parameter is critical for the price control, we still question whether this approach is appropriate**, particularly where changes result in such material variances

12.9. Nevertheless, the CAA has made a number of adjustments to Heathrow's forecasting approach that attempt to remove inappropriate interventions by Heathrow that serve to depress the forecast; **we agree with the CAA that these adjustments should be made to Heathrow's forecasting approach**, but without being able to see the model, cannot conclude whether more are required

12.10. A good example of this is the asymmetric distribution adjustment; being embedded within Heathrow's model, **we cannot observe what has been done within the Monte Carlo ("MC") modelling to cause this asymmetry**, which has the effect of causing Heathrow's median that informs the P50 variable to diverge from the mode of the distribution; are there any further modelling techniques that have material effect that are not directly observable?

12.11. Aside from other limitations of MC analysis noted by Skylark[102], **this particular adjustment appears to result from Heathrow's application of scenarios**, which themselves have been assigned arbitrary weightings[103] but whose "number of outputs selected from each scenario is chosen to match the scenarios weighting"[104]

12.12. This leads to a result, where Skylark recommend that "the **CAA should consider whether the lower scenarios are weighted appropriately"[105], noting that "the CAA is reliant on HAL's outputs from the MC analysis**, which is then subject to an amendment to remove the bias introduced by the use of asymmetric variable distributions"[106]; however no proper analysis has been undertaken to ensure there are no other biases within Heathrow's modelling

12.13. **Despite the assessment from Skylark on the combining and weighting of reference scenarios – the CAA "have not made changes to this approach** and have applied it in the same way as HAL"[107], despite its influence on the final P-values; this does not support a "fair bet" as Heathrow claim, but calls into question the

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[101] As noted in footnote to CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.23

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

[103] For detailed objection, see Airline Community response to Heathrow's Revised Business Plan

[104] CAP2266D: CAA H7 Forecast Review: Final Report, October 2021

[105] Ibid.

[106] Ibid.

[107] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, para 2.43

appropriateness of the assessment and decision not to make changes, and undermines incentives by ensuring regulation guarantees easy returns

12.14. We also **remain opposed to the use of a shock factor in modelling for passenger forecasts**; we consider that this does double count risk incorporated within the asset beta of the WACC, and maintain our position that this should be removed along with the new asymmetric risk allowance; **with pandemic risks removed through a TRS, a new allowance for asymmetric risk and the shock factor, why Heathrow does not have a WACC comparable to regulated utilities**?

12.15. The CAA's advisors highlight further multiple issues with Heathrow's modelling, such as the use of a decay function overlay model; those **advisors comment that "the appropriateness of this as an overlay model adjustment is questionable**"[108], noting as we later highlight that the actual out-turn traffic data matches a different recovery scenario than has been selected by Heathrow

12.16. The same report notes that "as a result, there is an argument that **if a Eurocontrol forecast is used as a guide, the year of return levels should therefore be adjusted to 2024 to reflect the more accurate (so far) scenario, bringing it in line with the other updated forecast sources**"[109]; as a result, we have performed this simple analysis in our adjustments to the PCM that follow in the next section

12.17. The **CAA's business plan guidance to Heathrow set out a requirement for it to take account of "scenarios or forecasts of economic activity**, both for the UK economy as a whole and for the economies of the key passenger destinations served by air transport services from Heathrow"[110]

12.18. However, the CAA's assessment of the RBP update revealed only **partial compliance with these requirements, stating that "there is a lack of transparency over how HAL demand forecasts are integrated**", and "there is no evidence of disaggregation of passenger forecasts into markets where appropriate"[111]

12.19. At a simple comparison level, the CAA's revised passenger forecasts – themselves an update of Heathrow's modelling – show the **CAA forecasts are significantly below other forecast recovery profiles in the industry**; this is particularly the case at Heathrow, at which traffic has tended to concentrate during the pandemic

12.20. As a result, the CAA's mid case analysis of 338.2m passenger risks being too low for determining an appropriate range for H7 Initial Proposals; as with operating expenditure and commercial revenues, the **CAA's forecast needs urgent updating to take account of both independent forecasts of passenger volumes and upgraded economic fundamentals**

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[108] Ibid.
[109] Ibid.
[110] CAP1940 Economic regulation of Heathrow: policy update and consultation, Table E.1
[111] CAP2139A Consultation on the Way Forward, Appendix E - Assessment of the RBP against the June 2020 Business Plan Guidance criteria

12.21. In our view, the H7 Initial Proposals and 2022 holding cap are significantly elevated as a result of depressed, erroneous passenger forecasts. Any decision taken based on those will be fundamentally flawed. **We therefore propose that the CAA's range should be further recalculated to account for the unambiguously more optimistic outlook for 2022** prevailing, based upon evidence available today

13. Updating the PCM to revise passenger forecasts

13.1. A number of independent forecasts of traffic exist, and we have developed an initial, simplistic **revision to Heathrow passenger forecasts on the basis of Eurocontrol's revised STATFOR forecasts**, which were released in October 2021, and reflected significant positive economic news that was released during summer and autumn; this is demonstrated by the uprating as compared to their May 2021 forecasts

Chart 1: Eurocontrol UK traffic forecasts: May vs Oct 2021 as % of 2019

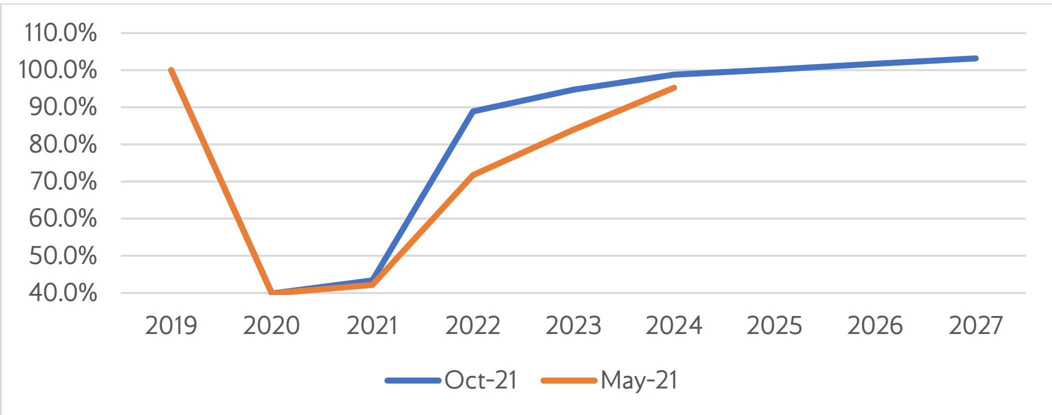


Table 4: Revised Heathrow forecasts using Eurocontrol mid-case Europe profile

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

13.2. In order to update the PCM on a consistent basis, **we have generated a revised output from the CTA model to update operating expenditure and commercial revenues** for these new, higher passenger volumes; we have updated the PCM with these appropriate inputs

13.3. We have not changed any other assumptions within the CTA model so as to ensure a like-for-like comparison to the CAA's H7 Initial Proposals and avoid undue complexity; **any subsequent update to passenger forecasts should strictly consider the mix of passenger traffic based upon origin and destination of traffic**

Table 5: CTA model output using our passenger numbers

	Opex, £ 2018 RPI real	2022	2023	2024	2025	2026
1	People	264.8	264.2	261.6	252.0	244.2
2	Operational costs excl. insurance	244.6	254.7	257.9	255.0	252.1
3	Insurance	15.6	15.9	16.0	16.2	16.4
4	Facilities maintenance costs	159.4	162.2	162.9	162.1	161.6
5	Rates costs	112.5	112.0	111.1	110.1	109.0
6	Utility costs excl. distribution contract	59.8	62.8	63.7	63.4	64.6
7	Distribution contract	29.6	29.6	27.0	26.1	26.2
8	General expenses incl. consultants & marketing, gen ex & interco	113.0	114.7	114.4	113.1	111.8
9	Surface access initiatives	8.3	8.6	9.1	10.9	10.5
10	Overlays	16.7	14.8	12.4	9.6	6.7
	Total	**1,024.4**	**1,039.6**	**1,036.2**	**1,018.5**	**1,003.0**

	Commercial Revenues, £ 2018 RPI real	2022	2023	2024	2025	2026
1	Retail	360.9	404.2	430.4	443.7	456.8
2	Bureaux	16.1	15.9	15.1	14.0	13.0
3	Surface Access	155.7	162.1	154.4	161.4	166.1
4	Service	50.2	54.1	56.5	58.0	59.6
5	Rail	107.7	117.3	110.5	113.9	116.9
6	Property	112.8	117.7	121.5	122.8	124.1
7	Other	1.2	1.3	1.4	1.4	1.4
8	Intercompany	0.0	0.0	0.0	0.0	0.0
9	Terminal drop-off charge	91.0	87.5	84.3	96.2	91.8
10	Red Terminal	16.0	6.3	0.0	0.0	0.0
	Total	**911.5**	**966.3**	**974.0**	**1011.4**	**1029.6**

	Other Revenues, £ 2018 RPI real	2022	2023	2024	2025	2026
1	Cargo revenue	21.5	15.1	11.4	9.6	7.7
2	ORC revenue	266.7	280.7	287.7	289.3	289.1

13.4. The output of this analysis suggests that the **CAA's range for H7 Initial Proposals could be further revised to £16.87 to £21.91 in 2020 prices, suggesting a midpoint of £19.39**; this more realistic passenger forecast is not unreasonable based upon the evidence we present below

13.5. The **effect of the CAA's proposed £29.50 holding cap vs the £19.39 is a £728m revenue overcollection in 2022** if Heathrow has 72m passengers travel through the airport, and Heathrow collects at the CAA's proposed holding cap; this would be an extraordinary situation, and surely not a desirable regulatory outcome

13.6. The output of the CAA's PCM is as follows, calculated using the same real, vanilla WACC at 3.6% and 5.6%, calculated **using the same upper and lower bound gearing, cost of equity and cost of debt inputs used by the CAA** within the PCM to develop its H7 Initial Proposals; once again, neither these nor any other parameters have been altered

13.7. This **further revised range is not an unreasonable outcome given the capacity plans that airlines have published, and the level of demand being witnessed** with the CAA's upper and lower bound WACC applied; this is a credible range for H7 Initial Proposals should they be updated to incorporate the positive economic environment coming out of the pandemic

Table 6: 3.6% real, vanilla WACC

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

Table 7: 5.6% real, vanilla WACC

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

13.8. Raising passenger forecasts has a clear effect of reducing the airport charge across H7, and this is particularly the case in 2022, where there are fewer passengers in both Heathrow's and the CAA's analysis; **ensuring the passenger forecasts reflect the latest available information is therefore critical to ensuring that consumer interests are maximised**

13.9. Furthermore, updating passenger forecasts will only ensure that financeability of the notional company is enhanced; **greater passenger numbers significantly enhance commercial revenue generation with a smaller increase in operating expenditure required** to support operations and service quality, due to the high proportion of relatively fixed costs

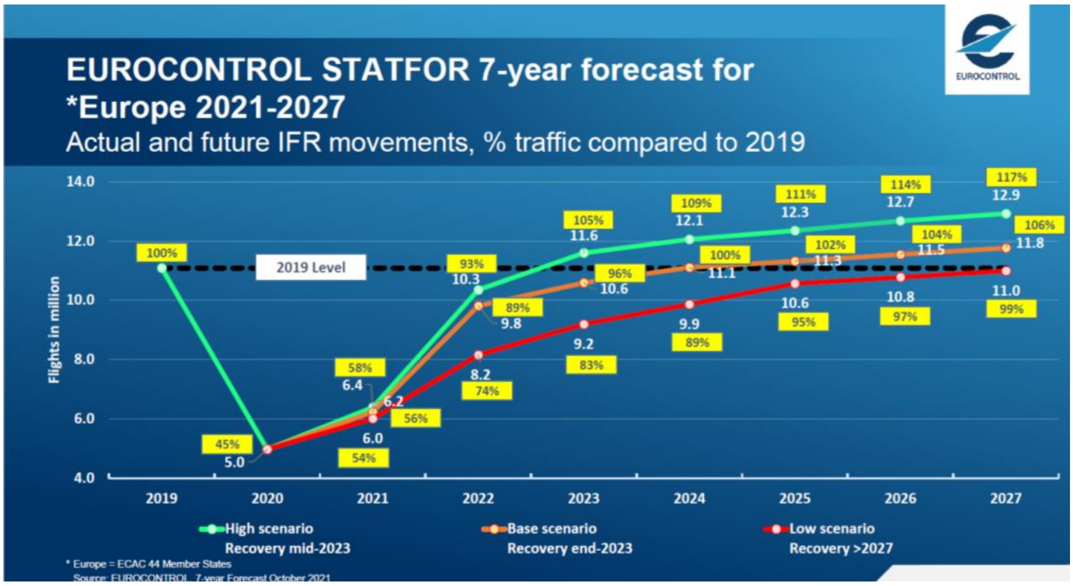
13.10. Passenger forecasts do however need to be realistic to avoid the notional company financeability being compromised, therefore it is **important that the CAA take into account a range of external evidence of why this is the case and 2022 passenger numbers in particular will be greater than forecast** at present

14. Independent forecasts and the profile of recovery

14.1. Considering other available forecasts, the CAA's analysis remains more pessimistic than Airports Council International ("ACI") and Eurocontrol forecasts, a fact portrayed in its own consultation[112], which compared CAA forecasts to April 2021 **ACI and Eurocontrol projections for recovery of passenger numbers; these alternate forecasts themselves have since been updated to incorporate significant new information**

14.2. Eurocontrol's **October 2021 update to its forecasts**[113] **replaced its May 2021 forecast, using updated traffic trends and economic growth,** and incorporated three scenarios for the impact and timing of recovery

<u>**Chart 2: Eurocontrol 7-year forecast for Europe 2021-2027**[114]</u>



14.3. This also highlighted that **current traffic growth was in line with its more optimistic Scenario 1 from the previous Eurocontrol forecast set**, which forecast a recovery in traffic volumes based upon a vaccine delivered in 2021[115]; Heathrow has instead selected Scenario 2 (vaccine 2022/recovery 2025) as a guide in its forecasting[116]

14.4. In addition, Eurocontrol's baseline forecast for Gross Domestic Product ("GDP") has been **updated using Oxford Economics August 2021 GDP data, an upward revision from its March 2021 forecast, and the same underlying economic data provider as used by Heathrow**, which means underlying Heathrow's model needs updating to reflect most recent available information

14.5. As a result, the Eurocontrol baseline scenario now forecasts a recovery to 2019 levels by the end of 2023 driven by a reliable vaccine and roll-out that reaches herd

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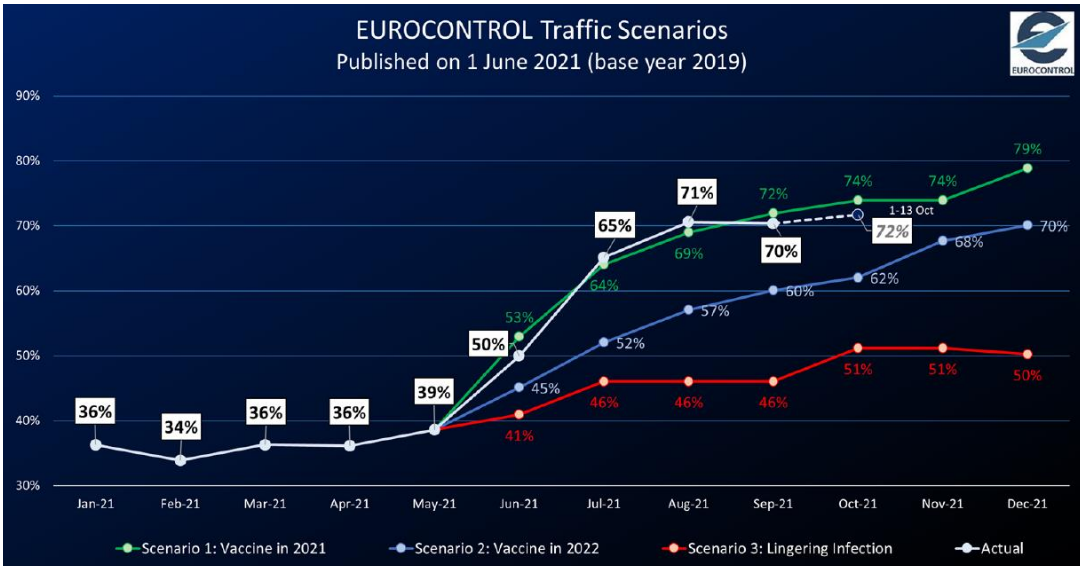
[112] CAP2265B H7 Initial Proposals: Section 1: Overall approach and building blocks, figure 2.6
[113] Eurocontrol forecast update 2021-2027
[114] Ibid.
[115] Eurocontrol 7-year forecast 2021-2027 summary presentation, p4
[116] CAP2266D: CAA H7 Forecast Review: Final Report, October 2021, p25

immunity levels within Europe[117]; furthermore, the aviation-specific impact has been updated, with key changes being **limited travel restrictions, and North Atlantic flows restarting during November 2021, supported by passenger confidence and pent-up demand**

14.6. **Eurocontrol also forecasts that business travel will now return to pre-pandemic levels in 2023**, and other global flows will recover over the course of 2022[118]; the **gloomy 2022 forecasts suggested by Heathrow and the CAA are therefore incompatible with those used across a large portion of the industry**

14.7. Helpfully, Eurocontrol set out short-term traffic scenarios at the end of 2021 in the same report[119], and supplement this analysis with a comprehensive assessment[120] of the pandemic impact on a regular basis; **these further demonstrate that actual traffic recovery is tracking near its previously presented Scenario 1**

<u>Chart 3: Eurocontrol June short term traffic scenarios[121]</u>



<u>Chart 4: Eurocontrol October revised short term traffic scenarios[122]</u>

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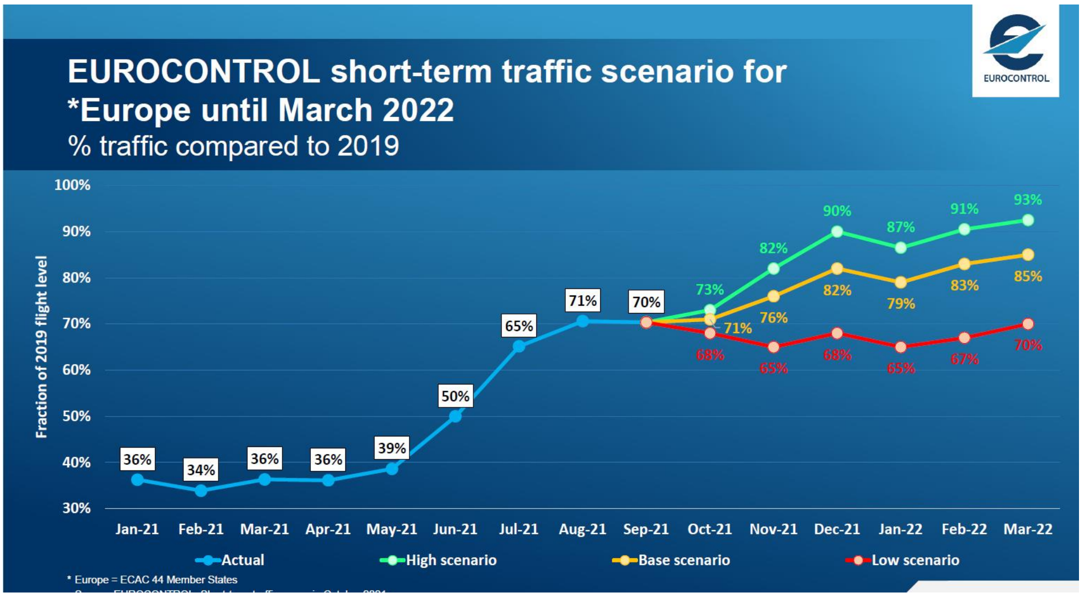
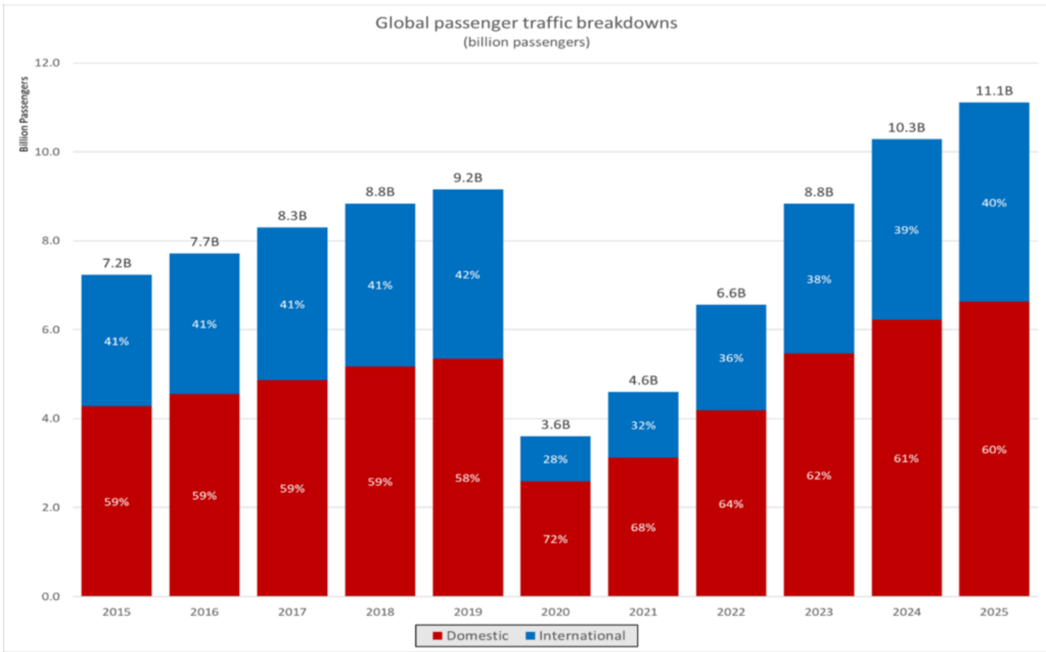
[117] Ibid. p8
[118] Ibid.
[119] Ibid. p9
[120] [Eurocontrol Covid-19 impact on the European air traffic network]
[121] Ibid.
[122] Ibid.



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

<u>**Chart 5: ACI medium-term global passenger traffic by type[123]**</u>

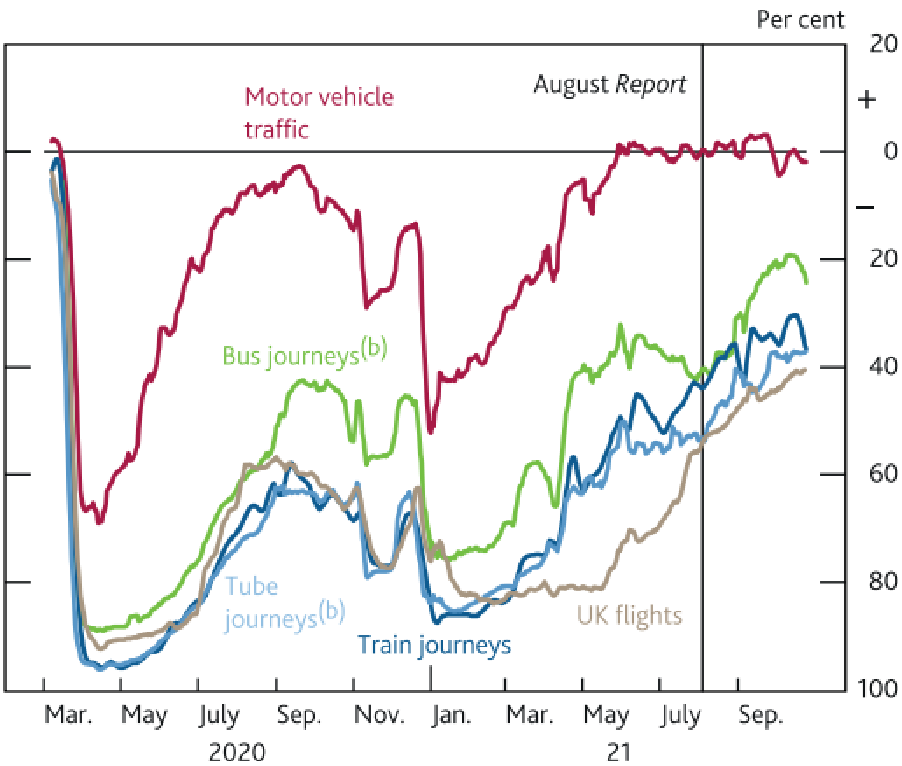


123 [Airports Council International, Impact of Covid 19 on the airport business, October 2021]

14.9. The increased pace of recovery across the economy has been picked up by the Bank of England in its November 2021 Monetary Policy Committee report, in which it states under the heading "**some service sectors are still expected to grow strongly**", that "some of these sectors have been relatively slow to recover from the pandemic, **so still have considerable scope for growth**"[124]

14.10. Further, they state under the heading that "the **consumer services recovery reflects growing confidence**", that "increasing spending on services also reflects some normalisation of the pattern of demand"[125]

Chart 6: Bank of England: Public transport use and flights[126]



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

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

14.11. Nevertheless, **this is not all recent economic news, and many forecasters identified the likely recovery in 2022 earlier in the year**; for example, KPMG's June 2021 forecast for the UK economy stated that "air transport is set for… strong

124 Bank of England, Monetary Policy Report November 2021, p24
125 Ibid. p25
126 Ibid. p24

growth in 2022, with output expected to reach 72% of pre-COVID level by the end of next year"[127]

14.12. Underpinning much of the current optimism in the aviation sector for 2022 are the updated GDP forecasts, which as we note above use a significantly dated April 2021 input set within the Heathrow model; **this needs material upward revision as GDP forecasts of 2022 have improved through the course of 2021**, as the CAA was advised by its consultants in their report accompanying this consultation

14.13. **That report stated "given the variability in forecasts throughout the pandemic, the CAA should request for HAL to provide the most up to date GDP forecasts**"[128]; unfortunately, this has not been included in the H7 Initial Proposals, and as a result, the 2022 holding cap is inappropriately elevated due to aged data

14.14. This is particularly important as **GDP data has been uprated over the course of 2021, as the strength of the economic recovery has become apparent** and after Oxford Economics' April GDP forecasts were released

14.15. As the International Monetary Fund noted, "**outturns for first quarter global GDP were stronger than anticipated, reflecting continued adaptation of economic activity to the pandemic"**[129], and beyond 2022, "advanced economy output is forecast to exceed pre-pandemic medium-term projections"[130]

In summary: the CAA proposal is based on limited and outdated data. It is essential that the CAA takes into account the most up to date forecasts rather than rely on outdated data.

15. Demand for air travel

15.1. This emerging recovery is reflected in traffic across the UK, and is concentrated at Heathrow; **Eurocontrol's traffic data is an important reference point for the pace and shape of the recovery, which supports its use as an alternative forecast**

15.2. Heathrow continues to dominate UK traffic rankings, and is now rapidly rising up the rankings of European airports as government restrictions have eased; the **recovery continues to show enduring strength as the US travel markets have re-opened and passenger traffic returns to key markets** served by airlines from Heathrow

[127] KPMG UK Economic Outlook, p5
[128] CAP2266D: CAA H7 Forecast Review: Final Report, October 2021
[129] IMF World Economic Outlook, October 2021, p1
[130] Ibid. p xv

Chart 7: UK airport flights breakdown: Monday 15th November 2021[131]

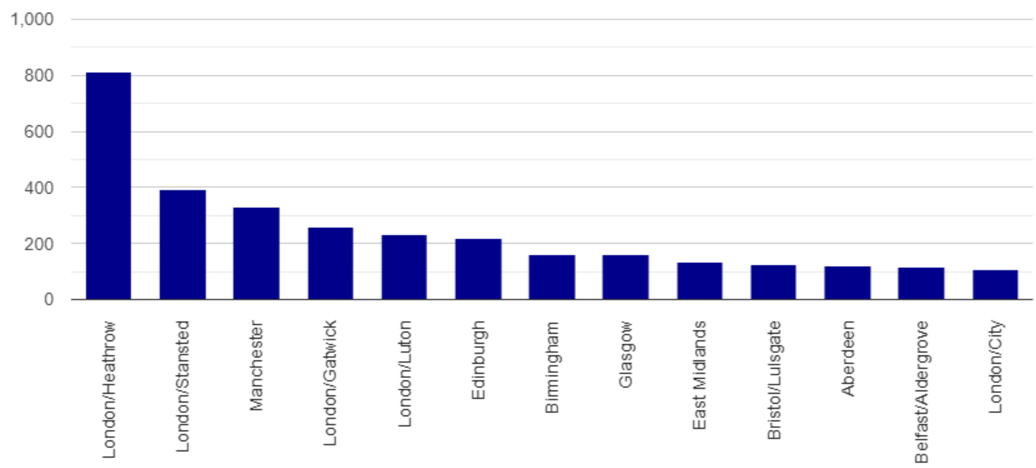
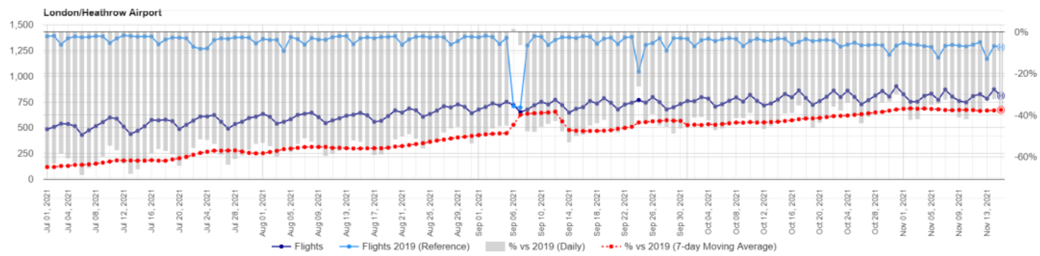


Chart 8: Heathrow flights: Jul 2021 to date vs 2019[132]



15.3. We also note that ✄

15.4. In the same presentation ✄

Chart 8: ✄[133]

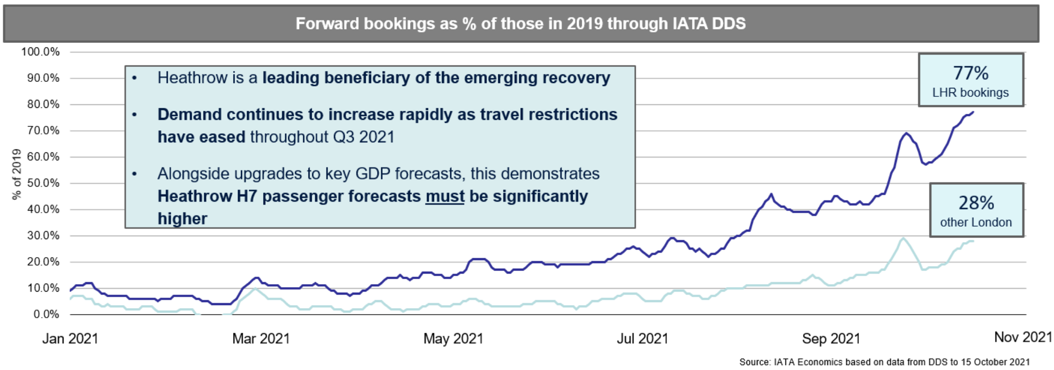
15.5. This **short-term strength is supported by the capacity that is already on sale for this winter season**, driving Heathrow's rapidly improving performance, before even considering airline plans for Summer 2022 that are reflected in our next section

Chart 9: ✄[134]

131 Eurocontrol UK daily airport traffic dashboard, accessed Tuesday 16th November 2021
132 Eurocontrol Heathrow traffic dashboard, accessed Tuesday 16th November 2021
133 ✄
134 ✄

15.6. Demand has returned strongly since the re-opening of travel to the US on 8th November, and **this has led to a significant uptick in bookings for 2022; this pent-up demand for travel has been concentrated at Heathrow**, as can be seen from the booking data through IATA DDS

<u>Chart 10: IATA DDS forward booking activity levels to October 2021[135]</u>



15.7. ✂ and highlights the reversion to normal activity we are likely to see as we emerge from the pandemic

15.8. This **demand environment is supported by** ✂[136]; this underscores the reality that we are emerging from the pandemic and government-imposed constraints on travel are finally being removed

<u>Chart 11: ✂[137]</u>

15.9. This market re-opening story is in direct contradiction to the portrayal of market re-opening that is set out in Heathrow's RBP update and previous business plans; as such, the **CAA should disregard Heathrow's position in relation to constraints on passenger volumes in 2022**, as this is clearly not the emerging reality

15.10. This is significant as contrary to Heathrow's projections of decline, the World Travel and Tourism Council in association with Oxford Economics has noted that the **travel and tourism sector is "on track to exceed pre-pandemic levels in 2022"**[138]

15.11. Furthermore, in the US, "the **outlook is even more rosy for 2022, with the travel sector in the U.S. expected to grow by another 28.4%**, reaching nearly $2 trillion

[135] IATA DDS activity as at October 2021

[136] ✂

[137] Ibid.

[138] WTTC Travel Recovery Survey Summary, 12th November 2021

of the U.S. economy for a contribution exceeding pre-pandemic levels"[139], and "the U.S. opening its borders and easing restrictions to major source markets such as the UK and the EU will provide a massive boost to economies on both sides of the Atlantic"[140]

16. Airport slots and airline plans

16.1. **Heathrow and CAA forecasts are incompatible with the slot rules in place at Level 3 slot-controlled airports**; in normal times, these require airlines to operate slots 80% of the time during the period allocated in the previous equivalent season in order to maintain traffic rights

16.2. This results in historical precedence as determined by **the coordinator, who allocates historic slots at Level 3 slot-controlled airports**; this confers the right to operate on a specific date and time

16.3. The **slot planning calendar is relatively rigid as a result of global coordination that is required** to ensure that allocation is consistent, and that airports and airlines can plan at both ends of their proposed routes

16.4. The **various deadlines built into the process of slot coordination in and around the IATA slot conference** – which is taking place in Rome 16th-20th November for Summer 2022 – mean that the CAA will have good visibility over airlines' planned operations

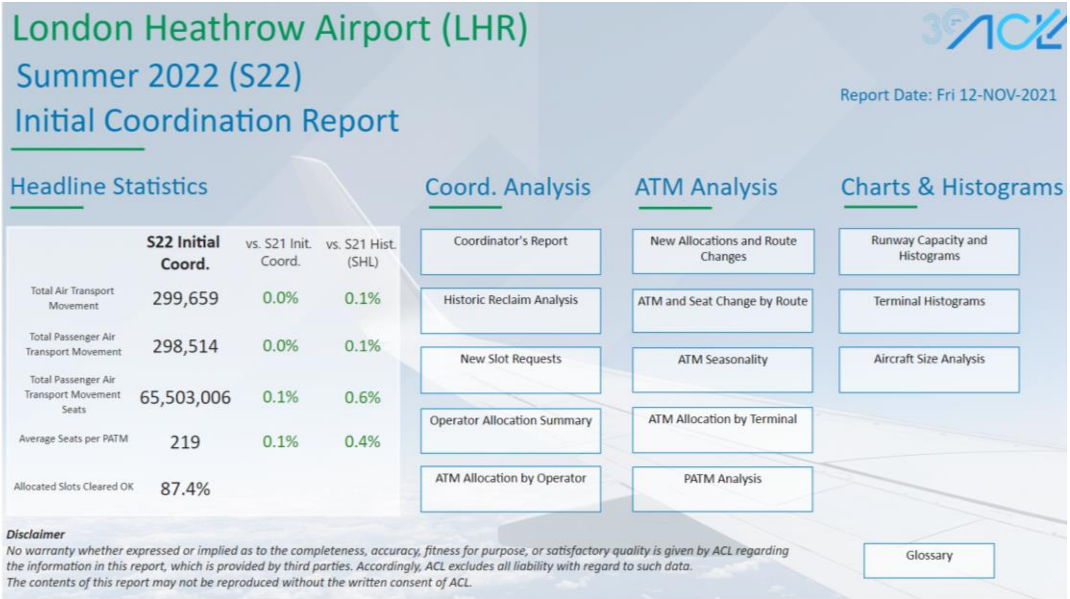
16.5. Alleviations of the rules to maintain historic precedence were previously in force during the pandemic, when airlines were unable to fly due to government restrictions; however ✄ **airports have been lobbying for its return to support airline recovery**[141], whilst Heathrow does not appear to support their further alleviation, in contradiction to the implications of their H7 passenger forecasts, where it would be a necessity at such low levels of passenger volumes to avoid airline failures

16.6. Airlines have submitted plans for Summer 2022 to the ACL, the coordinator of slots at Heathrow, and **these suggest a significant programme of flying has been planned and support demand for 299,659 movements in that season alone**

16.7. The CAA should note that **airlines are planning to use larger aircraft – 219 seats on average – and total seat capacity of 65.5m has been submitted** to the coordinator for the Summer 2022 season

[139] Ibid.
[140] Ibid.
[141] Business Traveller, "Coalition calls for restoration of 'use it or lose it' airport slot rules", 10th November 2021

Chart 12: Heathrow Summer 2022 Initial Coordination Report[142]



16.8. In addition, Heathrow are communicating a forecast of load factors between 80% and 93% through this ACL process, which implies significant passenger traffic through Heathrow now slots are more fully utilised[143]; **this is in direct contradiction to its position in the H7 periodic review, and suggests an extremely busy summer is actually being anticipated by Heathrow**

16.9. Chart 13: Heathrow Summer 2022 declaration appendices[144]

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%

16.10. Recent airline announcements reinforce the intent to fly significantly more capacity in 2022, with our parent company **IAG confirming a significant recovery has been underway since the summer, with plans to operate 100% of BA pre-pandemic capacity on the North Atlantic by Q3 2022[145], and restoring 90% of BA**

142 ACL: Heathrow Initial Coordination Report, Summer 2022
143 Heathrow: Summer 2022 declaration appendices, p6
144 Heathrow: Summer 2022 declaration appendices, p6
145 IAG Q3 2021 Results Presentation

operations by Q3 2022[146]; the same presentation further demonstrates the strength of our forward bookings following the US reopening announcement

16.11. Additionally, Virgin Atlantic have announced plans to grow in 2022[147]. Other large-scale operators into Heathrow are reporting similar patterns. In its recent Q3 report[148], Lufthansa has announced new bookings reaching 80% of 2019 with a **particularly strong demand on business travel, echoed by United highlighting London as its most booked international destination for business**, alongside wider announcements of increased operations and a new route into Heathrow[149]

16.12. Air Canada and Delta similarly have commented on a **faster-than-expected rebound is driving optimistic expectations for 2022[150] with plans to operate 90% of its 2019 transatlantic capacity**[151] and we note the likes of Emirates[152] and Qantas[153] have pulled forward operating plans. Furthermore, we continue to see airlines take opportunities to operate into Heathrow next year, Bamboo airlines' recent announcement[154] being an example of such.

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

17. Cost of capital

17.1. We further note that the **cost of capital remains significantly elevated, with the CAA's view of cost of embedded debt, pre-Covid asset beta, and post-Covid asset beta diverging from our views**, alongside minimal impact from the Traffic Risk Sharing mechanism on the WACC

17.2. We will expand on these issues in our December response, but **illustrate the effect of changing the WACC to our evidenced 1.9-2.8% vanilla, real range below**, which suggest the charge could fall to a range of £13.38 to £15.37 in 2020 prices, subject to financeability analysis; our initial view from the PCM is that the preceding

[146] Ibid.
[147] Shai Weis, Virgin Atlantic CEO, 11th November 2021
[148] Lufthansa Group Q3 2021 Financial Results
[149] https://simpleflying.com/united-london-heathrow-expansion, 28th October 2021
[150] Lucie Guillemette, Air Canada's Chief Commercial Officer, Air Canada Q3 2021 Financial Results
[151] https://www.businessinsider.com/delta-adding-a-dozen-transatlantic-routes-to-2022-schedule-2021-11?r=US&IR=T, 13th November 2021
[152] https://www.emirates.com/media-centre/emirates-to-recruit-6000-operational-staff-over-next-six-months-to-support-accelerated-recovery/, 25th October 2021
[153] https://travelweekly.co.uk/news/air/qantas-brings-forward-international-flights-relaunch, 15th October 2021
[154] https://travelweekly.co.uk/news/air/bamboo-airways-confirms-vietnam-london-flights, 3rd November 2021

changes support financeability to the extent that these lower WACC figures are not unreasonable

Table 6: 1.9% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	345	385	426	419	412	1,987
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,383	2,430	2,429	2,431	2,431	12,104
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	1,119	1,093	1,070	1,019	989	5,290
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	15.54	14.08	13.23	12.36	11.75	13.32
Profiled yield per pax	£'m CPI-real 2020/ pas	13.19	13.26	13.36	13.49	13.62	13.38

Table 6: 2.8% real, vanilla WACC

Live Scenario		2022	2023	2024	2025	2026	Total
Opex	£'m CPI-real 2020	1,080	1,101	1,106	1,098	1,091	5,475
Opex bonus (+ve) / penalty (-ve)	£'m CPI-real 2020	29	28	28	27	27	138
Regulatory depreciation	£'m CPI-real 2020	929	916	870	888	902	4,504
Return on year average RAB	£'m CPI-real 2020	497	542	585	575	566	2,765
Revenue allowance for tax	£'m CPI-real 2020	-	-	-	-	-	-
Total revenue requirement	£'m CPI-real 2020	2,535	2,586	2,588	2,588	2,585	12,883
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	1,271	1,250	1,229	1,176	1,143	6,069
Passengers	m ppa	71.99	77.65	80.89	82.50	84.12	397.15
Unprofiled yield per pax	£'m CPI-real 2020/ pas	17.65	16.10	15.20	14.25	13.58	15.28
Profiled yield per pax	£'m CPI-real 2020/ pas	15.15	15.22	15.35	15.49	15.64	15.37

18. £300m RAB adjustment

18.1. We have previously set out extensive arguments related to the CAA's decision to implement a £300m adjustment to the Regulated Asset Base ("RAB") as part of our response to CAP2139; this built upon previous consultations following Heathrow's request to adjust the RAB by up to £2.8bn

18.2. Whilst we note the CAA's final decision, we reiterate our position that such an adjustment is an inappropriate use of the RAB, and remain unconvinced of its necessity to prevent the breach of certain financeability ratios

Yours sincerely,

Alexander Dawe
Head of Economic Regulation
Networks & Alliances
British Airways Plc