Consumers and Markets Group

Economic regulation of Heathrow Airport Limited: H7 Initial Proposals - Summary

CAP2265A

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Civil Aviation Authority,
Aviation House,
Beehive Ring Road,
Crawley,
West Sussex,
RH6 0YR.

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Enquiries regarding the content of this publication should be addressed to: robert.toal@caa.co.uk

The latest version of this document is available in electronic format at www.caa.co.uk/CAP2265A

Contents

About this document

This consultation sets out our Initial Proposals for Heathrow Airport Limited's ("HAL") H7 price control review. It includes:

- this summary document which discusses our overall approach and the impact of the particularly challenging circumstances created by covid-19 on Heathrow airport, the price control review and these Initial Proposals.
- Section 1 which discusses[1]:
  - our proposed approach to the form of regulation for HAL, including our intention to introduce traffic risk sharing arrangements and to set a 5-year price control; and
  - our projections for each of the key price control "building blocks" (including numbers of passengers, costs and commercial revenues) that have informed our Initial Proposals.
- Section 2 which sets out[2]:
  - our views on HAL's request for a covid-19 related RAB adjustment, the treatment of asymmetric risk, the WACC, financeability and our provisional range for the H7 price control on airport charges; and
- Section 3 which describes[3]:
  - our proposals for developing stronger capital efficiency incentives and implementing outcome based regulation ("OBR"); and
  - our approach to dealing with airport charges in 2022 noting the particularly difficult and challenging circumstances that have been created by the pandemic and its impact on the CAA's H7 price control timetable.
- The appendices provide further information on the main issues set out in this consultation[4].
- We are also publishing, alongside these Initial Proposals, a number of supporting consultancy studies[5].

[1] www.caa.co.uk/CAP2265B

[2] www.caa.co.uk/CAP2265C

[3] www.caa.co.uk/CAP2265D

[4] www.caa.co.uk/CAP2265E

[5] www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/H7/Reports-by-external-consultants/

Views invited

We welcome views on all the issues raised in this document. Please e-mail responses to economicregulation@caa.co.uk by no later than:

- **Wednesday 17 November 2021** for any matters relating to airport charges for 2022 and the introduction of the holding cap discussed above; and
- **Friday 17 December 2021** for the wider issues in this consultation relating to our Initial Proposals for HAL's H7 price control and the associated incentive arrangements.

We cannot commit to take into account representations received after these dates.

We expect to publish the responses we receive on our website as soon as practicable after the period for representations expire. Any material that is regarded as confidential should be clearly marked as such and included in a separate annex. Please note that we have powers and duties with respect to information under section 59 of the Civil Aviation Act 2012 and the Freedom of Information Act 2000.

If you would like to discuss any aspect of this document, please contact Rob Toal (robert.toal@caa.co.uk).

Summary

Introduction

1. This document sets out the CAA's Initial Proposals for the price control and associated regulatory framework that should be applied to Heathrow Airport Limited ("HAL") after the present arrangements expire at the end of December 2021.

2. This price control review is being conducted in particularly challenging circumstances:

   - HAL, and the aviation sector more widely, are recovering from the extremely severe impact of the covid-19 pandemic, and the associated travel restrictions, on passenger numbers;
   - significant uncertainty remains about the future path of this recovery;
   - there are new and difficult issues to deal with such as HAL's request for a covid-19 related adjustment to its Regulated Asset Base ("RAB"); and
   - these issues have created significant pressure on the price control review timetable, which in turn has created uncertainty about the appropriate level of airport charges for 2022.

3. Setting price controls for HAL is one of the CAA's core functions under the Civil Aviation Act 2012 (CAA12). Our primary duty under CAA12 is to further the interests of users[6] of air transport service regarding the range, availability, continuity, cost and quality of airport operation services ("AOS"). We are now consulting stakeholders on our Initial Proposals for HAL's H7 price control. This is a crucial step in our H7 price control review programme and the views of respondents will be important in helping us shape Final Proposals (due in early 2022).

4. This summary sets out our broad approach to these Initial Proposals including:

   - key considerations, context and the supporting process;
   - how we intend to deal with the high degree of uncertainty created by the impact of the covid-19 pandemic;
   - HAL's request for a further covid-19 related RAB adjustment;
   - our approach to incentivising efficient capital expenditure and service quality;

[6] Under CAA12, our primary duty is owed to "users" of air transport services. These users are present and future passengers and cargo owners. As in previous consultations, we refer to these users as a whole using the term "consumers".

- the projections of costs, revenues, allowed returns and passenger numbers and how we have used these to identify a range of price controlled airport charges;
- our views on the way forward for dealing with airport charges in 2022 noting the very difficult and unusual circumstances that have been created by the covid-19 pandemic and the impact of these circumstances on the timetable for setting the price control; and
- the next steps for this price review programme.

Key considerations and context

5. The present circumstances create a significant challenge for the appropriate discharge of our statutory duties as the lower level of passenger numbers puts upward pressure on airport charges per passenger, even if the overall costs of operating and investment in the airport may not be higher than before or expected to increase materially in the medium term. In developing these Initial Proposals we have critically evaluated the passenger forecasts that HAL produced in its business plan and have assumed a level of passenger traffic about 7% higher than that assumed by HAL. Nonetheless, these forecasts were produced some time ago and before the recent government announcements on the lessening of travel restrictions. Therefore, the indicative range of airport charges in these Initial Proposals should be regarded as provisional.

6. We have built on the advantages of the existing regulatory framework where it is appropriate to do so, including basing these Initial Proposals around a Regulatory Asset based, five-year price control. This has twin advantages in terms of furthering the interests of consumers: it allows for a degree of smoothing of any increases in airport charges and also provides investors with a degree of certainty about the medium term and so this should support the cost effective and efficient funding of new investment.

7. As noted above there are also regulatory levers available that can help reduce volatility in airport charges and provide a degree of smoothing or mitigation of upward pressure on prices in the short-term, but it is also important that HAL can finance new investment, which requires sufficient revenues and returns to support reasonable access to debt and/or equity markets. In practice, this limits the scope we have to mitigate short-term price increases and our assessment suggests that given the assumptions we have made on forecasts of passenger numbers then it is likely that there will need to be significant increases in airport charges per passenger to support the necessary further investment to maintain a safe, secure and resilient operation of the airport.

8. Nonetheless, significant uncertainty remains about the path of the recovery and we will consider further the likely evolution of passenger numbers in the run up to our Final Proposals. This, and dealing with the other uncertainties that the pandemic has created, means that it is appropriate to base these initial proposals on a range of estimates that leads to a relatively wide and provisional range of airport charges in these Initial Proposals for the period 2022 to 2026. We will work with stakeholders over the coming months to narrow this range and establish a firm basis for Final Proposals.

9. The top of our provisional range in these Initial Proposals is airport charges of about £34.40 per passenger, which would involve a real increase in airport charges of around 60%. Increases towards the upper end of our range could cause material consumer detriment. Nonetheless, it is important to note that airport charges typically represent a relatively modest proportion of the air fares at Heathrow and so they would create a very significantly smaller percentage increase in the overall cost of travel. It is also vital for consumers that airport charges raise sufficient revenue to allow HAL to provide an appropriate level of service and finance new investment, including the capital spending necessary to keep the airport safe and secure. Given the difficulties that have been created by the impact of the covid-19 pandemic, we cannot rule out the need for such increases and, so, are consulting stakeholders on these matters.

10. The bottom of our provisional range for airport charges of about £24.50 would represent a real increase of about 15%. Increases towards the lower end of our range would create less risk of detriment for consumers through the level of charges, but would require HAL to meet stretch efficiency targets and would put greater pressure on the financeability of new investment. We also welcome further representations from stakeholders on HAL's financeability challenges and whether it is practicable to establish charging arrangements that allow for efficient financing at a lower level of airport charges.

11. We hope that recent developments with respect to international travel arrangements will allow us to revise upwards our passenger traffic forecasts for Final Proposals and reduce pressure on both the affordability of HAL’s charges and its financeability. Nonetheless, this is not certain and in the event that the pandemic were to lead to significant new restrictions on air travel, we would need to consider how best to respond, including in relation to whether a five year price control settlement would represent the best way forward.

12. We also note that when we look forward to the end of the H7 period and beyond we hope that the number of passengers will have bounced back to at least the level seen historically and this will provide the opportunity to reduce airport charges to more normal levels. This should be possible because the upward pressure on prices in this period is driven primarily by lower forecast passenger numbers rather than a material and sustained increase in operating and capital costs.

Summary of our process

13. The process for setting HAL’s next (“H7”) price control began in 2017. Initially the focus was on how best to adapt the regulatory framework to support the expansion of Heathrow airport. This led to an interim price cap (“iH7) being put in place for the two years (2020 and 2021) following the end of the Q6 price control period (2014 to 2019), while work continued on the detail of capacity expansion.

14. HAL’s Initial Business Plan (“IBP”) for the H7 price control period was issued in December 2019. Shortly afterwards, HAL paused its plans for expansion in the light of the Court of Appeal’s decision to set aside the Airports National Policy Statement (“NPS”) and the onset of the covid-19 pandemic. As a consequence, we confirmed in April 2020 that the H7 review would focus on the “two runway”

airport, with the intention of having a new price control in place from 1 January 2022.

15. As noted below in the section on HAL's request for a covid-19 related RAB adjustment, we also considered HAL's representations that its RAB should be increased to compensate for its covid-19 related losses and we made a targeted adjustment of £300 million. We considered this adjustment appropriate to further the interests of consumers, particularly to support timely re-opening of airport capacity during this year.

16. In the light of the impact of the covid-19 pandemic, HAL also issued a revised financial forecast and accompanying narrative in July 2020 which it referred to as a building block update ("BBU"). This was intended to update the baseline set out in its IBP to reflect the pausing of expansion and its initial assessment of the impact of the covid-19 pandemic. After HAL issued the BBU, a period of Constructive Engagement ("CE") with airlines started, which ran between August 2020 and October 2020. CE is a process for engagement between HAL and its airline customers to enable them to discuss and review HAL's plans and to provide a forum for airlines to set out their preferences on issues such as charges, costs, investment and service quality.

17. Following CE, HAL issued a revised business plan ("RBP") in December 2020. HAL's RBP "base case" implied a very significant increase in airport charges compared to the iH7 price control period. HAL's base case for H7 assumed an average charge of £30 per passenger (2018 prices) compared to an average of around £22 (nominal prices) for 2020.

18. The April 2021 Way Forward Document provided an update on our overall approach to the price control review, our initial assessment of HAL's RBP, our latest thinking in key policy areas and our proposed approach to developing projections for each of the key price control building blocks.

19. HAL then provided an updated business plan ("updated RBP") at the end of June 2021. The updated RBP noted that lower levels of passenger numbers expected over the H7 period meant that airport charges would need to rise beyond the level identified in the RBP. The updated RBP included two scenarios, one implying average charges over H7 of £32 per passenger, and the other implying charges of £43 per passenger (in 2018 prices).

20. These Initial Proposals include our assessment of both the responses to the Way Forward consultation and of HAL's updated RBP.

Uncertainty and demand risk

21. We are preparing these Initial Proposals against the backdrop of an unprecedented reduction in the number of passengers travelling to both domestic and international destinations. In August 2021, passenger numbers at Heathrow airport remained 71% lower than the equivalent month in 2019. Uncertainty about the pace and strength of the recovery of passenger demand in the wake of the covid-19 pandemic remains high and this creates significant challenges for this price control review.

22. We have developed a number of new mechanisms and approaches so that the price control arrangements should be more robust to future uncertainty and demand risk. This in turn should allow HAL to finance new investments on reasonable terms, allow us to assume a lower financing costs and so support a lower level of airport charges to the benefit of consumers. Without these new mechanisms and approaches to help allocate and manage risk, HAL's cost of capital and allowed return on its £16½ billion RAB would be significantly higher, which would create significant detriment for consumers.

23. The most important development is a new traffic risk sharing mechanism, but we have also strengthened our approach to dealing with asymmetric risk (i.e. those risks where HAL faces relatively large downsides compared to its opportunities to outperform the price control settlement) and allowed for a more flexible and effective approach to the governance of significant changes to HAL's capex programme, which may be appropriate if demand is significantly higher or lower than expected. Each of these developments is discussed in more detail below.

Traffic Risk Sharing

24. In the April 2021 Way Forward Document, we confirmed that we intend to introduce new arrangements for traffic/revenue risk sharing and stated that we would carry out further work on the design and calibration of these arrangements. The purpose of this mechanism is to update HAL's price control arrangements and the approach to risk sharing for the new information on risks that has emerged since the covid-19 pandemic began. By making these changes, we should further the interests of consumers by ensuring that:

- the regulatory arrangements are sufficiently flexible to allow for the setting of a five year price control and the smoothing of increases in charges; and
- that the new information that has emerged on future risks does not unduly increase HAL's cost of capital and the allowed returns that airport charges support.

25. We note HAL's arguments on why it favours a revenue risk sharing arrangement, but we consider this approach would dilute HAL's incentives to optimise commercial revenues, which could lead to higher charges for consumers in the long run.

26. When selecting the parameters for the proposed TRS mechanism, we have taken account of, among other things, the likely impact of traffic changes on opex and commercial revenues, and the extent of traffic risk that HAL has experienced in the past. We are also seeking to preserve incentives for HAL to grow passenger volumes, which can reduce charges to the benefit of consumers.

27. The risk sharing adjustment will be based on the cumulative differences between outturn and forecast traffic volumes over the full H7 period. They will be implemented by adjusting HAL's RAB at the start of the next regulatory period in H8. This should ensure consumers are protected from increases in charges during the difficult periods that would be typically associated with lower levels of passenger demand.

28. Further details of our proposed approach to these matters is set out in Chapter 1.

Allowances for asymmetric risk

29. Our objective in setting the price control is to arrive at a position in which opportunities for HAL to out-perform the incentives set in the price control are broadly matched against the risk that HAL could under perform. This is consistent with our approach to setting HAL's cost of capital and allowed returns. In the case of passenger forecasts, historical experience suggests that the risks that HAL could encounter sudden downside shocks to passenger traffic are not likely to be accompanied by an equal and offsetting set of possible upside events.

30. We consider that our established approach of allowing for "non-pandemic" risks through the inclusion of a shock factor in the passenger traffic forecasts remains appropriate. However, on balance, we should also make a stand-alone revenue allowance for these "pandemic risks" as this would be a transparent way of dealing with such low probability but significant events.

31. We have calibrated this by estimating the annual losses that HAL might incur if another pandemic were to occur, evaluating the frequency of such an event and weighting the estimated losses by the probability of such a shock occurring during H7. This leads to an additional revenue allowance of between £26m and £30m per annum (nominal prices). Further details of our proposed approach are set out in Chapter 7.

Flexibility in relation to capital expenditure

32. In developing the approach to capital expenditure incentives discussed below, we suggest retaining the flexibility that is associated with the existing "core and development" approach and propose to introduce arrangements for the enhanced oversight of any major changes to HAL's capex programme. This means that the capex programme can be updated to take account of the projects that are appropriate in the circumstances later in the price control period.

HAL's request for a covid-19 related RAB adjustment

33. In July 2020, HAL made a request that we should make an adjustment to its RAB to address the shortfall in the revenue it expects to recover in 2020 and 2021 due to the impact of the covid-19 pandemic. In April 2021, we published our decision that the best way for us to further the interests of consumers in response to the issues raised by HAL's request would be to make a targeted RAB adjustment of £300 million (in 2018 prices). We considered this adjustment appropriate to further the interests of consumers, particularly to support timely re-opening of airport capacity during this year.

34. In response, HAL indicated that it considers the £300m RAB adjustment we set out in the April 2021 RAB Adjustment Decision is insufficient. It has stated that our proposed adjustment:

- does not ensure the stability of the regulatory framework or deliver the best possible outcomes for consumers in H7;

- means that investors would no longer enjoy a legitimate expectation of the return of capital invested, which would fundamentally change the investment proposition; and
- be extraordinary and at odds with decades of accepted regulatory practice in the UK.

35. Airlines, by contrast, have told us that they remain opposed to a RAB adjustment that compensates HAL for losses incurred in the last control period as a result of the impact of the covid-19 pandemic on traffic levels.

36. HAL has made submissions in response to our consultations and as part its updated RBP setting out the reasons which it considers a total RAB adjustment of £2.6bn is needed immediately, including that it would:

- reduce the H7 cost of capital;
- facilitate deferral of revenues (through a depreciation adjustment) into future price control periods, leading to lower H7 charges;
- result in more investment and better service for passengers; and
- secure HAL's debt financeability

37. While we acknowledge that the impact of the covid-19 pandemic is likely to have heightened investor perceptions of risk in HAL, and that this could persist for a significant period, we note that we are taking the following steps to address these matters:

- introducing a TRS mechanism, which reduces HAL's exposure to future shocks;
- providing an allowance for asymmetric risk; and
- determining a higher "asset beta", and hence allowed cost of capital, in recognition of the likelihood of heightened risk perceptions by investors, even after taking into account the above two regulatory mechanisms.

38. These new arrangements should support investor confidence in the regulatory framework and ensure that HAL retains access to the capital that it requires. Having considered each of HAL's arguments regarding the need for a further RAB adjustment in H7, we conclude that no further RAB adjustment is appropriate. Further details of our assessment are set out in Chapter 6.

Developing HAL's price control framework

39. In addition to the steps outlined above in terms of new arrangements to help address uncertainty and risk, we are also making Initial Proposals to strengthen the incentive arrangements that are part of the price control to sharpen the incentives on HAL to deliver for consumers. This will help to support efficiency and economy on the part of HAL and make the regulatory regime targeted and focused. In particular, we are bringing forward proposals for:

- Outcome Based Regulation ("OBR") to create greater incentives on HAL to deliver and improve services that matter most to consumers;

- forward looking capital efficiency incentives to strengthen HAL's delivery of capital projects to provide greater value for money for consumers; and
- improved arrangements for other regulated charges, which should work more effectively in future and allow HAL and airlines to focus on meeting the needs of passengers.

Outcome based regulation

40. At the start of the H7 price review in 2017, we said that we intended to evolve the existing Service Quality Rebates and Bonuses ("SQRB") arrangements towards an OBR model. We said that HAL would be responsible for the initial development of OBR, based as far as possible on discussions with airlines and the Consumer Challenge Board ("CCB").

41. In developing its business plans, HAL engaged with airlines and the CCB and drew on consumer research to develop a proposed set of outcomes, measures, targets and incentives, and a proposal for continuous improvement. These were included in its RBP. Airlines also developed their own proposals for the OBR framework.

42. We have carefully reviewed the proposals put forward by HAL and airlines. Overall, we consider that transitioning to OBR will strengthen the link between economic regulation and the evidence-based priorities of consumers. It also helps to focus on the overall experience of consumers in their travel and airport experience. This should also incentivise HAL to deliver more innovative solutions and service improvements as circumstances change. The key features of our Initial Proposals for OBR are as follows:

    - **Outcomes**: we intend to accept HAL's proposed outcomes, which cover the main aspects of airport services that are important to consumers. These outcomes can be traced back to the results of HAL's consumer research and were supported by the CCB.
    - **Measures**: these are specific metrics that map to service quality performance against the outcomes and cover the majority of existing SQRB measures such as cleanliness, wayfinding, security queues, and availability of equipment. We are also introducing a number of new measures including overall satisfaction, ease of access to the airport, helpfulness/attitude of staff, departures flight punctuality and immigration queue times.
    - **Targets**: we have asked our advisers, Arcadis, to help us assess the targets for the various measures and intend to set out our proposed targets in a working paper to be published after these Initial Proposals.
    - **Incentives**: our view remains that we should retain so-called 'knife edge' incentives and a limited number of bonuses for H7. We are proposing to retain the maximum revenue exposure of 7% for rebates and 1.44% for bonuses consistent with the existing Q6 price control arrangements.
    - **Continuous improvement:** we have previously stressed the importance of the OBR framework remaining agile and being able to evolve to reflect the outcomes and quality of service that consumers expect and value. We therefore propose to retain the self-modification provisions in the licence

which allow HAL and airlines to implement reasonable and agreed changes and are also proposing a mid-term review of the OBR framework during H7.

43. Further details of our Initial Proposals for OBR are set out in Chapter 14.

Capital efficiency incentives

44. As with previous price controls, a key objective of our policy for H7 is to create incentives for HAL to undertake capital expenditure (or "capex") efficiently. We consider that this remains a priority in the context of a two runway airport and that the impact of the covid-19 pandemic emphasizes the importance of capital investments being made efficiently and delivering value for money for consumers.

45. On this basis, we consider that stronger incentives are needed to protect the interests of consumers from the increased costs that they would otherwise face were HAL to make inefficient capex investments. To achieve this, we are proposing to implement a forward looking incentive framework which includes financial incentives for the timely and efficient delivery of capex. Our Initial Proposals for the H7 capex incentive framework include:

- a forward looking incentive framework applied to most of HAL's capex portfolio;
- a baseline for each category of capex linked to appropriate delivery obligations;
- the same symmetrical incentive rate applied to each capex category baseline in the range of between 20% and 30%;
- flexibility that allows the capex baselines to be updated during H7 in specified circumstances, provided that changes are subject to appropriate governance;
- stronger incentives on HAL to deliver capex investment on time, including updates to the existing Q6 trigger mechanism and a proposal for a further penalty beyond a backstop date for significant delays in delivering capex categories; and
- retention of the "core and development" approach to capex, enhanced governance arrangements to reflect changes to the incentives framework and improved oversight of any significant changes to HAL's overall capex programme.

46. We consider that these proposals should help address the problems that we have experienced in the implementation of backward looking efficiency reviews that are a key feature of the existing approach to the regulation of capex. Further details of our Initial Proposals for capital efficiency incentives are set out in Chapter 12.

Other regulated charges

47. Other regulated charges ("ORC"s) are charges for specified services and facilities that are collected separately from the general regulated airport charges (that are subject to price control). They are, in general, levied on a "user pays"

basis. The costs of providing these services form part of HAL's overall cost base and the revenue associated with these charges is included in the “single till” calculations used to set the price control. So, consideration of ORCs is a necessary part of the overall price control review.

48. HAL has proposed a number of changes to the ORC framework, most of which were developed jointly with the airlines. These include:

- a move to a “marginal cost” approach under which the relevant fixed costs would in future be recovered through the regulated airport charges; and
- moving all costs for check-in facilities, IT, heating and gas to be recovered through the regulated airport charges, as these are used by all passengers.

49. We have accepted these changes but do not agree with the proposal to move business rates from the airport charge into ORCs as, in general, business rates do not represent a marginal cost. We also do not agree that moving business rates into ORCs would necessarily ensure transparency and/or good governance as HAL has suggested. On bus and coach services, there may be some advantages in moving to commercial arrangements but we are consulting further on this approach. We will also bring forward suggestions to improve the governance arrangements associated with ORCs.

50. Further details of our Initial Proposals for ORCs are set out in Chapter 13.

We are consulting on a range of charges

51. The framework we have described above, both in relation to the approach to risks and uncertainty, and strengthening the incentives on HAL to deliver for passengers and improve the efficiency and value for money of capital projects, can only properly deliver for consumers if the underlying price control is calibrated in an appropriate way. This means setting the price control in a way that is affordable and delivers value for money for consumers and allows HAL to fund the new investment necessary to deliver services and keep the airport safe, secure and resilient.

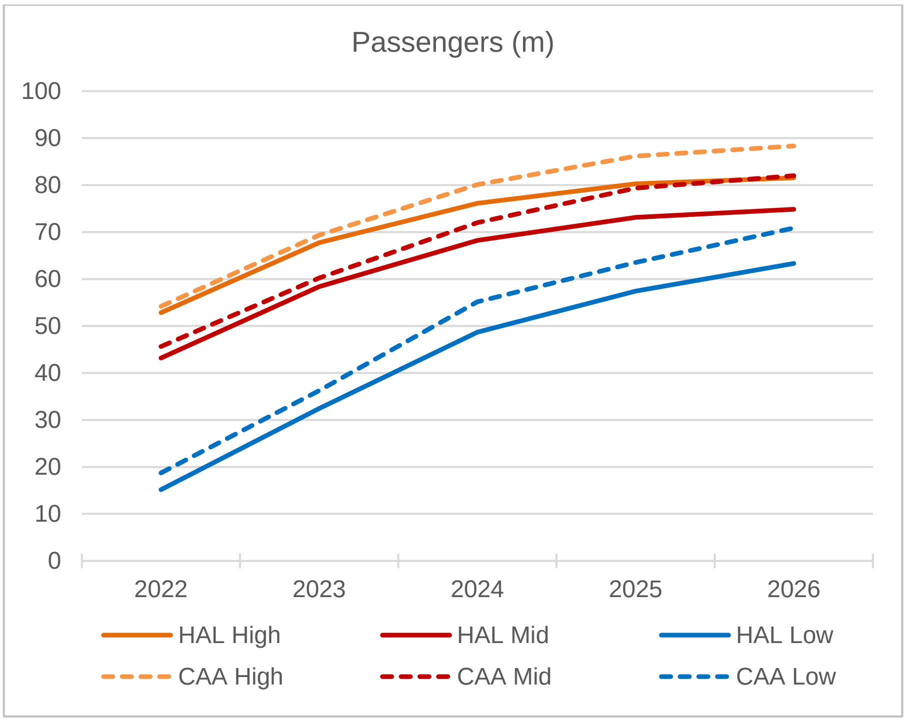
52. These Initial Proposals explore how we can deliver these objectives in the particularly challenging circumstances of HAL and the sector striving to recover from the severe downturn in passenger numbers that has been associated with the covid-19 pandemic.

53. While significant uncertainty remains, we have examined carefully HAL’s updated RBP forecasts and information provided by airlines. We have also carried out our own independent assessment of the likely numbers of passengers over the H7 period, projections of efficient costs and revenues and the appropriate level of allowed return. These are the key assumptions (or “building blocks”) that drive the overall level of the price control and our analysis of these building blocks is key to identifying a price control that can deliver affordable and value for money charges for consumers while also allowing HAL to fund further investment.

Forecasts of passenger numbers

54. Noting the current levels of uncertainty, we have engaged extensively with HAL and airlines on demand forecasting. In general, we consider that HAL's suite of forecasting models represent an appropriate approach to modelling the uncertainties created by the impact of the covid-19 pandemic, but we have made adjustments to some of the assumptions that drive the forecasts as they appeared unduly pessimistic. The forecast scenarios used in our Initial Proposals for H7 are presented in Figure 1, together with comparisons against HAL's updated RBP forecast scenarios.

Figure 1: CAA Initial Proposals passenger forecast scenarios, H7



Source: CAA

55. Further details of our Initial Proposals for passenger forecasts are set out in Chapter 2.

Capital expenditure

56. We recognise the challenges faced by HAL as a result of the impact of the covid-19 pandemic. Nonetheless, having taken account of this difficult context, and noting the importance of evidence submitted by HAL, we consider that both the quality and depth of evidence supplied by HAL in its updated RBP on capex estimates are generally poor for this stage in the price control process. For example, there is very limited evidence across all projects and programmes on how costs are built up, business case analysis including quantified benefits delivered, or the basis for cost estimates.

57. Bearing these difficulties in mind, we have taken a top-down approach to our Initial Proposals and used the limited evidence in the updated RBP, other

stakeholder evidence and the views of our advisors (Arcadis) to develop the following capex scenarios:

- "Mid" Case: this scenario is largely similar to HAL's "Safety Only" Plan;
- "Low" Case includes only committed projects in the "Protect the Business" portfolio which have a clearly defined scope and outputs, including essential security and asset management capex; and
- "High" Case includes all projects in the "Mid" case and additional "Win the Recovery" projects related to Security, as we note that it may be appropriate for HAL to deliver these additional outputs during the H7 period.

Table 1: CAA IP capex estimates, compared to HAL's scenarios

£m (2020p)	**Total H7**
CAA High	3,060
CAA Mid	**2,401**
CAA Low	1,608
HAL "Optimal Plan"	4,470
HAL "Safety Only Plan"	2,672

Source: CAA analysis

58. We have used the CAA "Mid" case in establishing our range for HAL's price control in the analysis set out below. This reflects the importance to the CAA of the investment continuing to support a safe, secure and resilient airport. These Initial Proposals also set out our expectations for HAL to provide additional information ahead of our Final Proposals and discuss new licence conditions to strengthen the obligations on HAL to provide high quality information on its capex plans. Further details of our Initial Proposals for capex are set out in Chapter 3.

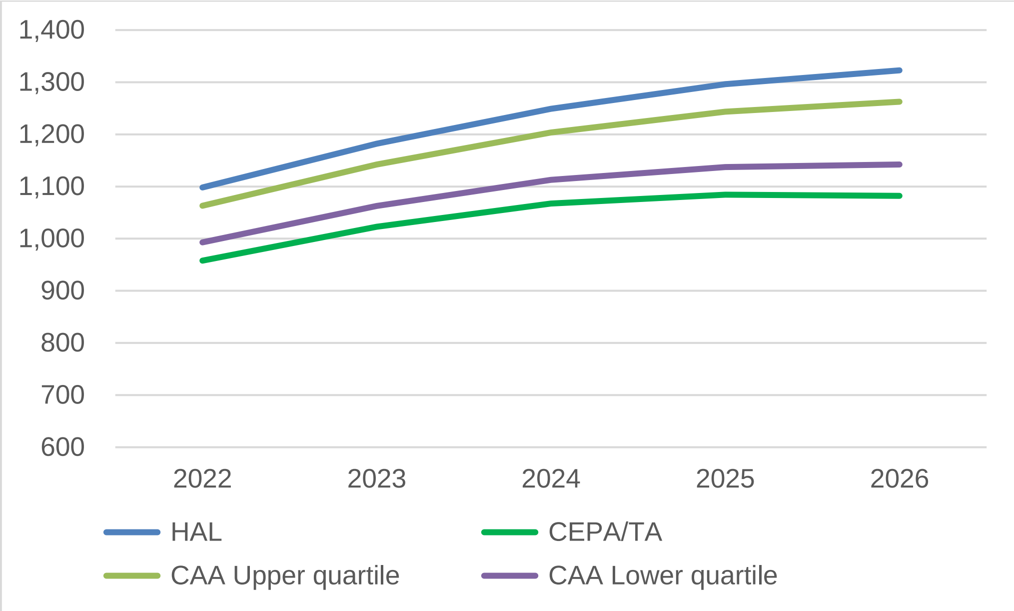
Operating expenditure (opex) and commercial revenues

59. We commissioned advisors CEPA/Taylor Airey to work with us on the assessment of HAL's opex and commercial revenues by reviewing HAL's forecasts and gathering relevant evidence (such as comparators and benchmarks) to support the assessment. In carrying out their assessment, CEPA/Taylor Airey relied mainly on HAL's top-down forecasting approach to develop an independent view of opex and commercial revenue but, where appropriate, made an independent assessment of the key assumptions driving the forecasts.

60. For the purpose of modelling our Initial Proposals for these two building blocks, we have developed ranges based on two scenarios. HAL's updated RBP projections (scaled to CAA passenger forecasts) define one end of the range and CEPA/Taylor Airey's mid case the other. We have then used the upper and lower

quartile of this range to inform our price cap projections as set out in Figures 2 and 3 below.

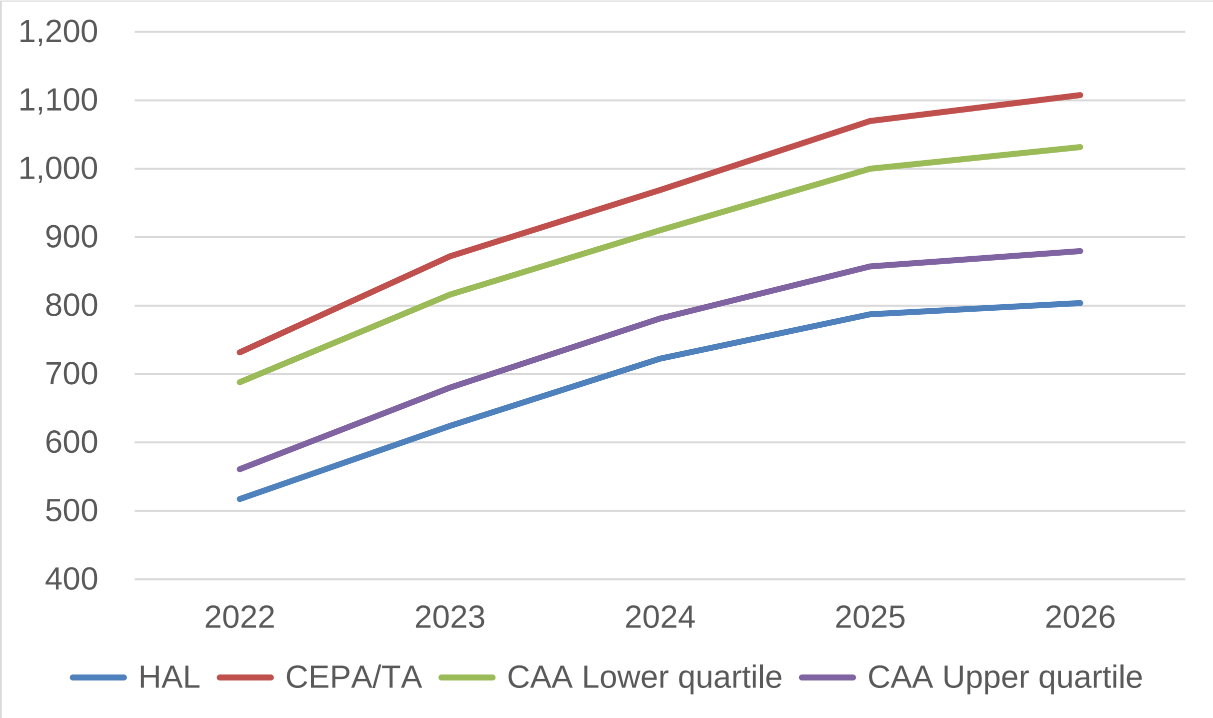
Figure 2: Summary of HAL, CEPA/TA and CAA Upper and lower opex projections (£m, 2020 CPI deflated prices)



Source: HAL updated RBP, CEPA/Taylor Airey analysis and CAA analysis

Note: excludes pension deficit repair costs

Figure 3: Summary of HAL, CEPA/TA and CAA Upper and lower commercial and cargo revenue projections (£m, 2020 CPI deflated prices)



Source: HAL updated RBP, CEPA/Taylor Airey analysis and CAA ranges

61. We will continue to refine our projections of opex and commercial revenues in developing our Final Proposals. We recognise that there are particular challenges in forecasting the level of commercial revenues, given the impact of the pandemic and broader changes affecting commercial revenues, such as tax changes. Our further work will be informed by responses to this consultation and updated analysis by CEPA/Tailor Airey. Further details of our Initial Proposals for opex are set out in Chapter 4 and commercial revenues in Chapter 5.

Cost of capital and allowed returns

62. The allowed weighted average cost of capital ("WACC") represents a return on the RAB and acts as a payment to investors and creditors for investing in the business and funding capital expenditure. The WACC is calculated as a weighted average of the cost of equity and the cost of debt. We have, as with previous airport price control reviews, based our assessment of the WACC and other financial framework issues on a "notional" or "efficient" financing structure. The "notional financial structure" constitutes a set of assumptions regarding the scale and nature of HAL's debt liabilities and reflects our views on the efficient balance between debt and equity finance. In practice, the assumptions can differ significantly from HAL's actual financial structure.

63. We are conscious that the issues and analysis involved in estimating the WACC for H7 are complex and subject to a significant degree of uncertainty. This is particularly the case in the context of the impact of the covid-19 pandemic. Our Initial Proposals are based on a careful assessment of the likely impact of the

pandemic on investors' likely future expectations of HAL's exposure to systematic risk.

64. For these Initial Proposals, we have taken into account the greater uncertainty associated with the WACC by adopting an inclusive approach that considers a reasonably broad range of evidence. This approach generates the relatively broad range of estimates set out in Table 2, which should facilitate further consultation with stakeholders. Further details of our Initial Proposals for the WACC are set out in Chapter 9.

Table 2: Summary of proposed WACC range (real, in RPI terms)

	H7 Initial proposals		Q6 Final Proposals	
Parameter	**Upper bound**	**Lower bound**	**Upper bound**	**Lower bound**
Gearing	61%	62%	60%	60%
Post-tax cost of equity	11.8%	6.6%	7.6%	5.7%
Cost of debt	1.7%	1.7%	3.5%	2.8%
WACC	**5.6%**	**3.6%**	**5.1%**	**3.9%**

Source: CAA

65. We have also estimated an allowance for HAL’s payments of corporation tax by uprating HAL’s cost of equity by a tax wedge. This is discussed further in Chapter 10.

The range for the price control

66. The above building blocks are brought together in the calculation of price control revenue. Two key drivers of these calculations also depend on HAL’s RAB, which is used to estimate regulatory depreciation (which provides funding for capital expenditure) and, in conjunction with our estimate of HAL’s WACC, is used to calculate allowed returns. In the current circumstances, these calculations present a number of challenges. First, the lower levels of passenger numbers illustrated in Figure 1 above put upward pressure on airport charges per passenger, as the RAB and, so, the allowances for allowed returns and regulatory depreciation are relatively fixed (in that they do not typically respond to variations in passenger numbers). Second, while there are advantages to consumers in smoothing charges per passenger over the period of the price control, as otherwise there could be a very significant upward spike in charges in 2022 and 2023 because of lower passenger numbers, this tends to put significant strain on HAL’s financeability in the early years of the H7 price control.

67. We explore these issues in the Initial Proposals by using a range of assumptions on opex and commercial revenues (key drivers of the overall level of the price control) and HAL’s WACC (a key driver of both the level of the price control and HAL’s financeability). These assumptions provide an appropriate range of

charges and financeability outcomes to facilitate further consultation with stakeholders on these important matters. We are also undertaking further work on all the key building blocks and revenue drivers as part of our ongoing work on the price review and will seek to refine our estimates and projections of all these factors in determining our Final Proposals. This means, in practice, our assumptions and projections of price control building blocks are provisional and subject to change as we continue our work on the price control review.

68. As we have explained above, we hope that recent developments with respect to international travel arrangements will allow us to revise upwards our passenger traffic forecasts for Final Proposals and reduce pressure on both the affordability of HAL's charges and its financeability. Nonetheless, this is not certain and in the event that the pandemic were to lead to significant new restrictions on air travel we would need to consider how best to respond, including in relation to whether a five year price control settlement would represent the best way forward.

69. Our two scenarios form a higher cost and charges case and a lower cost and charges case. These are based on upper and lower quartile assumptions for opex and commercial revenues and the range for HAL's WACC noted above. Both these scenarios use our central forecast of passenger numbers and capex.

70. These lower and upper quartile scenarios are summarised in Table 3 below.

Table 3: Summary of our initial proposals for airport charges

Lower quartile						
£m 2020, CPI-real	**2022**	**2023**	**2024**	**2025**	**2026**	**Total[7]**
Operating costs	1,015	1,085	1,134	1,158	1,163	5,555
Regulatory depreciation	929	916	870	888	902	4,504
Allowance for asymmetric risk	29	28	28	27	27	138
Allowed return (incl. tax)	631	665	696	684	673	3,349
Gross revenue requirement	**2,604**	**2,694**	**2,727**	**2,757**	**2,764**	**13,547**
Commercial revenues (incl. ORCs)	-795	-957	-1,075	-1,179	-1,216	-5,222
Cargo revenues	-55	-38	-24	-14	-11	-142
Net revenue requirement	**1,754**	**1,699**	**1,629**	**1,564**	**1,537**	**8,182**
Passengers	46	60	72	79	82	339
Unprofiled yield per pax	38.44	28.22	22.62	19.71	18.74	25.55
Profiled yield per pax	**24.18**	**24.29**	**24.49**	**24.72**	**24.95**	**24.52**

[7] The figures in the 'total' column for unprofiled yield per pax and profiled yield per pax are averages rather than totals.

Upper quartile						
£m 2020, CPI-real	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Operating costs	1,085	1,164	1,225	1,264	1,283	6,022
Regulatory depreciation	929	916	870	888	902	4,504
Allowance for asymmetric risk	25	25	24	24	24	122
Allowed return (incl. tax)	1,011	1,130	1,115	1,097	1,079	5,431
Gross revenue requirement	**3,051**	**3,235**	**3,234**	**3,273**	**3,287**	**16,079**
Commercial revenues (incl. ORCs)	-708	-845	-957	-1,039	-1,064	-4,614
Cargo revenues	-15	-14	-12	-11	-11	-63
Net revenue requirement	**2,327**	**2,376**	**2,265**	**2,222**	**2,212**	**11,402**
Passengers	46	60	72	79	82	339
Unprofiled yield per pax	51.02	39.46	31.45	28.00	26.97	35.38
Profiled yield per pax	**33.92**	**34.08**	**34.35**	**34.68**	**35.00**	**34.41**

Source: CAA

Financeabililty

71. We have assessed the financeability of this range in respect of both debt and equity. Debt financeability concerns the notional company (which as noted above is different from HAL’s actual financing) being able to access the debt finance it needs, when it needs it, at a reasonable cost. We have assessed debt financeability quantitatively using the same credit metrics and thresholds used by credit rating agencies.

72. Our analysis shows that trends in credit metrics across the five-year period are compatible with a strong investment-grade credit rating. However, certain interest cover and other metrics are under pressure in both the upper and lower quartile scenarios in 2022 and some of the metrics in the lower quartile are similarly under pressure in 2023. This is a consequence of the low number of passengers expected in those years, combined with the profile of charges.

73. We consider that, while any weakness in credit metrics is undesirable, the strong trajectory in credit metrics over the H7 period as a whole means that the overall profile is such that the notional entity ought to be able to retain an investment grade credit rating and issue cost effective debt finance in a timely way. Overall, our conclusion in respect of debt financeability is that the notional entity will be financeable across the H7 period.

74. Equity financeability concerns the perspective of equity investors and assessing whether our proposed price cap provides reasonable returns in terms of the size, timing and likelihood of receiving those returns. We have assessed equity financeability using three metrics (i) Return on Regulatory Equity ("RORE"); (ii) Internal Rate of Return ("IRR"); and (iii) Running yield and dividends.

75. Overall, our analysis shows that our Initial Proposals should be acceptable for shareholders in the notional business as they offer an expectation of returns consistent with the allowed cost of equity and would allow the notional entity to return to paying dividends before the end of the H7 period. Our Initial Proposals do not assume that the notional entity is supported by an equity injection. Further details of our assessment of these issues are set out in Chapter 11.

The timetable and 2022 charges

Timetable

76. The impact of the covid-19 pandemic has also had a number of implications for the H7 programme timetable. In particular, the timing of HAL's RBP and updated RBP was pushed back to ensure they were based on more up-to-date traffic projections. In addition, given the significance of the issues, we took extra time and resources to consult stakeholders on HAL's request for a covid-19 related RAB adjustment.

77. HAL has told us that it intends to provide a further building block update based on revised traffic forecasts around the middle of December 2021. As with previous H7 updates, we expect HAL to make this submission available to airlines and other stakeholders in a timely way to enable them to comment before the CAA issues its Final Proposals in March/April 2022. The key milestones for the remainder of the H7 programme are set out in Table 4 below.

Table 4: Timetable for the remainder of the H7 review

Date	Milestone
17 November 2021	Responses to draft licence modification on 2022 charges
17 December 2021	Responses to these IPs and further building block update from HAL
March/April 2022	CAA final proposals for the H7 price control and proposed licence modifications
May/June 2022	CAA final decision on the H7 price control and notice making the licence modifications
July/August 2022	Licence modifications take effect

2022 charges

78. HAL's current price control expires on 31 December 2021. As noted above, the final decision and licence modifications for a new five-year control period will not be made and take effect until the summer of 2022. For that reason, we intend to introduce interim arrangements to ensure the interests of consumers are protected in the period until the H7 licence modifications take effect.

79. We have been encouraging HAL and the airlines to engage on this issue with a view to agreeing the level of a holding cap which would be trued up with the CAA's final decision. Unfortunately, they have not been able to reach agreement on the level of a cap.

80. At the end of August, HAL issued its consultation on airport charges for 2022, in accordance with the process requirements of the Airport Charges Regulations 2011 (“ACR2011”). HAL’s consultation suggests airport charges of £37.6 per passenger (nominal prices) which has been derived from the assumptions included in HAL's updated RBP. We have received a number of submissions from airlines expressing significant concerns with both the scale of HAL’s proposed increase in charges and the underlying assumptions.

81. So that we carry out our duties and functions in a way to properly further the interests of consumers, we are consulting on a draft licence modification to implement an interim or “holding” price control that will apply from 1 January 2022 until the H7 licence modifications take effect. Our present view is that the Final Proposals would simply remove the holding cap from HAL’s licence and the correction factor in the price control would automatically adjust revenue in the later years of the price control for any under or over recovery of revenue against the level specified for 2022 in our Final Proposals.

82. While uncertainty remains about the final level of the proposals for the main price control, the overall range set out in these Initial Proposals reflects the best information currently available on how we should further the interests of consumers and discharge our other statutory duties. While a narrow focus on present consumers’ short term interests might suggest setting the holding cap at the bottom of this range, we have taken account of our duties as a whole in assessing where in the range to establish the holding cap. On balance, it would seem that the middle of the range for airport charges of £24.50 - £34.40 per passenger would both further the interests of consumers and have regard to supporting HAL’s financeability. Therefore, our starting point is to assume that the holding charge should be based on the mid-point of this range which we have rounded to £29.50 per passenger.

83. In summary, we consider that action by the CAA may be needed to put in place a licence condition to prevent HAL unduly increasing prices for 2022 to the detriment of consumers. Given the importance of 2022 to consumers any such licence condition would need to be in a form that compelled HAL to price no higher than the level of the holding cap in 2022 rather than leave its existing charging proposals in place and rely on the operation of the correction factor mechanism with the price control licence condition.

84. Nonetheless, noting the issues and process risk and possible distraction that might be created by an early appeal to the CMA, we are open to exploring alternative approaches to deal with these unique circumstances, in particular an agreement between HAL and airlines and binding commitments from HAL to set charges at this level. To accept such an approach, we would need to be satisfied that the arrangements and level of charges fully protected the interests of consumers and were consistent with our statutory duties. Nonetheless, we recognise the challenges in such arrangements emerging in a short period of

time and so expect to have to proceed with the licence modification discussed above.

85. Given the urgency of these matters we are seeking responses from stakeholders on our proposals for a holding price cap for 2022 and the related issues by 17 November 2021.

86. Further details of the analysis that has informed our proposals for the draft modification are set out in Chapter 15.

Process for assessing responses to previous consultations

87. In various submissions, including those related to its request for a covid-19 related RAB adjustment, HAL has suggested that the CAA has not adequately considered or explained why we have taken particular positions or rejected positions advocated by HAL. The CAA strongly rejects any suggestion that during H7 price control review and our wider work on HAL's regulatory framework, that there has been a systematic failure by the CAA to consider evidence put forward by stakeholders or provide reasonable explanations of the positions we have taken.

88. Our approach has been to consider the evidence and analysis we receive from stakeholders, assess the merits of such submissions and, where appropriate, conduct our own analysis (including using expert advisors). As set out in this document, on a number of issues we reach positions that differ from those advanced by different stakeholders and we explain why we have reached those positions. Just because we have reached a different view to a stakeholder does not mean that we have not thoroughly considered their view and explained our position.

Our duties

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

90. Key elements of our thinking on how our Initial Proposals enable us to discharge our duties under CAA12 are to be found in each chapter of these Initial Proposals. In this context, we note that one of the matters that we are required to have regard to in carrying out our functions is the need to secure that HAL can take reasonable measures to reduce, control or mitigate the adverse environmental effects of Heathrow airport. While these matters are of lesser prominence in the setting of a price control for a two runway airport than they were for expansion, we consider that the arrangements that we are proposing, particularly in relation to opex and capex allow HAL to incur efficient expenditure in respect of these matters.

Next steps

91. We welcome views on all of the issues raised in this document and, in particular, on our:

- broad approach to strengthening the price control arrangements for managing uncertainty and demand risk and in particular the Initial Proposals for TRS arrangements and adjustments for asymmetric risks;
- decision to confirm the targeted RAB adjustment of £300 million but not to make further changes in response to HAL's request of a covid-19 related RAB adjustment;
- Initial Proposals for new forward looking capital expenditure efficiency incentives and an outcome based approach to the regulation of service quality;
- projections of passenger traffic for the H7 period and whether and how these should be modified to reflect new information that emerges ahead of our Final Proposals on the shape of the recovery;
- projections of HAL's costs and commercial revenues;
- approach to estimating HAL's WACC and assessing financeability;
- Initial Proposals for a provisional range of airport charges of £24.50 to £34.40 for the H7 period and the likely impact of these potential increases in airport charges on consumers; and
- approach to airport charges in 2022 and our Proposal to introduce a holding price cap of £29.50 for 2022.

92. Please e-mail responses to economicregulation@caa.co.uk by no later than:

- **Wednesday 17 November 2021** for any matters relating to airport charges for 2022 and the introduction of the holding cap discussed above; and
- **Friday 17 December 2021** for the wider issues in this consultation relating to our Initial Proposals for HAL's H7 price control and the associated incentive arrangements.

Structure of this document

93. The structure of this Initial Proposals consultation is as follows:

- **Section 1** sets out details of the overall framework and our Initial Proposals for the main cost and revenue building blocks including: (Chapter 1) the overall approach; (Chapter 2) traffic forecasts; (Chapter 3) capital expenditure; (Chapter 4) operating expenditure; and (Chapter 5) commercial revenues.[8]
- **Section 2** sets out details of our Initial Proposals for the financial building blocks including: (Chapter 6) The H7 RAB; (Chapter 7) dealing with asymmetric risk; (Chapter 8) approach to financial framework; (Chapter 9)

[8] www.caa.co.uk/CAP2265B

the WACC; (Chapter 10) treatment of tax; (Chapter 11) calculating a price cap and financeability.[9]

- **Section 3** sets out details of our Initial Proposals for the key regulatory incentive and other price cap issues including: (Chapter 12) capital efficiency incentives; (Chapter 13) other regulated charges; (Chapter 14) Outcome Based Regulation; and (Chapter 15) the price control for 2022.[10]
- **the appendices** provide further information on the main issues set out in this consultation.[11]

[9] www.caa.co.uk/CAP2265C

[10] www.caa.co.uk/CAP2265D

[11] www.caa.co.uk/CAP2265E