Consumers and Markets Group

Economic regulation at Heathrow airport from January 2020: proposals for interim arrangements

CAP1769

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About this document

This document follows on from our consultations on the regulatory framework to support capacity expansion at Heathrow airport in June and December 2017 and April and October 2018.[1] It consults specifically on our initial proposals for the interim arrangements to apply after the end of the Q6 price control (in December 2019) for 2020 and 2021. In particular it examines the commercial arrangements for this period that have been agreed by Heathrow Airport Limited ("HAL") and certain airlines and assesses whether these provide appropriate protection for the interests of consumers.

Views invited

We welcome views on all the issues raised in this document, particularly those set out in the executive summary and chapter 1.

Please e-mail responses to economicregulation@caa.co.uk by no later than 23 April 2019. We cannot commit to take into account representations received after this date.

We expect to publish the responses we receive on our website as soon as practicable after the period for representations expires. Any material that is regarded as confidential should be clearly marked as such and included in a separate appendix. 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 Elly Shafran (elly.shafran@caa.co.uk).

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1 See:

- See CAP1541 Consultation on the core elements of the regulatory framework to support capacity expansion at Heathrow www.caa.co.uk/CAP1541 ("the June 2017 Consultation")
- Economic regulation of capacity expansion at Heathrow: Policy update and consultation www.caa.co.uk/CAP1610 ("the December 2017 Consultation")
- Economic regulation of capacity expansion at Heathrow: policy update and consultation www.caa.co.uk/CAP1658 ("the April 2018 Consultation")
- Economic regulation of capacity expansion at Heathrow: policy update and consultation www.caa.co.uk/CAP1722 ("the October 2018 Consultation")

Executive summary

Introduction

1. The current price control on HAL's charges to airlines at Heathrow airport is due to expire on 31 December 2019. This control ("the Q6 price control") had been due to end in 2018 but was extended by one year.

2. In our April 2018 Consultation, we proposed a further two year extension to the Q6 price control to 31 December 2021 and called this further extension the "interim H7" (or "iH7") price control. We said the purpose of the iH7 price control would be to protect the interests of consumers by aligning the next main price control period ("H7") with the wider capacity expansion programme at Heathrow airport.

3. The capacity expansion programme at Heathrow airport will be a very large privately financed infrastructure project. Broadly aligning the timetable for the price control with the wider programme should allow for the development of regulatory incentives to promote capital and financial efficiency, so promoting overall efficiency and protecting the interests of consumers. This remains an important objective and the commercial arrangements for the iH7 period, that have been discussed by HAL and airlines, are also consistent with the broad alignment of the next price control review with the wider programme for capacity expansion.

4. For the iH7 price control, we proposed that the existing path for HAL's prices[2] continue at RPI-1.5% for 2020 and 2021 (subject to a financeability test for this second year). The benefits of any expected outperformance would be shared with airlines and consumers in the longer term by adjusting regulatory depreciation (and so HAL's regulatory asset base (RAB)) by an amount representing the difference between (i) the RPI-1.5% price path and (ii) underlying revenue allowances calculated by reference to our updated building block assumptions.[3]

5. The iH7 regulatory price review (the process by which we would estimate the underlying revenue allowances used to set HAL's price control) started in October 2018, when HAL submitted a short business plan for the 2019-2021

[2] The price control that the CAA sets for HAL is for a "maximum revenue yield per passenger", but for simplicity we use the expressions "prices" and "price path" in this document.

[3] The regulatory building blocks are forecasts of passenger demand, opex, non-aeronautical revenues and capex.

period.[4] This provided stakeholders with HAL's views on the assumptions, estimates and projections that it considers should be applied for each of the key revenue drivers or regulatory building blocks in 2020 and 2021. At the same time, to inform our review, we commissioned Cambridge Economic Policy Associates (CEPA) to undertake an independent assessment of HAL's submission and provide its own projections for the key regulatory building blocks, providing an alternative underlying price path.

6. In parallel, HAL and some of the major airlines operating at Heathrow have been negotiating a commercial pricing arrangement for the iH7 period to replace the CAA led price control review process.

7. The commercial arrangements now agreed between HAL and these airlines provide for:

- a 'fixed' rebate to all airlines currently operating from Heathrow totalling £260 million, split into two equal payments of £130 million to cover 2020 and 2021;
- payment of the fixed rebate would be spread over a four year period, a year after the rebate was accrued;[5]
- a further volume rebate relating to the number of passengers if they rise above certain thresholds in 2020 and 2021, which would be paid in 2021 and 2022 respectively;
- if passenger numbers were to turn out significantly lower than expected, then the arrangements also provide some downside protection for HAL, and in these circumstances the fixed rebate can be reduced; and
- default arrangements for any airlines that chose not to agree to the commercial deal, we understand that these default arrangements would involve the airlines receiving an appropriate share of the fixed rebate but not the upside from any volume rebates.

8. The fixed and volume rebates are instead of the regulatory approach proposed in the April 2018 Consultation. This alternative regulatory approach would use regulatory depreciation (and so a RAB adjustment) to take account of any outperformance and so would spread the return of the difference between HAL's price path and the underlying revenue requirement over the longer term.

9. HAL and airlines have stated that implementation of these commercial arrangements is conditional on the CAA setting a RPI-1.5% price path and

4 The plan included forecasts for the iH7 period as well as forecasts for 2019.

5 The fixed rebate for 2020 would be paid in equal instalments over a four year period from 2021 to 2024, the fixed rebate for 2021 would be paid in equal instalments over 2022 to 2025.

retaining the existing Service Quality Rebates and Bonus (SQRB) scheme, current security expenditure levels and the methodology for calculating Other Regulated Charges (ORCs). These commercial arrangements are referred to in this consultation as the 'commercial deal' or 'commercial arrangement'.

10. An agreement on commercial terms suggests that the commercial deal may already reasonably reflect the interests of HAL and airlines. In these circumstances, our approach has focused on whether the proposed commercial deal is in the interests of consumers in accordance with our statutory duties under the Civil Aviation Act 2012 (the "CAA12"). We are also providing all airlines with the opportunity to comment on the issues raised in this consultation and whether they have any substantive objections to the commercial deal or the default arrangements put forward by HAL (for any airlines that chose not to agree to the commercial deal).

Main issues raised in this consultation

11. Chapter 1 summarises our assessment of whether the commercial deal is in the interests of consumers. This includes:

- the long term or strategic benefits from commercial arrangements in relation to the H7 price control period and the capacity expansion programme; and
- a comparison between the revenue that HAL is likely to generate from the commercial deal with the initial estimates made by CEPA as part of our early work on a price control for 2020 and 2021.

12. The appendices provide more detail on HAL's and CEPA's estimates of the key drivers of price control revenue, including passenger demand, operating costs and non-aeronautical revenues.

13. Our initial conclusions are that the commercial deal negotiated by HAL and the airlines at Heathrow is in the interests of consumers. In particular, encouraging the development of commercial arrangements between HAL and airlines provides longer-term advantages in terms of the possibility of better arrangements for managing the passenger traffic risks and will allow stakeholders to focus in the short-term on the challenges of capacity expansion. These factors appear to outweigh shorter term concerns around the form of the commercial deal (rebates rather than a RAB adjustment) and about the stringency for HAL of the targets associated with the commercial deal. We are therefore minded to support the iH7 commercial deal and in due course intend to bring forward changes to HAL's licence such that its price control conditions are consistent with the outcome of the commercial deal.

14. As noted above the commercial deal and iH7 price control currently applies to 2020 and 2021. If the capacity expansion programme were to be significantly delayed this could mean that it would not be appropriate for the main H7 price

control to start until 2023. Therefore, we retain the option of putting in place an arrangement to cover 2022, which would involve resetting more of the key drivers of price control revenue, including the possible reassessment of the cost of capital.[6]

Next steps

15. The iH7 review, including modifying HAL's licence, will need to be complete by the end of 2019. To deliver this, the key dates are:

- a final decision on whether the commercial deal is in the interests of consumers, and a statutory consultation on proposed modifications to HAL's licence in July 2019; and
- a final decision on the licence modification in November 2019.

16. If it becomes more likely that a third year of interim arrangements would be appropriate, we would aim to consult on these matters either towards the end of 2020 or early in 2021. Our view on whether this consultation would be necessary would depend on whether the overall capacity expansion programme remains on track, and the progress made by HAL on its masterplan for expansion and the DCO process during 2019 and 2020.

Our duties

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

Views invited

18. Views are invited on any of the issues raised in this consultation and on whether:

- stakeholders agree with our initial conclusions that on balance the commercial deal for the iH7 price control period is in the interests of consumers;
- we should take any other steps to protect the interests of consumers over the period 2020 and 2021; and
- there are any disadvantages with the commercial arrangements that we have not identified in this consultation.

6 See Paragraph 5.35 in the April 2018 Consultation. www.caa.co.uk/CAP1658

Chapter 1

Assessment of the commercial arrangement

Introduction

1.1 This chapter summarises our assessment of whether the commercial deal is in the interests of consumers. It includes:

- a description of the commercial deal;
- an assessment of the wider strategic benefits of the development of more commercial arrangements at Heathrow airport;
- a discussion of the initial work completed by CEPA on key revenue drivers for 2020 and 2021;
- a discussion of service quality;
- a description of our approach to setting the next main price control and the steps we will take to ensure that the rebates associated with the commercial deal do not cause any undue distortions to this process; and
- an overall assessment and conclusions.

The commercial deal

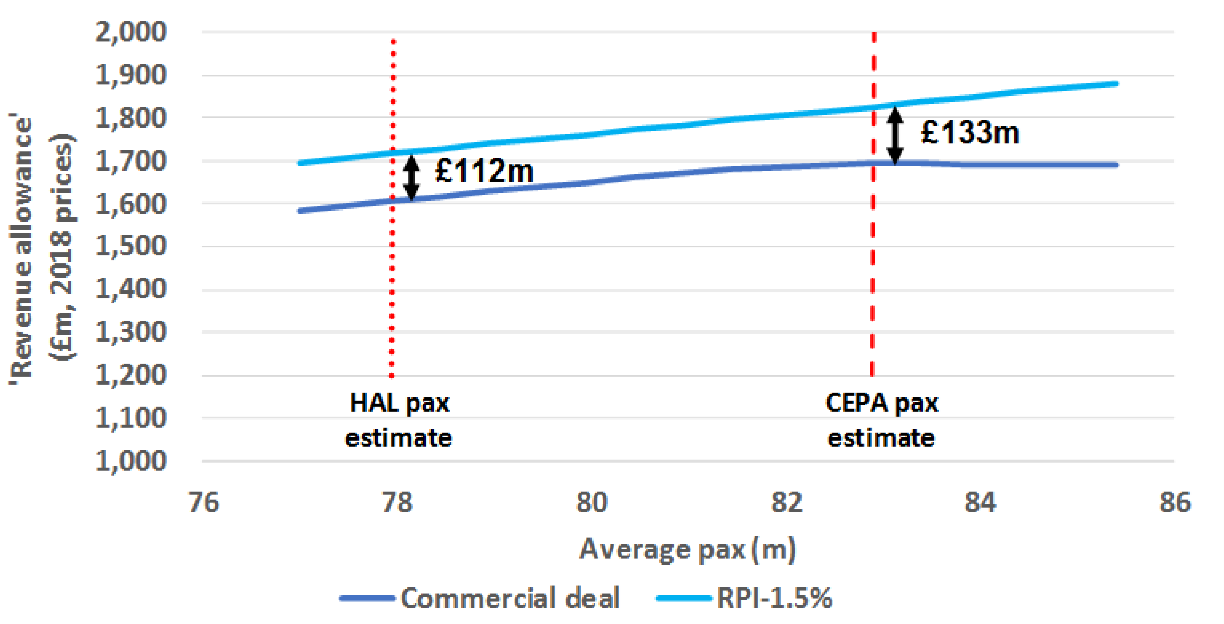
1.2 The commercial deal uses the same "headline price path" that we proposed for the iH7 price control in our April 2018 Consultation (i.e. HAL's per passenger revenue from airport charges changing each year by RPI-1.5%). While we had suggested a reduction in HAL's RAB to take account of the 'gap' between the price path and the lower expected levels of the key underlying revenue drivers, the commercial deal uses a combination of fixed and volume rebates.

1.3 The commercial deal means that airlines are likely to gain in the short term as they effectively pay a lower price than a 'headline' price path based on RPI-1.5%, but charges to airlines may be higher than they would otherwise have been in the longer-term. Much of the existing regulatory framework, for example around capex governance, RAB and capacity expansion, is unaffected by the commercial deal.

1.4 Figure 1.1 shows how the lower revenue allowance under the commercial deal could compare to the headline price path. The volume rebates included in the commercial deal have the effect of further increasing the rebate to airlines to the extent that higher passenger volumes exceed specified thresholds.[7]

1.5 Under HAL's forecast of an average of 78 million passengers in 2020 and in 2021, the commercial deal delivers charges to airlines (after the rebates have been applied) that are on average £112 million per annum (in 2018 prices) lower than the headline price path.[8] If the higher passenger forecasts assumed by CEPA turn out to be correct, then under the commercial deal HAL's underlying revenue requirement would be £133 million lower than the headline price path.

Figure 1.1: Comparison of the commercial deal with the RPI-1.5% price path



1.6 The commercial deal provides for rebates to airlines to be made during the 2021 to 2025 period, rather than our proposed approach of spreading the difference between the underlying revenue requirement and the price path over a longer period through an adjustment to HAL's RAB. This represents significantly lower prices for HAL's customers in the shorter term.

7 We understand that this arrangement would only apply for airlines who have signed up to the commercial arrangement with HAL. Other airlines would still benefit from the fixed rebate but not any benefit from the volume-risk sharing rebate.

8 Note that this figure represents average passenger numbers across the two years. Likewise, for the CEPA passenger estimate.

1.7 The volume rebate mechanism included in the commercial deal provides some additional benefit to airlines from passenger growth, while giving some protection to HAL if passenger volumes decrease in 2020 and/or 2021.

1.8 HAL and the airlines have stated that implementation of the commercial deal is conditional on the CAA retaining some existing price adjustment mechanisms including those for capital and security expenditure and aeronautical yield, along with the SQRB scheme. Any capital expenditure adjustments and regulatory depreciation would be based on the baseline capital expenditure assumptions as set out in CAP 1658.[9]

Wider benefits from commercial arrangements

1.9 We have long supported the principle of airports and airlines using commercial arrangements, noting that such arrangements have the potential to facilitate better outcomes for passengers including reduced prices, improved service quality and the development of new services.[10]

1.10 We noted in the October 2018 Consultation that there could be several advantages to a commercial deal between HAL and airlines.[11] The benefits for consumers could extend beyond the immediate iH7 period to future price controls. Specifically, deals relating to capacity expansion could be vital to support traffic growth and the overall affordability and financeability of new capacity development at Heathrow.

1.11 For example, substantial benefits could be realised from:

- stakeholders working successfully together on the design, scope and cost of the capacity expansion programme;
- a more focused and targeted sharing of volume risks than the existing price control; and
- HAL and airlines working together more successfully to improve the passenger experience.

1.12 The agreement of the commercial deal is the first of its kind at Heathrow and demonstrates that HAL and airlines can work successfully together. It would also demonstrate that the regulatory framework can be flexible to accommodate such

9 CAP 1658. Appendix D Table D.4. www.caa.co.uk/CAP1658

10 Economic regulation of new runway capacity - CAP 1279 (March 2015), Paragraph 2.12 www.caa.co.uk/CAP1279

11 Economic regulation of capacity expansion at Heathrow: policy update and consultation (October 2018), Paragraph 1.10. www.caa.co.uk/CAP1722

developments, in the same way commercial arrangements have emerged at Gatwick airport.

1.13 Since 2014, our economic regulation of Gatwick Airport Limited (GAL) has been based on a set of “commitments” written into GAL's Conditions of Use and enforceable by either airlines or us (through GAL's licence). Under this framework, GAL has also entered bilateral contracts with individual airlines accounting for around 85 per cent of the passengers using Gatwick airport. This period has seen several positive outcomes for customers:

- GAL has met the large majority of its service quality targets and held its airport charges below both the level allowed by the commitments and our own “fair price” benchmark;
- GAL has brought forward innovative approaches to increasing capacity at Gatwick airport; and
- airlines have introduced a number of new routes and services; traffic growth has been much higher than expected and passenger satisfaction scores have increased.

1.14 Consistent with principles of better regulation, the commercial deal at Heathrow facilitates regulation being focused on areas where it is needed. It enables us to conduct a more focused and proportionate review for the iH7 period. This would free up HAL, stakeholders and the CAA to focus on the important matters relating to capacity expansion, which would be in the interest of consumers.

1.15 In the longer term, consumers retain the benefit of CAA oversight through the regulatory process, since if HAL achieves greater efficiency savings that are implicitly captured in the iH7 deal, these can be shared with consumers at the next price control review, through lower expected costs for H7.

Preliminary work undertaken by CEPA

1.16 Before the commercial deal emerged, we appointed CEPA to support our work on the iH7 price control. We have compared the RPI-1.5% headline price path against the following alternative regulatory scenarios:

- Scenario 1: the underlying price path set out in the April 2018 Consultation, which subsequently became the basis for negotiation of the commercial deal; and
- Scenario 2: the underlying price path based on projections of passenger demand, opex, capex and non-aeronautical revenues from the CEPA iH7 assessment.

1.17 We consider the analysis undertaken by CEPA was proportionate given the level of information available and is a reasonable scenario to test the commercial arrangement against.

1.18 Table 1.1 below shows the revenue requirement, passenger numbers and required aero yield per passenger[12] for each scenario, alongside the RPI-1.5% headline price path.

Table 1.1: Summary of scenarios

£, 2018 prices	RPI-1.5%		Scenario 1: CAP 1658		Scenario 2: CEPA	
	2020	2021	2020	2021	2020	2021
Passenger numbers (m)	77.8	78.1	77.8	78.1	82.2	83.6
Required aero yield (£)	22.29	21.97	19.94	20.49	17.46	16.94
Revenue requirement (£m)	**1,734**	**1,716**	**1,552**	**1,600**	**1,436**	**1,416**
Reduction relative to RPI-1.5% (£m, annual average)		-		149		299

Source: CAA analysis, CEPA iH7 assessment

1.19 An underlying price path based on Scenario 2 would result in a yield of £16.94 per passenger in 2021 and an annual average revenue requirement[13] that is £299 million lower than under the headline RPI-1.5% price path. This level of underlying revenue for HAL would be significantly below the level envisaged in the commercial deal.

1.20 Nonetheless, we consider the difference between Scenario 2 and the headline price path to be very much an "upper bound" and an "initial estimate". It is likely that this difference would come down significantly if we were to continue with our assessment as part of the iH7 regulatory process for the following reasons:

12 Aero yield in Table 1.1 describes the amount HAL can charge per passenger using the airport. In the licence the term 'revenue yield per passenger' is used to describe the same concept. See Condition C.1 of HAL's licence. https://www.caa.co.uk/WorkArea/DownloadAsset.aspx?id=4294975875

13 The term revenue requirement here is defined as the amount of revenue that HAL would be expected to earn but after rebates are paid.

- the assessment for Scenario 2 has not accounted for certain important operating cost items in the region of £72 million[14] in 2020 and 2021 because HAL has not to date provided all the information necessary to justify these cost items; and
- Scenario 2 has not been subject to full scrutiny and challenge by HAL, nor has HAL had the opportunity to provide new evidence.

1.21 It should also be noted that projections of operating costs and non-aeronautical revenues are inherently uncertain and so there is scope for both outperformance and underperformance by HAL. There is also a high degree of uncertainty around the appropriate passenger demand forecast scenario to use in the light of Brexit which may, or may not, become clearer in the next few months.

1.22 We note that the commercial deal is similar to the regulatory outcome in Scenario 1, although any such comparisons are subject to the caveats in paragraph 1.21 above. Scenario 2 is more stringent on HAL (by £166 million per year) but, also as noted above, should be considered an upper bound estimate. Were we to continue with a price control review process we would expect the difference between the commercial deal and Scenario 2 to reduce substantially over the course of a detailed iH7 regulatory process. HAL would have an opportunity to submit new evidence, provide more information to substantiate its original estimates, and provide information to justify additional operating cost items not yet accounted for by CEPA. The difference could therefore reduce or disappear, so the issue we need to weigh is whether the wider strategic benefits discussed in paragraphs 1.9 to 1.15 outweigh the advantages to consumers that might arise if a regulatory process were to lead to a somewhat more stringent settlement. We discuss these matters further in the final section of this chapter.

1.23 Further detail on HAL's and CEPA's approach to estimating key revenue drivers for 2020 and 2021 is set out in Appendices B to D.

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14 This is an annual average figure over the two year period and includes costs associated with Brexit, additional resilience, growth / expansion and noise insulation costs.

Service quality arrangements

1.24 Implementation of the commercial deal is conditional on the CAA retaining the existing SQRB scheme.[15] The current mechanism remains fixed and is based on the approach taken for the existing Q6 price control.[16]

1.25 Following consultation in December 2016[17] we set out the future of service quality regulation for HAL and outlined a move towards outcome-based regulation (OBR). As part of an OBR framework, we would expect HAL, in discussion with airlines and the Consumer Challenge Board (CCB), to develop suitable outcomes, measures, targets and incentives to support its H7 business plan.[18]

1.26 A further extension of the Q6 price control for iH7 would delay the new OBR framework. Given this, and that the commercial deal incentivises passenger growth, it is important for HAL to demonstrate that it is acting in the consumer interest over the iH7 period, and that it continues to deliver on service quality, including a resilient airport operation.

1.27 We expect HAL to show that it is continuing to put consumer interests at the heart of its business, as well as implementing its consumer engagement strategy over the next few years. We consider that the iH7 period may offer the opportunity for HAL to begin to "shadow track" key parts of the OBR framework it is currently developing for its H7 business plan. Tracking key indicators during iH7 would not only have the benefit of piloting their suitability, but also provide the evidence required to help set incentive thresholds, bonus and penalty rates which would help to improve the final OBR framework for the H7 price control.

Relationship between iH7 and the next main H7 price review

1.28 The commercial deal provides for rebates to airlines to be accrued during the interim period but not actually paid in full to airlines until subsequent years in the H7 price control period.

1.29 We consider that for the purposes of the H7 price control review these iH7 rebates should not be treated as reductions in HAL's revenues and so should not

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15 The SQRB is an incentive mechanism which consists of levels of rebates which are paid to airlines if service standards are not met, and levels of bonuses which HAL receives for providing high quality services to its customers. It was introduced in Q4, since then the overall structure of the scheme has remained largely unchanged although it has been reviewed and modified at each price review.

16 Economic regulation at Heathrow from April 2014: Final Proposals. www.caa.co.uk/CAP1103

17 Future of service quality regulation for Heathrow Airport Limited: Consultation on the design principles for a more outcome-based regime, December 2016. www.caa.co.uk/CAP1476

18 Guidance for Heathrow Airport Limited in preparing its business plans for the H7 price control, April 2017, Chapter 2. www.caa.co.uk/CAP1540

affect the setting of the main H7 price control. It would not be in the interests of consumers for the regulatory regime to allow HAL to recover revenues more than once in relation to services it provides. On this basis, if airlines accrue contractual rebate rights during the interim period for payment by HAL during the H7 period, the CAA would seek to ensure that, in setting the price control for the H7 period, it would not make any extra allowances because of these payments.

1.30 Nonetheless, we cannot completely rule out a situation which might require the reprofiling of charges or other adjustments to revenues to support financeability or affordability. Such actions would only be considered after other options, including action by HAL, had been considered. We will need to develop the H7 price control, incentive arrangements and the cost of capital in a way consistent with both affordability and financeability of capacity expansion.

1.31 We are at a relatively early stage of developing the regulatory framework for capacity expansion and have not started the detailed work on calibrating the H7 price control, which would need to be developed in accordance with the CAA's statutory duties and through careful consultation with stakeholders on key issues. Both airlines and HAL would also have rights of appeal to the Competition and Markets Authority in relation to any decisions that the CAA takes to modify HAL’s licence to implement the H7 price control.

Summary

1.32 An assessment of the extent to which the commercial deal is in consumers’ interests requires comparing:

- the potential for an uncertain (but possibly lower) revenue requirement under a regulated settlement; against
- a more certain and agreed revenue under the commercial deal, with rebates paid back over a shorter period and with the potential for additional wider benefits over the longer-term.

1.33 The rebates from the commercial deal are paid back to the airlines at Heathrow over a much shorter period (2021-2025) compared to adjusting regulatory depreciation under an alternative regulatory-based approach. This represents a saving for HAL’s customers in the shorter term.

1.34 The commercial deal also provides a wide range of strategic or longer-term benefits for consumers. It would allow HAL and stakeholders to focus on the challenges of the capacity expansion programme. The deal also supports the potential for future commercial arrangements at Heathrow that could benefit consumers. For example, future agreements could support traffic growth through risk-sharing agreements or ensure better stakeholder engagement on the masterplan design which could bring cost savings for new capacity. Such arrangements could therefore make capacity expansion both more affordable and financeable.

1.35 While there may be issues with the form of the commercial deal (rebates rather than reductions in HAL's RAB) and the level of stringency, these appear to be outweighed by the longer-term gains from encouraging more commercial arrangements at Heathrow airport. In particular, if HAL and airlines could work together to maximise passenger volumes as new capacity is opened this could make a significant difference to the overall affordability of capacity expansion.

1.36 Based on the balance of risks, and the likely quantitative and qualitative benefits which would accrue from the commercial deal compared to the regulatory approach, we consider that the iH7 commercial deal is in the interests of consumers. We would welcome stakeholder views on this initial view and our minded to decision to use the iH7 commercial deal as the basis for the 2020 and 2021 price control.

Chapter 2

Changes to HAL's licence

Proposed licence changes

2.1 If we decide that it is appropriate to support the commercial deal, it will be necessary to modify HAL's licence later in 2019 to ensure that it integrates properly with HAL's licence and to allow for any other consequential licence changes that may be required for iH7. The licence changes we consider may be necessary are summarised in the table below.[19] We will consult on the specific licence conditions in the July 2019 consultation.

2.2 The table also includes the changes we are proposing to make to address the following issues:

- changes to the way the Treasury Bill Discount Rate is published;
- simplification of the time periods in which modifications to the Service Quality Rebates and Bonuses in Schedule 1 to the Licence can be made;
- including hold baggage screening to the list of other regulated charges, if HAL decides to charge for this through this mechanism; and
- removing references to Terminal 1 from the Service Quality Rebates and Bonuses in Schedule 1 to the Licence.

Table 2.1: Proposed changes to HAL's licence

Condition	Issue	Change
A3.1(g)	The Regulatory Year is defined as each of the five years to 2019	Replace 'five years to 2019' with 'seven years to 2021'
C1	HAL is negotiating a commercial deal with some airlines to cover the additional 2 years. This deal will need to be reflected in the price control condition.	Include provision for the Commercial Deal Drafting will be developed with further consultation in July.

19 The licence granted to HAL is available on our website at https://www.caa.co.uk/WorkArea/DownloadAsset.aspx?id=4294975875.

Condition	Issue	Change
C1.2	'…each of the <u>five</u> subsequent relevant Regulatory Years starting on 1 January 2015 and ending on 31 December <u>2019</u>…"	Replace 'five' with 'seven' and '2019' with '2021'.
C1.4	The security allowance dead band figure, currently £20,000,000, needs changing in 18 instances. For Q5+1 and Q6+1 this was increased in line with forecast inflation.	In each place it is used, change '£20,000,000' to '£21,000,000' This increase is based on the rise in inflation rounded to the nearest million.
Table C1 (security) *	Table only covers the period to 2018	Update the table to include 2019-2021
Table C2 (security) *	Table only covers the period to 2018	Update the table to include 2019 -2021
Table C3 * (development capex adjustment)	Table only covers the period to 2019	Update the table to cover the period to 2021
C1.11 * (business rates revaluation)	Term only covers period to 2019	Update the term to cover the period to 2021
	Definition of Ut only covers period to 2019	Update the definition to include figures for 2020 and 2021
Table C4 * (business rates revaluation)	Table only covers the period to 2019	Update the table to covers the period to 2021
C1.12	Timescales for 't' only goes to 2019	Replace with '*t = 2016, 2017, 2018, 2019, 2020 or 2021'*
C1.13 (n)	The method of publication of the Treasury Bill Discount Rate has changed.	Amend (n) to make clear this methodology only refers to 2014-2018
		Add new subparagraph (o): "**specified rate** (from 2019 to 2021) means the average of the three month Treasury Bill Discount Rate (expressed as an

Condition	Issue	Change
		annual percentage **interest** rate) published by the UK Debt Management Office (https://www.dmo.gov.uk/data/treasury-bills/tender-results/), during the 12 months from the beginning of May in Regulatory Period or Regulatory Year t-2 to the end of April in Regulatory Period or Regulatory Year t-1."
C2.5	Only covers the period to 2019	Include figures for 2020 and 2021
C2.6	Only c covers the period 2019	Include figures for 2020 and 2021. Change '2018 Regulatory Year' to 'preceding Regulatory Year'.
C2.7	We may need to include baggage screening if HAL decides to charge for this through this mechanism	Add: (o) hold baggage screening.
C4.1	The condition covers each of the subsequent five Regulatory Years	Replace 'five' with 'seven'
D1.10	The time period during which self-modifications to Schedule 1 can be made is complicated and has proved to be unnecessary. We propose changing this to allow modifications to be made at any time	Replace 'Modifications can be made to the Statement under Conditions D1.6 and D1.8 no more frequently than one group of changes in each three month period' with 'Modifications can be made to the Statement under Conditions D1.6 and D1.8 at any time.'
Schedule 1 statement of standards, rebates and bonuses		
Para 4.5, 4.6 and 4.7	Terminal 1 is now closed	Remove all references and equations relating to T1. Delete para 4.7.
Tables 1a – 1d	Terminal 1 is now closed	Remove Tables 1a – 1d and replace with 'Table 1 – Not used'.
Table 9	Table only covers the period to 2018	Update the table to cover the period to 2021

* NB These changes may not be required in light of the commercial deal. If needed, revised tables, drafting or calculations would be included in the July consultation.

Other licence changes

2.3 The October 2018 Consultation built on a number of previous consultations since 2014 to consider whether a new condition in HAL's licence to promote economy and efficiency by HAL would further the interests of consumers. As part of this, we considered the timing of the introduction of any such condition should the CAA decide to implement it.

2.4 We are currently considering the responses to the October 2018 Consultation and will publish our updated view on this issue in March 2019.

2.5 We are also proposing to modify the audit requirements for the regulatory accounts in Condition E1. The Institute of Chartered Accountants in England and Wales has issued revised guidance on the audit opinion for regulatory accounts. This means that auditors will no longer provide an opinion that the regulatory accounts fairly present the financial position and the financial performance of the Licensee. We are proposing to replace this requirement with new requirements to obtain a 'prepared, in all material respects, in accordance with' opinion and for HAL to make reasonable endeavours to agree 'Agreed-upon-Procedures' with us and its auditors, and for its auditors to report on their findings. This approach has been used in other regulated sectors, for example energy, and is designed to mitigate any loss of assurance from the change in guidance.

2.6 Any modifications to HAL's licence would be subject to statutory consultation and the appeal rights for HAL and airlines provided for in CAA12.

APPENDIX A

Our duties

A.1 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.

A.2 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.

A.3 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".

A.4 The CAA must also carry out its functions, where appropriate, in a manner that will promote competition in the provision of AOS.

A.5 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.

A.6 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.

A.7 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.

A.8 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

Passenger demand, operating expenditure and non-aeronautical revenues

B.1 This appendix sets out HAL's forecasts and CEPA's initial assessment of the key building blocks of passenger demand, operating expenditure and non-aeronautical revenues.

Passenger demand

HAL's approach

B.2 HAL's approach to forecasting passenger demand combines:

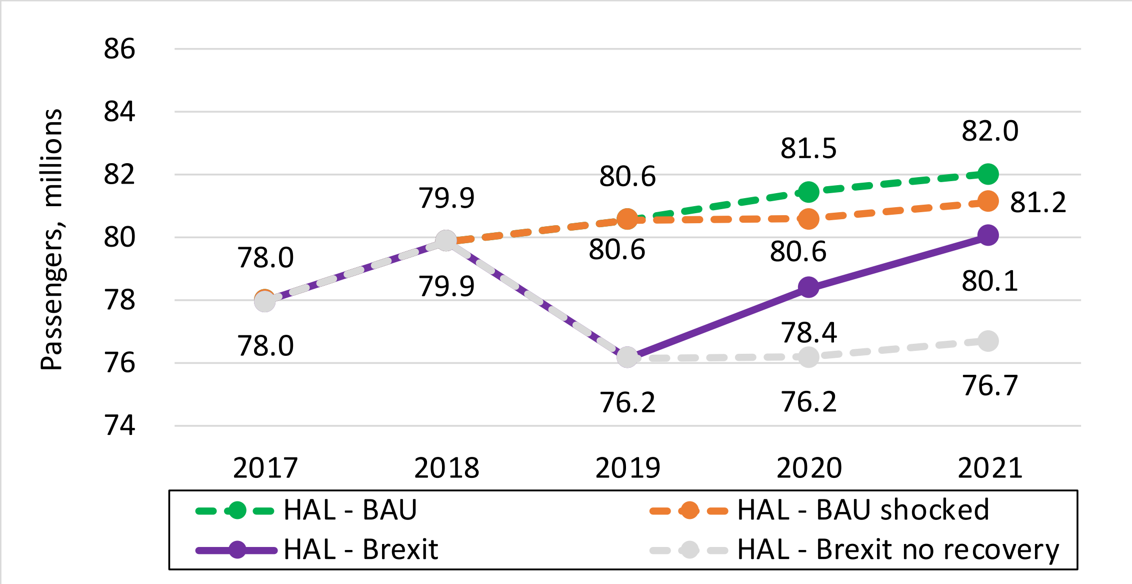
- a demand model, which is a 'top down' econometric model with market share analysis; and
- a supply model, which is a 'bottom up' airline capacity model.

B.3 HAL produced four different passenger forecasts for its iH7 submission (see Figure B.1). For the business as usual (BAU) forecasts, HAL applied a shock adjustment of 1.07% to the 2020 and 2021 forecast. The rationale for this adjustment was that Heathrow, being capacity constrained, has limited scope for growth in passenger volume and is subject to asymmetric downside risk (in other words while negative demand shocks reduce passenger numbers, positive demand shocks do not increase passenger numbers significantly as Heathrow is capacity constrained).

B.4 HAL applied an adjustment for Brexit to the BAU forecasts to reflect the impact of reduced air service agreements with the EU and other EU-bound destinations that it considers could be observed due to a no-deal Brexit. These effects come in the form of a reduction in open skies flying, a reduction in transfer passenger volumes, lower cargo volumes which reduces the number of passenger routes and lower general demand due to economic slowdown. The result of these effects is a substantial reduction to traffic in 2019.

B.5 For this no-deal Brexit scenario, which is used by HAL as its central case, HAL then predicted a gradual recovery in passenger demand in subsequent years. HAL also outlined an alternative no-deal Brexit with no recovery scenario which was not used for projecting the building blocks. This scenario assumed that there is no recovery from the shock in 2019 and permanently lower demand.

Figure B.1: HAL's passenger forecasts by scenario



CEPA's assessment

B.6 The CEPA iH7 study concluded that:

- forecasts of air transport movements (ATMs) at Heathrow in iH7 are appropriate, as the airport is likely to operate close to the cap of 480,000 ATMs per year;
- average seat per ATM at Heathrow in 2017 was higher than at major European airports, which implies limited growth potential, so HAL's forecasts are reasonable; and
- there is some scope for growth in the average load factor of airlines at Heathrow in 2020-2021, as it is comparatively low compared with major European airports.

B.7 CEPA considered that the no-deal Brexit scenario used by HAL represents the most extreme scenario possible and its use raises the possibility of HAL receiving a windfall gain if the Brexit situation turns out to be more positive than the worst case. In addition, CEPA considered that the demand shock adjustment used in Q6 was designed to reflect HAL's exposure to downside risks to passenger demand, so having a separate Brexit scenario with additional downward assumptions could double count the same risk.

B.8 In contrast to HAL, CEPA's passenger demand forecast in its core scenario was based on a negotiated UK withdrawal from the EU and includes a shock adjustment which was applied to the BAU forecasts.

B.9 CEPA estimated that a shock of 1.0% per annum should be applied to the passenger forecasts based on a weighted 1.2% Q6 shock adjustment.[20]

Operating expenditure

HAL's approach

B.10 HAL has proposed a 17.7% increase in opex between 2018 and 2021. The increase is mainly driven by inflation, passenger forecasts and new costs, some of which relate to the capacity expansion programme (see below). HAL has used its 2018 estimate of opex as a basis for its 2020 and 2021 forecast. Adjustments were made to reflect inflation, changes in passenger demand, specific additional costs and expected operating efficiency during the period.

B.11 Key elements of HAL's approach include:

- the use of an elasticity of 0.4[21] to adjust operating costs for changes in passenger numbers;
- the use of an unshocked no-deal EU exit passenger forecast as the most appropriate opex cost driver;
- additional opex related to the transfer of hold baggage screening from airlines to Heathrow which will be recovered in revenue through commercial arrangements with airlines;
- an additional £5.6 million per annum for resilience related to cyber security, increased counter terrorism costs and increased landside security;
- an annual average of £28.7 million for noise reduction and vortex protection schemes;
- an annual average of £22.6 million for additional operating expenditure in relation to capacity expansion;[22]
- an additional £5.3 million per annum for additional staff at border control and further costs to process cargo; and

20 The Q6 shock adjustment applied from 1991. Assuming that 2012 to 2017 is shock-free period, the weight applicable to this shock adjustment is (2012-1991) / (2017-1991) = 0.8077. The resulting shock adjustment 0.97 is rounded to 1%.

21 In other words, for each 1% rise in passenger numbers, opex is assumed to rise by 0.4%.

22 Includes community compensation from 2020 (prior to DCO consent) and the change in status of some expansion costs from Category B following submission of the DCO in 2020 and approval in 2021.

- an increase of £10 million per annum in operating costs of the Heathrow Express (HEX) following outsourcing of this service to Great Western Railway (GWR) in 2018 (see Appendix D).

B.12 HAL said that the 2018 opex baseline estimate is an accurate reflection of an efficient cost baseline[23] and that there is no scope for further catch-up efficiency during iH7 (in other words HAL assumes it is as efficient as the most efficient comparator airport). HAL has included a 0.9% per annum frontier shift efficiency. It has assumed that ongoing efficiency improvements exist for the iH7 period, in line with efficiencies that HAL assumes can be expected in any competitive business during that period. This is based on the historical difference between the RPI and CPI which HAL suggests reflects the potential for ongoing efficiency improvements.

CEPA assessment

B.13 CEPA's estimates reduce HAL's iH7 opex forecast by 6% by 2021. CEPA use the same elasticity value of 0.4 proposed by HAL, stating that this assumption appropriately captures the impact of increased passenger numbers on opex. CEPA used shocked rather than unshocked passenger numbers to forecast opex. CEPA noted that HAL has not provided adequate rationale to justify using different passenger forecasts for different building blocks.

B.14 CEPA has included the additional opex required for baggage screening but it disallowed new costs for pre-expansion/growth and costs associated with operating HEX due to insufficient evidence. CEPA has also not been able to assess whether the costs for noise insulation, resilience and EU exit preparations are reasonable and efficient based on the information provided.

B.15 CEPA applied a catch-up efficiency assumption of 0.75% per year to HAL's 2018 forecast to estimate an efficient opex baseline.[24] CEPA suggest that because HAL's historical performance has not been as strong as the comparator airports, it considers that there is likely to be further scope for catch-up efficiency, despite the improvements seen in recent years.

B.16 CEPA accepted HAL's assumption for frontier shift stating that the estimate of 0.9% per annum is broadly in line with previous CEPA analysis for the CAA on operating efficiency. [25] But CEPA did note that HAL did not provide evidence to show that its input costs increase by RPI rather than CPI.

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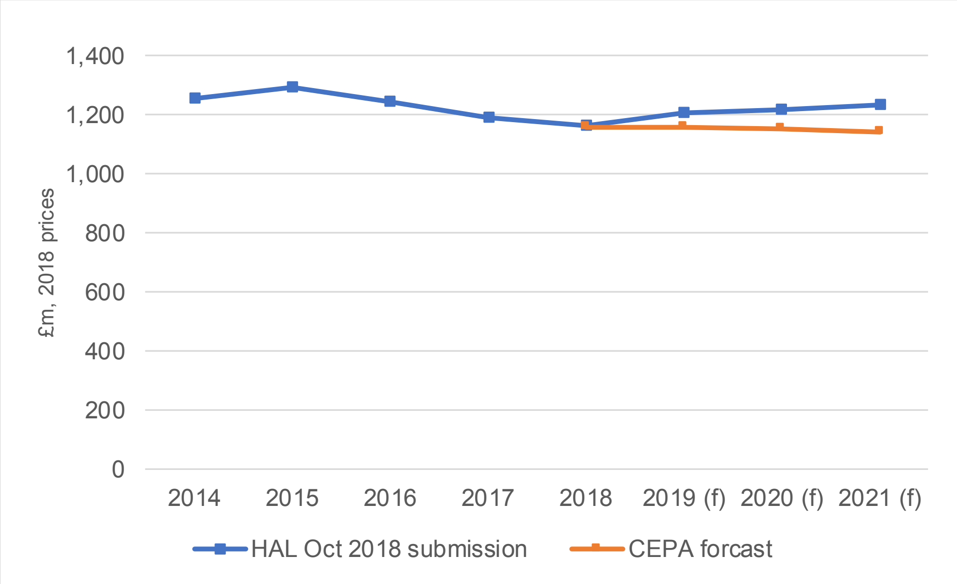
23 Supported by KPMG 2018 comparative efficiency study for Heathrow which compared the performance of 28 international and UK airports.

24 Based on CEPA's own analysis of Real Unit Operating Expenditure (RUOE), 0.75% is half the difference between HAL and the comparator airports average performance over the period assessed.

25 CEPA (2017) Review of efficiency of operating expenditure of Heathrow Airport http://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=7934

Figure B.2: HAL and CEPA forecasts of operating expenditure



Non-aeronautical revenues

HAL's approach

B.17 HAL forecast a growth in non-aeronautical revenues between 2018 and 2021 of 8.8% in nominal terms, although this is a reduction of 2.2% in real terms. The reduction in non-aeronautical revenues is mainly driven by lower rail revenues because of competing Crossrail services, partly offset by increases in retail, services and other revenue.

B.18 HAL used its 2018 estimate of non-aeronautical revenues as a basis for its 2020 and 2021 forecasts.[26] Adjustments were made to the 2018 baseline to reflect macroeconomic effects[27], passenger numbers, the impact of management initiatives, the impact of Crossrail on HAL's rail revenue and inflation. In particular HAL:

- used shocked passenger numbers to forecast commercial revenues stating that revenues will be driven by the actual number of customers expected to pass through the airport, so the shocked forecast is the most appropriate cost driver;
- assumed that retail and rail income have elasticities of 0.8 and that income from advertising, car rental and car parking has an elasticity of 0.4 with respect to passenger numbers;

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26 Income from retail, services, property and rail is discussed in Appendix B, other regulated revenues / charges (ORCs) is discussed in Appendix D.

27 For example, exchange rates for dollar/pound and euro pound.

- included an additional £15.1 million of revenue from 2019 relating to the transfer of hold baggage screening from airlines to Heathrow; and
- assumed a 1% per annum challenge (over and above inflation) which HAL refers to as management stretch which has been applied to its revenue forecasts. HAL points out that it has achieved strong historical performance despite significant headwinds for retail elsewhere in the economy, and that the growth of Uber and other disruptive technologies is likely to impact income from services.

CEPA assessment

B.19 CEPA removed all revenue adjustments HAL proposed from the macroeconomic impacts of a no deal EU exit scenario.[28] CEPA also applied an elasticity of 0.8 to HAL's shocked passenger forecasts to account for the impact of passenger growth on retail, services and rail revenues. CEPA's analysis showed that income from these services exhibits an elasticity with respect to passenger numbers greater than one.[29]

B.20 CEPA's discussions with airlines identified several new services and improvements that CEPA would expect to result in additional revenues. But CEPA noted that HAL's submission did not include additional revenue beyond the impact of Crossrail and the services charged directly to the airlines. CEPA also removed the estimated impact of Crossrail services on its forecast of HEX revenues given that the opening of Crossrail has now been delayed.

B.21 CEPA suggested that the 1% management stretch factor HAL included in its plan is insufficiently challenging so applied a 2% stretch assumption. This adjustment reflects the additional revenue that it would expect from new or improved revenue streams during the iH7 period. CEPA noted that between 2008 and 2017, HAL demonstrated an annual growth rate of 5% per annum in real terms.

B.22 CEPA's estimates increase commercial revenues by 7% in 2020 and 10% in 2021 as shown in Figure B.3.

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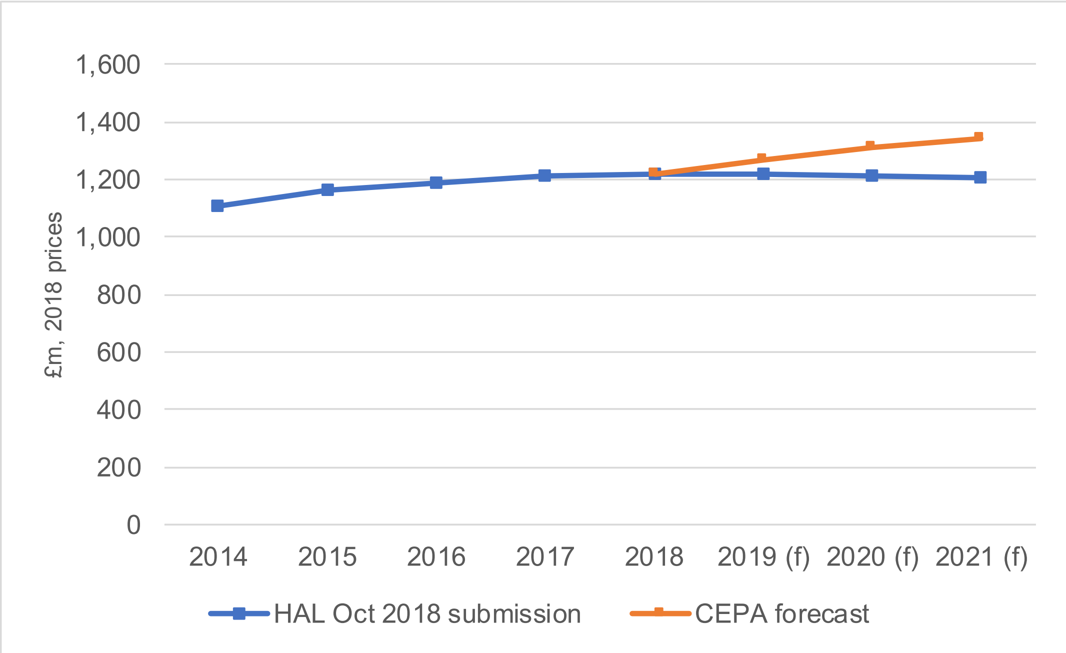
28 HAL's EU exit scenario forecasts a deterioration in the GBP-USD and GBP-EUR exchange rates, a reduction in UK GDP growth and an increase in RPI inflation during 2019 and 2020.

29 CEPA applied regression analysis to regulatory accounts data and historical data provided by HAL to support its iH7 submission.

Figure B.3: HAL and CEPA forecasts of non-aeronautical revenue



APPENDIX C

Capital expenditure, expansion costs and depreciation

Capital expenditure and expansion costs

C.1 This appendix reviews HAL's early view of capex for 2019-2021, with expenditure split into the following two categories:

- BAU base capex associated with running the airport, including masterplan costs for enhancements to the airport that would enable continued passenger growth within a two runway airport; and
- runway expansion capex relating to (i) the cost of applying for development consent for capacity expansion (Category B costs) and (ii) costs of preparing the construction of new capacity as soon as a DCO is obtained (early Category C construction costs).

C.2 HAL indicated that its iH7 capex estimates are preliminary at this stage. It is continuing to develop an expansion masterplan and a preferred option is expected to be selected in the next few months, ahead of its statutory consultation as part of the process for obtaining development consent.

HAL's approach

C.3 HAL provided an estimate of capex required to carry out BAU activities for 2019 to 2021. Overall base capex (covering both BAU and masterplanning activities) is expected to rise from £690 million in 2019 to £1,150 million in 2021. During the same period, HAL has stated that it will also be spending significantly more on the wider expansion work.

C.4 Masterplan expenditure, identified to enable HAL to grow the airport within the existing two runway arrangement, includes the T5+, T3+ and T2 baggage programmes which will deliver extra capacity available in these terminals before 2022.

C.5 HAL is in the process of updating its estimates of Category B and early Category C costs.

C.6 HAL also submitted operating expenditure for noise reduction schemes which is considered in Appendix B. HAL suggested that these costs could be treated as expansion costs but that our Category C policy precludes that approach.

CEPA assessment

C.7 CEPA stated that because HAL did not provide detailed information on the projects currently included within HAL's capex estimates (beyond headline estimates of future expenditure), a full assessment of the portfolio or the appropriateness of the capex estimates was not possible.

C.8 CEPA considers that HAL’s approach to capex for the iH7 submission is a significant departure from the current regulatory approach. CEPA states that HAL assumes that the capex plan should evolve over the course of the control period which is not the case for previous price controls.

C.9 CEPA considers that there needs to be more scrutiny of the appropriateness of the overall capex envelope to ensure that it is set by reference not only to deliverability and affordability, but also to the specific projects within the capex envelope. CEPA also considers that there is a greater need for closer monitoring of HAL's plans through the capex governance process.

C.10 CEPA recognises that HAL has shown historically that it is able to scale up capex over a short period. But it is less clear whether the non-expansion projects currently within the planning pipeline are sufficiently mature to be delivered during iH7.

C.11 CEPA suggests that under the current capex governance process HAL might respond to cost pressure in the capex programme by de-scoping certain projects rather than focusing on efficient delivery of the programme. There is also a risk that HAL prioritises projects that are not the highest priority for users (such as those that produce opex savings) over projects that produce greater benefits for airport users. CEPA recommends closer monitoring of the prioritisation of projects and the progression of individual projects through the governance process.

C.12 While CEPA has concerns about the approach adopted by HAL to determine the level of capex for iH7, it recognises that the masterplan process is ongoing and that the capex envelope may change. Therefore, CEPA has used HAL’s figures in its calculation of the underlying price path.

Regulatory depreciation

C.13 The commercial deal specifies a price path and associated rebates. It states that ‘regulatory depreciation [is] based on the baseline capital expenditure assumptions in and underpinning CAP 1658 Appendix D Table D.4’.

Table C.1: CAA capex scenario for 2019 to 2021

	Price base	2019	2020	2021
Expansion Capex	2014	167	167	485
Non-expansion	2014	182	306	509
Maintenance	2014	391	350	350
Total	**2014**	**740**	**823**	**1,344**

Source: Table D.4, CAP 1658

C.14 The depreciation figures used in conjunction with baseline capital expenditure were not set out in CAP 1658[30], but they were calculated in model scenarios for interim price control arrangements in our April 2018 Consultation. For clarity, we present the underlying depreciation figures from CAP 1658 in Table C.2.

Table C.2: Regulatory depreciation underpinning CAP 1658 Table D.4

£m, 2016 prices	2020	2021
Depreciation	745	750

Source: CAA

C.15 Depreciation is not used to calculate the charges for iH7 since the charges are specified by the commercial agreement. These figures will be needed to determine the opening RAB balance for the start of the H7 price control period.[31]

30 Economic regulation of capacity expansion at Heathrow: policy update and consultation www.caa.co.uk/CAP1658

31 For the avoidance of doubt we plan to use the depreciation figures shown in Table C.2 to calculate annual RAB values, including indexation, for the purpose of determining the opening RAB value for H7.

APPENDIX D

Other regulated charges and revenue

Rail revenues

HAL's approach

D.1 Rail revenues are expected to reduce over the iH7 period mainly due to the impact of new competing services when the Elizabeth Line opens. In addition, the operating costs of the HEX services have increased by £10 million per year because of the outsourcing of the services to Great Western Railways (GWR). This increase is based on an additional £16 million driven by the introduction of a new fleet of trains by GWR, offset by £6 million in staff savings. Outsourcing has meant that HAL has been able to avoid a substantial capital investment in a new fleet of trains.

D.2 The main anticipated impact on rail revenues is the start of the Crossrail services when the Elizabeth Line opens. HAL assumes an opening date of December 2019 with six trains per hour initially, increasing to eight trains per hour in 2021. It assumes that the one-way fare will be £✂.

D.3 HAL commissioned a study to assess the optimal future price of Heathrow Express (HEX) fares given the potential impact of competing Crossrail services. The study also considered the impact of reducing fares on HEX revenue. HAL considers it will need to reduce average HEX fares from £✂ to £✂ to maximise yield, and even at this price there is likely to be a reduction in passenger numbers of ✂% in 2020 and ✂% in 2021 compared to current levels.[32] It is expected that HEX revenue will reduce by ✂% and ✂% in 2020 and 2021 (£✂million and £✂million respectively).

D.4 HAL anticipates that this reduction, alongside changes to the other factors affecting the rail revenues, will lead to an overall reduction in revenues from £✂million in 2018 to £✂million in 2021.

CEPA assessment

D.5 In 2018 the Department for Transport confirmed that the opening of Crossrail had been delayed.[33] CEPA points out that the impact on HEX revenue during the iH7 period is uncertain.

D.6 CEPA noted that HAL has miscalculated the combined effects of a reduction in price and passenger numbers. CEPA suggests that the combined reduction to rail

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32 Percentage reduction figures quoted are cumulative.

33 Department for Transport (2018) Crossrail update, 10 December 2018

revenue would be ✂% and ✂% in 2020 and 2021. HAL has acknowledged this miscalculation.

Other regulated charges

D.7 ORCs are regulated under Condition C2 of HAL's licence. ORCs cover a range of activities including airside licences, check-in desks and staff car parking. HAL has forecast that ORCs revenue will increase from £246.1 million in 2018 to £270.4 million in 2021.[34]

D.8 In 2019 the ORCs revenue will increase by £3.1 million to allow for the recovery of additional costs for baggage facilities and maintenance. There will also be a £6.4 million reduction to reflect the anticipated impact of the specific 2019 pricing schedule now in place. In 2020 and 2021, the ORCs revenue will only change by reference to RPI inflation. ORCs are not affected by other factors such as elasticity as they are primarily driven by the number of air traffic movements rather than passenger numbers.

D.9 CEPA made no challenge to HAL's ORCs forecast. As these are subject to specific requirements on price setting each year, we are also content that HAL's forecasts are a reasonable input assumption for the alternative scenario to assess the commercial arrangement.

[34] By 31 December each year, before making any changes to its prices, HAL must inform the CAA and airlines of the pricing principles for each item charged including the assumptions and relevant cost information. If actual revenue in a year exceeds that forecast for that year (or, for 2019, it exceeds that made in 2018), HAL must inform the CAA and airlines of the reasons for those differences.