Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment

CAP 2140

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About this document

On 27 July 2020, HAL sent us a request that we should make an adjustment to its regulatory asset base ("RAB") to address the shortfall in the revenue it expected to recover in 2020 and 2021 due to the severe impact of the covid-19 pandemic on its business. Since then, HAL has made a series of further representations to us in support of its request.

This document sets out the CAA's response to HAL's request and its further representations. It provides our decision on the regulatory intervention package which we will apply ahead of making our proposals for the next ("H7") price review. It follows on from our October 2020 and February 2021 Consultations on these matters.

In particular, this document sets out:

- the process which we have followed in reaching our decision, including our consideration of stakeholders' consultation responses;
- an updated and final assessment framework, based on our statutory duties including the "better regulation principles" which we must have regard to under the Civil Aviation Act 2012 ("CAA12");
- our assessment of the different options for regulatory intervention using that assessment framework; and
- details of the early intervention we have decided to take and our proposed next steps.

If you would like to discuss any aspect of this document, please contact Stewart Carter (stewart.carter@caa.co.uk).

Summary and introduction

Introduction

1. On 27 July 2020, HAL sent us a request that we should make an adjustment to its regulatory asset base ("RAB") to reflect the shortfall in the revenue it expects to recover in 2020 and 2021 due to the severe impact of the covid-19 pandemic on its business. HAL has since made a series of further representations to us on these matters. This document sets out the CAA's response to HAL's request and those representations. It provides our decision on the regulatory intervention package which we will apply ahead of making our proposals for the next ("H7") price control review. It follows on from our October 2020[1] and February 2021[2] Consultations on HAL's request.

2. In reaching a view on:

   - whether an early intervention is required;
   - what form of intervention would be most suitable; and
   - the scale of that intervention,

   we have followed a robust evidence-led process. We have considered the views of, and information and evidence provided by, stakeholders, received in response to the October 2020 and February 2021 Consultations. We have also considered further representations from HAL and airlines, such as on service quality and investment. We have then conducted our own analysis and assessment, including examining the impact of early interventions on charges and on HAL's financeability.

3. Having considered this evidence and our duties[3] in CAA12, we have decided that the best way for us to further the interests of consumers (our primary duty under CAA12) in response to the issues raised by HAL's request is by making a targeted and focused regulatory intervention ahead of the H7 price review. In

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1 See Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment (CAP1966) (the "October 2020 Consultation"): www.caa.co.uk/CAP1966

2 See Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment (CAP2098) (the "February 2021 Consultation"): www.caa.co.uk/CAP2098

3 In this context, our duties include not only our "primary" duties to further the interests of consumers, where appropriate by promoting competition in the provision of airport operation services that is set out in sections 1(1) and 1(2) CAA12, but also our "secondary duties" in relation to:

- the matters that we are required to "have regard to" (consider) in performing those duties set out in section 1(3) and 1(4) CAA12; and
- the duty in section 1(5) CAA12 to carry out our functions in the way we think best where there are conflicts between the interests of different classes of consumer, or between the interests of consumers in the different matters set out in section 1(1) CAA12.

contrast, we consider that either not intervening now or making an adjustment of the scale proposed by HAL (£800 million RAB adjustment in 2021, with a total RAB adjustment of around £2.6 billion) would not meet our duties.

4. We have decided that a regulatory intervention, in the form of a RAB adjustment of £300 million (in 2018 prices), is a transparent and proportionate intervention that is needed now to further the interests of consumers. We have reached this decision having had regard to the need to:

- secure that all reasonable demands for airport operation services at Heathrow airport are met. We consider that this intervention will do this by incentivising additional investment by HAL during 2021 that would further the interests of consumers. We expect HAL to be proactive in undertaking necessary investment to maintain service quality and provide necessary capacity during the remainder of 2021 in the event of a stronger than expected recovery in passenger traffic;
- secure that an efficiently (or “notionally”) financed company, which is consistent with our approach we use to assessing HAL’s financeability in setting price controls, can finance its licenced activities at Heathrow airport. This should avoid a higher cost of debt finance for HAL that could increase charges to consumers in the future. We consider that this intervention will do this by providing a strong signal that the regulatory framework is consistent with enabling a notionally financed company to continue to access cost effective investment grade debt finance. Nevertheless, we recognise that HAL faces significant financial risks if traffic recovery is slower than expected, even with this adjustment to its RAB; and
- if evidence were to emerge of HAL failing to deliver on quality of service then we will take steps to further protect the interests of consumers by conducting a review of these matters (and we would seek to protect consumers from the costs of any such failures). This should help further incentivise HAL in delivering an appropriate level of investment and quality service to consumers.

5. In addition to the targeted and focused RAB adjustment we will consider the wider issues HAL has raised on issues such as regulatory depreciation and the cost of capital at the H7 price control review. We have also set out our intention to introduce new arrangements for traffic or revenue risk sharing as part of the H7 price control review. By reducing the risks that HAL faces for the current and next price control period, we expect consumers to benefit from a lower cost of capital in H7 and future price control periods than it would be otherwise.

6. The approach we have decided to adopt does not require any immediate modifications to be made to the price control conditions in HAL’s licence and will not have any impact on airport charges in 2021. As such, it will protect consumers from increased airport charges at a time when passenger numbers

remain depressed. This decision will, however, be reflected in the modifications we make to HAL's licence to implement the H7 price control, which we anticipate will come into effect in 2022.

The February 2021 Consultation

7. The February 2021 Consultation provided our updated thinking on HAL's request, taking in to account new and updated evidence, including the responses which we received to the October 2020 Consultation, and our own updated analysis. It included:

- our framework for identifying and assessing options for intervention;
- our assessment of a range of options (which included HAL's proposal for a RAB adjustment) in the light of our assessment framework; our own updated analysis; and the views of HAL and airlines in response to the October 2020 Consultation; and
- next steps and the timetable for dealing with these matters.

8. The February 2021 Consultation discussed four different packages of options for regulatory intervention:

- Package 1: no intervention before H7, but consider interventions at H7;
- Package 2: targeted intervention now and consider further intervention at H7;
- Package 3: application of a traffic risk sharing approach to be adopted for H7 retrospectively to 2020-2021; and
- Package 4**:** HAL's proposed risk-sharing arrangements for 2020-2021.

9. We said that Package 1 and Package 2 would be appropriate to consider further in deciding how we should respond to the issues raised by the impact of the covid-19 pandemic and our statutory duties under CAA12.

Responses to the February 2021 Consultation

10. We received a large number of responses to the February 2021 Consultation from a range of individuals and organisations, including over 30 airlines. The majority of these respondents supported the development and use of a framework for assessing the need, and options, for intervention based on our statutory duties under CAA12. However, several respondents questioned whether we had properly reflected certain aspects of our statutory duties in the assessment framework.

11. In its response, HAL continued to argue for a substantial RAB adjustment, with a preferred adjustment based on the allowed depreciation provided for in 2020 in the current ("iH7") price control (£800 million in 2018 prices). It provided more

evidence and analysis to support this position. HAL was also seeking a clear commitment now to Package 3 or Package 4, which would mean that the mechanism to manage traffic risks in the H7 period is applied retrospectively to 2020 and 2021. Applying its proposed traffic risk sharing mechanism, HAL estimated that the total RAB adjustment would be £2.6 billion (in 2018 prices), based on traffic forecasts in its H7 revised business plan (“RBP”).

12. HAL said that the CAA’s preferred Packages 1 and 2 set out in the February 2021 Consultation would be insufficient to ensure that it would be able to finance the provision of airport operation services as required by our statutory duties. It also said that:

- a substantial RAB adjustment was needed immediately to maintain the confidence of investors and credit rating agencies; and
- not making an early adjustment would constrain and delay investment which it said would be needed to protect services at the airport, provide benefits to consumers and re-open capacity in a timely way.

13. Most airlines continued to argue that there should be no regulatory intervention. However, some noted that, of our proposed options, they could support Package 1 from the February 2021 Consultation. This was dependant on the calibration of any intervention and subject to evidence to suggest that it would lead to a lower cost of capital for HAL at the H7 price control review. No airlines supported early intervention (Package 2) or the RAB adjustments under Packages 3 and 4, which they considered to be inconsistent with our statutory duties.

14. Airlines said that HAL’s recent debt investor updates have:

- signalled that there is no immediate danger of HAL breaching the covenants in its financing platform; and
- shown that HAL has sufficient liquidity to continue in operation even under severe downside traffic scenarios.

15. Furthermore, airlines considered that HAL has a sufficient capital plan in place without any intervention by the CAA to allow it to:

- reopen Terminal 4 when demand requires;
- maintain service quality to consumers; and
- carry out essential maintenance activity.

16. Other respondents expressed mixed views. Some opposed regulatory intervention, while Heathrow Airport Transport Forum (“HATF”) and Heathrow Strategic Planning Group (“HSPG”) jointly supported a RAB adjustment that was earmarked to support investment in environmental protection projects. MAG opposed regulatory intervention and noted that the type of support HAL is requesting is not available for any other airport in the UK.

Framework to assess the case for intervention

17. We have retained key elements of the assessment framework set out in the February 2021 Consultation because it reflects the need for us to make a decision that furthers the interests of consumers (our primary duty under CAA12) and having regard to matters we are required to by our secondary duties. It allows us to discharge our obligation to decide how best to further the interests of consumers where there are conflicts between the interests of present and future consumers and/or between consumers' interests in the range, availability, continuity, cost and quality of the airport operation services.

18. We have made certain changes to the assessment framework to reflect stakeholders' comments that we consider results in a better alignment with our duties. In particular, we have made changes to stress the importance of promoting economy and efficiency on the part of HAL, including efficient investment and service quality levels, and affordable charges. Furthermore, we have considered two new separate matters:

- the impact of our approach on competition. This is to reflect the requirement in our duties under CAA12 that "where appropriate" we must further the interests of consumers by carrying out our functions in a manner that we consider will promote competition in the provision of airport operation services); and
- to have regard to the "better regulation principles" set out in CAA12.

19. So, having considered our duties, the final assessment framework we used to take our decision on how we should further the interests of consumers has six key objectives as follows:

- to protect efficient investment and service quality levels;
- to promote economy and efficiency, including affordable charges;
- to protect consumers by avoiding undue increases in the cost of equity finance;
- to protect consumers from the consequences of HAL experiencing difficulties with raising debt, including by avoiding undue or inefficient increases in the cost of debt finance;
- to continue to promote competition; and
- have regard to the "better regulation principles" set out in CAA12, including proportionality and consistency.

Assessing packages for intervention

20. We have re-assessed the four packages of options for regulatory intervention set out in the February 2021 Consultation and summarised in paragraph 8 above.

We have done this using our updated assessment framework, our own updated analysis and in the light of the views and further evidence received from stakeholders in response to the February 2021 Consultation.

21. While HAL provided more evidence and analysis to support its position, we do not consider that its arguments have become substantially more persuasive that we should take action in the short term on the scale that HAL has proposed. We remain of the view that a number of the most important issues that HAL has raised are best considered as part of the H7 price review, where we can more clearly assess the impact on forward-looking charges, financeability and investment. These include broad issues around the protection of regulatory depreciation, the impact on the cost of capital, and the overall balance of risk and reward with traffic risk sharing.

22. Having thoroughly considered all the packages, our conclusion is to confirm our position set out in our February 2021 Consultation that we should focus on Packages 1 and 2. While Package 1 would largely meet our objectives to meet our statutory duties, adopting it could create some short term risks for consumers from:

- lower service quality; and
- a higher cost of debt finance for HAL (that could increase HAL's cost of capital and, so, charges to consumers in the future).

We consider that Package 2 could reasonably mitigate these risks and be calibrated in a way that avoids any undue increase in airport charges.

Our decision and implementation

23. Our decision is that we should respond to HAL's request by making an early regulatory intervention ahead of the H7 price review in line with Package 2. We will consider whether any further intervention is required as part of the H7 price control review.

24. We consider that an early regulatory intervention, in the form of a RAB adjustment, ahead of the H7 price review (in line with Package 2) is the best way to further in the interests of consumers in response to the impact of the covid-19 pandemic having regard to our secondary duties. We consider that such an intervention will further the interests of consumers, particularly by:

- signalling to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;
- providing stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and

- facilitating HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic forecasts are instead lower than currently forecast.

25. In considering HAL's financial position we have focused on the notional company, consistent with our wider approach to regulation of HAL and the approaches typically adopted by other economic regulators. The risks associated with HAL's actual financing structure are a matter for its shareholders and should not be passed on to consumers.

26. As noted above, an adjustment to the RAB would not require modifications to be made to the price control conditions in HAL's licence that apply during 2021. As such, it will not affect HAL's charges during the current price control in 2021, ahead of the H7 price control review. Furthermore, the impact on HAL's charges from 2022 will be lower than if the intervention were to be made to HAL's allowed revenues. This is because a RAB adjustment will mean that the costs of this intervention will be recovered over several price control periods. Finally, the RAB is well understood by investors and credit rating agencies, so that this approach should bring benefits to consumers from lower financing costs for HAL, without increasing charges to consumers in the short term.

27. We have therefore decided that an early RAB adjustment of £300 million is proportionate. We consider that an intervention of this scale is more appropriate than HAL's proposed RAB adjustment ahead of H7 which, in its latest response, was around £800 million in 2021 and a commitment for a total adjustment of around £2.6 billion (in 2018 prices).

28. As we explain further in chapter 4, our projections show that a RAB adjustment of £300 million will reduce HAL's notional gearing below an important threshold used to assess consistency with strong investment grade finance and should provide an important signal that the regulatory framework is consistent with enabling the notional company to continue to access cost effective debt finance. This intervention should also provide HAL with additional financial flexibility and incentives to carry out appropriate further investment, including the £218 million of capex that HAL set out to maintain service quality across a full range of demand scenarios and provide necessary capacity during 2021.

29. HAL's actual financing structure has a level of gearing above that of the notionally financed company we use in setting the price control. It has long been a principle of economic regulation that HAL's shareholders, rather than consumers, should bear the risks as well as the benefits associated with adopting its own financing structure. While it remains the position that actual financing choices are a matter for the company, we note that a RAB adjustment of £300 million would have a "spill over" effect of also providing a degree of support for the actual company. However, to the extent that any further support

might be required ahead of the H7 price control review, it would be for HAL's shareholders to support its actual financial structure.

30. We estimate that a RAB adjustment of £300 million would increase consumer charges from 2022 onwards by only around £0.30 per passenger (around 1.5%) and that there would be no impact on charges in 2021. On this basis, we are content that a £300 million RAB adjustment would not:

- have an undue or disproportionate impact on prices in H7 and beyond to the detriment of consumers; or
- unduly constrain our discretion to calibrate appropriately any interventions at the H7 price control review to achieve affordability and financeability in the interests of consumers.

31. We consider it is reasonable to expect the benefits to consumers from a lower cost of capital and greater service quality in H7 to outweigh these costs from the RAB adjustment. On cost of capital alone, the increase in the per passenger charge of £0.30 per passenger could be offset by a reduction in the H7 cost of capital by around 10bps compared to what it would otherwise have been.

Additional protections for consumers

32. As noted above, if evidence were to emerge of HAL failing to deliver on an appropriate quality of service in 2021, we will conduct a review of these matters. This would seek to understand whether HAL was reasonably prepared for the increase in passengers, provided additional capacity (for example, by reopening terminals) in a timely way and maintained service quality. In the event that such a review were to show that HAL had not responded appropriately, including in respect of service levels where this is within HAL's control, we would look to introduce additional protections around service quality in H7 and we would consider reducing the £300 million RAB adjustment or making offsetting reductions to revenue. The existing Service Quality Rebates and Bonus scheme provides metrics that can help to give an early indication of any issues with service quality.

Approach to the H7 price control review

33. To provide additional clarity on our approach for the H7 price control review, we summarise in this decision our latest thinking on how we will assess the case for additional interventions to further the interests of consumers. We will consider:

- the need to protect efficient investment and expenditure that HAL incurs in 2021 to maintain or improve the quality of service for consumers and to provide the necessary capacity for consumers in a timely way;
- how traffic risks are allocated in future. For the H7 period, we intend to introduce a form of traffic or revenue risk sharing which will reduce the level

of risk that HAL bears from variations in traffic levels. This could reduce the likelihood that HAL will under-recover depreciation in the future. It would also reduce future uncertainty and benefit consumers during H7 by reducing the cost of capital compared with what it would be otherwise;

- how best to estimate the range for the cost of capital taking account of the overall risk and reward package created by the price control framework and how to choose a point estimate from this range;
- making sure that any interventions are consistent with the risk-reward balance in the overall price control package, affordability and financeability; and
- further considering HAL's arguments that it should fully recover regulatory depreciation to protect its RAB.

34. On this final point, the work we have undertaken does not currently provide a clear case for a RAB adjustment that would provide the full recovery of regulatory depreciation from 2020 and 2021. The Q6 price control for HAL was set on the basis that HAL would recover regulatory depreciation and a reasonable allowed return on a forward looking basis, and that it would also bear traffic risks. This does not constitute a guarantee that HAL would recover regulatory depreciation irrespective of what happens to traffic levels during the regulatory period.

35. Nevertheless, this is an important issue that merits additional consideration, including assessing the impact of the treatment of regulatory depreciation on HAL's cost of capital and, if we were to make allowances for the recovery of historical depreciation, whether these should be adjusted to take account of outperformance by HAL earlier in the Q6 period. As regulatory depreciation from 2020 and 2021 was £1.6 billion (in 2018 prices), there would need to be a clear case that such an adjustment would further the interests of consumers, having regard to the other matters required by our secondary duties. We summarise our current analysis of these matters in Appendix C.

Our duties

36. In taking this decision, we have had full regard to our statutory duties under the CAA12, which are set out more fully in Appendix A.

Structure of this document

37. The structure of this decision document is as follows:

- chapter 1 describes the process which we have followed in reaching our decision including our consideration of stakeholders' consultation responses;

- chapter 2 provides an updated assessment framework, in accordance with our statutory duties including the better regulation principles which we must have regard to under CAA12;
- chapter 3 sets out our assessment of the different options for regulatory intervention using that assessment framework; and
- chapter 4 provides details of the early intervention and our next steps.

Chapter 1

Process for our decision

Introduction

1.1 This chapter:

- describes the overall process that we have adopted to support our decision making on HAL's request for a RAB adjustment; and
- summarises the responses we received to the February 2021 Consultation on HAL's request for a RAB adjustment, our assessment framework and the four packages of options that we assessed using this framework.

Overall process

1.2 On 27 July 2020, HAL sent us a request that we should make an adjustment to its regulatory asset base ("RAB") to address the shortfall in the revenue it expects to recover in 2020 and 2021 due to the severe impact of the covid-19 pandemic on its business. As such, this request sought to "reopen" the approach adopted by the CAA in the Q6 price control, as extended and now operating in the form of the "iH7" price control.

1.3 In our decision on setting the Q6 price control, we noted that we would consider requests to reopen the price control in exceptional circumstances and would do so in the light of our duties and the circumstances prevailing at the time.[4] The CAA did not:

- set any expectation as to how it would deal with any reopening request (other than it would do so in the light of its statutory duties); or
- commit to adjust the price control if HAL faced a risk over and above a set threshold identified from the Q6 settlement.

1.4 Bearing the above in mind, we have needed to develop an assessment framework based on our statutory duties to help us properly address HAL's request and consider representations from other parties. We have used this framework to help assess the detailed information that HAL has provided in

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4 Specifically, in the final proposals for Q6 (CAP1138), the CAA explicitly stated (at paragraph A12) that:

"*HAL may request that its price control be reopened at any time. The CAA would consider such a request in the light of its statutory duties under the circumstances prevailing at the time.*"

support of its request, and the representations we have received from other stakeholders on these matters.

1.5 As part of our approach, we have developed the following approach to governance:

- considered in detail the evidence and arguments put forward by HAL in its request of 27 July 2020;
- issued two consultations, in October 2020 and February 2021, giving extensive information to allow stakeholders to respond effectively with their views on the issues raised by HAL's request and how we should approach addressing them;
- considered in detail the responses that we received from stakeholders to those consultations;
- developed and revised our framework for the assessment of HAL's request;
- conducted our own assessment of the evidence presented by HAL and other stakeholders, including through (i) seeking additional information directly from HAL and (ii) conducting our own analysis and assessing evidence provided by both stakeholders and third parties, including credit ratings agencies, investors and other regulators as well as information available from public sources; and
- engaged directly with both HAL and airline representatives to give them an opportunity to express their views to us, both at a working level and to CAA board members.

1.6 As a result, the decision made by the CAA has been taken after:

- careful development of the assessment framework for addressing HAL's request; and
- detailed assessment of the individual issues raised by HAL through thorough consideration of the evidence provided by HAL, other stakeholders and the CAA's own inquiries; and
- extensive discussion and consideration of the issues by the CAA's Board.

Responses to February 2021 Consultation

1.7 In October 2020, we consulted on our initial assessment of HAL's request, and in February 2021 we consulted on an updated framework and assessment of options for intervention. We received a large number of responses to that latter consultation. We provide a summary of these responses below and respond to the main points raised in chapter 2 (on assessment framework), chapter 3 (assessment of packages) and Appendix C (responses to points raised by stakeholders).

HAL's response to the February 2020 Consultation

1.8 HAL continued to argue for a substantial RAB adjustment. HAL said that the CAA should:

- make a substantial RAB adjustment; and
- set out a clear commitment to apply its proposals for a H7 traffic risk sharing mechanism to 2020 and 2021.

It calculated a total RAB adjustment of £2.6 billion would be appropriate. This has reduced slightly from its previous response to the October 2020 Consultation (from £2.8 billion to £2.6 billion) due to an increase in the share of "downside risk" that HAL proposed to take (from 5% to 14%), based on opex savings compared with its revenue losses. This approach excluded revenues and costs from the "Other Regulated Charges" as defined in its Licence.

1.9 HAL considered that the CAA's preferred Packages 1 and 2 from the February 2021 Consultation would be insufficient to ensure that it is able to finance its provision of airport operation services at Heathrow and, so, in its view would be inconsistent with our statutory duties.

1.10 It said that a substantial RAB adjustment is needed immediately. HAL outlined five approaches for calibrating the scale of such an intervention ahead of H7. All of these approaches are based on bringing forward part of the total adjustment. HAL has specified a preferred adjustment based on the level of depreciation allowed in 2020 in the Q6/iH7 price control of £800 million (in 2018 prices). It is also seeking a clear commitment that the CAA should apply its proposed traffic risk sharing mechanism for the H7 price control retrospectively to 2020 and 2021 (as in Package 3).

1.11 HAL's response focuses on challenging the assessment we set out in the February 2021 Consultation of which options would be in the best long term interests of consumers. It stated that its proposed RAB adjustment would reduce H7 charges by £8.50 per passenger due to the impact it would have in facilitating a lower WACC and reprofiling of regulatory depreciation as part of the H7 price control settlement.

1.12 It suggested that we have:

- misinterpreted our statutory duties by giving insufficient weight to HAL's actual financial position rather than the notional basis used to set its price control; and
- given insufficient focus to equity financeability.

Furthermore, it has said that we have not fully engaged with the evidence that HAL has provided, or properly grasped the scale of HAL's financial challenges.

1.13 HAL said that delaying intervention until we set the H7 price control will undermine the expectations and confidence of investors and credit rating agencies. It considers that a failure to take sufficient action now would lead to difficulties:

- obtaining a covenant waiver from creditors in 2021, which could cause issues for its financeability; and
- accessing new debt finance and liquidity facilities on reasonable terms

This would increase costs to consumers and reduce financial resilience.

1.14 HAL also argued that if the CAA does not make an early adjustment to its RAB, this will constrain and delay its ability to make the investments that it states are needed to protect services at the airport, provide benefits to consumers and re-open capacity when it is needed.

1.15 It said that, as there is a clear case for intervention at the H7 price control review, then there would be no incremental costs associated with an immediate intervention, because it would simply involve bringing forward future action. On this basis the CAA should act immediately.

Airlines' responses

1.16 We received over 30 responses from airlines. Most airlines argued that there should be no regulatory intervention. However, some say that, of our proposed options, they could support Package 1 from the February 2021 Consultation, depending on the calibration of the intervention and evidence that it will lead to a lower WACC at H7.

1.17 No airlines supported early intervention (Package 2) or the RAB adjustments under Packages 3 and 4, which they considered to be contrary to our statutory duties. They stated that there is no case for urgent intervention because:

- the CAA has no obligation to reopen the Q6 price control and, if it did reopen it, no obligation to make a particular intervention;
- early intervention would be contrary to our primary duty to protect consumers;
- HAL's recent debt investor updates have signalled that there is no immediate danger of a covenant breach and show that it has sufficient liquidity even under severe downside traffic scenarios;
- in Q6, all traffic risk was allocated to HAL. To amend this now would be damaging to regulatory commitments;
- HAL has paid significant dividends to its shareholders during Q6 and those shareholders should inject new equity to remedy any financeability issues;

- HAL has a sufficient capital plan in place to reopen Terminal 4 when it is required, to maintain service quality to consumers and to carry out essential maintenance activities; and
- there is only around three months until the CAA needs to make its initial proposals for H7, so there is very little timing benefit in an early intervention.

1.18 Some airline responses provided comments on our framework for assessing options for intervention. They said that this framework could be better aligned with our statutory duties. Some airlines also disagreed with our conclusion that intervention would not affect competition and suggested that a substantial RAB adjustment would be anti-competitive.

Other stakeholder responses

1.19 Heathrow Hub Ltd said the CAA should not intervene and argued that shareholders should inject equity. They also:

- raised issues on the "value of time" and "willingness to pay" calculations that HAL has used to seek to demonstrate the benefits to users of investments in the near term;
- estimated that HAL has over-distributed dividends compared with market benchmarks; and
- considered that a RAB adjustment that seeks to secure HAL's financial sustainability would maintain or increase HAL's market power and would appear to be anti-competitive.

1.20 Heathrow Airport Transport Forum ("HATF") and Heathrow Strategic Planning Group ("HSPG") jointly supported a RAB adjustment that is earmarked to support investment in environmental protection projects. HSPG was concerned that the CAA did not consider its duty to ensure that their decisions do not have an adverse impact on the environment and considered an adjustment could bring benefits from acceleration of investment.

1.21 MAG said that the CAA should not intervene and noted that the type of support HAL is requesting is not available to any other airport. It considered that a RAB adjustment could have a material impact on airport competition in the UK. It requested that we consider the long term impact on competition and market structure when providing sizeable financial support to HAL, particularly at a time when other UK airports are experiencing significant financial pressures.

1.22 The two individuals who responded to our consultation said the CAA should not intervene. They raised concerns that consumers should not "bail out" HAL or support its high gearing, and that we should consider investment needed for climate change projects and future requirements.

Chapter 2

Assessment framework

Introduction

2.1 This chapter discusses our assessment framework for different options. The assessment framework in the February 2021 Consultation was based on our statutory duties under CAA12. This chapter provides an update to this framework and discusses our response to the representations we have received from stakeholders on these matters.

Our updated assessment framework

2.2 Respondents to the February 2021 Consultation generally supported an assessment framework based on our statutory duties. However, several respondents questioned whether certain aspects of our duties had been properly reflected in the proposed assessment framework. We consider these comments, and how we have addressed them, in more detail in the section below.

2.3 The CAA has a broad discretion on how to respond to HAL's request. However, its decision must be based on its primary duty to further the interests of consumers, having regard to the matters required by CAA12. Bearing the above in mind, we have retained key elements of the assessment framework set out in the February 2021 Consultation as it already:

- reflects the need for us to make a decision that furthers the interests of consumers;
- has regard to matters we are required to "have regard to" (consider) by our secondary duties; and
- requires us to decide how best to further the interest of consumers where there are conflicts between the interests of different classes of consumer, or between the interests of consumers in the different matters set out in section 1(1) CAA12.

2.4 Nonetheless, we have made certain changes to the assessment framework to reflect the feedback and comments which we received from stakeholders. Changes to that framework since the February 2021 Consultation can be summarised as us having:

- emphasised that, in applying our primary statutory duty to further the interest of consumers, we must consider the impact of our approach on competition so that we can determine the "appropriateness" of promoting competition. So, we have included this as a new, separate objective;

- stressed the importance of promoting economy and efficiency, including efficient investment and service quality levels, and affordable charges. We have made some changes to our assessment framework to reflect this; and
- emphasised the importance of the "better regulation principles"[5] by including a new, separate objective that we must have regard to them, and by making some changes to the way we describe those principles.

2.5 We also want to clarify that the objective of protecting consumers from difficulties with raising debt focuses on avoiding undue or inefficient increases in the cost of debt finance to which consideration of the notional efficient company (as discussed further below) is relevant.

2.6 In finalising our assessment framework, having considered the representations made by stakeholders, we did not include an additional objective on mitigating the environmental effects of the airport. We consider that, in the context of HAL's request, this is adequately captured by the objective of protecting efficient investment because, where appropriate, this will include projects that deliver environmental benefits.

2.7 The assessment framework is set out below. It seeks to enable the CAA to further the interests of consumers, having regard to the matters required by CAA12, taking account of the individual "secondary duties" including the "better regulation principles", and comparing the weight of the evidence.

[5] For the purposes of this decision, we refer to the principles in section 1(4) CAA12 that we must have regard to in carrying out our functions by virtue of section 1(3)(g) CAA12 as the "better regulation principles".

Figure 1 – Updated assessment framework (changes since February 2021 Consultation are highlighted in green)

Primary duty	Secondary duties	Question to include in assessment
Furthering the interests of consumers **(As part of this we must consider the impact of our approach on promoting competition)**	Securing that HAL is able to finance its provision of AOS	How to support: • ongoing efficient debt and equity financing of HAL? • an efficient cost of capital at H7? • regulatory consistency, including consistency with the notional financing structure from Q6?
	Securing that all reasonable demands for AOS are met	How to support: • efficient investment and level of service quality? • a recovery in passenger numbers at Heathrow?
	Promoting economy and efficiency on the part of HAL	How to support: • efficient and affordable charges to consumers? • efficient capex and opex? • appropriate actions by shareholders? How to incentivise appropriate behaviour by HAL? Are there appropriate customer protections in place?
	The "better regulation" principles specified in CAA12	How to: • target action where it is needed • minimise unintended/adverse consequences? • act consistently with the CAA commitments and other regulatory precent? • ensure that any action the CAA takes is proportionate to the problem to be solved?

Key objectives

- Protect efficient investment and service quality levels
- Promote economy and efficiency including affordable charges in H7
- Protect consumers by avoiding undue increases in the cost of equity finance
- Protect consumers from difficulties with raising debt
- Continue to promote competition
- Have regard to the Better Regulation principles including proportionality and consistency

2.8 In assessing the policy options in chapter 3, we have sought to consider each of the packages against each of the six objectives set out in Figure 1 above. We consider that this approach allows us to identify the packages which are best aligned with our primary statutory duties, having regard to our secondary duties, including the “better regulation principles”.

Our views on responses to the February 2021 Consultation

HAL

2.9 HAL broadly supported our objectives for assessing policy options and considered that they are appropriate and consistent. However, it pointed out that the CAA has no duties in respect of the recovery of the aviation sector more widely and that we should consider the key strategic nature of Heathrow airport to the UK. Furthermore, HAL considered that our objectives and framework do not properly address CAA's duties to secure that HAL is able to finance its provision of airport operation services at Heathrow; to promote economy and efficiency; or to have regard to the better regulation principles.

2.10 We consider that regulatory actions that support recovery of aviation at Heathrow airport are consistent with:

- our primary duty to further the interests of consumers in the range and availability of airport operation services; and

- our consideration of the matters required by a number of our secondary duties, particularly that of securing that reasonable demands for airport operation services are met.

Therefore, we have clarified our wording in the assessment framework to say that we will consider how to "support a recovery in passenger numbers at Heathrow" because that is in the interests of consumers. We do not consider that separate consideration of Heathrow's position as a hub airport adds to this analysis. Furthermore, we have made changes to emphasise the importance of economy and efficiency and we have included a new objective on the better regulation principles.

2.11 On HAL's comments on financeability, we consider that an approach that focuses on the financing of an efficient (or notional) company is consistent with our primary and secondary duties. We note that interventions made to support the notionally efficient company will, in general, have a spill over effect in supporting HAL's actual financial structure. We also note that such an approach is consistent with that adopted by other economic regulators. It is appropriate that there is a high hurdle for placing further weight on actual company financing given this would weaken incentives on HAL to manage the financial stability of the company and transfers the risks of its financing to consumers. We address this point in further detail in chapter 3 and Appendix C.

BA

2.12 BA said that the CAA is right to focus on its statutory duties but should take into account its duty to promote airport competition. BA proposed new objectives based on our statutory duties including promoting competition, regulatory commitments and incentivising efficiency.

2.13 In our updated assessment framework, we have emphasised that, in applying our primary statutory duty to further the interests of consumers, we must consider the impact of our approach on competition and we have included this as a new, separate objective. Furthermore, as noted above, we have made some changes to emphasise the importance of economy and efficiency and we have included a new, separate objective on the better regulation principles.

AOC/LACC

2.14 AOC/LACC considered that there is no case for reopening the Q6 settlement and making an intervention. However, if we do keep our assessment framework, we should include our statutory duties that relate to efficiency and competition, which should be equally important as ensuring that the notional company is financeable.

2.15 In our updated framework, as noted above, we have made some changes to emphasise the importance of economy and efficiency and we have included a new, separate objective on continuing to promote competition.

Other responses on promoting competition

2.16 In the February 2021 Consultation, we carried out an initial assessment of possible policy options against our duty to promote competition "where appropriate". We concluded that interventions of the scale that we were considering will not have a significant impact on competition in the provision of airport operation services. As such, those interventions would neither promote nor harm competition.

2.17 However, in their responses to the February 2021 Consultation, airlines, Heathrow Hub and MAG disagreed with our assessment that the competition impacts of intervention would be minimal. They stated that we should take account of the impacts of intervention, which could maintain or increase HAL's market power.

2.18 As noted above, in our updated assessment framework, we have included a new, separate key objective which states that any interventions which we make should be consistent with our duty to continue to promote competition. We give this new objective explicit consideration in chapter 3 when we assess the range of possible packages which form our policy options for intervention.

Chapter 3

Assessment of packages

Introduction

3.1 This chapter sets out our assessment of the different options for regulatory intervention based on the framework outlined in chapter 2, and in the light of views and further evidence provided by stakeholders in response to the February 2021 Consultation.

The February 2021 Consultation and responses

3.2 In the February 2021 Consultation, we rejected an approach that would have involved both no immediate intervention and no further consideration of these issues at the H7 price control review. We note that HAL and other stakeholders have interpreted this as us ruling out a "do nothing" or "no intervention" option.[6]

3.3 We then set out four main packages of intervention options:

- Package 1: no intervention before H7, but consider interventions at H7;
- Package 2: targeted intervention now and consider further intervention at H7;
- Package 3: application of H7 traffic risk sharing approach to 2020-2021; and
- Package 4: HAL's proposed risk-sharing arrangements for 2020-2021.

3.4 We concluded that Packages 1 and 2 had the potential to further the interests of consumers in a proportionate way. We identified significant concerns over Packages 3 and 4, including that the costs to consumers could be significantly higher, without necessarily providing clear additional benefits to consumers over those provided by Packages 1 and 2.

3.5 In its response, HAL set out an updated option, that is a variation on its earlier options. It considered that the CAA should:

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[6] For example: S&P, Heathrow Funding Class A 'BBB+' and Class B 'BBB-' ratings taken off CreditWatch Negative and affirmed; outlook negative, 4 March 2021; and Fitch, Fitch affirms Heathrow Funding and Heathrow Finance Notes, outlook negative, 30 March 2021.

- make a substantial early adjustment to the RAB to reflect unrecovered but allowed depreciation in 2020 (£800 million in 2018 prices);
- commit to protect allowed regulatory depreciation; and
- calibrate the full adjustment as part of the H7 price review based on its proposals for TRS.

3.6 Based on its current traffic forecasts and a change to the sharing rate to reflect opex savings that HAL has made during the covid-19 pandemic, HAL estimated a total adjustment of £2.6 billion, which is slightly below the level of its previous submissions.[7] This intervention is broadly in line with Packages 3 and 4 discussed above.

3.7 Airlines' responses generally preferred a no intervention or "do nothing" option. But some airline responses set out that they could support an intervention under Package 1, depending on how it is calibrated and if it leads to a lower cost of capital. No airlines supported an early intervention under Package 2.

3.8 Most other respondents did not support any early intervention under Package 2. The exceptions were the HSPG and HATF, which supported an early RAB adjustment earmarked to enable specific environmental projects.

Our assessment of the intervention options

3.9 In this section, we set out our assessment of the evidence we have seen from stakeholders and use our own analysis to assess the packages of options for intervention. It shows how we have considered and balanced the key objectives in Figure 1 in chapter 2 for each package.

3.10 We provide further detail on our responses to the points raised by HAL and other stakeholders in Appendix C.

No interventions now and no further consideration of these issues as part of the H7 price review

3.11 The circumstances created by the impact of the covid-19 pandemic are unprecedented and have raised several difficult issues for the H7 price control review. These include issues in relation to the management of future risks, affordability and financeability.

[7] HAL has changed its share of revenue losses (beyond the first 8% of revenue losses) from 5% in previous submissions to 14% in its most recent submissions, reflecting the level of opex savings it has made as a proportion of revenues (excluding costs and revenues from other regulated charges).

3.12 If we were to reject both an immediate intervention and further consideration of these issues as part of the H7 price control review, then this would create unnecessary risks for consumers by:

- not incentivising HAL to make efficient investment decisions in 2021 and during H7 to meet consumers' needs and deliver appropriate service quality;
- creating potential difficulties for HAL in raising sufficient investment grade debt to finance these investment needs; and
- risking higher charges. This could, for example result from an increase in the required cost of capital, where this cannot otherwise be offset by credible traffic risk sharing arrangements for H7. It could also lead to reduced flexibility to manage charge increases by profiling regulatory depreciation.

3.13 We consider that the packages identified below include potential options for intervention to address these risks. Therefore, we do not consider this option further.

Package 1 – No intervention before H7, but consider interventions at H7

3.14 Under this package, we would not make any interventions, such as a RAB adjustment, now. Instead, we would consider whether interventions are appropriate regarding HAL's losses for 2020 and 2021 as part of the H7 price control review.

Protect efficient investment and service quality levels

3.15 We have considered HAL's concerns over Package 1 and carefully reviewed evidence from HAL, airlines and other stakeholders. From this, we consider that the option of making any decisions on interventions as part of the H7 price review is likely to be consistent with the objective of protecting investment and service quality. This is because:

- there does not seem to be an urgent service quality or performance issue in 2021 that needs to be addressed through early intervention. This is indicated by HAL's service quality performance, as measured by the Service Quality Rebate and Bonus Scheme ("SQRB"), which has been broadly positive over the course of the pandemic. Airlines have made similar points in their responses that the existing SQRB arrangements protect consumers and that HAL's performance in this area has generally been good;
- given HAL's service quality performance to date, an approach which focuses on maintaining service quality in the short term might be appropriate;

- HAL's request for an adjustment of £800 million is not proportionate to the investment it is seeking to make of around £218 million in capex (which in any case would be added to HAL's RAB) and £9 million in opex; and
- service quality performance will be scrutinised in depth in setting the H7 price control, and that there is less than one year until new arrangements for service quality should be introduced.

3.16 That said, on the evidence that HAL has provided, we consider it is plausible that there may be some additional investment in the short term which is appropriate. This would support service quality over 2021 and into 2022, including investment necessary for ensuring that the re-opening of terminal capacity is carried out in a timely way. We discuss this further under our assessment of Package 2 below.

Promote economy and efficiency including affordable charges in H7

3.17 HAL has raised concerns that a substantial RAB adjustment is needed to be able to smooth depreciation and reduce per passenger charges, while airlines consider a substantial RAB adjustment will increase charges.

3.18 While we can see that these are important issues for consumers, there appears to be limited evidence that a substantial RAB adjustment in 2021 will achieve this objective. We continue to consider that this objective can be achieved by considering appropriate options for intervention as part of the H7 price control review. This would allow us to assess how we can best use regulatory depreciation to balance:

- charges and affordability in H7 while the aviation sector is recovering (hence securing that all reasonable demands for airport operation services are met and not "priced out" by unnecessarily high airport charges); with
- the need to secure both HAL's financeability and charges for consumers that are affordable.

3.19 The analysis we set out in the February 2021 Consultation suggested that depreciation profiling would be feasible in H7 without a RAB adjustment, and HAL could maintain reasonable credit metrics. HAL has subsequently said that this would not be feasible, since notional gearing would have increased markedly by the start of H7. HAL says that there would therefore be insufficient cashflow available with which simultaneously to de-leverage and defer revenues into future periods. We have conducted additional analysis of HAL's RBP to assess these issues further.

3.20 Our analysis suggests that, contrary to HAL's suggestion, it is plausible that the notionally financed company could return notional gearing to 60% (which was the level assumed in setting the Q6 price control):

- without a RAB adjustment;
- over a reasonable period;
- while also allowing for substantial depreciation reprofiling;
- assuming no dividends during H7; and
- maintaining reasonable credit metrics.

3.21 We provide further detail of our analysis in Appendix C. We would also note that notional gearing would only increase if covid-19 related losses are assumed to be funded largely through debt. If they are assumed to be funded through an equity injection, no de-leveraging would be necessary in H7. We intend to consider these issues further as part of the H7 price control review.

Protect consumers by avoiding undue increases in the cost of equity finance

3.22 HAL has raised a number of arguments why substantial early intervention is needed to:

- meet investor expectations on the risk they faced under the Q6 price control;
- provide credibility for future traffic risk sharing arrangements;
- meet equity financeability; and
- support the UK regulatory model.

3.23 Airlines, however, conclude that any intervention would compensate investors twice and disagree that an intervention is needed to reduce the future cost of capital.

3.24 We consider that all of these issues can and should be considered as part of the H7 price control review. We also have not seen evidence that bringing forward a significant RAB adjustment in 2021 is clearly required in the interest of consumers. In particular, we consider that:

- any intervention we might need to make at H7 for HAL's losses in 2020 and 2021 is subject to significant uncertainty. For example, we will need to consider the impact of any intervention on the cost of capital, the balance of risk and reward, financeability and charges;
- the reasonable expectations of investors are important to consider as they could lead to a higher cost of capital (and so charges) in future if we were to act contrary to, or undermine, these expectations. We will consider interventions that aim to achieve the lowest overall cost to consumers, taking into account the potential impact on the cost of capital. However, this appears to be mainly an issue for the H7 price review as we have not seen any convincing evidence to suggest that

early intervention is required to prevent a substantial increase in the cost of equity finance for H7 and beyond;

- as set out in the February 2021 Consultation, we have concerns that HAL has overestimated the impacts of the covid-19 pandemic and the RAB adjustment on the cost of capital. This is particularly so, since the cost of capital mainly relates to the forward-looking balance of risk and reward; and
- we intend to consider the issue around recovery of regulatory depreciation as part of the H7 price control review. However, these issues will require careful consideration as no explicit protection for regulatory depreciation was "built in" to the regulatory regime for airports in CAA12 or Q6/iH7. Caution is also needed in applying observations from other sectors, since HAL's price control was set on the basis that it would face demand risk.[8]

Protect consumers from difficulties with raising debt

3.25 HAL has raised concerns that a substantial early RAB adjustment is needed to secure HAL's access to capital and to avoid an increase in its cost of debt. It has referred to its importance in driving credit rating agencies' assessment and the potential need for HAL to seek further covenant waivers in 2021. HAL also considers that we must demonstrate that it can finance its operations based on its actual financial structure. Airlines disagree and consider that we should not make any intervention for HAL's debt financing.

3.26 On balance, the evidence seems to suggest that an early RAB adjustment is not necessary to support HAL being able to access investment grade debt or prevent a substantial short term increase in the cost of debt. In particular:

- an early RAB adjustment would not have a material impact on HAL's cashflow metrics in 2021, for either the notional or actual financed company;
- in recent public statements, HAL has stated that it will not breach its debt covenants under its current traffic forecast and has sufficient cash until 2022 even under an extreme "no revenue" scenario";[9]
- HAL has maintained investment-grade credit ratings, including having ratings recently confirmed by S&P and Fitch. While HAL is on

[8] This is different from, for example, energy networks which are subject to "revenue restrictions" rather than price caps and, so, do not face significant demand risks.

[9] Heathrow (SP) Limited, Results for the year ended 31st December 2020, 24 February 2021

negative outlook, the main factors cited by these credit rating agencies as affecting HAL's ratings are the recovery of passenger traffic in the future and the H7 price control review;[10]

- HAL has been able to issue significant debt in 2021 (most recently a £350m bond in March 2021) and the evidence suggests that HAL will continue to be able to secure new debt finance; and
- some of the pressure on HAL arises from the reduced "headroom" on HAL's gearing as against the covenants under its actual financing structure. However, we consider that we should focus on the notional efficient capital structure for the reasons set out in chapter 2. As a result, there is a high hurdle to be met before we would consider placing weight on concerns around HAL's actual financing structure. This is because doing so weakens incentives on HAL to manage its financing and passes the risks of HAL's actual financing structure from HAL's directors and shareholders to consumers.

3.27 However, we consider there remains the possibility that HAL could face higher debt costs and more difficulty in accessing debt if traffic recovery is much slower than expected in its RBP, resulting in higher costs for consumers. We carefully consider these risks further below under our assessment of Package 2.

Continue to promote competition

3.28 HAL has raised an issue that not making an early RAB adjustment will harm its competitive position with international airports. It notes that these have received a greater degree of government support than Heathrow airport, reinforcing the need for regulatory intervention.

3.29 We note that competition between airports tends to be most effective when they are both serving the same markets and are located relatively close to each other (so passengers and airlines can reasonably switch). The level of government support has been broadly the same across UK airports and if anything, higher charges at Heathrow should improve the competitive position of other airports. On balance we see no substantive case for or against a RAB adjustment on the basis of concerns about the impact of government interventions at airports in continental Europe.

[10] S&P, Heathrow Funding Class A 'BBB+' and Class B 'BBB-' ratings taken off CreditWatch Negative and affirmed; outlook negative, 4 March 2021; and Fitch, Fitch affirms Heathrow Funding and Heathrow Finance Notes, outlook negative, 30 March 2021.

Having regard to the better regulation principles including proportionality and consistency

3.30 Our work has actively had regard to the better regulation principles and we have taken these principles in to account in a range of ways, including:

- making sure our overall assessment framework is consistent with the approach we set out at the Q6 price control review. We have set this out in chapter 2;
- being consistent with our previous approach and the approach taken by other UK regulators in focusing on the "notionally financed" company;
- being targeted in assessing whether an intervention is needed now ahead of the H7 price review. We have considered this above and have identified some risks for consumers that we consider further below under our assessment of Package 2; and
- considering what intervention would be proportionate to the benefits for consumers. While we do not make decisions on the intervention to make at H7 under this package, we consider the appropriate scale of early intervention under Packages 2, 3 and 4.

Summary

3.31 We consider Package 1 provides a reasonable balance of our objectives to meet our statutory duties, though there are some potential short term risks to consumers from lower service quality and a higher cost of debt. These short term risks are addressed further below in our discussion of Package 2.

3.32 In response to the February 2021 Consultation, HAL provided more evidence and analysis to support its position. We do not think that its arguments have become substantially more persuasive on the case for action in the short term on the scale that HAL has proposed.

3.33 We remain of the view that a number of the most important issues that HAL has raised are best considered as part of the H7 price review, where we can see the impact on forward looking charges, financeability and investment. These include broad issues around protection of regulatory depreciation, the impact on the cost of capital, and overall risk and reward with traffic risk sharing.

Package 2 – Targeted intervention now and consider further intervention at H7

3.34 Under this package, we would make a targeted intervention now and we would also consider whether additional interventions would be appropriate as part of the H7 price control review. In the February 2021 Consultation, we set out an indicative range for an early RAB adjustment of £200 million to £600 million, and noted a number of difficulties with calibrating such an adjustment.

Protect efficient investment and service quality levels

3.35 As set out above for Package 1, we do not see sufficiently strong evidence that consumers will necessarily face a significantly higher risk to their service quality if no early RAB adjustment is made.

3.36 Nevertheless, we can see that there are some challenges for HAL as traffic begins to recover. HAL's existing terminal infrastructure is capable of operating for between 50 to 80% more passenger capacity than is currently forecast over 2021. However, we agree with HAL that:

- the recovery of passenger traffic return is potentially "lumpy";
- HAL's ability to deliver service quality as traffic recovers is untested; and
- that the pace of recovery is likely to continue being uncertain for some time.

3.37 HAL also reports that Terminal 4 requires investment which will take approximately 9 to 12 months before it can reopen (which is currently planned for the second half of 2022).

3.38 As a result, we consider it is plausible that there may be some additional investment in the short term which is necessary to support:

- service quality being maintained over 2021 and into 2022; and
- such investment in critical maintenance for Terminal 4 to be carried out in a timely way.

3.39 In normal times, HAL faces incentives to undertake necessary investment through including efficient investment in the RAB and earning an allowed cost of capital. In these unprecedented circumstances, we can see that HAL has significantly reduced its investment, focusing on minimum safety requirements. This could also mean that HAL takes a slower and more reactive approach if traffic recovers, which might not provide capacity in a timely way in the event of a faster than expected recovery in traffic.

3.40 This suggests that, in the exceptional circumstances of the covid-19 pandemic, a targeted regulatory intervention may be appropriate. This would be designed to ensure that HAL has both the capacity and incentives to invest in a way that fully meets the needs of consumers. This would be applied alongside incentives from the SQRB regime, which incentivise HAL to maintain service quality levels.

Promote economy and efficiency including affordable charges in H7 and protect consumers by avoiding undue increases in the cost of equity finance

3.41 As set out for Package 1 above, we consider there is limited evidence that a substantial early RAB adjustment is needed in 2021 to allow for the smoothing of charges at H7 or to avoid any undue increases in HAL's cost of equity. These issues are best considered at the H7 price control review.

Protect consumers from difficulties with raising debt

3.42 Under Package 1, we set out that an early intervention may not be necessary to allow HAL to continue to access debt markets. We also consider that there is a risk that HAL could face higher debt costs and more difficulty accessing debt if traffic recovery is slower than expected, resulting in higher costs for consumers. For example:

- Credit rating agencies have put HAL on negative outlook and, therefore, it is at risk of a downgrade. A reduction in the target credit rating used for the H7 price review could increase the cost of debt for consumers.[11] Credit rating agencies put weight in their qualitative assessment on the regulatory framework being supportive, stable and transparent. Our focus is on the notional rather than actual financial structure. We are conscious that, on a notional basis, a number of key credit metrics are below the levels normally associated with investment grade debt. If the recovery in traffic is slower than expected, then early regulatory intervention may be appropriate to signal the importance of the notional company being able to retain access to investment grade finance. This could be seen as credit positive, so reducing the probability of a credit rating downgrade for the notional efficient company during this challenging period; and
- HAL's notional gearing is expected to increase substantially in 2021, as a result of the impact of the covid-19 pandemic, to above 70%. If passenger traffic remains lower than expected, this would increase this peak gearing of the notional company. This in turn could prolong the reduction to efficient and sustainable levels unless we make an intervention in 2021 or at the H7 price review. It could also further reduce the headroom for the notional efficient company to make investments in the short term that would further the interests of consumers.

[11] Our analysis in Appendix C suggests that the cost of a downgrade could add around 17-35bps to the cost of new debt, significantly below estimates from HAL. Class A debt for the notional company would be towards the lower end of this range.

3.43 Bearing the above in mind, there is a case for a targeted intervention to address risks that the notional company could face higher debt costs, that could ultimately increase charges to consumers.

3.44 While we focus above on the financeability of the notional company, we have also examined the impact on the actual company, though this is a secondary consideration. It is possible that HAL will need to seek further waivers on its debt covenants during 2021 in respect of interest cover ratios. We think it is unlikely that HAL's ability to achieve these waivers would depend on an early regulatory intervention, because:

- a RAB adjustment would not improve interest cover ratios; and
- HAL should remain an attractive investment when traffic recovers.

3.45 We also note that shareholders have the option of providing additional support. Nonetheless, providing a signal of regulatory support for the notional company is likely to provide a spill over effect to the benefit of the actual company, both:

- improving the headroom on certain covenants; and
- strengthening HAL's negotiating hand with bondholders on future waivers if required, so reducing the cost of covenant waivers (or potentially avoiding the need for waivers on gearing).[12]

Continue to promote competition

3.46 Some stakeholders have raised concerns that a RAB adjustment would reduce competition between UK airports, because other airports have not had similar regulatory interventions.

3.47 As set out in the February 2021 Consultation, we considered a number of ways that a RAB adjustment might affect competition between UK airports and, so, competition in the provision of airport operation services. We concluded that we would not expect a RAB adjustment to have a material impact on competition. We remain of this view if there were to be a targeted intervention in 2021 because:

- we have not seen evidence to suggest that higher airport charges at Heathrow will undermine the competitive position of other airport operators: if anything, higher charges at Heathrow should improve the competitive position of other airports;
- a targeted RAB adjustment would not affect charges in 2021 and any direct impact on charges from H7 would be limited;

[12] We have estimated that a downgrade could put upward pressure on the cost of covenant waivers, with the analysis shown in Appendix C).

- while a RAB adjustment would allow HAL to incur certain targeted expenditures that other airports might struggle to make, it seems unlikely that such targeted expenditure would have a material impact on passengers' or airlines' choices of airport. This is especially so in the context of Heathrow's existing strong market position as the UK's main hub airport;
- HAL is under a regulated framework, which is different to the commercial framework applied at other UK airports, so any direct comparisons should be treated with caution and take these broader differences into account; and
- once traffic levels have recovered, HAL's ability to attract additional airlines and passengers from other UK airports and, therefore, its ability to benefit from any potential competitive advantage, is likely to be limited by capacity constraints. In the absence of capacity expansion, this will be the same regardless of whether HAL benefits from a RAB adjustment.

Having regard to the better regulation principles including proportionality and consistency

3.48 The considerations we set out under Package 1 above in relation to the better regulation principles also apply in relation to Package 2. The approach discussed above of focusing on the notional company in terms of financeability is also consistent with our approach to setting the Q6 price control and wider regulatory precedent. We further consider the materiality of a proportionate and targeted intervention in relation to Package 2 in chapter 4.

Summary

3.49 We consider Package 2 provides a reasonable balance of our objectives to meet our statutory duties. While any RAB adjustment would directly increase costs to consumers from 2022, we consider it could mitigate some potential short term risks to consumers from lower service quality and higher cost of debt if appropriately calibrated. These matters are discussed further in chapter 4.

Package 3 – Application of H7 traffic risk-sharing approach to 2020-2021

Package 4 – HAL's proposed risk sharing arrangements for 2020-2021

3.50 Under Packages 3 and 4, we would make an early intervention now (HAL has proposed an early RAB adjustment of £800 million) and a commitment to make further intervention at H7 either:

- in line with the traffic risk sharing approach to be applied in the H7 period (under Package 3); or
- based on HAL's proposed approach (under Package 4).

HAL has estimated that the total RAB adjustment should be £2.6 billion based on its current forecast of revenue losses in 2020 and 2021 (in 2018 prices).

3.51 We consider these two packages together in our assessment below, as they both involve a substantial early RAB adjustment and commitments to make substantial further interventions as part of the H7 price control review.

Protect efficient investment and service quality levels

3.52 We have highlighted in our assessment of Package 2 that a targeted intervention may be warranted in relation to efficiency and service quality and discuss the calibration of this further in chapter 4. There will be further issues to discuss in relation to these matters at the H7 price control review, but none of these issues support committing now to the levels of intervention envisaged in Packages 3 and 4.

Promote economy and efficiency including affordable charges in H7 and protect consumers by avoiding undue increases in the cost of equity finance

3.53 As set out in relation to Packages 1 and 2 above, we consider there is limited evidence that a substantial early RAB adjustment is needed in 2021 to allow for the smoothing of charges at H7 and to help avoid any undue increases in HAL's cost of equity. These issues are best considered at the H7 price control review.

Protect consumers from difficulties with raising debt

3.54 As we have noted in relation to Package 1, on balance, the evidence indicates that an early RAB adjustment, or early commitment to such an adjustment, is not necessary – either to support HAL being able to access investment grade debt or prevent a substantial short term increase in the cost of debt. Nonetheless, we do acknowledge that there are potential risks in relation to these matters and the discussion of Package 2 sets out the case for a targeted intervention to address these risks. Ensuring HAL has cost effective access to debt finance will also be an important consideration for the H7 price control review. However, there does not appear to be a compelling case for making an early intervention in relation to these issues of the scale associated with Package 3 and Package 4.

Continue to promote competition

3.55 In the discussion of Package 2 we have explained our view that a targeted intervention should not have an undue impact on competition in the provision of airport operation services. We would need to consider further the likely impact of any significantly greater intervention at the H7 price control review.

Having regard to the better regulation principles including proportionality and consistency

3.56 As noted above, our work on all the Packages has actively had regard to the better regulation principles. In addition to the points that we have already made we note that:

- committing to a relatively large RAB adjustment now would not be targeted or proportionate to the potential short term issues that we have identified for consumers around investment, service quality and financing in downside traffic scenarios; and
- a RAB adjustment of the nature proposed by HAL would not be consistent with approaches taken to date at other airports and in other regulated sectors. While regulators have responded to the risks created by the covid-19 pandemic in different ways, we have not seen any regulatory interventions of this scale.

Summary

3.57 In response to the February 2021 Consultation, HAL has provided more evidence and analysis to support its position. We still do not think that consumers' interests would be furthered by making a very substantial intervention in the short term and/or making commitments now on further interventions we will make as part of the H7 price control review.

3.58 For H7, we will carefully consider the arguments that HAL has made that its proposed adjustment is needed to support its regulatory framework, an efficient cost of capital and a future traffic risk-sharing mechanism. Nonetheless, our current assessment is that there are a number of serious issues with this analysis. Further details of this assessment are set out in the February 2021 Consultation and Appendix C. We intend to consider these issues further as part of the H7 price control review.

Decision on our preferred option

3.59 In the February 2021 Consultation, we set out that we should focus on Packages 1 and 2 only as being in the best interest of consumers. We consider that the evidence we have seen since that consultation continues to support this broad conclusion that these packages of options could further the interests of consumers in a targeted and proportionate way.

3.60 We remain of the view that some of the most important issues that HAL has raised are best considered as part of the H7 price review, when we can see the impact on forward looking charges, financeability and investment. These include broad issues around protection of regulatory depreciation, the impact on the WACC, and overall risk and reward with traffic risk sharing.

3.61 Nonetheless, there is a case for a more limited short term intervention as set out in our assessment of Package 2. Recent developments create a high degree of uncertainty around traffic forecasts and there are plausible reasons why there are benefits for consumers from earlier intervention. These include supporting appropriate levels of investment and quality of service, and providing clarity and clear signals that could reduce the risk of a credit downgrade and increases in the cost of debt, supporting a lower future cost of capital.

3.62 We have considered the relative advantages and disadvantages of each of Package 1 and Package 2. We consider that Package 2 provides the best balance of our objectives and meets our primary duty to further the interests of consumers. In particular:

- it has the potential to further the interests of consumers for service quality and investment in the current exceptional circumstances and given the high level of uncertainty around the speed and strength of passenger traffic recovery in 2021;
- it provides greater clarity and signals clear support of the regulatory framework in these exceptional circumstances, with potential benefits for debt financing costs and hence the cost of capital for H7;
- the risks to consumers, if traffic levels are much lower than expected, could significantly outweigh the potential risks that a targeted RAB adjustment places an unnecessary or disproportionate burden on them; and
- in our judgment, it is plausible that the relatively small increase in the aeronautical charge of approximately £0.30 per passenger (or 1.5%) implied by the adjustment would be offset by benefits to consumers from (i) a reduction in the WACC; (ii) an increase in investor confidence supporting investment in service quality (if there is a quick recovery in traffic volumes in 2021); and (iii) an improvement in the notional company's financing position going into H7 (for example, if traffic is weaker in 2021). We would also take account of the RAB adjustment in coming to a view on the cost of capital for H7.

3.63 To protect consumers, we consider that additional protections should be put in place to mitigate the risks that consumers do not benefit from an early targeted RAB adjustment. In the next chapter, we assess the appropriate type and scale of intervention and these additional protections for consumers.

Chapter 4

Details on intervention and next steps

Introduction

4.1 This chapter sets out the details of the early intervention we have decided to implement in the light of the assessment set out in chapter 3.

4.2 In the following sections, we consider the appropriate type and scale of early intervention, taking particular account of:

- the evidence and information we have on the consumer benefits of the investment that would be facilitated by early intervention; and
- the likely impact of an early intervention on HAL's notional and actual financial position and, especially, the credit quality of the notional company.

4.3 We then set out additional protections for the interests of consumers to promote service quality and economy and efficiency on the part of HAL and some more detail of our approach to the H7 price control review. As part of the H7 review, we will decide on whether further intervention is appropriate in the interests of consumers, taking into account the overall price control package and impacts on affordability and financeability.

Details on early intervention

Type of intervention

4.4 We consider that an intervention in the form of an adjustment to the RAB would be in the interest of consumers. In particular it would mean that:

- we would not make any modifications to the current price control conditions set out in HAL's licence and, therefore, our decision will have no impact on consumer charges in 2021 ahead of the H7 price control review;
- it smooths the impact on charges from 2022, compared, for example, with applying the intervention to revenues, which would have a greater immediate impact on charges. Moreover, the impact on charges during H7 will be mitigated if any RAB adjustment is not

depreciated until the following ("H8") price control and onwards, as suggested by HAL; and

- the RAB is well understood by investors, so should bring benefits to consumers from lower financing costs for HAL without increasing charges to consumers in the short term.

4.5 A number of airlines have set out that we should not be making any adjustment to the RAB because the RAB is not intended to be used for this purpose, but rather should be used to determine the future remuneration of HAL's efficient investments.

4.6 We agree that this is the primary purpose of the RAB. However, where there are clear advantages to consumers of using the RAB to smooth the impact on charges from adjustments and incentives, then we see no reason in principle why the RAB cannot be used in this way. For example, in the "Way Forward" document on the H7 price control review (published in parallel to this decision), we suggest using the RAB to help smooth any upward pressure on charges that might be created by traffic/revenue risk sharing mechanisms.

4.7 Bearing the above in mind, we propose to commit now to making a targeted and focused adjustment to HAL's RAB from the start of 2022 to take account of the factors discussed in chapter 3. This would be reflected in the modifications to the price control conditions in HAL's licence as part of the H7 price review. We will also consider at the H7 price control review whether any further regulatory intervention in respect of the revenue that HAL has lost in 2020 and 2021 as a result of the impact of the covid-19 pandemic would be in the interests of consumers.

Scale of intervention

4.8 As noted above in chapter 3, we have set out the case for responding to the impact of the covid-19 pandemic in a way that is consistent with our statutory duties under CAA12 by making a targeted early regulatory intervention ahead of the H7 price review. This would further the interests of consumers by providing appropriate incentives and signalling the importance of:

- HAL maintaining appropriate investment and service quality levels ahead of the start of H7. This would include ensuring there is sufficient terminal capacity ready and available to deal with any increases in traffic above the levels currently expected for the summer of 2021; and
- the efficient notionally financed company being able to continue to access cost effective debt finance.

4.9 There remains a high degree of uncertainty around the strength and speed of the recovery of passenger traffic during 2021. While highly uncertain, we are concerned that the risks consumers face from a lack of investment and difficulties in HAL raising debt finance could be significant. These could arise, for example:

- if there is insufficient terminal capacity to deal with any higher than expected recovery in traffic volumes; or
- issues with HAL accessing cost effective debt finance if the level of passenger traffic is lower than expected.

4.10 We have considered appropriate regulatory responses to mitigate these risks in a proportionate and targeted way. In the February 2021 Consultation, we set out an illustrative range for an early intervention of £200 million to £600 million. We considered this to be more proportionate to the size of the risks to the interests of consumers than HAL's proposed RAB adjustment ahead of H7. We consider below appropriate ways to calibrate the intervention. In its latest response, HAL proposed a RAB adjustment of around £800 million in 2021 and a total RAB adjustment of £2.6 billion (in 2018 prices).

4.11 We also consider that consumers will benefit from lower costs in the future from the notional company being able to continue to access cost effective debt finance. This requires the notional company to be able to access investment grade debt. This, in turn, is dependent on regulatory framework being stable and predictable so that the notionally financed company is financeable. This means there are benefits to consumers from providing a strong signal that the notionally financed company will remain financeable even in these unprecedented circumstances.

4.12 To illustrate this, we have estimated that the gearing for the notionally financed company would have increased from 60% prior to the covid-19 pandemic to just over 70% in 2021.[13] This increase takes the notionally financed company above the guideline levels set by some rating agencies for a strong investment grade credit rating.[14] A RAB adjustment of £300 million (in 2018 prices) would reduce the gearing of the notionally financed company by around 2% and so would reduce the peak gearing observed in 2021. We would not expect any credit rating to be unduly influenced by

[13] This is based on traffic forecasts set out in HAL's RBP. Under a slower traffic recovery, this increase in notional gearing would be higher.

[14] For example: Moody's rating methodology for regulated water utilities (June 2018) shows 70% net debt to RAB as the threshold for "Baa" investment grade ratings; and S&P have previously set out in a Heathrow Funding Ltd report (August 2019) that it might lower the rating ('A-') for Class A debt if group leverage increased from current levels of less than 70%.

credit metrics in any single year (that is, 2021). We nonetheless consider a regulatory intervention of £300 million provides a strong signal that the regulatory framework is consistent with enabling the notionally financed company to access cost effective investment grade debt finance.

4.13 On investment and service quality, we are concerned that HAL may face constraints in making necessary further investments to meet demand as a result of the increase that investment would drive in its gearing (or regulatory asset ratio, RAR).[15] HAL's RAR has increased significantly as a result of the impact of the covid-19 pandemic. This is the case irrespective of whether the increase is measured on the basis of the notionally financed company or HAL's actual gearing. While we cannot use regulatory levers directly to provide additional liquidity, we can make a RAB adjustment that provides additional headroom on HAL's gearing on a notionally financed basis, which facilitates HAL being able to borrow for investment. We consider this would need to be meaningful intervention to provide a sufficiently strong incentive, while remaining proportionate to the size of this issue and HAL's planned investment.

4.14 HAL has also argued that we should take account of its actual financing under our statutory duties. We observe it faces very limited headroom against its debt covenants (including RAR), which may require further waivers from the covenants in its financing platform during 2021. We also observe that if passenger traffic is lower than expected in 2021, then a reduction to net debt to RAB would be required to restore compliance with the RAR covenant in 2021. This could require support significantly above a £300 million increase in HAL's RAB. We have been clear throughout that our main focus should be on an efficient notional financial structure. We continue to consider that HAL's actual financing choices are a matter for the company and its shareholders and these risks should not be passed to consumers. While it remains the position that actual financing choices are a matter for the company, we note that a RAB adjustment of £300 million would have a "spill over" effect of also providing a degree of support for the actual company. To the extent that any further support might be required ahead of the H7 price control review, it would be for HAL's shareholders to support its actual financing structure.

4.15 HAL has set out that with appropriate incentives, it would plan to make additional investment in 2021 of around £230 million (£218 million capex and £9m of opex) to maintain and improve quality of services to consumers in 2021 and beyond. This includes investment to provide appropriate capacity at the airport if there is a particularly strong recovery in demand.

[15] HAL's RAR is measured as net debt to RAB.

4.16 We consider that an intervention that provides gearing headroom above its level of planned investment, for example, in the range £230 million to £300 million, would provide a clear and strong incentive for HAL to:

- undertake any necessary investment;
- maintain service quality; and
- provide necessary capacity during 2021.

4.17 We also note that efficient capex investment would be added to HAL's RAB and the current evidence is that HAL has maintained a reasonable quality of service throughout the covid-19 pandemic. As a result, there is no compelling case for an immediate adjustment greater than the £300 million, as this sum will provide HAL with sufficient financial flexibility to deal with any issues that arise. Longer-term investment and quality of service issues will be dealt with at the H7 price control review.

4.18 As set out above, we have considered potential interventions based on mitigating risks around the notional company's gearing (£300 million) and providing clear incentives on investment (above £230 million). On this basis, our judgment is that a RAB adjustment of £300 million in 2021 would be an appropriate and proportionate regulatory intervention.

Impact on the H7 price control review

4.19 We have also considered the direct costs this adjustment would place on consumers and whether the RAB adjustment would have an undue impact on charges in H7. We estimate that a RAB adjustment of £300 million would increase consumer charges from 2022 onwards by only around £0.30 per passenger[16] (around 1.5%) and that there would be no impact on charges in 2021. On this basis, we are content that a £300 million RAB adjustment would not:

- have an undue or disproportionate impact on prices in H7 and beyond to the detriment of consumers; or
- unduly constrain our discretion to appropriately calibrate any interventions at the H7 price control review to achieve affordability and financeability in the interests of consumers.

4.20 We consider it is reasonable to expect the benefits to consumers from a lower cost of capital and greater service quality in H7 to outweigh these costs from the RAB adjustment. On cost of capital alone, the increase in the per passenger charge of £0.30 per passenger could be offset by a

16 This is based on assumptions for the pre-tax cost of capital of 6% and RAB of £16 billion and assumes that regulatory depreciation on this RAB adjustment is not recovered during H7.

reduction in the H7 cost of capital compared to what it would otherwise be by around 10bps.[17] This is relatively small when considering the range of plausible estimates for the cost of capital. We will take account of our approach to the RAB adjustment, alongside other relevant considerations, such as the approach to risk sharing and incentive arrangements, in reaching our decisions on the cost of capital.

Additional protections for consumers

4.21 Given:

- the high degree of uncertainty over, and the strength and speed of, the recovery of passenger traffic; and
- therefore, whether the RAB adjustment required to meet our duties and objectives might turn out not to have been required

we have considered additional protections we should put in place for the interests of consumers.

4.22 We would expect HAL to respond to our decision on the RAB adjustment in 2021 by taking proactive steps to prepare for a higher than expected increase in passenger traffic. If evidence were to emerge that HAL was not delivering an appropriate quality of service in 2021, we would conduct a review of these matters.

4.23 In this review, we would seek to understand whether HAL was reasonably prepared for the increase in passengers, provided additional capacity (for example, by reopening terminals) in an efficient and timely way and maintained service quality.

4.24 In the event that this review showed that HAL had not responded appropriately or maintained service levels, we would look to introduce additional protections around service quality in H7. We would also consider reducing the £300 million RAB adjustment or make an offsetting reduction to revenues, making sure not to:

- "double count" any SQRB penalties that HAL might have incurred; or
- disallow any efficient costs that HAL had incurred to meet the increased demand experienced.

4.25 We would look to provide further guidance on this review as part of the H7 price control review. The SQRB metrics will provide useful information to signal any potential issues with service quality.

[17] The additional allowed revenue from 30p per passenger (around £19 million, based on average passenger forecast of 63 million p.a.) is similar to the reduction in allowed return from a 0.1% reduction in the WACC (based on a £16 billion RAB).

Approach to H7 price control review

4.26 For the H7 price review, we will consider further the issues raised by HAL and stakeholders relating to the case for any further intervention in relation to HAL's revenue losses in 2020 and 2021.

4.27 To provide additional clarity on our approach for the H7 price control review, we summarise below our latest thinking on how we will assess the case for an additional interventions and seek to further the interests of consumers. We will consider:

- the need to protect any efficient investment and expenditure that HAL incurs in 2021 to maintain or improve the quality of service for consumers and to provide the necessary capacity for consumers in a timely way;
- how traffic risks are allocated in future. For the H7 period, we intend to introduce a form of traffic or revenue risk sharing which will reduce the level of risk that HAL bears from variations in traffic levels. This could reduce the likelihood that HAL will under-recover depreciation in the future. It would also reduce future uncertainty and benefit consumers during H7 by reducing the cost of capital compared with what it would be otherwise;
- how best to estimate the range for the cost of capital taking account of the overall risk and reward package created by the price control framework and how to choose a point estimate from this range;
- making sure that any interventions are consistent with the risk-reward balance in the overall price control package, affordability and financeability; and
- further considering HAL's arguments that it should recover regulatory depreciation to protect its RAB.

4.28 On the final point on protection of depreciation, our current views, subject to further analysis and consideration at the H7 price control review, are that:

- we do not accept that the Q6 price control provided a guarantee that HAL would be able to recover all its regulatory depreciation and/or a particular level of return. The Q6 price control for HAL was set *ex ante* on the basis that HAL would recover regulatory depreciation and a reasonable allowed return on a forward looking basis. HAL would bear traffic risks, and we could consider requests to re-open the price control. This did not constitute an absolute guarantee that HAL would recover regulatory depreciation *ex post* irrespective of what happens to traffic levels during the regulatory period. Such a guarantee does not seem proportionate or consistent with the approach we took to setting the Q6 price control;

- nonetheless, this is an important issue that merits additional consideration. There may be a case for the regulatory framework to operate in a way that allows debt finance to be provided on a low risk and low cost basis. In the February 2021 Consultation, we noted that there may be a stronger case for protecting elements of regulatory depreciation that support notional debt financing arrangements;
- we may consider partially offsetting any adjustment in order to take account of HAL's outperformance against the assumptions used for the Q6 price control; and
- we may consider what happens during the rest of 2021 and take account of positive EBITDA in making a contribution towards any intervention based on regulatory depreciation.

4.29 As regulatory depreciation from 2020 and 2021 was £1.6 billion (in 2018 prices), there would need to be a clear case that such an adjustment would further the interests of consumers, having regard to the other matters required by our secondary duties. We summarise our current analysis of these matters in Appendix C.

Appendix A

Our duties

A1 The CAA is an independent economic regulator. Our duties in relation to the economic regulation of airport operation services ("AOS"), including capacity expansion, are set out in the CAA12.

A2 CAA12 gives the CAA a general ("primary") duty, to carry out its functions under CAA12 in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of AOS.

A3 CAA12 defines users of air transport services as present and future passengers and those with a right in property carried by the service (i.e. cargo owners). We often refer to these users by using the shorthand of "consumers".

A4 The CAA must also carry out its functions, where appropriate, in a manner that will promote competition in the provision of AOS.

A5 In discharging this primary duty, the CAA must also have regard to a range of other matters specified in the CAA12. These include:

- the need to secure that each licensee is able to finance its licensed activities;
- the need to secure that all reasonable demands for AOS are met;
- the need to promote economy and efficiency on the part of licensees in the provision of AOS;
- the need to secure that the licensee is able to take reasonable measures to reduce, control and/or mitigate adverse environmental effects;
- any guidance issued by the Secretary of State or international obligation on the UK notified by the Secretary of State; and
- the Better Regulation principles.

A6 In relation to the capacity expansion at Heathrow, these duties relate to the CAA's functions concerning the activities of HAL as the operator at Heathrow.

A7 CAA12 also sets out the circumstances in which we can regulate airport operators through an economic licence. In particular, airport operators must be subject to economic regulation where they fulfil the Market Power Test as set out in CAA12. Airport operators that do not fulfil the Test are not subject to economic regulation. As a result of the market power determinations we completed in 2014 both HAL and GAL are subject to economic regulation.

A8 We are only required to update these determinations if we are requested to do so and there has been a material change in circumstances since the most recent determination. We may also undertake a market power determination whenever we consider it appropriate to do so.

Appendix B

Glossary

Acronym/ term	Definition
AOC	Airline Operators' Committee (for Heathrow), a private company limited by guarantee.
AOS	Airport operation services, as defined in section 68 CAA12.
Asset beta	A measure of the perceived riskiness of a company's assets, taking into account both debt and equity financing, compared to the equity market as a whole.
BA/IAG	British Airways plc/International Airlines Group (owner of British Airways).
Base case	This represents the scenario HAL has presented under its Revised Business Plan ("RBP") under which it assumes it receives the full RAB adjustment requested.
BBU High	HAL's scenario for H7 constructive engagement with relatively rapid recovery in traffic. See also "Prolonged Contraction".
Better regulation principles	The CAA is required to have regard to the better regulation principles in CAA12, which are that regulatory activities should be: a) carried out in a way which is transparent, accountable, proportionate and consistent, and b) targeted only at cases in which action is needed.
Bps	Basis points are a unit of measure to describe the percentage change in the value or rate of a financial instrument. One basis point is equivalent to 0.01% (1/100th of a percent) or 0.0001 in decimal form.
CAA ("us"/"we")	The Civil Aviation Authority.
CAA12	Civil Aviation Act 2012.
Capex	Capital expenditure.
CMA	The Competition and Markets Authority.
Commercial deal or	The Agreement entered into between HAL and airlines that applies in 2020 and 2021 and provides for:

Commercial Agreement	• a "fixed rebate" to all airlines currently operating from Heathrow totalling £260 million, split into two equal payments of £130 million for 2020 and 2021; • a further volume rebate if the number of passengers rises above certain thresholds in 2020 and 2021; • if passenger numbers were to turn out significantly lower than expected, the commercial deal also provides for some downside protection for HAL (in these circumstances the fixed rebate to airlines would be reduced); and • default arrangements for any airlines that did not sign the commercial deal, so that those "non-signatory" airlines would receive an appropriate share of the fixed rebate but would not benefit from the volume rebate. Further details and discussion of the commercial deal are set out in CAP1852, "Economic regulation of Heathrow Airport Limited from January 2020: notice of licence modifications". See www.caa.co.uk/CAP1852.
Commercial revenues	Revenues HAL derives from services to passengers, such as retail, food and beverage, *bureaux de change*, advertising, car parking and car rental, or from services to airlines, check-in desks, office rental, airline lounges and warehousing.
Constructive engagement	The process for engagement between HAL and its airlines customers as part of the H7 price control process.
Consumers	As defined in CAA12, consumers are passengers and cargo owners, both now and in the future.
Covid-19	Coronavirus disease 2019.
Deprecation holiday	A period over which regulatory depreciation is included in aeronautical charges but not removed from the RAB.
Equity beta	A measure of the perceived riskiness of a company's equity compared to the equity market as a whole. Entities with an equity beta of less than one are considered less risky than the market as a whole, while a beta greater than one indicates that the investment is considered more risky than the market as a whole.
ex ante	Based on forecast data/before an event.
ex post	Based on actual data/after the event.
Financing platform	The "whole business securitisation" funding arrangements used by HAL to raise debt finance. Details of the arrangements comprising HAL's financing platform can be found at: https://www.heathrow.com/company/investor-centre/offering_related-documents.

Gearing	Ratio of a regulated company's debt to its RAB.
HATP	Heathrow Airport Transport Forum
HSPG	Heathrow Strategic Planning Group
H7	The next HAL price control that we assume will be in place from 1 January 2022. If set for the usual five year period, this will run for the years 2022 to 2026.
H8	The next HAL price control period after H7. If H7 is set for the usual five year period, H8 will start from the year 2027.
HAL	Heathrow Airport Limited, the licence holder and operator of Heathrow airport.
Heathrow Finance Plc	A holding company of HAL, which owns and operates Heathrow airport.
IBP	HAL's "Initial Business Plan" for the expansion of Heathrow Airport. The IBP was provided to the CAA in December 2019 and was prepared in the expectation of a 3rd runway being built.
IdoK	Interim determination of the K factor, a regulatory tool used in the UK water sector.
iH7	Interim H7 price control. Runs from 1 January 2020 until 31 December 2021.
LACC	London (Heathrow) Airline Consultative Committee, set up by IATA to implement a collaborative consultation framework for Heathrow airport.
MAG	Manchester Airports Group
NERL	NATS En Route plc.
No adjustment scenario	This represents the scenario HAL has presented under its Revised Business Plan under which it assumes it receives no RAB adjustment will be made.
Opex	Operational expenditure.
ORCs	Other Regulated Charges, as defined in Condition C2 (Charges for other services) of HAL's licence.
PCM	Price Control Model.
Prolonged Contraction	HAL's scenario for the constructive engagement process with airlines which includes a much slower recovery in traffic. See also "BBU High".

Q4 or Q4 price control	The "Q4" price control was the price control for the period from 2003 to 2008. See for example CAA decision document covering Q4 price control available online: https://webarchive.nationalarchives.gov.uk/20140605063754/https://www.caa.co.uk/default.aspx?catid=78&pageid=1182.
Q5 or Q5 price control	The "Q5" price control is the price control for the period from 2008 to 2014. See for example CAA decision document covering Q5 price control available online: https://webarchive.nationalarchives.gov.uk/20140605060146/http://www.caa.co.uk/docs/5/ergdocs/20090313StanstedPriceControl.pdf.
Q6 or Q6 price control	The "Q6" price control is the price control for the period from April 2014 to end of December 2018, the approach to which has subsequently been successively extended to cover 2019-2021. For the Q6 final decision, see www.caa.co.uk/cap1138.
QoS	HAL's quality of service, which is regulated through the SQRB scheme in its licence granted under CAA12.
RAB	Regulatory Asset Base.
RAR	Regulated Asset Ratio, defined as the ratio of HAL's debt to its RAB. The Group RAR refers to the ratio of the level of debt held at Group level to the RAB.
RBP	HAL's Revised Business Plan.
RoRE	Return on Regulatory Equity, which is a measure of the expected return on the portion of the RAB financed by equity.
Spread (also "bond spread")	The difference between the yield on a corporate bond and the yield on a risk-free security such as a government bond.
SQRB	Service quality rebates and bonuses, a scheme of incentives within HAL's current price control in its licence granted under CAA12.
Star Alliance	An airline alliance with 26 member airlines.
TRS	Traffic risk sharing mechanism.
United	United Airlines.
VAA/Virgin	Virgin Atlantic Airways.
WACC	Weighted Average Cost of Capital.
WTP	Willingness to pay survey.

Appendix C

Responses to points raised by stakeholders

Introduction

C1 This appendix provides our responses to specific comments made by stakeholders in their responses to the February 2021 Consultation. It deals with these comments under three broad headings:

- comments on the process we have followed and/or intend to follow;
- comments on the form and magnitude of the total covid-19 related intervention; and
- comments on our analysis of HAL's current financial position.

Comments on process

Engagement with evidence

C2 HAL asserted that there is a "continuing failure by the CAA to engage with evidence that HAL provides"[18]. We strongly reject this assertion. We have extensively engaged with the evidence provided by both HAL and other stakeholders in response to both:

- the October 2020 and February 2021 Consultations; and
- evidence and arguments provided separately from those stages of the process, such as requests for further information from HAL. HAL and airlines have also had the opportunity to make presentations directly to members of the CAA's board.

C3 Where we have not yet arrived at a final view on the evidence submitted, this is because we are in the process of gathering our own evidence and stakeholder views as part of the H7 price control process. This is consistent both with how other regulators approach the setting of price controls and our own practice at previous price controls.

C4 We have considered all of HAL's comments and evidence presented during this process. However, we will not always agree with a particular view or adopt a specific approach. We are concerned that at times HAL appears to

[18] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 35.

conflate engaging with evidence and agreeing with their interpretation of this evidence. For example, in this decision we have highlighted several areas where the evidence HAL has submitted to us exhibits significant gaps or weaknesses. Disagreements on the interpretation of evidence are commonplace in economic regulation. If HAL continues to be concerned by our approach on these issues then it has a right to request an appeal to the CMA in the context of the licence modifications to be made to HAL's licence to implement the H7 price control.

C5 As for the specific areas in relation to which HAL has asserted that we have not engaged with evidence it has submitted, we have set out our comments below.

Level of risk HAL was expected to bear in Q6/iH7

C6 HAL has suggested we have not engaged "*in appropriate, quantifiable terms*"[19] on this issue. We disagree. Appendix D of the February 2021 Consultation ("Investor expectations at Q6/iH7") contained an extensive discussion of this issue. It noted the evidence put forward by HAL and set out the reasons why we were sceptical as to whether investors perceived a binding upper limit to the level of risk to which they would be exposed in practice. We remain sceptical that any such upper bound has ever existed and, even if it did, that it can be robustly quantified. This does not constitute a failure to engage with evidence. We do, however disagree with HAL's interpretation of the evidence it has put forward.

C7 We also note that the question of whether we would reopen the price control (and how) was left open in the decisions implementing the Q6 price control. The CAA committed only to consider any request in the light of its duties and the circumstances prevailing at the time. As such, we did not set any other expectation as to how we would deal with any reopening request. The statements we made as part of the Q6 price control proposals certainly did not commit the CAA to adjust the price control if HAL faced a risk over and above a set threshold.

Evidence on consumer willingness to pay and witness statements

C8 We have considered HAL's evidence on willingness to pay and the witness statement provided by a member of HAL's executive team. This was considered in the context of the February 2021 Consultation, in chapter 3, and further as set out below.

C9 We have considered this evidence carefully, not only to assess the need for investment, but also the strength of the arguments on the benefits that

[19] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 25.

investment might bring and whether the claimed RAB adjustment is proportionate to the investment proposed.

C10 Notwithstanding HAL's contention that accelerating investment would benefit consumers by £1.45 billion, our position is that the cost of this investment is only £218 million, which in any case will be added to HAL's RAB. A further RAB adjustment of the scale requested by HAL therefore does not appear to be proportionate to the size of the investment HAL proposes. HAL's service quality performance has generally been good before and during the covid-19 pandemic. As such, an approach which focuses on maintaining service quality in the short term might be appropriate. We further consider HAL's approach to consumer engagement in the RBP in Appendix N of the "Way Forward" document.

C11 We, therefore, do not consider that this evidence on its own supports intervention on the scale HAL is requesting. As set out in chapters 3 and 4, we have decided that a more proportionate RAB adjustment is appropriate to incentivise investment during 2021.

Treatment of outperformance

C12 On HAL's historical performance, HAL has said that "*the CAA has not yet engaged on the substance of this issue*".[20] We expect to carry out further assessment of HAL's performance for our initial proposals for H7, including:

- a review of the appropriate timescale over which to measure performance;
- the drivers of out/underperformance; and
- how we should take account of this in calibrating further intervention at H7 in respect of HAL's revenue losses in 2020 and 2021.

C13 We have already published an initial assessment of outperformance. Further refining of this is complicated and requires time to ensure the analysis is done diligently and encompasses the full range of stakeholder views on these matters. The length of time needed to carry out this and other assessments is one reason why we consider that the ultimate decision on the scale of intervention should be made as part of the H7 price control review. This will enable us to assess this issue in the context of the broader issues raised by setting the H7 price control in the interests of consumers.

[20] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 226.

Consumer impact of a RAB adjustment

C14 HAL has suggested that "*the CAA should be undertaking a careful assessment as to which will adversely impact consumers more*"[21] between its proposed RAB adjustment or no RAB adjustment. It has highlighted our analysis in Appendix F of the February 2021 Consultation, but considers that this analysis is "perfunctory"[22].

C15 We disagree that this analysis is perfunctory. It represents the best available assessment given how far the H7 price control process has progressed. To fully understand the impact of the RAB adjustment on airport charges would require an assessment of every price control building block, not least, the cost of capital. By necessity, these will only be known as part of the price control review. This again demonstrates value of deciding the ultimate scale of intervention as part of the H7 process when we can assess these matters in the round. The licence modifications to implement the price control can also be appealed to the CMA if HAL or the airlines choose to do so.

C16 Further, we do not agree with HAL's statements in its RBP about the impact of the RAB adjustment: for example, Appendix F of the February 2021 Consultation demonstrated that a depreciation adjustment can be made without a RAB adjustment while still maintaining credit metrics that are similar to those with a RAB adjustment.

Engagement with investors

C17 HAL have expressed concern that "*ahead of this consultation the CAA does not appear to have consulted widely within the investment community or [Credit Rating Agencies]*".[23]

C18 The decision we have made has been reached after a thorough consideration of the evidence provided by HAL, other stakeholders, and the CAA's own inquiries. We would emphasise that the open, public consultation processes that the CAA has undertaken are, by their very nature, open to all interested parties to respond. As such, investors and other parties that have a view can, and do, respond to our consultation documents. In addition to this, we have engaged directly with several parties in relation to the February 2021 Consultation, including all three

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21 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 52.

22 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 53.

23 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 102.

major credit rating agencies, who we engage with regularly. We have now also consulted and/or considered the views of a selection of HAL's debt and equity investors.

Cost of intervention

C19 HAL has indicated that intervention that is taken *"now rather than later as part of H7 will deliver these benefits at no extra cost to consumers and without unduly constraining the approach that the CAA chooses to take later in H7"*.[24]

C20 We have considered this issue in detail and consider that there are various reasons why acting now could be detrimental to consumers, including that:

- it constrains the range of interventions we can ultimately make as part of the H7 price control. It would be undesirable for us to reverse interventions we make now during the H7 process unless HAL were to manifestly fail to deliver on investment or quality of service. This could undermine both investor expectations and our credibility. The approach we have decided to take seeks to manage this risk to consumers by making a proportionate intervention at this stage and considering whether further action is needed as part of the H7 price control; and
- we are in the process of examining and obtaining stakeholder views on HAL's business plan. Until this process is completed, we lack the evidence with which robustly to assess the impact of further interventions on airport charges and HAL's financial position. In the meantime, we have been carrying out analysis based on HAL's RBP as it stands. By necessity, this is an interim analysis until the further evidence required becomes available to us.

Speed of decision making

C21 HAL has stated that "*the CAA is moving far too slowly*".[25] We sympathise with HAL's difficult position at present and are endeavouring to address the issues HAL has raised as quickly as practicable. At the same time, we must discharge our statutory duties, and have regard to the need to engage in a robust and transparent decision-making process.

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[24] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 143.

[25] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 37.

C22 Our ability to make decisions as quickly as HAL wants must be viewed in the context of the need for us to be able to assess the complex issues; prepare adequate consultation materials; assess responses; and ensure that there is appropriate governance.

C23 The potential magnitude of the interventions necessary to address the issues raised by HAL means that we must have a reasonably high level of confidence in the impact of any intervention. Until we are in a position to assess the impact of any intervention with greater confidence than at present, we do not consider it would be consistent with our statutory duties to carry out a substantial intervention ahead of H7 – that is, beyond the targeted and proportionate intervention that we have decided to make. Our decision expressly makes clear that we will consider further intervention as part of the H7 price control review.

The actual financial structure and our statutory duties

C24 HAL has stated that "*Notwithstanding the work we have undertaken in relation to the notional gearing structure we strongly refute the CAA's position set out in para E14 of the consultation that the notional position is the "correct" one against which the CAA should carry out its assessment. The Civil Aviation Act 2012 s3(a) clearly states that the CAA should have a mind to "the need to secure that each holder of a licence under this Chapter is able to finance its provision of airport operation services in the area for which the licence is granted" (emphasis added). It is therefore incumbent on the CAA to demonstrate that Heathrow as it currently stands can be financed properly*."[26]

C25 We firmly disagree with HAL's interpretation of CAA12 in this regard. The use of a notional financial structure is a fundamental principle that has underpinned economic regulation since privatisation, as well as every price control determination we have made in the last 20 years. We, therefore, intend to base our assessment of HAL on a notional financial structure for H7. This is also consistent with our own, and other regulators' practice in setting price controls.

C26 We have been clear throughout this process, as well as the processes in respect of expansion and H7, that our focus should be on an efficient notional financial structure. This incentivises efficient costs and avoids the risks of HAL's actual financing choices (in particular, the overall level of

[26] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 85.

debt finance or gearing) passing from the directors and shareholders of the company to consumers.

C27 We have taken account of the impact of the covid-19 pandemic on the notional company and the financial strain that this would likely create. We note that regulatory interventions designed to benefit the financeability of the notional company will generally also benefit the financeability of the actual company.

C28 While not binding, both wider regulatory precedent and the explanatory notes to CAA12, also support this approach to assessing HAL's financeability. Specifically, the explanatory notes to CAA12 state that:

C29 "*Whilst this should require the CAA to encourage efficient and economic investment by allowing a reasonable return over time, the financing duty does not require the CAA to ensure the financing of regulated airports in all circumstances, for example* ***the CAA would not be required to adjust regulatory decisions in order to take account of an operator's particular financing arrangements or put the interests of users at risk by making them pay for an inefficient operator's financing decisions***."[27] [Emphasis added].

Development of a risk sharing mechanism

C30 HAL has stated that "*In order to implement a risk sharing mechanism it is necessary to have a metric by which the outturn and forecast can be compared. The CAA has not addressed this specifically in its consultation*".[28]

C31 HAL is correct that this mechanism is being developed as part of the H7 price control review. We have presented considerations that we will need to take into account when designing a risk sharing mechanism that could apply in H7 in our Way Forward consultation.[29]

Replicating competitive market outcomes as a statutory objective

C32 British Airways has emphasised the notes to CAA12, which state that the "*ultimate aim of economic regulation is, as far as is possible, to replicate*

[27] https://www.legislation.gov.uk/ukpga/2012/19/notes/division/4/1/1/1/1

[28] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 206.

[29] CAA (2021), "Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward", CAP 2139, April, Chapter 4.

the outcomes of a competitive market"[30], and considers that this should inform our approach to HAL's reopener request.

C33 We acknowledge the importance of this aim and agree that to some extent it is desirable to replicate competitive market outcomes: for example, by preventing HAL from earning excessive profits and incentivising improvements in service quality in a manner consistent with competitive dynamics.

C34 At the same time, we would highlight that there are limitations to the feasibility and desirability of mimicking competitive market outcomes. These include the need to ensure continuity in the provision of airport services and incentivising investment and service quality in consumers' interests.

Form and magnitude of covid-19 related intervention

Importance of recovering regulatory depreciation

C35 HAL considers that it is a fundamental principle of UK regulation that companies must recover the depreciation on the RAB. It has suggested that where such recovery is prevented within period by external factors (such as the current covid-19 pandemic), the price control must be adjusted to enable the company to earn back any under-recovered amounts.

C36 HAL has supported its view with a paper by Economic Insight, which examines the rates of return earned by water and energy networks. This paper states that it shows that "*based on historic returns, investors in these industries would expect there to be both a cap and a floor to their returns*".[31]

C37 HAL has further supported its view with a paper by Frontier Economics, which "*consider[s] the precedents available for the recovery of regulatory depreciation under the UK regulatory regime*".[32]

C38 We agree with HAL that a price control should be set *ex ante* on the basis that companies would recover regulatory depreciation plus a reasonable allowed return on a forward looking basis. This is a necessary condition for satisfying our secondary duty to secure that HAL is able to finance its

[30] https://www.legislation.gov.uk/ukpga/2012/19/notes/division/4/1/1/1/1

[31] Economic Insight (2021), "Evidence to support the CAA's consultation on HAL's COVID 19 related RAB adjustment", March, p4.

[32] Frontier Economics (2021), "Heathrow Depreciation Recovery", March, p1.

activities. It is also consistent with the "fair bet" principle that underpins much of UK economic regulation.

C39 This does not constitute an absolute guarantee that companies will be able to recover regulatory depreciation *ex post* irrespective of what happens to traffic levels during the regulatory period. This would effectively amount to a guarantee that a company will never be exposed to losses. Such a guarantee does not seem proportionate or consistent with an approach to setting a price control on the basis that HAL bears traffic risk. We, therefore, disagree with HAL that it is a fundamental principle of UK regulation that companies are guaranteed a recovery of regulatory depreciation, unless this has been explicitly set out as part of the regulatory framework.

Economic Insight report

C40 We do not consider that Economic Insight has drawn a balanced set of conclusions from the evidence it has presented.

C41 The fact that the water and energy networks considered by Economic Insight have not generally incurred losses is unsurprising since these entities are not subject to demand risk. They have also not been subject to an external shock of a similar magnitude to the current pandemic for HAL. This does not demonstrate that Ofwat or Ofgem have historically subscribed to a principle that the companies they regulate should be guaranteed the recovery of depreciation under all circumstances. In fact, we note that the data in Figure 4 of the Economic Insight report demonstrates the contrary: that other regulators do not always act to protect depreciation, since SSE exhibited negative returns, and hence under recovered its depreciation charge, in 2009.

C42 Economic Insight's analysis of historical returns earned by network utilities also does not demonstrate that *"investors in these industries would expect there to be both a "cap" and a "floor" to their returns".*[33] The "efficient markets hypothesis" indicates that investors do not base their expectations of the distribution of possible future returns on historical data alone. This means that investors would also not assume that future return possibilities are bounded by observed values for historical returns, which would not be a reasonable approach to formulating expectations. For example, in Figure 1 of Economic Insight's report, all observed returns after 2017 lie below the supposed lower bound for returns as at 2016.

[33] Economic Insight (2021), "Evidence to support the CAA's consultation on HAL's COVID 19 related RAB adjustment", March, p4.

C43 We also consider that the data in Figures 1 to 3 of Economic Insight's report appear to be misleading since they do not include all individual company observations and, hence, necessarily understate the distribution of return outcomes for these sectors.

Frontier Economics report

C44 We also have significant reservations about the Frontier Economics report.

C45 We do not agree that "*all regimes share […] a commitment that efficiently undertaken investment will be added to the RAB and that those costs will ultimately be recovered, even while the return on those assets is subject to commercial performance-related risk*."[34] To date, UK regulators have generally set price controls such that companies can expect to recover efficiently incurred investment *ex ante*. However, as indicated above, this does not amount to a guarantee that regulatory depreciation will be recoverable *ex post*. We are unaware of any examples where a regulator has retrospectively amended a prior price control determination to correct an earlier under-recovery of regulatory depreciation.

C46 We do not consider that the precedent of Phoenix Gas Networks is directly applicable in the current context. In the 2012 CC appeal, the Utility Regulator was intentionally seeking to reduce the RAB in consumers' interest. As Frontier Economics themselves point out, we are not seeking to reduce HAL's RAB. Rather, HAL is "simply experiencing the crystallisation of a commercial risk".[35] We are not persuaded that the nature of the risk, "normal" or otherwise, restores the analogy with the case of Phoenix: it remains the case that HAL has been subject to an external shock, which is fundamentally different to a discretionary reduction in the RAB.

C47 We disagree with Frontier Economics' assertion that "non-recovery of depreciation has never been considered, either by investors or regulators in setting the allowable WACC for Heathrow." As demonstrated by Economic Insight, SSE incurred a loss in 2009 which led to under-recovery of regulatory depreciation. To our knowledge, Ofgem did not make a corresponding adjustment in any subsequent price control to compensate for this under recovery.

C48 We disagree with Frontier Economics' assertion that "'writing off' historical depreciation because the public health interventions mean there is no customer base from which to recover them in 2020 is functionally identical to writing down Heathrow's RAB". In an accounting sense, a write down of

34 Frontier Economics (2021), "Heathrow Depreciation Recovery", March, p2.

35 Frontier Economics (2021), "Heathrow Depreciation Recovery", March, p2.

the RAB would be different from what has transpired. If Frontier Economics is instead drawing an analogy between uncompensated operating losses and a discretionary reduction in the RAB, we disagree with this view for the reasons stated above.

Characterisation of burden-sharing

C49 HAL has made various statements in its response relating to the sharing of the impact of the pandemic between itself and consumers. These are considered in turn below.

C50 HAL states *"The CAA says that making an adjustment is shifting the burden of dealing with the pandemic from shareholder to consumers. This is not true. An adjustment is about dealing with an exceptional event which was never intended to be accommodated in the settlement."*[36]

C51 We note HAL's description of our intentions when we set the Q6 and iH7 price controls, but we do not agree with these judgments. Regardless of how HAL may choose to characterise the Q6 and iH7 price control determinations, it is factually correct that any adjustment constitutes shifting the burden from HAL to consumers.

C52 HAL has also stated that *"there is a mistaken implicit assumption that equity in Heathrow has done comparatively well and it would also be largely held whole if the adjustment were delivered"*.[37]

C53 This statement is false and misrepresents the statements we have made to date. We have made no assumption or statement at any point that equity in Heathrow has done "comparatively well".

C54 It is, however, factually correct that HAL's proposed intervention would mean that the large majority of covid-19 related losses it incurred in 2020 and 2021 would be borne by consumers. This contrasts with the observation that HAL outperformed the regulatory settlement in Q6 from 2014 to 2019, before the impact of the covid-19 pandemic.

C55 It is also factually correct that equity in HAL would be largely held whole if its proposed adjustment were delivered, in the sense that no notional capital losses would be incurred, since regulatory depreciation would be protected in full. In chapter 4, in our discussion of regulatory depreciation, we note that there may be a case for the regulatory framework to operate

[36] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 11.

[37] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 12.

in a way that allows debt finance to be provided on a low risk and low cost basis. In the February 2021 Consultation, we noted that there may be a stronger case for protecting elements of regulatory depreciation that support notional debt financing arrangements.

C56 HAL has also stated that "*a key theme running through both CAP1966 and CAP2098 is that Heathrow has been relatively lightly impacted compared to the rest of the sector and that its shareholders have done relatively little*"[38]. This statement is false and misrepresents statements we have made to date. We have at no point suggested or implied that HAL has been lightly impacted in relative or absolute terms. It has certainly not been a "key theme" running through our consultations.

C57 We have also not said that HAL's shareholders have done relatively little. We have said, and continue to consider, that HAL's concerns around leverage and funding could be addressed with additional equity contributions. At the same time, we consider that HAL's actual financial structure is a matter for HAL's directors and shareholders.

Consumer impact of lower investment

C58 HAL has suggested that "*The CAA appear complacent about the risks to consumers, capacity and passenger service from the current squeeze on investment caused by the existing uncertainty around the balance of risk*".[39] HAL has also stated that "*the CAA reaches its conclusion without carrying out any meaningful analysis of the evidence we have provided or what reductions in maintenance spend or future investment could mean for passenger satisfaction or the delivery of outcomes to consumers*".[40]

C59 We disagree that we have been complacent about the risks to consumers resulting from HAL's current financial situation. Our statutory duties mean that we are concerned with the quality as well as the price of services received by consumers.

C60 We have reviewed the information provided by HAL and airlines on investment and service quality. We also intend to carry out further assessment as part of H7 once we have been able to take account of information from Constructive Engagement and expert review. This is a

[38] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 40.

[39] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 19.

[40] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 105.

proportionate approach given the issues and any longer-term considerations are best dealt with at the H7 price control review.

C61 In any event, the issues raised create trade-offs between, for example, the interests of consumers in relation to the cost and quality of airport operation services. We must carry out our functions in the way that we consider furthers those interests in the manner we think best, rather than using a set weighting. We consider both cost and service quality are important to the interests of consumers, but after considering HAL's evidence, have drawn different conclusions from HAL about how to reasonably address these matters. We do not consider HAL has made the case for a relatively large RAB adjustment to support service quality and investment.

C62 We also note that the responses we have received by airlines to the February 2021 Consultation have generally been sceptical about whether service quality would be materially improved by a RAB adjustment.

C63 We would also reiterate the observation made in the February 2021 Consultation that HAL's performance under the SQRB scheme has generally been good over the course of the pandemic. It is difficult to reconcile this observation with an urgent service quality or performance issue that must be addressed with a substantial RAB adjustment of the size requested by HAL.

C64 With respect to HAL's concerns regarding the impact of the covid-19 pandemic on its terminal capacity, we note that HAL's existing infrastructure is capable of operations for between 50 to 80% more passenger numbers than are currently forecast over 2021. However, we agree with HAL that there are some likely challenges for HAL as traffic begins to recover. We agree with HAL that the return of passenger traffic is potentially "lumpy"; that HAL's ability to deliver service quality as traffic recovers from such a shock is untested; and that the pace of recovery is likely to continue being uncertain for some time.

C65 As a result, we consider there may be some investment in the short term which is necessary to support service quality over 2021 and into 2022. Some short term investment is necessary to allow critical maintenance for Terminal 4 to be carried out in a timely way so that it can reopen according to forecast in the second half of 2022.

Options for scale of intervention set out in Appendix I of the February 2021 Consultation

C66 Stakeholders have commented on each of the three options we set out for the scale of intervention in Appendix I of the February 2021 Consultation. We set out our responses to these comments below.

Option 1A

C67 Option 1A involved no compensation for direct traffic-related losses but focussed on funding the additional direct costs associated with issuing new equity. The total scale of intervention under this option was estimated to be £40-£65 million.

C68 HAL has stated that "*Of the options identified by the CAA, we dismiss option 1A. Although this approach identifies potential additional costs arising from raising new capital, it ignores a wide range of additional costs (e.g. such as cleaning and signage) that have arisen as a result of Covid and therefore is partial. As far as we are aware it is not an approach taken by any other regulator*."[41]

C69 In this decision, we have signalled our view that it would be in consumers' interests to provide HAL with additional funding through a RAB adjustment. This would facilitate necessary investment expenditure in the short term as well as support HAL's access to cost effective debt finance. As such, we agree with HAL that Option 1A, in the form presented in the February 2021 Consultation, is not sufficiently broad.

C70 We also note BA's concerns regarding our estimate of the costs associated with raising new equity.

C71 Firstly, BA has noted that "*The present ownership structure has already successfully raised new funds from those same shareholders at relatively minimal cost; such a fundraising requires no involvement from an investment bank and relatively low legal, tax and accounting advisory fees to achieve*"[42].

C72 Secondly, BA has noted that the evidence that formed the basis of our assessment in the February 2021 Consultation was based on "*publicly listed companies, and fund-raising in non-UK markets*"[43]. BA suggests that the cost of such fundraising is potentially higher than private fundraising for unlisted companies in the UK.

C73 We agree with BA that the costs of raising equity are difficult to measure robustly and could potentially be lower than we have assumed. We disagree with BA that the estimate was based on fund-raising in non-UK

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41 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 162.

42 British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.14.4.

43 British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.14.6.

markets. The study on which the estimate was exclusively UK-focussed.[44]. We also note that whilst HAL's equity is not listed, it has several listed debt securities, which means that HAL might have incurred costs akin to those that characterise fundraising by firms with listed equity. We therefore continue to consider that 5% of total equity raised represents a reasonable estimate of the costs of raising equity in the current context.

Option 1B

C74 Option 1B was intended to "provide funding necessary to restore HAL's notional gearing to 60% by the start of H7 without an equity injection."[45] The total scale of intervention under this option was estimated to be around £1.4 billion. The size of this intervention would be much lower if we were to assume a greater level of dividend forbearance and/or took into account a potential further equity injection by HAL and/or outperformance in Q6.

C75 HAL has stated that "*In option 1B, the CAA propose an adjustment based on sharing the impact of the pandemic with consumers equally. The CAA have not provided justifications for:*

- *Why a 50% sharing rate is appropriate and provides an appropriate risk reward balance for Heathrow;*
- *How the approach is consistent with the Q6 WACC; or*
- *Why foregone dividends from 2020 and 2021 are excluded from the assessment (so that in practice Heathrow would bear more than 50% of the impact)*."[46]

C76 It appears that HAL has misunderstood Option 1B. It was not intended to represent equal sharing of the impact of the pandemic between consumers and shareholders as HAL has suggested. While this option implies a degree of risk sharing between shareholders and consumers, the extent of this risk sharing is incidental, and need not be equal.

C77 The question of consistency with Q6 is considered in paragraphs C135 to C166 below. We disagree that this option, or any other option we have proposed, is inconsistent with the Q6 price control settlement.

C78 Virgin noted that it would be interested to understand our assessment of what amounts to be a reasonable equity injection from shareholders of a

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[44] NERA (2009), "Cost of Capital for PR09: A Final Report for Water UK", as referenced in CEPA (2010), "Cost of raising equity".

[45] CAP2098A, Appendix I, Paragraph I1.

[46] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 200.

notional Heathrow company, taking in to account historical and future dividend payments.[47] If we decide to take this option forward at the H7 price control review we will set out more detail of our proposed approach.

C79 We note BA's suggestion that this option should be calibrated exclusively based on the notional financial structure. We would highlight that the estimate of £1.4bn for the total intervention corresponding to this Option represents the RAB adjustment necessary to return notional gearing to 60% based on the assumptions in HAL's RBP. As such, it does not reflect HAL's actual financial structure.

C80 We also note BA's statement that it is "*reluctant to support this (or any other specific) option until the entire risk package of H7 has been finalised and the effect of each potential option quantified*".[48] We will assess the case for additional interventions to further the interests of consumers as part of the H7 price control review.

Option 1C

C81 This option was intended to create a floor or cap on the losses that equity investors would suffer by funding specific price control revenue building blocks in 2020 and 2021.

C82 HAL has made various comments in respect of this Option. It has stated that "*The split of depreciation into debt and equity elements is not based on any regulatory precedent, nor is it based on sound corporate finance principles or practice*."[49] It has provided two reasons why the split of depreciation into debt and equity components could be inappropriate:

- "*the timing of these claims is not necessarily matched to the timing of depreciation and in practice repayments are often funded by new debt, rather than operating cashflow*";[50] and
- "*the CAA appear to believe that protecting an element of depreciation related to the 'debt' part of the RAB would give creditors comfort. In*

[47] Virgin Atlantic (2021), "CAP2098 Economic Regulation of Heathrow Airport Limited: Response to its request for a covid-19 related RAB adjustment – Updated consultation", March, Section 2, Paragraph 2.

[48] British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.15.4.

[49] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 189.

[50] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 190.

practice it would not, because the lack of protection for equity could undermine confidence in the equity buffer".[51]

C83 HAL is correct that there is no formal separation of regulatory depreciation into debt and equity components under the current regulatory framework. We also acknowledge that the proportion of the depreciation charge that corresponds to debt will depend on the assumptions made. At the same time, under the Q6/iH7 notional financial structure, 60% of future depreciation charges would be assumed to correspond to repayment of debt principal. This therefore represented one plausible benchmark for the proportion of depreciation corresponding to debt.

C84 We do not consider that the timing of actual debt and equity repayments is relevant to the current assessment. The relevant consideration is how historical capex is assumed to have been funded under the notional financial structure. We consider that it is reasonable to assume that capex was funded by debt and equity capital of similar maturity.

C85 We disagree with HAL's view that protecting the debt component of depreciation will not provide any comfort to creditors. We understand that creditors value the existence of an equity buffer as protection against business fluctuations. However, the floor on HAL's returns implied by Option 1C would effectively guarantee the repayment of debt interest and principal under the notional financial structure, meaning that default risk would be reduced. We therefore also disagree with HAL's statement that "*the risk of non-recovery could be substantial*". In any case, our analysis suggests that HAL will continue to benefit from a substantial notional equity buffer of at least 30% of RAB in H7.[52]

C86 HAL has also stated that "*We note that the approach adopted by the CAA is based on the real cost of debt. This approach fails to take into account that the actual cash cost of debt is higher as the majority of debt is priced on a nominal basis. This higher cash amount will need to be paid, before any return can be allocated to equity, and therefore not taking this higher cost into account results in the returns to equity being over estimated. Given this, the debt element of return should be based on the cash cost of debt rather than the real cost*."[53]

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[51] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 190.

[52] CAA (2021), "Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward", CAP 2139, April, Paragraph 3.20 suggests that notional gearing will have increased to around 67% by the end of 2020.

[53] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 194.

C87 We disagree with HAL's view that we should estimate the debt return based on the cash cost of debt. The intervention being considered under Option 1C is an increase in the RAB, which is indexed to RPI and hence will increase in each year with RPI inflation. If we were to uplift the RAB based on the cash cost of debt, we would be compensating HAL twice for the inflation component of cash interest costs.

C88 We acknowledge the concerns raised by BA in respect of this option, which are that it:

- would undermine regulatory consistency, since it is an *"incompatible ex-post reconciliation of an ex-ante incentive-based price control"*[54];
- would create inefficient pricing, since *"revenue caps motivate relatively large price changes in the opposite direction to those of Ramsey pricing"*[55]; and
- would create perverse incentives, since it *"would result in Heathrow being incentivised to avoid meeting capacity and service quality standards"*.[56]

C89 We note BA's concerns around the impact of this option on regulatory consistency. We think this impact could be partially mitigated by the exceptional nature of the current circumstances, together with a clear signal that such intervention would not be considered in the normal course of business.

C90 We disagree with BA that either this option or traffic risk sharing would necessarily cause inefficient pricing. The use of a RAB adjustment could smooth the impact of lower traffic on charges and Ramsey pricing is not necessarily an appropriate basis for setting a regulated price cap for HAL.

C91 We note BA's concern that this option would lead to perverse incentives for HAL. If we were to apply this option, we would continue to scrutinise HAL's cost efficiency and service quality such that HAL would continue to face incentives for improving both cost and service performance.

[54] British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.16.10.

[55] British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.16.5.

[56] British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 7.8.16.7.

Impact of intervention on the credibility of TRS

C92 HAL has reiterated its view that forward-looking mechanisms that limit HAL's exposure to future traffic risk will not be viewed as credible in the absence of its proposed RAB adjustment. It has supported this position with two additional pieces of evidence:

- it has referred to the NERL price control as an example of where the CAA has allegedly chosen not to apply a pre-existing risk sharing mechanism in the consumer interest; and
- it has commissioned a report by Economic Insight which examines three case studies regarding cases where government chose not to bail out failing firms.

C93 We set out below our current views as to why we do not consider these arguments to be persuasive. Nonetheless, we will consider these issues further at the H7 price control review.

NERL price control

C94 We do not consider that the NERL example demonstrates that a traffic risk sharing mechanism will not be credible for HAL in the absence of a RAB adjustment.

C95 HAL has misrepresented our approach to the NERL price control. Firstly, under the EU charging rules the current traffic risk sharing mechanism includes a carve out provision in the current exceptional circumstances (as traffic variations are beyond the 10% threshold) and an approach to addressing these matters consistent with our statutory duties should not create any undue regulatory risk. Secondly, we have set out in our latest consultation on RP3[57] that we are adopting an approach to reconciliation that will provide a high level of protection for NERL, with the arrangements proposed by the EC being an important benchmark for our approach. Thirdly, we have not seen similar concerns raised by NERL or other stakeholders, which we would expect to be the case if we were not adopting a credible or consistent approach to this reconciliation for the period affected by covid-19.

Economic Insight paper

C96 We consider that the case studies provided by Economic Insight have significant limitations.

[57] See CAA, "Economic regulation of NATS (En Route) plc: Update on approach to the next price control review" CAP 2119, page 15: www.caa.co.uk/CAP2119

C97 Firstly, these case studies all relate to the impact of failing firms in other sectors being denied state aid. HAL is not a failing firm, and the issue under consideration is the level of the price cap, not prospective state aid. The relevance of these case studies to HAL's current situation is, therefore, questionable.

C98 Secondly, it is a highly speculative exercise to ascertain and robustly demonstrate investor expectations *ex post*. For example, in the case of the National Express case study, Economic Insight states that "*It was clear that there was an expectation from National Express that the DfT would provide assistance or be open to negotiation in times of financial crises*"[58] but provides no evidence to support this statement. We consider that it is far from clear that National Express had any such reasonable expectation.

C99 Even if it was possible to demonstrate what investors were expecting, it is even more difficult to distinguish between the impact of unmet expectations and other factors. For example, by its own admission, in the case of the National Express case study, Economic Insight cannot isolate the extent to which the impact on the asset beta was due to the impact of the (supposedly) expected but unfulfilled government intervention.

C100 Economic Insight has referred to the necessity of the stand-by loan by the Strategic Rail Authority shows "*how investors' risk perceptions had been affected by the government placing Railtrack into administration*"[59]. We consider that it is equally plausible that this was necessary on account of the poor financial performance of the company due to the cost shocks it had faced in the wake of the Hatfield derailment and from the West Coast Mainline project.

C101 We therefore consider that Economic Insight has not demonstrated that investors had any reasonable expectation of intervention by CAA in respect of covid-19 related losses.

The relationship between the RAB adjustment and airport charge profiling

C102 HAL has reiterated its previously stated position that a RAB adjustment is necessary to enable profiling of charges in H7 that will benefit consumers. It has argued that the analysis we carried out in the February 2021 Consultation, which demonstrated that the same airport charges could be

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58 Economic Insight (2021), "Evidence to support the CAA's consultation on HAL's COVID 19 related RAB adjustment", March, p12.

59 Economic Insight (2021), "Evidence to support the CAA's consultation on HAL's COVID 19 related RAB adjustment", March, pp15-16.

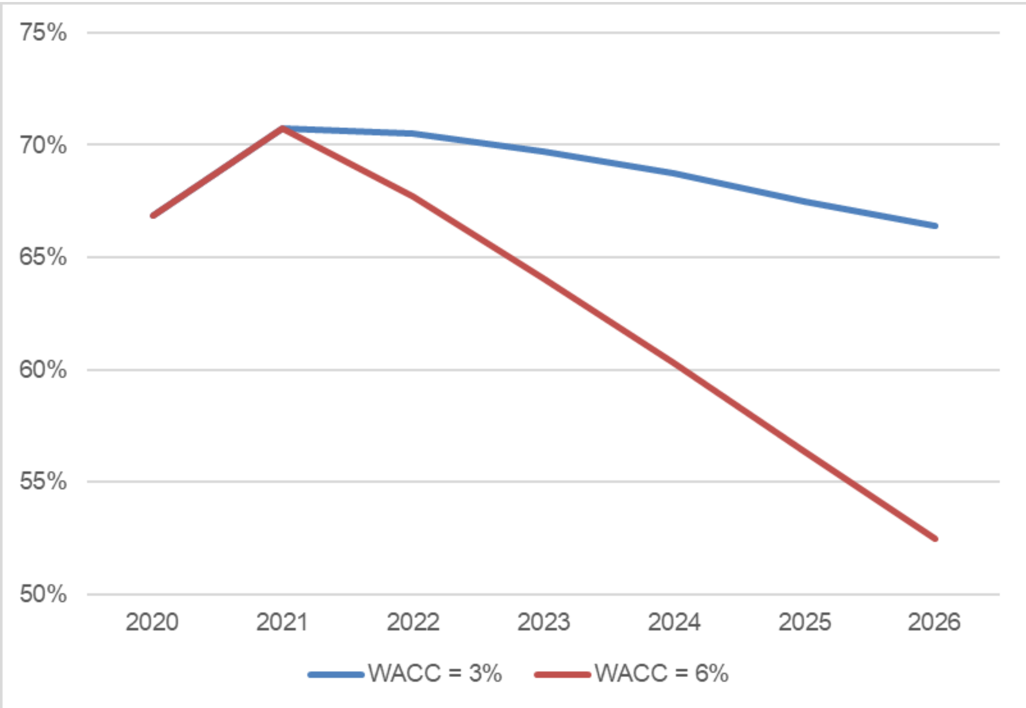
achieved with or without a RAB adjustment, is flawed since it did not take account of the need for HAL to reduce its gearing to pre-covid-19 levels by the end of H7.

C103 It has supported this view with a paper by Economic Insight which highlights certain issues associated with persistently high gearing.

C104 We have carried out additional analysis since the February 2021 Consultation with respect to the pace of deleveraging under different assumptions regarding the scale of the RAB adjustment, the profile of charges and the WACC.

C105 The figure below illustrates the trajectory of notional gearing under different WACC assumptions. The analysis is based on HAL's RBP, assumes that there is no RAB adjustment, and that £400 million of revenues is deferred to future price control periods. It also assumes that no dividends are paid for the duration of H7.

Figure 1: notional gearing trajectory with no RAB adjustment and a £400m depreciation adjustment



Source: HAL's RBP and CAA analysis

C106 Table 1 below then compares the profile of charges corresponding to these scenarios with the level of charges set out in the RBP.

Table 1: Airport charges by scenario

£/PAX, Real-CPI 2021 prices	2022	2023	2024	2025	2026
3% WACC	19.5	19.5	19.7	19.9	20.1
6% WACC	27.5	27.5	27.7	28.0	28.3
HAL RBP	32.6	32.6	32.9	33.2	33.5

Source: HAL RBP and CAA analysis

C107 This analysis demonstrates that, depending on the level of the WACC, notional gearing can be brought in line with pre-covid levels by the end of H7 without a RAB adjustment, while maintaining charges at or below the level in HAL's RBP. Even under the lower WACC assumption of 3%, notional gearing is substantially reduced by the end of H7.

C108 We therefore continue to disagree that a RAB adjustment is necessary to enable profiling of charges in H7 in the interests of consumers.

C109 We also consider that the Economic Insight report exhibits a number of flaws. Firstly, we disagree with the report's premise: that we "*questioned whether [the current pandemic] has actually raised financeability issues*"[60]. This statement misrepresents our position. We have highlighted several times that the pandemic is likely to put pressure on HAL's financial structure. Secondly, we also stated in our February 2021 Consultation that "*we think that it is reasonable for HAL to attempt to return the company to its target gearing level as quickly as is reasonably practicable*"[61]. The desirability of HAL reducing gearing over time is not in dispute. We were questioning whether this deleveraging must be completed by the end of H7, and whether the cost of not doing so is sufficient to justify a RAB adjustment of the scale HAL is proposing. The evidence presented by Economic Insight does not appear to directly address the concerns we have highlighted above. We comment on further aspects of Economic Insight's analysis below.

Literature review

C110 We acknowledge that the academic papers cited by Economic Insight suggest that leverage levels above their optimal level may imply

60 Economic Insight (2021), "Need for gearing recovery", March, p2.

61 CAA (2021), "Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment – Appendices", CAP2098A, February, paragraph E32. See www.caa.co.uk/CAP2098A

constrained investment. While it may be desirable for HAL to reduce reducing gearing over time we have the following additional observations:

- the quantitative relationship between leverage and investment is not obvious or estimated by Economic Insight;
- even if higher leverage constrains investment in H7, it is not obvious from the literature review that the adverse impact of this foregone investment on consumers is greater than the cost of the proposed RAB adjustment to consumers; and
- under the notional financial structure, it would be reasonable to assume that shareholders would inject some equity if higher leverage were to constrain investment.

Analysis of regulated company gearing levels

C111 We do not consider that Economic Insight's analysis of regulated company gearing levels demonstrates a need for HAL to fully deleverage by the end of H7 for the following reasons:

- the impact of the 2008/09 financial crisis on these companies was significantly less than the impact of the covid-19 pandemic on HAL;
- despite this, Economic Insight's analysis shows that all these companies took several years to repair their balance sheets: it is plausible that it would have taken longer to do so if the impact of the crises had been more pronounced for these companies; and
- in some cases, gearing had not returned to pre-crisis levels by the end of the data series (that is, ten years following the crisis).

Analysis of FTSE-100 companies

C112 We also consider that there are several issues with Economic Insight's analysis of FTSE-100 companies:

- the findings are based on a single year: 2009. We note that by Economic Insight's own definition, investment recovered sharply in the following year: 2010. In fact, investment was higher in 2010 than any previous year in the series other than 2008. This suggests to us that investment could be expected to recover after an external gearing shock;
- both investment and gearing appear to be volatile throughout the series, making it difficult to draw any robust conclusions regarding their relationship; and
- the FTSE-100 constitutes a relatively narrow set of large, listed companies with global operations, which does not necessarily represent a useful proxy for HAL. It is also dominated by financial

services companies, for which the nature of “investment” differs considerably from HAL (since fixed assets for these entities are likely to constitute financial assets).

C113 We consider that the first two observations also apply to Economic Insight’s analysis of Pennon and Anglo American.

C114 For avoidance of doubt, we consider that it is plausible that in certain circumstances there is an inverse relationship between gearing and investment. However, we do not consider that this analysis is conclusive regarding the appropriate pace of de-leveraging for HAL, or the costs associated with prolonged periods of higher gearing. It is certainly not conclusive regarding the scale of the RAB adjustment needed to enable profiling of airport charges in consumers’ interest.

Importance of the RAB adjustment in driving credit rating agencies’ assessment of HAL

C115 HAL has set out that we have we have misunderstood the importance of an early RAB adjustment in driving credit rating agencies’ assessment. HAL states that if no action is taken now, this could result in a further credit rating downgrade. HAL suggests that we have underestimated both the likelihood of a downgrade in 2021 and the effectiveness of a RAB adjustment in preventing it. For example, HAL suggests that a RAB adjustment would increase the comfort credit rating agencies would place in the regulatory regime and give them more confidence that a waiver process could be successfully executed.

C116 We disagree with HAL that we have underestimated either the risk of a downgrade or the effectiveness of a RAB adjustment in preventing it. We have considered these issues in detail and engaged with rating agencies on each of them. We recognise that rating agencies have understood from our February 2021 Consultation that we have rejected a “do nothing” option. We also recognise that that they are expecting clarity ahead of H7, and that a supportive, stable and transparent regulatory framework is credit positive. However, they do not explicitly state what actions they are expecting from us now. Our understanding is that their assessment will depend more broadly on the outcomes of the H7 price control review.

C117 For example, Standard & Poor’s has recently taken Heathrow Funding Ltd off Creditwatch Negative and affirmed its ratings. The RAB adjustment is discussed in the context of the full H7 price control reset: “*The ratings on HFL also depend on the H7 regulatory reset, which includes the pandemic-*

related regulatory asset base (RAB) adjustment that HFL has requested."[62] Standard & Poor's also notes the main factors affecting HAL's negative outlook and downside scenario being if traffic recovery or regulatory tariffs set for H7 are worse than its forecasts.

C118 Fitch has affirmed Heathrow Funding Limited's class A ('A-') and class B bonds ('BBB') with negative outlook. Similarly, it does not discuss the RAB adjustment in detail but refers to traffic levels and the H7 price control reset as the main factors in its ratings: "*we will revise the [Fitch rating case] should the severity and duration of the pandemic be worse than expected or the issuer fails to enforce tariff increase as expected*."[63]

C119 Nevertheless, we consider that a RAB adjustment ahead of the H7 price review could affect, in particular, the qualitative assessment of HAL's credit rating, as noted in chapter 3.

Importance of the RAB adjustment for securing HAL's access to capital

C120 HAL has suggested that we have failed to consider the potential impact that a failure to act would have on HAL's access to finance. HAL has stated that debt investors have told us that they expect the CAA to act in the current situation. If we do not act, then HAL considers that investors would reassess the attractiveness of Heathrow as a creditor, constraining HAL's ability to access new debt finance at acceptable terms in 2021.

C121 We have not failed to consider this point. HAL has been able to access new investment grade debt finance during 2021. We have reviewed various pieces of evidence, including discussions with debt investors, updates from credit rating agencies and credit research. This evidence suggests to us that investors are expecting clarity during 2021, but we have not seen evidence to suggest that they are expecting a particular RAB adjustment ahead of the H7 price control review.

C122 We have considered downside traffic scenarios and estimate that HAL may need to seek further waivers during 2021 to prevent breaches in interest cover and regulatory asset ratios covenants. It is not clear that these waivers could only be made if there was a particular RAB adjustment. We understand that a RAB adjustment could improve the terms of these

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[62] S&P Global, Heathrow Funding Class A 'BBB+' and Class B 'BBB-' ratings taken off CreditWatch Negative and affirmed; Outlook negative, 4 March 2021

[63] Fitch, Fitch affirms Heathrow Funding and Heathrow Finance Notes, Outlook Negative, 30 March 2021

waivers, but it seems unlikely that the cost to consumers would outweigh the cost of the RAB adjustment.[64]

Impact of a downgrade on HAL's cost of debt

C123 HAL considers that we have underestimated the impact on consumers from a credit rating downgrade. In HAL's response to the October 2020 Consultation, it estimated that a credit rating downgrade would lead to around 100bps and £300 million additional interest cost that would be reflected in customers' bills. HAL stated that by focusing on iBoxx, we have failed to reflect the impact of a downgrade on companies that have been significantly impacted by the covid-19 pandemic such as HAL. This is because the spread of HAL's bonds are much higher those exhibited by the iBoxx indices, meaning that these indices are irrelevant.

C124 We disagree with HAL's assessment and its statement that we have unduly focused on the impact on iBoxx. We agree that the impact of the covid-19 pandemic is likely to have affected the spread and absolute cost of HAL's debt. We also note that spread of HAL's debt to the relevant iBoxx indices has increased and HAL is underperforming against the iBoxx. We still consider that the cost of a one-notch downgrade should be similar for similarly rated debt – including both HAL's debt and the bonds comprising the iBoxx index. Moreover, basing an approach on iBoxx indices would be consistent with possible methods to estimate the cost of debt for the notional efficient company at the H7 price review.

C125 We have considered different methods for assessing the impact of a downgrade on HAL's interest costs, which lead to estimates for the impact that are significantly below 100bps:

- for HAL's class A bonds, we compared iBoxx corporate indices (A and BBB) over the last 30 days,[65] which implied a cost of 17bps per notch. We also looked at a Gatwick bond, which was 1 notch lower and trading around 25bps higher, reducing to around the levels for the iBoxx comparison when adjusting for duration;
- for HAL's class B bonds, we looked at a recent financing in a sector that has not been subject to so significant an impact from the covid-19

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[64] For example, we understand the cost of the Heathrow Finance consents in June 2020 were around £4 to £10 million p.a and on the basis of Manchester Airport Group Funding Plc (MAG) investor consent received in June 2020 we recognise the costs of future consents for Heathrow SP Limited could be higher than this.

[65] From 2 February 2021 to 16 March 2021.

pandemic, which observed a 35bps step up from a bank deal from BBB- to BB+; and

- we also looked at HAL's March 2021 consent solicitation for Heathrow Finance where it offered to pay a step up on downgrade of 25bps, an implied market estimate for a 1 notch downgrade (below Ba3 or BB-). We note these debt costs, as well as those above for class B bonds, may relate more closely to HAL's actual financial structure rather than the notional financed company.

Impact of the RAB adjustment on competition

C126 BA, MAG and Heathrow Hub all raised concerns that a RAB adjustment could have a material detrimental or distorting impact on competition.

C127 BA has stated that, *"it is curious that a RAB adjustment is assessed in Appendix J5 as being not expected to have a material impact on competition: we would disagree"*[66]. It expands on this by referring to the effects of the RAB adjustment in terms of increased airport charges and fares, and ultimately leading to a "deadweight loss to society".

C128 We agree with BA that any increase in airport charges has the potential to result in a deadweight loss to consumers and society more broadly. However, we view such effects through the lens of our primary duty to protect consumers. We view our duty to promote competition as separate from the direct impact on consumer welfare associated with higher airport charges. Rather, we view our duty to promote competition in terms of competition between UK airport operators. For example, we would be concerned if the way in which we set maximum charges at Heathrow had the effect of weakening or undermining the ability of other UK airport operators to compete with HAL in the provision of airport services. We must also consider whether consumers' interests can be protected by competition between airport operators rather than regulation.

C129 Our view in the February 2021 Consultation that a RAB adjustment is not expected to have a material impact on competition should be viewed in this light. Higher airport charges by HAL, while potentially detrimental to airlines and consumers, would not necessarily have a significant impact on competition between airport operators.

[66] British Airways (2021), "British Airways Response to CAP2098: Heathrow's request for a Covid-19 related RAB adjustment", March, Paragraph 5.10.4.

C130 Further issues relating to competition are discussed in chapter 3. We will also consider the impact on competition of any further regulatory interventions developed as part of the H7 price control review.

Analysis of Q6, iH7 and HAL's current financial situation

Characterisation of HAL's financial challenges as a balance sheet issue

C131 HAL has suggested that our approach incorrectly sees the current situation as a balance sheet issue: *"The CAA's approach appears sometimes to misconceive the current situation as primarily a balance sheet issue as seen in the calibration and quantification issues raised in the consultation."*[67]

C132 We have considered various aspects of HAL's current financial situation and have not exclusively approached this as a balance sheet issue. However, we do consider that balance sheet constraints apply. For example, HAL's December 2020 Investor report suggested that there was pressure on HAL's RAR covenant in 2021. We also noted in our February 2021 Consultation that there was pressure on HAL's gearing credit metric under the notional financial structure.

C133 At the same time, we also considered cashflow constraints. For example, in the appendices to our February 2021 Consultation, we considered several cashflow-based credit metrics including FFO to debt, debt to EBITDA, EBITDA margins and FFO interest cover. We are also aware that ICR covenants could come under pressure in an adverse scenario for traffic recovery in 2021.

C134 More generally, we are conscious that the current financial pressure faced by HAL is a combination of both balance sheet and cashflow pressures. This has informed and will continue to inform our thinking.

Nature of Q6 price control settlement

C135 HAL has stated that "*the CAA describe the Q6 shock allowance as a mechanism for managing volume risk. The Q6 determination makes it explicit that this is not an allowance to manage risk, but an adjustment to allow a central outcome*"[68].

[67] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 13.

[68] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 32.

C136 This statement is incorrect. We did not describe the shock adjustment as a "mechanism" in the February 2021 Consultation, but as a "premium" in recognition of the fact that volume risk was allocated to HAL in Q6.

C137 The quote HAL has referred to in footnote 3 of its response to the February 2021 Consultation is consistent with the interpretation above: namely, that the shock adjustment constitutes one component of a premium in recognition of the allocation of volume risk to HAL. The other component of this premium is the compensation for variation around the expected level included in the WACC.

C138 We therefore consider our description of the shock adjustment in the February 2021 Consultation to be accurate.

Understanding of CAPM

C139 HAL has indicated that "*the CAA raise the issue of the extent to which a diversified investor could manage beta risk. Beta is a measure of the risk of a fully diversified investor. This shows a fundamental lack of understanding of CAPM by the CAA*"[69].

C140 This statement is inaccurate and misrepresents our position. We did not refer to the extent to which a diversified investor could manage beta risk in the February 2021 Consultation. We said that "*investors may consider some of the impact of the crisis can be mitigated by holding a diverse portfolio of assets*".[70]

C141 Our statement is entirely consistent with CAPM: it is logical that the impact of the crisis on the portfolio returns of an investor holding an equity stake in HAL would be at least partly mitigated to the extent that the investor held a diverse portfolio of assets.

Investors' expectations regarding the level of risk to which they would be exposed at Q6

C142 HAL has reiterated its view that a key aspect of determining an appropriate intervention is the level of risk HAL was expected to bear in Q6. Specifically, HAL has made the following statements:

- investors expected CAA to intervene in the event of an extreme shock; and

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[69] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 32.

[70] See the Appendices to the February 2021 Consultation (CAP2098A), paragraph C3.

- the events of 2020 are not consistent with expectations under CAPM.

C143 We respond on each of these points below.

Investor expectations of intervention

C144 HAL has relied on various statements regarding the Q6 price control process to support its view that investors had specific expectations of regulatory intervention:

- the debate around three-factor approaches to CAPM;
- discussion during Q6 in respect of putting in a specific mechanism to deal with extreme circumstances; and
- statements by other stakeholders in Q6 pertaining to the risk protections that were being provided.

C145 We note that in some instances, HAL refers to its own views and statements during the Q6 consultation process, rather than the final price control framework that was put in place. For example, on three-factor approaches HAL expressed a view that it should be remunerated for co-skewness but, as HAL itself observes, we rejected that view. As for the broader point HAL makes around asymmetry due to traffic risk, this was addressed in Q6 by the application of a shock factor, as we observed in the February 2021 Consultation.

C146 HAL also repeated its assertion that our statements during the Q6 price control process gave rise to an expectation that we would intervene. As discussed in chapter 1, in the February 2021 Consultation, we:

- set out no clear expectation as part of the Q6 settlement as to what, if any, specific actions we would take if we were to re-open the price control (beyond noting the importance of having regard to our statutory duties); and
- made no explicit commitment to protect HAL from the impact of extreme traffic shocks.

C147 We also do not consider that the statement HAL has quoted from BA in its response to the February 2021 Consultation is persuasive. It may be the case that BA held certain views during the price control process, but these do not represent the views of investors, nor are they necessarily an accurate reflection of the impact of reopeners on systematic risk.

C148 We remain of the view that HAL has not provided convincing evidence in relation to these matters.

Consistency with CAPM

C149 HAL has attempted to infer the implied frequencies with which events of a similar magnitude to the current pandemic would be expected to occur, given the beta estimated at Q6.

C150 It estimates that such an event would occur with extremely low frequencies: and concludes from this analysis that level of losses experienced by HAL are incompatible with the CAPM assumptions at Q6.

C151 We reiterate our response from the February 2021 Consultation that the distribution of possible returns on which the CAPM estimate of HAL's beta were based at Q6 were unbounded. This means that any outcome, no matter how extreme it may be or how infrequently it might be expected to occur, is compatible with the beta we set at Q6[71]. We therefore do not agree with HAL's statement about the current level of losses being "incompatible" with CAPM.

C152 HAL's analysis of expected loss also appears to have serious weaknesses. It states that "*the allowed WACC in a determination implies a limited level of volatility in returns consistent with the market volatility in returns for a company with the same equity beta*".[72]

C153 This is only correct if the correlation between HAL's equity return and the return on the market is known or can be robustly estimated. HAL is not listed and hence the correlation between equity returns and market returns cannot be directly observed.

C154 To illustrate the difficulties with HAL's estimates of volatility, it is useful to express HAL's equity beta in terms of the volatility of HAL's equity returns as follows[73,74]:

$$\beta = \rho \frac{\sigma_i}{\sigma_m}$$

C155 This equation demonstrates that – contrary to HAL's statement – a broad range of equity return volatilities are consistent with any given beta, if the

[71] HAL appears to acknowledge this in HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 175.

[72] HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 187.

[73] This equation is a rearrangement of the definition of the CAPM beta.

[74] Where ρ is the correlation between HAL's equity returns and the return on the market index, σi is the standard deviation of HAL's equity returns and σm is the standard deviation of returns on the market index.

correlation coefficient is not known. For example, if we assume a beta of one and a market return volatility of 10%, the equity return volatility could be 10% if the correlation coefficient is one; or it could be 100% if the correlation coefficient is 0.1.

C156 In its response to the October 2020 Consultation, HAL stated "*The standard deviation of returns on shares in the FTSE all-share index is 3.36%. 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%.*"[75]

C157 We have two concerns with this statement. Firstly, we do not recognise the values HAL has estimated and it appears HAL has significantly understated the standard deviation of returns on the FTSE All-Share index.

C158 Our view of the relevant measure of standard deviation for the purposes of HAL's analysis is the standard deviation of annual returns[76]. We have estimated the standard deviation of annual returns for the FTSE All-Share based on daily index values. The figures are greater than HAL's estimate, regardless of the measurement period used.

Table 2: Standard deviation of annual returns on the FTSE all-share index[77]

Measurement period	Standard deviation of annual returns
2015-2019	13.07%
2010-2019	14.22%
2005-2019	17.08%
Average	**14.79%**

Source: Eikon and CAA analysis

C159 Secondly, HAL's statement effectively assumes a correlation of 1 (that is, a perfect correlation between HAL's equity return and the market return): an assumption for which HAL provides no evidence.

75 HAL (2021), "Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966)", November, Paragraph 139.

76 For variables such as equity returns that are assumed to follow a Gaussian random walk, or Wiener process, the standard deviation increases as the time interval under consideration increases. This is because there is an increasing probability that the instrument's price will be farther away from the initial price as time increases. This implies that the standard deviation of annual returns is higher than the standard deviation of returns over shorter intervals.

77 The standard deviation of annual returns is equal to $\sqrt{n}$ times the standard deviation of daily returns, where n is the number of trading days in a year.

C160 Although the correlation between HAL's equity return and the market return is unobservable, we have considered possible proxies for this value. Specifically, we have examined the annualised return volatilities for listed airport comparators and their correlation with the market index. This has been based on daily data between January 2018 and December 2019 (i.e., the two years prior to the current pandemic):

Table 3: Annualised volatilities and correlations for airport comparators

Comparator	Standard deviation of annual returns	Correlation with market index
Average	19.24%	0.34
Min	15.08%	0.11
Max	21.03%	0.53

Source: Eikon and CAA analysis

C161 This shows both considerably higher volatilities and considerably lower correlations than HAL has assumed.

C162 We have also examined the return volatilities of listed UK utilities and their correlation with the market index over the same period. These are summarised below. These also show considerably higher volatilities than HAL has assumed, as well as similar average correlations with the market index to the airport comparators considered in Table 3 above.

Table 4: Annualised volatilities and correlations for listed UK utilities

Comparator	Standard deviation of annual returns	Correlation with market index
Average	22.62%	0.34
Min	19.67%	0.30
Max	24.68%	0.37

Source: Eikon and CAA analysis

C163 If the correlation between HAL's equity return and the market index is assumed to be 0.53[78], and the standard deviation of the market return is assumed to be 13.07%[79], this would imply an equity return volatility for HAL of 27.18%[80], that is, around 7 times HAL's assumed level.

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78 Corresponding to the highest observed correlation coefficient for the comparators we have considered (Fraport).

79 Corresponding to the lowest return volatility estimate for the FTSE All-Share in Table 2 above.

80 This follows from a rearrangement of the equation set out in paragraph C110. The standard deviation of

C164 These issues are highly consequential in terms of the implied frequency with which equity losses of the scale observed in 2020 and 2021 would be expected to occur. An equity return volatility in the range 25%-30% would imply an expectation of equity losses equivalent to 2020 and 2021 at least once every 50 years. This is still infrequent but is many orders of magnitude more frequent than suggested by HAL and would not, in any case, suggest that the equity losses observed during the pandemic are inconsistent with the CAPM assumptions adopted in Q6.

C165 We note HAL's statement that: *"Calculated out, the scale of losses in 2020 would not be expected to occur for a company with Heathrow's equity beta, as defined by the CAA in the settlement, over a timescale a million times the current age of the universe. This would be comic if it was not so mistaken in terms of economics."*[81]

C166 We are concerned that HAL has made such statements without apparently having carried out cross-checks and sensitivities. This means that the evidence that it has provided does not appear balanced and its characterisation of the evidence is inappropriate.

Equity financeability

C167 HAL has alleged that "*The CAA has ignored equity financeability in its approach and this is inconsistent with its duties*".[82] Although HAL does not provide a definition of equity financeability, it refers to the ability of HAL to "*access equity markets if required*"[83].

C168 Providing the potential for reasonable returns to shareholders is an important part of creating a financeable price control. In our January 2020 and June 2020 Consultations, we presented a set of metrics through which we would examine equity financeability. This included both accounting measures such as the Return on Regulatory Equity ("RORE") and cash

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equity returns = equity beta of 1.1 / correlation coefficient of 0.5 * standard deviation of market index returns of 13.07%. This represents a relatively conservative estimate of HAL's equity return volatility, since it is based on the highest observed correlation coefficient and lowest observed market return volatility estimate.

81 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 49.

82 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 69.

83 HAL (2021), "Economic regulation of Heathrow: response to CAA consultation on Covid-19 related RAB adjustment (CAP2098): Heathrow's response", March, Paragraph 69.

measures that focussed on dividends such as running yield. It remains our intention to consider these metrics as part of the H7 price control review.

C169 In our Way Forward consultation, we carried out analysis which considers how quickly the notional entity could deleverage if HAL is assumed to fund covid-related losses exclusively with debt. In all the scenarios we considered, bringing notional gearing to pre-covid levels required dividend forbearance for several years in H7.

C170 A period in which no dividends are paid would be consistent with precedent and market expectations. Standard & Poor's has published analysis suggesting rated European airports will pay almost no dividends in 2020, 2021 and 2022 with a gradual return to payment of dividends from 2023 onwards.[84] HAL itself will be unable to pay dividends while gearing[85] remains above 87.5% due to a condition of the waiver it obtained from creditors.

C171 While dividend forbearance may be appropriate in the short run, in the long run the notional entity will need to be able to pay dividends to attract ongoing investment. We will, therefore, be looking to calibrate the H7 price control in a way that supports a return to dividend payment, within a reasonable timescale.

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84 See slide 13 of "Another Stretch Year For Europe's Airports" https://www.spglobal.com/_assets/documents/ratings/research/100049716.pdf

85 The covenant waivers refer specifically to 'regulatory asset ratio' which is a measure of gearing and is calculated as the ratio of net debt to RAB