

BEFORE THE COMPETITION AND MARKETS AUTHORITY

**IN THE MATTER OF AN APPEAL UNDER SECTION 25 OF THE CIVIL
AVIATION ACT 2012**

BETWEEN

HEATHROW AIRPORT LIMITED

Appellant

and

THE CIVIL AVIATION AUTHORITY

Respondent

NOTICE OF APPEAL



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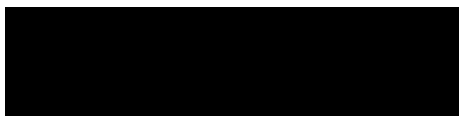
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STATEMENT OF TRUTH

I believe that the facts stated in this Notice of Appeal are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.



Signed:

Name: 

Dated: 17 April 2023

A. INTRODUCTION AND SUMMARY OF GROUNDS OF APPEAL

A(1) Introduction

1. Heathrow Airport Limited (“**Heathrow**” or “**HAL**”) seeks permission to appeal under s.25 of the Civil Aviation Act 2012 (“**CAA 2012**”)¹ against a decision of the Civil Aviation Authority (“**CAA**”) under s.22 CAA 2012 modifying the price control terms of Heathrow’s operating licence.²
2. Heathrow as the operator of an airport designated as a dominant airport by the CAA under the CAA 2012 is subject to a price control on the amount which it can charge users for the facilities. This charge is decided by the CAA and normally reviewed every 5 years. The latest price control, for the period known as H7 contains the decisions which are subject to this appeal, (“**the Decision**”)

A(2) Summary of Grounds of Appeal

3. In summary, Heathrow seeks permission to appeal against the following aspects of the Decision (the “**Grounds of Appeal**” or “**Grounds**”):
 - 3.1. **Ground 1—Covid-related RAB Adjustment**: The CAA has erred in refusing a further adjustment to Heathrow’s Regulated Asset Base (“**RAB**”) to reflect fully the impact of the Covid-19 pandemic on Heathrow. The CAA accepted that an adjustment should be made as a result of Covid-19, but allowed only an adjustment of £300 million. For the reasons set out at section D below, Heathrow submits that the CAA should, in the light of its statutory duties, have made an adjustment calibrated in proportion to the shortfall in the revenue it expected to recover in 2020 and 2021. Revenues fell catastrophically: revenue in 2020 was approximately 62% below 2019 levels and in 2021 approximately 60% below 2019 levels; in total across 2020 and 2021, Heathrow suffered losses of approximately £3.8 billion.³ Heathrow consequently seeks an adjustment of

¹ The Civil Aviation Act 2012 [**Auth/1/5**].

² Heathrow is designated as the operator of London Heathrow Airport. The CAA granted Heathrow a licence on 1 April 2014 which shall continue in force until revoked under Condition B2 of Heathrow’s Licence. Heathrow is therefore a “licence holder” entitled to bring an appeal against modifications to that licence under s.25(2)(a) CAA 2012. [**Auth/1/27**].

³ See 1st Squire paragraph 3.3 [**Core/4/230**]; 1st Cuchra, KPMG report at paragraph 5 [**Core/8/364**]

£2.225 billion calibrated using the CAA's risk sharing mechanism designed to share the impacts of catastrophic risk. In the alternative, Heathrow submits that the CAA should, in any event, have made an adjustment calibrated to allow Heathrow to recover the depreciation on the RAB which was incurred during the pandemic (when Heathrow did not have a fair opportunity of recouping its investment) and which would otherwise be irrecoverable.

- 3.2. **Ground 2—Cost of Equity (Asset beta)**: The CAA's estimate of the Cost of Equity of 6.97% RPI real is far too low. It implies an unlevered nominal cost of equity that is below Heathrow's observable cost of debt, which is wrong from first economic principles. The most important contributing factor, and the focus of this Ground of Appeal, is the CAA's estimate of Heathrow's asset beta. The CAA has fallen into error by effectively shunning market data and instead relying on a subjective and poorly evidenced series of assumptions to derive the asset beta, in a stark departure from best regulatory practice (**Ground 2A**). The CAA has also wrongly assumed that the TRS mechanism is able meaningfully to reduce Heathrow's asset beta (**Ground 2B**). Correcting for these errors by adopting an evidence-based approach in line with best regulatory practice leads to an asset beta of 0.82 (compared to the CAA's 0.53) and a cost of equity of 10.8%.
- 3.3. **Ground 3—Cost of Debt (Embedded Debt)**: The CAA's estimate of Heathrow's cost of embedded debt of -0.08% RPI real is unreasonably low and fails to provide Heathrow with an appropriate allowance to service that debt. The CAA's use of short-term inflation forecasts as a deflator is a significant departure from the established UK framework of using long-term inflation expectations to set allowed real returns. It undermines existing investment and financing decisions and introduces undesirable volatility into Heathrow's (and the notional company's) cash flows. During H7 this will lead to an under-provision for interest costs. In the long run it guides Heathrow towards adopting a shorter duration financing strategy that increases refinancing risks and transaction costs. While ostensibly securing a lower pricing outcome in H7, none of this is properly in the interests of Heathrow's users. The change in any event seeks to solve an issue, in the form of 'windfall' gains or losses, which

properly understood does not exist, and is unable to do so even on its own terms (**Ground 3A**). In addition, the CAA has erred when it calculates a Heathrow-specific premium of 8 bps⁴ over the iBoxx corporate debt indices. An appropriate premium is around 49–█ bps. The CAA’s estimate is wrong in large part because it is derived solely by reference to Heathrow’s Class A (A–rated) debt, thereby effectively assessing the costs of debt of an A–rated airport. This is inconsistent with the assumption that the notional company is BBB+ rated and leads to an underestimation of the cost of debt. Additionally, the CAA has underestimated the costs associated with foreign currency debt (**Ground 3B**). Finally, the CAA assesses the cost of embedded debt by reference to index observations averaged over 13.5 years. This is inconsistent with the average tenor of Heathrow’s actual embedded debt and assumptions underlying other elements of the price control (**Ground 3C**). Correcting these errors would lead to a cost of embedded debt of 2.50% RPI real for the notional company (compared to the CAA’s -0.08%). This is above Heathrow’s actual, more efficient cost of embedded of 1.79%, which Heathrow invites the CMA to substitute for the CAA’s estimate.

- 3.4. **Ground 4—AK-Factor**: The CAA is wrong to introduce an additional correction factor (AK-factor) in the Decision to claw back what it describes as over-recovered revenues in 2020 and 2021. Those years were defined by the pandemic which resulted in catastrophic financial losses for Heathrow. To speak of ‘windfall gains’ in those years is divorced from reality. The purported excess yields identified by a mechanical application of the K-factor formula are no more than an illustration of the limitation of that relatively crude mechanism. When revenues fall short by almost 70%, it is simply not appropriate or proportionate to continue to apply—as the AK-factor calculation does—fixed revenue adjustments designed to avoid over recovery when the over recovery they are intended to prevent has clearly not occurred. This is most obvious in relation to Heathrow’s capex budget, which the AK-factor implicitly assumes Heathrow should have continued to spend in full even in the light of a dramatic shortfall of income. The AK-factor, if implemented, would require Heathrow to

⁴ Basis points. 1 basis point is equal to 1/100th of 1%.

return around £258 million. That equates to more than 25% of all aeronautical revenues earned in 2020 and 2021, and would almost entirely unwind the effect to the CAA’s limited RAB adjustment. We therefore invite the CMA to remove the AK-Factor adjustment.

- 3.5. **Ground 5—Capex Incentives**: The Decision inserts a modified condition F1.1(a) into Heathrow’s licence, which introduces an overly complex, disproportionate and inefficient capex incentives regime. In H7, for every capex project that reaches the investment decision-making gateway (known as “Gateway 3”), the new regime will require Heathrow to obtain airline agreement to a series of granular “Delivery Obligations” before moving forward, including as to specific outputs, quality requirements, and completion deadlines (as well as weightings for each parameter). Heathrow expects that this will be required for at least 400 capex projects over the H7 period. This new framework is fundamentally flawed in its design and will introduce inefficiencies to Heathrow’s capex decision-making resulting in delays and higher costs – and it reflects an unwelcome and unwise departure from the more targeted and efficient Q6 framework. In making its decision, the CAA has also incorrectly assumed that the interests and incentives of airlines are aligned with users of air transport (rather than their own commercial interests). Heathrow submits the CAA’s decision is therefore wrong in law, because the CAA has failed to take into account its statutory duties (in particular its duties to further the interests of users of air transport services, to promote efficiency and economy, and to have regard to the principles of better regulation) and/or has erred in the exercise of its statutory discretion. We therefore request that the CMA quash the Decision to introduce the requirement to agree Delivery Obligations for all capex projects with airlines and revert to the prevailing Q6 arrangements.

A(3) Structure of this Notice of Appeal

4. The Grounds of Appeal are set out in **Sections D–H** of this Notice of Appeal. This follows a summary, in **Section B**, of the background to the Decision and the importance of getting the price control settlement right. The applicable legal principles are set out in **Section C**.

A(4) Supporting evidence

5. In support of its appeal, Heathrow relies on the following witness statements of fact:

Factual evidence

- 5.1. First Witness Statement of John Holland-Kaye, Heathrow's Chief Executive Officer ("**1st Holland-Kaye**") and Exhibit ("**JHK1**").
- 5.2. First Witness Statement of Michael King, Director of Regulation and Economics at Heathrow ("**1st King**") and Exhibit ("**MK1**").
- 5.3. First Witness Statement of Lucy Squire, Head of Regulatory Strategy at Heathrow ("**1st Squire**") and Exhibit ("**LS1**").
- 5.4. First Witness Statement of Sally Ding, Director of Business Planning and Treasury at Heathrow ("**1st Ding**") and Exhibit ("**SD1**").
- 5.5. First Witness Statement of Alistair Maxwell, Head of Scope and Regulation at Heathrow ("**1st Maxwell**") and Exhibit ("**AM1**").

6. Heathrow also relies on the following reports by expert economists:

Expert evidence

- 6.1. First Expert Witness Statement of Christopher Bolt, former UK economic regulator and most recently Chairman of the Guernsey Competition and Regulatory Authority (2020-2022) ("**1st Bolt**") and Exhibit ("**CB1**").
- 6.2. First Expert Witness Statement of Dr Maciej Firla-Cuchra, expert economist at KPMG ("**1st Cuchra**") and Exhibit ("**MFC1**").
- 6.3. First Expert Witness Statement of Peter Hope, expert economist at Oxera ("**1st Hope**") and Exhibit ("**PH1**").
- 6.4. First Expert Witness Statement of Chris Cuttle, expert economist at Frontier Economics ("**1st Cuttle**") and Exhibit ("**CC1**").
- 6.5. First Expert Witness Statement of Dr Mark Brown, infrastructure strategy expert at Aczel ("**1st Brown**") and Exhibit ("**MB1**").

7. The above-mentioned evidence supports the Grounds of Appeal in the manner set out in Table 1 below.

Table 1: Grounds of appeal alongside supporting evidence

Ground	Supporting evidence
Ground 1 – RAB Adjustment	<i>Factual evidence:</i> 1 st Squire <i>Expert evidence:</i> 1 st Bolt; 1 st Firla-Cuchra
Ground 2 – Cost of Equity (Asset Beta)	
Ground 2A – Post-Pandemic Asset Beta	<i>Factual evidence:</i> 1 st King (Section 4.1) <i>Expert evidence:</i> 1 st Hope (Section 3)
Ground 2B – TRS Adjustment	<i>Factual evidence:</i> 1 st King (Section 4.2); 1 st Holland-Kaye (Section 7) <i>Expert evidence:</i> 1 st Hope (Section 4)
Ground 3 – Cost of (Embedded) Debt	
Ground 3A – Use of Short-Term Inflation Estimates	<i>Factual evidence:</i> 1 st King (Section 5.1) <i>Expert evidence:</i> 1 st Hope (Section 6)
Ground 3B – Heathrow-Specific Cost of Debt Premium	<i>Factual evidence:</i> 1 st King (Section 5.2) <i>Expert evidence:</i> 1 st Hope (Section 5)
Ground 3C – Averaging Period for Index Observations	<i>Factual evidence:</i> 1 st King (Section 5.3) <i>Expert evidence:</i> 1 st Hope (Section 5)
Ground 4 – AK-Factor	<i>Factual evidence:</i> 1 st King (Section 6)
Ground 5 – Capex Incentives	<i>Factual evidence:</i> 1 st Maxwell <i>Expert evidence:</i> 1 st Cuttle; 1 st Brown

8. The Grounds of Appeal should also generally be read in the context of the evidence set out in the witness statement of Mr Holland-Kaye, Heathrow's CEO.

B. FACTUAL BACKGROUND

B(1) Summary chronology

9. The H7 price control follows on from the earlier Q6 price control, which originally covered the years 2014 to 2018 but was later extended to apply to 2019 as well.
10. The introduction of the H7 price control was delayed multiple times, initially to accommodate work resulting from the Government's decision that Heathrow was its preferred location for the development of a new runway in the southeast of England, and later due to the impact of the Covid-19 pandemic.
11. The years 2020 and 2021 were covered by an interim price cap (referred to as 'iH7' by the CAA) This was followed by a 'holding' cap in 2022, and a further 'interim' cap for 2023 while the H7 price control was being finalised.⁵
12. The Decision now the subject of this appeal was eventually published on 8 March 2023. Unusually, the price control in part applies retrospectively, back to the beginning of 2022; the H7 process, which took more than five years, was thus so delayed that a quarter of the price control period had already elapsed at the publication of the Decision.
13. Key steps in the H7 process leading up to the Decision included:
 - 13.1. In July 2020, in light of the severe impact of the Covid-19 pandemic, Heathrow made a request to the CAA for an upwards adjustment to its RAB to address the shortfall in the revenue it expected to recover in 2020 and 2021.⁶
 - 13.2. In December 2020, Heathrow provided a revised business plan⁷ ("**RBP**").
 - 13.3. In April 2021, the CAA issued a consultation on the 'Way Forward'⁸ ("**The April 2021 Way Forward Document**") which set out its initial assessment of

⁵ [Supp/57/1932], [MK/4/223], [Supp/58/2027]

⁶ [LS1/19/909]

⁷ [Supp/38/1634]

⁸ [MK1/2/86]

Heathrow's RBP and its proposed approach to the price control. At the same time, the CAA published its decision to make a limited RAB adjustment of £300 million.

- 13.4. In June 2021, Heathrow updated its revised business plan⁹ ("**RBP Update 1**").
- 13.5. In October 2021, the CAA issued its Initial Proposals for the H7 price control, to which Heathrow responded in December 2021.
- 13.6. In June 2022, the CAA's Final Proposals were published, to which Heathrow responded in August 2022.
- 13.7. In December 2022, Heathrow provided a further RBP update¹⁰ ("**RBP Update 4**").

B(2) Context of the appeal

14. This appeal has to be seen in the broader context of Heathrow's development. This context is set out in the statement of Mr John Holland-Kaye¹¹, Heathrow's Chief Executive Officer, which Heathrow requests the CMA Group read. In summary:

- 14.1. Heathrow used to be a poorly performing airport. In 2009, it was one of the worst-rated airports globally for service; in 2011, it was ranked 99th out of 146 principal global airports; in both cases based on passenger survey data. Many of Heathrow's issues at the time can be tracked back to underinvestment, which was driven over many years by a desire to keep down prices for airlines, but was ultimately to the detriment of consumers.
- 14.2. Great strides have been made over the last 15 years. The opening of Terminal 5, in 2008, was followed by the first phase of the new Terminal 2, the Queen's Terminal which opened in 2014, refurbishments to other terminals, new baggage systems, improved airfield technology, and a broad change in corporate culture to one that is now focused squarely on consumer outcomes.
- 14.3. This period has been a triumph for a stable regulatory environment that was able to attract some £11 billion of private investment to Heathrow. The results speak for

⁹ [Supp/42/1735]

¹⁰ [Supp/44/1762]

¹¹ [Core/2/164]

themselves: In 2019, Heathrow was ranked as a top 10 airport globally, and number 1 in western Europe (Skytrax World Airport Awards), while in January 2023, it was recognised as now the 2nd busiest international airport in the world.

- 14.4. Covid 19, however, had a truly devastating impact. Passenger traffic disappeared almost completely overnight and only slowly returned. Passenger volumes in 2021 were 76% below 2019 and the lowest since 1972. In the end, aeronautical revenues for the years 2020 and 2021 fell 70% short, and Heathrow suffered a loss before tax of almost £4 billion.
- 14.5. As a result, and to ensure that operations could continue, Heathrow had to take drastic action, including cutting headcount and pay, and delaying close to £1 billion in maintenance and replacement capital expenditure, effectively moving away from preventative maintenance to running assets until they fail. Other development and investment projects were also delayed.
- 14.6. It is critical that this missed investment is now caught up. It is felt today in service levels and resilience, and is needed looking forward to deliver on important improvements for passenger and cargo services: including completing the replacement of the now over 50 years old Terminal 2 luggage system, introducing new security scanners, as mandated by Government, and upgrading the cargo ‘horseshoe’, Heathrow’s 1960s designed cargo area. While work on the expansion of the airport is paused for now, this too will be a critical area of investment.
15. For all of the reasons set out in the remainder of this Notice of Appeal, and in Heathrow’s various submissions during the long regulatory process, the Decision makes all of this difficult. It calls into question Heathrow’s financeability and reduces headroom for resilience across the board. And it risks reducing the attractiveness of Heathrow to long-term investors by reneging on long-understood regulatory conventions.
16. These concerns are not academic but have very practical consequences: will business or leisure travellers arrive on time; will their luggage be there to meet them; what quality of service will they experience along the way? These are the interests of users of air transport services that the CAA has a primary duty to promote, under s.1 of the CAA 2012. With the Decision it fails to do so effectively. While airlines have a clear profit motive to provide a counterpoint in the regulatory process, it is important to remember that they are

not ‘users’ of the airport for the purposes of the CAA’s primary duty (as defined in s.69 CAA 2012).

C. RELEVANT LEGAL PRINCIPLES

C(1) CAA’s powers and statutory objectives

17. Under s. 1(1) CAA 2012 [**Auth/1/5**], the CAA's primary duty when carrying out its functions under Chapter 1 CAA 2012, including when setting price controls, is to act in a manner which will further the interests of users of air transport services regarding the range; availability; continuity; cost; and quality of airport operation services. For these purposes, a user is a person who (i) is a passenger carried by the service, or (ii) has a right in property carried by the service: see s.69 CAA 2012, and therefore does not include airlines, pilots, or other members of crew.¹² Under s. 1(2) CAA 2012, the CAA must, where appropriate, fulfil its primary duty by carrying out the functions in a manner which it considers will promote competition in the provision of airport operation services.
18. Further, in performing its duties, the CAA must have regard to the factors set out in Section 1(3) of CAA 2012, which include:
 - 18.1. the need to secure that each holder of a licence under Chapter 1 of CAA 2012 is able to finance its provision of airport operation services in the area for which the licence is granted,
 - 18.2. the need to secure that all reasonable demands for airport operation services are met,
 - 18.3. the need to promote economy and efficiency on the part of each holder of a licence under Chapter 1 of CAA 2012 in its provision of airport operation services at the airport to which the licence relates,
 - 18.4. the need to secure that each holder of a licence under Chapter 1 of CAA 2012 is able to take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport to which the licence relates, facilities used

¹² See further Explanatory Note 203 to the CAA 2012: “The definition of users of air transport services does not include airlines, pilots or other members of crew.”

or intended to be used in connection with that airport ("associated facilities") and aircraft using that airport,

- 18.5. any guidance issued to the CAA by the Secretary of State for the purposes of Chapter 1 of CAA 2012,
 - 18.6. any international obligation of the United Kingdom notified to the CAA by the Secretary of State for the purposes of Chapter 1 of CAA 2012, and
 - 18.7. the principles stated in in subsection 1(4) CAA 2012, namely that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and regulatory activities should be targeted only at cases in which action is needed.
19. Proportionality requires (i) that the objective sought to be achieved is sufficiently important to warrant intervention; (ii) that the measures designed to achieve an objective are rationally connected to it, (iii) that the intervention goes no further than is necessary to achieve the objective and (iv) that the intervention strikes a fair balance between the needs of the individual and the interests of wider society.¹³
20. Section 1(5) CAA 2012, goes on to state that if, in a particular case, the CAA considers that there is a conflict between the interests of different classes of user of air transport services, or between the interests of users of air transport services in different matters mentioned in subsection (1), its duty under subsection (1) is to carry out the functions in a manner which it considers will further such of those interests as it thinks best.

C(2) The CAA's public law duties

21. General public law also places the following duties on the CAA:

21.1. A duty of enquiry, i.e. "*the duty ... which falls upon a decision-maker to 'take reasonable steps to acquaint himself with the relevant information, in order to enable him to answer the question which he has to answer'*": see *R (Campaign*

¹³ See for example *Huang v Secretary of State for Home Department* [2007] UKHL 11 at para 19 [Auth/37/1882].

Against Arms Trade) v Secretary of State for International Trade [2019] EWCA Civ 1020 at §58. [Auth/41/1,692]

- 21.2. The CAA must have regard to not only to the considerations specifically required in the CAA 2012, but also any considerations that are obviously material to its decision: see *re Findlay* [1985] 1 AC 318 HL per Lord Scarman at 333-334. It must also disregard irrelevant considerations: see *Associated Provincial Picture Houses Ltd v Wednesbury Corp* [1948] 1 KB 223, CA at 228 per Lord Greene MR. [Auth/29/1,317]
- 21.3. The CAA may not delegate powers or duties that are conferred on it by statute. There is a general presumption against delegation of powers or duties that are conferred by statute; see *Vine v National Dock Labour Board* [1957] AC 488, p512 (Lord Somervell) [Auth/30/1,348]. The CAA 2012 gives no such authority to the CAA to delegate its decisions to third parties.
- 21.4. The CAA must respect any legitimate expectations which it has engendered, unless there is the overriding interest justifying the change of policy outweighs the requirements of fairness: see *R v North and East Devon Health Authority, ex p. Coughlan* [2001] QB 213 at paragraph 58. [Auth/36/1,539]
- 21.5. The CAA is subject to the general public law requirement that its decisions be based on evidence, and a duty to have regard to all evidence that is potentially probative on the issues before it: see *R v Deputy Industrial Injuries Commissioner, ex p Moore* [1965] 1 QB 456, CA at 488 per Diplock LJ. [Auth/31/1,382]
22. Furthermore, the application of a price control to an undertaking engages its rights under the Human Rights Act 1998, and specifically the right to property which is a qualified right protected by Article 1, first protocol (“A1P1”). A1P1 applies here in that the price control amounts to a control on the use of Heathrow’s assets.¹⁴ Further if the price control is constructed such that it does not permit the undertaking to recover its costs, it falls within the intrusive second category set out by the ECtHR in

¹⁴ See, for example, in the context of rent control, *R&L, SRO and others v Czech Republic, Applications nos. 37926/05 etc*), Judgment of 3 July 2014 at paragraph 98-109. [Auth/40/1914-16]

Sporrong and Lonnroth v Sweden (1982) 5 EHRR 35, ECtHR, [Auth/32/1685] namely the “deprivation of possessions”. Measures which *prima facie* breach A1P1 may in principle be justified by considerations of the general interest, provided that the measure is proportionate. This, in turn, requires a “fair balance” to be struck between the policy goal and the interference: see *Sporrong* at paragraphs 69 and 73. However, the deprivation of possessions is only in exceptional cases considered to be proportionate in the absence of appropriate compensation: see *James v United Kingdom* (1986) 8 EHRR 123, ECtHR, at para 54. [Auth/34/1,461]

C(3) Appeals and Standard of Review

23. The holder of an existing airport operation licence may apply to the CMA for permission to appeal under s.25 CAA 2012 [Auth/1/27]. against modification of the conditions in that licence.¹⁵ Permission may only be refused if the appeal is trivial or vexatious, does not have a reasonable prospect of success or concerns matters remitted to the CAA following an earlier appeal and raises grounds which were considered or could have been raised in that earlier appeal: s.25(5)-(6) CAA 2012.
24. Under s.26 CAA 2012, the CMA may allow an appeal under section 25 CAA 2012 only when it is satisfied that the decision appealed against was wrong on one or more of the following grounds:
 - 24.1. that the decision was based on an error of fact;
 - 24.2. that the decision was wrong in law; and
 - 24.3. that an error was made in the exercise of a discretion.
25. Errors of law do not allow for any margin of appreciation or “discretion” on appeal:

“in the context of challenges relying on an alleged error of law, ... there [is] no role for ‘regulatory judgement or discretion on the question of what is the correct construction of legislation’ and also that ‘on that question, the

¹⁵ Appeals may also be brought by a provider of air transport services whose interests are materially affected by the decision.

*concept of reasonable judgement, as embodied in the Wednesbury test, has no part to play”.*¹⁶

26. The same is true for findings of fact:

*“the [appeals body] has a clear jurisdiction in respect of factual errors, and we will exercise that jurisdiction where we conclude that GEMA has based its decision on a plain error of fact”.*¹⁷

27. Errors in the exercise of discretion do allow some room for judgment; but that room is not, by any means, unbounded. For example, the CMA found that whilst expert regulators should be afforded a margin of appreciation, it is not unbounded and depends on whether the error alleged is:

27.1. merely alleging that the regulators weighting of factors or other exercise of judgement is wrong;¹⁸ or

27.2. exercising discretion when making adjustments to costs, in which case the CMA has found that there has to be:

*“a limit to the discretion of regulators to make adjustments to the costs assumed in setting the price control where the consultation process has failed to demonstrate evidence in support of those adjustments. The exercise of regulatory discretion remains bounded and subject to legal principles”*¹⁹

28. There are numerous examples of decisions which fall within the scope of regulatory discretion but where the bounds of that discretion have been breached. Most typically – though not always – these are decisions where numbers are involved. So, for example, Ofcom was found to have erred in the exercise of its judgement in settling forecast volumes for BT’s local loop unbundling price control (analogous to forecast

¹⁶ ELMA para 3.70, [Auth/15/960] referring to the position in SSE Generation Limited v GEMA and National Grid Electricity System Operator Limited and Centrica plc/British Gas Trading Limited, Decision, 30 March 2021 [Auth/18/1354], at para 5.17.

¹⁷ ELMA para 3.69, citing E.ON at para 5.16; [Auth/15/959] quoting the dicta of the Court of Appeal to this effect in *T-Mobile v Ofcom* [2008] EWCA Civ 1373 [Auth/38/1879].

¹⁸ CMA: RII02 ELMA Final Determination, 28 October 2021, paras 3.65–3.68 [Auth/15/959] which referred to *Virgin Media Limited v Ofcom* [2020] CAT 5 at para 57 [Auth/42/2030] and SONI at para 3.35.[Auth/11/554]

¹⁹ CMA: Northern Powergrid v the Gas and Electricity Markets Authority Final determination, 29 September 2015, para 4.142. [Auth/7/432]

passenger volumes in this price control).²⁰

29. Where alternative approaches are possible, the CMA is more likely to find an error where “*some alternatives clearly had greater merit than the solution chosen*” by the regulator, see *Electricity Licence Modification Appeals*, Decision of 28 October 2021 (“*ELMA Decision*”) at paragraph 3.43. The CMA may also find an error in the assessment of evidence “*if the Decision is based on unreliable data or fails to take account of the relevant evidence*”, see *ELMA Decision* paragraph 3.47 [Core/15/954]
30. The CMA has generally adopted the approach that, even where an error of fact, law or discretion is identified, it will only interfere with the decision if it is satisfied that the error is material. Relevant factors in determining the materiality of an error include the impact of the error on the overall price control, whether the cost of addressing the error would be disproportionate to the value of the error, whether the error is likely to have an effect on future price controls, and whether the error relates to a matter of economic or regulatory principle. In appropriate cases, an aggregation of immaterial errors may amount to a material error. See *ELMA Decision* at paragraphs 3.89-3.97 [Core/15/965].
31. Pursuant to paragraph 23(3) of Schedule 2 CAA 2012, in hearing the appeal, the CMA may not have regard to any matter, information or evidence raised or provided by a person other than the CAA²¹ if it was not considered by the CAA in making the decision that is the subject of the application or appeal, unless the CMA considers that—(a) the person or a relevant connected person could not reasonably have raised the matter with the CAA, or provided the information or evidence to the CAA, during the period in which the CAA was making that decision, and (b) the matter, information or evidence is likely to have an important effect on the outcome of the application or appeal, either by itself or taken together with other matters, information or evidence.

²⁰ *TalkTalk Telecom Group plc and British Sky Broadcasting Limited v Ofcom* [2013] CAT 8; LLU and WLR appeals, 2013 [Auth/39/1891], Competition Commission Case 1193/3/3/12 [Auth/39/1891]; note that this should not be taken to imply that there cannot be errors of fact, including precedent fact, in volume decisions.

²¹ The CAA is subject to parallel restrictions on the matters, information and evidence that it may raise or provide under paragraph 23(2) Schedule 2 CAA 2012. [Auth/1/120].

32. In accordance with section 30(2) CAA 2012 when deciding an application for permission to appeal under section 25 CAA 2012 and in determining the appeal itself and in exercising its powers on disposal of the appeal, the CMA must have regard to the duties imposed on the CAA by section 1 CAA 2012.

D. GROUND 1: COVID-RELATED RAB ADJUSTMENT

D(1) Introduction to the RAB Adjustment Ground

33. For the reasons set out below, the CAA has erred in law and/or in the exercise of its discretion, in failing to make a proper adjustment to Heathrow's Regulatory Asset Base ("**RAB**") in order to redress the catastrophic shortfall in passenger numbers and revenue resulting from the imposition of government restrictions in response to the Covid-19 pandemic ("**Covid-19 restrictions**").
34. The terms of the CAA's previous price control decisions make it clear that investors were not expected to bear this type of catastrophic risk. Failing to respect those expectations denies Heathrow a fair opportunity to recover its invested capital and a return on that capital, and undermines confidence in the regulatory scheme.

The Impact of Covid restrictions on Heathrow

35. Following the imposition of Covid-19 restrictions, Heathrow experienced an immediate and almost total collapse in passenger numbers. In Q2 of 2020, passenger volumes were approximately 4% of those in the equivalent quarter of 2019.²² Across the whole of the first year of pandemic restrictions (from April 2020 to March 2021), passenger volumes were only 12 per cent of those observed in the preceding year (between April 2019 and March 2020).²³ Passenger volumes in 2020 were the lowest since 1975. In 2021 they were even lower, and the lowest since 1972.²⁴
36. Since Heathrow is subject to single till price regulation which caps the revenue it can earn on a per passenger basis, and since there was no ex ante provision in the price

²² 1st Cuchra, KPMG report paragraph 135 [**Core/8/392**].

²³ 1st Cuchra, KPMG report paragraph 136. [**Core/8/392**] The UK went into lockdown on 23 March 2020. Even across the whole of 2020 (which included unaffected the relatively unaffected months of January-March) passenger numbers were 72.7% below 2019 and the lowest levels since 1975: see 1st Squire paragraph 3.2 [**Core/4/230**].

²⁴ 1st Squire paragraph 3.2. [**Core/4/230**].

control for this type of collapse in passenger numbers, the immediate impact was that Heathrow's revenue likewise collapsed, virtually overnight, for a prolonged period and for reasons entirely outside of its control. Across both 2020 and 2021 (averaged together), HAL's revenue fell by 61% compared to 2019.²⁵ At the time the CAA acknowledged that the impact on Heathrow's passenger demand and revenues was "severe and unprecedented".²⁶ Despite draconian measures, it was impossible to cut costs to the same extent whilst keeping the airport open, and HAL incurred losses of around £4 billion across 2020 and 2021, equating to around 22% of its RAB value.²⁷

The need for a RAB Adjustment and Heathrow's request

37. As further explained below, the scale of this demand and revenue shock lay wholly outside the risks allocated to Heathrow under the regulatory settlement and required a response. Specifically, the CAA had made clear in the Q6 price control (and previous price controls), that Heathrow could request the CAA to "revisit the price control if key assumptions, such as traffic, are significantly worse than the forecast".²⁸ In line with that indication, in July 2020, HAL requested that the CAA make an adjustment to the value of the RAB²⁹ to reflect the severe and unforeseen impact of Covid-19 restrictions on its business (referred to below as a "**Covid-Related RAB Adjustment**").
38. Heathrow's request in July 2020 was for a RAB adjustment consisting of an immediate depreciation holiday and a subsequent adjustment based on a revenue-risk sharing arrangement which it estimated would likely be c.£1.7 billion. In March 2021, in the light of further information as to the severity and duration of the pandemic and

²⁵ 1st Cuchra, KPMG report paragraph 156. [Core/8/398].

²⁶ CAP 1966, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustments*, 9 October 2020 at ¶2. [LS1/26/961-996].

²⁷ 1st Cuchra, KPMG report paragraph 142 [Core/8/394].

²⁸ CAA CAP1151: [Q6 Notice granting the licence](#), 10 February 2014, paragraph I29 [LS1/12/767-768].

²⁹ The RAB is a component of the price control which reflects the value of the investments that HAL has made in the regulated business: normally, investments are added to the RAB when they are made, and removed from the RAB progressively through the process of depreciation. The function of the RAB as a regulatory commitment device and the reasons why it is the appropriate vehicle for an adjustment to reflect the impact of Covid-related restrictions are addressed further below at paragraphs 92 - 95.

as to the CAA’s proposals, Heathrow submitted an amended request based on a traffic risk-sharing arrangement which it estimated at around £2.6 billion.

The CAA’s decisions

39. The CAA’s response to that request was confused and inadequate.

39.1. Whilst the CAA accepted that an adjustment should be made to the price control to reflect the fact that an unanticipated risk had eventuated, the scale of its intervention was grossly insufficient. In the April 2021 Covid Statement³⁰ the CAA implemented a RAB adjustment of only £300 million (“**the 2021 RAB Adjustment**”). This was stated to be a “targeted and focused RAB adjustment” in order to (a) incentivise additional investment in 2021 and (b) to secure that an efficiently financed company could finance its licenced activities at Heathrow. No other aims were identified. The CAA stated that it would consider “*the wider issues HAL has raised on issues such as regulatory depreciation and the cost of capital at the H7 price control review*”.³¹

39.2. Subsequently in the Decision, the CAA has refused to make any further adjustment to the H7 opening RAB. Importantly, in the Decision, the CAA has not even considered whether the 2021 RAB adjustment was sufficient to address the actual problem which formed the basis for Heathrow’s request, namely the crystallisation of a risk that had not been allocated to Heathrow under the regulatory settlement, in the form of a massive shortfall in passenger numbers and revenue due to Covid-19 restrictions.

The errors in the Decision

40. The CAA has erred in law and/or in the exercise of its discretion, as follows:

³⁰ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid 19 related RAB adjustment*, 4 May 2021. [LS1/48/1379] Note that the 4 May date reflects that this document was updated on that day; it was originally issued in April 2021.

³¹ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021 at paragraphs 4-5. [LS1/48/1385]

- 40.1. First, in refusing to make a RAB adjustment calibrated to redress the catastrophic shortfall in passenger numbers and hence revenue fails to respect the terms of the previous regulatory settlement and hence reasonable investor expectations as to the allocation of risk in the current regulatory settlement. The terms of previous price control decisions make clear that such catastrophic risk was not allocated to investors under the price control and that investors were not remunerated under the price control for bearing catastrophic risk. Failing to respect those expectations denies Heathrow a fair opportunity to recover its invested capital and a return on that capital. Moreover, the CAA's failure to act appropriately to fulfil investor expectations in this instance undermines confidence in the regulatory scheme more generally. As such it is liable to drive up the cost of capital and is a risk to financeability.
- 40.2. Secondly, and in any event, the CAA erred in failing to make a RAB Adjustment calibrated to compensate for depreciation of the RAB during the pandemic. The nature of the RAB is that it is intended to secure that investors receive the return of efficiently invested capital. In circumstances where Covid-19 restrictions prevented Heathrow from having a fair opportunity to recover depreciation incurred during the pandemic, and given that the terms of previous price control decisions make clear that catastrophic risk was not allocated to investors under the price control, the CAA should have taken action to uphold the integrity of the RAB.
41. In making these errors, the CAA has in each case acted contrary to the CAA's statutory objectives of promoting the interests of current and future consumers, and failed to have any regard, alternatively proper regard, to the principles of proportionality and consistency and the need to secure that each holder of a licence under this Chapter is able to finance its provision of airport operation services in the area for which the licence is granted. As John Holland-Kaye, Heathrow's Chief Executive Officer, explains in his evidence, Heathrow's shareholders "*cannot understand why the CAA has changed the rules of the game after they have invested*

in good faith” and this will make it harder to obtain further equity investment and so undermine improvements to passenger and cargo services and airport expansion.³²

The Structure of this Ground of Appeal

42. The structure of the remainder of this ground of appeal is as follows:
 - 42.1. Sections D(2) and D(3) below set out the essential factual background, including the impact of Covid-19 restrictions on Heathrow, Heathrow’s requests and the CAA’s decisions;
 - 42.2. Section D(4) explains in detail the CAA’s first error (i.e. the failure to respect the allocation of risk under the previous price control);
 - 42.3. Section D(5) explains in detail the CAA’s second error (i.e. the failure to ensure HAL would at least recover depreciation of the RAB incurred during the pandemic);
 - 42.4. Section D(6) addresses the CAA’s responsive arguments in the H7 Final Proposals and the Decision;
 - 42.5. Section D(7) addresses the remedies required and the quantum of the necessary RAB Adjustment on the assumption that the CMA accepts either Error 1 or Error 2.

D(2) Background to the RAB Adjustment Ground

i. Impact of Covid-19 on HAL

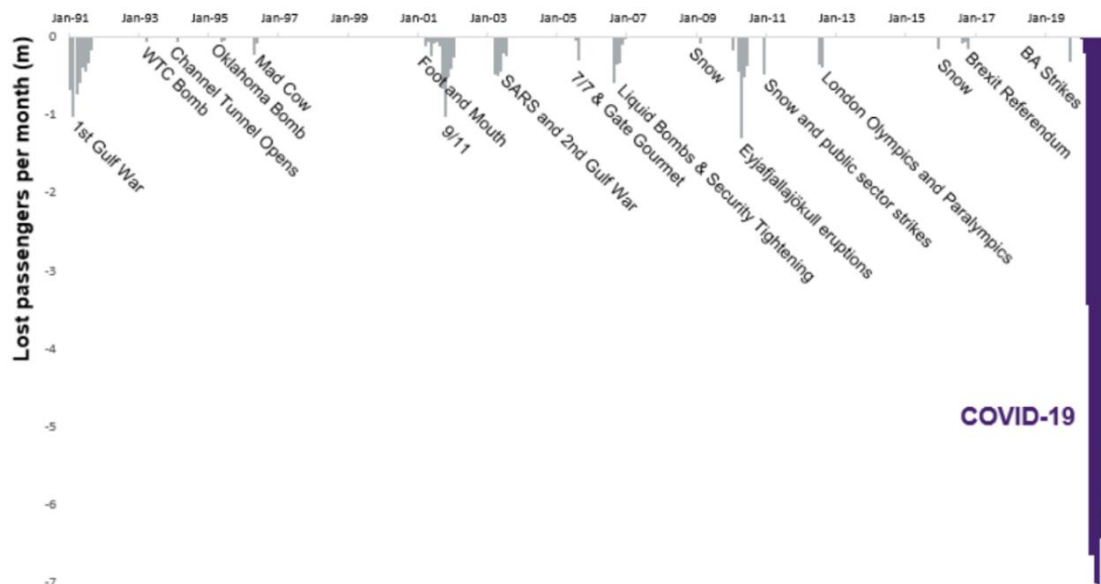
43. Following the onset of the Covid-19 pandemic, HAL experienced a collapse in air traffic and passenger numbers: in the first year of pandemic restrictions (from April 2020 to March 2021), passenger volumes were only 12 per cent of those observed in the preceding year (between April 2019 and March 2020).³³

³² 1st Holland-Kaye, paragraph 6.13. [**Core/2/172**].

³³ 1st Cuchra, KPMG report [Section 4.1]. [**Core/8/392**] The UK went into lockdown on 23 March 2020. Even across the whole of 2020 (which included the relatively unaffected months of January-March) passenger numbers were 72.7% below 2019 and the lowest levels since 1975: see 1st Squire paragraph 3.2. [**Core/4/231**]

44. The scale of this impact was vastly beyond previous demand shocks to air traffic, such as those from 9/11 or the volcanic ash cloud.³⁴ Figure 1 below compares the impact of various demand shocks across the period from 1990 to 2021

Figure 1: Passenger impact of historical shock events³⁵



45. As John Holland-Kaye explains, Heathrow took “drastic action” to mitigate the impacts of Covid-19 so far as it could, including by closing both Terminals 3 and 4 and one of the two runways, stopping all non-essential costs, renegotiating supplier contracts, cutting management staff by a third and front-line staff by a quarter, imposing company-wide pay reductions of 10-15%, cancelling bonuses and using the Government furlough scheme.³⁶

46. However, the operation of an airport such as Heathrow by its nature involves high fixed costs and high operational gearing,³⁷ and Heathrow could not reduce costs

³⁴ See 1st Holland-Kaye, paragraph 6.6. [Core/2/171]

³⁵ See 1st Squire, paragraph 3.12. [Core/4/233] The graph shows the impact of demand shocks on monthly passenger volumes compared to expected monthly passenger volumes in line with the methodology used to calculate the passenger shock factor

³⁶ See 1st Holland-Kaye paragraph 6.3; [Core/2/170]. 1st Squire paragraph 3.7. [Core/4/232]

³⁷ 1st Cuchra, KPMG report paragraphs 70-73 and 136. [Core/8/377] [Core/8/392]

further whilst maintaining the capability to serve essential passenger flights and key cargo flights (such as deliveries of PPE).³⁸

47. In consequence of the loss of passengers and revenue, Heathrow became severely loss-making virtually overnight and for a prolonged period, for reasons entirely outside of its control. Across both 2020 and 2021 (averaged together), HAL's revenue fell by 61% compared to 2019.³⁹ It incurred losses of around £4 billion across 2020 and 2021, which equates to around 22% of its RAB value.⁴⁰
48. Heathrow was forced to obtain both debt and equity injections in order to ensure it could continue to operate and that its debt could maintain an acceptable credit rating. It drew down £2.1 billion of previously signed debt in 2020, and raised a further £1.6 billion of new debt in 2021. It also secured a further cash injection from its corporate group of £600 million: see 1st Squire paragraph 3.10. Throughout 2020 Heathrow also received approval from creditors to waive covenants for 2020 and in some cases 2021 to avoid breaches of its loan facilities.⁴¹ However, the consequence for Heathrow was that its credit has been downgraded and for a long time it was on the edge of losing investment grade credit rating.⁴²
49. At the time the CAA acknowledged that the impact on Heathrow's passenger demand and revenues was "*severe and unprecedented*",⁴³ and stated that "*it is very clear that the impact of the covid-19 pandemic has created exceptional circumstances*".⁴⁴
50. It is respectfully submitted that for airports such as Heathrow, the pandemic and the Covid-19 restrictions represented a truly catastrophic event.

³⁸ 1st Squire paragraph 3.7 [Core/4/232]

³⁹ 1st Cuchra, KPMG report paragraph 156 Table 4. [Core/8/398]

⁴⁰ 1st Cuchra, KPMG report paragraph 142 [Core/8/394]

⁴¹ 1st Squire paragraph 3.11 [Core/4/233]

⁴² 1st Holland-Kaye paragraph 6.4 [Core/2/170]

⁴³ CAP1966 at para 2. [LS1/26/966]

⁴⁴ CAP1966 at para 13. [LS1/26/969]

ii. HAL's requests for a RAB adjustment

51. Discussion between Heathrow and the CAA over a RAB adjustment has continued over an extended period, since the start of the pandemic in March 2020. Moreover, for much of that period, the eventual scale of the impact on passenger numbers, and the associated shortfall in revenue against that expected under the Q6 framework, remained uncertain. Moreover, during that time further information became available as to the risk-sharing arrangements that the CAA considered to be appropriate on a forward-looking basis. In those circumstances, HAL's specific proposals went through several iterations. For completeness those are described below. However, the CMA should not lose sight of the essential point that each of Heathrow's requests sought that the CAA should intervene to (a) share the risk of the catastrophic shortfall in passengers and revenue with airlines and passengers over the longer term; and (b) as a minimum, ensure that Heathrow was able to recover its efficiently invested capital agreed with airlines, that would otherwise be depreciated during the pandemic.

Heathrow's initial request

52. In July 2020, HAL formally⁴⁵ requested that the CAA make an adjustment to the value of the RAB as a result of to the severe impact of the Covid-19 restrictions on its business: see 1st Squire paragraphs 5.15-5.20. [Core/4/248]

53. Heathrow's initial request was for the adjustment to be implemented in two stages.⁴⁶

53.1. an immediate depreciation holiday in 2020 and 2021 which would defer £1.6bn of depreciation;

53.2. a subsequent "true up" which would take account of the actual impact of Covid-19, calculated applying a risk-sharing mechanism that the CAA was proposing for the future (i.e. what became the TRS in the CAA's Final Proposals).

54. The specific risk-sharing mechanism that Heathrow proposed for the true up was a revenue risk-sharing arrangement with an 8% threshold within which Heathrow took

⁴⁵ Earlier informal contacts in the first months of the pandemic are detailed at 1st Squire paragraphs 5.10-5.14. [Core/4/247]

⁴⁶ See 1st Squire paragraph 5.15. [Core/4/248]

all risk, and 95% sharing of revenue loss outside that threshold. At the time, Heathrow estimated that this adjustment would equate to a RAB adjustment of c.£1.7 billion, based on its forecasts of passengers for 2020 and 2021: see 1st Squire paragraph 5.16. In the event outturn passenger numbers over 2020 and 2021 were much lower than these July 2020 forecasts.⁴⁷

55. Notably, the total amount of the proposed adjustment was significantly less than Heathrow's estimate of its likely Covid-related losses at the time, which was in the region of £2.2 billion.⁴⁸

56. Heathrow's submission explained that a RAB adjustment would be the best solution because it would allow additional revenue to be recovered over a long period, smoothing impacts on airlines and preventing short-term price rises, which might not be in the interests of consumers: see 1st Squire paragraphs 5.17-5.19. **[Core/4/248]**

The CAA's consultation process and Heathrow's subsequent requests

57. The CAA's consultation process is described at 1st Squire paragraphs 5.24-5.41. **[Core/4/250]**

58. Subsequently, as HAL developed a clearer view of the scale and duration of the impacts of the Covid-19 restrictions and of its ability to respond, it concluded that passenger numbers were going to be even lower than previously forecast, and in March 2021 HAL submitted a revised request for a Covid-related RAB adjustment of £2.6 billion, again to be based on a risk-sharing arrangement, and which was again significantly lower than Heathrow's forecast losses: see 1st Squire at paragraphs 5.39-5.40. **[Core/4/253]**

iii. The CAA's £300m RAB adjustment

59. In the April 2021 Covid Statement⁴⁹ the CAA decided to take some action in consequence of the impact of Covid-19 and agreed that adjusting the RAB was the

⁴⁷ See 1st Squire paragraphs 5.16 (passenger forecasts in July 2020 of 29.2m for 2020 and 62.8m for 2021) and paragraph 3.2 (actual passengers of 22.1m for 2020 and 19.4m for 2021). **[Core/4/248]**

⁴⁸ See CAP 1966, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 9 October 2020, at paragraph 9. **[LS1/26/967]**

⁴⁹ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021. **[LS1/48/1379]**

best way to do so. However, it wholly failed to calibrate the RAB adjustment to meet the scale of the actual problem, namely the occurrence of a previously unanticipated and catastrophic demand shock.

60. The CAA implemented what it described as a “*targeted and focused*” RAB adjustment of only £300 million.⁵⁰ It did so on the basis that this limited intervention would “*further the interests of consumers, particularly by:*

- *signalling to HAL the importance of maintaining appropriate investment and service quality levels ahead of the start of H7;*
- *providing stronger incentives and financial capacity for HAL to be proactive in planning for potentially higher than expected traffic levels from the summer of 2021; and*
- *facilitating HAL in being able to continue to access investment grade debt to finance its activities, particularly if traffic forecasts are instead lower than currently forecast.*”

61. Importantly, the CAA did not make any finding that this RAB adjustment would be sufficient to redress the catastrophic shortfall in passenger numbers (and hence revenue) for Heathrow. Rather it made the intervention which it considered was “*transparent and proportionate*” at that stage in order to (a) incentivise additional investment in 2021 and (b) to secure (in its view) that an efficiently financed company could finance its licenced activities at Heathrow.⁵¹ It explicitly stated that it would “*consider the wider issues HAL has raised on issues such as regulatory depreciation and the cost of capital at the H7 price control review*”, as well as taking action to introduce traffic or revenue risk sharing for the future.⁵²

62. The CAA chose to adjust the RAB rather than other parts of the price control, as “*the impact on HAL’s charges from 2022 will be lower than if the intervention were to be made to HAL’s allowed revenues. This is because a RAB adjustment will mean that the costs of this intervention will be recovered over several price control periods*”. It

⁵⁰ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021.at paragraphs 4-5. [LS1/48/1385]

⁵¹ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021.at paragraphs 4-5. [LS1/48/1385]

⁵² CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021 at paragraph 5. [LS1/48/1385]

thus appears to be common ground between Heathrow and the CAA that any intervention should be implemented through the RAB.

63. The CAA rejected a policy of non-intervention on the basis that “*the circumstances created by the impact of the covid-19 pandemic are unprecedented*” and because failing to intervene could create difficulties for Heathrow in financing itself and increase the cost of capital on a forward looking basis.⁵³
64. As noted above, the CAA specifically stated that a further RAB adjustment could be considered in the context of the H7 price control⁵⁴. The CAA also confirmed the following to Heathrow in correspondence:

*it is the CAA’s view that the majority of the issues raised by HAL’s request for a RAB adjustment are best dealt with as part of the “in the round” consideration of the H7 price control. As such, we consider that the appropriate forum for oversight of the CAA’s decision set out in the Response would be as part of any appeal to the CMA.*⁵⁵

65. Accordingly, the CAA agreed it was appropriate for HAL to bring any appeal in connection with the decision to make a £300 million RAB adjustment following the H7 price control Decision.

iv. The H7 Consultation Process

66. Throughout the H7 Consultation Process, Heathrow has maintained the position that the CAA should apply a further adjustment to the H7 opening RAB to take account of the impact of Covid-19 and to ensure stability and credibility of the regime and ensure the right outcomes for consumers in H7.

D(3) Overview of the decision under appeal

67. In the Decision, the CAA has concluded that the H7 opening RAB should be based on a roll-forward of the Q6 RAB, subject only to an end-of-period adjustment of £300

⁵³ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021 at paragraphs 3.11-3.12. [LS1/48/1405-1406]

⁵⁴ CAP2140, *Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment*, 4 May 2021 at paragraph C15 [LS1/48/1438]

⁵⁵ Letter from James Wynn Evans, CAA Special Counsel, to HAL dated 11 May 2021 [LS1/50/1470-1471]

million which reflected its April 2021 Covid Statement: see Decision paragraphs 10.6, 10.22 and 10.74-10.75.

68. In fact the CAA's reasons for rejecting a further RAB adjustment are chiefly set out in the H7 Final Proposals. To a great extent the Decision simply confirms that reasoning given in the H7 Final Proposals is maintained, and responds to specific points raised by Heathrow in its response to the H7 Final Proposals. Accordingly, reference is made both to the H7 Final Proposals and the Decision to give a full account of the CAA's position.
69. In its Final Proposals and Decision the CAA rejected the possibility of any further RAB Adjustment. It has done so ostensibly on the basis of considering its statutory duties. In particular, the CAA asserts that it had not created any expectations that it would intervene in the event of an exceptional demand shock.
70. The CAA similarly rejected arguments by airlines that the CAA should reverse the £300 million RAB Adjustment. That reasoning is not relevant for the purposes of this appeal.
71. Heathrow sets out below two fundamental errors which vitiate the CAA's decision, namely:
 - 71.1. First, in refusing to make a RAB adjustment calibrated to redress the catastrophic shortfall in passengers and hence revenue, the CAA failed to respect reasonable investor expectations as to the allocation of risk in the current regulatory settlement. The terms of previous price control decisions make clear that such catastrophic risk was not allocated to investors under the price control and that investors were not remunerated under the price control for bearing catastrophic risk. Failing to respect those expectations denies Heathrow a fair opportunity to recover its invested capital and a return on that capital. Moreover, the CAA's failure to act appropriately to fulfil investor expectations in this instance undermines confidence in the regulatory scheme

more generally. As such it is liable to drive up the cost of capital is a risk to financeability.⁵⁶

71.2. Secondly, and in any event, the CAA erred in failing to make a RAB Adjustment calibrated to compensate for depreciation of the RAB during the pandemic. The nature of the RAB is that it is intended to secure that investors receive the return of the capital invested efficiently. In circumstances where government restrictions prevented Heathrow from having a fair opportunity to recover depreciation incurred during the pandemic, and given that the terms of previous price control decisions make clear that catastrophic risk was not allocated to investors under the price control, the CAA should have taken action to uphold the integrity of the RAB.

72. The Decision and H7 Final Proposals contain a number of counter-arguments presented by the CAA on particular points of detail. These are addressed at section D(6) below.

D(4) Error 1: CAA's RAB Adjustment failed to respect the allocation of risks under the existing regulatory settlement

i. Introduction

73. For the reasons set out below, the impact of Covid-19 fell far outside the risks which were allocated to investors under the Q6 settlement. The CAA was required to intervene in order to fulfil the risk allocation implied and understood under the Q6 settlement.

ii. The impact of Covid-19 fell outside the risks allocated to investors under the Q6 settlement

74. It is clear from a consistent line of previous regulatory statements, culminating in the Q6 settlement, that Heathrow's investors were not expected to bear the impact of catastrophic events of the scale of the Covid-19 pandemic.

56 See 1st Holland-Kaye, paragraph 6.13. [Core/2/172]

The Q4 price control

75. In its review of the Q4 price control period (from 2003 to 2008), the CC was clearly of the view that action could be taken ex post to deal with “*significant and sustained*” volume risks. Thus it rejected the suggestion that a volume term, which would limit an airport’s losses, should be included in the price control, specifically on this basis:⁵⁷

“A volume term should not be included in airport charges for Q4. In the event of any catastrophic event leading to a significant and sustained fall in volume, there is a possibility of an interim review”.

And in its discussion on the costs of capital it stated:

*“The cost of capital adequately reflects risk; we have allowed for AICC; we believe the effect of smoothing returns at Heathrow between quinquennia also provides a significant margin in Q4 in the event of major disruption (for which there is also the scope for interim review—any such disruption would also be taken into account in the next review in considering return in Q5)”⁵⁸
[emphases added]*

The Q5 price control

76. In its Final Report in September 2007 on the Q5 Price Control the CC reiterated the distinction between “business risks” (which do not require ex post intervention) and “catastrophic risks” (which do) in the following terms:⁵⁹

“We considered whether the events suggested by BAA as catastrophic risks, such as the two Gulf wars, the 11 September 2001 terrorist attacks, SARS, the 7 July 2005 bombings, the August 2006 terrorist plot, communicable diseases, natural disasters, geopolitical upheaval, and technological failures of either aircraft or airport systems were catastrophic risks or business risks. Whilst we accept that these were all significant events, we believe them to be business risks to which investors would expect an international airport to be exposed.

⁵⁷ Competition Commission, BAA plc: a report on the economic regulation of the London airports companies (Heathrow Airport Ltd, Gatwick Airport Ltd and Stansted Airport Ltd), November 2002 (Ch2 p.72) [Auth/3/328]

⁵⁸ Competition Commission, BAA plc: a report on the economic regulation of the London airports companies (Heathrow Airport Ltd, Gatwick Airport Ltd and Stansted Airport Ltd), November 2002 (Ch2 p.99) [Auth/3/335]

⁵⁹ Competition Commission, A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd), September 2007 [Auth/4/337]

*Unlike these business risks, we consider catastrophic events to be low frequency and high impact in terms of rendering an airport inoperable for a sustained period.
These events highlighted by BAA are not infrequent (four in the last five years) and not high impact (...) these events have not threatened the overall activities or viability of BAA.”*

As further set out at paragraph 80 below, the specific events which the CAA identified as “business risks” were all far smaller than the impact of Covid.

77. The CAA accepted the distinction between normal business risks and catastrophic risks in its final Q5 decision in March 2008. It identified normal drivers of traffic variability as including matters such as “*macroeconomic factors affecting consumer demand and international trade, aviation trends*”.⁶⁰ By contrast it accepted that catastrophic risks could warrant reopening the price control, stating that it:⁶¹

“...would not expect divergences between outturn and projected costs to justify an interim review of the Price Control, save in the case of a truly catastrophic event that rendered much of Heathrow or Gatwick unusable for a significant period of time.”

The Q6 price control

78. It is clear that the Q6 settlement embodied a view that, whilst HAL was expected to bear a certain, expected, level of volume risk, action could and should be taken if traffic was significantly at odds with the forecast. Moreover the Q6 settlement explicitly did not contemplate demand shocks of the scale of the Covid-19 pandemic:

78.1. The CAA specifically referred to the possibility for such ex-post action in its final proposals for the Q6 Price Control, stating that “*the ability of a licensing regime to revisit the Price Control if key assumptions, such as traffic, are significantly at odds with the forecast, could be a credit strength*”.⁶²

⁶⁰ CAA, *Economic Regulation of Heathrow and Gatwick Airports 2008-2013: Q5 Final Decision*, March 2008 (para 3.8 pg.28) [LS1/5/153]

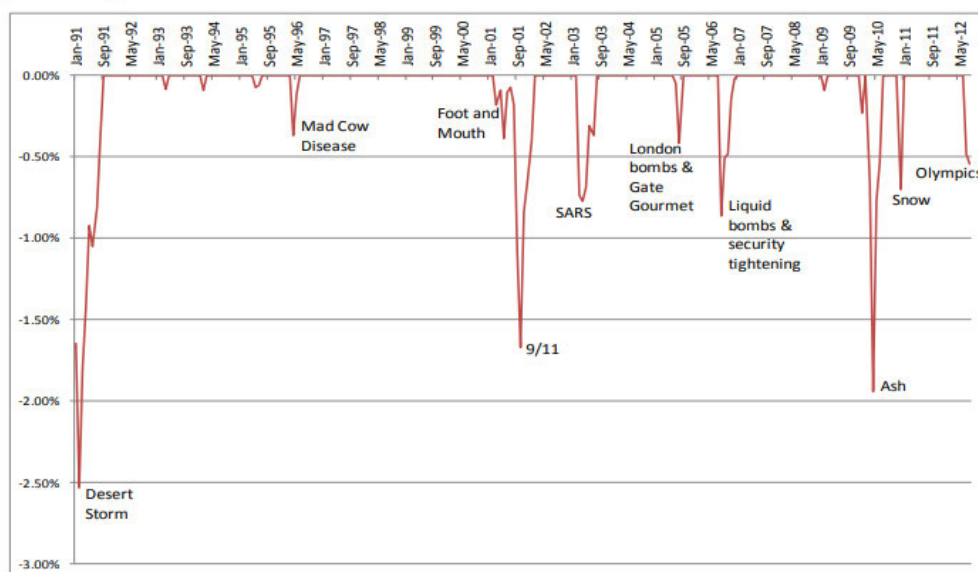
⁶¹ CAA, *Economic Regulation of Heathrow and Gatwick Airports 2008-2013: Q5 Final Decision*, March 2008 para E.70 pg.256) [LS1/5/192]

⁶² The CAA repeatedly reiterated this point: see CAP1103, *Economic regulation at Heathrow from April 2014: Q6 Final Proposals*, 2013, paragraphs 10.27 and 12.110 [LS1/7/276, 278]; and CAP1151, *Q6 Notice granting the licence*, Appendix I, paragraph I29 [LS1/12/767].

78.2. Moreover, expectations as to the risk that HAL could reasonably be expected to bear were embedded within the Q6 price control. The CAA explicitly set the Q6 price control so as to account for both (a) an “*expected level of demand shocks*” (which were to be taken into account in traffic forecasts) and (b) “*variations around this expected level*” (which were to be taken into account in the cost of capital): see Q6 Cost of Capital Appendix B⁶³ at paragraphs B13 and B18. The CAA specifically assessed “*expected magnitude of shocks going forward*” on the basis of the data on historic demand shocks in the period from 1991 to 2012: see Q6 Cost of Capital Appendix paragraph B23.

78.3. The CAA set out the magnitude of the historic traffic shocks it was considering in Figure B2 of the Q6 Cost of Capital Appendix:

Figure B.2: Heathrow traffic shocks 1991–2012, effect on annual passengers



Source: HAL

79. The CAA explicitly estimated the “average shock” to passenger numbers across these historic events to be in the region of 1.2% per annum.⁶⁴ The CAA subsequently stated that the shock factor was calibrated to “*to match the average annual loss of volumes that HAL experienced over the period from 1991 to 2012 as a result of one-off events*

⁶³ CAP1151 *Estimating the cost of capital: technical appendix for the economic regulation of Heathrow and Gatwick from April 2014: Notices granting the licences* February 2014. [LS1/12/471-821]

⁶⁴ CAP1151 “Economic regulation at Heathrow from April 2014: Notice granting the licence” February 2014 Appendix B at para B52. [LS1/12/665-666]

such as the Gulf War, the 9/11 terrorism attacks, SARS and volcanic ash.”⁶⁵ This was the level of the average demand shock incorporated in traffic forecasts, with “*variations around this expected level*” to be dealt with through the cost of capital.⁶⁶

80. “*Variations around this expected level*” cannot be understood to include events of the scale of Covid. A 96% fall in passenger numbers cannot be described as a “*variation*” around the “*expected level*” without stretching language to breaking point. This would also be inconsistent with how the WACC is set in general, and was set specifically in the Q6 price control:

80.1. The CAA has consistently used the CAPM approach used to set the asset beta (which the CAA describes as representing “*the underlying systematic risk exposure of the company’s assets*”) ⁶⁷ and hence the WACC. That approach is designed to take account of an expected degree of variation around the mean in responses to systematic risk around an expected rate of return, and assumes that those risks are symmetric. That is: it assumes that if, for example, the relevant asset is particularly responsive to risk on the downside, it will also be responsive on the upside: see 1st Cuchra, KPMG report at paragraphs 204-216. **[Core/8/410-412]**

80.2. This approach is completely incapable of taking account of the kind of volume risk to which Heathrow was exposed as a result of the Covid-19 restrictions. Heathrow experienced an immediate 96% fall in passenger numbers, and a sustained fall of 73% across the whole of 2020 and 76% across the whole of 2021: see 1st Cuchra, KPMG report at paragraphs 135 – 138 **[Core/8/393]**. Heathrow is subject to a statutory cap on the number of flights which can be operated, and is (in normal times) an exceptionally busy airport operating on

⁶⁵ Civil Aviation Authority (2021), *Economic regulation of Heathrow Airport Limited: H7 Initial Proposals Section 2: Financial Issues*, paragraph 7.5 **[Supp/26/1211]**

⁶⁶ CAP1151 “*Economic regulation at Heathrow from April 2014: Notice granting the licence*” February 2014 at paragraph B13. **[LS1/12/653]**

⁶⁷ The CAA states that “*The asset beta of a company is equivalent to its equity beta if it had no debt outstanding and represents the underlying systematic risk exposure of the company’s assets*” and that “*the equity beta represents the extent to which a company’s stock is correlated with the market index*”: see CAP2524 “*Economic regulation of Heathrow Airport Limited: H7 Final Decision*” 8 March 2023, at paragraphs 9.43-9.44. **[Supp/4/157]**

average at over 99% of the total allowed number of air transport movements.⁶⁸

It is physically and legally impossible for Heathrow to carry 73-76% more passengers than normal across a two year period. Hence it is clear that the risk to which Heathrow was exposed was heavily asymmetric and not a matter which is automatically included in the WACC as set via CAPM.

80.3. Accordingly, Heathrow will not have been remunerated for such asymmetric risk, unless the WACC included an explicit allowance to cover it. However, there was no such explicit allowance included in the Q6 WACC.

80.4. Further, as set out above, the Q4 and Q5 price controls had made clear that investors did not bear catastrophic risk, and it follows that under those price controls, investors were not remunerated in the asset beta for bearing catastrophic risk. In the Q6 framework, the CAA continued with the same asset beta assumption used for Q5,⁶⁹ and did not make any adjustment to change the allocation of catastrophic risk.

80.5. The point that the CAA clearly did not, in setting the Q6 framework, allocate all traffic risk to Heathrow in all circumstances is reinforced by the statement in the Q6 Notice Granting the licence⁷⁰ at paragraph I29 that “*the ability of a licensing regime to revisit the price control if key assumptions, such as traffic, are significantly worse than the forecast, could be credit strength*”.

80.6. Further it is clear that there was no room in the WACC as set in the Q6 price control for any implicit allowance which could accommodate the impact of events such as the Covid-19 pandemic. The CAA specifically compared the WACC it proposed to use for Heathrow to the WACC assumed by other regulated companies. Although it concluded that Heathrow’s WACC should be higher specifically because “*airport operators are exposed to demand risk in a way that water and energy are not*”,⁷¹ the level of the demand risk

⁶⁸ 1st Squire paragraph 3.1. [Core/4/166]

⁶⁹ CAP 1155 at paragraph 6.44. [LS1/13/864]

⁷⁰ CAP1151 “*Economic regulation at Heathrow from April 2014: Notice granting the licence*” February 2014 [LS1/12/471]

⁷¹ CAP1140 at para 6.28 [LS1/11/451].

premium is telling. The CAA itself calculated that the asset beta for HAL was only 14% higher than that for National Grid Electricity Transmission (NGET) (i.e. 0.50 compared to 0.44) and that this equated to a WACC which was 40 basis points (0.4%) higher.⁷² By contrast KPMG calculates that the premium on this WACC which would have been required to compensate for exposure to a risks of the scale of the Covid-19 pandemic (aside from any other demand risks) would be between 0.71% (if assumed to be a 1-in-50 year probability) and 1.52% (if assumed to be a 1-in-20 year probability): see 1st Cuchra, KPMG report at paragraph 222 - 223 and Table 7 [**Core/8/413**]

81. Heathrow submits that in Q6 the CAA rolled over the same allocation of catastrophic risk as had been applied in Q4 and Q5. This risk was not allocated *ex ante* to investors and remunerated through the price control, rather the regulator would step in in such circumstances.

The impact of Covid-19 was catastrophic and fell outside the range of risks that investors had adopted

82. It is clear that the impact of Covid-19 vastly exceeded either the average or the range of shocks that the CAA had regard to in setting the Q6 price control. This is evident from comparing the CAA's chart of traffic shocks from 1991-2012 to Figure 1 above which shows the same chronology of traffic shocks from 1991 onwards, but includes the Covid-19 pandemic.
83. Further, as already noted, HAL's passenger numbers were 73% below forecast for 2020 and 76% below forecast for 2021. That vastly exceeds any reasonable minimum threshold for intervention.
84. As succinctly stated by Chris Bolt, a former economic regulator who worked on developing the RAB concept at Ofwat, and was subsequently (inter alia) Rail Regulator and Chairman of the Office of Rail Regulation and a member of the Expert Group on Airport Regulation:⁷³

In the case of HAL, however, even if the cost of capital is assumed to allow for significant one-off events such as interruptions to operations following

⁷² CAP1115 at para 7.76 [**Supp/45/1811-12**]

⁷³ 1st Bolt, paragraph 5.5 [**Core/7/346**]

9/11 and the Icelandic ash cloud, the impact of Covid-related restrictions was an order of magnitude or more greater. It was clearly not foreseen or foreseeable. I am not aware of any statement by the MMC or CAA at the time the RAB for HAL was established that an allowance was made in the cost of capital to address such extreme situations. Accordingly, I consider that the principle of regulatory consistency would indicate that a specific further adjustment should be made to the RAB at the forthcoming periodic review, on the basis that the targeted adjustment already made is insufficient.

85. In January 2022, the Thessaloniki Forum of Airport Charges regulators⁷⁴ adopted a paper setting out recommendations on legislation for airport charges in times of crisis.

85.1. That paper clearly set out a view that the risk of the Covid-19 pandemic was to be regarded as an exceptional risk, rather than an ordinary business risk which is compensated through the ordinary operation of charge controls:

4.10 Shareholders of price regulated undertakings receive a risk compensation for their price regulated activities in the form a regulatory WACC. For this reason, it is in principle appropriate to transfer the demand side risk to the shareholders.³² As a result of these general principles demand side risk should according to fundamental economic regulatory principles not be transferred to users by increasing charges.

4.11 It may be said that economic regulation has only been designed for normal economic cycles in which the economic profits and losses broadly cancel out over the medium term. Situations like the Covid-19 pandemic cause disruptive financial losses in the airport sector and would therefore not be part of a normal business cycle, which economic regulation does not take into account. The financial losses caused by Covid-19 may be a “black swan” event. Black swans that do disrupt cost recovery may sometimes appear in some price regulated sectors. Golden swans that would dramatically increase profits do ideally not appear in properly price regulated sectors, are often to a large extent passed through to customers³³. The question is does economic price regulation compensate for black swans of this kind?

85.2. Moreover, the paper sets out a definition of exceptional circumstances warranting ex post intervention, developed from consideration of the existing definitions in the Netherlands and Spain. That definition is rooted in (a) the scale of the impact on air traffic or the regulated undertaking and (b)

⁷⁴ The Thessaloniki Forum of Airport Charges Regulators is an official EU level body composed of representatives of the national independent supervisory authorities established by the Member States according to article 11 of Directive 2009/12/EC of the European Parliament and the Council on airport charges.

consideration of whether the problem could have been foreseen, influenced or mitigated by the regulated undertaking.

6.7 The nature of a crisis cannot be predicted. Besides a pandemic, many other unforeseen situations may result in a severe crisis in the aviation sector or for individual airports (for example earthquakes, volcanic eruptions, floods or terrorist attacks). Hence it is important that any definition of exceptional circumstances is flexible and robust enough to deal with a wide range of unexpected situations. However, the definition should not be too narrow in order to maintain a certain scope of action.

6.8 For example, the Dutch legislation defines exceptional and unforeseen circumstances as follows (only applies to Schiphol Airport):

- a. The airport can't foresee the circumstances, before setting the charges and conditions.*
- b. The circumstances have a disproportionate and disruptive effect on volume, sales, costs and financial results of the aviation activities.*
- c. The circumstances cannot or to a limited extent be influenced by the airport.*
- d. The effects of the circumstances cannot or to a limited extent be mitigated by the airport.*
- e. Conservation of the existing charges cannot be expected from the airport.*

6.9 Another example could be the Spanish legislation, which defines as exceptional causes that may justify a modification of the Airport Regulation Document (DORA) currently in force, any causes not attributable to the Airport manager, that were unforeseeable at the time of approval of the DORA, and that have a certain and substantial effect on the financial viability of the network of airports. Thus, the Spanish law establishes as such exceptional causes, amongst others, annual reductions of more than 10% of the passenger traffic throughout the network due to natural disasters, terrorist acts or war situations.

6.10 Therefore, the Forum is of the opinion that a possible generic definition of the "exceptional circumstances" could be as follows: "Circumstances that an airport could not have reasonably foreseen or influenced causing disproportionately large variations in air traffic and/or has a large impact on the annual financial results of the regulated activities, and these effects cannot be significantly mitigated by the airport." Crises are exceptional circumstances having a negative impact, which is the scope of this paper.

86. To the extent that it is necessary to decide upon a minimum threshold for intervention, KPMG's analysis of a number of regulation precedents, including statements by the CAA and both UK and international comparators, indicate that a reasonable approach would involve significant risk sharing when traffic or revenue falls more than 10% below forecast by reference to which the price control is set: see 1st Cuchra, KPMG

report at section 5.2 [Core/8/404]. It is clear that the impact of the Covid-19 restrictions far exceeded that level (or any reasonable minimum threshold).

iii. 7581The CAA's statutory duties required intervention to fulfil the allocation of risk established under the existing price control settlement

87. To the extent that the impact of Covid-19 restrictions fell outside the risks allocated to investors under the existing price control settlement, the CAA's statutory duties required it to take effective action substantially to redress the consequent collapse in passenger numbers and revenue, save insofar as Heathrow was able to mitigate it.

88. As set out in section C above the start and end point of the CAA's statutory duties is the interests of both current and future consumers. It is clear that the interests of current and future consumers are not always served simply by taking action that directly lowers charge per passenger in the short term, without regard to the impact on prices over the long term. Under the scheme of the Act, the consumer interests require to be considered including with reference to the factors in s1(3) CAA 2012, [Auth/1/6] including specifically financeability, proportionality and consistency. These factors are not in tension with the consumer interest; rather they support it:

88.1. Inconsistent regulatory action undermines expectations and confidence in the regulatory regime. This drives up cost of capital and reduces or stops investment in capacity and quality of service, contrary to interests of future consumer.

88.2. The interests of current and future consumers require that the regulated business be financeable: if an efficient operator is not financeable under the price control, capital will not flow into the business to support investment and the consumer interest.

89. The CAA's refusal to implement a RAB adjustment which compensates Heathrow for the occurrence of a catastrophic demand shock, or at the least ensures it will achieve the return of its capital, is contrary to the requirements of financeability, proportionality and regulatory consistency, and therefore contrary to the interests of consumers.

- 89.1. It is clear from the previous regulatory statements set out above, and a consideration of the level of return granted to Heathrow under those settlements, that catastrophic risks were not allocated to Heathrow. If the CAA was correct in stating that catastrophic risk was allocated to Heathrow under the last (Q6) price control, HAL could not have been considered financeable under that price control: see 1st Cuchra, KPMG report at section 6.3. **[Core/8/424]**
- 89.2. Regulatory consistency therefore requires that the CAA should make a RAB adjustment to respect that allocation of risk. Moreover, a failure to fulfil that expectation will severely undermine investor confidence in the regulatory regime and endanger financeability: see 1st Squire paragraph 6.15 **[Core/4/262]**.
- 89.3. Moreover, proportionality requires that the action taken by the CAA should be calibrated to address the fundamental reason for intervention, namely the crystallisation of a catastrophic risk which had not been allocated to investors.
90. A RAB adjustment is therefore in the interests of current and future consumers. Honouring the regulatory contract benefits consumers (current and future) in the form of lower cost of capital, and enables and incentivises investment. By contrast, if the CAA is permitted to undermine the regulatory contract, the confidence of investors in UK regulated industries generally will be undermined with severe consequences for current and future consumers not just of airport services, but in all the other regulated sectors.

D(5) Error 2: In any event, the CAA erred in failing to make a RAB Adjustment calibrated to ensure HAL would at least recover depreciation of the RAB incurred during the pandemic

91. In the alternative, and in any event, for the reasons set out below, the CAA has erred in failing to make a RAB Adjustment calibrated to ensure HAL would at least recover depreciation of the RAB incurred during the pandemic.

i. The nature and function of the RAB

92. The RAB, and depreciation of the RAB, are essential elements of the price control on Heathrow, and a common part of the regulatory architecture in the UK.

93. At its simplest level, the RAB reflects HAL's previous investment in the business - its capital base. Investments are added to the RAB if they satisfy the required process and are thus deemed to be efficient. The RAB is factored into the price control in two ways, which together provide Heathrow with both return of, and return on, capital invested, namely:
- 93.1. Annual depreciation: The depreciation charge depletes the RAB, and thus reduces HAL's stock of capital. However, this depreciation is treated as a cost in the price control, so Heathrow is compensated for it through the price control. This depreciation charges ensures HAL receives the return "of" the RAB, i.e. recovery of a proportion of its previously invested capital.
- 93.2. WACC: Heathrow receives a return equivalent to its assessed WACC on the average RAB across the year. This ensures that Heathrow receives a return "on" the RAB, i.e. a reasonable return on its outstanding invested capital.
94. The RAB (and depreciation on the RAB) play a crucial role underpinning investor confidence in the regulatory regime, and have been described as an "*instrument of regulatory commitment*".⁷⁵ As explained in 1st Bolt paragraph 4.9, [Core/7/344] the use of the RAB as a concept in UK price control regimes establishes a "*key principle ...that investors should earn a return on, and where networks are thought to have a finite life a return of*" invested capital. He further states that this "*is a key element of regulatory commitment which results in a lower cost of capital for RAB-based regimes than would otherwise apply*". Professor Jon Stern has similarly stated that RABs are "*a regulatory device to reassure investors – and hence keep down the cost of capital.*"⁷⁶
95. In ordinary cost accounting, depreciation of an asset is intended to match the cost of an asset to profits made from the use of that asset, on an assumed basis. However, depreciation of the RAB under the price control is different in that it is used not simply to monitor profitability but to match a share of the previous capital investment

⁷⁵ See Stern J (2014) *The Role of the Regulatory Asset Base as an Instrument of Regulatory Commitment*, European Networks Law and Regulation Quarterly, 2:1 [LS1/14/874].

⁷⁶ See Stern, *ibid*, at page 2 [LS1/14/876]

to the price control period and hence ensure the opportunity for the return of invested capital.

ii. Depreciation on the RAB during the pandemic denies HAL the opportunity to recover its invested capital

96. As explained above, depreciation of the RAB matches an appropriate share of HAL's accumulated capital investment to the opportunity to earn revenue in a particular year. However, for prolonged periods during Covid, HAL had no opportunity to earn revenue from its accumulated asset base.
97. As set out at paragraph 35 above, in the first year of pandemic restrictions (from April 2020 to March 2021), passenger volumes were only 12% of those observed in the preceding year (between April 2019 and March 2020); and across the two years 2020 and 2021 (averaged together), HAL's revenue fell by 61% compared to 2019⁷⁷ and it incurred losses of £3.8 billion.⁷⁸ In those circumstances there was no chance for Heathrow to even cover its immediate operating expenses, let alone earn sufficient revenue to cover depreciation.
98. Nonetheless, under the iH7 price control mechanism (which rolled forward the Q6 price control), the RAB was still being depreciated at the same assumed rate during this period. Absent any adjustment to RAB, therefore, a substantial portion of the cost of HAL's accumulated capital investment was being matched to a period in which HAL did not in real terms have the opportunity to earn the return of or a return on that investment.
99. This failure to meet the regulatory commitment under the RAB arrangements is precisely the type of time-inconsistency issue that the RAB is intended to prevent.
100. Further or alternatively, as set out at paragraph 22 above, the price control represents a control of use of property, within the meaning of Article 1 Protocol 1 ECHR. The way in which the depreciation mechanism operates is, in effect, a form of expropriation: the RAB is an asset, representing a stock of invested capital on which Heathrow earns a return; the depreciation charge progressively removes a part of the

⁷⁷ 1st Cuchra, KPMG report, paragraph 156 [Core/8/398]

⁷⁸ 1st Squire paragraph 3.11. [Core/4/233]

value of that asset from Heathrow each year. Any such expropriation must be proportionate: see paragraph 22 above. In normal circumstances that expropriation is proportionate as the depreciation charge is also used to set the level of the price control, and thus an equivalent sum is returned to Heathrow (subject to normal traffic risk and the other risks which are expressly allocated to Heathrow). However, in the circumstances of the Government's Covid-related restrictions, the operation of the charge control did not permit the return of the RAB to Heathrow. In those circumstances, the operation of the depreciation charge is disproportionate and unlawful. The CAA and CMA are obliged under s.6 HRA 1998 to take action to remedy this disproportionate interference with Heathrow's rights. Moreover, s.3 HRA 1998 requires that the provisions of the CAA 2012 be interpreted, so far as it is possible to do so, to enable this interference to be remedied.

D(6) Response to the CAA's Counter-Arguments

101. In the H7 Final Proposals and the H7 Final Decision, the CAA sought to provide counter-arguments to Heathrow's submissions in favour of a more substantial RAB adjustment. These are addressed below.

102. However, it should be noted that the CAA's fundamental errors were those set out above. The CAA should have taken action that would actually address the reason for intervention, that is that a catastrophic risk had crystallised which had not been allocated to investors (namely, a collapse in passenger numbers and corresponding shortfall in revenue caused by the Covid-19 restrictions). Further and in any event the CAA should have taken action to ensure that the return of the capital invested by Heathrow to the extent otherwise depreciated during the pandemic.

103. Accordingly, insofar as the CAA's counter-arguments actually engage with Heathrow's positive arguments they are vitiated by those same fundamental errors. To the extent that the counter-arguments engage with other points of detail (such as the CAA's delay in adopting a decision on the RAB Adjustment) they are of secondary importance.

The CAA's argument that previous regulatory statements would not lead investors reasonably to expect intervention

104. First, the CAA rejected the argument that Heathrow and its investors had a legitimate expectation, as a result of regulatory statements made by the Competition Commission (CC) and the CAA in the course of the Q5 price control, that the CAA would intervene to protect Heathrow from the financial consequences of an exceptional traffic shock.⁷⁹

105. For the avoidance of doubt, although the phrase “legitimate expectation” was used in Heathrow’s submissions, Heathrow does not contend on this appeal that it had a legitimate expectation in the classic public law sense. Nor did the CAA’s reasons for rejecting it turn upon characterising the argument in that way. Rather, the CAA contested in substance the understanding that would have been conveyed by those regulatory statements.

106. In particular, in the H7 Final Proposals the CAA rejected the argument that the statements in relation to the Q5 price control could have engendered any expectation of intervention in relation to an event such as Covid:⁸⁰

The CC, ...was clear⁵³ that communicable diseases can be considered a normal business risk and that Heathrow Airport’s shareholders are compensated for bearing such risks through the allowed cost of capital. The CC also demarcated the kinds of risk that were not captured by the allowed cost of capital specifically as risks that can potentially “render an airport inoperable for a sustained period”. The CC said that if these genuinely catastrophic risks were to crystallise during the Q5 period, they would need to be dealt with outside of the framework of economic regulation.

107. And in respect of the Q6 price control, the CAA stated that

...we consider that CAA was clear, and that HAL’s investors should have understood, that downside risks, including pandemic-related risks, were expected to be borne by HAL in accordance with the risk allocation set out in the CAA’s Q6 final proposals document”

⁷⁹ See H7 Final Proposals paragraphs 10.26-10.29 [Supp/15/782-783]; Decision paragraphs 10.23-10.37. [Supp/4/192-194]

⁸⁰ H7 Final Proposals at paragraphs 10.26 and 10.29. [Supp/15/782-783]

108. In the Decision, the CAA maintained its view that its interpretation of the CC's position was "*reasonable*".⁸¹ It further downplayed the relevance of the statements in relation to Q5, stating that "*the relevance of the CC's Q5 determination is limited by the fact that it took place over 15 years ago and has been superseded by our subsequent Q6 determination*".⁸² It further suggests that there is "*significant uncertainty and ambiguity as to how the CC would have viewed the pandemic*" and reiterates the suggestion that as a communicable disease, Covid-19 was a merely a business risk.⁸³

109. The short answer to all of these points is that the CAA has misread the previous statements in relation to Q5 and Q6:

109.1. The CC delineated a category of catastrophic risks as being "*low frequency and high impact in terms of rendering an airport inoperable for a sustained period*". Thus the distinction of principle between the two categories of risk (business risk and catastrophic risk) was based upon the frequency and magnitude of the hazard in question.

109.2. The reference to "communicable diseases" was clearly part of a list of historic examples put forward by (then) BAA:

"...the events suggested by BAA as catastrophic risks, such as the two Gulf wars, the 11 September 2001 terrorist attacks, SARS, the 7 July 2005 bombings, the August 2006 terrorist plot, communicable diseases, natural disasters, geopolitical upheaval, and technological failures" (emphasis added)

109.3. It does not make any sense to read the CC as limiting the possibility of intervention to low frequency and high impact events which do not fall within that list. On the CAA's reading of the CC, an outbreak of "communicable disease", a "terrorist attack" or "natural disaster" that entailed the complete closure of Heathrow for several years would similarly be a "business risk", notwithstanding these would render the airport "*inoperable for a sustained*

⁸¹ Decision paragraph 10.25 [Supp/4/192].

⁸² Decision paragraphs 10.24 [Supp/4/192].

⁸³ Decision paragraph 10.27 [Supp/4/192-193].

period” – the very definition used by the CC for a catastrophic risk. Indeed, on the CAA’s reading of the CC’s Q5 decision, it is difficult to understand what circumstances could ever constitute exceptional circumstances so as to warrant reopening the price control.

109.4. Nor, on the CAA’s reading of the allocation of risk, is it clear why the CAA in fact made a £300 million RAB adjustment in the present case.

109.5. A distinction based on frequency and impact (and excluding events which are caused by the airport operator itself) is the only sensible and proportionate approach. By way of comparison it may be noted that the Thessaloniki Forum of Airport Regulators considered, first, that the general definition of exceptional events should be tied to the magnitude of the impact on airports (rather than to any particular category of cause) and, secondly, that Covid-19 was just such an exceptional event.⁸⁴

109.6. The suggestion that the relevance of the Q5 decision is “*limited*” simply by reason of its age begs the question. The real issue is whether there has been any material change in the allocation of risk. If not, all the age of the Q5 decision shows is that the allocation of risk is of long standing.

109.7. The CAA’s points regarding the Q6 settlement are addressed below.

110. Secondly, and strikingly, in the Decision at paragraph 10.30 the CAA argues that even if it is wrong about the allocation of risk at Q5, this was superseded by Q6 and that “*the statements we made at Q6...made no distinction between catastrophic and business-as-usual risk, and unambiguously and explicitly allocated all traffic risk to Heathrow (as evidenced at paragraph 10.27 of our Final Proposals)*”. The “evidence” set out at paragraph 10.27 of the Final Proposals is the following CAA statement in the Q6 Final Proposals⁸⁵ at paragraph 3.14:

The allowances for demand shocks in the traffic forecasts and in the cost of capital are two different concepts. The CAA does not, therefore, consider that its proposals constituted double-counting. For example, the CAA may set the

⁸⁴ Thessaloniki Forum: *Airport charges in times of crisis*, 27 January 2022 [LS1/52/1545].

⁸⁵ CAP1103 “Economic regulation at Heathrow from April 2014: final proposals” 3 October 2013 [LS1/7/259-278].

price control on the basis of a forecast level of shocks of 1% per annum. However, there could be a 10% chance that the outturn level of shocks exceeds the forecast level by one percentage point or more. The risk that the outturn is different is borne by the company and its shareholders. The CAA therefore allows a higher rate of return for the company than would otherwise be the case to compensate for this risk.

111. The only basis for the CAA's statement that unambiguously and explicitly allocated all traffic risk is the single sentence "*The risk that the outturn is different is borne by the company and its shareholders.*"

112. This is simply wrong for the reasons set out at paragraphs 73 to 90 above. The CAA's traffic forecasts included a certain level of demand shocks that did not on any view encompass events of the scale of Covid. The WACC allowed for an expected level of variation around this forecast level, but in the absence of any specific allowance was incapable of including large asymmetric risks such as Covid, and it did not in fact compensate for this risk. The CAA was crystal clear, in setting the Q6 framework, that adjustment was possible in order to ensure that Heathrow did not bear all traffic risk in all circumstances in particular in its statement in the Q6 Notice Granting the licence⁸⁶ at paragraph I29 that "*the ability of a licensing regime to revisit the price control if key assumptions, such as traffic, are significantly worse than the forecast, could be credit strength*".

113. The CAA is unfairly seizing on a single sentence and reading it misleadingly out of context.

114. Moreover, the CAA's argument again proves too much: its contention that all traffic risk had been "*unambiguously and explicitly*" allocated, is inconsistent with the fact that the CAA in fact did choose to make a RAB adjustment.

115. Thirdly, CAA also considered that the explicit statement in the Q6 price control that it could be reopened in extreme circumstances created only a procedural legitimate expectation that the CAA would consider such a request in the light of its statutory objectives, and not a substantive legitimate expectation that it would in fact

⁸⁶ CAP1151 "*Economic regulation at Heathrow from April 2014: Notice granting the licence*" February 2014 [LS1/12/471-821].

intervene.⁸⁷ This is not in itself a sufficient reason for rejecting an intervention: even if the indications given by the CC and CAA that the regulator would intervene in the event of exceptional circumstances did not cross the threshold of certainty required to establish a legitimate expectation in public law,⁸⁸ that does not mean that the commitment was not highly relevant to the exercise by the CAA of its power of intervention, and to its statutory duties. The expectations engendered in investors are obviously highly relevant to the consideration of financeability. Similarly, the CAA must have regard to the need for regulatory consistency.

116. Fourthly, the CAA rejected Heathrow's argument that the Q6 framework must have envisaged intervention in the event of a demand shock of the scale of Covid, since it did not adequately remunerate HAL for accepting such risks.⁸⁹

117. The CAA's reasons for rejecting this argument implicitly relied upon the same contention that the Q6 framework had allocated the relevant risks to Heathrow and its investors:⁹⁰

10.39 The fact that a pandemic subsequently occurred does not imply that the framework was miscalibrated given the information that was available at the time. It also does not follow that we should retrospectively amend the Q6 framework. It is in the nature of price control determinations that the forecasts on which the determination is based are typically different from out-turn. Under incentive regulation, we do not retrospectively correct for these forecast errors, even when they are material⁶²: this provides the regulated entity an incentive to manage risks and act efficiently. If we were to adopt the practice of retrospectively amending forecasts in light of out-turn data, this would constitute rate of return regulation.

[FN62 There are exceptions to this: for example, where we explicitly introduce mechanisms for truing up against out-turn data, such as the TRS mechanism and cost of new debt indexation mechanism we are introducing

⁸⁷ H7 Final Proposals at paras 10.30-10.34 [**Supp/15/783-784**], maintained at Decision 10.23 [**Supp/4/192**]

⁸⁸ That is a demanding threshold usually requiring that there is an express representation which is clear, unambiguous and devoid of relevant qualification: *R v Inland Revenue Commissions es p MFK Underwriting Agents Ltd* [1990] 1 WLR 1545 per Bingham LJ at 1569. For the avoidance of doubt, Heathrow does not contend that there was an express representation to the effect that the CAA would intervene in precisely the way now requested by Heathrow in the event of a pandemic, and therefore does not rely upon a substantive legitimate expectation in this sense.

⁸⁹ The CAA unfairly characterised this argument as being in some way a challenge to the Q6 settlement, rather than understanding it as a following through of the consequences of the Q6 settlement: see H7 Final Proposals paras 10.37-10.38. [**Supp/15/785**]

⁹⁰ H7 Final Proposals paragraph 10.39 [**Supp/15/785-786**]

at H7. However, these should be clearly signalled and defined upfront. This is not the case with HAL's proposed RAB adjustment.]
(emphasis added)

118. Three points require emphasis here:

118.1. The implication of the CAA's footnote 62 to paragraph 10.39 of the H7 Final Proposals is that any adjustment that was not "*clearly signalled and defined upfront*" constitutes impermissible rate of return regulation. However, that is inconsistent with the clear statements of the CC and CAA that ex post intervention could be undertaken in the event of catastrophic risk (albeit in an undefined way). It is also inconsistent with the fact the CAA itself had chosen to implement a £300 million RAB adjustment: an adjustment of £300 million was no more clearly signalled or defined upfront than an adjustment of £2.6 billion. It is simply a smaller intervention. The CAA's reasoning thus proves too much.

118.2. The CAA relies upon a general principle that it should not intervene "retrospectively" in order to preserve incentives to efficiency. However, that has no real application to the present case: Heathrow could not have done anything to avoid the Government's Covid-related restrictions or to maintain traffic volumes in the face of those restrictions, and did everything it could to mitigate the impact of those restrictions on its operations and to attract airline, cargo and passengers. Further, as explained in the KPMG report at Section 6.2 [Core/8/422] the return allowed to Heathrow did not in fact remunerate it for absorbing the risk of events such as Covid.

118.3. The CAA's defence of the Q6 settlement on that basis that Heathrow continued to be able to attract investment has a "through the looking glass" quality. Heathrow's point was precisely that its investors had committed vast amounts of capital to investment in Heathrow, on the faith precisely of an allocation of risk, set out in the Q6 settlement (and previously settlements), under which the CAA would intervene in the event of a risk of the scale of the pandemic. Not only was that the implication of previous regulatory statements (as to which see paragraphs 78 - 81 above), but HAL's investors were not being sufficiently remunerated in respect of those risks. For the CAA to

respond by pointing out that HAL had succeeded in attracting that investment is no kind of answer at all.

Consistency with other sectors / Precedents

119. At Decision paragraphs 10.34-10.36, [Supp/4/194] the CAA rejects the relevance of the precedents cited by KPMG, on the basis that they show only interventions in specific situations and do not provide a clear read across.

120. For the avoidance of doubt, it is not Heathrow's case that any of these precedents is precisely the same as the situation in respect of Heathrow and the Covid-19 restrictions, nor that any of these precedents determine the exact form of intervention that the CAA should adopt. However, as set out at section 3.3 of the KPMG report,⁹¹ precedent formed by the CAA itself and other UK regulators shows that infrastructure investors have strong reasons to expect regulatory intervention in the event of a catastrophic exogenous occurrence. That forms investors' reasonable expectations in relation to investment in regulated infrastructure in the United Kingdom, and is part of the context in which the specific regulatory statements in relation to the Q4, Q5 and Q6 price controls requires to be read.

Financeability

121. The CAA considered that financeability considerations did not require a further RAB adjustment.⁹²

122. Its assessment in this respect was entirely forward-looking. It relied upon the same assessment of financeability as for its main H7 assessment, and rejected the suggestion that it should consider the losses incurred by Heathrow due to the pandemic:

10.45 By including historical periods in its analysis, HAL and KPMG are implicitly testing whether a creditor or investor with perfect foresight would, at a particular date in the recent past, have committed capital to the business knowing that a global pandemic was about to occur. It is not clear that this question is relevant to our statutory duties.

⁹¹ 1st Cuchra, KPMG report [Core/8/352].

⁹² See H7 Final Proposals paragraphs 10-44-10.46 [Supp/15/787]; Decision 10.45 [Supp/4/195].

123. The CAA frames this tendentiously. Heathrow's point is that the Q6 framework explicitly did not remunerate Heathrow *ex ante* for taking catastrophic risk, and as a corollary it follows that action may be taken *ex post* to tackle these risks if they occur. The point of the backwards looking financial assessment is simply to clarify that, since HAL was not remunerated for these risks, the intention cannot have been that it would bear them.

124. Further, to the extent that the CAA relies on forward-looking financeability, it has not made any adequate assessment.

124.1. The CAA's £300 million adjustment was calculated primarily by reviewing the size of adjustment needed to ensure that the notional company could maintain a gearing of below 70% for 2021 given the impact of Covid-19 on its balance sheet, and thus protect consumers from difficulties in raising debt. The CAA targeted a gearing of 69.5% to ensure that the gearing was below 70%:

124.2. For the avoidance of doubt, the CAA could not rely on this 70% threshold to conclude that it had fulfilled its duties in respect of financeability by making an adjustment of £300 million. That 70% threshold is arbitrary, and is only one metric which is assessed by credit rating agencies and reflects the position only at a single point in time: see Para. 6.5 1st Squire at [Core/4/259]

124.3. Moreover, the CAA's duties of financeability and ensuring economy and efficiency on the part of the licensee, means that it must do more than simply ensure that the operator is not prevented from raising debt in the short term; it should ensure that an efficient operator is able to raise both debt and equity capital at a sufficiently low cost to support the investment needed in the interests of current and future consumers. With this in mind gearing should not and cannot be the only consideration. To the extent that gearing is one of the concerns, the appropriate target would have been to calibrate the adjustment by reference to the intervention needed to reduce the gearing of the notional company back to 60%. This was the threshold used in the Q6 settlement.

Return of the RAB

125. First, the CAA specifically rejected HAL’s argument that the regulatory scheme, in particular through the mechanism of the RAB, was founded on an expectation that investors would, as a minimum, be able to recover their investment. The CAA rejected this in striking terms in the H7 Final Proposals:⁹³

- *the inclusion of an ex ante allowance for regulatory depreciation within the CAA’s price controls does not constitute an absolute guarantee that HAL will be able to recover that revenue irrespective of what happens to traffic levels during the regulatory period; and*
- *more generally, HAL is wrong to state that there is a fundamental principle of UK regulation that companies are guaranteed a recovery of regulatory depreciation, unless this has been explicitly set out as part of the regulatory framework.*

126. For the reasons set out above at paragraphs 94 to 99, this statement is significantly at odds with the general understanding of the role that the RAB plays as a regulatory commitment device, and is liable to severely undermine trust in the UK regulatory system.

127. Secondly, the CAA has entirely rejected submissions that it should implement various alternatives to allow the recovery of foregone depreciation, stating that “*We do not consider that the resulting cost would not [sic] be sufficiently offset by a lower cost of capital, more investment or better service quality*”.⁹⁴ For the reasons set out at section D(5) above, this is erroneous in two major and related respects.

127.1. First, what is at issue in respect of foregone depreciation is whether the CAA upholds the regulatory bargain that is inherent in the institution of the RAB. The proper question for the CAA is whether it is right to depart from that

⁹³ H7 Final Proposals paras 10.46-10.50 [Supp/15/787-788], maintained at Decision 10.43 [Supp/4/195]. The CAA also specifically relied at para 10.49 of the H7 Final Proposals on a statement made by the CC, in a report on Stansted Airport, to the effect that return on the RAB may be “*higher or lower than the expected return seen in the WACC x RAB calculation*”. With respect, this misses the point: the allowance for regulatory depreciation ensures the return of the RAB (i.e. the recouping of the principal invested by Heathrow in its business), rather than ensuring any particular return on the RAB (i.e. a profit on the remaining stock of capital invested).

⁹⁴ H7 Final Proposals para 10.52 [Supp/15/789], maintained at Decision 10.43 [Supp/4/195]

regulatory bargain, and is obliged to have regard to the needs of consistency and proportionality.

127.2. Secondly, the CAA has wrongly restricted itself to considering its duties only in a very narrow sense of what directly increases or lowers airport charges for passengers. The CAA has not considered the wider and indirect impact on the cost of capital which is likely to arise from its course of action in failing to uphold the regulatory bargain.

Consistency with the H7 price control period

128. The CAA rejected the argument that there was an inconsistency between its application of the TRS risk sharing mechanism for the future and its refusal to implement such risk sharing retrospectively, or that to do so would undermine the credibility of its risk sharing arrangements for the future.⁹⁵ It did so explicitly on the basis that this risk-sharing was a new arrangement, and again that the Q6 settlement did not explicitly or implicitly include any such commitment to risk-sharing.⁹⁶

The framework provided by CAA12 permits the CAA to allocate risks in one particular way during one regulatory period and to consciously and explicitly apply a different allocation of risk at the start of the next regulatory period. This kind of recalibration is a standard and familiar feature of periodic reviews across regulated industries. It is highly unlikely that investors would consider a new risk allocation to be “credible” only if a regulator retrospectively applies the same arrangements to historical periods. It is legitimate and reasonable for regulators to change approach in response to new information and risks, and provided this is appropriately justified should support investor confidence in the regulatory regime

129. For the reasons set out above at section D(4), it is clear that the CAA did not “consciously and explicitly” apply a different allocation of catastrophic risk in the Q6 period to that in the Q4 and Q5 periods.

Asymmetry of risk and the economic characteristics of infrastructure assets

130. The CAA rejected the argument that its refusal to take action to remedy the demand shock, combined with the fact that HAL’s prospects of out-performance were capped

⁹⁵ H7 Final Proposals paras 10.41-10.43[Supp/15/786], maintained at Decision 10.47. [Supp/4/195]

⁹⁶ H7 Final Proposals at paragraph 10.42. [Supp/15/786]

by the regulatory framework, meant that HAL was exposed to an asymmetry of risk.⁹⁷ In the Decision,⁹⁸ the CAA stated that it was not persuaded that the nature of infrastructure assets precludes them from bearing demand risk.

131. The CAA's reasoning here is infected by its failure to appreciate that the risk profile of investment in regulated utilities and infrastructure is fundamentally different to the risk profile of investment in unregulated markets, both by reason of the cap on out-performance and the possibility of regulatory intervention to support the return of the RAB and/or to limit downside risk:

131.1. The returns earned by unregulated companies may fluctuate substantially both on the upside and downside (even if in the long run they are constrained by competition) and investors accept the risk profile as given, expecting to earn a return commensurate with that risk.

131.2. By contrast, utilities and infrastructure are highly capital intensive and long-term investments requiring a high degree of commitment and trust from investors: see 1st Cuchra, KPMG report at section 3.1. **[Core/8/376]** In the case of regulated utilities and infrastructure, the risk profile for investors is inherently conditioned by the existence of regulation, including both the fact that the possibility of out-performance (even in the short term) is capped or limited by price regulation of utilities, and that the possibility of downside risks is limited: see 1st Cuchra, KPMG report at paragraphs 77-78 **[Core/8/378]**

131.3. Ensuring that the risk profile for investors does not become unduly asymmetric is in the long term interests of consumers in regulated markets, as it lowers the cost of capital.

131.4. Specifically, as set out at paragraph 120 above, the reasonable expectations of investors in Heathrow was that exceptional downside traffic risk (such as that caused by the pandemic) fell outside the scope of risks allocated to investors

⁹⁷ H7 Final Proposals paras 10.54-10.57 **[Supp/15/789]**

⁹⁸ Decision paragraphs 10.50-10.51 **[Supp/4/196]**

under the existing price control framework, and this was reflected with the Q6 price control in a low WACC.

131.5. Moreover as explained at paragraph 80.2 above, it is both physically and legally impossible for Heathrow to outperform on the upside to anything like the same magnitude as the downside risk that eventuated as a result of the Covid-19 restrictions. Heathrow is subject to a statutory cap on the number of flights which can be operated, and is (in normal times) an exceptionally busy airport operating on average at over 99% of the total allowed number of air transport movements. Heathrow carried 73% fewer passengers than forecast in 2020 and 76% fewer than forecast in 2021. It would be physically and legally impossible for Heathrow to carry 73-76% *more* passengers than normal across a two-year period.

Retrospection

132. At Decision paragraphs 10.38-10.42 [**Supp/4/194-5**], the CAA dismisses an argument that a RAB adjustment would only be retrospective because the CAA did not take action promptly in 2020 when Heathrow first requested it.

133. This is not an argument that need detain the CMA. For the avoidance of doubt, Heathrow does not advance this point as a positive reason why the appeal should be allowed. Heathrow's case is that the CAA would not be acting retrospectively at all in implementing a RAB adjustment: it would be adjusting the RAB for the future, to take account of the actual financial impact of Covid-19 on the regulated business and in order to fulfil the regulatory contract created by the Q4, Q5 and Q6 frameworks. The issues arising are therefore fundamentally the same whether they are being considered now or in July 2020, when Heathrow made its request. In neither case would there be retrospection.

D(7) Remedies – The Appropriate quantum of a RAB adjustment

134. The starting point is that the quantum of the intervention should be proportionate to the specific reasons for intervention.⁹⁹ This requires, *inter alia*, both that the

⁹⁹ The CAA is specifically subject to a duty of proportionality under s.1(4) CAA 2012. [**Auth/1/6**]

intervention is rationally connected to the objective sought to be achieved, and that the intervention strikes a fair balance between the needs of the individual and the interests of wider society: see section C above.

135. Accordingly, the appropriate quantum of a RAB adjustment depends upon whether the adjustment aims to respect the allocation of risks under the existing regulatory settlement (as set out at paragraphs 73 - 90 above) or only to ensure that the Heathrow can recover depreciation. These are dealt with separately below.

i. The appropriate quantum of a Covid-Related RAB Adjustment to alleviate the shortfall in passengers and revenue due Covid-19 restrictions

136. For the reasons set out above, the fundamental reason for intervention is that the regulatory bargain was that a catastrophic risk had crystallised which had not been allocated to investors (namely, a collapse in passenger numbers and corresponding shortfall in revenue caused by the Covid-19 restrictions). Heathrow's best estimate of its shortfall in revenue against forecast across 2020 and 2021 is between £3.3 billion. What was therefore required, was that the intervention by the CAA should be calibrated so as to fulfil the allocation of risks under the existing regulatory settlement.

137. As set out in the KPMG report at Sections 5.2 and 5.3, [Core/8/404] this requires consideration both of (i) the threshold at which the risk allocation should be regarded as changing from normal business risks, borne by investors, to catastrophic risks and (ii) what risk allocation applies above and below that threshold.

138. A number of streams of evidence indicate that a reasonable threshold at which the risk allocation may be regarded as shifting is traffic reduction of around 10% over 2 years:

138.1. This was the threshold implemented by the CAA in its RP3 Decision establishing a traffic risk sharing mechanism for NERL: see CAP 1830, *UK RP3 CAA decision document* page 117, August 2019 [MFC1/6/112]. It should be noted that the CAA implemented this threshold in advance of and (necessarily) in ignorance of Covid. It is thus the threshold established by the CAA without the benefit of hindsight.

- 138.2. A 10% deviation is also the threshold at which the risk sharing ratio shifts under the TRS mechanism implemented by the CAA in the Decision itself. Deviations from forecast of less than 10% are subject to a 50% sharing rate, whereas deviations from forecast of more than 10% are subject to a risk sharing ratio of 105% of aeronautical revenues¹⁰⁰. This appears to reflect a view that investors should not substantially bear risk outside that 10% band.
- 138.3. A 10% threshold is supported by international comparators, such as (i) AENA (Spain's state-owned airports) which is subject to a price control revision in the event of reduction of traffic volumes of over 10%; (ii) Aeroporti di Roma which is subject to 50% risk sharing beyond a 5% variation; and (iii) Budapest Airport which can apply for a price control revision in the event of reduction of traffic volumes of over 10%.
- 138.4. A 10% threshold is consistent with indicative low traffic scenarios calculated on the basis of plausible but severe downside scenarios. KPMG has calculated the potential impact on traffic in the event of the deep recession scenarios used by the Bank of England in its stress testing of banks, and derived estimates that these would depress passenger volumes by around 5.8% over four years: 1st Cuchra paragraph 192, Table 6 [Core/8/406].
- 138.5. A 10% downturn for one year would be greater in magnitude than any of the traffic shocks experienced by Heathrow over the period since 1990.
139. It is clear that, on any view, Covid-19 restrictions represented a catastrophic risk, which was wholly different in type to the business risks that Heathrow was expected to bear under the price control and that the impact of the Covid-19 restrictions vastly exceeded any reasonable threshold for intervention.
140. Heathrow proposes that the RAB adjustment may appropriately be calculated by applying an adjusted version of the CAA's TRS mechanism to 2020 and 2021.

¹⁰⁰ The 105% sharing rate takes into account the incremental impact of commercial revenues over and above the aeronautical revenue per passenger due to Heathrow's single till structure.

- 140.1. The CAA's forward-looking TRS mechanism provides for 50% sharing of traffic risk within a 10% threshold, and then a 105% sharing for reductions in traffic beyond the 10% threshold.
- 140.2. For the reasons set out above, a 10% threshold is a reasonable point from which to begin an adjustment for catastrophic risk. Accordingly, Heathrow submits the 105% sharing of risks beyond that point is an appropriate form of intervention.
- 140.3. By contrast, Heathrow acknowledges that the sharing of risk within the 10% threshold is not entailed by investor expectations about catastrophic risk. Heathrow therefore proposes that the TRS mechanism be adapted such that Heathrow bears all risk within the 10% threshold, but that beyond that point risk is shared at the 105% rate.
- 140.4. Applying this risk sharing mechanism to the 2020-2021 period indicates that the appropriate RAB adjustment is £2.225 billion: see 1st Cuchra, KPMG Report paragraph 379 [**Core/8/442**]; 1st Squire paragraph 2.2.[**Core/4/230**]
141. An adjustment of this magnitude is also consistent with, indeed lower than, the level of intervention that KPMG calculated was required on other metrics:
- 141.1. In a paper submitted by Heathrow during the consultation phase, KPMG calculated that an adjustment of £2.6 bn would be required to ensure that the notional company could continue to reach the target thresholds for credit metrics used to conclude that the Q6/iH7 price control was financeable in 2020, 2021 and 2022.¹⁰¹ In the same paper it also estimated that an adjustment of £2.8bn was required to ensure that the notional company can access equity at an efficient cost. This analysis concluded that due to the scale of equity lost in 2020 and 2021 through the unremunerated depreciation to the RAB, Heathrow's investors could not expect to earn the H7 cost of equity without an adjustment.

¹⁰¹ KPMG, Recovery of COVID-related losses for Heathrow Airport Limited, December 2021, Section 4.2 [**LS1/56/1503**]

141.2. In its expert report submitted in these proceedings, KPMG estimates that the additional risk premiums that Heathrow would have been entitled to, had pandemic risk been included in the WACC, would have amounted to around £2.583 billion in the period since privatisation, assuming the pandemic to have been a 1-in-50 year event: 1st Cuchra paragraph 422, Table 14.

142. Moreover this intervention is substantially less than the actual revenue shortfall experienced by Heathrow, and represents a fair sharing of the burden of the pandemic between Heathrow's investors and consumers.

ii. The quantum of RAB Adjustment required to ensure return of the RAB

143. Heathrow's unrecovered depreciation for 2020 and 2021 amounts to £1.6 billion: see 1st Squire at para 6.7 [**Core/4/259**]. This is the intervention that would be required and proportionate in order to remedy the problem of the depreciation charge continuing to operate during the pandemic, if the CMA is not taking broader action to remedy the shortfall in passengers and revenue as set out at paragraphs 136 to 142 above.

E. GROUND 2: COST OF EQUITY (ASSET BETA)

E(1) Introduction to the Cost of Equity Ground

144. Allowing a return on capital that is appropriate to the level of risk of an investment is important in order to fully compensate investors and therefore support much-needed investment in Heathrow. In the long run, investors will only be willing to continue to invest, if they are able to earn returns that are matched to their perceptions of risk. Failing to provide an adequate return on investment therefore risks the financeability of an asset and ultimately runs contrary to the interests of its users.

145. The Weighted Average Cost of Capital ("WACC") is the price control measure which is used to calculate the return Heathrow is allowed to earn on its capital (represented by the RAB) as part of its regulated revenue. The WACC is the weighted average of: (i) the cost of equity; and (ii) the cost of debt, where the weighting is provided by the notional company's gearing ratio.

146. This Ground of Appeal addresses the errors which have infected the CAA's estimate of the equity component of the WACC. The following ground (Ground 3) is concerned with the cost of debt.

CAPM cost of equity

147. The cost of equity is the rate of return a shareholder requires for investing equity into Heathrow. The true cost of equity for an investment is not known and must be estimated. The CAA, as most regulators, calculates the cost of equity using a standard model known as the Capital Asset Pricing Model ("CAPM"). In the CAPM, the cost of equity is given by:

$$\text{Cost of equity} = RFR + \{\text{Equity Beta} * (\text{TMR} - RFR)\}$$

where RFR is the risk-free rate (return on a risk free asset, often determined by reference to yields on government bonds), TMR is the total market return (return on a diversified market portfolio, represented by a broad index such as the FTSE All Share or STOXX Europe 600), and Equity Beta measures the riskiness of a specific equity investment relative to the market portfolio, or more precisely the relative extent to which it is exposed to systematic risks (rather than firm specific events) which an investor cannot avoid through diversification.

148. Equity Beta reflects the risk faced by a firm's shareholders (equity investors), which includes both the risk inherent in a firm's business model and financial risks (arising from financial gearing). These are commonly separated in a regulatory context and addressed through the design of the notional firm (financial gearing) and an estimate of the unlevered asset beta which captures only business risk.

149. The asset beta may additionally be used to calculate an unlevered cost of capital (also referred to as the unlevered cost of equity), which assumes that the business is entirely financed by equity. This may serve as a useful cross-check, as it represents the return that is appropriate for the overall riskiness of a firm's assets. This provides an upper bound to the cost of debt, irrespective of gearing, as debt holders have a superior claim on a business's assets (equity only has a contingent claim on any residual assets once all debt

has been paid off) and therefore, even if the firm were entirely financed by debt, never have to bear risk greater than that inherent in the firm's assets.¹⁰²

The CAA's Cost of Equity estimate is too low

150. The Decision estimates Heathrow's cost of equity for the notional company structure at 6.97% RPI real. This is far too low.

151. The extent to which the CAA has gone wrong becomes apparent when comparing the CAA's cost of equity estimate to Heathrow's and other companies' observed cost of long-term debt. Using the CAA's assumptions for the CAPM variables, and its long-term assumption for RPI inflation of 2.73%,¹⁰³ the notional company's cost of equity estimate is equivalent to a nominal unlevered cost of equity of 6.20%.¹⁰⁴ This is almost identical to the yield of the iBoxx GBP non-financials BBB 10+ index,¹⁰⁵ and it is below the cost of recently (October 2022) issued Heathrow Class A debt (7.03% and 7.11%)¹⁰⁶ and the yield of Heathrow's other traded Class A debt (7.05% and 6.85%)¹⁰⁷.

152. As explained above, this is inconsistent with economic and corporate finance first principles. The same result is borne out by a more systematic comparison of asset and debt risk premia (the "ARP-DRP differential") carried out by Oxera.¹⁰⁸

The CAA's estimate of Heathrow's asset beta is not credible

153. As set out in Heathrow's responses to the Initial and Final Proposals and in its December 2022 RBP Update, the CAA's under-provision for the cost of equity is due to errors in its determination of each of the CAPM parameters, and compounded by its failure to select an appropriate point estimate within the CAPM derived range.¹⁰⁹

¹⁰² See 1st Hope, section 2E.2 for a fuller explanation. [Core/9/485]

¹⁰³ Decision §9.95. [Supp/4/165]

¹⁰⁴ 1st Hope §2.5. [Core/9/483]

¹⁰⁵ *ibid.* [Core/9/483]

¹⁰⁶ 1st King §27 [Core/3/182]. This data was shared with the CAA in the context of the December RBP Update at §7.10.4. [Supp/55/1805]

¹⁰⁷ 1st King §29. [Core/3/184]

¹⁰⁸ See 1st Hope, section 2. [Core/9/482] This analysis was shared with the CAA in the context of the December 2022 RBP Update at Appendix 2, section 5. [MK1/12/609-612]

¹⁰⁹ See in particular Heathrow's response to H7 Final Proposals, section 10.6 [Supp/20/1015] and December 2022 RBP Update, sections 7.7 to 7.8. [Supp/44/1802-1804]

154. For the purposes of this appeal, however, Heathrow focuses solely on the CAA's estimate of asset beta. This is because it is the most important factor contributing to the shortfall, and the one where the CAA has most clearly fallen into error well beyond the range of any permissible discretion.

155. As with the resulting cost of equity, the CAA's estimate of Heathrow's asset beta of 0.53 is simply not credible. It does not stand up against reasonable comparators:

155.1. It sits at the very bottom of the range of 0.49–0.84 of observed asset betas for listed comparator airports over a range of time periods, and well below the observed values of 0.68–0.80 for Aena, the airport operator with the most comparable regulatory framework.^{110, 111}

155.2. It is at the bottom end of the range of 0.52–0.62 the CMA identified for airports in February 2020, pre-Covid.¹¹²

155.3. It is in line with the asset beta of 0.50 assumed during the previous price control period, which was based on pre-2014 data, despite significant structural changes since then including the break-up of BAA and resulting increase in competition for Heathrow.

156. The CAA's estimate therefore implicitly assumes that Heathrow's characteristics and its regulatory regime make it less risky than other airports (in some cases significantly so), and in any event no more risky from an investor's perspective than it was before the pandemic. It also appears to assume that investors are wrong in their assessment of Heathrow's risk profile as revealed by the market price of Heathrow's traded debt, which continues to exhibit a significant premium to the iBoxx index.¹¹³

157. There is no evidence to support these assumptions. On the contrary, as set out below, there is overwhelming evidence of a persistent increase in the risk perception for airports that is

¹¹⁰ 1st Hope, Tables 3.1 and 3.2. [Core/9/507]

¹¹¹ See 1st King §55. [Core/3/191]

¹¹² 1st King §59 and Table 4. [Core/3/192]

¹¹³ 1st Hope, Figure 5.1. [Core/9/527]

unlikely to disappear over the remainder of the H7 period (to April 2025) and good reasons to assume that there has been a structural increase in actual risk.

The errors in the Decision

158. The CAA has been led astray by effectively shunning market evidence, and instead relying on a subjective three-stage approach to estimating Heathrow's asset beta, which is based on its view of:

158.1. Heathrow's pre-pandemic asset beta;

158.2. the impact of the pandemic on Heathrow's asset beta; and

158.3. the effect of the TRS mechanism on Heathrow's asset beta.¹¹⁴

159. In doing so, the CAA has erred in two fundamental ways:

159.1. **Ground 2A—Post-pandemic asset beta:** There was no justification to depart from well-established regulatory best practice of relying directly on market data to estimate Heathrow's asset beta. The CAA's approach of "manually" adjusting an assumed pre-pandemic asset beta is subjective and littered with arbitrary assumptions that lack any solid evidential support. It is impossible to apply consistently over future price control periods and does not self-correct. It is without regulatory precedent and clearly inferior to a market-based approach.

159.2. **Ground 2B—TRS adjustment:** The CAA's further downward adjustment of the asset beta on account of the TRS mechanism is misconceived. The TRS does not reduce Heathrow's risk in a sufficiently certain or immediate way that it would credibly reduce asset beta during the H7 price control period. The CAA's adjustment is in any event again dependent on arbitrary assumptions that lack evidential support and should be rejected.

¹¹⁴ See Decision §§9.84 to 9.86. [Supp/4/163-164]

E(2) Ground 2A—Asset beta: starting point and pandemic effects

The decision under appeal

160. In order to estimate the asset beta, the CAA has followed the three-stage process outlined above, which once broken down actually involves a total of 13 steps over the course of which an initial estimate of Heathrow’s pre-pandemic asset beta is adjusted first so as to derive a post-pandemic asset beta (the first 8 steps) and then further to account for the impact of the TRS mechanism.

161. The process was originally put forward in the Initial Proposals and has remained largely preserved in the Final Proposals and the Decision, other than for limited “targeted adjustments”¹¹⁵ made in response to stakeholder representations. It is described in more detail in the witness statement of Mr King¹¹⁶ and the report of Oxera.¹¹⁷ In short:

161.1. The CAA starts by estimating Heathrow’s pre-pandemic asset beta. In the Initial Proposals, it set a range of 0.50–0.60 based on contemporaneous market data from three listed comparators. However, in the Final Proposals, it abandoned this approach in favour of the assumption, maintained in the Decision, that Heathrow’s pre-pandemic asset beta was “*likely*” to be in line with the level it had previously determined for Q6 of 0.50.¹¹⁸

161.2. The CAA then estimates the impact of the pandemic on Heathrow’s asset beta. This involves a series of adjustments that are largely derived from the report it commissioned from Flint Global for the Initial Proposals.¹¹⁹ These adjustments are at the core of the CAA’s approach and, in effect, serve to re-weight market-based observations of comparator asset betas to reflect an assumed likelihood and duration of potential future pandemic-like events.

161.3. In doing so, the CAA relies on a number of assumptions. These include, *inter alia*, that (i) pandemic-like events will occur in the future at a frequency of once every

¹¹⁵ See H7 Final Proposals §9.50. [Supp/15/709]

¹¹⁶ 1st King, section 4.1. [Core/3/186-200]

¹¹⁷ 1st Hope, section 3. [Core/9/490]

¹¹⁸ H7 Final Proposals, §§9.51 and 9.62. [Supp/15/709] and [Supp/15/711]

¹¹⁹ Estimating Heathrow’s beta post-COVID-19, Flint Global, August 2021 [MK1/3/170]; subsequently updated: H7 Updated Beta Assessment, Flint Global, May 2022. [MK1/5/260]

20 to 50 years, (ii) these events will have a duration of 17 to 30 months, (iii) all of the increase in observed asset betas since February 2020 is related to pandemic risk, and (iv) the current pandemic has no more impact on Heathrow's asset beta during H7.

162. On this basis, the CAA estimates a pandemic impact of 0.02–0.11 and, together with an assumption as to the pandemic-related shift in the risk differential between Heathrow and its comparators, arrives at a 'post-pandemic' (but 'pre-TRS') asset beta of 0.52–0.71.

The CAA's approach is arbitrary and legally indefensible

163. The CAA's approach is a stark departure from well-established regulatory practice which relies on observable market evidence. Regulatory precedent almost universally estimates asset beta by reference to the observable betas of a range of comparable, listed companies over a range of time horizons, thereby reflecting a broad market-based assessment of the regulated company's risk.¹²⁰

164. The large number of assumptions involved in the CAA's process, in contrast, means that market data is effectively ignored. Evidence from listed comparators remains only ostensibly at the heart of the CAA methodology, as observed effects are scaled by reference to assumptions about the future risk profile of Heathrow (and by implication other airports) that have no empirical basis.

165. Assumptions as to the length and frequency of potential future pandemic-like events, or the extent to which current market data represents the effect of Covid-19 alone rather than a longer-term reassessment of risk are necessarily speculative. Making them the cornerstone of the regulatory approach renders the overall process arbitrary and, as a result, legally indefensible. Regulatory discretion is bounded and subject to legal principles. In particular, discretion cannot be sufficient to justify adjustments for which there is no evidential basis.¹²¹

¹²⁰ See 1st Hope §3.48 [**Core/9/504**] and 1st King §46-47. [**Core/3/188-189**]

¹²¹ See section C above, at paragraph 27.2, also see paragraph 21.5

The CAA's assumptions are speculative and ill-evidenced

166. The CAA's process critically depends on assumptions as to the pre-pandemic "base-line" beta, as the starting point; the frequency and duration of future pandemic-like events, for the probability re-weighting of observed betas; and the extent to which recent market data reflects factors other than Covid-19, for the measure of the size of a pandemic effect.

167. On the whole, the CAA presents little empirical or theoretical basis for these assumptions, and a number of its assumptions are clearly flawed.

168. **First**, the CAA's assumption as to the length of the pandemic period is based on the assumption that the Covid-19 pandemic ended in March 2022.¹²² As Oxera explain, there is clear evidence that pandemic effects continued to be felt post this date, including in the form of continued elevated option-implied volatilities (a measure of expected risk), and a slow recovery in corporate travel.¹²³ The CAA's assumed duration of the pandemic therefore has no proper evidential basis. It is in any event questionable how reliable an indicator the duration of the current pandemic is for the profile of future pandemic like events.

169. **Second**, any estimate as to the likely frequency with which pandemic-like events will reoccur in the future is necessarily an arbitrary assumption.

170. **Third**, by treating observed betas from the pandemic period as the measure of the pandemic effect, the CAA implicitly assumes that all of the increase in the observed betas over that period is due to the immediate impact of Covid rather than other potential effects, which could include longer term changes such as a possibly permanent decline in business travel post-pandemic and increasing environmental risks.¹²⁴ Given the early, February 2022 cut-off date of its asset beta analysis, the CAA also implicitly assigns no weight at all to the potential effects of more recent developments, including a changed geopolitical environment as a result of the Russia/Ukraine conflict, or the impact of a changed monetary policy environment.¹²⁵ 1st King provides a detailed discussion of why this

¹²² See Updated Beta Assessment, Flint Global, May 2022, p.24. [MK1/5/283]

¹²³ 1st Hope, section 3D.1. [Core/9/496]

¹²⁴ See e.g. 1st Hope §§3.26–3.29 [Core/9/498-499] and discussion in 1st King, section 4.1.2.1. [Core/3/194]

¹²⁵ 1st Hope §3.17. [Core/9/495]

assumption is wrong in the light of the increased systematic risk now faced by Heathrow and comparable airports, to which the CMA is respectfully referred.¹²⁶

171. **Fourth**, the pre-pandemic ‘base-line’ beta on which the CAA relies as its starting point is severely out of date. It is based on the Q6 asset beta, which relies on pre-2014 data, and was itself anchored to the Q5 beta (determined in 2006). It is not realistic to assume that the systematic risk of airports, and in particular Heathrow, has remained unchanged over this period. To highlight only three structural changes: (i) in 2006, Heathrow, Gatwick and Stansted, which now compete, were still co-owned by BAA; (ii) the period since 2006 has seen a significant increase in the number of low cost carriers and the traffic volume accounted for by these carriers—a market in which Heathrow is less active and which has led to a decline in Heathrow’s market share;¹²⁷ (iii) 2006 predates Brexit which has had a particular impact on Heathrow. It is also worth noting that the CAA ignores more recent evidence of pre-pandemic asset betas, including the range of asset betas for other airports (up to the end of February 2020) which the CMA considered as part of its redetermination of the NERL RP3 price control.¹²⁸

172. As will be apparent, the end result is therefore, essentially, an arbitrary exercise.

There was no reason to depart from well-established regulatory best practice

173. The CAA’s approach is even more regrettable, as there simply was no reason to depart from well-established regulatory best practice. The established approach of estimating betas over a range of different time periods itself ensures that no specific data point is overweighted (the concern the CAA is aiming to address with its change in approach). As an approach that is based on historical market data, it is also inherently self-correcting and will ensure that, over time, actual market outturns are fairly reflected in allowed returns and therefore charges. By contrast, there is no guarantee that any misspecification in the CAA’s approach will ever be corrected. As with any approach based on pure discretion, it is possible for the underlying assumptions to be wrong period after period.

¹²⁶ 1st King, section 4.1.2.1 [Core/3/194] and Annex 1. [Core/3/224]

¹²⁷ See 1st King §62. [Core/3/192]

¹²⁸ See 1st King §§59–62. [Core/3/192]

174. The CAA’s choice to manually assign a different weight to certain observations therefore does no more than to introduce an element of subjectivity, and is ultimately arbitrary.

175. This concern is shared by other regulators. In the PR19 Final Report,¹²⁹ the CMA observed the following in respect to the potential impact that changes in the regulatory settlement may have on the asset beta, which it is respectfully submitted applies more generally to any forward-looking risk assessment:

We recognize that beta may change over time ... we consider the most robust approach to be to use the available beta evidence that we have from historic movements in stock prices, rather than to make speculative adjustments to reflect how beta may change in the future.

176. Ofwat, in setting out its methodology for the upcoming price control (PR24), came to the same conclusion, expressly in relation to pandemic related risks, with which Heathrow respectfully agrees:

We also do not agree that reweighting data to reflect assumptions about future recurrence of systematic risk events would be appropriate for the circumstances of the water sector. Weights related to the likelihood of the Covid-19 pandemic or Russia-Ukraine war recurring would be prone to inaccuracy, as both what data to exclude and the probability of recurrence is uncertain and so would require significant subjective judgments to be made. Additionally, calibrating for one source of systematic risk (for example applying weights based solely on the Covid-19 pandemic period) could miscalibrate weightings for other relevant sources of risk, with ambiguous implications for the accuracy of forecast betas over 2025-30.

In summary, we consider the case for using structural breaks and/or weighted periods is unproven. Instead we consider that due caution around recent volatility should be reflected by using longer estimation periods and trailing averages of beta compared to PR19, which focused on 2-5 year estimation windows and averaging over only 1 month.

(Emphasis added.)¹³⁰

177. The CAA in principle agrees that “*data on airport share prices and movements in stock market indices are important and relevant to the assessment*” and it recognises that “[*i*]t is plausible that their evolution since 2020 could signal a shift in investors’ perceptions

¹²⁹ At paragraph 9.477. [Auth/14/898]

¹³⁰ Ofwat: *Creating tomorrow, together: Our final methodology for PR24*, Appendix 11 Allowed return on capital, page 42. [Auth/26/1,438]

*of the systematic risk exposure of airports.*¹³¹ It also concedes that the task of determining parameters such as the frequency of future pandemic-type events is “*not straightforward*”.¹³²

178. However, the CAA nonetheless concludes that—

*... it is necessary to place lower weight on data from the pandemic period, to ensure that the impact of the pandemic is not over-represented in the asset beta estimate.*¹³³

179. In doing so, it effectively chose to substitute its own subjective assessment of future risk, which has little evidential support as explained above, for that of a wide-range of market participants—including, of course, existing and potential future investors in UK airports and infrastructure.

180. That approach is misconceived. It is fundamental to the regulatory regime and to investor confidence that regulatory discretion is not applied in an arbitrary manner, but in accordance with principles of regulatory best practice. ‘Regulatory discretion’ should not be relied on to avoid the need for evidence-based decision making.

181. The CAA’s assumption-based approach also cannot realistically be applied consistently over future time periods. Even if a similar approach were applied again, key assumptions such as the definitions of the pandemic and non-pandemic periods would need to be revisited.

The CAA’s approach increases perceived regulatory risk

182. The departure from precedent, lack of a well-evidenced calibration of the CAA’s methodology and the concomitant increase in the role of regulatory discretion all combine to increase regulatory risk—and ultimately the cost of financing Heathrow in the future. As Ms Ding, Heathrow’s treasurer, explains in her evidence, this concern about the

¹³¹ CAP2139A: *Consultation on the way forward*, April 2021, Appendix J - Weighted Average Cost of Capital, paragraph 38. [Auth/44/2089]

¹³² H7 Initial Proposals §9.31. [Supp/26/1232]

¹³³ H7 Initial Proposals §9.30. [Supp/26/1231-1232]

predictability and consistency of the regulatory framework is borne out strongly in conversations with investors.¹³⁴

Conclusion

183. In summary, the CAA's approach is wrong in law because it seeks to substitute evidence-based decision making with pure discretion. It is in any event an error in the exercise of regulatory discretion to depart freely from readily available evidence and a well-established regulatory method which other regulators, faced with the same difficulties, continue to adopt.

Remedy: A market led approach which suggests a significantly higher asset beta

184. Equity betas for listed companies are observable in the form of the correlation of the returns on the companies' stock with the returns on a broad market portfolio. In the combination with known leverage ratios, observable asset betas can therefore be derived.

185. Oxera in its report calculates empirical asset betas for a range of traded comparator airports (Paris, Zurich, Frankfurt, and Aena (Spain)) based on a conventional approach that relies on both daily and weekly returns data over a range of different time periods (2, 5, 7 and 10 years).¹³⁵ For the daily data, based on a cut-off date of 17 November 2022 (the same as used elsewhere in the Decision), the observed values across all of the different time periods range from 0.49 to 0.80. For the weekly data, based on a cut-off date of 21 November 2022, the range is 0.50 to 0.84.¹³⁶

186. The averages of all of these ranges (assigning equal weight to all observations) sit significantly above the CAA's mid-point estimate of 0.53. In addition, as explained by Oxera and Mr King, there are strong reasons, in this case, to choose a point estimate that sits well above the midpoint of the observed ranges:

186.1. **Consistency with observed cost of debt:** As explained above, the CAA's estimate of Heathrow's cost of equity implies an unlevered cost of equity that is below the observable cost of Heathrow's debt and that of other comparably-rated companies.

¹³⁴ 1st Ding §5.6; also see §3.3. [Core/5/272]

¹³⁵ 1st Hope, section 3E. [Core/9/504]

¹³⁶ See 1st Hope, Tables 3.1 and 3.2. [Core/9/507]

This is inconsistent with first economic principles. As Mr King demonstrates, an asset beta estimate towards the top-end of the observable ranges would be required to achieve a realistic premium of the cost of equity over the cost of debt.¹³⁷

186.2. **Consumer welfare:** In deciding to what extent to aim up, regulators are trying to balance the risk of overcharging customers on the one hand, and the risk of underinvestment, and the resulting loss in quality of service, on the other hand. As Oxera's analysis demonstrates, consumer welfare is maximised by aiming up because the potential loss of consumer welfare from under-remuneration and loss of investment (even if only a relatively small proportion of investment is at risk) far exceeds the potential cost to customers of over-remuneration.¹³⁸ This general argument is particularly compelling in the present case. As Mr Holland-Kaye explains, many of Heathrow's historical problems were the result of underinvestment. While great improvements have been made over the last 15 years, Heathrow once again has had to delay significant investment due to the impact of the pandemic. This now urgently needs to be caught up, and continued going forward, including ultimately with a view to expansion.¹³⁹ On the other hand, the costs of over-remuneration are likely to be limited. Heathrow is operating close to or at capacity, with the result that airlines are able to charge a premium above economic costs. This means that increases in airport charges are unlikely to be passed on to consumers.¹⁴⁰

186.3. **Relative risk of Heathrow compared to other airports:** Relative to its listed comparators, there are a number of factors which indicate that Heathrow is exposed to greater risk. These include a relatively long duration price control (as opposed to annual price caps), intense competition from neighbouring airports, a much lower share of more resilient domestic travel, and greater traffic risk overall as

¹³⁷ 1st King, section 4.3.1. [Core/3/206]

¹³⁸ 1st Hope, section 3D.3 [Core/9/501]

¹³⁹ 1st Holland-Kaye, sections 4–6, and in particular §§4.1, 5.5, 5.6 and 6.13 [Core/2/167; 169-170; 172]; see also 1st King §123. [Core/3/207]

¹⁴⁰ 1st King §122 and Frontier Economics analysis referenced there. [Core/3/207]

judged by the outcome during the pandemic.¹⁴¹ All of these factors further support an asset beta towards the top end of the observed ranges.

187. Heathrow invites the CMA to endorse an evidence-based approach and replace its own decision in this respect for that of the CAA. The CAA's estimate of asset beta should be replaced by a comparator derived value. Heathrow's previous estimate of its asset beta of 0.82¹⁴² is at the upper end of the observed range of 0.49 to 0.84. For the reasons set out in the previous paragraph, this remains an appropriate estimate and Heathrow invites the CMA to adopt this value. For comparison, it is worth noting that this is broadly comparable with an asset beta of 0.77 recently determined by the Belgian regulator for Brussels Airport.¹⁴³

188. Adopting such an approach would be in line with consistent regulatory precedent. It is also an approach that can continue consistently to be applied in the future and is inherently self-correcting, as any outturn deviation in asset beta over the price control period will be reflected in the market data that will inform the asset beta in future price controls.

189. Alternatively, to strengthen the self-correcting properties of a market-data based approach even further, the CMA could align the observation period with the length of a price-control period. The benefit of this approach would be that any divergence between forecast and outturn asset betas over a price control period would be 'trued up' in the next price control (using historical data from the previous period). This would allow changes in asset beta to be fairly reflected in consumer charges and investor returns over time, allaying any concern of giving undue weight to specific periods.

190. Focusing solely on data over the 5-year period to 17/21 November 2022 yields a range of observed betas of 0.66 to 0.84.¹⁴⁴ For the same reasons as above, an appropriate estimate of Heathrow's would be towards the top of this range and therefore also consistent with Heathrow's previous estimate of 0.82.

¹⁴¹ 1st King §§124–125. [Core/3/207-208]

¹⁴² See e.g., 1st King, Table 6 [Core/3/199]

¹⁴³ See 1st Hope §3.58. [Core/9/507]

¹⁴⁴ See 1st Hope Tables 3.1 and 3.2. [Core/9/507]

E(3) Ground 2B—Asset beta: Effect of the TRS

The decision under appeal

191. With the Decision, the CAA introduces a Traffic Risk Sharing (“**TRS**”) mechanism intended to reduce the risk of significant losses (or gains) for Heathrow arising out of lower (or higher) than expected outturn passenger numbers. The principle of such a mechanism was first mooted in the April 2021 Way Forward consultation with the stated objective, inter alia, to “*avoid unnecessary upward pressure on HAL’s cost of capital*”.¹⁴⁵
192. The mechanism saw significant modification between Initial and Final Proposals. As implemented by the Decision, it allows Heathrow to recover a certain percentage of any revenues lost as a result of lower-than-expected passenger numbers over a 10-year period (and, vice versa, requires it to give back excess revenues).¹⁴⁶ The recovery starts with one years’ delay (i.e. from year t+2) and takes the form of an adjustment to regulated charges for years still within the H7 period and an adjustment to the H7 closing RAB equivalent to recovery that would fall during subsequent price control periods.¹⁴⁷
193. The CAA argues that the TRS mechanism reduces Heathrow’s systematic risk.¹⁴⁸ In the Decision, it therefore makes a downward adjustment to its post-pandemic asset beta estimate on account of the TRS. By contrast to the Initial Proposals, which had suggested that the TRS should guide the selection of a point estimate for the pandemic risk component of the asset beta, in the Final Proposals and the Decision, the CAA applies a direct downward adjustment to the overall asset beta of 0.08–0.09.¹⁴⁹
194. The CAA calculates the value of the adjustment based on the dual assumptions that 50–90% of the difference between the observable asset betas of listed comparator airports and

¹⁴⁵ April 2021 Way Forward Consultation, p. 62. [MK1/2/147]

¹⁴⁶ The mechanism applies to 50% of any outturn difference up to 10% of allowed revenues, and 105% thereafter (1st Hope §4.6). [Core/9/511]

¹⁴⁷ The mechanism is described more fully by Oxera at 1st Hope, section 4B. [Core/9/511]

¹⁴⁸ H7 Final Proposals §9.37. [Supp/15/706]

¹⁴⁹ H7 Final Proposals §§9.23, 9.128 and 9.145. [Supp/15/702], [Supp/15/724] and [Supp/15/726]

those of network utilities (water and energy)¹⁵⁰ is due to volume/traffic risk, and that the TRS mechanism eliminates 50% of that risk.¹⁵¹

The TRS adjustment is fundamentally flawed

195. As explained in further detail below and in the expert report by Oxera¹⁵², the very significant reduction in the CAA's estimate of Heathrow's asset beta on account of the TRS mechanism is fundamentally flawed:

195.1. **First**, the TRS mechanism is unsuitable meaningfully to reduce Heathrow's systematic risk (and therefore asset beta). It lacks the immediacy and certainty of payback that would be required for that purpose and instead affords Heathrow the opportunity to earn back lost revenues over a long time period in the form of future higher charges that will themselves be subject to the same systematic and regulatory risks. This conclusion is supported by trying to quantify the effect of the TRS based on academic principles and related regulatory precedent, which points to an essentially zero adjustment.

195.2. **Second**, the magnitude of the adjustment made by the CAA is in any event essentially arbitrary because it is based on assumptions that lack any evidential support, by the CAA's own admission, and fail to take account of material considerations in the form of the different risk-sharing mechanisms from which a number of Heathrow's comparator airports benefit.

196. More generally, as with the CAA's elaborate construction of a post-pandemic beta, there was simply no need for the CAA to depart from an evidence-led approach. As the CMA has only recently observed, the most robust approach even in the context of regulatory change is to use the available evidence from historic market data, rather than to make essentially speculative adjustments to reflect how beta may change in the future.¹⁵³ In addition, a number of Heathrow's comparator airports benefit from different risk-sharing

¹⁵⁰ As determined by recent price control decisions (PR19 and RIIO-GD2/T2, respectively).

¹⁵¹ H7 Final Proposals §9.158 and Table 9.3. [Supp/15/728-739] See also Decision §§9.84 to 9.85. [Supp/4/163]

¹⁵² 1st Hope, section 4C. [Core/9/513]

¹⁵³ See PR19 Final Report as cited at paragraph 175 above.

arrangements. To the extent that such mechanisms are able to reduce the cost of capital, this will already be reflected in observable market evidence.

The TRS mechanism is unsuitable meaningfully to reduce systematic risk

197. The downward adjustment to Heathrow's asset beta that is applied by the CAA assumes, by definition, that the TRS mechanism is able to reduce Heathrow's exposure to systematic risk. That is unlikely to be the case in any meaningful way. As set out in the Oxera report,¹⁵⁴ the payback offered by the TRS mechanism on account of any volume shock is neither certain nor immediate enough to have this effect.

198. Unlike an insurance contract, the TRS mechanism does not offer guaranteed and immediate compensation. Instead, it affords Heathrow the possibility to earn back, by means of higher charges, the lost revenue over a long, future 10-year period. As Oxera observes, Heathrow's ability to do so is far from certain. The additional revenues carry the same level of risk as the rest of Heathrow's cash flows, which depend on future passenger demand.¹⁵⁵ The importance of this risk and the related uncertainty is amplified by the fact that, as Oxera calculate based on the CAA's own Price Control Model, the TRS mechanism reduces profit risk by only about 4% during the H7 period, with the rest deferred to future price control periods by means of a RAB adjustment.¹⁵⁶

199. Heathrow's ability to earn the required additional returns, in the form of higher charges, may also be constrained by the price-elasticity of demand. This is likely to be a particular problem if the shock for which the TRS mechanism is seeking to compensate has effects that persist over a number of years (such as the recent pandemic). In that case, Heathrow would find itself having to raise prices, to seek to recover lost revenues, at a moment in time when demand may still be depressed and when raising prices could depress demand yet further. This may risk reinforcing a demand shock and ultimately, as Oxera observe, then serve to *increase* rather than mitigate Heathrow's asset beta.¹⁵⁷

200. The TRS mechanism's ability to reduce systematic risk is further hampered by a perception of regulatory risk. As the experience with the recent pandemic has shown,

¹⁵⁴ 1st Hope, section 4C.1. [Core/9/513]

¹⁵⁵ 1st Hope §4.12. [Core/9/514]

¹⁵⁶ 1st Hope §4.27. [Core/9/520]

¹⁵⁷ 1st Hope §4.13 [Core/9/514].

similar regulatory mechanisms have been prone to being renegotiated in extreme circumstances. The regulatory scheme for European Aeronautical Service Providers was amended for 2020 and 2021, imposing new baseline costs and spreading revenue recovery over a longer time period; domestically, the TRS mechanism for the UK air traffic control operator (NATS (En Route) plc, or “NERL”) was suspended by the CAA in favour of a future retrospective reconciliation.¹⁵⁸

201. A further consequence of these issues is that the effects of the TRS mechanism are likely to be asymmetrical. There is significantly less uncertainty that the TRS would work as advertised to cap windfall gains than to insure against windfall losses: in contrast to the concerns set out above, Heathrow’s ability to lower charges is not subject to demand risk, and there is no reason to assume that the CAA would renege on the mechanism in such a situation. Any upside shocks are in any event likely to be smaller than the potential downside effects of a future pandemic-like event.

202. In summary, while the TRS mechanism would allow Heathrow to earn back a share of revenues lost to demand shock, Heathrow may not actually be able to do so; and there are significant concerns about the regulatory resilience of risk sharing mechanisms in the face of severe shocks. All of this means that the CAA’s basic assumption that the TRS mechanism is able to reduce Heathrow’s systematic risk is flawed, and that there is therefore no safe basis on which to assume that it would serve to reduce the asset beta.

203. This conclusion is supported by trying to quantify the impact of the TRS through an alternative lens, namely by reference to its likely impact on operational gearing and the link between operational gearing and systematic risk found in the academic literature. As Mr King estimates, by analogy to an approach employed by the CMA in its redetermination of Bristol Water’s PR14 price control, this would point to a reduction in Heathrow’s asset beta of around 0.002. This is around 3% of the adjustment proposed by the CAA (see below). As investor expectations of the cash flows associated with the TRS are likely to be less correlated with the market than those that would result from a direct reduction to operational gearing, the actual impact on systematic risk and asset beta is likely to be even smaller, and therefore essentially zero.¹⁵⁹

¹⁵⁸ 1st Hope, section 4C.2 [Core/9/515].

¹⁵⁹ 1st King §§106–108. [Core/3/203-204]

The magnitude of the TRS adjustment is in any event essentially arbitrary

204. The calculation of the magnitude of the TRS adjustment relies on the comparison of the observable asset betas of listed comparator airports with the asset betas of network utilities (water and energy) as determined by recent price control determinations (PR19 and RIIO-GD2/T2). To calculate the effect of the TRS mechanism, the CAA assumes that 50–90% of the difference in betas are explained by volume risk,¹⁶⁰ and that the TRS mechanism is able to mitigate 50% of that risk.¹⁶¹

205. For the first assumption that 50–90% of the difference between airports and network utilities derive from volume risk, there is simply *no* evidence in support, and the CAA does not pretend to offer any. It states in the Final Proposals that—

*The adjustment for the TRS mechanism relies to a significant extent on judgement in several areas where there is limited evidence available with which to carry out a detailed quantification.*¹⁶²

206. In fact, the CAA does not even offer “*limited evidence*” but simply states that “*we consider that [traffic risk] represents the principal factor*”¹⁶³.

207. It is unsurprising that the CAA is unable to provide any more cogent reasoning for its adjustment. The implicit assumption that the TRS mechanism can, in effect, turn Heathrow’s cash flows into something no more risky than those of a network utility lacks reality. As Oxera explains, a company’s asset beta reflects a multitude of factors that in combination capture its business risk. Heathrow’s business differs fundamentally from that of network utilities. To name but a few factors: it has unregulated as well as regulated activities; structural factors beyond traffic risk, such as changing patterns of business travel, may influence its business but are unlikely to have any effect on utilities; its regulatory environment is significantly more susceptible to change than that of utilities;

¹⁶⁰ H7 Final Proposals §9.158 [Supp/15/728-729] and Table 9.3. See also Decision §9.84. [Supp/4/163]

¹⁶¹ Ibid. See also Decision §9.85. [Supp/4/164]

¹⁶² H7 Final Proposals §9.160. [Supp/15/729]

¹⁶³ Ibid.

etc.¹⁶⁴ Network utilities are therefore simply not a good starting point when analysing an airport's asset beta.

208. In addition, the calculation adopted by the CAA ignores that many of the comparator airports themselves benefit from some form of risk sharing mechanism, in particular Aena, Fraport and Aeroports de Paris.¹⁶⁵ Their observed betas therefore already include any benefit these mechanisms may have on the cost of capital, while the CAA implicitly assumes that they reflect entirely unmitigated traffic risk. If the observed airport betas already reflect mitigation for (an element of) traffic risk, then any remaining gap to utilities—to the extent that these are useful comparators at all—is likely to be driven much more by other factors. While the CAA considered this issue in the H7 Final Proposals,¹⁶⁶ it wrongly focused on whether the respective mechanisms had mitigated pandemic risk in relation to the Covid-19 pandemic in a way that was comparable to the protection afforded by the TRS, not whether they were able to provide a degree of protection against volume risk more generally that would be reflected in the respective airports' asset beta.¹⁶⁷

209. Finally, even ignoring these issues, the CAA's approach entails the further unstated assumption that any reduction in volume risk leads to a commensurate reduction in the asset beta, for which there is also no support. As explained above (at paragraph 203), an alternative attempt to quantify the TRS's impact points to a much smaller adjustment.

210. The TRS adjustment is therefore essentially arbitrary. It pegs Heathrow against an unrelated benchmark and makes an unsupported assumption as to the extent that the gap to this benchmark can be closed. The adjustment should be rejected on that basis alone, even leaving aside that, as explained above, the TRS mechanism is in any event unlikely meaningfully to reduce systematic risk. The CAA seeks to substitute pure discretion for a total absence of evidence. This is not permissible.

¹⁶⁴ See 1st Hope §4.20 and the CEPA analysis referenced there. [**Core/9/516**]

¹⁶⁵ See 1st King §112 [**Core/3/205**]. As originally highlighted by Heathrow in its response to the H7 Initial Proposals §§7.6.2–7.6.4. [**Supp/32/1518**]

¹⁶⁶ H7 Final Proposals, §9.127f. [**Supp/15/723**]

¹⁶⁷ See 1st King §108. [**Core/3/204**]

Conclusion and remedy

211. In summary, as with the CAA's approach to calculating a post-pandemic asset beta, the CAA is wrong in law to apply a further essentially arbitrary adjustment on account of the TRS mechanism. The adjustment is irrational in that it seeks to reduce asset beta to reflect a reduction of systematic risk that the TRS mechanism is not in fact able to achieve. The CAA also, by its own admission, lacks any evidential support for the key assumptions that determine the magnitude of the adjustment. Additionally, the CAA has failed to take account of relevant considerations in the form of comparator airport's risk sharing mechanisms.

212. The calculation of the TRS adjustment also suffers from a number of factual errors in respect of its coverage of non-aeronautical charges and the protection rate achieved by the TRS mechanism.

213. The TRS adjustment in any event represents an error in the exercise of the CAA's regulatory discretion by departing even further from best regulatory practice and applying a disproportionate adjustment in respect of an effect that is at best questionable.

214. Heathrow therefore invites the CMA to reject the TRS adjustment and instead endorse an approach to estimating Heathrow's asset beta that is based solely on market evidence, as set out at paragraph 184184-190 above. As explained there, there are strong arguments in this case to choose an estimate towards the upper of the observed range of comparator betas.

215. This indicates that Heathrow's previous estimate of 0.82 for its asset beta remains appropriate.

F. GROUND 3: COST OF DEBT (EMBEDDED DEBT)

F(1) Introduction to the Cost of Debt Ground of Appeal

216. The previous ground (Ground 2) was concerned with the errors that have infected the cost of equity component of the CAA's allowed WACC. This Ground is concerned with the cost of debt component. Heathrow is a large user of corporate debt markets, with about £15.6 billion in outstanding debt,¹⁶⁸ a significant proportion of which continually needs to

¹⁶⁸ 1st Ding §3.2. [Core/5/268]

be refinanced. Setting an appropriate cost of debt allowance is therefore another important element of the price control's allowed return on capital that it is necessary to get right in order to support continuing, much-needed investment at Heathrow.

The decision under appeal

217. The CAA separately estimates the cost of embedded debt (that is, debt that the notional company is assumed to have already issued at the start of H7) and new (yet to be raised) debt. This Ground focuses on the cost of embedded debt.

218. The embedded debt consists of a mixture of fixed-rate debt instruments and inflation linked instruments, the latter themselves being a mixture of index-linked bonds and derivative instruments (swaps) overlaid on fixed-rate bonds to provide inflation indexing.¹⁶⁹

219. The CAA estimates the nominal cost of fixed-rate embedded debt as the sum of:

219.1. the 13.5-year trailing average of the yields on the iBoxx non-financials A- and BBB-rated 10+ years indices; and

219.2. a Heathrow-specific premium of 8 bps based on a comparison of the price of Heathrow's Class A notes at issuance to the above iBoxx indices.¹⁷⁰

220. As the price control provides a real allowance for the cost of debt, the CAA then deflates this nominal cost by the Office for Budget Responsibility's ("**OBR**") October 2022 forecast of RPI inflation for H7 (starting with a 11.6% estimate for 2022, and equating to an average of 4.9% over the H7 period).¹⁷¹

221. The cost of index-linked debt is derived in the same way, save that an additional index-linked premium of 15 bps is added and the nominal cost is deflated by an estimate of historical long-term RPI inflation expectations of 2.73%.¹⁷²

¹⁶⁹ See 1st Ding §5.3 [**Core/5/272**].

¹⁷⁰ Decision §9.92. [**Supp/4/164**]

¹⁷¹ Decision §9.40 and table 9.2. [**Supp/4/156**]

¹⁷² Decision §§9.93 and 9.94. [**Supp/4/165**]

The errors in the Decision

222. The CAA's estimate of Heathrow's cost of embedded debt of -0.08% RPI real is unreasonably low and fails to provide Heathrow with an appropriate allowance to service that debt. In arriving at its estimate, the CAA has erred in three ways:

222.1. **Ground 3A— Use of short-term inflation estimates:** The CAA's use of short-term inflation forecasts to deflate the nominal cost of fixed rate embedded debt is a significant departure from the established UK framework of a real returns-based regulation and the use of long-term inflation expectations. It undermines existing investment and financing decisions and introduces undesirable volatility into Heathrow's (and the notional company's) cash flows. During H7 this will lead to a significant under-provision for interest costs. In the long run it guides Heathrow towards adopting a shorter duration financing strategy increasing refinancing risks and transaction costs. While ostensibly securing a lower pricing outcome in H7, none of this is in the interests of Heathrow's users. The mechanism of short-term forecasts in any event seeks to address an issue in the form of 'windfall' gains or losses which properly understood does not exist, and is unable to do so even on its own terms.

222.2. **Ground 3B—Heathrow-specific cost of debt premium:** The CAA has erred in calculating a Heathrow-specific yield premium of 8 bps over the iBoxx corporate debt indices it uses as a benchmark. An appropriate premium is around 49–█ bps. The CAA's estimate is wrong in large part because it relies solely on the cost of Heathrow's Class A debt (A– rated for most of the relevant period)¹⁷³, disregarding its Class B notes (BBB rated) and effectively assessing the costs of debt of an A– rated airport. This is inconsistent with the assumption that the notional company is BBB+ rated and leads to an underestimation of the cost of debt. Additionally, the CAA has underestimated the costs associated with foreign currency debt.

222.3. **Ground 3C—Averaging period for index observations:** The CAA has erred in basing its assessment of the cost of embedded debt on observations of the iBoxx indices it uses for comparison that are averaged over 13.5 years. This is inconsistent

¹⁷³ These ratings applied for most of the observation period. Post Covid, the notes were down-graded by S&P to BBB+ at Class A and BBB- at Class B; however, investors wish to see Heathrow return to the prior ratings: see 1st Ding §4.6 [Core/5/270]

with the average tenor of Heathrow's actual embedded debt and assumptions underlying other elements of the price control, in particular about the amount of debt that needs to be refinanced each year. It also undesirably adds to the incentive for Heathrow to move towards a shorter duration financing policy.

223. Correcting all of these errors would lead to a cost of embedded debt of 2.50% RPI real (compared to the CAA's -0.08%).¹⁷⁴ While this would be the appropriate measure for the cost of embedded debt of the notional company, it is in excess of the actual cost of Heathrow's, more efficient embedded debt of 1.79% RPI real.¹⁷⁵ It is the latter which Heathrow asks the CMA to implement as a remedy (as explained below).

F(2) Ground 3A—Use of short-term inflation estimates

224. As explained in the following, the CAA's use of short-term inflation estimates to deflate the nominal cost of fixed-rate embedded debt is mis-conceived and wrong in law for two principal reasons:

224.1. **First**, it is a departure from the well-established UK regime of economic regulation which provides for real returns on an indexed RAB which is undesirable and contrary to the interests of Heathrow's users. It undermines past investment decisions, increases perceived regulatory risk and reduces the attractiveness of Heathrow to long-term investors (see paragraphs 226 to 233 below). It also sets undesirable incentives for Heathrow to move to a shorter term financing policy for its fixed-rate debt that will increase risk and costs in the long-term, and creates an immediate financeability issue in H7, or to increase its reliance on index-linked debt, contrary to the design of the notional company and to the detriment of investors seeking leveraged exposure to inflation (see paragraphs 234 to 237 below).

224.2. **Second**, the fundamental change in regulatory approach is in any event unnecessary and therefore disproportionate. It seeks to address an issue in the form of 'windfall' gains that do not in reality exist but represent natural deviations within a system that are expected to even out in the long run (see paragraphs 238 to 243);

¹⁷⁴ Decision §9.168. [Supp/4/178]

¹⁷⁵ 1st Ding §§6.17–6.18. [Core/5/278]

it also fails to achieve the CAA's own stated goal of ensuring that efficiently incurred financing costs are recovered within each price control period avoiding the issue of 'windfall' gains or losses (see paragraphs 244 to 245).

225. All of this is ultimately contrary to the interests of Heathrow's users and weakens the regulatory regime.

The UK "indexed RAB–real WACC" regulatory regime

226. As Oxera explain in their report, the established framework for economic regulation in the UK is based on providing a regulated real return (in the form of a real WACC) on a capital base (RAB) that is indexed to inflation and therefore retains its value in real terms.¹⁷⁶

227. As regulated assets tend to be long-lived, they are usually financed in addition to equity by long-term debt with a tenor spanning multiple price control periods. The actual, nominal cost of any fixed-rate (as opposed to index-linked) component of this debt, as determined at issuance, reflects correspondingly long-term inflation expectations. Put simply, a 20-year note is not priced by reference to inflation expectations for the next 5 years. To secure the recovery of efficiently incurred financing costs over time, the return allowed by a price control on account of the cost of debt therefore also needs to reflect long-term inflation expectations.

228. While real returns to equity will necessarily fluctuate (and correlate positively with inflation)¹⁷⁷ in the short run whenever a component of fixed-rate debt is used, the combination of a constant RAB (in real terms) and an appropriate allowance for the long-run cost of debt nonetheless ensures predictable real returns to equity over time, in line with the real cost of equity allowed by the price control.

229. This is a desirable feature of the UK regulatory regime, as it offers investors the opportunity to invest in assets whose nominal returns correlate with inflation. This is particularly important for investors such as pension funds, which have inflation-linked liabilities. Regulated assets providing predictable real returns therefore fulfil an important

¹⁷⁶ 1st Hope, §6.17f [Core/9/534]

¹⁷⁷ See 1st Hope §6.19. [Core/9/535]

economic function. Vice versa, it is because of these characteristics that regulated assets are able to attract long-term stable investment.

The CAA's approach is an undesirable departure from the established real returns framework

230. By relying on short-term forecasts of inflation to deflate nominal debt costs, the CAA breaks this mechanism. The change in the CAA's approach in the Decision means that allowed real returns are now dependent on changeable short-term forecasts of inflation and that, in effect, RPI indexation is only applied to 58% of the RAB (the component financed by equity plus 30% of the debt—the proportion of index-linked debt the CAA assumes to notional company to hold)¹⁷⁸, while the indexation of the remainder (assumed to be financed by fixed-rate debt) is offset by the use of a the short term RPI deflator for the cost of fixed-rate debt.

231. This is undesirable from a broader economic perspective and decreases the attractiveness of Heathrow as an investable asset with consequential negative effects on its ability to continue to attract much needed investment in the future.

232. This is a concern that has been recognised by other regulators. Ofgem, for example, in its RIIO-2 Framework Consultation considered that—

Changing the way we pay the return [from a real return to a nominal return] could reduce demand from investors with inflation-linked liabilities (e.g. pension funds), who are looking for inflation-proof investment opportunities.¹⁷⁹

233. The negative effect on Heathrow's investability is exacerbated because the CAA's change clearly undermines long-term investment and financing decisions that were made on the basis of a settled understanding of the regulatory regime. This undermines regulatory confidence and is liable to increases the perception of future regulatory risk, a key factor in the investment decisions of long-term infrastructure investors.¹⁸⁰

¹⁷⁸ 1st King, §139. [Core/3/211]

¹⁷⁹ Ofgem (March 2018), 'RIIO-2 Framework Consultation', March, para. 7.79. [Auth/19/1401]

¹⁸⁰ 1st Ding §5.6, also see §3.3. [Core/5/272]

The CAA's change in approach guides Heathrow to higher risk and costlier financing choices

234. The use of short-term estimates also has practical implications for the way Heathrow finances itself in the debt markets, which will increase financing risks and transaction costs to the detriment of consumers.

235. Contrary to the CAA's use of short-term inflation estimates, Heathrow's actual embedded debt portfolio is long term as befits the long-lived nature of its assets. Heathrow (and the notional company) therefore faces the unenviable choice of either accepting the risk of significantly increased cash flow volatility, as its nominal long-term debt costs do not change, in contrast with the CAA's allowance which is tied to changing short term estimates of inflation; or changing its financing approach to either raising shorter term debt or reduce its reliance on fixed-rate debt altogether.

236. The potential increase in volatility of cash flows is highly significant. As Mr King calculates, the change in the OBR's inflation estimates between 2022 and 2025 translates to a swing in the WACC of 4.8% and a change in resulting cash flows of £960 million between those two years.¹⁸¹ The potential volatility of cash flows is also aptly illustrated by the fact that the use of short-term inflation estimates leads to an essentially zero real WACC for 2022 and 2023 (on the CAA's own assumptions), and had expectations not been for a swift recovery to long-term trend, WACC may well have stayed at those levels for longer.¹⁸² Equally, while a shift to shorter term financing could in the long run align Heathrow's costs of embedded debt to the allowance provided by the CAA (on the assumption that the CAA does not change its approach again when inflation recedes), such a change is undesirable because the more regular refinancing required would increase re-financing risks and transaction costs.¹⁸³ It would also lead to a misalignment in duration between Heathrow's assets and the liabilities which finance them. A permanent shift away from fixed-rate debt, in addition to being contrary to the design of the notional company, would be similarly unattractive. It would require significant restructuring costs and would ultimately weaken the appeal of Heathrow's equity to investors that seek leveraged exposure to inflation.

¹⁸¹ 1st King §140. [Core/3/211]

¹⁸² Ibid.

¹⁸³ 1st Ding §5.11 [Core/5/273]

During H7 financeability issues are unavoidable

237. During H7, and to a lesser extent over the following price control periods, Heathrow's (and the notional company's) position will be even more precarious. Restructuring its debt portfolio in the short term, so as to shorten its duration, would give rise to significant close-out costs on current positions, which are not provided for in the price control.¹⁸⁴ Heathrow will therefore largely need to absorb the shortfall that arises out of the mismatch between the CAA's allowance, which will decrease significantly due to being deflated by high short term inflation estimates and its actual, nominal coupon costs that remain unchanged. This shortfall is significant. Heathrow estimates that for 2022 and 2023 alone, the CAA's changed approach will amount to a reduction in real revenues of around £1.39 billion.¹⁸⁵ As Heathrow needs to continue to service its debt, this is money that will need to be diverted from other areas of the business, materially impacting the company's ability to deliver services to consumers.

The windfall gains identified by the CAA do not exist

238. The CAA justifies its change in approach by stating that—

... retaining our previous approach would lead to a material miscalibration of the price control that is not expected to reverse over any defined time period. This is the case in the current context: the inflation forecast over H7 is significantly above the long-term level, and using the latter to deflate nominal yields would result in a windfall gain for HAL at the expense of significant consumer detriment.

239. This is a mischaracterisation of the existing mechanism. As explained above, and in more detail by Oxera,¹⁸⁶ the use of any fixed-rate debt in the financing mix will result in a positive correlation between real equity returns and inflation. In years of high inflation, this will result in an overprovision relative to long-term debt costs; but similarly, in years of low inflation it will result in an underprovision. As outturn inflation demonstrably mean-reverts around long-term expectations (aided by the Bank's inflation targeting

¹⁸⁴ 1st Ding §5.18 [Core/5/275]

¹⁸⁵ 1st King §137. [Core/3/210]

¹⁸⁶ See 1st Hope Section 6C.1, §§6.17 – 6.28 [Core/9/534]

mandate),¹⁸⁷ this can be expected to even out over time, with the result of ensuring the recovery of efficiently incurred financing costs over the life of the relevant debt.

240. The CAA rejects this argument by stating that—

... between 2000 and 2021, UK inflation forecasts have only deviated from their long-term averages by a relatively small amount, implying that HAL has not been systematically under-remunerated under our previous approach of using long-term inflation forecasts.

241. However, the CAA presents no analysis to support this view. As is apparent from the OBR's forecasts on which the CAA relies (and Figure 6.1 in 1st Hope), the current spike in inflation is likely to be short-lived. The CAA/OBR expects inflation to be back below the long-term trend by 2024.¹⁸⁸ There is therefore no evidence to suggest that a relatively small underprovision over a long historical (and potentially future) period would not be sufficient to balance out any short-term positive deviation. To the contrary, the mean reverting nature of inflation suggests that curtailing the upside effects of the current higher than average inflation may risk ultimately resulting in efficiently incurred costs not being recovered over time.

242. The 'windfall' gains that the CAA identifies therefore are no such thing, but instead a feature of a system that has allocated inflation risk to investors, who are best able to bear this risk. Tinkering with it now in the face of higher short-term inflation is opportunistic and in its asymmetric nature violates the regulatory 'fair bet' principle.

243. As Oxera and Mr King explain further, the CAA's calculation of the purported windfall gains¹⁸⁹ is further exaggerated by assuming that the notional company has a significantly lower share of index-linked debt (and therefore higher share of fixed debt) than Heathrow actually does.¹⁹⁰ There is no justification for such an assumption.

¹⁸⁷ See 1st Hope 6.37, Figure 6.1 [Core/9/539-541] and the CMA's commentary from the PR19 Final Report to the same effect, as cited at [6.36].

¹⁸⁸ Decision, Table 9.1. [Supp/4/150]

¹⁸⁹ Presented in the H7 Final Proposals §§9.215 – 9.218 [Supp/15/738-739]

¹⁹⁰ 1st Hope §6.28f [Core/9/537]; 1st King §137. [Core/3/210]

The CAA's approach does not remedy the problem it purports to address

244. The CAA's approach in any event fails to achieve its stated aim of avoiding 'windfall' gains or losses due to a mismatch between forecast and outturn inflation. It simply replaces more stable long-term expectations with more volatile short-term forecasts. This avoids a mismatch only on the assumption that outturn inflation over the price control period matches forecasts when it is set. The worked example the CAA presents in support of its position¹⁹¹ is entirely circular in this respect, as it assumes what it intends to show, namely that outturn inflation indeed matches the OBR forecasts over H7.

245. This is unlikely to be the case with any precision. Contrary to a reliance on long-term inflation expectations to which outturn inflation demonstrably mean-reverts, there is additionally not even a reason to assume that deviations between short-term forecast and outturn inflation will equal out over time. Five-year forecasts at the beginning of each price-control period may well consistently over or underestimate outturn inflation period after period, giving rise to the risk of systematic one-sided miscalibration.¹⁹² This is significantly less likely with long-term expectations, not least because of the Bank's inflation targeting mandate.

Conclusion: the CAA has failed to act proportionately or in line with its duties – financeability

246. In summary, the CAA's approach appears motivated largely by achieving lower near-term price outcomes, but it does so to the detriment of Heathrow and its users because it introduces volatility, incentivises poor long-term financing choices, gives rise to a funding short-fall during H7, and in the long-run makes Heathrow a less attractive investment. It does, in any event, seek to address an issue of 'windfall' gains that does not exist, and purports to do so with a mechanism that is unable to achieve this aim.

247. All of this renders the Decision wrong in law, as it is incompatible with the CAA's duties, including its primary duty to act in a manner which will further the interest of users of air transport services, its Better Regulation Duties, including to act consistently and proportionately, and its duty to have regard to Heathrow's ability to finance itself.

¹⁹¹ At H7 Final Proposals §§9.216–9.218. [Supp/15/738-739]

¹⁹² 1st Hope §6.15. [Core/9/534]

Remedy: Use of long-term inflation expectations consistently with long-established precedent

248. Heathrow invites the CMA to quash the CAA’s decision to rely on short-term inflation estimates to deflate the nominal cost of embedded fixed-rate debt and instead substitute its own decision to use long-term inflation expectations (in the form of the CAA’s estimate of long-run RPI inflation of 2.73%) as a deflator in the same way as has been done for index-linked debt.

F(3) Ground 3B—Heathrow-specific cost of debt premium

249. The CAA estimates a Heathrow-specific yield premium of 8 bps over the iBoxx corporate debt indices it uses as a benchmark. This is far too low. As set out below, an appropriate premium is around 49 to ■ bps.

The CAA is wrong to consider only Heathrow’s Class A debt

250. The CAA arrives at its artificially low premium in large part because it estimates the Heathrow-specific premium based solely on the company’s Class A debt. This was A– rated for most of the relevant period. The CAA therefore effectively assesses the cost of debt of an A– rated airport. This is inconsistent with a notional company that is BBB+ rated as assumed by the price control for other purposes (including in its financeability assessment).

251. The CAA states that by not reflecting the cost of Heathrow’s Class B debt, it “*protects consumers from the effects of higher leverage associated with HAL’s Class B and subordinated borrowings*”.¹⁹³ However, it provides no justification for the implied assertion that Heathrow’s Class B debt is in somehow inefficient.

252. While the CAA contends in its financeability analysis, that the notional company would benefit from a one-notch upgrade similar to that enjoyed by Heathrow’s actual debt, this is an unrealistic assumption. As Mr King explains, that uplift is the result of structural features of the relevant notes, and credit agencies’ treatment of mechanisms similar to the regulatory ringfence makes amply clear that this would not lead to a corresponding benefit for the notional company.¹⁹⁴

¹⁹³ Decision, §§9.139-9.140. [Supp/4/172-173]

¹⁹⁴ 1st King §§145–150. [Core/3/212- 214]

253. As Oxera observe, Heathrow's Class A and Class B debt taken together broadly correspond to a combined credit rating of BBB+. ¹⁹⁵ Basing an assessment of a BBB+ rated notional company's cost of debt solely on Heathrow's Class A debt is irrational, as a BBB+ rated company, by definition, would not be able to finance itself exclusively by means of A- rated debt.

The CAA underestimates the cost of foreign currency debt

254. A further factual error arises out of the CAA's treatment of foreign currency debt. As Ms Ding explains, Heathrow has to rely in part on foreign currency debt, as the Sterling market alone does not have a sufficient depth to be able to accommodate all of Heathrow's financing requirements. The CAA acknowledges this and recognises the costs associated with transposing foreign denominated debt back to Sterling by means of cross-currency swaps. However, it significantly underestimates those costs. As Ms Ding shows by reference to actual pricing and projected spreads for Australian Dollar, Canadian Dollar, Euro and the Swiss Franc, the CAA underestimates swap costs by up to 40 bps. ¹⁹⁶ Its assessment of these costs is therefore factually wrong.

Remedy

255. As Mr King explains, ¹⁹⁷ there are principally two possible approaches that can be used to estimate an appropriate premium for the cost of debt of a BBB+ rated airport relative to the average of the A and BBB iBoxx non-financial indices on which the CAA relies as a benchmark:

255.1. The first is to compare the actual spread at issuance of Heathrow's debt with the most relevant iBoxx index, adjusting for tenor and credit rating. Including both Heathrow's Class A (A- rated) and Class B (BBB rated) debt, which taken together broadly correspond to a combined credit rating of BBB+, ¹⁹⁸ this yields a premium of ■ bps. ¹⁹⁹

¹⁹⁵ See 1st Hope §5.14. [Core/9/525]

¹⁹⁶ 1st Ding §6.12 and associated table. [Core/5/277]

¹⁹⁷ 1st King §152. [Core/3/214]

¹⁹⁸ See 1st Hope §5.14. [Core/9/525]

¹⁹⁹ 1st Ding §6.14 and associated table. [Core/5/278]

255.2. A second approach is to assess the appropriate premium by reference to Heathrow's traded debt. This is only practical for Heathrow's Class A debt²⁰⁰ and is therefore likely to be an underestimate. Oxera has performed this analysis and finds that between March 2011 and December 2021²⁰¹ there was an average spread of 34 bps between Heathrow's traded class A bonds and the iBoxx GBP non-financial A 10+ index. It also observes that this spread is comparable but below that observed for bonds of Manchester and Gatwick Airports.²⁰² Combined with a new issuance premium of 15 bps (as assumed by the Decision)²⁰³, this yields a premium of 49 bps.

256. Both of these approaches yield broadly similar results and indicate an appropriate Heathrow-specific premium of between 49 and ■ bps, much higher than the CAA's 8 bps estimate. Heathrow invites the CMA therefore to quash the CAA's decision in this respect and substitute its own decision to find an appropriate Heathrow-specific debt premium of about ■ bps (the middle of the range).

F(4) Ground 3C—Averaging period

257. The CAA's decision to rely on a 13.5-year trailing average of the yields on the relevant iBoxx indices to determine the nominal cost of Heathrow's embedded debt is wrong. It is based on factually erroneous statements about Heathrow's actual debt and inconsistent with other assumptions for the notional company.

258. In the Initial Proposals, the CAA had calculated the cost of embedded debt by using a 20-year "*collapsing average*" of the iBoxx indices which reflected an implicit assumption that the notional company would evenly raise debt over the course of its assets' life of 20 years.²⁰⁴ In the Final Proposals, the CAA switched to a 13.5-year trailing average of the iBoxx index on the ground that this "*better reflects the issuance profile of Heathrow's*

²⁰⁰ As Mr King explains, there is no Class B debt of appropriate tenor to compare it to the relevant iBoxx 10+ index: see 1st King §152(b). [Core/3/214]

²⁰¹ While this period overlaps in part with the period during which Heathrow's Class A notes had been downgraded to BBB+ (post Covid) which likely will have led to an increase in spreads, the comparison to the A-rated index nonetheless remains appropriate, as the notional company is likely to have suffered a corresponding Covid-related downgrade and increase in funding costs: 1st King §157. [Core/3/215]

²⁰² 1st Hope §5.20 and Table 5.2. [Core/9/527]

²⁰³ Decision §9.176. [Supp/4/179]

²⁰⁴ 1st King, §155 [Core/3/215]; H7 Initial Proposals, §9.187. [Supp/26/1260]

class A debt, which has been issued more recently on average than a 20-year profile would imply”.²⁰⁵ This approach was retained in the Decision.

Inconsistent with Heathrow’s actual embedded debt

259. The CAA’s assertion that a 13.5-year averaging period is better aligned with Heathrow’s actual issuance profile is not supported by the facts. As explained by Ms Ding, the average maturity for all of Heathrow’s Class A debt at issuance was 17.6 years, while the Sterling-denominated component of this, which most closely matches the Sterling-denominated iBoxx indices used as a benchmark, had an average maturity of 21.1 years at inception.²⁰⁶

260. Whilst the beginning of the 13.5-year averaging period appears to be aligned with Heathrow’s restructuring of its debt in 2008, Heathrow has retains a significant amount of debt on its balance sheet which pre-dates 2008.²⁰⁷

261. As Ms Ding calculates, the 13.5-year period does not even appear to be consistent with the CAA’s own assumptions as to the distribution of Class A debt over different, broad maturity bracket, which indicates an average maturity of 15.7 years and assumes that 17% of Heathrow’s Class A bonds predate 2007.²⁰⁸

Inconsistent with assumptions for the notional company

262. Further, the assumed averaging period has important signalling effects for Heathrow’s financing policy. If the CAA is to assume a 13.5-year averaging period for the purposes of estimating the cost of embedded debt, this should therefore be consistent with other price control parameters. However, as set out in more detail in 1st King, that is not the case. A 13.5-year averaging period is inconsistent with the assumed notional company construct for a number of other parameters including: the regulatory asset life (of around 21.7 years); the average tenor of the debt making up the iBoxx indices used as a benchmark (of around 20 years); and the averaging period of the long-term inflation forecast used to deflate the cost of index-linked debt (20 years); and the assumed profile of new debt issuance (of 5% per annum, indicating that embedded debt is fully replaced after 20

²⁰⁵ H7 Final Proposals, §9.220. [Supp/15/739]

²⁰⁶ 1st Ding, §6.6. [Core/5/276]

²⁰⁷ 1st King, §160. [Core/3/216]

²⁰⁸ 1st Ding §6.8. [Core/5/276]

years).²⁰⁹ The latter in particular is important, because to be consistent with a shorter averaging period, the CAA would have had to assume higher new debt issuance (c.7.5% refinancing would be required to replace all embedded debt within 13.5 years), leading to a higher share of (more costly) new debt over the price control period, and a higher cost of capital overall.

Remedy

263. Heathrow invites the CMA to quash the CAA's decision to rely on a 13.5-year averaging period of the relevant indices for calculating Heathrow's cost of embedded debt, and instead substitute its own decision to revert to a 20-year collapsing average, as proposed in the H7 Initial Proposals, for assessing the notional company's efficient cost of embedded debt. As explained in the following paragraphs, Heathrow's overall proposed remedy for the cost of embedded debt is to adopt Heathrow's actual, more efficient cost.

F(5) Conclusion and remedy for the Cost of Debt Ground

264. In conclusion, for all of the reasons set out in this Ground of Appeal, the CAA has erred in changing its approach for deflating the nominal cost of fixed-rate embedded debt to relying on short-term inflation estimates rather than long-term inflation expectations; has underestimated the Heathrow-specific cost of debt premium relative to the average of the A and BBB iBoxx non-financial indices on which it relies as a benchmark; and applied too short an averaging period of 13.5-years rather than the more appropriate 20 years.

265. Correcting for all of these errors yields an appropriate estimate of the efficient cost of embedded debt for the notional company of 5.23% nominal or 2.50% RPI real. This is based on the 20-year average of the iBoxx GBP non-financials A and BBB 10+ indices, calculated by Oxera to be 4.72% for the period 31 December 2001 to 31 December 2021,²¹⁰ a Heathrow-specific premium of ■ bps (the middle of the range identified at Ground 3B above), and the CAA's own view of long-term inflation expectations of 2.73%.²¹¹

²⁰⁹ 1st King, §158. [Core/3/217]

²¹⁰ 1st Hope §5.26. [Core/9/529]

²¹¹ Decision §9.95. [Supp/4/165]

266. As Mr King explains, in its submissions to the CAA during the H7 process, Heathrow had based its estimate of the cost of embedded debt on its actual cost of debt of 1.70% real (4.65% nominal). This estimate was based on a long-run inflation assumption of 2.9%. Adjusting the cost to reflect the CAA's view of long-run RPI of 2.73%, results in a real cost of 1.79%. This cost reflects the overall cost of both Class A and Class B debt.²¹²

267. As this is lower, and therefore more efficient, than the estimate of the cost of embedded debt of the notional company properly calculated, the CAA should have used Heathrow's actual cost of embedded debt, and Heathrow now invites the CMA to do the same in substituting its decision for the CAA's.

G. GROUND 4: THE AK FACTOR

G(1) Introduction to the AK Factor Ground

268. Heathrow's price control imposes a maximum yield per passenger cap designed to allow the recovery of efficiently incurred costs and an appropriate return on capital. As an ex-ante price control, this cap is necessarily based in part on assumptions, which are likely in reality to turn out somewhat differently from plan. In line with price controls in other sectors, the charges condition in Heathrow's licence therefore contains a correction factor (or K-factor) which is intended to true up retrospectively any over or under-recovery of revenue that has arisen in a prior year (for practical reasons, typically two years prior, or 't-2') due to differences between outturn and assumptions.

269. Such over or under-recovery may arise, for example, where the outturn passenger mix is different from that assumed by the price control. In addition, the K-factor mechanism includes fixed revenue adjustments intended to prevent over recovery of revenue relative to budgeted costs not directly related to passenger volumes. In particular, there is an adjustment to reflect the actual level of capex compared to the assumption underpinning the price cap. There is also a business rates adjustment to reflect the proportion of the reduction in the rates bill that should be passed on to consumers. These adjustments are intended to ensure that revenue raised based on the per passenger price cap does not include an allowance for a return on capital that has not been spent or a rates bill that is not incurred.

²¹² 1st King §162. [Core/3/217]

270. Although these revenue adjustments are intended to prevent over-recovery, issues arise when outturn passenger numbers are very low. If this occurs, then the reduction to prevent over-recovery is still applied in full even though overall there is likely to have been significant under-recovery. Indeed, even if no revenue was recovered at all in any given year, the mechanism would still calculate an over-recovery.

G(2) The decision under appeal

271. The Decision implements such a K-factor as part of the maximum allowed per passenger yield defined in licence conditions C1.4 and C1.5, which from 2024 onwards will true up outturn differences that have arisen in price control years from 2022 onwards.²¹³

272. As the introduction of the H7 price control was delayed, allowable charges for the years 2022 and 2023 were subject to a simplified ‘holding’ and ‘interim’ price cap, respectively.²¹⁴ These simplified caps did not include a K-factor, and no correction was therefore applied in respect of any deemed over- or under-recovery in the years 2020 and 2021.

273. The Decision now seeks to rectify that by including an additional correction factor, referred to as the ‘AK-factor’, described as “a new mechanism to address the over-recovery of revenues in Regulatory Years 2020 and 2021”.²¹⁵ It is calculated in essentially the same way as a regular K-factor, save that it allows additional flexibility to return the identified over-recovered revenue across the remainder of H7, i.e. 2024 to 2026. This is to address what the CAA considers an “*unusually large correction*”.²¹⁶

274. The CAA states that Heathrow recovered around £166 million more revenue than it should have done over 2020 and 2021.²¹⁷ However, as 1st King explains, once correcting for two errors in the input data, the CAA’s yield calculations actually suggest that Heathrow has

²¹³ The actual correction factor K_t is defined in Condition C1.24.

²¹⁴ [CAP2305 and CAP2488] [MK1/4/223] and [Supp/58/2027]

²¹⁵ Decision, Appendix C, §C38. [Supp/6/280] The AK-factor forms part of the price cap in Condition C1.4, and is defined in Conditions C1.22 and C1.23.

²¹⁶ H7 Final Proposals, CAP2365, §14.17. [Supp/15/866]

²¹⁷ Decision §14.30. [Supp/4/243]

‘over-recovered’ revenues of around £91 million in 2020 and £166 million in 2021, i.e., £258 million in total.²¹⁸

G(3) The errors in the Decision

275. The inclusion in Heathrow’s licence of an additional correction factor in respect of the years 2020 and 2021, in the form of the AK-factor, is unreasonable and therefore wrong. The purpose of a K-factor is to correct for any over or under-recovery of revenue relative to efficiently incurred costs (as reflected by the per passenger yield cap). It is therefore ultimately intended to avoid excess returns. The years 2020 and 2021 were defined by the Covid pandemic and resulted in a catastrophic financial performance for Heathrow. Revenues from aeronautical charges were almost 70% below target,²¹⁹ and Heathrow suffered operating losses before tax of around £3.8 billion over the two years. It is divorced from reality to argue against this backdrop that a K-factor in respect of these years is “*necessary to protect consumers against windfall gains*”.²²⁰

276. The correction identified by the CAA, once correctly calculated, would require Heathrow to return more than 25% of all aeronautical revenues earned over these two years,²²¹ further exacerbating the financial impact of the Covid pandemic and depriving the business of funds that are much needed to catch-up on investment delayed out of necessity during the Covid years. Returning around £258 million in revenues would almost entirely unwind the effect of the CAA’s present RAB adjustment of £300 million.

277. It is in any event wrong to think of the excess yields identified by a mechanical application of the K-factor formula automatically as over-recovery. The (A)K-factor is a relatively crude tool that works sufficiently well in years where deviations between plan and outturn are small but breaks down in years where deviations are large.

278. The two largest contributors to the £258 million overyielding identified by the AK-factor’s calculation are an adjustment to reflect the impact on allowed returns of capex being lower than assumed in price limits (accounting for £132 million) and changes to business rates

²¹⁸ 1st King §176 and Table 8. [Core/3/220]

²¹⁹ 1st King §178 and Table 9. [Core/3/221]

²²⁰ Decision §14.32. [Supp/4/244]

²²¹ See 1st King Tables 8 and 9 for the adjustment and aeronautical revenues, respectively. [Core/3/220-21]

(£75 million).²²² As explained in the following, these adjustments are intended to prevent over recovery of revenue. However, the reduction in revenues seen in 2020 and 2021 cannot be described as over-recovering revenue in any meaningful way and therefore there is no requirement for an adjustment to prevent over recovery. The remaining £51 million can more easily be understood as overyielding but would be inappropriate to return for other reasons, as also explained below.

Capex adjustment

279. The (A)K-factor formula compares actual with allowed revenues. In addition to accounting for the actual number of passengers who used the airport in the relevant year, the (A)K-factor formula in calculating allowed revenues includes a number of further adjustments that are independent of outturn passenger volumes. These include an adjustment (AC_t) that accounts for the return on any over- or underspend in capex relative to plan.²²³

280. The AC_t adjustment is therefore based on the difference between incurred and allowed capex, but there is no assessment as to whether the original capex budget remained appropriate in the light of revised passenger numbers, or whether there were sufficient outturn revenues available against which to set the expenditure. This is not in general necessary where, as in a ‘normal’ year, the deviations in outturn are small and previously set capex budgets generally remain appropriate. However, the logic behind the calculation breaks down in extreme years where large deviations in revenue clearly require adjustments to expenditure as well that cannot be accommodated by the (A)K-factor formula.

281. In 2020 and 2021 specifically, revenues declined dramatically. The description of events by Mr Holland-Kaye, Heathrow’s CEO, will be unsurprising—

“Covid-19 has been devastating for everyone in aviation, and the effects were truly exceptional. Almost all of Heathrow’s revenues come from consumers, but a very high proportion of our costs are fixed. Passenger footfall disappeared overnight and we saw an unprecedented and unforeseeable drop in revenues. While a high fixed cost base is common to

²²² See 1st King §§179 and 180. [Core/3/221]

²²³ The AK-factor calculation in condition C.1.22 incorporates the AC_t adjustment defined in condition C1.10 via the definition of the maximum yield M_t formula in condition C1.5, which it imports. The effect of the adjustment is amended by condition C1.23 to reflect the conditions of the 2020 and 2021 caps.

regulated infrastructure, the potential volatility of revenues and asymmetric risk is unique to Heathrow.

As explained to the CAA Board in January 2022 we took drastic action in order to protect the business and ensure operations could continue. This included: cutting 28% of our headcount, cutting all pay temporarily and some permanently, delaying close to £1bn capital expenditure in asset maintenance and replacement, automation projects to improve service and sustainability investments, cutting training, even closing our main office. We had to move from carrying out preventative maintenance to running assets until they fail. ... ”²²⁴

282. In contrast to this reality, however, the AK-factor formula implicitly continues to assume that there was an over recovery related to return on capex irrespective of the actual level of revenue achieved. In both years, returns on RAB were negative and therefore there cannot have been any return on capex, but the formula insists that the non-existent return should be clawed back. Indeed, even if revenue had been zero, the mechanism would still have identified Heathrow as having over recovered.

283. With aeronautical revenues down around 70%, it was clearly right for Heathrow not to continue its capex programme apace, which would otherwise have risked financial distress of the business. The reduction in capex was a clear reaction to the reduction in revenue. It was emphatically not what a K-factor is intended to guard against, namely collecting revenues in relation to a return on investment that has not happened, leading to a ‘windfall’ gain. No such recovery has occurred. For the CAA to contend otherwise is misunderstanding the reality of 2020 and 2021.

Business rates

284. As explained in 1st King,²²⁵ a related issue arises in respect of payments for business rates. Business rate liabilities are based on a property’s ‘rateable’ value which is reassessed normally at five yearly intervals. Following the 2017 revaluation, Heathrow’s business rates liability reduced, contrary to what had been assumed in the Q6 determination. As a result, an adjustment was put in place intended to ensure that Heathrow did not benefit from 80% of any reduction in actual business rates payments against plan. This adjustment remains in place and is reflected in the AK-factor calculation.

²²⁴ 1st Holland-Kaye §§6.1–6.3. [Core/2/170]

²²⁵ 1st King §180. [Core/3/221]

285. The resulting revenue adjustment is intended to ensure that there is no over-recovery of revenue for costs that Heathrow does not incur. However, the dramatically lower revenues in 2020 and 2021 mean that the lower business rates payments were offset by a more than commensurate reduction in revenues and Heathrow's revenue in these years therefore did not include any over-recovery and there was no 'windfall gain' in the CAA's words.

Remaining AK-factor correction

286. The remaining £51 million identified by the AK-factor's yield calculation is attributable to factors that are comparable to those that give rise to overyielding in regular years, including in particular an outturn mix of landing and departure charges which was different from that forecast ahead of the year. As 1st King explains, this change in mix was the result, at least in part, of the commercial decision taken by some airlines to fly planes even with few passengers on board. This meant that flights more often than usual incurred a minimum departure charge and therefore an atypically high charge per passenger. However, in those cases airlines deliberately chose to incur high per person charges because it made commercial sense for them, often due to other revenues such as from cargo. It would be inappropriate, in particular given the overall loss of revenue in those years, to require Heathrow to return the additional charges to airlines. Heathrow in these cases did incur the costs related to aircraft movements that the minimum departure charge is specifically designed to recover in the case of low passenger numbers.

G(4) Conclusion and remedy

287. For all the reasons given above, it is clear that a retrospective revenue reduction across the years 2020 and 2021 by means of the AK-factor is neither required nor justifiable. Such a correction would in effect require Heathrow to return revenues it never earned, or in the case of minimum landing charges, revenue that was rightly raised to recover actually incurred costs. Heathrow therefore invites the CMA to quash the Decision in this respect and substitute its own decision for that of the CAA by removing the AK-factor from the charges condition in Heathrow's licence.

H. GROUND 5: CAPEX INCENTIVES

H(1) Summary of legal grounds of appeal

288. The CAA’s Decision introduces a modified licence condition F1.1(a) inserting an overly complex, disproportionate and inefficient ex ante capex incentives regime, which requires Heathrow to secure agreement with airlines on detailed Delivery Obligations (“DOs”) for all projects reaching Gateway 3 (“G3”) in H7.²²⁶ The new regime introduced for H7 will require Heathrow to reach agreement with airlines on each project’s expected output(s), quality requirements and timing as well as weightings for each parameter. Heathrow expects that there will be at least 400 projects passing through G3 during H7 that will be subject to the new DO framework.²²⁷

289. By comparison, the Q6 framework applied a far more measured and targeted approach which aligned with best practice in delivering capex projects. In Q6, Heathrow was required to reach agreement with airlines for the capital budget for G3 projects and only agree more detailed criteria for specific key projects, meeting certain criteria (known as “trigger” projects). The capital expenditure was then reviewed on an ex post basis to determine the amount to be removed from the RAB if any spend was deemed inefficient. This existing regime was working successfully and efficiently, and in the interests of users of air transport.

290. The new H7 requirements will be detrimental for users of air transport services, contrary to the CAA’s primary statutory duty, for the following reasons:

290.1. The H7 framework design is fundamentally flawed as it will not result in an efficient or economic capex incentive regime which operates in the interests of users of air transport. In particular:

290.1.1. It will not result in any efficiency gains, and in fact will create inefficiency and result in a move away from best practice for contracting the

²²⁶ During the regulatory period, projects transition from “Development” to “Core” capex by progressing through “Gateways”. “Core” projects are defined as those which have a greater degree of certainty around their scope and costs and have already been adopted as a requirement by both Heathrow and the airlines. By contrast, “Development” projects are at an earlier stage and still subject to review, discussion and approval by airlines and Heathrow as to their budget. G3, or Gateway 3, marks the point at which a project transitions from “Development” to “Core”.

²²⁷ Heathrow estimates – see 1st Maxwell, paragraph 3.2.3.1, footnote 4. [Core/6/285]

work on capex projects, resulting in higher costs and delays. Heathrow predicts that the new regime will require c.80 new recruits in order to provide the necessary resourcing associated with operating the new regime.

290.1.2. Based on Heathrow's Q6 experience of seeking airline agreement, Heathrow expects considerable delays arising from the extensive level of airline agreement which will be needed to establish prescriptive DOs for every project passing through G3.

290.1.3. It incorrectly assumes the interests and incentives of airlines are aligned with those of users of air transport, rather than aligned with airlines' own commercial interests. In operating the new regime, airlines can be expected to act in accordance with, and to prioritise, their own commercial interests rather than the interests of users of air transport. Furthermore, the priority given to the interests of airlines in the new regime confers a disproportionate and unreasonable degree of influence and authority on airlines on complex issues relating to the granular detail of all G3 capital projects on which airlines have no special technical and commercial expertise.

290.2. In introducing the H7 capex incentives framework the CAA has failed in its statutory duty to have regard to the principles of better regulation:

290.2.1. **It is not necessary:** the Decision fails to provide any substantive or quantifiable evidence that the current Q6 regime is not operating in the interests of users of air transport services in justifying the introduction of the new regime.

290.2.2. **It is not proportionate or targeted:** the Decision fails to establish that the new unprecedented level of intervention by airlines in the granular detail of capital projects is required or proportionate to any detriment to users of air transport services at Heathrow from the current regime. The CAA also fails to establish that there are demonstrable benefits to users of air transport from the new regime. On the contrary, the new regime introduces a blanket "one size fits all" approach to all capital projects regardless of size, financial value or importance at the G3 stage introducing disproportionate complexity.

290.2.3. **It is neither transparent nor accountable**, especially as the CAA has:
(i) failed to conduct any regulatory impact assessment in respect of the likely impact of the new regime for users of air transport services; (ii) failed to meaningfully engage with Heathrow’s proposals for alternative more targeted and proportionate amendments to the Q6 regime; and (iii) has provided insufficient detail in the new licence condition on the intended operation of the new regime.

290.2.4. **It is not consistent with relevant regulatory precedent** and fails to explain why the complex and intrusive new regime is required for Heathrow when other airports such as Dublin, Gatwick and other European comparators do not operate with an equivalent regime.

291. While Heathrow shares the CAA’s objective of achieving efficient outcomes for users of air transport services, the Decision on a new capital incentives regime does not achieve that outcome. On the contrary, it introduces an ineffective, untargeted and overly burdensome regime.

292. As a result the Decision is wrong in law under section 26(b) of the CAA 2012 as the CAA has failed to take into account its statutory duties, in particular the CAA’s primary duty to further the interests of users of air transport services,²²⁸ the duty to promote efficiency and economy,²²⁹ and the duty to have regard to each of the principles of better regulation.²³⁰

293. In addition and/or alternatively, the CAA has erred in its exercise of discretion under section 26(c) of the CAA 2012 since it has made a decision which will create inefficiency compared with the existing framework for Q6 and has prioritised the commercial interests of the airlines above the interests of users of air transport services at Heathrow.

294. Unless corrected by the CMA, the Decision will have a material impact on Heathrow’s ability to efficiently deliver its £3.6 billion capex programme during H7.²³¹ The new

²²⁸ *Civil Aviation Act 2012*, section 1(1) [Auth/1/6].

²²⁹ *Civil Aviation Act 2012*, section 1(3)(c) [Auth/1/6].

²³⁰ These principles are transparency, accountability, proportionality, consistency and ensuring regulatory activities are targeted only at cases where action is needed (*Civil Aviation Act 2012*, section 1(4) [Auth/1/6]).

²³¹ See CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 6.11 and table 6.1 [Supp/3/109].

regime will introduce a poorly designed regulatory model which will result in significant increases in resources, cost and delays for Heathrow’s business and therefore ultimately users of air transport. Heathrow therefore requests that the Decision to introduce the new H7 capital incentives regime requiring agreement with airlines on DOs for all projects is quashed and that the CMA restores the existing Q6 regime.

295. The remainder of this section for the capex incentives ground of appeal is structured as follows:

295.1. **Section H(2):** Overview of H7 Capex Incentives Framework.

295.2. **Section H(3):** Detailed Legal Grounds of Appeal.

295.3. **Section H(4):** Remedies.

296. This ground of appeal is supported by:

296.1. a witness statement from Alistair Maxwell, hereafter referred to as “**1st Maxwell**”, Head of Scope and Regulation for the Infrastructure Team at Heathrow Airport Limited, which explains the background to the Q6 and H7 capex incentives price control frameworks and the detrimental operational impact that that the new regime will have upon Heathrow’s business and its users;

296.2. an expert report²³² from Chris Cuttle of Frontier Economics (“**Frontier**”), hereafter referred to as “**1st Cuttle**”, which provides expert evidence demonstrating that the design of the new capital incentives regime is flawed, including its expected detrimental impact on incentives, the risk of being penalised twice by the DO and Outcomes Based Regulation (“**OBR**”) framework used in H7 and the finding that it does not result in a “fair bet” for Heathrow; and

296.3. an expert report from Dr Mark Brown of Richard Azcel Limited (trading as “**Aczel**”), an infrastructure consultancy firm with extensive construction industry expertise, which explains (i) why the new regime will not be in accordance with best practices relating to contracting for capital investment projects; and (ii) the

²³² 1st Cuttle, Frontier: *Review of the CAA’s Final Decision on capex governance for H7*, April 2023. [Core/10/564]

ways in which Heathrow will be unable to contract efficiently for capital investment projects under the new regime.

H(2) Overview of H7 Capex Incentives framework

The Decision

297. The Decision sets out the parameters of its new capex incentives regime as follows²³³:

297.1. *Our final decision is to implement an ex ante capex incentives framework with the following key parameters and characteristics.*

- *An incentive rate of +/-25 per cent will be applied to any under/overspend against a project's budget agreed at G3.*
- *Each project will be required to have delivery obligations (DOs) agreed with airlines at G3. These should include a project's expected output(s), quality requirements and timing, and these elements may be adapted to reflect the characteristics of a particular project.*
- *Each DO will have a weighting to determine what proportion of baseline capex is associated with performance against each DO. SMART indicators should also be established to determine whether or not each DO has been met, and the level of adjustment to baseline capex associated with non-delivery.*
- *There will be a cap on the overall capex envelope we have assumed for the calculation of the H7 price control plus 5 per cent. HAL will have 2 windows when it can apply for this cap to be increased. These will be: (i) 1 February 2024 to 31 March 2024; and (ii) 1 February 2025 to 31 March 2025.*
- *In considering the requirement for new capex, we will take into account airline views.*
- *In exceptional cases, HAL may seek our consent to make an application outside of these windows.*
- *The capex envelope will not be indexed to construction inflation. In so far as this runs at a higher level and on a sustained basis than the economy-wide CPI inflation and, if HAL can demonstrate that additional capex will be*

²³³ See CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.25 [Supp/3/127].

required over the course of H7 as a result of construction inflation running higher than CPI inflation, then HAL can seek to use the adjustment mechanism and request a higher capex allowance.

298. The H7 licence modification decision amends licence condition F1.1(a) to provide that, in relation to matters subject to the governance and consultation arrangements, agreement will be required with Relevant Parties (i.e. including airlines) “*where relevant*”. The term “*where relevant*” in the licence is defined by reference to the Decision which provides that DOs must be agreed with airlines for all projects passing G3 (as set out in the paragraph above). The modified licence provides that new governance and consultation arrangements to implement the Decision must be developed by the end of 2023.

299. The relevant licence conditions and sections of the Decision are as follows:

299.1. Modified licence condition F1.1(a)²³⁴ provides that Heathrow must develop governance and consultation arrangements which will be agreed with the Relevant Parties²³⁵ using reasonable endeavours.²³⁶ These governance and consultation arrangements should “*allow Relevant Parties to scrutinise, challenge and collaborate with the Licensee to drive efficient costs and appropriate service levels and to propose and, where relevant, agree amendments to*” a number of areas including e.g. proposals for future investment in the short, medium and long term that have the potential to affect Relevant Parties and proposals for the development and delivery of key capital projects identified in its future investment proposals.

299.1.1. the text “*where relevant, agree*” in licence condition F1.1(a) did not exist in the previous licence.²³⁷

²³⁴ F1.1(a) is not only designed to cover the arrangements for capital expenditure but also Service Quality and Other Regulated Charges - CAA CAP2365D: [H7 Final Proposals Section 3: Financial Issues and Implementation](#), 28 June 2022, paragraph 14.21 [Supp/15/867].

²³⁵ **Relevant Parties** means those stakeholders that need to be consulted for the “Licensee” to comply with the relevant obligation under condition F1, including any groups or boards already established for the purpose of developing protocols. See condition F1.9 of the revised licence as set out in CAA CAP2524E2: [H7 Final Decision Appendix C](#), 8 March 2023, paragraph C61 [Supp/6/304].

²³⁶ CAA CAP2524E2: [H7 Final Decision Appendix C](#), 8 March 2023, part F, paragraph F1.1(a) [Supp/6/301].

²³⁷ See licence condition F1.1 in CAA: [Licence granted to Heathrow Airport Limited by the Civil Aviation Authority under section 15 of the Civil Aviation Act 2012](#), 2 February 2022 [Auth/2/272].

299.1.2. The Decision makes clear that the use of the words “*and where relevant, agree*” in the amended licence refer back to the first line of the clause (i.e. to develop, consult on and use reasonable endeavours to agree with Relevant Parties governance and consultation arrangements), and, in the CAA’s view, distinguish those elements of the list of matters covered by condition F1.1(a) that could be the subject of agreement (such as capital projects) and those which do not require agreement (such as charges under Condition 2).²³⁸

299.1.3. The Decision therefore concludes that “*we consider the words in question perform a useful function in ensuring that the drafting of the condition does not inadvertently impose an obligation on HAL to agree matters that are not properly the subject of agreement under the Licence*” (emphasis added).²³⁹

299.1.4. The Decision confirms that “*each project will be required to have DOs agreed with airlines at G3*”.²⁴⁰

299.2. Licence condition F1.3 states that the requirements of modified condition F1.1(a) must be met within “Regulatory Year” 2023 (i.e. by 31 December 2023).

299.3. Licence condition F1.4 provides that the governance and consultation arrangements shall include elements set out in the CAA’s Guidance.

299.4. Licence condition F1.5 provides that no CAA Guidance under condition F1.4 shall have effect unless the CAA has first consulted Heathrow and any other relevant parties on that Guidance or any revision of it.

299.5. For the purposes of condition C1 (price control), a “capex project” is defined in the licence as any project that is being taken forward in accordance with the governance arrangements, and the “governance arrangements” are defined in the

²³⁸ CAA CAP2524D: [H7 Final Decision Section 3: Financial Issues and Implementation](#), 8 March 2023, paragraph 14.38 [Supp/4/245].

²³⁹ CAA CAP2524D: [H7 Final Decision Section 3: Financial Issues and Implementation](#), 8 March 2023, paragraph 14.39 [Supp/4/245].

²⁴⁰ See CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.25 [Supp/3/127].

licence as the arrangements set out in the Capital Efficiency Handbook which will be published by Heathrow as required in accordance with licence condition F1.1(a).

299.6. Licence condition C1.16 preserves the use of the “trigger” arrangements agreed either before the new capex governance arrangements come into effect or the end of 2023, whichever is earlier.²⁴¹

Background to the Decision

300. The H7 ex ante proposals were initially developed in the context of airport expansion (i.e. necessitating outside of business-as-usual capex) – a context which is no longer relevant since H7 is set on a two-runway basis.²⁴²

301. By way of background, the CAA’s Q6 framework is an ex post regime. The Gateway process, as described further in 1st Maxwell,²⁴³ is the procedure through which prospective capex projects are tested, scrutinised, refined and ultimately approved by Heathrow and key stakeholders including airlines. Projects progress through from Gateway 0, where the need for investment is identified, to Gateway 8, where retrospective review of the delivered investment takes place.

302. G3 is the stage at which a project transitions from “Development” (i.e. the early stage where it is still subject to review) to “Core” (i.e. projects which have a greater degree of certainty around their scope and costs).

303. Under Q6, agreement with airlines is required on project budget to allow projects to pass G3. In addition, key projects (due to size and/or strategic importance) are subject to “triggers” for which “trigger” penalties occur only for late delivery. Heathrow’s capex projects are then reviewed “ex post” by the CAA for inefficiency and any inefficient spend will be removed from the RAB.

304. The CAA has now decided to put in place an ex ante regime for the H7 period. This ex ante regime includes the requirement to agree prescriptive DOs with airlines for all

²⁴¹ This time limit was introduced at the Decision stage – see CAA CAP2524E2: [H7 Final Decision Appendix C](#), 8 March 2023, C33 [Supp/6/275].

²⁴² Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.3.1 to 8.3.3 [Supp/19/983].

²⁴³ See 1st Maxwell, paragraphs 4.3 to 4.13. [Core/6/287]

projects passing through G3 (which Heathrow estimates to include at least 400 projects during the period). DOs require agreement with airlines not only on timing but also expected outputs and quality,²⁴⁴ in addition to the weighting of each parameter and SMART²⁴⁵ indicators that will determine whether or not each DO has been met.

305. The CAA set out the capex incentives regime in each of the H7 Initial Proposals (Chapter 12), H7 Final Proposals (Chapter 7) and the Decision (Chapter 7). 1st Maxwell provides an exhibit demonstrating the relevant engagement sessions with, and submissions made to, the CAA throughout the consultation process.²⁴⁶

306. An overview of the changes made to the H7 capex incentives framework compared with the regime in place in Q6 is set out below.²⁴⁷

²⁴⁴ CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.25 [Supp/3/127].

²⁴⁵ SMART: specific, measurable, achievable, relevant and time-bound.

²⁴⁶ Heathrow: *Heathrow / CAA: H7 Capex Working Session*, 27 April 2022, page 10 [AM1/11/372].

²⁴⁷ See CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.25 [Supp/3/127].

	Q6 capex incentives framework	H7 capex incentives framework
Overall structure	<ul style="list-style-type: none"> • <i>Ex post</i> review: at the end of the regulatory period, the CAA reviewed capital expenditure which had passed through G3 to identify any capex inefficiently incurred to remove from the Regulatory Asset Base (“RAB”) for the next regulatory period. 	<ul style="list-style-type: none"> • <i>Ex ante</i> review: in advance of delivery, cost baselines and DOs will be agreed with airlines. For each project, Heathrow’s performance will then be measured against these baselines and DOs involving a detailed <i>ex post</i> reconciliation exercise.²⁴⁸
“Core” to “Development” process	<ul style="list-style-type: none"> • During the regulatory period, projects could transition from “Development” to “Core” capex by progressing through “Gateways”. G3 was where a project transitioned from “Development” to “Core”, agreed by Heathrow and airlines. • The budget for individual projects was agreed between Heathrow and airlines at the point it passed through G3.²⁴⁹ 	<ul style="list-style-type: none"> • The “Core and development framework” is retained from Q6, such that projects will still need to progress through Gateways 0 to 8. • At G3, the need for airlines’ agreement will cover further parameters relating to detailed DOs (see row below).
Role of airlines	<ul style="list-style-type: none"> • Airlines contributed to the Gateway process through their involvement in the monthly Capital Portfolio Board (“CPB”): the main stakeholders are Heathrow, the AOC, the London Airline Consultative Committee (“LACC”), the International Air Transport Association (“IATA”), individual airlines, the Independent Fund Surveyor (“IFS”)²⁵⁰ and the CAA.²⁵¹ • At G3, Heathrow and the airlines’ agreed the budget for all projects to proceed to “Core” through 	<ul style="list-style-type: none"> • As in Q6, at G3, airlines’ agreement will be required for projects to proceed to the “Core” stage in the development process. • For all projects, airlines and Heathrow will be required to agree at G3 detailed DOs relating to the expected output, quality and timing for each project. DOs will also include (i) weightings to determine what proportion of baseline capex is to be associated with performance against each DO; (ii) SMART indicators that will determine whether or not each DO has been met; and (iii) the level of

²⁴⁸ As an exception, Crossrail contributions and core projects having passed G3 prior to the new capex incentives regime taking effect will remain subject to an *ex post* review.

²⁴⁹ CAA CAP1951: [Economic regulation of Heathrow Airport Limited: working paper on capital expenditure efficiency incentives](#), 13 August 2020, Appendix C, paragraph 9 [CC1/4/156].

²⁵⁰ The IFS is an independent expert adviser that is mandated to assess the reasonableness of Heathrow’s capex decision-making on major projects under Q6. It provides an ongoing assessment of the reasonableness of all key decisions made on key projects by Heathrow, to ensure Heathrow’s capital is being used effectively to deliver the outcomes determined by the business case. IFS’s role involves advising on a selection of projects and producing reports which comment on technical, procurement, programme, commercial and risk issues. Gardiner & Theobald were jointly appointed by Heathrow and the AOC as the IFS for the Q6 regulatory period, which continued into the H7 regulatory period following several extensions to its appointment as the IFS (to the end of 2026). For further information, see also Gardiner & Theobald: [Heathrow Commission Extended](#), 24 January 2022 [Supp/48/1850].

²⁵¹ The CAA has a standing invitation to these meetings.

	<p>decisions of the CPB.²⁵²</p> <ul style="list-style-type: none"> • For specific key projects only, which were subject to “triggers”,²⁵³ airlines’ agreement was also needed to approve or reject more detailed objectives in the form of “Trigger Definition Sheets” (“TDSs”). • The CAA acted as an arbiter where agreement could not be achieved between Heathrow and airlines.²⁵⁴ 	<p>adjustment to baseline capex associated with non-delivery.²⁵⁵</p> <ul style="list-style-type: none"> • The CAA’s draft Guidance²⁵⁶ does not clearly set out what its role will be in the instance of a dispute between Heathrow and the airlines. Instead it simply notes, the CAA will assess whether and how to intervene in a dispute on a case-by-case basis and in accordance with its duties.²⁵⁷ • Heathrow will continue to meet with the airlines on a regular basis and each month at the CPB will formally approve capex investment decisions required under the H7 capex arrangements.
<p>Triggers v DOs</p>	<ul style="list-style-type: none"> • “Trigger” penalties for late delivery applied to key projects²⁵⁸ due to their scope and complexity, their impact on airline stakeholders, and/or their strategic importance or their capital value (there were 11 “trigger” projects during Q6²⁵⁹). • TDS set out a summary of the overall business case, descriptions 	<ul style="list-style-type: none"> • Additional layer of complexity to TDS with the requirement for DOs which will apply to all projects and will specify not only timing (like “triggers”) but also expected outputs and quality for each individual project, as well as weightings for each parameter. • In the event of Heathrow not

²⁵² Steer: *Heathrow Airport - Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, paragraphs 2.9 and 2.10 [AM1/6/188].

²⁵³ The primary function of “triggers” (as defined in Heathrow: *Q6 Capital Investment Triggers Handbook*, February 2018) is to incentivise HAL to deliver against established deadlines for key projects. Triggers were set only as part of the G3 process and included “triggers” such as those included in Appendix 3 of the Handbook [AM1/4/74].

²⁵⁴ CAA CAP2365C: *H7 Final Proposals Section 2: Building Blocks*, 28 June 2022, table 7.3 [Supp/14/669].

²⁵⁵ See CAA CAP2524C: *H7 Final Decision Section 2: Building Blocks*, 8 March 2023, paragraph 7.10 and 7.25 [Supp/3/119, 127].

²⁵⁶ Alongside the Decision, the CAA published a consultation on draft Guidance on capital expenditure governance under the new regime. Please refer to paragraph 307 below for further detail.

²⁵⁷ CAA CAP2524G: *Draft guidance on capital expenditure governance*, 8 March 2023, paragraph 4.6 [Supp/9/424].

²⁵⁸ A “key project” is a project that meets any one of the following criteria: (i) **scope and complexity**: projects that have bespoke design and delivery responses or significant interfaces with other projects of significant time criticality; (ii) **airline stakeholder impact**: projects with significant impact (positive or negative) on passengers and/or airlines (determined by operational or capacity impact during implementation, significant change management for stakeholders to use a new facility, or significant increases in operating costs arising from the proposed project); (iii) **strategic importance**: high to significant impact on HAL’s key performance indicators; and/or (iv) **capital value**: above £20m.

²⁵⁹ The 11 projects relate to “triggered” projects with completion dates in Q6. In Q6, there were c.660 projects from 1 April 2014 to 31 December 2018 which passed through G3 overall Heathrow CAP2365: *Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response*, 9 August 2022, paragraph 8.5.13 [Supp/19/987].

	<p>of the scope to be triggered and how the achievement of the “trigger” milestone is demonstrated.²⁶⁰</p> <ul style="list-style-type: none"> • Heathrow paid an agreed rebate for each month of delay.²⁶¹ 	<p>achieving its DOs, the capex baseline will be adjusted. Weightings agreed with airlines will determine what proportion of baseline capex is to be associated with non-performance against each DO and the level of adjustment to baseline capex associated with non-delivery.</p>
Incentive rate	<ul style="list-style-type: none"> • The risk to Heathrow is asymmetric, as the CAA can only make a disallowance for inefficiency. 	<ul style="list-style-type: none"> • A symmetrical incentive rate of 25% will apply to any over- or under-spending compared to the baselines set at G3.
Review	<ul style="list-style-type: none"> • If the CAA, through its ex post review, identified a proportion of capex as inefficiently incurred, that capex was removed from the RAB at the start of the next regulatory period. 	<ul style="list-style-type: none"> • In the event of Heathrow not achieving its DOs, the capex baseline will be adjusted to reflect actual delivery. • Reconciliation involves comparing Heathrow’s actual spending for each capex project to the final baseline. • The CAA will apply its capex efficiency incentive adjustments to the total of incurred capex on each project subject to incentives, including associated financing cost adjustments, to H8 opening RAB.^{262,263}
Capex envelope	<ul style="list-style-type: none"> • At the start of the regulatory period, an initial capex envelope was set. • There was no cap during the 	<ul style="list-style-type: none"> • At the start of the regulatory period, an initial capex envelope is set. • A cap (with a 5% margin) on the

²⁶⁰ Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraph 8.5.11 [Supp/19/987].

²⁶¹ This rebate was based on allowed financing costs of the capex to compensate the stakeholders. CAA CAP1951: [Economic regulation of Heathrow Airport Limited: working paper on capital expenditure efficiency incentives](#), 13 August 2020, Appendix C, paragraph 13 [AM1/8/268].

²⁶² Based on Heathrow’s current understanding, adjustments are made ex post in the following steps: (1) The CAA will assess Heathrow’s performance on each capex project against its DO to adjust the capex baseline – the weighting applied to each individual DO will determine the level of capex baseline reduction. (2) Following this adjustment, the revised baseline will become the final baseline. (3) Reconciliation would involve comparing HAL’s actual spend on each capex project with the final capex baseline. HAL must bear 25% of any overspend (when compared with the final baseline), or gets to keep 25% of any underspend. (4) Overspending or underspending at HAL’s risk is calculated in Net Present Value (“NPV”) terms and is compared against the full financing cost (or benefit) already accrued during H7. The difference between these amounts is the required adjustment to achieve the targeted capex efficiency incentive rate. (5) The RAB will also be adjusted to account for financing costs associated with any adjustment that is made to the baseline at the end of the period (to reflect non-delivery or under-delivery of the DO) – this is the closing RAB. (6) The H8 opening RAB will then be the closing RAB, reduced by the NPV of over/underspend at HAL’s risk, plus financing costs adjustments.

²⁶³ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix F [Supp/16/900].

	<p>regulatory period. Instead, the total amount of capex that Heathrow was permitted to recover through airport charges was the outcome of an agreement with airlines (through airlines agreeing to projects proceeding to the “Core” stage).²⁶⁴</p>	<p>total amount of expenditure that Heathrow will be permitted to recover through airport charges in H7 will be applied.</p> <ul style="list-style-type: none">• Heathrow will be able to formally apply to the CAA for an adjustment to the overall capex envelope (“uncertainty mechanism”), with two windows in which they can make an application for an adjustment to the cap: (a) 1 February 2024 to 31 March 2024; and (b) 1 February 2025 to 31 March 2025.
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²⁶⁴ Heathrow CAP2365, Chapter 7: [Economic regulation of Heathrow Airport Limited, H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraph 7.5.11 [Supp/19/1515].

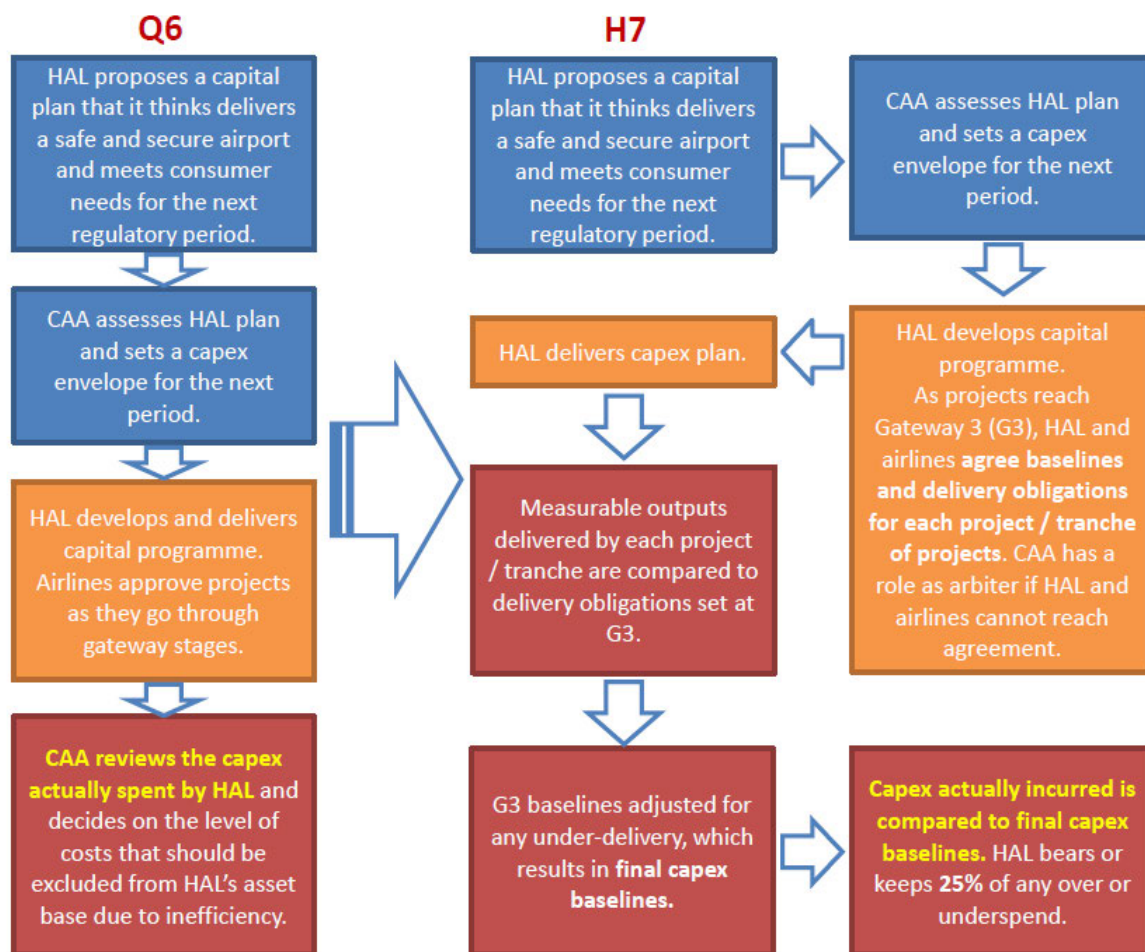


Figure [3]: CAA diagram of new capex incentives framework from CAA²⁶⁵

307. Concurrently with publishing the Decision, the CAA has published a consultation on draft guidance on capital expenditure governance under the new regime²⁶⁶ (with a deadline for response of 28 April 2023) (“**draft Guidance**”). The draft Guidance introduced further complexity and uncertainty and includes the following proposals:

307.1. **Additional reviewer for common standards and processes:** a proposal that the standards and processes that Heathrow commonly applies across projects should be independently reviewed and that Heathrow and airlines should agree the scope,

²⁶⁵ CAA: *Implementing H7 Capex Incentives - HAL session*, 17 August 2022, page 3 [Supp/54/1915].

²⁶⁶ CAA CAP2524G: *Draft guidance on capital expenditure governance*, 8 March 2023 [Supp/9/404].

focus and timing of these reviews and the selection of the provider. The CAA proposes that this reviewer is funded through Heathrow's capex allowance.²⁶⁷

307.2. **Additional reviewer for more complex or costly projects:** for projects that are more complex, or more costly, or which have a greater impact on airline operations – and in response to the request from airlines – the CAA proposes an even more detailed review is conducted by the IFS.²⁶⁸

307.3. **No financial threshold for complex/costly projects:** the CAA proposes that Heathrow produce annually, and at least six months in advance of the start of the year, a list of all projects due to proceed through G3 in each year to form the basis of consultation with airlines on which should be subject to a more detailed review²⁶⁹ and that no financial value threshold should be applied to determine which projects are subject a more detailed review.²⁷⁰

307.4. **No clear role for the CAA:** the draft Guidance invites Heathrow to submit to the CAA a proposed process it has agreed with airlines for resolving disputes in the response to the draft Guidance consultation.²⁷¹

H(3) Detailed Legal Grounds of Appeal

The design of the H7 capex incentive framework is flawed

308. This section sets out the detrimental impact the H7 framework will have by way of its fundamentally flawed design that:

²⁶⁷ CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraphs 3.14 to 3.21 [Supp/9/415].

²⁶⁸ CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraphs 3.29 to 3.35 [Supp/9/417].

²⁶⁹ The CAA has requested that, in response to the draft Guidance consultation, airlines and Heathrow identify those projects that are due to proceed through G3 in the next 12 months that would be suitable for a more detailed review (CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraph 3.38) [Supp/9/419].

²⁷⁰ CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraph 3.36 [Supp/9/418].

²⁷¹ CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraph 4.2 [Supp/9/424].

308.1. is contrary to the CAA's statutory duty to promote economy and efficiency (section I);

308.2. fails to take account of the interests of users of air transport - contrary to the CAA's primary duty - by inappropriately prioritising the commercial interests of airlines (section II).

(I) The design of the CAA's capex incentives framework is contrary to the CAA's statutory duty to promote economy and efficiency

309. The Decision on capex incentives will result in a breach of the CAA's duty to promote economy and efficiency for the following reasons, as detailed further below:

309.1. The capex incentives Decision fails to recognise Heathrow's existing Q6 incentives to deliver investment projects efficiently.

309.2. The design of the H7 incentive framework will impose unworkable complexity in respect of at least 400 projects during H7 and result in significant increases in time, resources and cost.

309.3. The requirements of the regime introduce inefficiency by failing to recognise the way in which complex capex projects are managed in practice at Heathrow.

309.4. The DO regime does not promote efficient incentives.

The capex incentives Decision fails to recognise Heathrow's existing Q6 incentives to deliver investment projects efficiently

310. Under Q6, Heathrow already has the incentive and ability to deliver projects efficiently given that the existing capex incentives framework:

310.1. involves extensive engagement with customers, airlines and an independent expert adviser, the IFS, and focuses on the most important investments; and

310.2. contains extensive protections to ensure the efficient delivery of capital projects by Heathrow, in particular subjecting Heathrow's capital expenditure to considerable levels of scrutiny, including incentives from TDS²⁷² and ex post efficiency reviews.

311. Critically, the framework was designed to allow Heathrow to work together with airlines to deliver capital programs in a flexible and timely way. Capital projects that were successfully delivered in Q6 include the new Terminal 2, a new baggage system for Terminal 3 and new transfers security infrastructure for Terminals 3 and 5 (to name just a few examples).²⁷³ The success of Q6 is demonstrated by:

311.1. **Independent review of efficiency:** the reviews undertaken at Q6 by a series of independent reviewers that have consistently confirmed the efficiency of Heathrow's capital expenditure, including:

311.1.1. Arcadis were commissioned by the CAA in its CAP1964A Heathrow Q6 Capex Efficiency Review in September 2020²⁷⁴ to advise on Heathrow's capital efficiency and in particular to identify and estimate any inefficiency in a sample of Heathrow's capital projects during the Q6 regulatory control period. Arcadis reviewed ten projects, including some of the most challenging projects undertaken in that period. Arcadis concluded that out of the total capital expenditure of £633.1 million²⁷⁵ subject to their review there was a potential for inefficiency in the range of £0 to £12.7m, representing only 0.44% of the overall portfolio.²⁷⁶ In light of Arcadis' report, the CAA

²⁷² For "trigger" projects, a TDS would be prepared, which sets out details of the project's overall business case, "trigger" objectives, achievement criteria and agreed parameters and assumptions, as agreed with airlines. The TDS also contains an agreed amount to be paid by Heathrow in the event that it fails to meet its obligations, serving as a mechanism for rebates in case of late project delivery.

²⁷³ Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.4.2 to 8.4.5 [Supp/19/984].

²⁷⁴ Arcadis CAP1964A: [CAA Report - Heathrow Q6 Capex Efficiency Review](#), 22 September 2020 [AM1/9/270].

²⁷⁵ Calculated from the final cost of all projects, which is the outturn cost of the completed projects, with the exception of two projects (B131 Main Tunnel Refurbishment, and B131 Cargo Tunnel Refurbishment) which were based on a forecast cost of £343.3 million, as they were yet to be completed at the time of review.

²⁷⁶ Arcadis CAP1964A: [CAA Report - Heathrow Q6 Capex Efficiency Review](#), 22 September 2020, page 18 [AM1/9/288]. Arcadis identified only one project (the B131 Cargo Tunnel) which they considered inefficient, seven of the projects were found to have been delivered efficiently, and the remaining two were identified as having been potentially delivered inefficiently, but the inefficiency was "hard to quantify or easily attribute" (page 11) [AM1/9/281].

decided to disallow only £12.7m of Heathrow’s capital expenditure for the Q6 period (i.e. the maximum amount in the range identified by Arcadis).

311.1.2. Gardiner & Theobald, appointed as IFS for Heathrow²⁷⁷, concluded in its End of Regulatory Period Q6 Report for CAA dated 15 July 2020 that “*the majority of projects in Q6...were delivered within budget (or revised budgets encompassing scope increase) and within schedule*”²⁷⁸. Moreover, the IFS has delivered real time regular reporting on key projects over the Q6 period and produced over 650 reports in total, covering 44% of the portfolio by value. These reports evidence the success of the projects and the Q6 framework, whilst identifying relevant learning points and potential improvements. The IFS reported that the majority of these learning points had been addressed and led to an overall improvement in IFS key performance indicators ratings towards the end of Q6.²⁷⁹

311.2. **Limited disputes:** during the Q6 period there have been very few issues of dispute escalated to the joint steering board,²⁸⁰ and only two projects escalated to the CAA with respect to capital investment during Q6 (including the interim period).²⁸¹

311.2.1. the Lakeside project, escalated on 31 January 2019 and resolved by the CAA on 13 March 2019; and

311.2.2. the Terminal 3 Central Search Area (“T3 CSA”) project escalated on 22 December 2022, whereby the CAA issued a brief response in January 2023 but the issue is yet to be resolved.

²⁷⁷ During the Heathrow CPB on 28 May 2020, the CAA requested of both Heathrow and the airline community that the IFS be instructed to provide a report summarising the IFS findings, themes, trends and observations on the projects and programmes reviewed by the IFS during the Q6 regulatory period. Gardiner & Theobald were appointed as the IFS for Heathrow under a Framework Agreement with Heathrow Airport Limited and the Heathrow Airline Operating Committee (AOC).

²⁷⁸ Gardiner & Theobald: *Report Heathrow Airport Independent Fund Surveyor (IFS) End of Regulatory Period Q6 Report for Civil Aviation Authority (CAA)*, 15 July 2020, section 2.2 [AM1/7/236].

²⁷⁹ Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.4.6 – 8.4.9 [Supp/19/985].

²⁸⁰ Steer: *Heathrow Airport - Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, paragraph 7.2 [AM1/6/216].

²⁸¹ 1st Maxwell, page 25, footnote 84 [Core/6/307]

311.3. **Construction industry recognition:** Heathrow’s performance in Q6 was recognised by the wider construction industry with a number of best practice awards from the Association of Project Managers on Terminal 3 Integrated Baggage (“**T3IB**”) to the Terminal 3 Flight Connections Centre being selected as the Institution of Civil Engineers Project of the Year, and the Passenger Automation programme being recognised at the Future Travel Experience Awards. In addition, Heathrow was a finalist in three different categories at the 2022 Association for Project Management Awards, ultimately winning Technology Project of the Year Award for the Heathrow Terminal Drop Off Charge project and Project of the Year Award for the Firemain Replacement Project.²⁸²

312. Furthermore, a report by Steer submitted with Heathrow’s IBP Submission reviewed the CAA consultation documents and noted: “[w]e consider that the current model for the regulation of capital expenditure at Heathrow Airport is the best fit for the airport in the fast-changing aviation industry and that the status quo should remain”.²⁸³ Steer based its conclusion on their assessment of the available evidence on the Q6 capex incentives regime that:

312.1. Heathrow has effectively kept capital expenditure costs under control, and the cost control is supported by an independent auditor (i.e. the IFS), which provides visibility of key project development to stakeholders;

312.2. the constructive engagement and close involvement between airlines and Heathrow, which recognises that differences will exist, owing to the varying degrees of importance placed by each party on different drivers, has meant that largely the governance process has been allowed to run itself with minimal intervention of the CAA in relation to decision making; and

²⁸² Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.4.5 and 8.4.12 [Supp/19/985-986].

²⁸³ Steer: *Heathrow Airport - Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, Executive Summary, paragraph 10, [AM1/6/181].

312.3. the process allows for necessary agility as the dynamism of the aviation industry requires projects to change their content and scope in period, allowing Heathrow to meet the changing needs of users of air transport.²⁸⁴

313. Despite the fact that the evidence supports the conclusion that the Q6 regime has been working effectively, the CAA has decided to amend the regime. The CAA's rationale for doing so is set out in Appendix G of the H7 Final Proposals. For the reasons set out below, each of its justifications is flawed. The purported justifications are:

313.1. unsubstantiated claims that stronger budget/timing incentives are needed. However, the conclusions of both the CAA and independent reviewers of Heathrow's capex (as outlined above) confirm that Heathrow has been operating efficiently and that the current Q6 regime already provides well-designed and rigorous budget and timing incentives which suit the nature of the capex projects at Heathrow;

313.2. unsubstantiated allegations that it is unclear to airlines whether benefits/outputs from projects have been delivered. Heathrow strongly contests this claim. For the reasons explained in further detail in 1st Maxwell, airlines already have access to extensive information about Heathrow's capex projects, including through information provided via a Development Information Portal, regular monthly meetings and stakeholder groups, the current certification gateway process and independent reviews of projects e.g. through the IFS. Given the access to information and levels of regular engagement that the airlines currently have under the Q6 regime, this cannot possibly be a reason to propose a new framework;

313.3. unsubstantiated claims that the passing of time and the asymmetry of information can make ex post reviews challenging. As to this, 1st Maxwell explains that the CAA has access to detailed real time information about capex projects throughout the regulatory period, including through the volumes of information currently available to the CAA from over c.650 IFS reports on real time project monitoring and the monthly stakeholder governance meetings to which the CAA has a standing invitation. Proposing this as a justification, when the new regime will be

²⁸⁴ Steer: *Heathrow Airport - Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, paragraph 7.2 [AM1/6/216].

significantly more challenging to implement for all stakeholders given its complexity (including an extensive reconciliation process), also appears illogical; and

313.4. a concern that the strength of Heathrow's existing incentives became weaker over the course of the regulatory period (because the earlier a project is undertaken during the period, the longer the period for which a return on approved capex, compared with actual capex, is recovered). However:

313.4.1. In practice, as confirmed by 1st Maxwell,²⁸⁵ this factor was not a driver of capex decision-making by Heathrow during Q6. Indeed, the ex post efficiency review and ongoing monitoring by airlines and the IFS provide strong incentives for Heathrow to act efficiently throughout the period irrespective of when a project starts and ends.

313.4.2. Second, while this issue could be potentially relevant to the introduction of the 25% sharing rate, it does not provide a basis for introducing the overly complex and intrusive requirement to agree DOs with airlines for every project passing through G3.

314. For the reasons explained further below, the new H7 framework will result in a move away from the positive aspects of the current Q6 regime which have been identified by the CAA's consultants and best practice, and will instead introduce inefficiency, cost and delay.

The design of the H7 incentive framework will impose unworkable complexity in respect of at least 400 projects during H7 and result in significant increases in time and resources

315. According to the CAA itself, good incentive design should be simple and straightforward to implement.²⁸⁶ However, the new requirement to obtain agreement on DOs for all capital projects regardless of size is essentially a requirement to enter into a detailed contract between Heathrow and airlines in relation to each and every single project passing through G3 (involving a need to formally renegotiate for any adjustments as a project progresses).

²⁸⁵ See 1st Maxwell, paragraph 6.2.4. [Core/6/310]

²⁸⁶ CAA: [Better regulation - Statutory regulatory principles and regulators code](#) [CC1/8/347-348].

316. Under Q6, “triggers” introduced timing incentives to be applied to “key projects”. A project that meets any one of the following criteria could be considered a “key project”:

316.1. *scope and complexity*: projects that have bespoke design and delivery responses or significant interfaces with other projects of significant time criticality;

316.2. *airline stakeholder impact*: projects with significant impact (positive or negative) on passengers and/or airlines (determined by operational or capacity impact during implementation, significant change management for stakeholders to use new facilities, or significant increases in operating costs arising from the proposed project);

316.3. *strategic importance*: high to significant impact on HAL’s key performance indicators; and/or

316.4. *capital value*: above £20m.

317. There were 11 completed “trigger” projects during Q6.²⁸⁷ The TDS sets out a summary of the overall business case, the scope to be triggered and how the achievement of the “trigger” milestone will be demonstrated.

318. The requirement to reach agreement in relation to DOs goes much further than the “trigger” regime in terms of the scope of the agreement required. For instance, as set out in the table below, DOs introduce additional agreements on quality, weightings and additional regulatory importance of scope – and critically they now apply to all projects regardless of size or significance and will require agreement with airlines on ex post detailed reconciliation for each project.

²⁸⁷ The projects “triggers” were applied to in Q6 represent less than 2% of the 660 investment decisions, see Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), Chapter 8, 9 August 2022, paragraphs 8.5.10 to 8.5.20 [Supp/19/987]. See 1st Maxwell, section 4c for a definition of key projects under Q6 [Core/6/293]

Table [2]: Comparison between “triggers” and DOs²⁸⁸

Element	Trigger	Delivery Obligation
Cost	Yes (ex post)	Yes (ex-ante)
Scope	Yes (no regulatory significance)	Yes (with enhanced regulatory importance)
Quality	N/A	New
Timing	Yes	Yes (with enhanced details on % split for delays)
Weighting on scope	N/A	New
Weighting on quality	N/A	New
Weighting on timing	N/A	New
Indicator for delivery obligation has been met	Achievement criteria for timing	New overall process required
Indicator for delivery obligation has not been met	N/A	New – as Triggers are always achieved at some point – it’s been a question of when. Now scope, quality and timing are under review.

Source: Heathrow

319. Table [3] below shows the average time spent drafting a TDS in Q6. The average number of months agreeing a TDS was eight months: five in drafting, and three in completion (i.e. the trigger project has been completed and airlines have to sign off on the trigger completion).²⁸⁹

Table [3]: Average number of months spent drafting TDS²⁹⁰

No of Triggers completed in Q6	Average number of months spent drafting Trigger Sheet then signing
11	8 (5 in drafting and 3 in completion)

Source: Heathrow

²⁸⁸ Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), Chapter 8, 9 August 2022, paragraph 8.5.22, table 4 [Supp/19/988-989].

²⁸⁹ This also captures occasions where changes were required to a “trigger” post investment decision.

²⁹⁰ See Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), Chapter 8, 9 August 2022, paragraph 8.5.18 at table 3 [Supp/19/988] which sets out the time required for “triggers” in Q6.

320. The above Q6 experience data provides a good indicator of the level of effort currently involved in agreeing an equivalent (albeit less burdensome) arrangement and a baseline from which to consider the implications of the Decision which will apply to all projects passing through G3 in H7. “Triggers” applied only the largest and/or most important projects, but they were only focused on timing and therefore required considerably less detailed levels of agreement than DOs which extend not only to timing, but also to scope, quality as well as weightings and SMART indicators to determine whether each DO has been met.

321. Based on this Q6 experience (as explained further in 1st Maxwell), Heathrow predicts that the CAA’s new capex incentives framework will result in:

321.1. an increase in the workload that Heathrow expects to result from the DO-process by comparison with the work involved in administering triggered Q6 projects by approximately 90-times. As set out in further detail in 1st Maxwell, this estimate was calculated based on the average time required to agree a trigger under Q6 combined with the increase in the expected number of DOs in H7 (compared with triggers under Q6) and the level of effort associated with agreeing a DO in light of the additional parameters (as set out in Table [2] above);²⁹¹ and

321.2. an increase of c.25% (3 months on average) in terms of the time required to reach an investment decision on an individual project due to the additional steps that Heathrow will have to take with respect to DOs, i.e. *“setting and agreeing the proportionality split in advance of working up the Investment Decision, the expected increase in referrals to the CAA, and the need to agree the Delivery Obligation... [for] each individual project”*²⁹².

322. This increase is driven by the fact that DOs are now required for every project passing through G3. In order to respond to this increase in workload, Heathrow estimates that c.80

²⁹¹ Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), Chapter 8, 9 August 2022, paragraphs 8.5.21 to 8.5.39 [Supp/19/988-990] and table 1 [Supp/19/982].

²⁹² Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.5.40 et seq. [Supp/19/991].

new recruits will be needed (to an existing team of 260²⁹³) in order to process the significant increase in time and bureaucracy associated with the new regime, and demonstrating the material impact this decision will have on Heathrow's business.²⁹⁴

The requirements of the regime introduce inefficiency by failing to recognise the way complex capex projects are managed in practice at Heathrow

323. The new H7 regime is a blunt “one size fits all” regime which does not take into account the variety and complexity of projects undertaken by Heathrow, which requires a high level of responsiveness. For instance:

323.1. **Variable supply and demand:** Heathrow needs to have the flexibility to alter supply levels within a short space of time. Unlike in other regulated industries that have much more consistent levels of both supply and demand, consumer demand in the aviation market is more variable, driven by a range of unpredictable and varied factors e.g. local economic factors, unforeseen and/or revised statutory or health and safety requirements, or external global macroeconomic factors. Airports are also exposed to sudden changes in airline capacity levels too – for instance, where airlines provide short notice of changes to aircraft type or availability. An example of the type of capex project that can be particularly affected by such uncertainty includes projects such as runway intervention focusing on repairing structural cracks in runway foundations.²⁹⁵

323.2. **High level of responsiveness needed:** Much of Heathrow's capex project work often takes place with a lack of certainty as to when work can be executed – for instance, Heathrow tends to have an equal amount of work undertaken at night as during the day.²⁹⁶ This is because capex projects are executed in a live operational environment so the teams only get access at specific times of day to minimise disruption to passengers, which can also be subject to daily operational performance (e.g. air traffic delays, weather etc.). It is therefore quite common for

²⁹³ Heathrow requires a workforce with a diverse set of expertise to deal with capex projects – this team consists of members that work across solutions and infrastructure design and delivery as well as independent consultants across areas of procurement, project management office, technology and airline engagement team. See 1st Maxwell, paragraphs 1.6 and 3.2.3.5 for more information. [Core/6/282; 286]

²⁹⁴ See 1st Maxwell, section 7e. [Core/6/326]

²⁹⁵ 1st Cuttle, Frontier Report box 6. [Core/10/581]

²⁹⁶ 1st Maxwell, paragraph 7.10. [Core/6/316]

the team to get late possession of a site with little notice in advance. Making decisions in this dynamic context requires a high level of flexibility and ability to be responsive to make quick decisions where needed.

323.3. **Complexity and unpredictability:** the projects undertaken by Heathrow during H7 will be undertaken in a particularly unpredictable environment in which the airport will be required to respond to the evolving impact of the recovery from the impact of the Covid-19 pandemic and evolving statutory requirements and environmental and planning consents.²⁹⁷

324. The H7 DOs result in a loss of flexibility which limits Heathrow's ability to be responsive to developments on a project and disincentivises them from taking a course of action that does not align with DO outputs (even if it may be more efficient or better value).

325. Moreover, as outlined in the construction expert report of Dr Mark Brown, as a project matures from early-stage planning to nearing completion, there is also a natural evolution or refinement of the scope of the project. The Q6 framework provided for the flexibility to respond to these changing circumstances because the budget for a project was agreed with airlines at G3 but the precise details now covered by the DOs could be adapted in accordance with the requirements of each specific project as it evolved. Heathrow remained incentivised to deliver projects efficiently since capex would be removed from the RAB at the end of the period if the CAA deemed any spend to have been incurred inefficiently.

326. The new regime lacks this agility, which will be detrimental to Heathrow's efficient running and delivery of capex projects.²⁹⁸ The H7 framework could only be workable in practice if the exact costs of each capital project were known in advance, the scope of each project is unlikely to change, and there is likely to be little scope for disagreement with airlines over the precise scope of the contents of each of the DOs. These features are absent from the vast majority of capital projects at Heathrow and are likely to apply, if at all, only to simple routine maintenance or repair projects.

²⁹⁷ Jacobs: [H7 Capital Efficiency](#), June 2021, slide 8 [Supp/47/1837].

²⁹⁸ Steer: *Heathrow Airport - Assessment of CAA-consulted ex-ante capital allowance process*, December 2019, paragraph 7.4 [AM1/6/216].

327. In response to Heathrow's concerns about the inherent cost, rigidity and delays that would be introduced by the new regime at the development stage, the CAA states that it expects Heathrow to undertake the "*necessary optioneering and planning during the development stage of projects to a sufficient quality to derive a P50 cost estimate for G3*"²⁹⁹. However, this comment does not address the basis of Heathrow's concerns or the way in which construction projects work in practice. The flexibility to take prompt and efficient action in response to developments on a project is a key element of efficiency.

328. Under the new regime, Heathrow is hamstrung by the significant risk that a project will not satisfy the detailed DO requirements on scope, quality and timing that are agreed at G3. This means that, in practice:

328.1. Heathrow will be disinclined to proceed with projects until airline agreement has been achieved on the detailed DO parameters at G3 because it is too risky for Heathrow to procure any work beforehand; and

328.2. if the scope of work changes during the course of the project (as is commonplace for capex projects), Heathrow will inevitably be further delayed in responding to such challenges since it will be required to renegotiate with airlines every time potential changes are required.³⁰⁰

329. Moreover, in practice, contractors engaged by Heathrow to work on capital projects provide quotes which remain open for acceptance over a short period. As outlined in 1st Maxwell, the standard practice within the construction industry at present is that quotations are open for acceptance for around one month; Heathrow has more recently experienced high levels of volatility in both first and second tier prices due to *inter alia* recent fluctuations in oil and steel prices and inflationary pressures, meaning that contractors are willing to commit to the quoted prices for even less time.

330. In order to have a sufficient basis to seek agreement with airlines on DOs under the new H7 regime, Heathrow would, in practice, be required to seek relevant quotes in respect of

²⁹⁹ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G, page 51 [Supp/16/921].

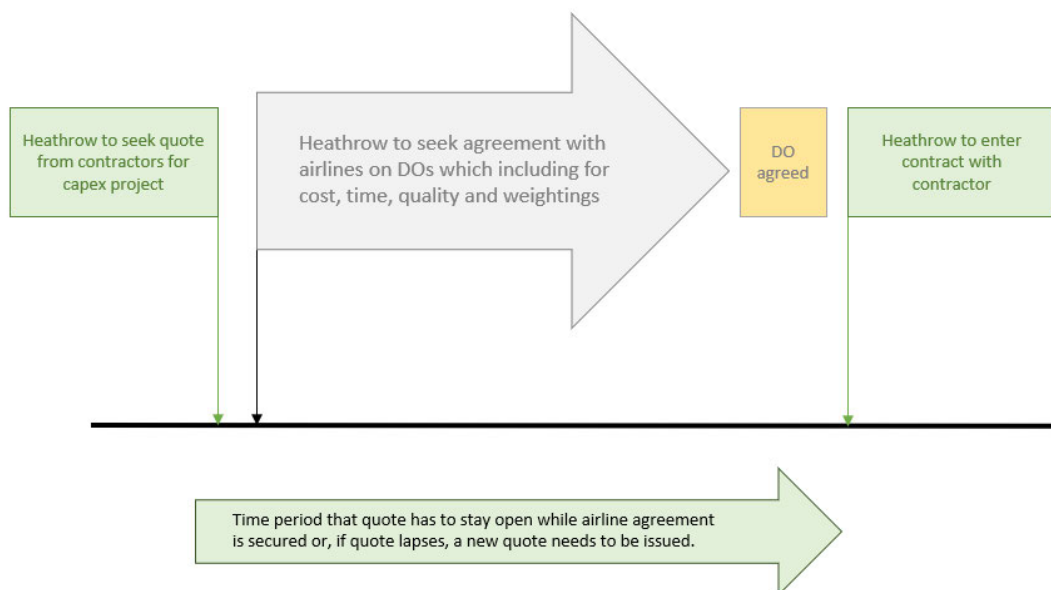
³⁰⁰ This prescriptive framework of DOs also differs from the change control mechanism under Q6, under which Heathrow agrees with the airlines in order to change the baseline scope of a business case after its determination, and is therefore more specifically targeted at material changes (and limited in scope).

each project before approaching the airlines to obtain their agreement. Based on Heathrow's Q6 experience (where the average time to agree and sign a TDS was 8 months), it seems entirely plausible that a considerable proportion of DOs may take longer to agree than the (approximately) one month period for which quotes currently tend to remain open.

331. Given the expected lead time to secure agreement on each of the DOs, this will mean that quotes may need to remain open for longer – which will result in contractors adding a premium to the quote to cover the risk that there might be price volatility in the (extended) period for which the quote remains “open” – or, where a quote has lapsed, a new quote will need to be sought which will involve additional time and delay and potentially further sign off from airlines should the updated information differ from the original quote. Projects can only proceed once this extensive process of consulting with contractors and airlines is concluded. The CAA has failed to consider the impact of these consequences on the supply chain in its Decision.

332. We have set out how this process will work at H7 in the diagram below:

Figure [4]: process for DO agreement and contracting work at H7



333. The new regime is therefore incompatible and inconsistent with the way that projects are managed and procured at Heathrow and will lead to delays, higher costs and inefficiency. The above figure also only considers the impact of the delay on a single project. However, since the DO requirements apply to every project, the detrimental impact of this delay will also likely have a compounding effect as enabling projects are delayed meaning that Heathrow is unable to move on to the next project in the pipeline until the delay is resolved. Moreover, this is likely to lead to a domino effect, particularly relevant for projects that need to progress in a sequenced manner within their programme.

The DO regime does not promote efficient incentives

334. The design of the DOs is inherently flawed and will inevitably lead to inefficient incentives to behave in a way which is again not correlated with achieving efficient outcomes.

335. First, the H7 capex incentives framework will inevitably incentivise airlines to be inflexible during the process of agreeing DOs. As explained in the Frontier report,³⁰¹ the

³⁰¹ 1st Cuttle, Frontier: *Review of the CAA's Final Decision on capex governance for H7*, April 2023, section 2.5. [Core/10/583]

design of the framework can be expected to encourage airlines to negotiate strongly for DOs with requirements and weightings that are in their short term commercial interests, even if this does not necessarily produce a better outcome for consumers. This is because the consequence of Heathrow's failure to meet these stringent requirements would maximise the likelihood of disallowed capex, reducing the opening H8 RAB and in turn reducing airport charges in the future.

336. Second, as explained further in the Frontier report,³⁰² the H7 regime - particularly the 'knife-edge'³⁰³ nature of the scope requirements - incentivises Heathrow to be more risk-averse and encourages Heathrow to focus on delivering exactly what was set out in the DOs (to avoid getting penalised for even the slightest case of under-delivery). When working in a dynamic capex delivery environment, such risk aversion creates a high risk of achieving worse outcome for users of air transport. For example:

336.1. If it becomes apparent that a better outcome could be achieved by delivering a smaller number of higher quality outputs, Heathrow would not be incentivised to adapt its approach if the project's DO would penalise Heathrow for under-delivering on scope and would not compensate it for over-delivering on quality.

336.2. Similarly, if it becomes apparent that a better outcome could be achieved by taking more time to complete a project, Heathrow would not be incentivised to adapt its approach if the project's DO would penalise Heathrow for under-delivering on timing and would not compensate it for over-delivering on quality.

336.3. For instance, Heathrow might embark on a project to upgrade its pre-conditioned air units. Having agreed at G3 that it would upgrade 104 units to design standard "X" by June 2025 at a cost of £50 million, Heathrow might subsequently be approached by its contractors regarding the possibility of upgrading the relevant units to a higher, longer-lasting design standard "Y", at the same price, but requiring an extra six months to complete installation. If the project's DO would

³⁰² 1st Cuttle, Frontier: *Review of the CAA's Final Decision on capex governance for H7*, April 2023, section 2.5. [Core/10/583]

³⁰³ As further detailed in 1st Cuttle, Frontier: *Review of the CAA's Final Decision on capex governance for H7*, April 2023, section 2.5, [Core/10/583] this means that either the scope and quality DOs are met in full and all of the associated capex is added to the RAB, or the DOs are not met (even if only by a small amount) and all of the associated capex is removed from the capex baseline.

penalise Heathrow for failing to meet the deadline agreed at G3, then Heathrow would be incentivised to deliver the lower quality output rather than go through further rounds of agreement (and associated delay) with airlines to amend the DO, with no guarantee that there will be agreement achieved – thereby disincentivising an outcome that, overall, might be better for stakeholders in the longer term.

336.4. This demonstrates the unreasonable nature of the prescriptive DOs which restrict Heathrow's flexibility unnecessarily, stifling innovation. As reflected in the Frontier report,³⁰⁴ the result is that ultimately, the focus is incorrectly placed on "outputs" rather than the "outcomes" to be achieved.

337. Third, the DO regime is likely to drive Heathrow to break projects down into smaller projects (so the 400 project number estimate may well end up being even higher). The reason that Heathrow would do this is to carry out more works earlier in the project life cycle to identify any issues (i.e. asbestos, or ground works issues) rather than setting the DO and associated risk allowance at the outset and discovering issues later down the line on which Heathrow would bear costs should the DO not be met.

338. Although breaking projects down into these individual elements may allow Heathrow to reduce its risk, this is likely to increase the bureaucratic burden and delay since it will mean Heathrow and the airlines will have to agree a separate DO for each individual element of a project. Agreeing additional DOs – given the expected levels of delay outlined above – will likely result in further increases to cost and disruption to the operation. In order to further mitigate the risk associated with agreeing to such detailed DOs, it will likely also result in Heathrow carrying out more intrusive surveys and checks on more minor elements of the project in advance of agreement, rather than adopting a pragmatic decision to proceed onto site and having flexibility to deal with issues relating to more minor elements as they arise, in line with industry best practice.

(II) The design of the CAA's capex incentives regime fails to take account of the interests of users of air transport - contrary to the CAA's primary duty - by inappropriately prioritising the commercial interests of airlines

³⁰⁴ 1st Cuttle, Frontier: *Review of the CAA's Final Decision on capex governance for H7*, April 2023, section 2.2. [Core/10/575]

339. The Decision on capex incentives inappropriately prioritises the commercial interests of airlines, contrary to the CAA's primary duty for the following reasons, as detailed further below:

339.1. Securing the agreement of airlines for DOs prioritises the commercial interests of airlines above the interests of users of air transport services.

339.2. The H7 capex regime confers a disproportionate degree of control on airlines in respect of issues on which they have no special technical or commercial expertise.

Securing the agreement of airlines for DOs prioritises the commercial interests of airlines above the interests of users of air transport services

340. The CAA's primary duty under CAA 2012 is to further the interests of users of air transport services.³⁰⁵ Its primary duty is not to ensure the interests of airline operators are prioritised above all other stakeholders.

341. However, the H7 framework effectively outsources the CAA's role to further the interests of consumers to the airline community. In doing so, the CAA has failed to have regard properly to the fact that airline interests are not a direct proxy for the interests of users of air transport services and, indeed, in some cases those interests may conflict. Heathrow does not object to airlines playing a role in the approval of capex projects. However, the level of control and micromanagement that is being conferred on airlines under the new H7 regime is not in accordance with the CAA's primary duty and takes insufficient account of the fact that airlines are commercial entities which can be expected to act in their own commercial interests. The Decision does not engage with, or explain why, the CAA nevertheless considered it appropriate to confer intrusive power of control over granular aspects of all capital projects on the airlines.

342. In particular, informed by experience in Q6, Heathrow is concerned that the expanded role of airlines under the H7 framework is likely to result in behaviour which is not aligned with the interests of users of air transport for the following reasons:

342.1. **Q6 experience of airline engagement:** as explained further in 1st Maxwell, there is no incentive for airlines to reach a swift decision. Experience under Q6

³⁰⁵ *Civil Aviation Act 2012*, section 1(1) [Auth/1/6].

demonstrates that there have been numerous examples in practice where airlines have sought to prioritise their own needs, or disproportionately focused on issues which have little to no bearing on promoting the interests of users of air transport in discussions relating to capital projects.³⁰⁶ One recent example is Heathrow’s plan to deliver on its legal requirement for enhanced threat detection Security Programme by 1 June 2024 (a mandatory deadline imposed by the Department for Transport (“DfT”). For this project, detailed engagement began in Summer 2022 and agreement was required by December 2022 to deliver the project by the legal deadline. However, agreement has still not been forthcoming due to airline requests driven by their own commercial interests and overly detailed information requests which have delayed the process. These requests include withholding airline approval if [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]³⁰⁷

342.2. **Limitations of airline consultation role:** airlines are, moreover, not always best placed to act as experts in relation to necessary airport investment. For example:

342.2.1. Airlines do not have any particular expertise in relation to routine capex projects that are not directly related to the delivery of airline services, such as refurbishment of lifts and escalators, interior decoration, or commercial capex projects at the airport that are more directly focussed on the requirements of other airport users – e.g. a property tenant, or cargo handlers.

342.2.2. In some instances, airlines’ incentives in discussions with Heathrow on capital projects are likely to be primarily or partly driven by their own strategic interests arising from competition between different airlines rather than the interests of airport users. Airlines at Heathrow are incumbents at a heavily congested airport, and therefore have a commercial incentive to block or delay projects that could benefit entrants, for example by limiting capacity. Likewise larger airlines at Heathrow have a commercial incentive to block or delay projects that may benefit smaller airlines. As a clear example of this

³⁰⁶ Please refer to 1st Maxwell, section 7c. [Core/6/318]

³⁰⁷ Please refer to 1st Maxwell, paragraph 7.16 *et seq.* [Core/6/319]

behaviour, British Airways (“BA”) has publicly not supported expansion at Heathrow in the past, notwithstanding the restrictions that the lack of expansion capacity has placed on BA’s own ability to expand at its major hub and the public statements from CAA, DfT and Consumer Challenge Board that expansion was in the interests of consumers.

342.2.3. In other instances, airlines may be acting as competitors to Heathrow, with resultant conflicts of interest on certain projects. For example, BA has office space just outside the airport perimeter which media reports suggest BA is seeking to sublet (potentially even to Heathrow).³⁰⁸ This can be expected to materially affect BA’s incentives in relation to capex projects related to Heathrow’s commercial property within the scope of the new H7 regime.

342.3. **Heathrow’s licence requirements:** Heathrow is required under its licence to operate in an economical and efficient manner and shall “*seek to secure that the reasonable demands of users and air transport services [...] are met*”.³⁰⁹ In contrast, the airlines are not subject to such a duty and they are free to prioritise their own commercial interests in any discussions relating to agreement on DOs for capex projects. As a result, the objectives of the airlines in such discussions tend to be on short term commercial interests of the airlines rather than taking a holistic view of the interests of the users of air transport services at Heathrow.

342.4. **Regulatory design incentivises inflexibility from airlines:** as explained above, and in the Frontier report, the CAA’s design of the DOs may incentivise airlines to be inflexible and negotiate requirements that are in the interests of their short term commercial incentives, even if this does not necessarily benefit consumers. Moreover, the design also discourages airlines from renegotiating after G3, so as to maximise Heathrow’s likelihood for penalties which would disallow capex and reduce the opening H8 RAB, in turn reducing airport charges in the future.³¹⁰

³⁰⁸ The Guardian: [BA ponders sale of Waterside HQ as more staff work from home](#), 19 March 2021 [CC1/6/213-216].

³⁰⁹ CAA: [Licence granted to Heathrow Airport Limited by the Civil Aviation Authority under section 15 of the Civil Aviation Act 2012](#), 2 February 2022, paragraph B3.2 [Auth/2/254].

³¹⁰ 1st Cuttle, Frontier: *Review of the CAA’s Final Decision on capex governance for H7*, April 2023, box 7.

343. The CAA itself has recognised that airlines would be in a position to prioritise their own commercial interests under the new regime for capex incentives when it stated that the new regime would allow for “a clear ability for airlines to decline to proceed with a particular project on the basis that it is either not required or does not meet airline needs” (emphasis added).³¹¹ Given the limitations of airlines in acting as a proxy for consumers as set out above, this comment demonstrates that the regime may result in a prioritisation of airline needs over those of users of air transport.

The H7 capex regime confers a disproportionate degree of control on airlines in respect of issues on which they have no special technical or commercial expertise

344. In Q6 the relevant capex regime required Heathrow to:

344.1. agree with airlines the capital budget for G3 projects, with a power of seeking escalation to the CAA; and

344.2. agree to TDSs for key projects.

345. However, under the H7 framework, airlines will have significantly expanded and detailed powers and an effective veto over a range of granular DOs across all projects, including non-aeronautical or commercial projects, for additional factors such as project delivery and quality where the airlines do not have relevant expertise and which exacerbate the limitations of airlines’ role in the consultation process as outlined above.

346. Airlines themselves have requested that a panel of experts are appointed on their behalf to assist them in their significantly expanded role, funded through the capex allowance (and this has been proposed by the CAA as part of the draft Guidance³¹²). [REDACTED]

[REDACTED] 313 [REDACTED]
[REDACTED]

³¹¹ CAA CAP2365C: [H7 Final Proposals Section 2: Building Blocks](#), 28 June 2022, paragraph 7.67 [Supp/14/652].

³¹² The CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023 suggests that there should be an independent review of common processes and standards – see paragraph 3.22: “This review (or reviews) should consider the extent to which HAL’s process and standards reflect best practice elsewhere in the construction industry, or other relevant comparators. The review should either conclude that HAL’s processes and standards are appropriate or identify where these should be updated or enhanced in keeping with best practice” and paragraph 3.27 “We expect that this review should be funded through HAL’s capex allowance” [Supp/9/416].

³¹³ Further detail is set out in 1st Maxwell, paragraph 7.29. [Core/6/323]

[REDACTED]

[REDACTED]. Such requests can be viewed as a recognition that airlines do not always have the right expertise to comment on these kinds of capex projects. The CAA has prioritised expanding the level of airline involvement to such an extent that it has lost sight of its duty to design a capex regime which gives primacy to the interests of users of air transport rather than the commercial needs of airlines.

Principles of Better Regulation

347. This section establishes how the H7 capex incentive framework is contrary to the CAA’s duty to have regard to principles of better regulation by introducing an expansive new regime which:

347.1. is not necessary (section I);

347.2. is not proportionate or targeted (section II);

347.3. is neither transparent nor accountable (section III); and

347.4. is inconsistent with relevant regulatory precedent (section IV).

(I) The CAA’s Decision for capex incentives is unnecessary – the Q6 arrangements are working well and the CAA had no proper basis to introduce the intrusive new requirements relating to DOs

348. For the reasons explained in paragraph 313 et seq above, the justifications provided by the CAA’s new regime are flawed. There is no evidence of inefficiency in the existing arrangements and the CAA has failed to carry out an evidence-based assessment to demonstrate a need for this change.

349. The CAA’s objective is to propose “*clear, simple and symmetrical financial incentives*” which also “*retain flexibility*”; however, the introduction of a complex H7 capex incentive

framework runs directly counter to this aim.³¹⁴ Therefore, the Decision is clearly contrary to its duty to act in a way which is targeted only at cases in which action is needed.

(II) The CAA’s Decision is not targeted or proportionate and applies a blanket policy across all capex which bears no correlation to the benefits to users of air transport

The introduction of DOs is not proportionate to the objective it is seeking to achieve

350. According to the CAA’s own interpretation of the “Better Regulation” framework, the CAA must take a proportionate approach to capex meaning that: “*Regulators should intervene only when necessary; remedies should be appropriate to the risk posed, and costs identified and minimised*”.³¹⁵

351. The risk that the CAA is trying to solve is unevidenced, while the new DO-based framework it is introducing is widespread, untargeted and will be extremely costly. This is contrary to the meaning of proportionality and it is an error to describe it as such. The CAA claims its new framework is proportionate without providing any compelling evidence as to why this is the case.³¹⁶ The CAA has also failed to provide any substantive or quantifiable evidence as to how the new regime would benefit users of air transport, or to carry out a regulatory impact assessment.

352. The CAA seeks to justify its disproportionate regime on the basis that the information required to set a DO should already be contained in project information to suggest it would be no more burdensome for Heathrow.³¹⁷ However, this misses the point. Heathrow does not deny that it already provides airlines with considerable amounts of information under the Q6 regime – but the CAA does not engage with Heathrow’s main concern which is the

³¹⁴ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G, paragraph G14 [Supp/16/917].

³¹⁵ CAA: [Better regulation - Statutory regulatory principles and regulators code](#) [CC1/8/347-348].

³¹⁶ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G. The CAA’s justification for proportionality is that only a proportion (determined by the symmetric incentive rate) of over or underspending will be disallowed from the RAB or added as a bonus (depending on over- or underspend), thereby limiting Heathrow’s risk exposure. The CAA comments that Heathrow can both under- and out-perform baselines. This is very unlikely in practice for the reasons set out in section 359, namely the nature of duplicative penalties and the asymmetric distribution that the H7 framework confers [Supp/16/925-926].

³¹⁷ HAL CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraph 8.5.8 and table 4 in paragraph 8.5.22 [Supp/19/987-988]; (see also CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G, table G.2. [Supp/16/920]), and CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023 [Supp/3/125].

extensive level of detailed agreement now required (which, in any event, is also likely to result in even more information requests from airlines than exists under Q6).

353. Heathrow has maintained its position throughout the H7 consultation that the Q6 framework is clearly superior to the H7 framework but, in order to be constructive and for the reasons explained in 1st Maxwell, Heathrow has also sought alternatives with the CAA as to how their H7 proposals could be amended to make them more proportionate and alleviate Heathrow's concerns. For instance, Heathrow provided a set of proposals to the CAA in May 2022 which included the introduction of a financial threshold of £25 million over which more detailed airline agreement obligations could be required (thereby avoiding an overly wide range of projects subject to DOs).³¹⁸

354. As explained further in 1st Maxwell, the idea of a financial threshold is supported by the fact that the overwhelming majority of any overspend from Q6 has been in the projects over £50 million. This indicates that these high value projects above this threshold are likely to be the ones which merit the most scrutiny (rather than applying the same level of scrutiny to all projects irrespective of value or importance).

³¹⁸ CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.20 [Supp/3/121]. See also Heathrow: *Heathrow capex incentives proposal*, 13 May 2022 [AM1/12/408], one in a series of presentations made by Heathrow to hold a constructive discussion with the CAA on possible alternatives or modifications to the proposed H7 framework, none of which were engaged with, trialled or properly considered by the CAA prior to the Decision.

355. However, despite mentioning Heathrow's alternative proposal, in the Decision,³¹⁹ the CAA failed to engage with any of these proposals or to trial different options before putting in place the Decision, and proceeded with its disproportionate approach.

The new framework does not result in a "fair bet" for Heathrow which further supports the conclusion that the Decision is disproportionate

356. The proposal to use penalty-only DOs based on the outputs of scope, quality and timing of a project, and an agreed weighting for each, does not provide a "fair bet" for Heathrow to set the capex baseline reconciliation. This again supports the conclusion that the CAA's "resolution" for its concerns is entirely out of proportion to its objective. The Frontier report³²⁰ supports the conclusion that the introduction of DOs does not result in a fair bet for Heathrow - and a summary of the key points are set out below.

357. First, the CAA's analysis of whether the capex incentives are a fair bet only discusses the symmetric ex ante cost sharing mechanism, and does not consider DOs at all.³²¹ However, DOs are by nature 'penalty only' as they incentivise Heathrow to perform exactly within the specified limits of the DOs, with no scope to outperform. Heathrow cannot meaningfully outperform the output or quality metrics and is not incentivised to deliver

³¹⁹ CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.20 [Supp/3/121].

³²⁰ 1st Cuttle, Frontier: *Review of the CAA's Final Decision on capex governance for H7*, April 2023, section 2.7. [Core/10/590]

³²¹ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G, table G.1 on page 45 [Supp/16/915].

more output or higher quality on a capex project than what is agreed at the outset since the incentive rate is related to over- or under-spending.³²²

358. Second, and contrary to the claims of the CAA³²³, the distribution risk is not symmetrical; it is only possible to deliver up to a maximum of 100% below budget but you can go multiple times over-budget. The H7 framework is therefore inherently skewed towards penalties.

359. Third, it is plausible that Heathrow could receive duplicative penalties from DOs as well as OBR (and the OBR regime is also mostly penalty-only).³²⁴ Under the OBR regime, Heathrow already incurs penalties if it does not meet certain service quality targets – as explained further in the Frontier report,³²⁵ where these overlap with the obligations under a DO, Heathrow may be penalised twice. OBR is intended to incentivise Heathrow (and regulated businesses in general) to focus on delivering outcomes that are most valued by consumers, rather than focusing on the precise outputs (e.g. equipment) or inputs (e.g. time and money) needed to achieve the outcomes. For instance, a capex project aimed at repairing jetties, such as the B101 T3 Airbridges project, which replaces 12 jetties across nine stands, can clearly be mapped to measure F14 (Availability of jetties) under the existing OBR measures. It is also plausible that if this capex project were delayed, Heathrow would incur a penalty from the timing DO, as well as potentially from OBR. This potential for “double jeopardy” is wide-ranging. Heathrow’s evidence is that a number of the capex projects currently in the pipeline - were they to be completed late or over budget or to a reduced quality - could see Heathrow penalised under both OBR and the DO regime; for example, Heathrow’s wi-fi upgrade programme, escalator upgrades in T5, track transit system enhancement project, and fixed electrical ground power units replacement works.³²⁶ The penalty-only nature of DOs, asymmetrical risk and risk of duplicative penalties all provide additional evidence to support the conclusion that the

³²² See explanation provided in footnote 19 of 1st Cuttle, Frontier: *Review of the CAA’s Final Decision on capex governance for H7*, April 2023.

³²³ CAA CAP2524C: [H7 Final Decision Section 2: Building Blocks](#), 8 March 2023, paragraph 7.7 [Supp/3/118].

³²⁴ Further detail is set out in 1st Maxwell, section 7(d). [Core/6/324]

³²⁵ 1st Cuttle, Frontier: *Review of the CAA’s Final Decision on capex governance for H7*, April 2023, section 2.7. [Core/10/590]

³²⁶ Further detail is set out in 1st Maxwell, section 7(d). [Core/6/324]

CAA's new framework is disproportionate solution to the objective that the CAA is seeking to achieve.

(III) The CAA's novel capex incentive framework is not transparent or accountable

360. The CAA describes the transparency principle as regulators being “open” and “keep regulations simple and user-friendly”.³²⁷ Yet the CAA has failed to keep the capex incentive framework open and simple, both in terms of the substantive requirements (as explained above) as well as in relation to the process for implementation and how the requirements are drafted in the licence.

361. In relation to process, not only has the CAA failed to carry out any sort of regulatory impact assessment (despite Heathrow's consistent and repeated requests³²⁸) or meaningfully engage with Heathrow's alternative proposals (as outlined above), but also – despite having first proposed a new regime around six years ago³²⁹ – the regime is still unfinished business with certain elements of the framework yet to be defined and still being finalised through the draft Guidance. There is also a lack of clarity in terms of how the reconciliation process will work in practice with only a limited example provided at H7 Final Proposals stage with which Heathrow had various concerns.

362. The draft Guidance also flags that there may need to be updates to the Guidance should concerns arise that it “imposes an excessive burden and cost on HAL and/or airlines, unnecessarily contributes to delays”.³³⁰ This is no answer to the concerns that Heathrow has with the regime, provides no guarantee as to what future changes could potentially be made and, if anything, suggests an underlying concern on the part of the CAA as to the burdensome nature of its regime.

³²⁷ CAA: [Better regulation - Statutory regulatory principles and regulators code](#) [CC1/8/347-348].

³²⁸ For example, see Heathrow: [Working paper on capital expenditure efficiency incentives \(CAP1951\) – Heathrow's response](#), 16 October 2020 [Supp/47/1816], paragraph 13; Heathrow CAP2265: [Economic regulation of Heathrow Airport Limited: H7 Initial Proposals - Heathrow response](#), October 2021 paragraph 9.4.2 [Supp/34/1557]; and Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited, H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraph 8.5.4 [Supp/19/986].

³²⁹ CAA CAP2139: [Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward](#), 27 April 2021 [AM1/10/356-362]. We note paragraph 28 on capex efficiency incentives states “Over the last four years, we have consulted on our approach to capex efficiency incentives for the next price control”.

³³⁰ CAA CAP2524G: [Draft guidance on capital expenditure governance](#), 8 March 2023, paragraph 4.9 [Supp/9/425].

(IV) The CAA’s Decision is not consistent with regulatory best practice – the CAA fails to take account of relevant comparators and fails to consider consistency within its own price control decision

The Decision is inconsistent with relevant comparators

363. In coming to the Decision, the CAA has failed to take account of relevant airport comparators: Dublin and Gatwick. Both these airports have a requirement to consult, and not agree, with airlines and also maintains a far greater degree of flexibility in the framework to be responsive to developments on a capex project as it progresses.

364. For example, Dublin Airport, which is Heathrow’s closest comparator from a regulatory perspective - as both are regulated with an almost identical application of the single-till approach - is also regulated with a capex incentives framework:

364.1. Dublin Airport’s regulator, the Commission for Aviation Regulation (“**CAR**”), currently applies an incentive framework whereby capex projects are either:

364.1.1. **Ex ante:** CAR (the regulator) determines the cost and scope of these projects at the outset of the price determination (i.e. a form of ex ante control). Airlines can express their views but airline approval is not required. The regulator determines the capital allowances with the support of IFS.

364.1.2. **StageGate:** The StageGate process is typically used for large scale infrastructure projects (rather than relatively smaller projects) and/or projects without sufficient certainty on costs.³³¹ The StageGate process is analogous to Heathrow’s existing Q6 Gateway process, where initial costs allowances are provided at the outset of the price determination, and the projects’ scope and costs are finalised throughout the price control period as the project evolves and matures.

364.1.2.1. To finalise the projects’ cost and scope the airport is required to consult with key stakeholders including airlines.³³² Like the ex ante process, the

³³¹ Commission for Aviation Regulation: [Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024](#), 24 October 2019, paragraph 9.114 [Supp/45/1810].

³³² Commission for Aviation Regulation: [Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024](#), 24 October 2019 [Supp/45/1807-1812].

regulator makes a determination at the outset (i.e. the initial allowances) with the support of the independent expert, the IFS.

364.1.2.2. As projects evolve, the airport is required to consult with stakeholders through the StageGate process – the IFS also independently assesses airport’s proposals.

364.1.2.3. Again the airport has to consult (but not agree) with airlines on the cost and scope of projects as they evolve through the regulatory period; this process allows the project to proceed with a significant degree of certainty over the recoverability of costs,³³³ rather than the cost and scope being set out at the outset of the control period when projects are less developed.

364.1.2.4. CAR states that “[t]he StageGate process is intended to improve the regulatory model by allowing for ongoing flexibility for the scope and/or cost of certain projects to evolve throughout the regulatory period, rather than being set in advance”.³³⁴

364.1.2.5. In its determination on charges for 2020-2024, CAR decided to adjust “the set of projects included to target those where we consider the process will add the most value. The number of StageGate projects has reduced from 21 to 17”.³³⁵

365. Gatwick is regulated under a “Licence based Commitments” regime, a hands-off approach which is very different to Heathrow. Gatwick’s approach is far less intrusive and burdensome than Heathrow’s H7 regime by an order of many magnitudes.

365.1. **Capex plan:** Gatwick shares annually a 5-year capex plan with the Airlines Consultative Committee (“ACC”) ahead of publication as part of its Capital

³³³ For both ex ante and StageGate projects, in order to roll the RAB forward to determine the subsequent price control, the CAR (accordingly supported by the IFS) would assess whether the project delivered the Deliverable(s) defined for each project. To the extent that this is the case: i) for ex ante projects the RAB would be rolled forward based on the initial costs allowances; ii) for the StageGate process projects, provided that the projects meet the Deliverable, the RAB would be rolled forward based on the cost set out through the StageGate process.

³³⁴ Commission for Aviation Regulation: [Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024](#), 24 October 2019, paragraph 9.99 [Supp/45/1807].

³³⁵ Commission for Aviation Regulation: [Determination on the Maximum Level of Airport Charges at Dublin Airport 2020-2024](#), 24 October 2019, paragraph 9.102 [Supp/45/1807].

Investment Programme (“CIP”) consultation, and it meets with the ACC to perform an ex post review of capex projects.

365.2. **Consultation:** Importantly, the airport needs to consult airlines on its CIP, but there is no obligation to have full agreement from all airlines.³³⁶ This is regardless of the value of the project or the type of the project (i.e. whether it is subject to ex ante or ex post review).

365.3. **Ex post review:** For the ex post review of capex projects at Gatwick, a financial threshold of £1 million is applied, under which projects are not individually reviewed (with the exception of Commercial Returns Projects which are not subject to individual ex post review). Projects below this threshold are looked at on an aggregate basis.³³⁷

365.4. **Form of ex ante scrutiny:** At Gatwick, a financial threshold of £5 million is applied to individual capex projects for them to become ‘major projects’, open to a higher level of scrutiny by airlines.³³⁸

365.4.1. Projects above this threshold have the option of ex ante scrutiny, whereby airlines have the option to form working groups for specific major projects. Airlines require Gatwick to update them annually on individual projects within this category as part of the CIP consultation.³³⁹

365.4.2. For projects below this value, airlines have no ex ante scrutiny and are given annual updates on an aggregate basis.

365.4.3. In addition, projects in the Asset Stewardship Program (for asset maintenance and replacement) and the Commercial Returns Project (for

³³⁶ Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 4 [Supp/55/1922-1924].

³³⁷ Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 4 [Supp/55/1922-1924].

³³⁸ There is one exception to this, such that a project underneath this value threshold can become a major project if “in the reasonable opinion of Gatwick Airport Limited (GAL) and/or the ACC have a particular impact on customer service, operations or are of a strategic importance”. Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 4 [Supp/55/1922-1924].

³³⁹ Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 4 [Supp/55/1922-1924].

capex projects not funded through airport charges) generally do not have this higher level of ex ante scrutiny, no matter the project value.³⁴⁰ Airlines continue to be consulted, but they do not have ex ante scrutiny and are only given project updates at an aggregate level.

365.5. **Proportionate penalties:** Gatwick has a contract of commitments that it must meet, including a minimum annual investment level, and it is only penalised with paying a rebate if it does not meet its core service standards.³⁴¹ However it does not have particular service standards that it must adhere to on a project- or programme-level. Hence Gatwick is not subject to overly prescriptive penalties, or the risk of duplicative penalties.

366. The H7 approach is also out of line with other comparable European examples, including Amsterdam, Zurich and Rome airports,³⁴² and the regulatory burden introduced is out of line with best practice compared to other European comparators.

The Decision is inconsistent with other areas of the price control

367. As explained further in the Frontier report,³⁴³ the CAA has not appropriately considered the potential for double jeopardy that arises from the introduction of the DO regime alongside the OBR regime. Rather, the CAA seems to dismiss this concern out of hand despite the fact that it demonstrates a further flaw in the regulatory design.³⁴⁴ The CAA claims that DOs represent a consistent regulation, but fails to consider the internal

³⁴⁰ The exception is the previously outlined case, where a project in the Asset Stewardship Program is considered a ‘major project’ due to strategic importance. Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 4 [Supp/55/1922-1924].

³⁴¹ Gatwick: [Gatwick Airport - Conditions of Use 2023/24](#), 31 January 2023, Schedule 3 [Supp/55/1917-1921].

³⁴² Heathrow CAP2365: [Economic regulation of Heathrow Airport Limited: H7 Final Proposals - Heathrow response](#), 9 August 2022, paragraphs 8.6.50 to 8.6.51 [Supp/19/1004].

³⁴³ 1st Cuttle, Frontier: *Review of the CAA’s Final Decision on capex governance for H7*, April 2023, section 2.6. [Core/10/585]

³⁴⁴ CAA states in CAA CAP2365C: [H7 Final Proposals Section 2: Building Blocks](#), 28 June 2022, paragraph 7.52 [Supp/14/650] that “there are likely to be many projects for which the OBR framework is less relevant, for example because there is not a measure that would capture the specific impact that a proposed project is intended to deliver”.

consistency with other parts of H7.³⁴⁵ This is not in line with the CAA's statutory duty to be consistent.

Legal conclusions on CAA's capex incentives decision

368. The Decision is wrong in law under section 26(b) of the CAA 2012 as the CAA has failed to take into account its statutory duties and has designed a regime which prioritises the needs of airlines over those of users of air transport services. In the Decision, the CAA has breached its primary duty to further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.³⁴⁶ The CAA has also breached its secondary statutory duties to promote efficiency and economy,^{347,348} and as it has not designed a framework which is transparent, accountable, proportionate and consistent, and targeted only at cases in which action is needed.

369. In addition and/or alternatively, the CAA has erred in its exercise of discretion under section 26(c) of the CAA 2012 by introducing a requirement to agree complex DOs on all G3 projects. The CAA has made a decision which will create inefficiency compared with the existing framework for Q6 and has prioritised the commercial interests of the airlines above the interests of users of air transport services at Heathrow. The CAA has failed to meaningfully engage with the consequences highlighted by Heathrow in relation to the resulting inefficiency due to the cost and delay of agreeing DOs, the flawed incentives framework created, and the constraints it will place on Heathrow's ability to operate efficiently and flexibly in line with industry best practice.

370. The CAA has also failed to engage with reasonable alternatives proposed by Heathrow to mitigate its concerns, and failed to conduct a regulatory impact assessment at any stage in the consultation process.

³⁴⁵ CAA CAP2365E3: [H7 Final Proposals Appendices D - K](#), 28 June 2022, Appendix G, page 56 [Supp/16/926].

³⁴⁶ *Civil Aviation Act* 2012, section 1(1) [Auth/1/6].

³⁴⁷ *Civil Aviation Act* 2012, section 1(3)(c) [Auth/1/6].

³⁴⁸ These principles are transparency, accountability, proportionality, consistency and ensuring regulatory activities are targeted only at cases where action is needed (*Civil Aviation Act* 2012, section 1(4) [Auth/1/6]).

H(4) Relief Sought

371. Heathrow respectfully requests that the CMA quash the Decision to introduce the requirement to agree DOs with airlines and restores the prevailing Q6 regime such that the Decision to impose a requirement to agree DOs for all projects passing through G3 is no longer incorporated into the licence, including removing the wording “*and, where relevant, agree*” from licence condition F1.1(a).

372. In the absence of a requirement to agree DOs on G3 projects, Heathrow would also propose a return to the Q6 arrangements relating to the use of “triggers”. In order to implement this change, Heathrow respectfully requests that the CMA also remove the wording “; *and prior to the either the governance arrangements being modified as a result of guidance issued during 2023 in accordance with Condition F or 31 December 2023, whichever is the earlier*” from licence condition C1.16. This amendment would remove the expiry date imposed on the use of triggers in the modified licence.

H7 Price Control Appeal - Glossary

Abbreviation	Meaning
ABP	Airlines' publication, "Alternative Business Plan" submitted to the CAA in February 2021
ACC	Airlines Consultative Committee
ACR2011	The Airport Charges Regulations 2011 (S.I. 2491/2011)
Aczel	Richard Aczel Limited (trading as Aczel)
AOC/LACC	Airline Operators' Committee (for Heathrow) / London (Heathrow) Airline Consultative Committee, set up by IATA
AOS	Airport Operation Services, defined in section 68 CAA12
ASQ	Airport Service Quality
BA	British Airways
BA/IAG	British Airways plc/International Airlines Group (owner of British Airways)
Better Regulation Principles	The principles to which the CAA must have regard under section 1(3)(g) CAA12 and set out in subsection 1(4) CAA12
CAA	The Civil Aviation Authority
CAA 2012	The Civil Aviation Act 2012
Capex	Capital Expenditure
Capex baseline	The forecast of development and core expenditure
Capex category	Capex categories include projects that have common outputs / objectives and similar levels of risk and controllability
Capital Efficiency Handbook	HAL publication which includes details of the capex governance framework and associated processes
CAPM	Capital Asset Pricing Model

Abbreviation	Meaning
CAR	Commission for Aviation Regulation
CdG	Charles de Gaulle Airport
CIP	Capital Investment Programme
CMA	The Competition and Markets Authority
Commercial revenues	Revenues HAL derives from services to passengers, such as retail, food and beverage, <i>bureau de change</i> , advertising and car parking, or from services to airlines, such as office rental, airline lounges and warehousing
Consumers	“Users” are defined in section 69 CAA12 as passengers and those with “a right in property” (cargo) carried by air transport services and include future users
Core and development framework	The core and development framework describes the transition of capex from development capex to core capex. Core capex is capex that has been through Gateway 3 (investment decision stage) of capex governance. Development capex is capex at an earlier stage of development
CPB	Capital Portfolio Board
CPI	Consumer Price Index
CPI-H	The Consumer Prices Index including owner-occupied housing costs
Decision	CAP2524 "Economic regulation of Heathrow Airport Limited: H7 Final Decision" 8 March 2023. See www.caa.co.uk/CAP2524
DOs	Delivery Obligations
DCO	Development Consent Order under the Planning Act 2008
DfT	Department for Transport

Abbreviation	Meaning
DIP	Development Information Portal
DIWE	Demonstrably inefficient and wasteful expenditure
draft Guidance	The CAA's draft guidance on capital expenditure governance under the new regime, which the CAA published concurrently with publishing the Decision
Equity beta	Company specific estimate of risk relative to the whole market
<i>Ex ante</i> framework	An <i>ex ante</i> framework where HAL's performance is measured against cost baselines agreed in advance of delivery
<i>Ex post</i> review	A backward looking review using actual figures rather than forecasts
FFO	Funds From Operations
FPG	Future Portfolio Group
FTEs	Full-time employees
Frontier	Frontier Economics
Gateway 3 (G3)	Capex projects follow an eight phase "Gateway" process which aligns with each project's level of maturity (from G0 to G8). Project business cases are reviewed at key points (Gateways) throughout their life. Gateway 3 is an investment decision stage of capex governance arrangements
H7	The price control period for Heathrow from 1 January 2022 until 31 December 2026
H8	The price control for Heathrow following H7
HAL	Heathrow Airport Limited, the licence holder and operator of Heathrow airport

Abbreviation	Meaning
HAL's Expansion	HAL's programme to expand Heathrow airport by the construction of a new northwest runway and associated infrastructure in accordance with the Airports National Policy Statement (see "NPS")
IATA	International Air Transport Association, a global trade association representing airlines
iBoxx indices	The Markit iBoxx Corporates Indices represent investment grade fixed-income bonds issued by public or private corporations and are produced by IHS Markit.
IBP	HAL's publication, Initial Business Plan submitted to the CAA in December 2019 in response to the Updated Business Plan Guidance, https://www.heathrow.com/company/about-heathrow/economic-regulation/h7-update
IFS	The Independent Fund Surveyor for HAL.
iH7	The interim H7 price control, running from 1 January 2020 until 31 December 2021
IPCR	Independent Planning Costs Reviewer appointed by the CAA under the Planning Costs Recovery Policy Statement
JSB	Joint Steering Board
KPIs	HAL's Key Performance Indicators
LACC	London Airline Consultative Committee
NERL	NATS En Route plc
NPS	The Airports National Policy Statement published on 5 June 2018 produced by the Government under the Planning Act 2008
NPV	Net Present Value

Abbreviation	Meaning
OBR	Office for Budget Responsibility
OBR	Outcome Based Regulation, the proposed service quality regulation regime for H7
Opex	Operational Expenditure
ORCs	Other Regulated Charges, which are for specified services and facilities that are collected separately from the general regulated airport charges
PR19	The five-year price control settlement for water companies in England and Wales for 2020-2024. Ofwat's decision published in December 2019 can be found at: https://www.ofwat.gov.uk/wp-content/uploads/2019/12/PR19-final-determinations-Overview-of-final-determinations.pdf
PMO	Project Management Office
Price Control Model	The financial model developed by the CAA to calculate HAL's revenue requirements for H7
P50	P ₅₀ defines the median at which point 50% of observations will exceed the best-estimate (P ₅₀) and 50% will not exceed it
Q5	Q5 was the price control for the period from 2008 to 2013, the approach to which was subsequently extended to cover January to March 2014
Q6 / Q6 price control	Q6 was the price control for the period from 2014 to 2018, the approach to which was successively extended to cover 2019 and 2020 to 2021
RAB	Regulatory Asset Base
RBP	HAL's publication, Revised Business Plan submitted to the CAA in December 2020

Abbreviation	Meaning
RBP Update 1	HAL's publication, Revised Business Plan updated to take the 2021 situation into account and submitted to the CAA in June 2021
RBP Update 4	HAL's publication, Updated Revised Business Plan submitted to the CAA in December 2022
RIO2	Ofgem RIO2 price control, for details please see https://www.ofgem.gov.uk/energy-policy-and-regulation/policy-and-regulatory-programmes/network-price-controls-2021-2028-riio-2
RNS	The London Stock Exchange Regulatory News Service
RORE	Return On Regulatory Equity
RP3	The NATS En Route plc (NERL) Reference Period 3 price control that was originally expected to run from 1 January 2020 to 31 December 2024
RP3 Provisional Findings	CMA provisional findings report in relation to the NERL RP3 regulatory appeal
RPI	Retail Price Index
RPS Final Report	CMA final report in relation to the NERL RP3 regulatory appeal
SMART	Specific Measurable Achievable Relevant and Time-bound
SME	Subject Matter Expert
SPGs	Stakeholder Programme Groups
SQR	Q6 Service Quality Regime
SQRB	Service Quality Rebates and Bonuses, the service quality regulation regime for Q6

Abbreviation	Meaning
The Licence	The licence granted to Heathrow Airport Limited by the Civil Aviation Authority under section 15 CAA12 on 13 February 2014
TIGRR	Taskforce for Innovation, Growth and Regulatory Reform
TRS	Traffic Risk Sharing
T3 CSA	Terminal 3 Central Search Area
T3IB	Terminal 3 Integrated Baggage
VAA	Virgin Atlantic Airways
WACC	Weighted Average Cost of Capital

Further Defined Terms

Defined term	Document details
Decision	CAP2524 "Economic regulation of Heathrow Airport Limited: H7 Final Decision" 8 March 2023. See www.caa.co.uk/CAP2524
H7 Final Proposals	This document: CAP2365 "Economic regulation of Heathrow Airport Limited: H7 Final Proposals" 28 June 2022. See www.caa.co.uk/CAP2365
H7 Initial Proposals	CAP2265 "Economic regulation of Heathrow Airport Limited: H7 Initial Proposals" 19 October 2021. See: https://consultations.caa.co.uk/economic-regulation/h7-initial-proposals-october-2021/
Interim Price Cap Consultation for 2023	CAP2488 "Economic regulation of Heathrow Airport Limited: setting an interim price cap for 2023" 8 December 2022. See: www.caa.co.uk/CAP2488
Interim Price Cap	Decision following CAP2488 consultation "Economic

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Decision for 2023	regulation of Heathrow Airport Limited: setting an interim price cap for 2023" February 2023. See: www.caa.co.uk/CAP2488
OBR Working Paper	CAP2274 "Economic regulation of Heathrow Airport Limited: H7 Initial Proposals - Working paper on outcome based regulation" 19 November 2021. See: www.caa.co.uk/CAP2274
The April 2021 Covid Statement	CAP2140 "Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment" 4 May 2021 (initially released in April). See: www.caa.co.uk/CAP2140
The April 2021 Way Forward Document	CAP2139 "Economic regulation of Heathrow Airport Limited: Consultation on the Way Forward", 27 April 2021. See: www.caa.co.uk/CAP2139
The February 2021 Covid Consultation	CAP2098 "Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment" 5 February 2021. See: www.caa.co.uk/CAP2098
The April 2021 Working Paper	CAP1996 "Economic regulation of Heathrow Airport Limited: working paper on Q6 capital expenditure and early expansion costs" 27 April 2021. See: www.caa.co.uk/CAP1996
The October 2020 Covid Consultation	CAP1966 "Economic regulation of Heathrow Airport Limited: response to its request for a covid-19 related RAB adjustment" 9 October 2020. See: www.caa.co.uk/CAP1966
The September 2020 Working Paper	CAP1964 "Economic regulation of Heathrow: working paper on the efficiency of HAL's capital expenditure during Q6, 22 September 2020". See: www.caa.co.uk/CAP1964
The August 2020 Working Paper	CAP1951 "Economic regulation of Heathrow Airport Limited: working paper on capital expenditure efficiency incentives" 13 August 2020. See: www.caa.co.uk/CAP1951
The June 2020	CAP1940 "Economic regulation of Heathrow: policy update

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Consultation	and consultation” 23 June 2020. See: www.caa.co.uk/CAP1940
The June 2020 Business Plan Guidance	Guidance included as Appendix E to CAA publication CAP1940 “Economic regulation of Heathrow: policy update and consultation” 23 June 2020. See: www.caa.co.uk/CAP1940
The April 2020 Programme Update	CAP1914 “Economic regulation of Heathrow: programme update” 30 April 2020. See: www.caa.co.uk/CAP1914
The January 2020 Consultation	CAP1876 “Economic regulation of Heathrow Airport Limited: further consultation on regulatory framework and financial issues” 13 January 2020. See: www.caa.co.uk/CAP1876
The December 2019 Consultation	CAP1871 “Economic regulation of Heathrow Airport Limited: policy update and consultation on early costs of capacity expansion” 19 December 2019. See: www.caa.co.uk/CAP1871
The August 2019 Working Paper	CAP1832 “Economic regulation of Heathrow Airport Limited: working paper on financial resilience and ring fencing” 15 August 2019. See: www.caa.co.uk/CAP1832
The July 2019 Consultation	CAP1819 “Economic regulation of capacity expansion at Heathrow: consultation on early costs and regulatory timetable” 11 July 2019. See: www.caa.co.uk/CAP1819
The July 2019 Business Plan Guidance	Guidance included as Appendix D to CAA publication CAP1819 “Economic regulation of capacity expansion at Heathrow: consultation on early costs and regulatory timetable” 11 July 2019. See: www.caa.co.uk/CAP1819
The April 2018 Expansion Consultation	CAP1658 “Economic regulation of capacity expansion at Heathrow: policy update and consultation” 30 April 2018. See: www.caa.co.uk/CAP1658
The April 2017	CAP1540 “Guidance for Heathrow Airport Limited in

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Business Plan Guidance	preparing its business plans for the H7 price control” 27 April 2017. See: www.caa.co.uk/CAP1540
The Planning Costs Recovery Statement	CAP1513 “The recovery of costs associated with obtaining planning permission for a new northwest runway at Heathrow Airport: Policy Statement” 27 February 2017. See www.caa.co.uk/CAP1513
The December 2016 Consultation	CAP1476 “Future of service quality regulation for Heathrow Airport Limited: Consultation on the design principles for a more outcome-based regime” 8 December 2016. See: www.caa.co.uk/cap1476
Q6 Cost of Capital Appendix	CAP1155 “Estimating the cost of capital: technical appendix for the economic regulation of Heathrow and Gatwick from April 2014: Notices granting the licences” February 2014. See CAP: www.caa.co.uk/cap1155
Q6 Notice Granting the Licence	CAP1151 “Economic regulation at Heathrow from April 2014: Notice granting the licence” February 2014. See: www.caa.co.uk/cap1151
Q6 Final Decision	CAP1136 “Heathrow Airport Limited operator determination” 10 January 2014. See: www.caa.co.uk/cap1136
Q6 Final Proposals	CAP1103 “Economic regulation at Heathrow from April 2014: final proposals” 3 October 2013. See www.caa.co.uk/cap1103
Q6 Initial Proposals	CAP1027 “Economic regulation at Heathrow from April 2014: initial proposals” April 2013. See www.caa.co.uk/cap1027
CC 2009 BAA Report	Competition Commission: “ BAA airports market investigation: A report on the supply of airport services by BAA in the UK ” 19 March 2009
Q5 Final Decision	CAA “ Economic Regulation of Heathrow and Gatwick ”

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	Airports 2008-2013: CAA decision ” 11 March 2008
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