

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

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Appendix A

Our duties

- A1 The CAA is an independent economic regulator. Our duties in relation to the economic regulation of airport operation services (“AOS”), including capacity expansion, are set out in the CAA12.
- A2 CAA12 gives the CAA a general (“primary”) duty, to carry out its functions under CAA12 in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of AOS.
- A3 CAA12 defines users of air transport services as present and future passengers and those with a right in property carried by the service (i.e. cargo owners). We often refer to these users by using the shorthand of “consumers”.
- A4 The CAA must also carry out its functions, where appropriate, in a manner that will promote competition in the provision of AOS.
- A5 In discharging this primary duty, the CAA must also have regard to a range of other matters specified in the CAA12. These include:
- the need to secure that each licensee is able to finance its licensed activities;
 - the need to secure that all reasonable demands for AOS are met;
 - the need to promote economy and efficiency on the part of licensees in the provision of AOS;
 - the need to secure that the licensee is able to take reasonable measures to reduce, control and/or mitigate adverse environmental effects;
 - any guidance issued by the Secretary of State or international obligation on the UK notified by the Secretary of State; and
 - the Better Regulation principles.

- A6 In relation to the capacity expansion at Heathrow, these duties relate to the CAA's functions concerning the activities of HAL as the operator at Heathrow.
- A7 CAA12 also sets out the circumstances in which we can regulate airport operators through an economic licence. In particular, airport operators must be subject to economic regulation where they fulfil the Market Power Test as set out in CAA12. Airport operators that do not fulfil the Test are not subject to economic regulation. As a result of the market power determinations we completed in 2014 both HAL and GAL are subject to economic regulation.
- A8 We are only required to update these determinations if we are requested to do so and there has been a material change in circumstances since the most recent determination. We may also undertake a market power determination whenever we consider it appropriate to do so.

Appendix B

Glossary

Acronym/ term	Definition
ADP	Airport operator Groupe ADP, formerly Aéroports de Paris, based in Paris.
ADR	Airport operator ADR Group or Aeroporti di Roma, based in Rome.
Aena	Airport operator Aena SME, based in Spain.
AOC	Airline Operators' Committee (for Heathrow), a private company limited by guarantee.
AOS	Airport operation services, as defined in section 68 CAA12.
Asset beta	A measure of the perceived riskiness of a company's assets, taking into account both debt and equity financing, compared to the equity market as a whole.
BA/IAG	British Airways plc/International Airlines Group (owner of British Airways).
Base case	This represents the scenario HAL has presented under its Revised Business Plan under which it assumes it receives the full RAB adjustment requested.
BBU High	HAL's scenario for H7 constructive engagement with relatively rapid recovery in traffic. See also "Prolonged Contraction".
bps	Basis points are a unit of measure to describe the percentage change in the value or rate of a financial instrument. One basis point is equivalent to 0.01% (1/100th of a percent) or 0.0001 in decimal form.
CAA ("us"/"we")	The Civil Aviation Authority.
CAA12	Civil Aviation Act 2012.
Capex	Capital expenditure.
CMA	The Competition and Markets Authority.
Commercial deal or Commercial Agreement	The Agreement entered into between HAL and airlines that applies in 2020 and 2021 and provides for:

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

Financing platform	The “whole business securitisation” funding arrangements used by HAL to raise debt finance. Details of the arrangements comprising HAL’s financing platform can be found at: https://www.heathrow.com/company/investor-centre/offering_related-documents .
Gearing	Ratio of a regulated company’s debt to its RAB.
H7	The next HAL price control that we assume will be in place from 1 January 2022. If set for the usual five year period, this will run for the years 2022 to 2026.
H8	The next HAL price control period after H7. If H7 is set for the usual five year period, H8 will start from the year 2027.
HAL	Heathrow Airport Limited, the licence holder and operator of Heathrow airport.
Heathrow Finance Plc	A holding company of HAL, which owns and operates Heathrow airport.
IBP	HAL’s “Initial Business Plan” for the expansion of Heathrow Airport. The IBP was provided to the CAA in December 2019 and was prepared in the expectation of a 3rd runway being built.
IdoK	Interim determination of the K factor, a regulatory tool used in the UK water sector.
iH7	Interim H7 price control. Runs from 1 January 2020 until 31 December 2021.
LACC	London (Heathrow) Airline Consultative Committee, set up by IATA to implement a collaborative consultation framework for Heathrow airport.
NERL	NATS En Route plc.
No adjustment scenario	This represents the scenario HAL has presented under its Revised Business Plan under which it assumes it receives no RAB adjustment will be made.
Opex	Operational expenditure.
ORCs	Other Regulated Charges.
PCM	Price Control Model.
Prolonged Contraction	HAL’s scenario for the constructive engagement process with airlines which includes a much slower recovery in traffic. See also “BBU High”.
Q4 or Q4 price control	The “Q4” price control was the price control for the period from 2003 to 2008. See for example CAA decision document covering Q4 price control available online:

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

Appendix C

The impact of the covid-19 pandemic on the cost of equity

Introduction

C1 As we have explained in the main document, it is important to consumers that there are no undue increases in the cost of financing HAL's regulated activities because this would tend to lead to higher airport charges in the future. An important component of HAL's financing costs is the cost of equity finance. This appendix:

- describes information that HAL has provided on these matters (in particular beta values and risk); and
- sets out our initial assessment of this information.

Appendix D deals with related matters, including HAL's arguments that there should be certain limits on the risks that HAL's equity investors bear.

HAL view

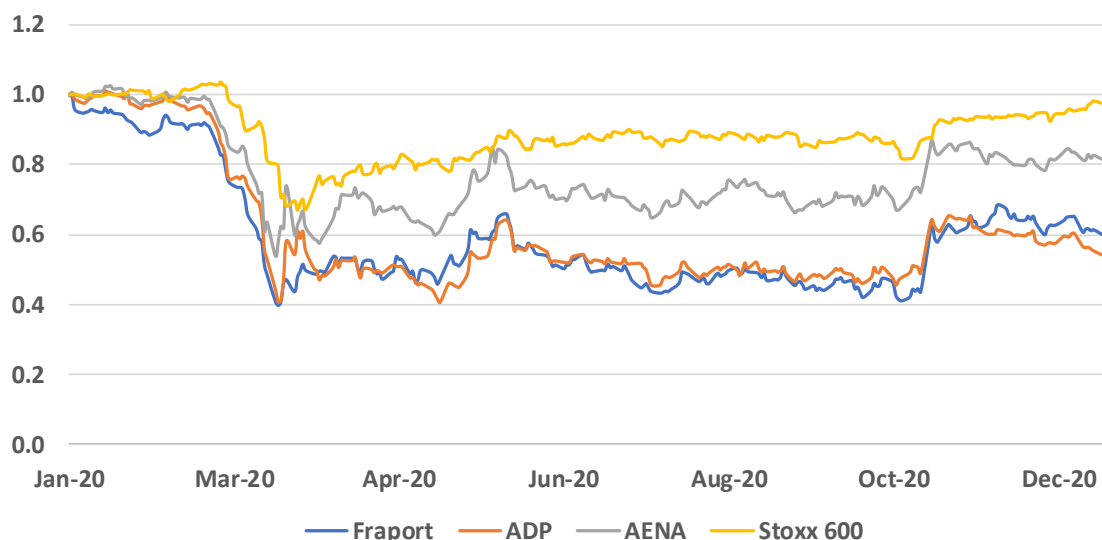
C2 In its response to the October 2020 Consultation, HAL has presented an estimate of the impact of the covid-19 pandemic on the cost of equity in the absence of any intervention by the CAA.¹ HAL estimates that the covid-19 pandemic has increased HAL's asset beta by 0.38 and contributed to an increase in its post-tax cost of equity from 8.30% (IBP) to 16.79% (RBP). It further estimates that the RAB adjustment would reduce the impact of the covid-19 pandemic on the asset beta by 0.16 and on the real, post-tax cost of equity by 3.14% to 13.65%.

¹ HAL (2020), "Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966): Heathrow's response", November, paragraphs 249 to 251.

CAA assessment

C3 We agree with the premise of HAL's assessment that, absent any intervention by the CAA, investors' required returns could increase, potentially significantly. At the same time, HAL's estimate could be seen as towards the upper end of the plausible range of estimates. For example, under HAL's analysis, if the covid-19 pandemic were assumed to be a one in 100-year event, the increase in the asset beta would be only 0.14. In addition, it is not clear that investors would reflect the full impact of the crisis in an increase in the asset beta: investors may consider some of the impact of the crisis can be mitigated by holding a diverse portfolio of assets². This is particularly the case given that stock returns have exhibited a noticeably different dynamic from airports' equity returns, as is shown in Figure 1 below:

Figure 1: Relative performance of airport share price and the Stoxx 600 (price at 1 Jan 2020 rebased to 1.0)



Source: Eikon, CAA analysis

C4 Nonetheless, we consider that it is plausible that HAL's cost of equity will increase in the absence of any regulatory intervention, and that this increase

² CAPM assumes that investors only require compensation for the systematic or non-diversifiable component of total risk. Therefore, under CAPM, the proportion of the increase in return volatility that is diversifiable will not be reflected in the beta. Only the non-diversifiable proportion of the increase in return volatility will be reflected in beta. It is difficult to robustly estimate the proportion of return volatility that is diversifiable, but this is likely to be below 100%.

could be quite significant. The extent of the increase is unclear and depends on a number of variables that are difficult to measure robustly. These include, in particular:

- how frequently investors expect crises of similar magnitude to recur; and
- the extent to which investors expect the impact of such crises to be mitigated by holding diverse portfolios of assets.

C5 We noted in the October 2020 Consultation³ that traffic risk sharing (“TRS”) was, at that time, being considered as part of constructive engagement between HAL and airlines on HAL’s RBP. The form and calibration of any prospective TRS mechanism has yet to be developed as part of the H7 price control review. We nonetheless consider that an appropriately specified TRS mechanism could fully or partially mitigate any increase in the cost of equity due to the impact of the covid-19 pandemic.

C6 In its response to the October 2020 Consultation, HAL disagreed that a TRS mechanism would substantially mitigate the increase in the cost of equity it had estimated. In paragraph 60 of its response, it said:

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

³ CAP1966, Paragraph 3.5.

greatest deviation from settlement assumptions ever seen, then it lacks the credibility to act at any point [in the?] future.”⁴

C7 In support of its view, HAL has commissioned a paper by Economic Insight⁵ to examine whether there is

“Evidence that specifying a mechanism to reduce risk in the next price control (i.e., a new ex-ante mechanism), as currently being considered by the CAA, in the absence of adjustments for historical performance in 2020 or 2021, would have no impact on investors’ perceptions of risk (or more broadly, that this ex-ante approach would be inferior to acting ‘now’, as HAL requests)”.

C8 To reflect the possibility that a TRS mechanism would be insufficient on its own to mitigate the increases in the cost of equity due to the covid-19 pandemic, we are consulting on a range of additional interventions that could support and supplement a TRS in managing investor expectations on future returns.

C9 We disagree with HAL’s argument, as summarised in paragraph C6 above, that introducing a TRS mechanism would have no mitigating impact on investors’ perception of risk. We consider that it is entirely credible for a regulator to apply a new mechanism to future performance without it applying it to the past. We also disagree that introducing a new mechanism to shield HAL from future traffic constitutes “failing to act”. On the contrary, we consider that introducing such a mechanism represents proportionate and targeted action given the circumstances.

C10 The Q6 and iH7 price control frameworks allocated traffic risk to HAL (and so its shareholders). An adjustment to forecast revenues to reflect potential shocks in traffic levels (referred to as a “shock adjustment”) was explicitly included to compensate for this risk. Nonetheless, the Q6 price control documents also explained that we could reopen the price control to deal with exceptional circumstances.

⁴ HAL (2020), “Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966): Heathrow’s response”, November, paragraph 60.

⁵ Economic Insight (2021), “Impact of Ex Ante Mechanisms on Investor Risk Perceptions”, January.

- C11 If a new TRS mechanism were to be implemented, we consider that investors could readily distinguish between the framework that applied in Q6 and iH7 and any forward-looking TRS mechanism. By contrast, amending a previously agreed regulatory mechanism after the event could have precisely the opposite impact to that argued for by HAL. This is because it could be more damaging to the credibility of the regulatory framework than adhering to what was previously agreed: it could signal to stakeholders that settled regulatory mechanisms could be subjected to uncertain change and amendment during their period of operation as a result of the application regulatory discretion.
- C12 As for the Economic Insight report:
- We do not consider that the findings of this report support HAL's conclusion that a TRS mechanism would have no impact on investors' perceptions of risk. The report illustrates that Government support may have been effective in mitigating the financing costs of the limited sample of companies considered in the report. Whilst intuitive, this finding does not appear to have a direct implication for how best to determine the balance between a retrospective adjustment for 2020 and 2021 and new TRS arrangements for HAL; and
 - In terms of the detail of the report, the sample considered by Economic Insight is very small, being, at most, 15 observations. As such, even the finding that Government support may have been effective in mitigating the financing costs of the sample of companies considered may not carry across to the broader economy or to HAL.
- C13 In summary, we agree that a substantial increase in the cost of equity could occur if the CAA does not act, but that such action could include introducing a forward looking TRS mechanism. We consider that the scale of the increase estimated by HAL is likely to be towards the higher end of the plausible range. For example, we consider that a lower estimate could be justified on the basis of a lower expected frequency of such crises. Our present view is that an appropriately specified and calibrated TRS mechanism could substantially or fully mitigate any increase in the cost of equity. We will consider any further

representations we get on these matters and carry out further analysis, including as part of the H7 price control review.

Appendix D

Investor expectations at Q6/iH7

Introduction

D1 This appendix follows on from Appendix C and deals with HAL's arguments that there should be limits on the risk that its equity investors bear. If this is the case, they should receive substantial compensation for the impact of the covid-19 pandemic on shareholder returns.

HAL view

D2 HAL has said in its response to the October 2020 Consultation that

“the WACC set at Q6 included assumptions about the level of risk to which shareholders in Heathrow were exposed and the appropriate return for bearing that risk”⁶. It goes on to suggest that “given [the level of the allowed return in Q6/iH7], there is an implied upper limit to the amount of risk that Heathrow was expected to bear”⁷.

D3 It has referred specifically to a number of observations that it considers support the view that there is an implied upper limit to the amount of risk that HAL can be reasonably expected to bear, including:

- **Q6 comparator companies:** HAL has said that the equity beta used in the Q6 settlement was based on comparator companies whose regulatory frameworks included traffic risk sharing mechanisms. This led investors to expect a degree of implicit protection by CAA in the event of a significant traffic shock;

⁶ HAL (2020), “Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966): Heathrow's response”, November, paragraph 125.

⁷ HAL (2020), “Economic regulation of Heathrow: response to its request for a covid-19 related RAB adjustment (CAP1966): Heathrow's response”, November, paragraph 126.