Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966)

Heathrow's response

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Contents

Executive Summary

1. Heathrow believes an appropriate adjustment to address the impact of the Covid-19 crisis will benefit consumers and would be consistent with important regulatory principles. We are pleased the CAA has recognised that there is a problem, and that it has the power to act. We now urge the CAA to engage fully with the evidence and take action.

2. Making a RAB adjustment is demonstrably in the interests of consumers. It will lead to lower airport charges driven by lower financing costs, it will allow better choices for service and capacity in 2021/22 and beyond and it will improve financeability to attract private funding to support the airport through the crisis and beyond.

3. Heathrow and its regulator face a serious set of choices going into 2021 which will have major impacts for airport users for years to come. To fulfil its statutory duties, the CAA must make an appropriate adjustment now. Our proposed approach allows the CAA to do this in a timely way, whilst allowing precise quantification to be deferred and considered as part of the H7 settlement.

4. Heathrow is asking that the CAA act now to apply regulatory principles in a proportionate way so that regulation of the airport can continue to operate for consumers for 2021 and H7. Regulation is successful where it puts long-term private capital to use for the benefit of current and future consumers. Regulated businesses such as Heathrow do operate on a different basis from unregulated ones. Regulated business must operate commercially, but also must invest based on assumptions defined by the regulator not simply market choices. At times CAP 1966 appears to confuse the reality that Heathrow is reliant upon the regulator to enable appropriate outcomes with assertions of comparisons to other businesses that are not regulated.

5. It is important that regulators ensure the functioning and consistency of their assumptions. Basic principles of RAB based regulation need to operate in practice for the regulatory model to work for consumers. This is important across the whole of UK regulation. These principles include the recovery of efficiently incurred investment through regulatory depreciation and a rationally calculated range of risk and return that private investors are expected to bear given their capped upsides.

6. RAB based regulation has delivered where it has been sustained. At Heathrow it has led to a decade of better service, £11bn of private investment and charges falling 28% since 2014. This is a precious consumer benefit to build upon. The CAA can therefore support greater continuity of service for airline customers and passengers during a very turbulent period for the industry by continuing to ensure that regulation works appropriately.

7. The challenge that the CAA's consultation does not address is that the Covid-19 crisis means these core regulatory principles are no longer operating at Heathrow. The need to address such fundamental issues has already led other regulators to make adjustments in 2020 (e.g., Ofwat for Thames Tideway, the CAR in Ireland). The Q6 settlement did not envisage Heathrow (or airlines or consumers) bearing all risk and was clear that the price control could be adjusted

before the end of the period in extreme circumstances.[1] The CAA accepts the option to adjust exists and that we are currently in extreme circumstances. Yet the CAA's initial response is that no adjustment needs to be made. Without an appropriate adjustment, current and future investors and other stakeholders are likely to increasingly view airport regulation as being a certain losing bet.

8. To illustrate how extreme circumstances now are, based on its latest forecast Heathrow is likely to lose over 100m passengers over 2020 and 2021 compared to the forecasts set out at the end of 2019 and experience revenue losses of over £3.4bn. As alluded to in CAP 1966, circumstances have materially worsened since our July submission and even since the CAA consultation was issued. The announcement of an additional lockdown with legal constraints on travel from 5th November will increase these losses and reinforces how exceptional are the circumstances the airport and wider industry now face.

9. Covid-19 is having a devastating impact on aviation. This an opportunity for the CAA to help minimise the longer-term impact of Covid-19 and ensure investment continues to be delivered in the most efficient way, not just driven by short term financial pressures. Longer term investment today will cost less and ensure passenger service and consumers do not suffer over the longer term. The CAA has a duty to further the interests of both present and future users of air transport services. By failing to address the long-term impacts of the situation, the CAA is not fulfilling its duty.[2]

10. We are not seeking special treatment or to avoid difficult choices faced elsewhere. We are asking for regulatory principles to be applied, equity shares big losses in all cases and this is not a balance sheet issue. Consumers also gain from action now rather than waiting for H7. The adjustment we propose will not increase cashflows or airport charges in 2020 or 2021. Heathrow has taken extensive prudent actions to protect the airport's finances – we have funding through 2021 – and will continue to take whatever steps are necessary.

11. An appropriate adjustment, defined now, would allow:

- lower prices through H7 and beyond resulting from a lower cost of capital;
- lower prices through avoiding higher debt costs resulting from a 2-yr downgrade in credit rating;
- delivery of new CT scanners, quicker reopening of terminals in 2021/22 and more resilient assets, queues and punctuality through recovery into early H7;
- greater capacity to attract further private funding to support the airport through the crisis without resort to consumers or public funds.

12. No action now significantly increases the likelihood of a credit rating downgrade. Assuming that took two years to recover from, the additional cost of the debt raised during this period over its life would be around £300m. Delay could lead to enduring and significantly greater costs for consumers.

[1] CAA, CAP1103, Page 21, Paragraph 2.11
[2] https://www.legislation.gov.uk/ukpga/2012/19/enacted, Section 69 (2)

13. CAP 1966 raises a number of conceptual issues with how any proportional adjustment might be calculated but has not set out any analysis of Heathrow's submission. The possibility of an adjustment in exceptional circumstance was clearly stated in the Q6 settlement but the mechanics were left open to be determined later in response to whatever circumstances arose. We have built on our July submission by showing a range of approaches that can be used to quantify an appropriate adjustment. We call on the CAA to now engage in this quantitative assessment and how the issues might be resolved.

14. We show that any reasonable approach to determining the amount of risk that Heathrow was expected to bear results in a material adjustment. Various methods of calibrating a threshold for adjustment all point to around 10% of revenue. However, even using a larger threshold and accounting for the CAA's estimate of outperformance (with which we disagree strongly), the amount of adjustment resulting is far larger than regulatory depreciation in 2020 and 2021 combined.

15. Given this it is imperative that the CAA acts in line with its duties and basic RAB regulatory principles to suspend regulatory depreciation for 2020 and 2021. That will allow Heathrow to make different choices for 2021 resulting in better outcomes for consumers. It will clearly demonstrate that good regulatory oversight is in place improving wider market confidence, enabling easier access to finance, and mitigating long-term impacts on the cost of capital.

16. The CAA set out an assessment of Heathrow's Q6 outperformance in CAP 1966A. We strongly disagree with the CAA's approach in this regard. We show that a proper assessment of Heathrow outperformance should consider performance over the whole of the economic cycle - on this basis we have not outperformed. In addition, even over Q6, we show that the approach taken by the CAA results in the largest adjustment possible. Other more reasonable approaches result in much lower assessments of outperformance in Q6. We also show that consideration of outperformance will be inconsistent with wider regulation. It is doubtful the CAA would have raised performance as an issue to consider if there had been underperformance in Q6.

17. We proposed an adjustment mechanism that maximises consumer benefits now, delays and then limits any impact on airport charges and allows flexibility to change the scale of the adjustment over the next few years. There are viable alternatives – for example a revenue adjustment in H7 - once the principle to act is established. We continue to believe our initially proposed mechanism offers the best balance of benefit for Heathrow and consumers over the long term.

18. The impact of our proposal will increase charges by between £1.80 and £3 for H7. In practice, given that an adjustment would also potentially enable Heathrow to smooth depreciation over H7, reducing the average H7 charge, action now will likely allow a net reduction in charge all else equal. In contrast, the higher WACC and shock factor in the case with no adjustment leads to prices increasing by £4-£5 in H7. This will not be able to be mitigated by lower depreciation as a result of the financial constraints from the pandemic. As noted above, the adjustment also allows greater investment and better service in H7.

19. Given these benefits, the only reason for the CAA not to act now would be if they considered that no adjustment was likely through the H7 process. We do not consider such a position is credible or sustainable to appeal.

20. Heathrow is asking that the CAA act now to apply regulatory principles in a proportionate way. Heathrow has clearly demonstrated why the proposed amendment is in consumer interests and we request that the CAA focuses on this issue in its forthcoming review. We do not consider it would be an appropriate exercise of regulatory discretion for the CAA to continue to request more information and more analysis from Heathrow without engaging in evidence gathering and analysis itself.

21. Further, we consider that the CAA's current approach and process is a fundamental breach of the CAA's statutory duties in so far as it:

    a. Imposes a "burden of proof" on Heathrow which is both <u>unclear</u> and <u>improperly high</u>;

    b. Fails to undertake proper inquiries and analysis itself.

22. The process adopted by the CAA is not transparent and fails to allow stakeholders to properly engage in the decision being taken. On a number of issues, the CAA has not set out a clear evidence base for its position in the consultation document. This is particularly the case in regard to the CAA's assumptions on the impact of Heathrow's current financial structure on the need for an adjustment, which conclusions were made with no supporting evidence. Additionally, the CAA has not set out the level of evidence it would consider 'sufficient' in order to take a decision on Heathrow's application. Without this transparency, stakeholders cannot properly assess, analyse and respond to the CAA's conclusions.

Introduction

23. In this response to the CAA's consultation we restate our position that the CAA needs to act now to protect the interests of consumers in line its' statutory duties.

24. In particular, we explain that:

- Heathrow is regulated by the CAA and that robust regulatory principles mean that the CAA needs to take regulatory action to address the situation Heathrow faces;
- If the CAA does not act now, then this will lead to worse outcomes for consumers in 2021, 2022 and potentially beyond than if it did act now;
- Making an adjustment will lead to better consumer outcomes via lower prices, higher investment and better service in H7 than in a no adjustment outcome;
- The impact of the pandemic on Heathrow has led to a greater loss of value than any reasonable estimate of the amount of risk it should have borne for Q6;
- Even taking account of other factors, the likely required adjustment would be larger than regulatory depreciation for 2020 and 2021 and is therefore proportionate action; and
- It is therefore in accordance with the CAA's duties to take action now to remove regulatory depreciation for 2020 and 2021 whilst still being able to consider the precise approach to take as part of the H7 price control.

25. We respond to some specific questions raised by the CAA in its consultation in respect of financing the business.

26. We set out our concerns with the approach and process the CAA has used in responding to our July submission.

27. Finally, we set out some thoughts on next steps.

Heathrow is a Regulated Business

28. Heathrow is a regulated business.

29. This means that the prices it can charge are set by the regulator based on the assumptions made by the regulator at its determination. It does not have the freedom other companies have to adjust its charges to take account of market advantages and it faces regulatory constraints on its investment that mean its ability to react to market choices is constrained.

30. In its consultation, the CAA appears at times to be confused on the differences between regulated and unregulated businesses and at times treats Heathrow as if it were not a regulated company. This is demonstrated by its questioning why Heathrow should have a regulatory adjustment when no other companies are getting support.

31. In asking this question, the CAA is fundamentally misunderstanding its duties to consumers and Heathrow. The CAA and Heathrow must make decisions with the long-term interests of consumers in mind. This means that reactionary responses to the current crisis are not available to Heathrow as they are to other industry participants. For example, the fact that an airline is able to reduce investment in the short term in no way indicates that Heathrow taking the same approach is in consumer interests. Likewise, while airlines, quite appropriately, are able to increase prices as demand recovers – as indeed they have done in recent months – Heathrow is not because of the price cap. We therefore urge the CAA not to be distracted by considering how other companies are responding, and instead to focus on the question of what is in the best interest of Heathrow's consumers in the long term.

32. The CAA has previously acknowledged this difference in consultations on the regulatory framework for the delivery of expansion. When considering pre-funding of the expansion programme, while the CAA acknowledged that allowing pre-funding of investment through Heathrow's regulatory framework could allow for the outcomes delivered by regulation to better mimic those seen in a competitive market, it went on to consider that, whatever the potential outcomes in a competitive market, the CAA's decisions should be based on protecting the interests of users by reducing risk and smoothing prices.[3] This clearly shows that previous CAA decisions have been made independently of seeking to mimic outcomes in competitive markets and have instead focused on ensuring the framework delivers the right outcomes for consumers.

33. As part of the assessment of how consumer interests are best served it's important to consider the impact of changes in the regulatory model on investors. For the regulatory model to work for consumers, the basic principles of RAB based regulation need to be followed by the regulator. The consistency of the RAB model, and regulatory action to ensure it, is also important across all UK regulation. These principles include the recovery of efficiently incurred investment through regulatory depreciation and an appropriate balance of risk and reward.

34. Regulation is successful where it creates the right balance of risk and reward and thereby puts long-term private capital to use for the benefit of consumers. Investors in regulated businesses

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[3] https://publicapps.caa.co.uk/docs/33/CAP1279%20Economicregulationofnewrunwaycapacitynon_confidential.pdf, para 3.33

understand that their returns are likely to be in a relatively narrow range, and that returns above target are likely to be capped. In Heathrow's case, capacity constraints strongly limit such upside performance in any case. Investors also expect the downside to be capped in respect of circumstances outside their control. They also expect that action consistent with the formulae by which the regulator sets its price controls.

35. RAB based regulation has delivered where it has been implemented in line with good regulatory practice. At Heathrow it has led to a decade of better service, £11bn of private investment and charges falling 28% since 2014. This is an important consumer benefit to build upon. However, the success of this model is under threat at Heathrow. Average returns over the last 20-years have been below the cost of capital despite delivering significantly better than average operational performance. The impact of Covid-19 makes this persistent issue worse, with the value lost through the pandemic being equal to over 50% of the notional equity in Heathrow. Effectively the impact of the pandemic is equivalent to losing over a decade's worth of expected return with no prospect of recovery over the long term given a capped upside.

36. A primary reason for the success of the RAB based regulatory model is that it gives investors confidence that they will be able to recover the investments they make over time with an appropriate return on capital defined and justified by an independent regulator. Efficiently incurred investments they make are added to the RAB. They make a return on the RAB reflecting the allowed cost of capital. They obtain return of their investment through regulatory depreciation of the RAB being reflected in allowed revenues.

37. In Heathrow's situation during 2020 and 2021 this framework is not working as intended. The revenue recovered in 2020 does not allow any recovery of regulatory depreciation in this year as shown in Figure 1 below.

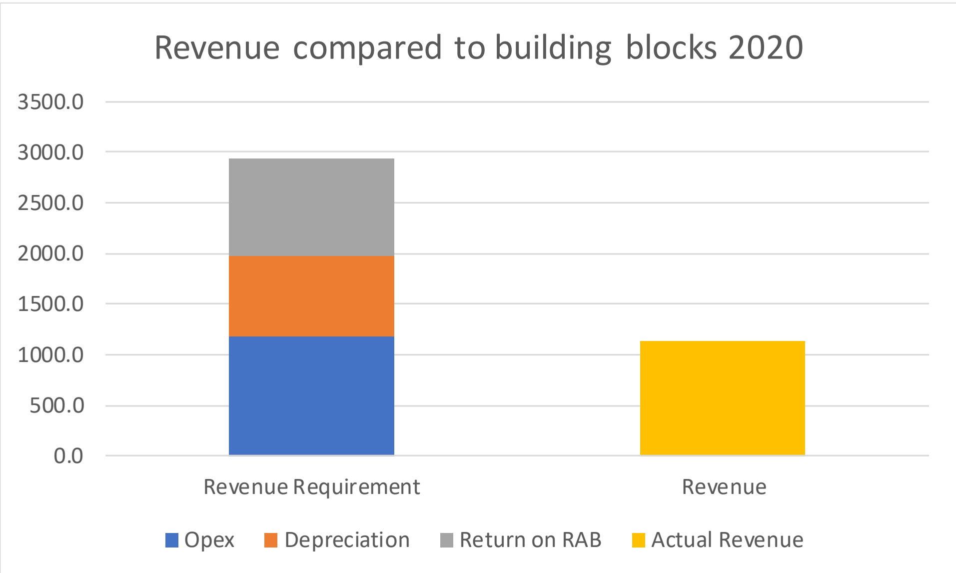

Figure 1 - Revenue in 2020 compared to building blocks

38. The challenge that the CAA's consultation does not address is that the Covid-19 crisis means that the normal regulatory expectations and approaches no longer apply for Heathrow.

39. In contrast, other regulators have already taken action. Ofwat has made adjustments to the regulatory process for Thames Tideway despite the impact on it being much less than Heathrow. In addition, the CAR in Ireland has launched a consultation that includes proposals for immediate action as well as much greater recognition of the challenge to regulation posed by the pandemic. As evidenced in our July submission, most European aviation regulators had created mechanism for adjustment action and are now engaging their regulated companies to establish the appropriate way to enact those.

40. The Q6 settlement did not envisage Heathrow (or airlines or consumers) bearing unlimited risk and was clear that the price control could be adjusted in extreme circumstances. The CAA accepts the option to adjust exists and that we are currently in extreme circumstances. Yet the CAA's initial response is that no adjustment needs to be made. We consider that this view is inconsistent with the duties of the regulator, is inconsistent with the principles of good regulation, and will lead to higher airport charges and lower investment that will damage consumer interests.

The settlement does not assume Heathrow bears exceptional downside of Q6

41. The CAA sets out at paragraph 14 of its consultation that it believes "…that the starting point for our assessment is a long standing system of economic regulation that allocates managing traffic risk to HAL in the period to December 2021, and that HAL accepted the continuation of these arrangements as part of a licence modification in 2019". We do not agree that this is an accurate characterisation.

42. It is Heathrow's view that any acceptance of traffic volume risk applied in the ordinary course of business (accepting normal fluctuations) and that both section 22 of the Civil Aviation Act and the CAA's statements during the Q6 price control consultation and H7 price control process gave Heathrow a legitimate expectation that any exceptional changes in traffic volume would result in that position being reassessed.

43. In its consultation, the CAA has not addressed the issue of the level of risk that Heathrow was expected to bear. We address this issue below.

Airport Competition

44. In its consultation the CAA stated that Heathrow had not provided any information on its views of the impact of its proposals on competition in the provision of airport operation services.

45. We note that the CAA's primary duty in relation to Heathrow is further the interests of consumers at the airport and we consider our proposal does further those interests and is consistent with that duty. This should be the primary focus of evaluation.

46. We do also consider that the proposed adjustment would not negatively impact competition in the provision of airport operation services. If anything, we believe that failure to ensure the regulatory settlement operates in a consistent way will hinder proper competitive dynamics in the market for airport services because:

- If Heathrow were unregulated it would, out of competitive pressure, likely have moderately higher investment or spend than under the constraint of an unbalanced risk and reward framework imposed by asymmetrically skewed regulation. Long-term competitive interest would drive this dynamic – sharpening competition in both the London / South East market and the hub / transfer market.

- In practice Heathrow competes with other airports that are either unregulated or supported by public funds or regulatory support. Our clearest competition dynamic is with other hub airports in Europe for transfer passengers. These other hubs are increasingly either recipients of state aid or benefitting from regulatory action to address the impact of the pandemic. Without CAA regulatory action, Heathrow will actually be disadvantaged in comparison to these other hubs in competitive terms over the long term – as they are able to maintain capacity, service or commercial terms that an unbalanced Heathrow regulatory settlement could not match.
- Arguably, a major impediment to airport competition in the UK is the price cap imposed at Heathrow. Because Heathrow's prices are capped, but the charges of airlines operating at Heathrow are not capped, airlines benefit from significant fare premia by operating at Heathrow. These premia mean the effective value of operating at Heathrow for airlines is higher than it might be in a purely market driven environment. This makes it harder for other UK airports to compete effectively with Heathrow. This dynamic reinforces the importance of the CAA applying consistent regulatory principles where it chooses to intervene so that it can most closely mimic competitive market forces.

Impact on Consumers

47. The impact on consumers not only depends on the scale of any adjustment the CAA decides upon, but also on the timing of any action – for example whether the CAA takes early action to confirm suspension of regulatory depreciation for 2020 and 2021. Together these will define the benefits to consumers of any action taken.

48. Heathrow and the regulator now face serious choices for consumers for the next 12-14 months and beyond. The uncertainty around the length and depth of the crisis means that both capital and operating expenditure need to be constrained heavily in order to preserve liquidity against this uncertain future – as is true in many businesses, not least in aviation. The question is whether the scale of the necessary short-term actions can minimise the impact on longer-term investment.

49. This is an opportunity for the CAA to help ensure investment continues to be delivered in the most efficient long-term way and is not just driven by short-term financial pressures artificially exacerbated by regulation. Maintaining longer-term investment today will cost less and benefit passenger service over the long-term. Without the prospect of regulatory action to allow proportionate adjustment to support the basic assumptions of the RAB-based regulatory model, investment, operations and financing in 2021 and early 2022 will be more heavily curtailed than an unregulated commercial business might do or if the adjustment is made.

50. The solution we have proposed for 2020 and 2021 ahead of H7 is to waive regulatory depreciation for these two years. This will enable greater expenditure in 2021 and 2022 through:

- Providing a clear signal to investors and rating agencies that the regulatory regime is consistent and that the mismatch between risk and reward will be addressed. This will considerably ease access to additional finance;
- Providing a clear signal to the Board of Heathrow that the regulatory regime will in practice support long-term investment and decision making. This will reduce the pressure to take short-term decisions to preserve liquidity that have potential detrimental impacts on service and consumers later; and
- The additional expenditure will enable better consumer outcomes as described below.

51. In addition, if no recovery is made as part of the H7 process there will be additional impacts:

- Investors view of the risk of Heathrow will be higher and require a higher WACC;
- The need to our finances to pre-Covid levels after the pandemic will severely constrain investment during H7 putting further pressure on service levels; and
- The regulatory framework will require a higher shock factor to be included in passenger forecasts leading to additional upward pressure on charges.

52. To reflect these different consequences, we refer to the following three scenarios:

- Regulatory depreciation for 2020 and 2021 is removed and a balancing adjustment included as part of H7;

- No action is taken until H7, but an appropriate adjustment is made then;
- No adjustment is made.

53. In the following sections we show:

- The impact on the passenger charge of each scenario;
- The impact in 2021 and 2022 if action is not taken now and is delayed until the H7 determination; and
- The impact on investment and service during H7 if an adjustment is not made.

Airport Charges

54. Although charges are not altered until 2022, scenarios a) and b) could have different impacts on charges due to the additional costs of added debt in scenario b). In the case of scenario b), the high risk of a downgrade will lead to additional debt costs of around £300m due to the higher cost of debt incurred in the two-year window required to recover the rating (see Paragraph 218). This would add around £0.45 to customer bills in H7 compared to scenario a).

55. Based on the current passenger forecast, the approach we propose (see below) results in recovery of £2.7bn. The prolonged contraction forecast we shared in July resulted in an adjustment of £2.3bn. This scale of adjustment would increase airport charges by between £1.90 and £3.00 per passenger during H7 depending on assumptions on WACC and number of passengers.

56. In the section below on investment in H7 we show that with an adjustment in place, it is possible to smooth depreciation to mitigate charge increases in H7 from fewer passengers. In the Table below we show the impact of a depreciation adjustment of £300m per annum consistent with Table 2 below. The actual level of depreciation adjustment that could be made will depend on a number of parameters including the outturn of the pandemic for 2021, the size of the adjustment, the H7 WACC and the level of capital expenditure assumed. Therefore, the specific amount depends upon the Determination in the round. Note that there is no scope to reduce depreciation in the event there is no adjustment made as demonstrated below.

57. In case c), investors would require a higher WACC to compensate for the higher level of risk. The WACC differential required by investors has been estimated to be 1.3% (see below at paragraph 259). In addition, there would need to be an increase in the passenger shock factor to reflect the expected outcome of the increased asymmetry of returns. Based on the current passenger forecast and a return period of 30 years, the shock factor would have to increase by 3.6%. In combination these factors increase charges by around £4-£5 per passenger.

58. These charge impacts are summarised in the table below.

Table 1 - Impact on charge of scenarios

	Case a)	Case b)	Case c)
Impact on charge	£2.30 to £3.50	£1.90 to £3.00	£4 to £5
Depreciation reduction possible	Yes	Yes	No
Charge impact after depreciation change	-£1 to -£1.8	-£1.40 to -£1.20	£4 to £5

Source: Heathrow

Note: Positive charge value means an <u>increase</u>, negative a <u>decrease</u> in H7 average charge

59. Table 1 shows that with an adjustment charges will be around £6 to £7 lower per passenger than otherwise without an adjustment. In addition, an adjustment will allow greater investment and higher levels of service for consumers, with an early adjustment providing significantly more benefit that a later adjustment.

60. A potential approach to H7 the CAA may consider is to propose a mechanism to reduce risk for H7 onwards, without making the adjustments that the mechanism would imply for 2020 and 2021. We consider that such an approach would have no mitigation impact on investors' perception of risk because of the impact on regulator credibility. This is because a failure to implement any adjustment in the current truly exceptional circumstances would lead investors to believe that, in practice, regulators would avoid making any such an adjustment in future - irrespective of the specified mechanics. Even were the mechanism to be tightly prescribed with no scope for regulatory intervention, investors would worry about regulators taking other steps to counter the mechanism. Put simply, if a regulator with the explicit power to act cannot act in the midst of at the greatest crisis aviation has ever seen and the greatest deviation from settlement assumptions ever seen, then it lacks the credibility to act at any point future. Therefore, we consider this approach would have the same charge impact as case c.

61. Regulatory credibility, and thus cost of capital and therefore price, would be most reinforced by immediate action in 2020. Other regulators have acted with more urgency than the CAA. For example, Ofwat had put measures in place to protect water companies from non-household retailer bad debt in April and took measures to protect Thames Tideway in August. Early action would add more credibility than acting later, even if the right adjustment is made. We have estimated that delayed action could cost consumers an additional £300m as a result of the additional interest costs from a 2-year credit rating downgrade. However, it is possible that the impact could be greater if the delay were seen to undermine the credibility of a regulator. However, it is clear than clarity of policy and early action will maximise the credibility and impact of the regulator.

62. The impact of the various factors affecting the charge is illustrated in the chart below. This sets out the impact of the various elements based on passenger numbers of 68m. It shows the charge in the case with adjustment is £5.80 lower than the case with no adjustment.

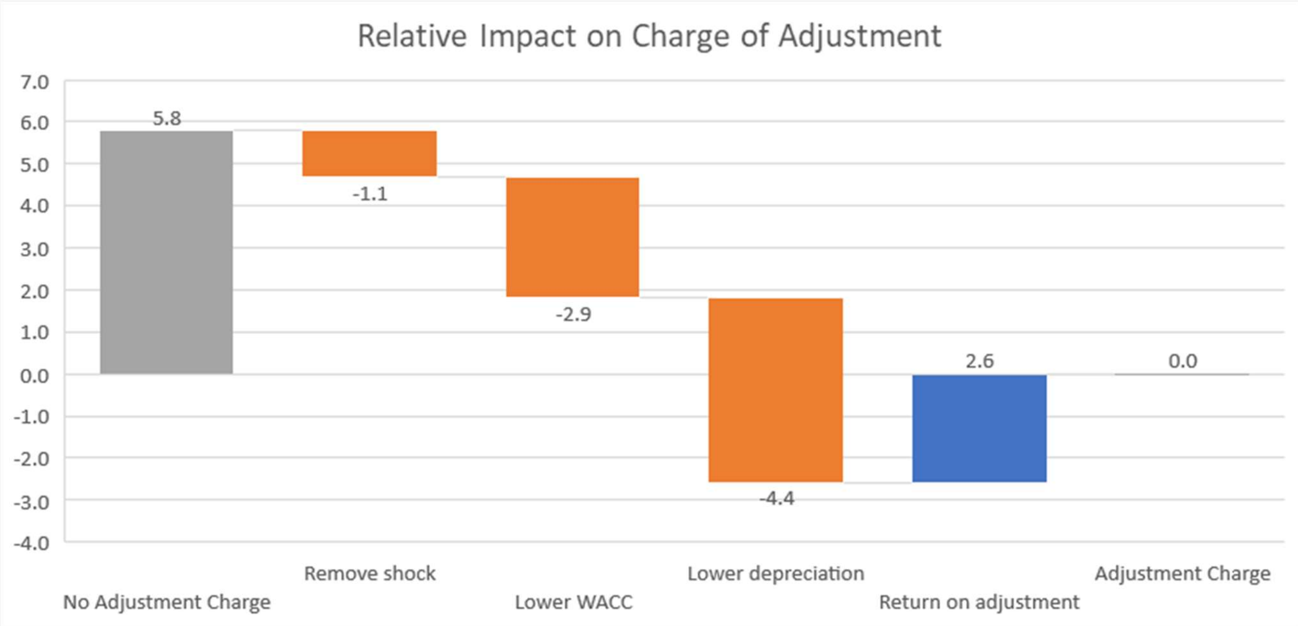

Figure 2 - Relative impact on adjustment on charge

Impact on 2021 and 2022 of delaying decisions to H7

63. Implementing the requested depreciation holiday ahead of 2021 would give a clear and credible signal to Heathrow, its investors, and the wider market that there would be appropriate action in line with the expectations of a Regulator in exceptional circumstances. Without this, the uncertain extent and depth of the impact of the pandemic on aviation means that Heathrow will have to preserve liquidity by reducing capital and operating expenditure to the lowest levels possible.

64. Before Covid-19, we had forecast a capital investment of £854m for 2021. In our June Investor Report we confirmed that management action to protect the business has already reduced this forecast to £357m. This c.£500m reduction will not threaten the safety of our passengers or colleagues but it will limit our ability to maintain and improve service outcomes for consumers and delay measures to make Heathrow more efficient and sustainable. The reduction includes impacts in the next 12-18 months including:

a) Deferring Security Transformation investments, delaying big improvements to the customer security experience such as leaving electronic devises in bags and greater efficiency of security operations releasing pressure on queue times

b) Impacting other service investments, including for example new lifts and routes in T3 for Passengers Requiring Support so they can avoid handovers in the airport journey

c) Stopping revenue improvement opportunities, including upgrades to the T2 Departure Lounge and the Cargo area which will add new services and reduce charges in future

d) Postponing resilience improvements, including baggage resilience across the airport and adding further delay to replacing the T1 baggage system.

e) Suspending investment in electric buses and pre-conditioned air, halting or at least delaying future step-changes in sustainability performance.

65. Since June, the outlook for traffic has deteriorated significantly. As a result, capital expenditure for 2021 is being squeezed further to well below [REDACTED]. To achieve this lower number will require taking more service risk. In particular, it increases the need to defer the reopening of Terminals 3 and 4 as long as possible, potentially also to consolidate terminal operations further.

66. The consolidation of operations into just Terminals 2 and 5 has allowed us to reduce operating costs and defer capex on maintaining those terminals that are not operating for passengers. Bringing terminals and other facilities back into operation would require a significant investment and additional costs. Moreover, the need to preserve liquidity in an uncertain situation with no clear regulatory solution means we will take an even more cautious approach to recommissioning and not do so until we are absolutely sure they are required permanently.

67. This harms consumers in two ways. Firstly, it increases the risk that capacity will be constrained – especially in the event of fluctuations in demand as markets open and close or a rapid recovery in demand, limiting consumer choice and competition. A firm with clear and balanced long-term incentives would be able to anticipate rising demand with more risk appetite, knowing it could benefit from upside performance. Secondly, again particularly in a rapid recovery, it would lead to high levels of congestion in the operating terminals as the provision of other facilities is delayed. We know that congestion and queue times are key drivers of overall satisfaction among passengers. Higher density of passengers in the operating terminals than otherwise could therefore lead to reductions in passenger satisfaction and experience.

68. In addition, we have made large reductions in the numbers of operational and security colleagues as part of our change programme - over [REDACTED] colleagues will soon have left the business. As demand recovers, we would need to rehire and train new colleagues to be able to meet higher demand. Similarly, to asset investment, the pressure from very low revenues, uncertainty around recovery and asymmetrically unbalanced regulatory financial incentives would mean that we will not recruit colleagues until we are sure they are required permanently. As a result, sudden increases in demand could lead to periods of poor service whilst we assure ourselves that the increase is not temporary and whilst additional resources are being mobilised and trained. Such pressures could lead to greater queues at security, delays to on-time departure, and greater congestion in arrival and departure areas, again, significantly reducing passenger's satisfaction with their experience at Heathrow.

69. We provide a witness statement from Emma Gilthorpe, Chief Operating Officer at Heathrow in Annexe 3. This sets out her professional view of the impact of a delay in action by the CAA in respect of the Covid-19 adjustment.

70. The constraint on investment in 2021 will also have a significant impact on investment in 2022. Capital projects have lead-in times for design, planning, mobilisations etc. There will be no funding for this available in 2021 if there is no adjustment. The reductions in non-operational colleagues of near 60%, including nearly all of our infrastructure projects expertise mean we have lost a significant amount of institutional capability and capacity. It will take time to restore the company's ability and workforce to deliver capital projects. Again, this will be a constraint tighter than what a non-regulated commercial firm with a more balanced set of risks and

rewards might face. This means it will take a considerable and additional time to bring new projects on tap, meaning that investment in 2022 will also be severely curtailed.

71. In contrast, putting the depreciation adjustment in place will give the company the ability to moderately increase investment levels in 2021 and 2022 to take a more precautionary approach to increases in demand. In practical terms, it could allow earlier installation of CT security scanners, quicker restoration of terminal capacity if demand recovers, more resilient service levels and potentially earlier investment in digital improvements driving savings in our operations and protecting non-aeronautical revenue streams. All this would still amount to a highly constrained investment plan, in line with commercial realities, but enable a more long-term approach, resulting in earlier delivery to consumers of the benefits of these core projects.

72. We note that the financial incentives on service as set out in our Licence would in normal times ensure that we are financially incentivised to deliver a minimum level of service. However, these are not normal times. The incentive framework is effectively irrelevant when passenger numbers and revenue are so low and incentives so unbalanced. The Q6 framework is based on Heathrow having the ability to deliver a level of service above the minimum level before rebates are paid out. The pressures on liquidity in 2021 mean we do not. Any enforcement of those rebates would only magnify the financial constraints we would be forced to operate in and therefore the service we could provide.

73. We note with concern the CAA's comments that "many companies across the aviation sector are reducing their investment" and the implication that Heathrow should reduce service quality. A number of companies, including Heathrow's competitor airports, continue to invest to adapt the service they provide to meet altered consumer expectations post-Covid. In some cases, this is because they are unregulated so they face a different risk and reward balance. In other cases, they have government support and in some, regulatory action to adjust. They are acting because it is in their long-term interests as well as the long-term interests of consumers to make those investments, particularly in a competitive market with excess capacity. Consumer research is clear that users expect a cleaner, easier and more reassuring airport experience. They would do this with the expectation of being able to recover the investment through higher charges in the future. Without a regulatory solution Heathrow cannot do this.

Impact on Investment and Service in H7

74. In this section we explain how an adjustment impacts on Heathrow's ability to invest in H7; illustrate some of the practical consequences of this in terms of investment; and set out some of the resulting impacts on service.

Restoring financial balance creates strong downward pressure on investment

75. The impact of Covid-19 on revenue during 2020 and 2021 means that the costs of running the airport are effectively being met by shareholders rather than customers. From the perspective of Heathrow SP, the regulated business, this liquidity has been provided through additional debt and equity[4]. The resulting increase in debt is reducing the equity value in the airport considerably with gearing being much higher at the end of 2021. Such an increase in gearing

[4] The source of equity for the regulated business was provided from the proceeds of additional debt or quasi-debt raised in Heathrow's structure above Heathrow Finance.g

and consequent loss of shareholder value would be true irrespective of the initial level of gearing. As the immediate crisis recedes, shareholders will need to recover this value and restore the level of gearing to its initial level. Companies generally operate at an efficient level of gearing. Therefore, this desire to return gearing back to its initial level after a crisis would be true for any company. In other words, following an impact such as Covid-19, all companies would seek to return gearing to previous levels.

76. Once H7 is begun, there are four key factors that will affect the ability of Heathrow to restore gearing to the initial level by the end of the period:

- The extent of any RAB (or other) adjustment[5] in respect of Covid-19;
- The level of dividends during the period;
- The level of capex during the period; and
- Any adjustments that are made to depreciation during H7 (e.g. to smooth prices).

77. Following the onset of the pandemic in March, Heathrow committed to not paying any dividends in 2020 and 2021. This is now a condition of our financial waivers. However, as the situation stabilises during H7, the airport should no longer be in a crisis mode and a normal business would expect dividends to resume during this period.

78. It is possible to use a financial model to understand the interplay of these factors[6]. The purpose of this modelling is not to specify exactly the level of dividends, capex or depreciation adjustments for H7. Rather it is intended to show the clear interplay of these factors during H7 and to demonstrate the issues that Heathrow will face in the event of no adjustment.

79. The modelling shows that this impact is not a consequence of Heathrow's current gearing. It is a consequence of the major loss of revenue in 2020 and 2021, irrespective of the initial gearing position. For the purposes of analysis we have considered Heathrow starting with 60% gearing, consistent with the notional balance sheet. The model assumes aiming to return to 60% gearing by the end of the period. With this initial gearing, the impact of the pandemic would be to increase gearing to 74% by 2021. To illustrate the same effect is seen at higher levels of gearing we have run Case 6 with higher gearing levels.

80. The modelling approach is based on revenue equalling the revenue requirement. Consequently, the conclusions from the modelling are independent of passenger numbers (this is because the number of passengers affects the yield, not the revenue requirement).

81. The scenarios are based on a post-tax cost of equity of 9.3% (consistent with the CMA view of airport cost of equity pre-Covid-19). In normal steady state operation, dividends payable would be exactly equal to this rate at around £600m per annum.

82. The current crisis situation is not steady state. We have therefore assumed that equity will bear a significant part of balance sheet repair. Again, without seeking to specify exactly the

[5] For the purposes of the analysis we assume a RAB adjustment as proposed, although similar financing effects in broad terms would result from other mechanisms to adjust the risk and reward balance
[6] A spreadsheet setting out the financial analysis underpinning each case is included as an annex to this submission.

levels of dividends we have assumed for the purposes of these scenarios we a lower dividend rate of around 6% i.e. around £400m per annum. This reflects a shortfall in dividends over the period of over £1bn in this illustration. For comparison this is around a third of expected H7 dividends, or around half the rate of dividends paid during Q6. This is an aggressive assumption for equity forbearance given the historically low achieved returns for Heathrow over multiple economic cycles.

83. Note that the results from the modelling would be the same for any level of the post-tax cost of equity provided the same forbearance of £1bn in dividends was assumed.

84. For Case 1 and Case 2 we consider a situation where a Covid-19 related RAB adjustment of £2.7bn is applied. In Case 1, Heathrow can continue to invest capex at a level similar to that in the BBU high case whilst returning to the initial level of gearing by the end of H7 and limiting the forbearance on dividends to £1.0bn. In addition, there is some scope for reducing or smoothing depreciation in H7 for affordability reasons at the cost of a reduction in the capex that can be delivered as shown in Case 2.

Table 2 - A RAB adjustment is supportive of investment in H7

	Case 1	Case 2
RAB Adjustment	£2.7bn	£2.7bn
Dividend forbearance	£1.0bn	£1.0bn
Capex in period (2018p)	£4.75bn	£3.5bn
Depreciation adjustment (2018p)	0	-£1.5bn

Source: Heathrow

Note: Negative depreciation value means a reduction or smoothing of regulatory depreciation in H7 which would reduce average H7 charge, positive depreciation value means an increased or acceleration of regulatory depreciation in H7 which would increase average H7 charge

85. Figure 3 illustrates the gearing over the period for Case 1 with and without a RAB adjustment. This shows that without the RAB adjustment, gearing remains well above the starting level.

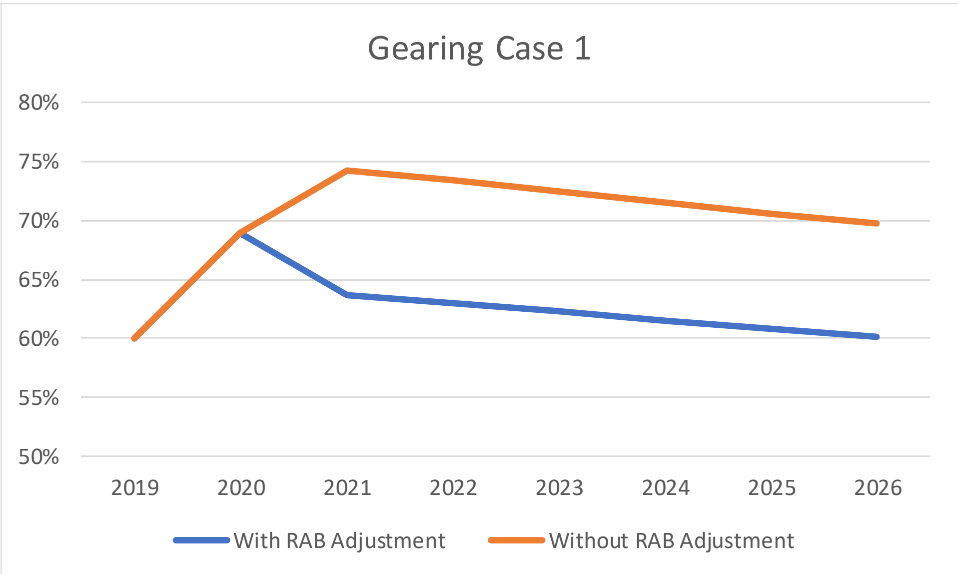

Figure 3 - Illustration of Gearing in Case 1 with and without reopener

86. In the event there is no Covid-19 related RAB adjustment, then it will not be possible to invest appropriate amounts of capex and return gearing to the initial level at the end of H7 without unreasonable levels of dividend forbearance. This is illustrated in Cases 3, 4 and 5 in the table below. Case 6 is an additional situation that considers a higher initial gearing of 75%. If the initial gearing is higher, dividend forbearance needs to be increased further to enable minimum levels of capex in the no adjustment case although the same overall dynamics are seen.

Table 3 - Without a RAB adjustment investment is severely curtailed

	Case 3	Case 4	Case 5	Case 6
RAB Adjustment	0	0	0	0
Dividend forbearance H7	£1.0bn	£1.0bn	£1.6bn	£2.2bn
Capex H7 (2018p)	£0.75bn	£2.0bn	£2.0bn	£2.0bn
Depreciation adjustment (2018p)	0	+£1.25bn	0	0

Source: Heathrow

Note: Negative depreciation value means a reduction or smoothing of regulatory depreciation in H7 which would reduce average H7 charge, positive depreciation value means an increased or acceleration of regulatory depreciation in H7 which would increase average H7 charge

87. In Case 3, the amount of capex that is affordable (£0.75bn) is not simply sufficient to maintain the airport's £16bn asset base appropriately.

88. Case 4 then shows that to achieve a reasonable minimal level of capex (c.£2bn) without a RAB adjustment and £1bn of equity forbearance requires accelerated depreciation in H7 to be is included in the scenario. This scenario would thus add around £3 per passenger to charges in H7 all else equal (i.e. and not accounting for the £2-4 potential for regulatory smoothing discussed in the previous section. This case is somewhat analogous to an H7 revenue adjustment mechanism in terms of the impact on the airport charge.

89. Case 5 shows an alternative in which the minimum level of capex is retained but dividends forbearance is increased even further. The comparison between Case 5 and 6 illustrate that the effects on equity are predominantly driven by the revenue impacts not gearing assumptions.

90. Together, Table 2 and Table 3 clearly show the following:

- There is significant challenge to restore financial balance for the airport, even with very significant dividend forbearance by equity and regardless of initial gearing;
- Without a RAB adjustment, investment in H7 will be artificially curtailed unless depreciation is accelerated in H7, putting further pressure on H7 airport charges;
- Without a RAB adjustment it is not possible to reduce or smooth H7 depreciation and restore the balance sheet to the target gearing; and
- With a RAB adjustment, there is more scope to appropriately balance investment and adjust depreciation to manage airport charges as passenger numbers are recovering.

91. Greater investment is possible if the time taken to return to the original level of gearing is extended beyond the period. However, this option would be unviable for investors, especially in a situation where not only has there been no RAB adjustment, but the historic return to

equity has been well below the cost of capital over an extended period of multiple economic cycles. This means that the pressure to avoid an excessive forbearance on dividends will simply result in stronger pressure to minimise investment during H7 in the event of no adjustment.

92. The recent judgement by the CMA in the water appeals has emphasised the need for regulation to deliver appropriate investment by setting the right level of WACC. Whilst the right WACC is a pre-requisite of delivering appropriate investment, post the impact of the loss of value from Covid-19 it is not sufficient. The need to recover from the impact of the pandemic results in strong pressure to minimise investment in the no adjustment scenario irrespective of the WACC allowed at H7. Such a pressure is not in the interests of consumers.

Practical consequences of lower investment in H7

93. We are currently progressing our H7 capital plans for our Revised Business Plan. In the case of no adjustment, recovery from the low level of expenditure in 2021 and the need to rebalance our finances significantly constrains capital expenditure in H7. The key impact of this on capital expenditure will be in line with that set out for 2021 and will be:

- To delay the delivery of schemes delivering benefits for consumers such as the security improvements that will be delivered by the introduction of CT scanners;
- To defer the return to four terminal operation / full capacity as long as possible;
- To squeeze maintenance expenditure leading to increases in service risk and higher future costs;
- To increase hurdle rates on opex efficiency and commercial revenue schemes reducing the long-term effectiveness of the airport; and
- To delay progress on moving towards delivery of the third runway or new capacity.

94. It is unlikely there will be sufficient investment capacity available to meet the compliance deadlines set by the Department for Transport on security. Delaying compliance would allow expenditure to be deferred enabling more allocated to critical maintenance. We believe this can be done maintaining current security standards but has consequences for increasing service and efficiency, leading to the loss of benefits for consumers.

95. Delaying the opening of Terminal 3 or 4 will reduce the need for investment in H7. We believe there are considerable savings to be achieved by consolidating operations into 3 terminals for as long as possible over the course of H7, even if demand returns to pre-Covid levels. We believe this can be done safely but has consequences for service levels, particularly at peak hours. It also potentially has consequences for our ability to provide capacity for airlines and consumers in any recovery of demand, limiting their choice and ability to fly.

96. Expenditure on maintenance will be constrained to maintaining safety and security and repairing critical assets only. Deferred projects include: work on the T5 Track Transit System; Kilo Apron Development works; T4 Hold Baggage Screening completion of works; T3 Pier 7 Airbridge Replacement; and Manual Handling Aids. Lower levels of proactive capital maintenance will increase the risk of unexpected failures and reduce asset availability.

97. It is in the interest of the airport, airlines and consumers to invest in projects that improve Heathrow's net non-aeronautical position over the regulatory period. These long horizons allow investment in transformative projects that change how efficient Heathrow is and how much revenue it can generate. The outcome is an airport with structurally lower charges long term. With non-commercial capital constraints, the minimum acceptable rate of return is higher, with expectations that only projects that deliver very near-term cash positive returns are investable. This is a commercially rational response to investment constraints, but the long-term outcome is fewer transformative projects being delivered, an airport that is structurally less efficient and as a result a higher passenger charge – damaging the consumer interest both in H7 and in future price controls.

98. The economic case for expansion remains strong and we are confident that the Supreme Court will overturn the Court of Appeal ruling and reinstate the ANPS. The airports commission showed that expansion would deliver huge benefits to consumers. However, in the event of no adjustment, Heathrow would not be able to finance expansion. Additional Government aid or significant pre-funding would be required to enable it to go ahead. Avoiding an adjustment therefore risks permanently undermining the financeability of expansion and therefore the well-understood benefits of increasing the UK's hub airport capacity.

Impact on service

99. Lower levels of investment would have a detrimental impact on service in H7. Over the last 10 years, Heathrow has invested in its infrastructure and services and seen passenger service and satisfaction levels rise as a consequence. Lower levels of investment would curtail this improvement and will, in some cases, reduce the service levels we are able to provide across a number of areas and parts of the passenger journey.

100. This does not mean that we would be ignoring service levels for the H7 period in the case that no adjustment was made. However, the need to reduce investment through the H7 period for the reasons set out above would mean that we would have to accept lower levels of service in some circumstances. A key example is the reopening of terminals to passengers.

101. The deferral of investment in CT scanners, while it will not compromise security, will mean that we will be unable to improve the security experience for passengers until later in the H7 period at best. From a service point of view, CT scanners are key to allowing passengers to keep laptops in their hand luggage – a key pain point. CT scanners are also important for increasing flow rates and thus reducing queuing – especially in Heathrow's physically constrained search areas with new Covid-19 control measures. We know that passengers value an easy and reliable airport experience which could be improved by the provision of this new CT scanner technology. Deferring this relatively modest investment will delay the delivery of this consumer benefit which is not what an unregulated commercial airport would likely do.

102. We also know that many groups of consumers value automated solutions, with the demand for touchless and automated journeys growing due to the Covid-19 pandemic. While, as with investment in security, we will not compromise health and safety, reduced investment through the H7 period will mean that additional investment in this area will have to be stopped or deferred, again counter to what an unregulated business might seek to do.

Service impacts of delays to reopening T4 to passengers

103. Due to significantly lower passenger numbers we have currently consolidated passenger operations out of terminals 3 and 4. It will require additional investment and operating costs to reopen these terminals to passengers and indeed maintain them in a state of readiness that can respond to any recovery of demand in a timely way.

104. Without a RAB adjustment providing the platform for us to maintain even minimal investment and costs, we would seek to avoid these increased costs until additional terminal capacity is fully demonstrated to be needed more permanently. This will inevitably mean that, at peak times and in the event that passenger volumes return quickly, service levels across the rest of the airport campus will decline until closed terminals are reopened. This is an impact consumers and Heathrow will have to tolerate.

105. In order to assess the quantitative impact on service levels we have assessed the consequences of not operating Terminal 4 for passengers on a number of service level metrics. This gives an initial estimation of the impact on service levels in the case that passenger numbers return before investment can be made to reopen Terminal 4 or in the case that passenger numbers return to higher levels in peak times when Terminal 4 remains closed to them. We have assumed that passengers travelling through T4 would be split among the three open terminals reflecting the proportion of traffic these three terminals serve today.

106. Our initial analysis of the impact of delaying the opening of T4 for passengers shows an impact on a number of key service metrics, set out below. Generally, this analysis provides average impacts – worse case or tail performance usually deteriorates further than the average. Furthermore, for illustration this only assumes the loss of T4 for passengers – removing T3 or other facilities would increase the service impacts. The key findings so far are:

   a. **Security queue times**

   An increased number of passengers would be travelling through the three open terminals, leading to greater load on the security lanes in these terminals. Even assuming some efficiencies in passenger throughput versus today's levels, this will lead to an increased queuing time for passengers, particularly at peak times and will likely cause more frequent breaches of a 5-minute queue time performance. On a high scenario, infrastructure limitations will lead to an increase of average waiting times of more than a minute per passenger, and a drop on our 5-minute service level of 10% (i.e. from a target of 95% to around 85%). More passengers will experience a longer wait time for as long as they are unable to use Terminal 4.

   b. **Pier service levels**

   Without Terminal 4 pier service capacity in the other three open terminals would mean that fewer passengers than today would experience pier service (i.e. use of airbridges when getting on or off aircraft). Pier Service levels would drop to around 86% in a high passenger volume scenario if we were unable to reopen Terminal 4 for embarkation. This is materially below our current service level of 95%.

c. **Check-in queue times**

Increased volumes of passengers travelling through other terminals would also impact waiting times at Check-in. Passengers would have to wait longer to check-in at peak times due to infrastructure limitations. Whilst resourcing is managed by the airline community, we estimate these infrastructure limitations will lead to increases between 60% and 100% of today's queueing times at peak hours.

d. **Minimum Connection Times (MCT)**

While T4 is closed to passengers there will necessarily be increased use of remote stands. This will increase the average MCT of each terminal by around 8 minutes or 11% on average even as a few passengers are able to transfer within a single terminal.

e. **Punctuality**

Increased use of remote stands and potential knock on effects of the other service aspects set out above will lead to greater departure delays for some aircraft. This will lead to a reduction in performance for on-time departure although this is harder to accurately model given multiple related effects.

f. **Overall passenger satisfaction**

In addition to decreased performance levels for the metrics above, we know that closing Terminal 4 for a longer period of time when there are higher numbers of passengers flying through Heathrow would impact overall passenger satisfaction.

Service impacts from lower maintenance

107. The lower levels of maintenance discussed in Paragraph 96 above will lead to greater service risk from Heathrow's assets. The potential impacts will include:

a) Lower asset reliability will result in more occasions where assets are not available for periods of time. This could lead to interruptions and delays in the journeys of passengers and staff impacting the ability of planes to depart on time;

b) Reductions in reliability of the baggage system as a whole will lead to more passengers travelling without their bags;

c) Lower asset reliability will reduce resilience at the airport. Over time, the risk of simultaneous failure will increase and existing resilience plans will become difficult to deliver on these few occasions; and

d) Clearer evidence of maintenance issues such as lifts, escalators or travellators not working will reduce customers satisfaction at Heathrow.

Value of service to consumers

108. One way to consider the proportionality of and action is to compare the value to consumers of potential service impacts of not adjusting relative to the costs of making the adjustment. This is why we provided initial evidence in our July submission on this consumer value.

109. In our July submission we showed that were on-time departure to fall from around 80% to 60% the loss of consumer welfare would be around £570m p.a. based on the results of the IBP willingness to pay survey. In addition, we showed increasing security queue time by 5 minutes for 40m departing passengers would result in a loss of £150m pa of consumer welfare[7].

110. In CAP 1966 the CAA questioned the appropriateness of using these WTP values for this situation. We were surprised by this, as the WTP values for both security and departure delays were consistent with Webtag values for lost time given the consumers that use Heathrow and the conditions of the airport.[8] The use of time value of delays is standard practice in economic appraisals. Even if the values were halved, and therefore well below Webtag guidance, the impact of the delays illustrated out would be over £350m per annum.

111. The key point, which the CAA has not addressed, is that small delays over millions of customers amounts to a very large loss of consumer value. Using Webtag values, which are likely to underestimate the impact at airports, an average delay per passenger of 10 minutes in total over each pinch point in the airport journey amounts to over £3bn of lost consumer value at Heathrow in H7.

Impact from delays to Expansion

112. Expansion of Heathrow has previously been assessed as leading to significant benefits to consumers by providing a wider choice of destinations, more convenient flights and much lower airfares. The airports commission estimated total benefits of up to £210bn[9]. Frontier Economics and DfT estimated economic benefits of £187bn[10,11].

113. At present, Covid-19 has had a devastating impact on demand for flying and Heathrow is not currently capacity restrained. In addition, the Court of Appeal's decision setting aside the NPS has led to uncertainty over the legal basis and, therefore, timescales for expansion. However, we anticipate that the airport could likely return to operating at its movement cap during H7 and that the case for airport expansion in the South East will remain compelling.

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[7] WTP values obtained from the Systra 2018 willingness to pay survey were £3.55 per passenger for an improvement from 80% to 85% on time departure, and £1.55 to reduce security queue time from 5 to 3 minutes (67-%ile) (See Table 16 of Systra report). Assuming the same unit rates and 40m departing passengers per year, the loss of value from a 20% reduction in OTD is 40m * 20 * 3.55/5 = £568m pa, and 5 minutes extra queue time is 40m * 5 *1.55/2 = £155m pa.

[8] ICS Consulting, Developing the Cost Benefit Analysis Framework Valuations and Initial CBA Results, July 2019

[9] Airports Commission: Appraisal Framework https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300223/airports-commissionappraisal-framework.pdf

[10] https://www.gov.uk/government/publications/airport-expansion-updated-cost-and-benefits-appraisal.

[11] Frontier Economics, Competition and Choice 2017, Dec 2017

114. An appropriate adjustment would result in Heathrow being able to pursue expansion at an appropriate pace as demand recovers during the period. Without an adjustment, Heathrow will not have the capacity to pursue expansion during H7 or potentially for even longer. This will result in the benefits of expansion for consumers being deferred many years. Such a delay would result in lost benefits to consumers of several billion per annum. In CAP 1871, the CAA estimated the impact of a year's delay to be in the range £0.9bn to £2.5bn per annum. It is a relevant consideration that the expected harm from such a delay thus significantly outweighs the annualised impact of any adjustment.

Service Quality Incentives

115. The H7 period will include a regulatory outcome incentive regime that will provide Heathrow with incentives in respect of specified measures of consumer service, although the actual measures, targets and incentives for H7 are yet to be determined. Typically, financial service incentives for airports are only applied to those aspects of the service that are wholly or largely within the airport's control (e.g. such as security wait times). Incentives in these areas will be a factor that Heathrow will take into consideration at H7. However, the level of targets set, and the associated incentives, need to be consistent with the investment assumed in the Determination and the operating environment in H7. In the early part of H7, this environment may be volatile and difficult to predict with a consequent greater risk to service levels. The investment squeeze resulting from a situation with no adjustment would result in it being unlikely that the appropriate targets for H7 are the same as those for Q6.

116. A number of important aspects of service such as punctuality, lost baggage, and overall satisfaction are likely to be outside of the financial service incentive regime as they are not largely in Heathrow's control. In these areas, the regulatory performance regime will therefore have less of a direct influence Heathrow's performance. However, Heathrow has to compete with other airports in the South East for direct flights and with other Hubs such as Paris, Schiphol and Dublin for transfer flights. This competition will strongly influence Heathrow's performance.

What is the appropriate scale of an adjustment?

117. The CAA has recognised that in the current circumstances Heathrow is not being remunerated for its regulatory depreciation, that without regulatory intervention there is no opportunity for Heathrow to catch-up recovery of this depreciation and that this discrepancy is not consistent with the normal approach to RAB based regulation[12].

118. However, in its consultation, the CAA has not set out any analysis of how the magnitude of such intervention might be calculated and the factors that it would need to take into account. In particular, it has failed to undertake:

- Any assessment of potential approaches that might be used to determine the appropriate amount of an adjustment;
- Any assessment of the potential range of adjustments that would be required at H7; and
- Any consideration of how such an amount would impact consumers and the benefits case for immediate intervention.

119. As a result, the CAA has not demonstrated that it has fully considered Heathrow's application appropriately and in accordance with its duties.

120. In addition beyond regulatory depreciation it has not set out quantified or verifiable analysis either of Heathrow's assessment of an appropriate scale of adjustment – which was based on reference to the assumptions in the original regulatory settlement – nor provided any analysis of its own based on alternative logics.

121. It is not possible to quantify the scale of any adjustment to address the impact of Covid-19 without first making an assessment of the amount of risk that Heathrow was expected to bear in the Q6 settlement. It is clear in regulatory logic, that it is not appropriate for Heathrow to recover the proportion of the impact it was expected to bear. That is the normal variation in actual performance accounted for in the regulatory settlement for which private investors are compensated. However, any amount beyond this level should be the starting point for assessing the appropriate scale of any adjustment.

122. We accept that there may be other factors the CAA may wish to consider that could result in the final amount of any adjustment being different from the amount assessed as being beyond the threshold that Heathrow was expected to bear. In its consultation, the CAA raised issues around treatment of under/overperformance in previous years; treatment of cost savings that Heathrow has achieved to mitigate the impact of the pandemic, and whether the scale of any adjustment is proportionate to the benefits it brings to customers. Given the lack of clear ex-ante guidelines as to any threshold for intervention, there may also be considerations of general judgement in ensuring timely and prudent action in consumers interests for service, provision of capacity and to ensure financeability.

[12] CAP1966 para 2.7

123. However, our view is that, after robustly considering these other factors, the adjustment that we set out in our initial submission remains appropriate and in the best interests of consumers. In the following Sections we address:

- The risk that Heathrow was expected to bear at Q6;
- Adjustments for performance in previous periods;
- Adjustments to reflect mitigating actions; and
- The proportionality of the proposed adjustment.

124. We conclude that the approach proposed in our original submission is robust and appropriate.

What risk was Heathrow Expected to Bear at Q6?

125. The WACC set at Q6 included assumptions about the level of risk to which shareholders in Heathrow were exposed and the appropriate return for bearing that risk. Specifically, the asset beta for Heathrow was judged to be 0.47[13], a level that is consistent with a view that Heathrow's underlying risk was very much less than the market average (asset beta 0.70), and indeed relatively much closer to that of a water utility (asset beta 0.31).

126. Given this level of return, there is an implied upper limit to the amount of risk that Heathrow was expected to bear. Below, we discuss three approaches that can be used to assess this limit and thus what might be an appropriate adjustment threshold:

- Comparisons with risk adjustment mechanisms for comparator companies used to determine the asset beta;
- Comparisons with the underlying volatility of shares, and therefore wider market expectations about the amount of downside; and
- Potential downside limits to return on regulatory equity (RoRE).

Comparator Companies

127. In our initial application for a Covid-19 related RAB adjustment we proposed a revenue threshold of 10% based on airport comparators and NERL[14].

128. The asset beta for Q6 of 0.47 was derived partly through comparisons with the asset betas of other European airports, and in particular Fraport and AdP[15]. In the 2020 NERL appeal, the CMA also considered the appropriate asset beta range for airports. Their decision of a range of between 0.525 and 0.625 was also based on an assessment of the asset betas of listed European Airports including AENA as well as Fraport and AdP.

[13] This is based on the equivalent asset beta for a debt beta of 0.05. An assumption of a debt beta of 0.05 is used throughout this submission to ensure comparability.
[14] In the submission we proposed a threshold of 10%, implemented as an 8% threshold and 95% recovery rate. This is equivalent to a 10% threshold but we considered it had better incentive properties for Heathrow by ensuring that the airport continued to bear additional downside risk beyond the threshold
[15] The CAA did not directly use the values of the comparator betas. It used their relative stability to argue that the beta of Heathrow did not need to be increased from Q5 despite the beta of the comparators being higher

129. In our application for a Covid-19 related RAB adjustment we set out an analysis of the regulatory mechanisms available to European airports to respond to downside reductions in passenger numbers. There were different approaches at different airports. Some were allowed to reset their prices for subsequent years, whereas others had specific adjustment mechanisms that set thresholds beyond which adjustments would be made. For those companies that had specific thresholds, AENA has the largest threshold of 10% of revenue.

130. Prior to the impact of Covid-19, AENA had a higher asset beta than AdP or Fraport. This shows that investors did not consider that this reduced the risk of the airport compared to AdP or Fraport. It demonstrates that a maximum downside exposure of 10% is consistent with the asset beta range identified by the CMA earlier this year. This asset beta range is higher than the allowance at Q6, and therefore a maximum exposure of 10% loss of revenue is consistent with the Q6 allowed cost of capital, if not more conservative in establishing an appropriate threshold for any adjustment.

131. Comparisons with other Sectors are also possible. For example, Ofwat took steps in April to limit Water companies' exposure to the bad debts of non-household retailers during the Covid-19 crisis. Following consultation, it has limited their exposure to 1 month's income from non-household retailers, i.e. up to no more than 1.5% of their overall revenue revenues.[16] This is a much lower level of exposure than generally applied to airports – again noting that in the CAA settlement the asset beat, i.e. risk profile of Heathrow was set closer to water utilities than the overall market average

NERL

132. In its assessment of the asset beta of NERL in 2020, the CMA used the asset beta of airports arguing that it was not clear that the risk profile of NERL was different from that of airports.

133. They did this despite NERL's regulatory framework which limits its downside exposure to revenue to 100% of the first 2% loss, one third of the loss between 2% and 10%, and zero beyond 10%. This limits its total downside to 4.66% of revenue. Therefore, it is clear that the CMA considered that the asset beta range it identified (0.525 to 0.625) was consistent with a regulatory framework that provided substantial downside mitigation in the event of a shock.

134. The operational gearing of NERL is higher than that of Heathrow. Nevertheless, a revenue shock of 4.66% for NERL is equivalent to a revenue shock of 10% for Heathrow when adjusted to provide the same return on regulatory equity[17].

135. Therefore, it is clear that the asset beta range identified by the CMA for airports of 0.525 to 0.625 is consistent with a regulatory framework that provides protection against downside shocks of greater than 10% of revenue.

[16] Ofwat, Covid-19 and the business retail market: Proposals to address liquidity challenges and increases in bad debt – decision document, April 2020

[17] In 2018 NERL had revenue of £704m and a RAB of £979m. This allows the impact on equity returns of a 4.67% downside to be calculated as 4.8% of regulatory equity (based on 30% notional gearing). This is equivalent to £309m for Heathrow, i.e. 10% of revenue.

136. The asset beta range identified by the CMA for NERL is higher than the asset beta of 0.47 allowed at Q6. Therefore, the Q6 WACC would be in practice be consistent with a revenue threshold of less than 10%.

137. Overall, comparison of comparator airports and CMA assessments of airport risk are consistent with a maximum exposure for Q6 of 10% of revenue in the event of a shock.

Market Volatility analysis

138. The return on listed shares varies from year to year, and shareholders will expect returns in some years to be higher than in other years. However, very large movements from average returns would be expected to be increasingly rare, and at some particular scale, it is reasonable to argue that investors did not expect to bear losses beyond that scale.

139. The standard deviation of returns on shares in the FTSE all-share index is 3.36%[18]. The equity beta allowed for Heathrow at Q6 was 1.10. Therefore, the expected standard deviation of Heathrow returns at Q6 would be 3.70%.

140. The CAA used CAPM theory to set the WACC at Q6. This theory is based on returns being normally distributed[19]. It is possible to use this to determine losses and equivalent revenue thresholds that for different return periods of losses. This is illustrated in the table below.[20]

Table 4 - Impact of return period on revenue thresholds

Return Period	Reduction in equity return	Equivalent Revenue Loss £m	Equivalent Revenue Threshold
20-years	4.7%	311	10%
75-years	7.1%	468	15%
333-years	9.3%	609	20%

Source: Heathrow

141. We consider that it is not appropriate for a regulated company to be expected to bear downside impacts that occur less frequently than once every 20-years. This represents four regulatory periods and is a much longer period than shares are typically retained by investors. Revenue thresholds of 15% or 20% are equivalent to extremely long return periods and therefore are unlikely to be within the range that shareholders should be expected to bear, especially given regulatory intervention roughly each five years.

142. Therefore, consideration of expected market volatility also demonstrates that a 10% revenue threshold is appropriate. Even at the extreme limits of conservative assumptions, it indicates a threshold of no more than 20% of revenue.

[18] KPMG, Heathrow 3R Premium, Dec 19
[19] Note that at Q6 Heathrow argued strongly that the likely distribution of returns it faced was skewed heavily to the downside. The CAA ignored this evidence and continued to use an approach that assumed returns were normally distributed (e.g. see CAP 1140)
[20] The amounts are based on revenue of £3.05bn, a RAB of £16.4bn, notional gearing of 60% and use a one-sided normal distribution to take into account returns can be significantly below target, but not significantly above as a result of capacity constraints.

RoRE Approaches

143. RoRE is often used by regulators to understand the level of risk associated with a particular regulatory framework. As such, it is a further possible approach to setting thresholds by considering the appropriate floor to RoRE. Three potential thresholds are considered below:

- RoRE equal to the cost of debt;
- RoRE equal to the level at which cash flows to shareholders are zero; and
- RoRE equal to zero.

144. An important point to consider in the context of an adjustment for Covid-19 is that in this situation we are considering impacts that are outside of management control. This is a different situation to the calibration of regulatory incentives for issues that are in the control of management. As a result, care needs to be taken in comparing thresholds for issues that are and are not in management control.

145. The cost of debt is a proxy for a relatively risk-free investment in that failure to recover principal is generally very unlikely. As such, it is a potential lower limit for the appropriate return for a regulated company.

146. The regulatory framework is based on a real cost of capital. However, in practice a proportion of debt is priced in nominal terms. This means that the cashflows to debt are higher than the cost of debt allowed in the regulatory settlement. If the loss of revenue is sufficiently large, then a cashflow to equity will fall to zero at a RoRE of above zero. If cash flows to equity reduce to zero, interest cover ratios on debt will be less than 1.0 and this is generally inconsistent with retaining an investment grade credit rating. Therefore, this threshold may be an appropriate lower limit for RoRE in a downside shock.

147. If RoRE falls below zero, then a regulated company is not only not earning any return on RAB, it begins to lose revenue associated with regulatory depreciation and thereby recovery of the RAB. A RoRE below this level, as a result of factors outside manage control, is therefore not consistent with the principles of RAB based regulation. This therefore forms an absolute limit to the amount of risk Heathrow would be expected to bear in a downside shock.

148. The Table below sets out the equivalent revenue thresholds for each of these RoRE approaches[21].

Table 5 - Potential RoRE thresholds

RoRE Threshold	RoRE	Equivalent Revenue Loss £m	Equivalent Revenue Threshold
Cost of Debt	2.12%	310	10%
Zero cash to equity	2.16%	307	10%
Zero	0.0%	449	15%

Source: Heathrow

[21] The cost of debt and zero cash to equity are based on Heathrow debt costs as at the end of 2019. If the Q6 determination allowances were used instead, the revenue thresholds would be 7.7% and 8.2% respectively

149. Table 5 shows that the 10% threshold obtained from the comparator and market approaches is equivalent to RoRE being set so that cash to equity is zero. This is equivalent to a situation where interest cover ratios fall below 1.0.

150. An issue with a RoRE based approach is that the threshold is to some extent arbitrary and not related to market expectations of risk. Therefore, we consider that this approach is less appropriate than the comparator and market-based approaches. Nevertheless, it allows a reasonable cross-check with these approaches to be made.

Summary

151. Based on Heathrow's current forecast the loss of revenue over 2020 and 2021 is £3.4bn, or £3.3bn excluding ORCs. The table below sets out the approaches described above. It also sets out the amount of revenue loss that is beyond the threshold based on the latest forecast. The revenue amounts exclude ORCs.

Table 6 - Summary of potential approaches to threshold

<table>
<tr><th>Approach</th><th>Revenue Loss Threshold</th><th>Amount beyond Threshold (2018p)</th></tr>
<tr><td>Airport Comparators</td><td rowspan="5">10%</td><td rowspan="5">£2.8bn</td></tr>
<tr><td>NERL</td></tr>
<tr><td>1 in 20yr market loss</td></tr>
<tr><td>RoRE = cost of debt</td></tr>
<tr><td>Zero cash to equity</td></tr>
<tr><td>1 in 75yr market loss</td><td rowspan="2">15%</td><td rowspan="2">£2.5bn</td></tr>
<tr><td>RoRE = zero</td></tr>
<tr><td>1 in 333yr market loss</td><td>20%</td><td>£2.2bn</td></tr>
</table>

Source: Heathrow

152. Table 6 shows that for any plausible revenue threshold, the likely losses at Heathrow in 2020 and 2021 beyond the threshold are significant.

153. In our July submission our view was that a 10% revenue threshold was appropriate based on airport comparators and NERL. Inclusion of consideration of expected market loss and RoRE considerations has confirmed our view that such a threshold is appropriate.

154. The appropriate threshold is also relevant to any ex-ante risk protection mechanism put in place for H7. It would be inconsistent to have a different mechanism in place for H7 to that used as a basis for determining an adjustment for iH7 without reconciling other aspects of the determination. A wider threshold for H7 would result in a larger shock allowance and would also lead to a higher WACC. This makes it clear that consumer interests are not aligned with choosing the largest threshold.

Adjustments for previous performance

155. In its consultation, the CAA sets out the issue of whether there should be any interaction between earlier outperformance in Q6 and an adjustment. It also sets out an estimate of the outperformance of Heathrow for Q6 and Q6+1 of £1.1bn.

156. Heathrow considers that there are a number of major issues in respect of combining risk mitigation mechanisms with assessments of historic performance. These issues include:

a) the appropriate period over which to consider performance;
b) the impact of any interaction in terms of regulatory appropriateness in terms of consistency and incentive properties;
c) the appropriate benchmark for assessing performance relative to economic cycle and choices of company structure;
d) consideration of impact of performance on airlines; and
e) how such an interaction would be implemented

Appropriate period for considering performance

157. To properly assess relative performance, it is important to choose the right timescale that properly reflects the nature of the underlying business.

158. Heathrow is a high equity beta company. At Q6 the equity beta was 1.1. Based on the water and NERL preliminary CMA findings, the pre-Covid equity beta of Heathrow is 1.43. The performance of high beta companies should be correlated with the overall performance of the market. Consequently, shareholders would expect it to outperform when economic conditions are good and underperform when economic conditions are poor. This means that outperformance needs to be considered across the whole business cycle.

159. It is also clear that the repercussions of Covid-19 will be felt long after the end of both Q6 and H7. Therefore, the CAA's assertions that a strong return in Q6 is a relevant consideration but that returns well below the expected level in previous Qs are not is an irrational position to take. It is not acceptable that the CAA proposes to take a view 'in the round' but chooses to disregard the well below expected returns Heathrow made in previous Qs.

160. In addition, whilst assessing Heathrow's performance over only one regulatory period might be acceptable for a low equity beta company, it is not appropriate for a high equity beta company. This is because the performance over one regulatory period will reflect only part of the economic cycle and therefore will not reflect the expected variation in performance of the business.

161. The CAA has suggested that the regulatory process means that historical returns should not be included in the assessment of performance and that only the current period is relevant. However, iH7 was subject to a different set of price control limits to Q6. Given this the iH7 period alone should be treated as the current period. Therefore, were the CAA proposed approach to be applied, then it would consider performance in iH7 only during which extreme underperformance is anticipated.

162. Neither the iH7 period, nor the Q6 and Q6+1 period represent a full economic cycle. Therefore, In the context of the iH7 Covid adjustment, it is not appropriate to limit consideration of out-performance to these periods only.

163. Assessing performance over the full cycle from 2008/09 to 2019 shows underperformance. The average return on RAB was 4.9% compared to a target return of 5.2%. The net underperformance during the period was £0.30bn.

Inappropriate regulatory properties of such an interaction

164. Any interaction between a Covid-19 related adjustment and relative performance is likely to be asymmetric. It is doubtful the CAA would have raised an issue in respect of previous performance if Heathrow had underperformed earlier in Q6.

165. In addition, we have serious concerns about potential approaches that intermix incentives to create greater performance with risk mitigation adjustments designed to deal with extreme circumstances outside management control or the assumptions of the settlement.

166. A clear consequence of any interaction between adjustment and performance is that the resulting mitigation from any event would be different at different times. For example, if a company had underperformed early in a period, the interaction would have no impact, whereas if it had outperformed, the interaction would reduce the amount of the adjustment. This results in the impact of the risk mitigation mechanism being inconsistent and not related to the underlying risk. Such inconsistency is not compatible with the CAA's duties.

167. In addition, such an approach has highly detrimental impacts on incentive properties. Consider a situation where an adjustment was triggered over the first two years of a five-year period after which conditions returned to normal. In this situation, the impact of the interaction would be to remove any further incentive on the company to outperform the settlement in the later years. This demonstrates that such an interaction would be inconsistent with the CAA's duties to promote efficiency.

168. The CAA states at a number of points in its consultation that, given the relatively strong performance of Heathrow during Q6, it is to be expected that Heathrow uses that outperformance to offset current losses. If that is the case then the incentives to outperform a settlement due to action by the business and its owners - by means of improving customer experience, cost savings, etc - are significantly reduced. Heathrow has made clear in its submission that it proposes to absorb the first 8% of revenue losses and 5% of losses beyond that threshold, which represents both a substantial impact on equity and is consistent with the assumptions in the settlement. The regulatory incentives for improved performance within the settlement are completely undermined by losses larger than these levels.

169. These examples show that any interaction between performance in a period and an adjustment for extreme circumstances is likely to lead to inconsistent regulation and poor incentive properties. Consequently, any such interaction should be rejected.

Appropriate benchmark for assessing performance

170. The relative performance of Heathrow can be considered in respect of the achieved level of return compared to an appropriate benchmark. There are three broad options in respect of which return to consider: return on RAB; pre-tax return on equity; or post-tax return on equity. In addition, the appropriate benchmark could be the return allowed for the price review or a more contemporaneous assessment of the appropriate return.

171. In its consultation, the approach the CAA used was to compare post-tax return on equity with the allowance at the Q6 determination. We consider that extreme care needs to be taken in respect of the non-building block elements of outperformance. In particular:

- Assessing return on equity takes account of changes in the cost of debt since the determination but does not take into account any changes in the cost of equity. This is an inconsistent approach;
- Performance relative to the cost of equity over a short period does not take into account impacts from the expected variation in returns during the economic cycle; and
- The Heathrow regulatory regime uses a pre-tax approach. As such there is a clear and transparent notional allowance for the rate of tax and a clear expectation that actual tax costs will differ depending upon the actual structure adopted by the company. Given this it is not appropriate to consider differences in post-tax returns and any comparison should be at the pre-tax level only.

172. We consider that it is inappropriate to compare outturn return on equity without considering how the outturn cost of equity has also changed. Given this, we consider that an approach to outperformance that considers return on RAB is more likely to be a reliable measure of performance.

173. A major weakness in the approach adopted by the CAA is that it has not taken into account the cost of equity for Q6 being too low. This can be seen by applying the findings of the CMA in respect of the NERL and Water appeals in 2020 to the pre-Covid estimate of the cost of equity for Heathrow. This is demonstrated in the table below that compares application of the CMA findings to the WACC for Heathrow in 2019[22].

Table 7 - Updated estimate of Heathrow WACC based on CMA interim findings

WACC Parameter	Q6 Decision	CMA 2020 pre-covid
Asset Beta	0.47	0.60
Equity Beta	1.10	1.43
Post-tax cost of equity	6.83%	9.34%
Pre-tax cost of equity	8.55%	11.53%
Cost of debt inc fees	3.22%	2.32%
Vanilla WACC	4.66%	5.13%
Pre-tax WACC	5.35%	6.00%

Source: CMA/Heathrow Analysis

174. Table 7 shows that the current CMA based estimate of the post-tax cost of equity for Heathrow is 2.5% higher than the allowance at Q6. This difference applied to the whole of Q6 and Q6+1 represents an underperformance of £916m (2018p). This alone would reduce the CAA estimate of outperformance to £197m.

[22] This estimate was based on the market parameters used for water: TMR 6.0%; and RFR -1.87% (both RPI stripped). The asset beta is based on the 75%-ile of the airport range of 0.525 to 0.625 in the NERL interim findings. The use of the 75%-ile point in the asset beta range is consistent with the aiming up approach for equity used in the water determination. The cost of debt of 2.32% is Heathrow's actual cost of debt in 2019 assuming long term inflation of 2.9% consistent with the CMA approach in the water findings.

175. The table below shows how the assessment of performance can change depending upon the period considered, the approach used to assess performance, and the baseline to which performance is compared.

Table 8 - Assessment of outperformance depends on approach

Period for Comparison	**Economic Cycle**	**Q6 and Q6+1**			
Approach	Return on RAB	Post-tax return on equity	Return on RAB	Pre-tax return on equity	Post-tax return on equity
Baseline	Determination WACC	Outturn cost of equity	Determination WACC	Determination cost of equity	Determination cost of equity
Outperformance	-£303m	£197m	£678m	£801m	£1,113m

Source: CAA/Heathrow

176. Table 8 shows that the approach adopted by the CAA in its consultation results in the highest possible assessment. We consider that this approach by the CAA is inappropriate and inconsistent as it takes into account outturn cost of debt and tax paid but does not adjust for outturn cost of equity.

177. We consider that the first column sets out the most appropriate measure of performance as the period reflects the full economic cycle and it uses return on RAB. On this basis, Heathrow has not outperformed during the current business cycle even before the impact of Covid-19.

Consideration of impact of performance on airlines in the period

178. The CAA consultation has not considered the benefits that airlines received during Q6 as a result of the greater number of passengers. In addition, it has not considered the benefits that have accrued to airlines as a result of the lack of capacity at Heathrow.

179. During Q6, performance at the airport improved considerably. This can be seen in ASQ scores where Heathrow has improved to being among the very best airports in Europe.

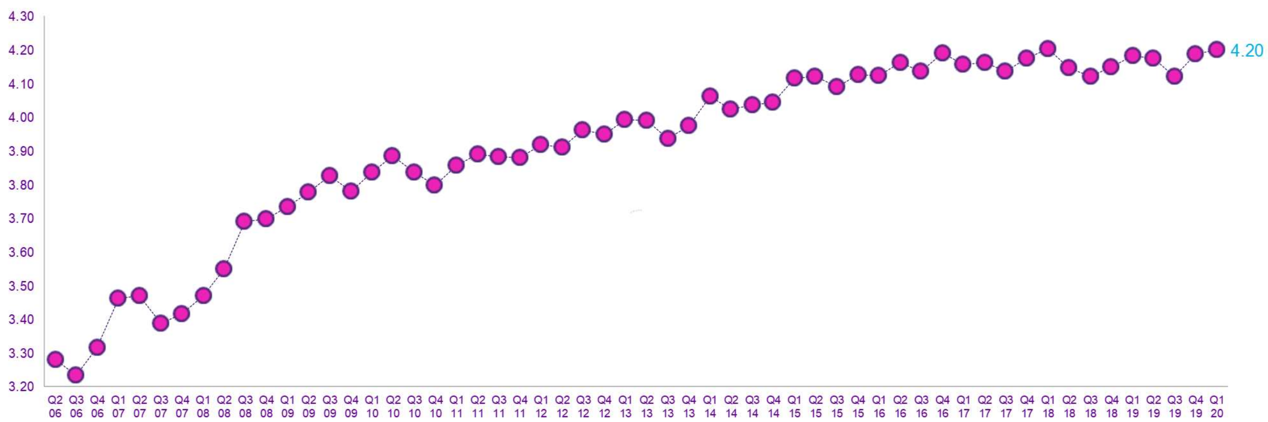

Figure 4 - Heathrow ASQ Scores

180. This high performance for consumers has helped drive higher numbers of passengers and improved the attractiveness of the airport to consumers. This in turn has driven up demand to use the airport. However, during Q6 capacity at Heathrow was constrained by the movement cap and being limited to operating on two runways only.

181. The CAA has also not considered airline performance at Heathrow over the same period. The constraint on capacity alone has led to airline ticket prices being higher than they otherwise would have been. Frontier Economics used a range of approaches to robustly estimate that the additional revenue recovered by airlines was between £2.0bn and £2.6bn per annum[23]. Over the period, this means that airlines collectively have benefitted at Heathrow by around £15bn. This means that airlines have benefitted disproportionately from the improved performance delivered by Heathrow. It also puts the proportionality of any potential adjustment into context.

Implementation of any such interaction

182. In the section above we showed that any interaction between a risk mitigation mechanism and outperformance leads to inconsistent regulation and inappropriate incentive properties and that therefore such an interaction is appropriate.

183. However, if such an interaction were to be applied, then there are two broad ways in which it could be done:

- A cap could be applied to the overall adjustment so that returns over an appropriate period do not exceed the allowed return (either on RAB or equity); or
- The amount of adjustment identified could be reduced by an appropriate proportion of the earlier outperformance.

184. In the first approach, the amount of an adjustment would be capped so that the average return over the period including the adjustment did not exceed the target rate of return. As set out above, we consider that such an approach would lead to inappropriate incentives and regulatory inconsistency. In addition, it would inappropriately conflate normal variations in performance arising from management action, and extreme variation arising from factors outside management control.

185. The second approach would calculate an adjustment relative to a particular threshold and then reduce the adjustment by the amount of earlier outperformance. This would expose the company not only to the identified appropriate threshold, but then arbitrarily increase this threshold by the amount of previous outperformance. In effect it guarantees a far bigger loss from the situation than envisaged by the setting the appropriate threshold. In addition to the resulting arbitrariness of the adjustment, the approach would guarantee that performance during the period was less than target. As such, this approach would be inconsistent and punitive and therefore we do not consider that it is appropriate.

186. This means that only the first of these approaches is a viable option. However, as set out above we consider that this is also an inappropriate approach as it leads to inconsistent

[23] Frontier Economics, Estimating the Congestion Premium at Heathrow, May 2019

outcomes and inappropriately mixes the impacts of an incentive framework with an extreme risk mitigation mechanism.

Conclusion on treatment of outperformance

187. In the sections above we have shown that:

- It would be bad regulation to include an interaction between historical outperformance and a risk mitigation mechanism such as the adjustment sought due to Covid-19;
- That even were such an adjustment to be made, performance should be considered across the whole of the economic cycle for a company such as Heathrow, and that across the whole cycle Heathrow has not outperformed;
- That there are difference ways to calculate outperformance in Q6 and the CAA has chosen an approach we believe is partial a designed to result in the maximum fassessment; and
- That the CAA has not considered the substantial benefits airlines have received from Heathrow's higher performance.

188. Given this, we consider that it is not appropriate to make an adjustment to any Covid-19 related recovery to reflect performance earlier in Q6.

189. We also note, that even were any assessed losses beyond a threshold capped so that performance over the whole of Q6 and iH7 were capped at an allowed return, the residual amount of any adjustment would be greater than the regulatory depreciation for 2020 and 2021 of £1.6bn. Therefore, any concerns about the appropriate way to treat historic performance should not give the CAA reason to delay and not remove 2020 and 2021 regulatory depreciation in the meantime. This is illustrated in the Table below based on the recovery amounts set out in Table 6 and some of the outperformance estimates set out in Table 8.

Table 9 - Impact of potential outperformance caps on recovery amount

Outperformance Case		Economic Cycle	Q6 cf outturn CoE	Q6 Return on RAB	Q6 CAA Approach
Assessed Outperformance (Table 8)		-£0.3bn	£0.2bn	£0.7bn	£1.1bn
Lost revenue (exc ORCs)		£3.3bn			
Lost revenue less outperformance		£3.3bn	£3.1bn	£2.6bn	£2.2bn
Revenue Threshold	Losses beyond threshold (Table 6)	Losses beyond threshold capped by revenue loss less outperformance			
10%	£2.8bn	£2.8bn	£2.8bn	£2.6bn	£2.2bn
15%	£2.5bn	£2.5bn	£2.5bn	£2.5bn	£2.2bn
20%	£2.2bn	£2.2bn	£2.2bn	£2.2bn	£2.2bn

Source: Heathrow

190. Table 9 clearly shows that even with an extreme revenue threshold and the greatest adjustment for outperformance the residual adjustment is greater than regulatory depreciation

for 2020 and 2021 of £1.6bn. This should give the CAA considerable comfort that acting now will not prejudice their ability to consider all issues in the round, including performance, as part of H7.

Adjustments for Mitigating actions

191. In our July submission we argued that the appropriate risk threshold for Heathrow was 10% of revenue (excluding ORCs). However, in implementing this threshold we adopted a threshold of 8% and a recovery rate of 95% beyond this. We demonstrated that this approach was the same overall level of risk but had better incentive properties[24].

192. In its consultation, the CAA stated that Heathrow "has not provided evidence that it has fully accounted for both the cost savings it has made, and those it plans to make, in calibrating the proportionality of its proposed response".[25]

193. We are disappointed to see this written in the CAA consultation since our submission discussed this issue in detail. In this we demonstrated that there were many reasons why making an adjustment for cost savings in the recovery mechanism would not be appropriate. The reasons we set out were:

- Making an explicit adjustment for actual differences in operating costs removes proper incentives on Heathrow to manage its costs appropriately during the period;
- The revenue threshold proposed of 8% (or 10% with 100% recovery rate beyond) is already conservative in comparison to the approaches at other airports and at NERL and they do not have adjustments to their recovery to adjust for opex savings. Including an adjustment for opex savings would therefore not be consistent with this revenue threshold and the regulatory logic of the Heathrow settlement;
- Much of the cost base at Heathrow is largely fixed. This makes making savings beyond a particular level very difficult;
- The revenue thresholds proposed represent over 30% of operating costs excluding those associated with ORCs. The loss Heathrow is therefore retaining is much greater than any amount it can save in operating costs;
- Based on the ratio of operating costs to revenue at Heathrow, using a recovery rate of 95% is equivalent to Heathrow mitigating reducing operating costs by around 1.5% for a 10% reduction in passenger numbers. As a consequence, a partial and realistic adjustment for operating costs *is* deliberately included as an incentive;
- The exceptional costs of delivering the savings that have been made are considerable. In addition, dealing with Covid-19 and ensuring an effective recovery could lead to a significant increase in operating costs despite the lower passenger numbers – no specific counter adjustment has been made for these either.

194. An additional consideration is that many of the savings made in 2020 are likely in practice to be deferrals of expenditure to later years. For example, temporary reductions in pay may have

[24] July Submission p24
[25] CAA consultation, p27

to be reversed in later years through higher rewards when the situation recovers, and missed training may still be required.

195. We are disappointed that the CAA has not engaged with the detailed arguments and discussion we included in out submission on this matter. This is further evidence of the CAA's poor process in assessing this issue.

Assessment of methods for adjustment

196. In our submission we also set out a discussion of the most appropriate way to implement a risk adjustment mechanism and concluded that a RAB adjustment based on revenues was the most appropriate methodology as against alternative methods. The CAA does not address this discussion in its consultation. However, we understand from our discussions with the CAA that they agree a RAB based approach would be most suitable in the event an adjustment were to be applied.

197. We have addressed in the discussion elsewhere the issues with assuming that all issues could be solved by assuming just equity support and the CAA's implications that Heathrow must demonstrate it has evaluated all other possible alternative.

198. If the recovery were to be during H7 only, rather than spread over thirty years using the RAB as we propose, the impact on charges would be much higher at around £9 per passenger.

199. Table 10 sets out estimates of the amount of revenue that would be recovered through the RAB as a result of this mechanism for the delayed recovery and prolonged contraction scenarios.

Table 10 - Scale of proposed recovery mechanism

£bn (2018p)	Scenario	
	Delayed Recovery (June)	Current Forecast (October)
Estimated Revenue Loss	2.2	3.3
Amount recovered in RAB	1.7	2.7
Amount borne by Heathrow	0.5	0.6
Estimated impact on allowed yield in H7	£1.2 per pax	£2.7 per pax

Source: Heathrow

200. Table 10 shows that the consequence of the adjustment on future charges at the airport is relatively small and amounts to less than 0.5% of a typical fare of £400. As such it will have can at most have very limited impact upon consumers.

Summary of Approach

201. There is no dispute that the Q6 settlement can be revisited in exceptional circumstances and that we are currently experiencing exceptional circumstances. Therefore, the trigger for action by the CAA has been met in the current circumstances.

202. In the sections above we have demonstrated that:

- Implementing an adjustment will lead to lower prices for consumers in H7 (see Table 1);
- There will be considerable consumer detriment in 2021 and 2022 if the CAA do not act immediately to signal significant recovery of value at H7. The most appropriate way to do this is to remove regulatory depreciation for 2020 and 2021 creating the capacity for extra investment in these years;
- Any reasonable analysis of the threshold of risk that Heathrow was expected to bear as part of Q6 is very much smaller than the losses Heathrow faces (see Table 6);
- That examined over the business cycle, Heathrow has not outperformed. However, even if the CAA estimate of outperformance is used to cap returns over the period, the size of any residual losses is significantly greater than regulatory depreciation for 2020 and 2021 (see Table 9); and
- Failure to implement a RAB adjustment will result in significant downward pressure on investment in H7 due to the need for Heathrow to recover from the losses experienced in the pandemic. This in turn will lead to worse outcomes for consumers.

203. Given this, we consider that the case for a RAB adjustment remains compelling.

204. In its consultation, the CAA did not engage on the specific details of the approach we proposed for calculating the appropriate adjustment and did not set out any alternative approaches. We have reassessed the approach we proposed and continue to consider it robust and in the best interests of consumers.

205. Consistent with our July submission, we request that the CAA adopt the following approach to a RAB adjustment by way of a policy statement:

1) Apply a depreciation holiday for 2020 and 2021. This means that Heathrow's RAB will be higher at the end of 2020 and 2021 by a known amount. This will give investors' confidence in Heathrow's ability to recover lost value and continue to finance itself during the crisis. It will allow greater investment in 2021 and 2022 and deliver a better outcome for consumers in those years.
2) Apply an adjustment to the starting RAB in the H7 determination based on the actual revenue outturn for 2020 and the forecast revenue for 2021 to correct for any difference between the required RAB change and that implemented through the depreciation holiday. The recovery amount calculated for 2020 and 2021 based on actual and forecast revenue (excluding ORCs) will be:

$$\text{Recovery amount} = (\text{Forecast revenue} * 0.92 - \text{actual revenue}) * 0.95$$

3) No depreciation would be applied to this element of the RAB for H7, but return would be included in prices from 2022 in H7.
4) A final adjustment to RAB would be made at the end of 2022, reflecting actual outturn revenue for 2021 and prices for 2023 onwards adjusted accordingly.

206. Since the RAB is not currently defined in the licence, we do not consider that a formal licence modification is required for step 1. However, the CAA's policy decision should be accompanied

by an express ‘revision’ to the depreciation arrangements set out in the CAA’s iH7 policy decision (i.e. CAP1852 Appendix C).

207. The approach we propose will in itself directly impact bills by around £2.60, around 0.5% of the typical fare of passengers at the airport. As demonstrated above, it will avoid far larger cost of financing impacts on the H7 charge in the case of no adjustment, as well as creating the potential for smoothing regulatory depreciation to manage airport charges in H7.

208. This approach allows the CAA to take action now to secure benefits in 2020 and 2021, whilst giving more time to consider the issue in the round as Steps 2-4 would be reflected in the H7 price control licence conditions.

Financeability implications

209. In its consultation, the CAA appear to treat the current pandemic as a balance sheet issue. They seem to consider that our key concern is the high level of gearing that will result from the pandemic impacts and that we are thus requesting an adjustment primarily to address this high gearing. As a result, they seem to have focussed on our current financial structure and the degree to which this has led to high gearing rather than focussing on the devastating economic impact of the pandemic that is independent of this structure. We consider that in this approach, the CAA have fundamentally missed the nature of the challenges posed by Covid-19 and as a result focussed on the wrong issue.

210. Moreover, the actual level of gearing of a company should have no bearing on the approach to regulation adopted by a regulator. This has been the standard approach by UK Regulators for over 30 years. The principle was recently upheld by the CMA who have struck out Ofwat's proposed gearing adjustment for water companies. Therefore, by focussing on this issue, the CAA is also not acting in line with good regulatory precedent.

211. Above all, the impact of Covid-19 on Heathrow is an economic issue arising from the impact of the pandemic and Government actions and restrictions on travel. It is not primarily a balance sheet issue. Our current forecast for 2020 and 2021 represents over 100m fewer passengers in these years than was expected before the pandemic. This corresponds to a loss of revenue of £3.4bn and will result in very significant losses for Heathrow in both years.

212. Heathrow has used the strength and flexibility of its existing debt platform and prudent financing action to ensure it has sufficient liquidity to fund its operations throughout 2021 and beyond. However, maintaining compliance with covenant requirements and the confidence of rating agencies requires strong actions to preserve liquidity. These actions include reducing capex to the greatest extent possible and maximising short-term cost savings. The potential impact on consumers of these actions is set out above.

213. The huge loss of value experienced by Heathrow is, as we show earlier, beyond any reasonable expectation of the level of risk Heathrow would be expected to bear as a regulated company. Furthermore, the loss of passengers and revenue is driven both by the pandemic and by specific and deliberate Government actions. Without recovery of an appropriate proportion of this loss, investors view of the risk of Heathrow will increase significantly. Evidence of such investor views is already clear in the market data on Heathrow's debt and the asset beta of airports. This higher risk will lead to a much higher cost of capital in the future, significantly increasing charges to passengers.

214. In addition, the debt overhang resulting from the losses will need to be repaid and the balance sheet restored to its original condition. In the absence of an appropriate recovery mechanism, such rebuilding severely constrains the ability of the airport to invest for many years. This challenge exists irrespective of the original gearing of the airport.

215. The solution we have proposed for 2020 and 2021 ahead of H7 is to waive regulatory depreciation for these two years. This provides the following benefits:

- Practically ensuring that a core regulatory principle – regulatory depreciation – operates to at least some degree even in a crisis
- Providing a clear signal to investors and rating agencies that the regulatory regime is consistent and that there will be some calibration of the inevitable value loss to the risks assumed and used by the regulator, thereby easing access to additional finance;
- Avoids consumers having to pay higher debt costs arising from more costly debt in 2021 and 2022 arising from a reduction in credit rating; and
- Providing a clear signal to the Board of Heathrow that the regulatory regime will in practice support long-term investment and decision making. This will reduce the pressure to take short-term decisions to preserve liquidity that have potential detrimental impacts on service and consumers later.

216. Acting now will deliver clear benefits to consumers for 2021 compared to acting at the end of 2021 when it is too late to influence actions during the year. Therefore, the only reason for the CAA not to act now would be if they considered that no adjustment was likely through the H7 process. We consider that the consequent impact on charges, investment and service means that a decision that no adjustment was required would be inconsistent with the CAA's duties and be extremely vulnerable to challenge on appeal.

217. Absence of timely action could trigger a credit rating downgrade with material costs to consumers. Heathrow raises most of its funding from debt capital markets, rated as investment grade by independent credit rating agencies. Rating agencies assess their credit rating on the currently available regulatory framework. They assume equity investors will act rationally in light of this framework – thus taking into account the risk and reward balance. They also take note of regulator action as well as general principles. In absence of adjustment, our cashflow credit metrics would reflect the immediate risk with gearing and interest cover ratios vulnerable to further reductions in traffic.

218. We estimate that a credit rating downgrade would cost consumers around £300m. A temporary downgrade would take 18-24months to be restored, even after the root cause for downgrade were cured (i.e. risk and reward balance issues were addressed in future). During that period, debt would be refinanced at higher spread. Considering that Heathrow's debt duration is 10.5 years, Heathrow would refinance c £3bn of debt during the 18-24 months at higher cost while rating remain downgraded. For every 100bps, costs borne consumers would increase by c£280m. This cost can be avoided by early action in 2020.

219. We have shown above that any reasonable approach adopted by the CAA would result in an adjustment that was greater than the regulatory deprecation for 2020 and 2021. Given this, together with the material and tangible benefits of acting early, the CAA should be able to implementing the depreciation adjustment as requested without risk of later revision.

220. Over the last 20-years, the returns at Heathrow have been below its cost of capital. The impact of the pandemic has exacerbated this impact. Without an appropriate adjustment, investors are likely to increasingly view airport regulation as being a losing bet. This will increasingly undermine the incentive to invest at the airport and in the long run be seriously detrimental to consumer interests. Therefore action by the CAA is imperative.

221. In its consultation, the CAA raised a number of specific issues it wished Heathrow to address. These requests are set out below alongside out responses.

(i) "options for bolstering its financial position, including options that involve an element of new cash contributions from shareholders;"

222. Given the much more gradual recovery in its passenger traffic, Heathrow took the prudent and proactive step to further enhance its liquidity position by accessing global debt capital markets in October.

223. In October, Heathrow raised £1.4 billion equivalent across three public bond transactions in Euro, Sterling and Canadian dollars. All three transactions were well oversubscribed and completed at competitive prices. However, the spread was around 110 to 160bps wider than other regulated utilities in current market conditions. This is much higher than the spread of between 20 and 30bps at the start of 2020 before the effects of the pandemic became apparent. This increase in spread reflects investors view that risk is now much higher in aviation sector. This new debt financing was raised within the ring-fenced group, Heathrow SP, where the bulk of funding activities are executed.

224. Heathrow's management also opted to reinstate the fourth layer of its capital structure, ADI Finance 2, with a new £750m facility signed in October with private international infrastructure lenders. The layer, which was still in use until early 2019, sits outside of the ring-fenced group and is subordinated to all other debt financing raised by the airport. Heathrow plans to inject the facility's net proceeds into the Heathrow Finance group to partially repay some debt and push over £600m into the ring-fenced group, Heathrow SP. This represents an injection of equity at the regulated entity level (Heathrow SP). The capital injection will provide further liquidity and headroom to the covenants built into Heathrow's debt financing platform.

225. Considering the funding raised in October, Heathrow's liquidity stands at around £4.5bn and means that all of its 2021 debt maturities are pre-funded. Given this strong liquidity position, the airport is able to meet all its forecast obligations for at least 12 months under the extreme stress scenario of no revenue or well into 2023 under its current traffic scenario.

226. Despite the uncertainties ahead, Heathrow's recent funding activities demonstrated the benefits of its debt financing platform as the airport was able to continue accessing competitively priced funding from international capital markets. Recent transactions also illustrated debt investors' continued confidence in Heathrow's credit story.

227. Heathrow's debt financing platform was set up in 2008 to ensure maximum flexibility in accessing international debt capital markets. As a result, over the years, Heathrow has issued across four layers of its capital structure and developed a presence in 8 international bond markets. Issuing across four layers of the capital structure allows access to different investors profiles when it comes to risk appetite on one hand. On the other hand, non-sterling debt financing is conducted at the most secured and highest rated level of the capital structure where Heathrow can access the deepest pools of liquidity. Combining those two approaches maximised Heathrow's ability to diversify its sources of funding and therefore to maintain price tensions as much as possible between the various markets it can access. The financing

platform also provides a strong suite of financial and information covenants which in turn underpin Heathrow's investment grade ratings.

228. This strong suite of creditors protections coupled with other credit fundamentals including the resilience of the business, the historical predictability of cash flows warranted by its regulatory framework and its prudent financial management evidenced by its ongoing conservative liquidity position have been critical to maintain debt investor's confidence. Retaining investor confidence in the regulatory framework is critical to Heathrow's ongoing access to finance.

229. Despite its strong liquidity position and the mitigating actions being implemented early on, Heathrow was forecasting a breach of its financial covenants. Heathrow's financial covenants are of two types: a gearing ratio driven by net nominal debt and the value of Heathrow's RAB and a cash flow ratio largely driven by the cash flow generated by the operations and cash interest paid.

230. Despite the historical headroom Heathrow has consistently maintained to avoid breaches of these covenants, the Covid-19 crisis put these ratios at risk. This was because the actions to protect liquidity led to a slower RAB growth and lower passenger volumes have meant significantly lower cash flow from operations. Therefore, in July 2020, Heathrow's management took the prudent step to secure a waiver from its creditors which removed the risk of covenant breaches in the short term. Over 90% of creditors involved in the waiver process supported Heathrow's request, demonstrating the continued confidence of the credit community in Heathrow's ability to deliver its mitigations plans to navigate this crisis as well as the appropriateness of its financing structure.

231. Although the risk of covenant breaches was removed in the short term, Heathrow's latest traffic outlook, published in October 2020, points to renewed pressure on its financial covenants as well as credit metrics monitored by rating agencies. Heathrow revised its traffic outlook from 29.2m passengers to 22.6m in 2020, a reduction of 72% compared to 2019 volumes. It also reduced its 2021 forecast from 62.8m to 37.1m passengers. No covenant breach is forecast under current traffic outlook thanks to mitigations put in place or under consideration to reduce costs. However, Heathrow's management remains vigilant in the face of this fast-changing situation, as illustrated by the recent Government's announcement of a four-week national lockdown starting on 5 November 2020. While Heathrow's liquidity puts it in a robust financial position, financial covenants will again come under strain without management actions to continue reducing costs in 2021. Heathrow is finalising its business plans to address this challenge.

232. As it continues navigating the Covid-19 crisis, Heathrow has demonstrated the benefits of its prudent financial management, in particular by consistently maintaining a robust liquidity position together with cautious headroom to its financial covenants while taking proactive steps where headroom was likely to reduce due to external factors.

(ii) "robust cash flow modelling, ideally using the CAA's price control model, to demonstrate the expected evolution of the financial position of the notional entity as well as HAL's actual financial position;"

233. We show the likely evolution of the financial position of the notional business in paragraphs 74 to 92 above and have included the spreadsheets underpinning this analysis with our response. This shows that if gearing was at 60% at the end of 2019, the impact of the pandemic would be to increase gearing by the end of 2021 to 74%.

234. Gearing of Heathrow SP and Heathrow Finance will reflect the ongoing finance activities at Heathrow. These include the potential for providing new equity to the regulated business (Heathrow SP) by raising debt in the structure above Heathrow Finance as has already been done, or by equity being provided by ultimate shareholders. This additional finance can be provided to either or both Heathrow SP and Heathrow Finance allowing them to maintain an appropriate financial position.

235. However, the availability of such additional finance is strongly dependent on the confidence investors place in Heathrow's regulatory regime. If this confidence weakens as a result of the CAA's failure to take appropriate action in respect of Covid-19, access to additional finance would be jeopardised. In addition, retaining the confidence of credit rating agencies is important in respect of being able to secure additional funds.

(iii) "evidence of the case for immediate regulatory intervention and a reconciliation of this case to the public statements referred to above about HAL's financial position and liquidity;"

236. Heathrow has provided clear evidence of its proactive and cautious financial management by enhancing its liquidity position, reducing its costs and securing a capital injection.

237. Under Heathrow's latest traffic scenario, there is no covenant breach forecast in 2021 but significant uncertainties remain ahead. Heathrow will need to continue implementing its mitigation plans and look for further costs savings opportunities. This will contribute to maintain investors and credit rating agencies confidence.

238. While investors and credit rating agencies are particularly sensitive to actions taken to reduce costs in the current environment, they also rely significantly on the regulatory protections and regulatory assumptions underpinning Heathrow's credit story.

239. By delaying or refusing to take action, the regulator will dampen investors' confidence and impact how Heathrow's risk profile is perceived by its credit community. it may lead to adverse outcomes with rating agencies and will have adverse consequences for the cost of debt financing and therefore on airport charges.

(iv) "further analysis of the cost of capital that is more complete and considers all relevant factors, including those which may lead to a lower estimate;"

240. The asset betas of listed airports have continued to be much higher than before the pandemic. The table below sets out estimates of the asset betas of Fraport, AdP and AENA as at the end of September. The impact of the pandemic resulted in a step change in investors views in the riskiness of airports, and therefore there is a clear break in data before this time, and in data after this. To reflect this, we have considered current spot asset betas on data since the impact of the pandemic only as well as using 2-year daily frequency estimates.

Table 11 - Current asset betas of comparator airports

	Fraport	AdP	AENA	Average
Spot beta (2-years daily frequency)	0.72	0.89	0.86	0.82
Spot beta (149-days daily frequency)	0.77	1.01	0.98	0.92

Source: Heathrow

241. The average asset beta from these two approaches is 0.87. We have used this to estimate a WACC based on contemporary market data.

242. In addition to the increase in the asset beta of comparator airports, the spread of Heathrow bonds relative to the iBoxx index has continued to widen. Over the 3-months up to the end of September, the average spread was 0.9%. Taking into account a new issue premium of 0.15% and a proportional allowance of 0.05% for the higher costs of index linked debt (as included in the IBP) a current view of the cost of new Heathrow debt is that it would be 1.10% greater than the iBoxx index.

243. Taking account of this contemporaneous market data and using the cost of capital parameters identified in the CMA water appeal results in an estimate of current market WACC for H7 of 8.5%. The elements of this estimate are set out in the table below[26].

Table 12 - Estimate of Airport WACC from current market parameters

Parameter	Gearing 60%	Gearing 75%
Asset Beta	0.87	0.87
Equity beta	2.10	3.33
Cost of Equity	14.64%	24.29%
Pre-tax cost of equity	18.07%	29.99%
Cost of debt inc costs	2.05%	2.05%
Overall WACC (vanilla)	7.08%	7.61%
WACC (pre-tax)	8.46%	9.04%

Source: Heathrow

244. The estimate above is based on notional gearing of 60%. The impact of the pandemic is such that a company at the notional gearing at the start of 2020 would end 2021 with gearing of 75%. Table 12 shows that at this higher level of gearing the current WACC is estimated to be 9.0%.

245. Even were the cost of debt for Heathrow assumed to be the same as that for water companies, ignoring the historical spread between Heathrow and water companies and the current very high post Covid-19 cost of new debt for Heathrow, the resulting WACC would be 8.2%.

(v) "evidence on, and estimates for, the incremental impact on the cost of capital of different regulatory intervention options;"

246. The current asset betas of comparator airports reflect investors views of the risk of these airports. As such they also include an expectation of the regulatory mitigations that will be

[26] This estimate is based on a TMR of 6.0% and RFR of -1.87% (RPI stripped) consistent with the CMA findings for water. The cost of embedded debt is 2.15% based on the water company embedded debt with an addition of 30bp to reflect the difference in spread between Heathrow and Anglian water bonds of the same rating and tenor prior to Covid. The cost of new debt is 0.56% equal to the water company cost of new debt plus 1.10% to reflect the post covid cost of debt for Heathrow.

available to these airports. In other words, current market data reflects the market view of the riskiness of airports post mitigation.

247. Given this, it is not possible to use market data to directly estimate the impact on WACC of different regulatory intervention options. Without intervention, the actual WACC of Heathrow could be much higher than indicated by current market data as current market data will include the expected intervention for the comparator airports. Conversely, the WACC with intervention could be lower than current market data indicates if the intervention provided to Heathrow was greater than the expected intervention at comparator airports.

248. Whilst it is not possible to use market data to identify these effects, it is possible to estimate the impact of the unmitigated pandemic on the asset beta of Heathrow, and also possible to estimate the potential benefit from intervention. The current market value can be used to cross-check the consistency of such estimates and assess their overall reasonableness.

Estimating the impact of the unmitigated pandemic on airport asset betas

249. An estimate of the impact of the unmitigated pandemic on airport asset beta can be obtained by considering how the pandemic impacts the variance of returns for Heathrow and comparing the increased standard deviation of airport returns with the average standard deviation of t returns for the market as a whole.

250. This estimation approach is illustrated in the table below based on an initial estimate of asset beta of 0.60 and equity beta of 1.43. The result of the calculation depends upon the time periods over which the impact is expected to recur. The table shows estimates for timescales of 25, 30 and 35 years.

Table 13 - Estimation of the impact of Covid-19 on airport asset betas

Standard deviation of stock market (A)		3.36%	
Allowed asset beta (B)		0.60	
Allowed equity beta		1.43	
Target RORE		9.30%	
RoRE in 2020		-19%	
RoRE in 2021		-12%	
Time period (years)	25	30	35
New Variance[27]	0.179	0.190	0.202
New Standard deviation for Heathrow (C)	8.5%	8.0%	7.6%
New Equity beta (=B/A)	2.52	2.37	2.26
New Asset beta (D)	1.04	0.98	0.93
Increase in asset beta (=D-B)	0.44	0.38	0.33

Source: Heathrow

251. Table 13 shows that this approach of estimating the impact of the pandemic on airport asset betas identifies impacts that are consistent with the observed increases in asset beta of 0.25

[27] The variance is calculated as (time period – 2) times the variance of the market overall for a share with Heathrow equity beta, plus the variance in 2020 and 2021

to 0.4. The approach is also consistent with an assumption that some mitigation of the impact of Covid-19 is already included in market asset betas.

Estimating the impact of intervention on the asset beta of Heathrow

252. One potential approach to estimate the impact of a RAB adjustment on Heathrow's WACC is to consider the expected impact of such an adjustment on returns. This approach is set out in the Table below for timescales of 25, 30 and 35 years.

Table 14 - Estimation of the impact on asset beta of intervention from expected returns

Adjustment Benefit % RAB		16.5%	
Return Period years	25	30	35
Average uplift to equity pa	1.6%	1.4%	1.2%
Equity beta equivalent	0.21	0.17	0.15
Asset beta impact	0.08	0.07	0.06

Source: Heathrow

253. The approach set out in Table 14 calculates the impact of the expected increase in returns arising from the adjustment. As such, it is likely to underestimate the overall impact on asset beta as it does not take into account the benefit from no longer having to bear the higher risk. It is not possible to quantify this additional benefit, but it will clearly be no bigger than the direct impact of the risk itself.

254. An additional approach that could be used is to consider the reduction in variance of returns that would happen as a result of mitigation.

Table 15 - Estimation of the impact on asset beta of intervention using volatility

Adjustment as proportion of loss		82%	
Reduction in volatility		57%	
Return Period years	25	30	35
Assessed increase in asset beta without mitigation	0.44	0.38	0.33
Asset beta impact	0.19	0.16	0.14

255. The approach set out in Table 15 calculates the impact of the asset beta directly based on the reduction in volatility that the adjustment would provide. The estimates are higher than those in Table 14 as they also include the cost of bearing the risk as well as the expected outcome of the risk.

Crosscheck to market data and overall conclusions

256. The approaches above can be combined to obtain an overall estimate of airport asset beta post mitigation from a RAB adjustment consistent with this submission. This is illustrated in the table below for the three different time periods. For this illustration, the benefits from the adjustment have been assumed to be those set out in Table 15.

Table 16 - Estimate of post adjustment asset betas

	25 Years	30 Years	35 Years
Base Asset Beta	0.6	0.6	0.6
Increase due to the impact of Covid	0.44	0.38	0.33
Benefit from adjustment	-0.19	-0.16	-0.14
Asset beta post adjustment	0.85	0.82	0.79

Source: Heathrow

257. The numbers from the 30-year calculation are illustrated in Figure 5 below.

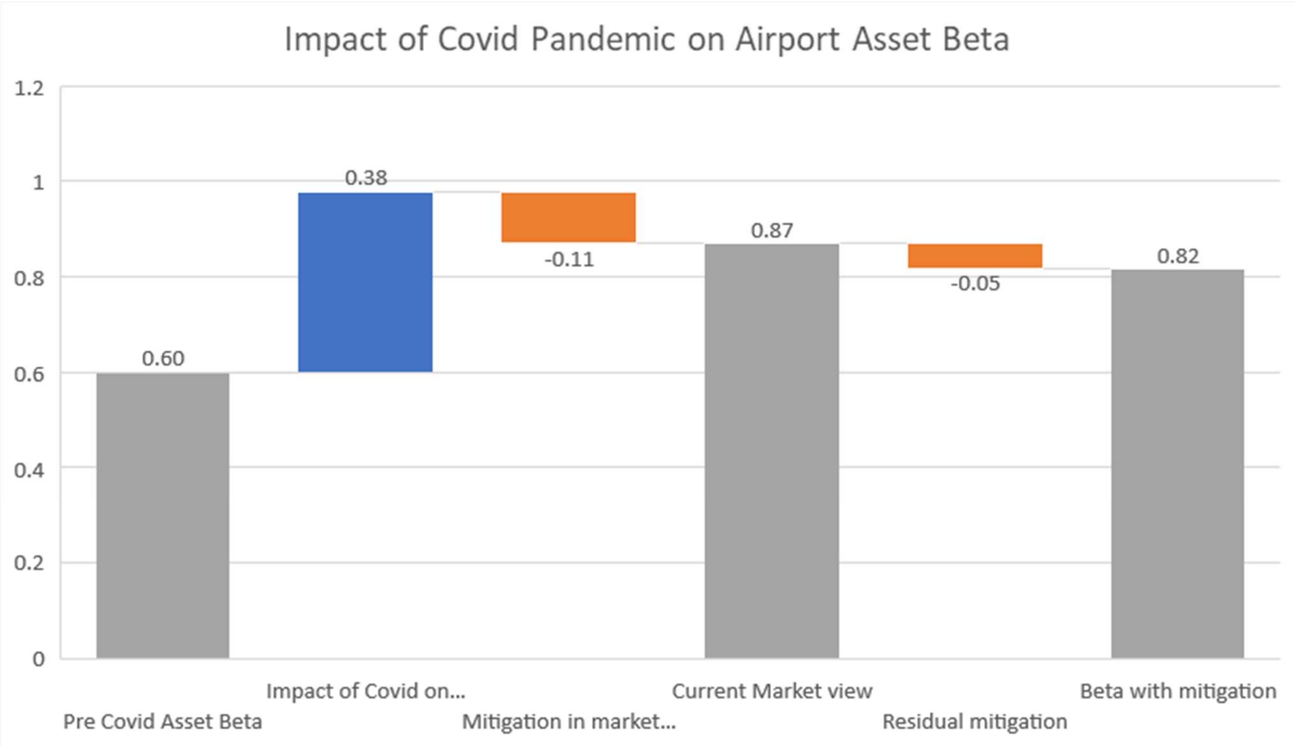

Figure 5 - Impact of Covid-19 and Mitigation on Airport asset beta

258. This shows that the analysis above is consistent with the current market data. It is worth noting that consideration of time periods less than 25-years or more than 35-years gives results that are difficult to reconcile to current market data as they result in a mitigated asset beta above the current market level, or an unmitigated asset beta below the current market level.

259. The estimates of the impact of Covid-19 and any associated recovery adjustment set out here are not intended to be precise estimates. The approaches used, whilst reasonable, are approximate in nature. Potential issues with them include the degree to which the impact of Covid-19 and any recovery therefrom can be considered a systematic risk. It is possible that the systematic element of the risk is greater than calculated here as well as lower. However, the consistency with market data suggests that the approach set out here is reasonable, and likely to be roughly right. Given this, we can estimate that the benefit to asset beta from the proposed reopener is likely to be around 0.16. This corresponds to a difference in WACC of around 1.3%, or around £4 on yield per passenger.

(vi) "an assessment of the "pros and cons" of different levels of credit ratings to understand the net impact on consumers of achieving one credit rating level over another."

260. There are two key benefits from recovering an A- credit rating. Firstly, a better rating results in a lower cost of debt and therefore lower charges for consumers. Secondly, a higher credit rating gives access to a wider and much deeper pool of investors and providers of banking services such as liquidity facilities and currency swap lines.

261. A lower credit rating leads to a higher cost of debt. The typical difference between the A and B iBoxx 10+ NFC indices is around 0.3%. In the long run therefore a credit rating of BBB+ rather than A- would lead to the cost of debt increasing by 0.3% and the overall WACC increasing by around 0.2%. This would increase average yield by around £0.50 per passenger. Note that losing this credit rating does not conversely address the other issues which an adjustment is designed to resolve – simply being a cost to consumers.

262. Access to a wider pool of investors and bank facilities is key for Heathrow if the airport is to be expanded by private finance. We set out extensive evidence in the IBP that an A- rating would be required for Heathrow to be able to finance expansion. Expansion of Heathrow would bring huge benefits to consumers once demand for air travel returns to pre-pandemic levels.

Process Issues

263. Ahead of publication of the CAA's consultation, we provided a letter setting out our key areas of concern with the CAA's process. These concerns centre around the following areas:

a. The CAA failed to engage with the urgency of the situation and has not commenced an appropriate regulatory review. In the document, the CAA states that:

"If circumstances turn out to be particularly difficult, there could be intense pressure on its financeability and continued ability to provide investment and reasonable levels of service. If these difficulties looked likely to emerge, it would be important for us to adopt a suitable process that would allow us not only to consult stakeholders, but also to be able to react quickly to protect consumers' interests and consider what changes to the regulatory framework might be appropriate either in 2021 or 2022 and beyond"[28]

Our application makes clear that we are already in a "particularly difficult" position and that there is already pressure on financeability. However, the CAA has not taken steps to asses or analyse this situation and the potential impact of it for consumers. This prevents stakeholders from both properly engaging in the process and understanding the CAA's proposals and increases the chance of consumer harm as a consequence of no action being taken.

b. In its consultation the CAA set out its view that we had not provided enough evidence on the service and cost impacts on consumers to allow it to assess whether our proposed RAB adjustment would be in the interests of consumers. The consultation however is silent on the level of information the CAA would need in order to take a decision. This is a failure of transparency.

c. It is clear from the CAA's consultation document that, in addition to not engaging with the urgency of the process, it has not engaged with the evidence provided by Heathrow in our initial submission. In the two and a half months between our submission and the CAA's consultation we made repeated attempts to engage with the CAA on the substance of the submission to ensure that the CAA had the evidence and information it needed to carry out a targeted and effective consultation. In this time, the CAA did not make known any of its concerns around the level of evidence provided or request further detail. This has therefore led to an inefficient consultation process which risks prolonging an urgent decision and leading to consumer harm.

The CAA's requirement for 'evidence' from Heathrow

264. The CAA states or implies on a number of occasions that Heathrow is required to meet an extraordinary burden of proof before the CAA should decide to take regulatory action. It is noteworthy that the CAA *does not* reach a provisional view on the substantive merits of Heathrow's request, but instead its initial assessment is that Heathrow's evidence is 'uneven

[28] CAA, CAP1966, para 19

(in that it provides more detail on some issues than on others)'[29] and that Heathrow focuses on a single remedy rather than comprehensively addresses every option.[30]

265. The CAA has therefore failed to address the substance of Heathrow's request. It has done so through two fundamental breaches of the CAA's statutory duties:

a. Imposing a "burden of proof" on Heathrow which is both <u>unclear</u> and <u>improperly high</u>; and

b. Failing to undertake proper inquiries and analysis itself.

266. This is not only a fundamental failure by the CAA to understand, much less apply, its statutory duties as an economic regulator. It also compromises confidence in the CAA as a transparent regulator. Heathrow has been engaging with the CAA for months on the CAA's approach to the requested RAB amendment, without the CAA raising any concerns with Heathrow that further evidence was needed. If the CAA had done so, Heathrow could have provided that evidence promptly – avoiding the need for the CAA to publish a consultation in which it has failed to reach any substantive conclusions at all. This consultation was the first time the CAA indicated to Heathrow that substantially more evidence was required. It is deeply regrettable that the CAA did not seek to engage with Heathrow on this earlier – doing so would have facilitated a swifter decision to be reached which is clearly in consumers' interests.

The burden of proof on Heathrow

267. The CAA's consultation response is replete with complaints that Heathrow has not provided sufficient evidence – the CAA complains that Heathrow's evidence:

a. 'falls short of that required robustly to justify its claims';[31]

b. is not 'comprehensive evidence';[32]

c. should '<u>robustly demonstrate</u>… an <u>urgent need</u> for regulatory action';[33] and

d. has not 'fully explored' all potentially relevant issues.[34]

268. The CAA's approach here is simply wrong. We explain the proper approach below. But in particular the CAA's approach is flawed because:

a. It fails to explain what standard it has adopted and why it has chosen that approach;

b. it seeks to apply <u>different</u> standards without explaining why, or what the difference actually is;

29 CAP 1966 para 2.6.
30 CAP 1966 para 2.10.
31 CAP 1966 para 16.
32 CAP 1966 para 17.
33 CAP 1966 para 17.
34 CAP 1966 para 18.

c. the standards it uses are much too high even on their face;

d. relevant case law explains what the standard should actually be. The CAA has not applied this standard.

269. Even if the CAA's approach – or one of them – were correct, it's criticisms of Heathrow's submission are also factually wrong. For example, Heathrow did indeed consider carefully various alternative options for implementing an adjustment and explained our logic based on consumer interest and regulatory principles for the proposals we made in our submission. Thus, for example, we explicitly avoided immediate impacts on the airport charge, tried to maximise our ability to act quickly with any adjustment and to review and true up and adjustment later. We also evaluated alternatives to revenue adjustment and explained out reasoning in terms of actionability for consumers and maintaining incentives on Heathrow. To a large extent the CAA consultation failed to engage on these points and the relative merits of the options we considered.

270. Further, in any event, CAA is also wrong in its attempt to require Heathrow to provide exhaustive evidence and analysis for all possible options before it will reach a substantive decision. Identifying and assessing different options is the regulator's duty – not Heathrow's. In any event, Heathrow <u>has</u> explained at length why it considers alternatives to be inappropriate.

271. In the *SkyScanner* case, for example, SkyScanner had raised with the OFT plausible concerns about the potential harm to competition arising from the OFT's planned course of conduct. The OFT failed to investigate these concerns, gather any relevant data, or to alter its proposed decision in any meaningful way. It gave SkyScanner's concern effectively no weight on the basis that it was insufficiently evidenced. But the CAT fundamentally rejected this approach:

> *If a consultation response raises an important and obvious point of principle, <u>it is for the authority to examine it further</u>. This is particularly so where the authority has not carried out an analysis of the economic effects of the practices which it proposes to address … and where that decision itself may generate its own economic effects within the market.*[35]

272. This reasoning is directly applicable. The CAA has <u>expressly accepted</u> that there are 'exceptional circumstances' and that the CAA now has to consider '*whether the regulatory framework for HAL is fit for purpose as a result*.' The CAA therefore recognises that there are <u>important and highly plausible reasons why an urgent regulatory decision may be necessary to protect consumer interests</u>.

273. Accordingly, the CAA has a fundamental duty to examine this question itself – not to passively ignore the substance of Heathrow's request until and unless Heathrow meets some arbitrary evidentiary threshold. That threshold has already been met and the CAA has accepted as much.

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[35] *SkyScanner v CMA* [2014] CAT 16 para 90.

Undertaking proper inquiries

274. Secondly, and relatedly, the CAA has erred in law because it has failed to do any of the fundamental tasks which would be expected of an economic regulator in order to reach a provisional view in the absence of complete information, such as:

a. engaging with stakeholders to obtain more information;

b. responding to Heathrow's proactive offers to provide more data; or

c. undertaking its own analysis and reaching provisional substantive conclusions for other stakeholders to comment on.

275. The case law is clear that the CAA, as an economic regulator, is legally required to take 'reasonable steps' to acquaint itself with relevant facts in order to answer a question relating to its statutory duties.[36] Specifically, an economic regulator

'*must do what is necessary to put <u>itself</u> into a position properly to decide the statutory questions*'[37] [emphasis added]

and must

'*not only take proper account of the material before it but must also <u>ensure that it has all the material before it that is relevant and necessary for its decision</u>*'.[38] [emphasis added]

276. This is made clear in the Flynn Pharma Ltd case, where the Court of Appeal observed that regulators have significant powers to obtain information and conduct analysis and that it is not acceptable for a regulator to assume they can rely on 'passive steps' rather than taking proactive steps to obtain and appraise itself of relevant information.[39] The Court went on to say that the regulator '*will always need, at least as part of its duty of good administration, to give some consideration to prima facie valid'* evidence produced by stakeholders.[40]

277. In this case, Heathrow has presented the CAA with an urgent request for regulatory intervention which, if granted, would be in the interests of consumers. Heathrow has provided detailed and lengthy evidence and analysis – the CAA's complaints, in comparison, are generalised and do not reflect any engagement with Heathrow about which evidence is possible to provide or the form such evidence should take. Should the CAA wish to assess the merits of other options then Heathrow is happy to engage fully with that review.

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[36] see e.g. *Secretary of State for Education and Science v Tameside Metropolitan Borough Council* [1977] AC 1014, 1065B per Lord Diplock; *Barclays Bank plc v Competition Commission* [2009] CAT 27 at [24]; see also *R v Secretary of State for the Home Department, ex p Venables* [1998] AC 407 (CA).
[37] *Tesco plc v Competition Commission* [2009] CAT 6 at [139].
[38] *SkyScanner v CMA* [2014] CAT 16.
[39] *Flynn Pharma Ltd v Pfizer Inc* [2020] EWCA Civ 339, para 113.
[40] *Flynn Pharma Ltd v Pfizer Inc* [2020] EWCA Civ 339, para 260.

278. To be clear, Heathrow considers that any CAA decision to refuse the RAB adjustment on the basis that Heathrow has not provided sufficient evidence, or that it has not comprehensively exhausted its exploration of all possible options, would be unlawful. Such an approach puts an impermissible burden of proof on Heathrow. Such an approach is especially unacceptable in a context where Heathrow has offered to engage closely with the CAA, and the CAA is aware that the request needs to be dealt with urgently.

Comparisons with other Airports

279. Heathrow notes that both the CAA and Airlines have suggested that the examples provided of other airports where adjustment mechanisms are available are not relevant because those mechanisms have not been used. We disagree. These mechanisms provide realistic prospects for those businesses to recover some of their lost revenues regardless of whether or not the mechanisms have been fully triggered at this point. As a matter of fact, many of them have been or are in the process of being triggered. The presence of these mechanisms provides those businesses with certainty regarding their ability to finance future spend and also signals to the financial markets that it is a safe investment. Further, Heathrow's competitive position is incumbent upon competing on a level playing field with airports worldwide, that position is increasingly threatened in light of the impacts of Covid-19.

280. Although mechanisms available to other airports may not yet have been used in their entirety, it is not accurate to say that there has been no consideration of the impact of Covid-19 on these other regulatory frameworks. There have been key developments at both Dublin and Aéroports de Paris alongside many regulators choosing to delay price controls and the application of these mechanisms in order to fully review the impact of Covid-19 on the airports they regulate.

281. Annexe 1 provides a summary of regulatory action and state support provided to both airlines and airports due to the impact of Covid-19. The following sections set out some more detail on the key developments relevant to Heathrow's application.

Regulatory Action at Dublin Airport

282. In June 2020, the Commission for Aviation Regulation (CAR) in Ireland began a process of reviewing how to account for the impact of Covid-19 on Dublin airport's regulatory framework. In its consultation it set out clearly that, while the ex-ante regulatory framework in place allows for a reasonable level of deviation against forecast, the impact of Covid-19 was not a reasonable degree of deviation and that this did not seem likely to change in the short term. It therefore put into force Article 32 (14)(a) of the 2001 Act which allows for an interim review where there are substantial grounds to do so.[41]

283. On 23 October, CAR published a draft decision on next steps for this interim review. The document was clear in stating that it considers the impact of Covid-19 to be exceptional and outside of the control of Dublin airport. It has therefore decided that this means that certain

[41] https://www.aviationreg.ie/_fileupload/COVIDConsultation.pdf

aspects of the regulatory framework are no longer fit-for-purpose and, if not adjusted, are likely to run contrary to its statutory objectives.[42]

284. While the review of wider impacts on the price control structure for 22 onwards remains ongoing, the CAR has taken a number of key decisions for pricing in 2020 and 2021 to fit the changed circumstances and respond quickly to these. While further information on the outcomes of this review are provided in Annexe 2, in summary, the key decisions taken by the CAR so far include:

a) Fixing the passenger charge for 2021 at current levels to allow for price stability;
b) Removing triggers and price control adjustments for 2020 and 2021 as well as removal of triggers that may impact 2022 prices, including the carry forward of any over recovery caused by low passenger numbers through the K-factor;
c) Removal of the capex claw back mechanism for 2020/2, allowing Dublin to use revenues for either capex or opex as it sees fit; and
d) Continued suspension of quality of service financial incentives.

285. This review and swift action clearly shows that aviation regulators elsewhere are acknowledging the unprecedented impact of Covid-19 on regulated airports and the need to act fast to ensure that regulatory frameworks are fit for purpose in the near future.

State Funding

286. It is also important to note that a number of European airports and airlines have received funding in the form of state aid. There has been no support forthcoming from the UK Government and it is therefore imperative that the CAA acts to ensure that Heathrow and the UK remain competitive when compared with European rivals. It is clearly in consumers' interests that the UK maintains its status as having one of the top global hub airports.

287. Since the start of the Coivd-19 crisis, governments have made nearly £100bn of financial support available to airlines across the globe[43]. This would be the equivalent of nearly 15% of global airline total revenues in 201944. Annexe 1 of our submission provides more detail on the state aid provided to airlines and airports and the structure of this support. The below table summarises where this support has been provided.

[42]https://www.aviationreg.ie/_fileupload/2019%20Determination/2020%20Interim%20Review/Draft%20Decision%20_Interim%20Review.pdf
[43] Airline websites, various press releases and government websites.*
[44] IATA economics – Est. 2019 Airline total revenue was $838bn (exchange rate 1GBP = 1.29 USD), Heathrow analysis

Table 17: Summary of global government support provided to airlines

Region	Value of state support (GBP)
North America	£23.6bn
Europe	£29.5bn
United Kingdom	£1.8bn
Asia Pacific	£13.7bn
Middle East/Africa	£3.2bn

Source: Heathrow

288. Airports have also received state support as well as being supported by the state support given to their home carriers. There has also been regulatory or cost recovery support for airports given by both the state and regulators. This is also summarised in Annexe 1.

289. A key case to consider is the approach to state support taken at German airports. In the funding package agreed with the European Commission, the German Government has put forward a framework to offset the losses incurred by airports due to the impact of Covid-19 between 4th March and 30th June 2020.[45] While the size of the packages available to specific airports has not yet been made public, the support provided could reach very significant levels. At Frankfurt airport for example, support to offset lost revenues through this period could stretch to around £400m.[46]

290. When approving the funding package, Executive Vice President Margrethe Vestager stated that "*Airport operations must be secured to ensure connectivity, mobility and air transport. This scheme will enable German authorities at different levels to compensate German airports for the damage suffered as a result of the coronavirus outbreak. At the same time, it will help them address their liquidity shortages and weather the crisis.*"[47] This is a clear recognition of the impact of Covid-19 on airports and the need to act quickly to secure their future.

[45] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472
[46] This is an estimated value calculated by subtracting FRA's Q2 2020 revenues from their Q2 2019 revenues (it excludes Fraport's International airport revenues (source is FRA Q2 2020 results)
[47] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472

Table 18: Summary of support given to European airports

Airport	Support provided[48]
OSL	£450m direct support to offset revenue losses
ZCH	Home Carrier support (£1.3bn) Extension of current regulatory period under until value of regulated till is zero or positive. This will be no later than 2025. Flexible charges regime allows Zurich to adapt charges to match uncertainties. If traffic recovers quicker, charges can be reset quicker to compensate for 2021 ramp-up discounts.[49]
MCH	Home Carrier support (£8.2 bn)
MAD / Spanish network	~£23m to fund incentive programme Royal decree providing the right to recover costs related to Covid-19 through the regulatory framework. This is not subject to the 0% cap included in the DORA. If recovery is not possible in this period, it can be transferred to subsequent periods.[50]
AMS	Home carrier support (£2.7bn)
CDG	Home Carrier support (£6.4bn) Suspended current regulatory period and obligations.
FRA	Home Carrier support (£8.2 bn)
FCO	Home carrier support (~£200m) The Italian Government has passed a new law which, in light of the damages caused by Covid-19, will extend by 2 years all Italian Airport concessions

48 Exchange rates used: 1 GBP = 1.1 EUR
49 https://www.zurich-airport.com/the-company/media/news-center/2020/jul/ir-20200715-gebuerenverhandlung?cat=all&year=&search_string=
50 http://www.aena.es/csee/BlobServer?blobkey=id&blobwhere=3000010813533&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs&blobheadername1=Content-disposition&blobheadervalue1=attachment;%20filename=H1%202020%20Results%20Presentation.pdf

Next steps

291. Heathrow is facing difficult choices now and these choices will be impacted by the CAA's approach to the Covid-19 related RAB adjustment.

292. If the CAA acts quickly to suspend regulatory depreciation for 2020 and 2021 this will allow Heathrow to take longer-term decisions now. It will still give the CAA the scope to finalise the ultimate amount of the adjustment as part of the H7 process and in light of actual conditions in 2021. We have demonstrated above that this will lead to significantly better outcomes for consumers in 2021 and 2022.

293. The failure of the CAA to engage in the substance and quantification of the issue in its October consultation has added unnecessary delay and increased jeopardy for consumers. Further delays and failure to engage in substance will exacerbate this. Therefore, it is imperative that the CAA engage with the substance and quantification of this issue rapidly.

294. We therefore request that the CAA concludes on the issue of depreciation adjustments for 2020 and 2021 before the end of 2020.

295. Given the significant benefits that accrue from early action, the only reason for the CAA not to act now to remove this depreciation would be that it considered no adjustment would be applied as part of H7. If this is the CAA's view, then it should make that case now with clear analysis and reasoning. It is improper administration for the CAA to state they will make a decision later when in reality they have made a decision now but without engaging or consulting on the substance of the decision.

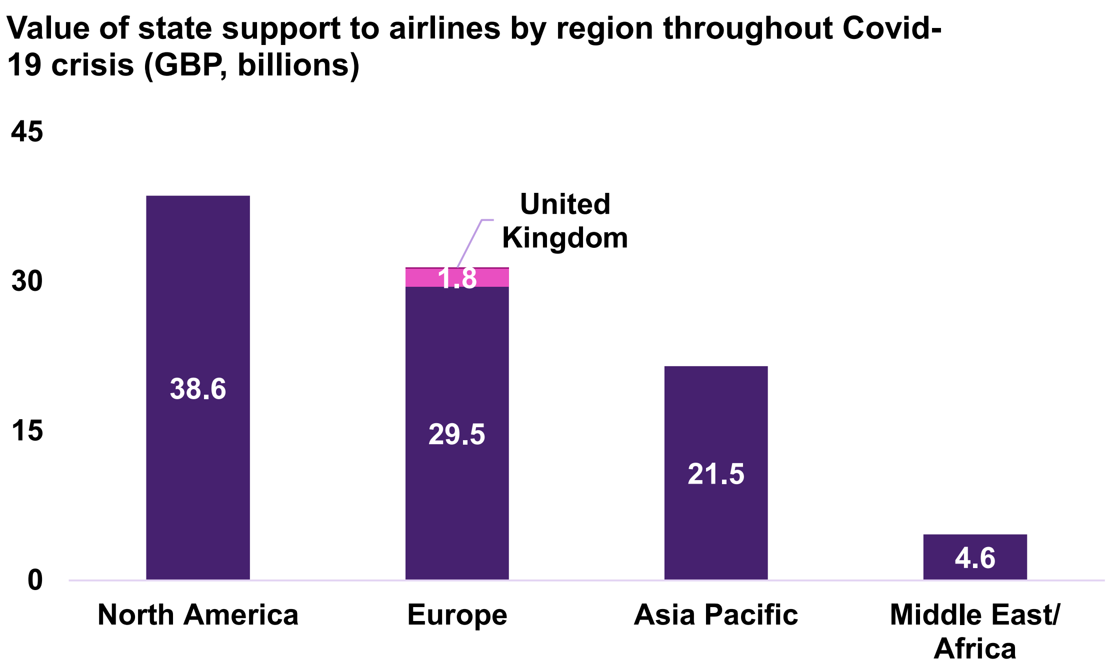
272. Heathrow of course stands ready to provide any additional evidence or discuss any questions related to these issues at any point and would urge the CAA to request further details it needs to progress its work at the soonest possible point.

Annexe 1: Summary of state and regulatory support to airlines and airports for Covid-19

Airlines have received significant financial support from governments

1. Since the start of the Coivd-19 crisis, governments have made nearly £100bn of financial support available to airlines across the globe51. This would be the equivalent of nearly 15% of global airline total revenues in 201952, and measures the announced total value of interventions directly available to airlines through sector-specific schemes, as well as financial support made available to other industries that airlines have also been able to access.

Figure 6 Value of state support to airlines by region



Source: Airline websites, various press releases[53]

2. The scope of financial support has varied based on the different types of interventions that governments have elected to offer, meaning that individual airlines have received different levels of support. For example, the US government has provided 352 airlines with over £19.3 billion in loans and grants, whilst a further 7 airlines are benefitting from access to an additional £19.3 billion provided in the form of Treasury Loans[54]. Within Europe, a combination of equity injections, loans and subsidies totalling £31.3bn has been spread across 20 different airlines, with the size and scope of packages varying drastically across individual countries[55]. In the Asia Pacific, region, Singapore Airlines has received the largest individual financial package of any airline to date,

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[51] Airline websites, various press releases and government websites.*
[52] IATA economics – Est. 2019 Airline total revenue was $838bn (exchange rate 1GBP = 1.29 USD), Heathrow analysis
[53] Airline websites, various press releases and government websites.*
[54] US treasury announcements, Airline press releases
[55] European commission announcements, various press releases

valued at £10.8bn, which is more than half the total value of state support provided in the region to other airlines[56].

3. Certain governments have yet to agree specific financial packages to support airlines. For example, in Canada, a £4.1bn low-interest loan programme to fund airlines is currently being discussed in parliament (although Canadian airlines have already accessed a £0.6 billion wage subsidy programme)[57]. Another example is the UK, who have offered financial support totalling £1.8 bn to carriers on a case-by-case basis as opposed to rolling out a sector-specific plan[58].

4. Governments have made this financial support available, subject to airlines complying with specific conditions, which have varied dependent on individual government policy and as a result of direct airline negotiation with governments. Examples of such conditions have included:

   a) Divestiture of slots at hub airports to maintain competition
   b) Maintaining a minimum Hub presence at certain airports
   c) Guaranteeing provision of a minimum number of flights and routes throughout the crisis
   d) Limits on what aid can be spent on (e.g. acquisition bans, dividend/share buyback suspensions etc.)
   e) Conditions/restraints on executive pay
   f) Environmental commitments (e.g. caps on domestic flights, emissions per passenger targets, etc.)
   g) Giving up equity stakes to the government in exchange for access to liquidity, including up to full nationalisation
   h) Government presence on airline executive leadership/supervisory boards

[56] Reuters, https://uk.reuters.com/article/us-health-coronavirus-airlines/singapore-airlines-latest-to-get-massive-rescue-amid-coronavirus-crisis-idUKKBN21D3UW, Last Accessed (26/10/2020)
*N.B. value of job support / wage subsidy schemes to airlines is only included in these figures if it was included in a sector-specific bailout package. Total support airlines have received is therefore bigger than this value. Values are exclusive of direct support to Cargo-only airlines.
[57] Reuters, https://www.reuters.com/article/us-health-coronavirus-canada-aviation-idCAKBN2752DZ , last accessed: 28/10/2020
[58] The Covid Corporate Financing Facility, where are the conditions for the Billion £ bailout, PositiveMoney, July 2020

Table 19 Examples of state aid provided to individual airlines by region

Region	Airline	Value of state support (GBP)	Structure of support	Conditions attached
North America	American	£8.8bn	£4.2 bn Treasury funded loan £3.2bn direct grant £1.4bn direct loan	Treasury funded loan capped at £5.8bn US government has right to purchase up to 10% of value of direct loan as shares at predetermined price
North America	United	£7.9bn	£4.0bn Treasury funded loan £2.8bn direct grant £1.1bn direct loan	Treasury funded loan capped at £5.8bn US government has right to purchase up to 10% of value of direct loan as shares at predetermined price
North America	Southwest	£2.6bn	£1.8bn direct grant £0.8bn direct loan	US government has right to purchase up to 10% of value of direct loan as shares at predetermined price
North America	Delta	£4.3bn	£3.0bn direct grant £1.3bn direct loan	US government has right to purchase up to 10% of value of direct as shares at predetermined price
Europe	Lufthansa	£8.2bn	£5.5bn in various loan guarantees £2.7bn Recapitalisation	20% equity to German government Two seats on supervisory board to German government Divestiture of 24 Take-off/Landing slots Dividend and acquisition suspension Restriction on executive pay

Europe	Air France	£6.4bn	£3.7bn loan guarantee £2.7 bn shareholder loan	Reductions in Domestic flights Commitments to environmental targets Dividend suspension
Europe	KLM	£3.1bn	£2.2bn loan guarantee £0.9bn direct loan	15% controllable costs reduction target Reductions in night flights Commitments to environmental targets Dividend suspension Restriction on executive pay
Europe	Alitalia	£2.9bn	£2.9bn Capital injection	Renationalised by Italian government
Europe	Tui	£2.9bn	£2.8bn loan guarantees £0.1bn bond investment	Dividend and acquisition suspension Restriction on executive pay
Europe	TAP Air Portugal	£1.1bn	£1.1bn direct loan	Must fully reimburse loan within 6 months or submit restructuring plan
Europe	Aeroflot	£0.9bn	£0.8bn loan guarantees £0.1bn state subsidy	Loans expected to be repaid in 1 year State subsidy recipients: - must maintain 90% of employee count (ref. 1st Jan 2020) - maintain minimum flying levels (passenger flights) - only spend subsidy on salaries, aircraft leasing and airport parking fees

Europe	SAS	£0.9bn	£0.9bn recapitalisation	Swedish and Danish governments to increase equity holdings to 20% each
Europe	Iberia	£0.7bn	£0.7bn loan guarantees	N/A
Europe	Finnair	£0.5bn	£0.5bn loan guarantees	Loan conditions N/A Figures exclude a £0.5bn rights issue, which Finnish government was granted a pro-rata participation
Europe	Condor	£0.5bn	£0.5bn loan guarantees	N/A
Europe	20 Swedish commercial airline operators	£0.4bn	£0.4bn loan guarantees	N/A
Europe	Austrian	£0.4bn	£0.3bn loan guarantees £0.1bn direct aid	Parent company must inject £0.1bn of equity
Europe	Brussels	£0.3bn	£0.3bn loan guarantees	Parent company must inject £0.2bn of equity
Europe	Norwegian	£0.3bn	£0.3 bn loan guarantees	Required to undergo recapitalisation programme to be eligible
Europe	Vueling	£0.2bn	£0.2bn loan guarantees	N/A
Europe	Air Baltic	£0.2bn	£0.2bn equity injection	State participation increased from 80 – 96% Dividend suspension
Europe	SATA Air Açores	£0.1bn	£0.1bn loan guarantees to cover liquidity of next six months	N/A

United Kingdom	Ryanair	£0.6bn	Purchase of commercial paper in exchange for short-term loans	Expected to show restraint on executive pay and dividends
United Kingdom	easyjet	£0.6bn	Purchase of commercial paper in exchange for short-term loans	Expected to show restraint on executive pay and dividends
United Kingdom	British Airways	£0.3bn	Purchase of commercial paper in exchange for short-term loans	Expected to show restraint on executive pay and dividends
United Kingdom	Wizz Air	£0.3bn	Purchase of commercial paper in exchange for short-term loans	Expected to show restraint on executive pay and dividends
Asia Pacific	Singapore	£10.8bn	£3bn in equity £7.8bn in convertible notes	Rights issue offered at ~54% discount to last traded share price
Asia Pacific	Cathay Pacific	£2.9bn	£2.1bn in equity £0.8bn bridge loan	Existing shareholders to infuse £1.2bn in equity Hong Kong government to take 6.1% stake in Cathay Pacific and place two non-voting observers onto board
Middle East/Africa	Emirates	£1.5bn	£1.5bn equity injection	N/A
Middle East/Africa	Qatar	£1.5bn	£1.5bn equity injection	Issued 730 million shares to Qatari government
Middle East/Africa	Egyptair	£0.2bn	£0.2bn loan	Can only be used to pay external debt

Source: Airline websites, various press releases and government websites. Rounded to nearest £0.1bn. Not all individual airlines included in table, so figures do not add up to regional values shown in chart. Value of job support / wage subsidy schemes to airlines is only included in these figures if it was included in a sector-specific bailout package. Total support airlines have received is therefore bigger than this value. Values are exclusive of direct support to Cargo-only airlines.
Exchange rates:
1.0 GBP = 1.3 USD, 1.0 GBP = 1.1 EUR, 1.0 GBP = 1.8 SGD

Airports have benefitted from state support and regulatory flexibility

5. It is clear that other airports across Europe have benefited from both state support and increased flexibility in their regimes. This support has been to the direct benefit of consumers and airlines as it has allowed airports to offer incentive schemes and discounts to airlines.

6. Examples of regulatory action include:

    a) The suspension of service quality incentive targets
    b) The extension of current regulatory arrangements to provide stability for both airport and airlines
    c) The removal of annual regulatory adjustments to provide greater price certainty
    d) The suspension of regulatory arrangements to allow for annual pricing
    e) The ability to pass through costs for additional operational requirements due to Covid-19

7. Additionally, some airports have either received support from the state, allowing them to offer incentive schemes and discounts to airlines, or have benefitted from state support given to their home carriers to allow them to continue earning airport charges revenue. Certain airports are also directly receiving compensation for lost revenues due to the coronavirus, as part of state support packages.

8. Of importance are the packages that have been provided to Norwegian airports operator Avinor, as well as the recently agreed framework to compensate German airports for lost revenues. Avinor is set to receive ~£350m in in direct grants to offset revenue losses, and a further ~£40m deferral on an existing state loan[59]. In response, Avinor were able to suspend large parts of their airport charges across Norwegian airports from March to October 2020[60].

9. German airports are also set to receive significant support to offset lost revenues. The EU commission has approved a German government framework to offer direct grants to offset revenues lost between 4th March – 30th June 2020[61]. Whilst the size of agreed packages has yet to be announced, the size of these packages could be significant. For example, if Frankfurt airport were compensated for all revenues lost during this period, they could receive up to £400m to offset lost revenues[62].

10. Following the announcement of support to German airports, the EU commission is continuing to explore state support packages directly to airports in other member states, indicating that more support to European airports is possible: *"Airport operations must be secured to ensure connectivity, mobility and air transport. This scheme will enable German authorities at different levels to compensate German*

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[59] Avinor Q1 and Q2 2020 results and press releases. Exchange rate used: 1 GBP = 12.04 NOK
[60] Avinor Q1 and Q2 2020
[61] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472
[62] This is an estimated value calculated by subtracting FRA's Q2 2020 revenues from their Q2 2019 revenues (it excludes Fraport's International airport revenues (source is FRA Q2 2020 results)

Classification: Confidential

airports for the damage suffered as a result of the coronavirus outbreak. At the same time, it will help them address their liquidity shortages and weather the crisis. During these difficult times, we continue to work with Member States to ensure that national support measures can be put in place as quickly and effectively as possible to tackle the negative effects of the coronavirus outbreak." – Margrethe Vestager, Executive Vice President, Competition policy.[63]

[63] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472

Table 20 Airport risk sharing, adjustment mechanisms and state support

Airport	Regulatory framework	Risk sharing and adjustment mechanisms available to airport	Regulatory changes implemented	State Support[64]
OSL	Single Till	Avinor has discretion to make exemptions to charges under specific circumstances		~£392m direct support to offset revenue losses
ZCH	Hybrid Till / Price Cap (RAB)	Legislation provides for consultation and agreement with users. In the event of failure to agree, regulator will intervene.	Extension of current regulatory period under until EVA of regulated till is zero or positive. This will be no later than 2025. Flexible charges regime allows Zurich to adapt charges to match uncertainties. If traffic recovers quicker, charges can be reset quicker to compensate for 2021 ramp-up discounts.[65]	Home Carrier support (£1.3bn)
MCH	Dual Till / Rate Of Return	Charges negotiated directly with airlines and approved by the Federal Ministry		Home Carrier support (£8.2 bn) Potential compensation package being discussed[66]

[64] Exchange rates used: 1 GBP = 1.1 EUR
[65] https://www.zurich-airport.com/the-company/media/news-center/2020/jul/ir-20200715-gebuerenverhandlung?cat=all&year=&search_string=
[66] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472

MAD / Spanish network	Dual Till / Price Cap (RAB)	Airport regulation fixes charges between 2017 – 2021 If traffic is 10% lower than forecast, losses beyond this can be recovered through charges in the following year. The DORA can be reviewed under extreme circumstances, one of which is a 10% drop in passenger numbers.[67]	2021 charges negotiations delayed until October Royal decree providing Aena with the right to recover costs related to Covid-19 through its framework. This is not subject to the 0% cap included in the DORA. If recovery is not possible in this period, it can be transferred to subsequent periods.[68]	~£23m to fund incentive programme
AMS	Hybrid Till / Price Cap (RAB)	Clause for 'exceptional and unforeseen circumstances' allowing charges for the next year can be reset to reflect over/under recovery spread over three years[69]	Charges for 2021 will increase by 4.7% as agreed through the three year settlement.	Home carrier support (£2.7bn)
CDG	Hybrid Till / Price Cap (RAB)	Traffic risk sharing mechanism after a dead band of +/-0.5% after which 50% of outperformance and 20% of underperformance is shared between airport and airlines. Two specific review and termination clauses: - If passenger numbers breach a threshold of around 2% versus forecast for three consecutive years or if investment is less than	Suspended current regulatory period and obligations. For airport charges and investments going forward ADP will annually consult with aviation users and seek approval from ART until there is certainty in forecasts of the future of aviation and CDG.[71] Proposed increase for 2021 charges of 2.2%	Home Carrier support (£6.4bn)

[67] https://www.boe.es/boe/dias/2014/10/17/pdfs/BOE-A-2014-10517.pdf
[68] http://www.aena.es/csee/BlobServer?blobkey=id&blobwhere=3000010813533&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs&blobheadername1=Content-disposition&blobheadervalue1=attachment;%20filename=H1%202020%20Results%20Presentation.pdf
[69] https://www.schiphol.nl/en/download/b2b/1523624122/1T8kLVjBBmOiaKqOO4WC0K.pdf, Article 22
[71] https://www.globenewswire.com/news-release/2020/05/26/2038825/0/en/A%C3%A9roports-de-Paris-SA-Termination-of-the-2016-2020-ERA-and-termination-of-the-public-consultation-document-for-the-2021-2025-ERA.html

		75% of that set out by the ERA - In the case of exceptional and unforeseeable circumstances that lead to a disruption of the economics of the agreement[70]		
FRA	Hybrid Till / Rate Of Return	Charges negotiated direct with airlines and approved by the Federal Ministry		Home Carrier support (£8.2 bn) Potential compensation package of £0.4bn being discussed [72]
DUB	Single Till / Price Cap (RAB)	Article 32 (14)(a) of the 2001 Aviation Act provides for a review and potential reopening of the regulatory framework – Covid-19 constitutes substantial grounds for carrying out of a review (CAR)[73]	For 2020 CAR have recommended the removal of the global per-passenger charge cap and to replace it with individual time-specific caps on each individual aviation charge for 2020. It has also proposed removal of the K-factor from the 2022 price cap formula, removing the capability to carry forward 2020 under or over recovery into 2022. 2021 price cap is to be fixed at €7.50	None received

[70] https://www.parisaeroport.fr/docs/default-source/groupe-fichiers/finance/relations-investisseurs/r%C3%A9gulation/2016-2020/2016-2020-economic-regulation-agreement.pdf?sfvrsn=242508bd_8

[72] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1472. Value of package is an estimate based on the difference between FRA Q2 2019 and Q2 2020 results (source is Fraport Q2 2020 results – values are only inclusive of FRA business units and excludes International revenues)

[73] http://www.irishstatutebook.ie/eli/2001/act/1/section/32/enacted/en/html

			All triggers, adjustments and service quality incentives are removed for 2020 and 2021. A further interim review from the CAR is expected in 2021.[74]	
FCO	Dual Till / Price Cap (RAB)	Traffic risk sharing mechanism with deadband of +/-5%. Outside of this band, performance is shared at a rate of 50%. Revenue shortfalls are added to the tariff calculations for the next period. Allowance for a rebalancing of tariffs for the remainder of the regulatory period if there is a yearly variation of +/-6% of traffic volumes.[75]	The Italian Government has passed a new law which, in light of the damages caused by Covid-19, will extend by 2 years all Italian Airport concessions	Home carrier support (~£200m)

[74] https://www.aviationreg.ie/_fileupload/2019%20Determination/2020%20Interim%20Review/Draft%20Decision%20_Interim%20Review.pdf
[75] http://www.adr.it/documents/17615/9522342/2017-21+Tariffe+-+Incontro+Utenti+2016+__+ENG+v+9+settembre.pdf/4f9bd37a-6c53-40a9-b6a7-c2326d306d27

Annexe 2: Commission for Aviation Regulation draft decision for Dublin Airport

1. The CAR published their draft decision on the interim review of Dublin Airport's 2019 Price determination on the 23/10/2020 in response to the impacts of Covid-19 on the viability of the existing 2020-24 framework. CAR believe that Covid-19 clearly constitutes substantial grounds for a review with respect to the regulatory settlements set out for 2020 and 2021.

2. Article 32 (14)(a) of the 2001 Aviation Act enables a reopening of the regulatory framework. The objective of this review is to consider how the 2019 determination can be adjusted at this time to fit the changed circumstances in 2020 and 2021. This review does not cover; changes to the building blocks of the framework, allocation of risk and the regulatory settlements beyond 2022. This will be covered by the CAR in a further review through 2021.

3. Key modifications proposed by the CAR for 2020/2021 include:

    - To set a series of price caps for 2020
    - To fix the passenger charge for 2021 at €7.50
    - Removal of triggers and adjustments relating to price caps for 2020 and 2021
    - Removal of adjustments to 2020 and 2021 that would affect 2022 and beyond
    - Dublin Airport will not have to pay a rebate to airport users due to any overcollection of aeronautical charges per passenger in 2020
    - Dublin Airport will not bring forward any under collections from 2020/21 into 2022
    - Introduction of a consultation process for 2020/21 Capex projects over €4m
    - Continued suspension of Quality of Service penalties

2020 Price Cap

4. For 2020 CAR have recommended the removal of the global per-passenger charge cap and to replace it with individual time-specific caps on each individual aviation charge for 2020. Each of these limits would be set equal to Dublin Airport's menu of charges.

5. It would also see the removal of the K-factor from the 2022 price cap formula, removing the capability to carry forward 2020 under-recovery into 2022.

6. Due to reduced passenger traffic and a relatively high level of cargo movements in 2020, Dublin Airport is likely to have over-collected on their charges per passenger. As the aeronautical charges will be skewed towards runway and parking charges. CAR have decided Dublin Airport are not required to rebate any over-recoveries unless these exceed the menu of charges.

2021 Price Cap

7. 2021 price cap is to be fixed at €7.50. Due to the nature of costs built into the price cap CAR understands that realistically this price cap will vary slightly. Therefore; any overcollections are

to be refunded 90 days after the end of the year and Dublin airport can recover any under collections of up to 5% through the K-factor term.

Triggers and Adjustments

8. Removal of all triggers and adjustments for 2020 and 2021. Further suspension of the Quality of Service penalties for 2020 and 2021, but Dublin Airport must continue to report on quality of service performance where possible.

9. Removal of timeline incentive for Capex projects. Removal of the claw back mechanism for unspent Capex in 2020/21. Dublin Airport can use passenger revenue for either Capex or Opex purposes as it sees fit.

10. Capex projects over €4m require a consultation and approval of over 50% of the user airlines.

Future Reviews

11. A further interim review from the CAR is expected in 2021. However, the content/purpose of this review is not clear and is dependent on the development of the pandemic.

12. A potential wide-ranging review would cover:

    a) Length of regulatory period
    b) Broader adjustments to the framework
    c) Inclusion of a revised forecast
    d) Revised commercial revenue targets
    e) Revised Opex forecasts
    f) Capex adjustments
    g) Adjustments to the Quality of Service regime

Annexe 3: Impact on service

Statement Emma Gilthorpe
Expected Service Quality Impacts at Heathrow in 2021

Introduction

1. I am Emma Gilthorpe, Chief Operating Officer of Heathrow Airport. As part of my role I am ultimately responsible for service and quality at the airport. I am making this statement in support of Heathrow's application for a Covid-19 related RAB Adjustment.

2. The Covid-19 pandemic has resulted in a number of issues relating to service quality which Heathrow has worked hard to mitigate, however, it is inevitable that without early assurance of the RAB adjustment, service levels in 2021 and into 2022 will be lower than those passengers have previously enjoyed at the airport. Prior to Covid-19 we had forecast capital investment of £854m for 2021, we are now anticipating that capex will be reduced to less than [REDACTED].

3. I understand the CAA can make a decision this year with regard to regulatory depreciation or delay their decision until much later in 2021 as part of the H7 process. I have set out below my current expectation as to what the impacts of delaying a decision until later in 2021 will be on service in 2021. It is difficult to quantify with certainty as there are many variables, not least the speed with which passengers return to the airport, and precisely how reduced maintenance will reduce the reliability of our assets. However, the following are reasonably likely outcomes based on my professional opinion.

4. I want to emphasise for the avoidance of doubt that, despite there being impacts on service arising from these policy choices, we will not compromise on the safety and security of our passengers, Team Heathrow colleagues or our people.

Likely Impacts

Reduced Terminal Capacity

5. In 2021 Heathrow will defer opening of Terminals 3 and 4 until we are absolutely sure they are needed permanently. It is possible that variations in travel restrictions next year could lead to very volatile passenger numbers, with high peaks of short duration. Until we are sure such peaks are not temporary, we will be cautious about opening terminals. At these peaks, higher passenger numbers in Terminals 2 and 5 would have significant impacts on service. I have provided more detail on these impacts below.

Security Queue Times

6. It is very likely that security queue times will increase in Terminals 2 and 5 during temporary peaks in traffic.

7. I am very concerned about the impact of longer queue times on passenger welfare. It will present particular challenges when social distancing needs to be maintained and may undermine passenger confidence regarding a return to travel.

8. It is clear that airlines do not, and will not, tolerate or accept any decrease in current service levels despite the unique circumstances we find ourselves in operationally. Airlines are already clearly stating that SQRB targets, alleviated due to the impact of Covid-19 on our operations, should be reintroduced in order to ensure Heathrow maintains its current, high, service standards. No airline has indicated to Heathrow that it is prepared to accept lower service standards, yet these can only be achieved through expenditure that will not be available in the absence of clear regulatory action that allows us to take a long-term approach.

Decreased Pier Usage

9. Operating out of two terminals will result in an increasing number of passengers having to use non pier-served services. We are aware that passengers value pier service and that increased use of bussing will reduce passenger satisfaction and therefore not be in consumers' interest.

Reduced Investment Across Campus

10. The high reduction in capital expenditure will also have impacts across campus which are not related to the temporary closure of Terminals. My concerns for 2021 include:

Impact of Staff Reductions

11. Heathrow is working very hard to ensure that service standards are kept as high as possible, but I consider it likely that these will fall absent the right framework to enable us to be more proactive than reactive. Heathrow is being forced by the current circumstances to make difficult choices with regard to staffing levels and this will inevitably lead to delays in the implementation of business enhancing initiatives, which will in turn have an adverse effect on consumer welfare.

12. The issue of security queue times will be exacerbated by the fact that Heathrow is having to offer up voluntary severance as part of our drive to harmonise terms and conditions for employees and thereby reduce costs. As demand recovers, we will have to recruit and train new staff. This will take time and therefore if demand recovers faster than we expect or we experience fluctuations in demand, queues will lengthen as we struggle to match resources to the demand.

Asset Availability

13. As a result of reduced capital maintenance expenditure, we will have to take a much more reactive approach to maintenance than is ideal for customer service. More assets will be allowed to run to failure and the lives of existing assets will be stretched, where this can be done safely. This increases the risk of more occasions where failure impact customers journey through the airport. Heathrow will always prioritise safety, but it is rational to assume that maintenance spend will need to be phased in order to reduce cost in 2021. This means, logically, that asset availability will reduce. Reduced asset availability will have a clear negative impact on consumer welfare as it will lead to more lost bags; reductions in departure punctuality; and lower resilience overall.

Passenger Welfare Enhancing Measures

14. With such constrained Capex budgets Heathrow will not be able to invest at pace in measures which could restore passenger confidence in travel during the Covid-19 crisis and speed up

recovery of passenger numbers. For example, investment in touchless journeys and automation will be significantly constrained and the service range we offer and that customers desire like porter services, meet and assist and POD parking will have to be materially constrained.

Overall Passenger Satisfaction

15. I anticipate that we will see a direct fall in passenger satisfaction and perceived value of service as a result of heavily constrained investment. We know from passenger studies that passengers place a high value on short wait times, uncongested terminals and swift returning bags. All these facilities will be negatively impacted without investment leading to direct consumer harm.

Conclusion

16. Heathrow will continue to deliver the best service possible within the constraints it faces. I do however have very real concerns that, without immediate regulatory action to put in place an adjustment, Heathrow will be unable to take the required decisions to secure investment that is in the best interests of consumers. In this situation, passengers will be adversely affected in 2021 and beyond.

Signed

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Emma Gilthorpe, Chief Operating Officer

Annexe 4: CAA Views Invited in CAP 1966

CAP 1966 and CAP1966A - Views Invited	Signposted sections in Heathrow's response
Chapter 1 Views are invited on any aspect of the issues raised in this chapter and in particular the approach we have set out above to assessing HAL's request.	For content relating to the CAA's approach, see: • 'Process Issues'
Chapter 2 Views are invited on any aspect of our initial conclusions and in particular our findings that: • HAL has identified a number of important issues in relation to the operation of the regulatory framework in the circumstances of Covid-19; and • It has not provided sufficient information to justify urgent regulatory intervention, nor has it provided evidence that demonstrates that its proposed remedy is proportionate or supported by an assessment of different options for dealing with the difficulties it has identified.	Justification of urgent regulatory intervention, see: • 'Impact on Consumers' and Annexe 3 • 'Financeability implications' Demonstration that the proposed remedy is proportionate, see: • 'Heathrow is a Regulated Business' • 'Impact on Consumers' and Annexe 3 • 'What is the appropriate scale of an adjustment?' Assessment of different options, see: • 'Process Issues' – specifically 'The CAA's requirement for 'evidence' from Heathrow
Chapter 3 Views are invited on any aspects of our plans for next steps, including the issues we intend to consider as part of the H7 price control review and/or whether there is further evidence that might support more immediate regulatory intervention.	'Next Steps' section sets out Heathrow's view. For further evidence to support immediate regulatory intervention see: • 'Impact on Consumers' and Annexe 3 • 'Financeability implications'
CAP1966A - Quality of Service and Investment Issues • HAL does not appear to have considered the functions of the existing regulatory framework in providing appropriate incentives for HAL to maintain an appropriate quality of service • HAL has not provided supporting evidence that quantifies either the short or long term detrimental impact on the consumer of the actions it suggests it would take without the RAB adjustment • HAL has not considered whether there are other options for regulatory intervention that could be demonstrated to be targeted and proportionate in mitigating some of the specific QoS and investment issues it has highlighted	See: • 'Impact on Consumers' and Annexe 3, the accompanying witness statement from Emma Gilthorpe

We need to consider the possibility that the some of the actions HAL has said it is seeking to avoid in terms of cost reduction may be appropriate given emerging evidence on more protracted recovery in passenger numbers	
CAP1966A - Financeability and Cost of Capital • An assessment of a range of options for bolstering its financial position, including options that involve an element of new cash contributions from shareholders • Robust cash flow modelling, ideally using the CAA's price control model, to demonstrate the expected evolution of the financial position of the notional entity as well as HAL's actual financial position • Evidence of the case for immediate regulatory intervention and a reconciliation of this case to the public statements referred to above about HAL's financial position and liquidity • Further analysis of the cost of capital that is more complete and considers all relevant factors, including those which may lead to a lower estimate • Evidence on, and estimates for, the incremental impact on the cost of capital of different regulatory intervention options • An assessment of the "pros and cons" of different levels of credit ratings to understand the net impact on consumers of achieving one credit rating level over another	See: • 'What is the appropriate scale of an adjustment?'; • 'Financeability implications'
CAP1966A – Regulatory Precedent and Case Studies	See: • 'What is the appropriate scale of an adjustment – comparator companies'; • 'Process Issues – Comparisons with other airports', Annexes 1 and 2