Economic regulation of Heathrow Airport Limited: H7 Initial Proposals - Working paper on outcome based regulation (CAP2274)

Heathrow's response

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1. Executive Summary

- 1.1.1. We welcome the detail provided by the CAA. However, it is disappointing that this was not provided as an integrated part of the CAA's Initial Proposals at the end of October. The lack of integration is evident within the CAA's proposals.
- 1.1.2. Our response to CAP2265 details our views on the CAA's proposed policy positions for H7 and provides an overview of our views on the CAA's approach to targets, bonuses and rebates. Our response to this document provides our detailed views on the CAA's proposed targets and a view of how rebates and bonuses should be structured for H7.
- 1.1.3. As set out in our response to the CAA's Initial Proposals, we are concerned that the approach taken to OBR is inconsistent with the CAA's policy on OBR as set out in CAP1540:
 - "Targets should be based on evidence and take account of the following factors: customer preferences and satisfaction with respect to historical and current performance levels; the scope for improving performance (including consideration of innovative ways of working) without incurring significant extra costs on the basis of setting demonstrably challenging targets for management; and the willingness of consumers and airlines to pay for investment to further improve performance beyond that possible using existing facilities." The CAA's proposals base targets on Q6 service levels and historic performance only. There is no consideration of preference of consumers or the scope and cost of improving performance.
 - "Where practicable incentives should be both positive (reward) and negative (penalty)" – The CAA's proposals do not follow this principle. Instead, the CAA has broadly retained the asymmetric Q6 incentive structure which only allows for limited bonuses on four measures while eighteen measures could be subject to penalties.
 - "Incentives must be justified and calibrated with respect to consumer priorities and willingness to pay." The CAA's proposals continue to apply the Q6 methodology for incentives and calibration. This is not in line with evidence from consumers which shows that they value every unit of performance and that, in many cases, a bonus would be appropriate given the value received by consumers through increased service.¹
- 1.1.4. The CAA's OBR policy also states that targets "must also be integrated with the business plan and HAL's proposals for efficiency incentives". However, the CAA's proposals on targets are not consistent with assumptions elsewhere in the price control, namely:
 - The Arcadis report, used by the CAA to evidence its views on targets and the
 potential for service degradation notes that "The concept of an Enhanced
 Service Overlay (ESO) is deemed reasonable for asset related measures to
 ensure the reliable delivery of services and to mitigate against low frequency,
 but high impact events"². Although the Arcadis report notes that the CAA has

¹ Evidence sources include: Systra, Heathrow Airport Customer Valuation Research, November 2018, Systra, Heathrow Airport Passenger Priorities in a Post-Covid World, December 2020

² Arcadis, OBR Targets Assessment, November 2021, Page 8

made an allowance for opex overlays in its forecast, this is not evident in the CAA's upper and lower quartile opex forecasts.

- The Arcadis report references our proposed investment in Pre-Conditioned Air (PCA) through H7 as part of our carbon and sustainability programme when considering our potential asset availability performance in H7. The CAA's proposals do not allow the capital for this programme within the proposed envelope.
- The Arcadis report notes that our proposed investment in making targeted improvements for Passengers Requiring Support (PRS). This was provided for within the 'Future Ready Airport' programme of our RBP Update 1 'Optimal plan' capital plan and as an opex overlay within the ESO. The Arcadis report highlights that this proposed investment ensures that PRS are treated with dignity and care and should therefore be part of our minimum plan. However, the CAA's proposals remove the 'Future Ready Airport' programme and so do not include this spend within the capital envelope and do not allow for the ESO for PRS improvements.
- 1.1.5. The CAA's proposals rely heavily on work carried out by Arcadis to calibrate targets for H7. We are concerned that this is not a robust evidence base for the CAA's Initial Proposals. First, the methodology in this report focuses solely on past performance to justify future targets and, as such, is not in line with the CAA's policy for setting targets as set out in paragraph 1.1.3.
- 1.1.6. In addition to being against the CAA's policy principles, Arcadis and the CAA have not evidenced the assumption that historic performance can be accurately used to forecast future performance given the uncertain and changing circumstances of H7. This assumption is evident in the CAA's proposals to increase the targets for key areas such as cleanliness and Wi-Fi based on performance at high levels across Q6 without assessing the impact of the changed circumstances of Covid-19 and technology change on consumer expectations.
- 1.1.7. Second, in coming to its conclusions, the report does not look at Heathrow's reported monthly performance against measures, the data used to assess performance against target, and instead looks at annual performance. This leads to errors in Arcadis' assumptions, such as assuming that Heathrow performed above target for Track Transit System (TTS) availability in Terminal 5 throughout Q6.
- 1.1.8. Finally, Arcadis' report fails to take into account the evidence we have provided in our RBP, RBP Update 1, consultation responses and capital governance meetings regarding our cost estimation processes and opex requirements. An example of this is Arcadis' cost assumptions for the Regulated Security programme. These assumptions do not take account of the evidence we have provided and instead rely on an unevidenced cost assumption.
- 1.1.9. In its document, the CAA notes the potential issues around the timing for introducing the new OBR regime. We want to engage further with the CAA on the practicalities of this ahead of the implementation of the H7 licence. From the point of view of obtaining greater levels of consumer understanding as well as contractual reasons, it would be ideal to introduce a new Departures and Arrivals QSM questionnaire from July 2022. Doing this would enable us to capture the new suite of OBR measures more efficiently for H7. It would also mean that we need to change the way we capture some of the current Q6 measures that will not be part of the H7 scheme (Flight Information Display Screens and Departure Lounge Seating Availability).

- 1.1.10. In order to accommodate the launch of the new Departures and Arrivals QSM questionnaire in July 2022, we are proposing that the new OBR regime still begins on 1 January 2023, but that from 1 July 2022 that the Q6 measures around Information Display Screens and Departure Lounge Seating Availability are removed from the licence and no longer measured.
- 1.1.11. Ahead of its Final Proposals, we ask that the CAA:
 - Follows its own stated intention for the H7 service quality regime when setting targets for H7 by ensuring that it incentivises Heathrow to provide a "good" level of service based on consumer expectations, rather than its current position which incentivises excellent service levels.
 - In place of Arcadis' flawed analysis, carefully considers the robust evidence base of consumer expectations and service valuations we have provided in order to inform its H7 targets.
 - Provides the Airline Community evidence used by Arcadis in its assessment of targets for H7. While this is summarised in Arcadis' report, the evidence provided to substantiate Airline Community views should be shared.
 - Removes the financial incentives from 'Timely Delivery of baggage' and 'Check-in Infrastructure' measures where achieving the target is not within Heathrow's direct control.
 - In line with its policy statement on the implementation of OBR as set out in CAP1540, uses Heathrow's proposed weightings for rebates based on the outputs of robust research on consumer priorities and valuations.
 - Review the potential upside and downside available under the scheme, in line
 with regulatory precedent, to ensure that Heathrow faces robust economic
 incentives to improve performance where this would lead to benefits for
 consumers.
 - Increases the number of measures eligible for a bonus under the scheme as per our proposals to ensure that the availability of bonuses is aligned with consumer benefit and valuations.
 - Implements sliding scale incentives to ensure that the incentive structure is aligned to consumer valuations of service quality.
 - Ensures that there are adequate exclusions for availability based measures in the event that circumstances outside of Heathrow's control mean that we are unable to meet targets and that these are accompanied by an adequate Force Majeure Events process as detailed below.

2. Targets

- 2.1. Arcadis' assessment of targets
- 2.1.1. As set out in detail in our response to the CAA's Initial Proposals, we do not think that Arcadis' assessment of potential H7 service levels is robust. As set out in Appendix 23 of our Initial Proposals response, the H7 Legal Annex, we are also concerned that

the CAA has unlawfully delegated its decision making regarding OBR to Arcadis in its treatment of Arcadis' report.

2.1.2. Arcadis has used historical data to forecast future service levels and has concluded that we have not taken account of our ability to perform above target when setting future service levels. This approach is not in line with the CAA's policy on OBR which states that:

"Targets should be based on evidence and take account of the following factors: - customer preferences and satisfaction with respect to historical and current performance levels; - the scope for improving performance (including consideration of innovative ways of working) without incurring significant extra costs on the basis of setting demonstrably challenging targets for management; and - the willingness of consumers and airlines to pay for investment to further improve performance beyond that possible using existing facilities."

- 2.1.3. Arcadis' report takes into account neither consumer preferences and satisfaction with current service levels nor costs and willingness to pay. For this reason, the Arcadis report alone does not represent a robust evidence base to inform the CAA's decision. We have provided a robust consumer-focused evidence base to set targets and incentives for H7 based on consumer valuations and willingness to pay. We urge the CAA to engage with this evidence base when setting its H7 targets. More information is provided in Section 2.3
- 2.1.4. The analysis itself is also flawed. It appears to have been undertaken on an annual rather than a monthly basis despite performance being measured and incentivised on a monthly business. As a consequence, the approach by Arcadis does not reflect our actual performance. This means that instances where Heathrow has failed targets have not been taken into account when assessing whether or not our proposed H7 targets are reasonable. Examples include:
 - Arcadis finds that Heathrow has historically been able to meet and perform above target for the two-car availability measure on the Terminal 5 track transit system (TTS). Arcadis' report appears to show that we performed comfortably above the 97% target in 2018/19 and 2019/20. However, in reality we failed this measure in September and October 2019, paying a total rebate of £628,800.
- 2.1.5. In its paper Arcadis also makes an assessment of our proposed costs as part of its analysis. This assessment should be reviewed:
 - Arcadis notes that, while our proposed Enhanced Service Overlay (ESO) for asset maintenance is reasonable, it has not seen justification for the quantum of the overlay. We provided justification of the quantum of our proposed overlay in our RBP³, RBP Update 1⁴ and RBP Update 2⁵. We ask the CAA to review this justification and ensure that the correct level of ESO is provided for within the settlement.
 - Arcadis estimates the cost of investment in the regulated security programme
 to be £1.5m per lane with a maximum benchmark of £2m per lane. This
 estimate is used to conclude that the CAA's proposed capital plan allowance is
 consistent with retaining service quality in H7. It notes that we have not provided

³ Section 7.1.6.10

⁴ Section 5.4.5

⁵ Section 4.6

a breakdown of costs to evidence our estimates. This is incorrect. We have provided evidence of the estimates and associated outputs of our capital plan in our RBP⁶, RBP Update 1⁷, Capital Programme one-pagers, Capital Governance forums⁸ and RBP Update 2. On the other hand, no substantive evidence has been provided by Arcadis to inform their 'benchmark'. We therefore ask the CAA to review the detailed evidence we have provided to assess the cost allowance required to meet service targets.

2.1.6. We also note that Arcadis has sought feedback and submissions from the airline community on our proposed OBR framework. While page 40 of the report provides a summary of this conversation, the evidence submitted by the airline community to substantiate their views has not been shared through the process. We request that this information is disclosed to ensure that the process is conducted transparently.

2.2. CAA's Initial Proposals

- 2.2.1. Key to ensuring that the H7 service quality scheme is deliverable and incentivises service in the interests of consumers will be ensuring that the CAA's proposals on targets are integrated with cost allowances in the price control. Key examples include:
 - Enhanced Service Overlay asset maintenance: As yet, it is not clear the extent to which the CAA's proposals on opex include our proposed ESO relating to asset maintenance. Arcadis notes that it is reasonable to include these costs in the settlement to ensure the delivery of current target asset availability levels for consumers⁹. Therefore, the CAA should ensure that these costs are integrated into the CAA's opex forecasts for H7 and highlighted explicitly through the process.
 - Covid-19 overlay: Arcadis highlights the CAA's proposal to allow Heathrow's proposed Covid-19 overlay as part of the H7 opex forecast as one of the factors supporting an increase in the target for cleanliness satisfaction in H7¹⁰. However, as is the case for the ESO, the CAA's opex ranges do not allow us to assess the extent to which the CAA has included this overlay within the H7 opex forecast. For the Final Proposals, the CAA should ensure that the allowance is explicitly included within the forecasts and that its opex forecasts provide detail on the allowances provided.
 - PRS: Arcadis notes that our proposed opex overlay for PRS service and our proposed capital investment should be included within a minimum 'safety only' budget.¹¹ The CAA's Initial Proposals do not include investment in PRS, either through opex or capex. The CAA should ensure that this expenditure is included within its Final Proposals to ensure consistency with proposed service targets.
 - Carbon and sustainability: In its assessment of service targets, Arcadis notes
 the proposed investment in Pre-conditioned Air (PCA) as part of our 'Optimal'
 capital plan and uses this in setting its recommendation that we can maintain
 Q6 asset availability levels for PCA. The CAA's Initial Proposals do not include

⁶ Sections 1.5.1 and 1.5.2

⁷ Section 5.2.5.2

⁸ FPG, CPB and Security Airline Working Group papers as shared at Appendix 7 of Heathrow's response to the Initial Proposals

⁹ Arcadis, OBR Targets Assessment, November 2021, Page 8

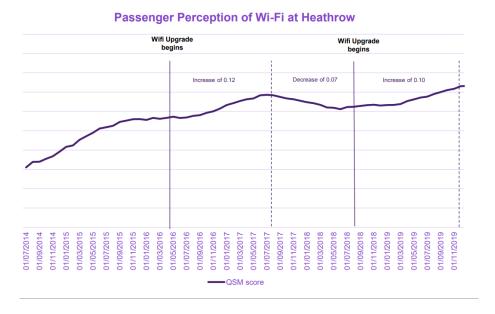
¹⁰ Arcadis, OBR Targets Assessment, November 2021, Page 25

¹¹ Arcadis, OBR Targets Assessment, November 2021, Page 39

this expenditure as part of the capex plan. This inconsistency should be resolved ahead of the Final Proposals.

- 2.2.2. The CAA's proposals include increases in targets for cleanliness, Wi-Fi and wayfinding. We do not agree that these increases in targets are justified.
 - Cleanliness: Since the start of Covid-19, cleanliness has been more at the forefront of consumers' minds meaning that expectations have increased and that what they used to consider as good is now average at best. This shows that the use of historic satisfaction levels to forecast future performance is not robust. Heathrow has proposed a higher target than Q6 based on the increased importance to consumers of cleanliness but this was predicated on the CAA allowing Heathrow's full Covid-19 opex overlay for the whole of H7 in order for us to meet this change in consumers expectation and safety requirements, which the CAA has not done in its initial proposals.
 - Wi-Fi: As we saw throughout Q6 consumers' expectations around Wi-Fi continued to change and increase. This resulted in Heathrow having to investment to match consumer expectations. In its initial proposals the CAA has given Heathrow a stretch target in terms of Wi-Fi. The CAA has not supported either its own or Heathrow proposed target with the required commercial capital expenditure, that would allow us to upgrade the current technology as it becomes outdated, which lead to a decline in satisfaction levels (see Figure 1).

Figure 1: Changes in Perception of Wi-Fi at Heathrow



Source: Departures and Arrivals QSM

• Wayfinding: We know that more and more consumers now expect to be able to find their way using their digital device. The CAA has ratchetted up the target for wayfinding at Heathrow, now expecting a significant percentage to rate wayfinding as 'Excellent', but they have failed in their initial proposals to provide the capital and operating expenditure required for Heathrow to keep up with increasing consumer expectations for Digital wayfinding. We would ask that the CAA lowers this target to represent a Good level of performance, allows the capital under Efficient Airport programme for us to invest in Digital wayfinding and the Opex in the Enhanced Service Overlay.

- 11.1.1 As mentioned above, the standards set by the CAA do not correspond to requiring a 'good' level of service. The Initial Proposals state that the service quality regime is there to ensure that Heathrow provides a "good" service, and it incentivises "good" performance¹². However, by setting targets of 4.00 and above the CAA is clearly expecting Heathrow to provide a level of service which is deemed "excellent" by consumers through proposing to increase targets for satisfaction measures above 4.00.
- 2.2.3. This approach is not proportionate. While we agree that the price control should facilitate the delivery of the service levels consumers expect and the service quality regime should incentivise this, requiring excellent service as a minimum service level with a rebate payable below this level is not in line with the purpose of the service quality regime.
- 2.2.4. Under the Quality Service Monitor (QSM) measurement system where consumers are asked to rate Heathrow a scale of 5 = Excellent, 4=Good, 3=Average, 2=Poor and 1=Extremely Poor, anything above 4.00 requires a proportion of ratings to be excellent (5). While we can understand why the CAA would want to target excellent performance and provide bonuses for achieving this, we do not think it is appropriate for rebates to be paid on performance which has been assessed as "good" by passengers a rating which fully meets the CAA's expected outcome. We therefore argue that the CAA's proposed service levels of above 4.00 are inappropriate as minimum levels.
- 2.2.5. If the CAA is seeking to incentivise 'excellent' performance, this should be done through the inclusion of a bonus for achievement of 'excellent' service, not through penalising the delivery of 'good' service through a rebate. We therefore propose that the CAA include these service levels above 4.00 as a bonus threshold, with the minimum service level for rebates remaining at 4.00.
- 2.3. H7 proposed targets
- 2.3.1. We are now in the position to provide targets for the following measures after having been able to collect a suitable baseline dataset. This dataset allows us to predict the likely position for the measures in 2026 based on Heathrow being able to progress with its plans for H7 supported by our proposed Capital and Operating Expenditure forecasts:
 - Reducing Heathrow's Carbon Footprint (CO2e/PAX)
 - Ease of access to the airport
 - % of the UK population within 3 hours (and one interchange) of Heathrow by public transport
 - Helpfulness / Attitude of Airport Staff
- 2.3.2. Having relooked at the data, all other targets remain consistent with those proposed in our RBP Update 1 from June 2021. The only exception is 'Feeling Safe and Secure'. We are now proposing a slightly reduced H7 target based on changes in consumers interpretation of the meaning of question since Covid-19. It is also clear from the data that performance in 2019 was an outlier compared to the rest of Q6 (see Figure 2). These changes have resulted in more passengers being neutral on

¹² CAA, CAP2265D, Page 28, Paragraph 14.2

the measure rather than agreeing. This is something we expect to continue for and as a result means that achieving the 2019 levels of agreement is no long realistic target.	
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Source: Departures and Arrivals QSM

- 2.3.3. Our H7 targets are calibrated on the basis of the continued use of monthly reporting and measurement against service quality targets. As set out by the CAA in its Initial Proposals, a move to daily measures would "be equivalent to increasing the level of the target by an unknown and potentially significant amount" For this reason, if daily measurement were to be introduced, the below targets should be reviewed.
- 2.3.4. As set out in our response to the CAA's Initial Proposals, we disagree with Airline Community requests to move to daily measurement of service quality performance. In addition to significantly raising the target, a move to daily measurement would:
 - Increase the costs required to meet current service quality targets. Given high levels of consumer satisfaction with current service levels, this increase is not justified or in the interests of consumers. This would not be proportionate.
 - Heathrow would be exposed to increased risk of failure due to events outside of our own control and influence. This would not be appropriate as Heathrow would be bearing a risk we are unable to manage. While we maintain detailed forecasts to ensure we have adequate resource and resilience to deliver on our queue time targets, an occurrence causing a large and unforeseeable increase in passengers presenting at security at the same time will inevitably mean that we are unable to meet our targets. The current framework allows us to recover service without being penalised, however a daily target would expose us to this uncontrollable risk.
 - Daily measures would increase the incentive for colleagues to fix issues fast rather than well, leading to longer future outages. This would not be in the

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¹³ CAA, CAP2265D, Page 34, Paragraph 14.28

interests of consumers and could also create safety concerns for colleagues who are forced to work quickly, not properly.

2.3.5. Taking into account the above, our proposed H7 targets are set out below:

Financial Measures

Consumer Outcome	Measure	Q6 Target	CAA proposed H7 target	H7 target
Predictable and Reliable	Runway operational resilience	As per Q6 licence ¹⁴	As per Q6 licence	As per Q6 licence
Predictable and Reliable	Provision of stand facilities	N/A	99%	99.0%
Predictable and Reliable	Stand Availability	N/A	99%	99.0%
Predictable and Reliable	Wayfinding	4.10	4.20	4.15
Predictable and Reliable	Central search queue time % queue times < 5 mins % queue times < 10 mins	95.0% 99.0%	95.0% 99.0%	95.0% 99.0%
Predictable and Reliable	Transfer search queue time % queue times < 10 mins	95.0%	95%	95.0%
Predictable and Reliable	Staff search queue time % queue times < 10 mins	95.0%	95%	95.0%
Predictable and Reliable	Control post vehicle Queue Time % vehicle queue times < 15 mins	95.0%	95%	95.0%
Predictable and Reliable	Availability of lifts, escalators, travellators (renamed from PSE)	99.0%	99%	99.0%
Predictable and Reliable	Terminal 5 Track Transit System (TTS)			

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¹⁴ A rebate is payable if a material event has occurred which was caused primarily be a failure of Heathrow of the provider of air traffic services at the airport and has generated a material operational impact. Material operational impacts include a flow rate restriction at less than the declared runway scheduling limit, the cumulative number of actual movements is less than the cumulative reference number of movements by at least four for the duration of the material event.

Consumer Outcome	Measure	Q6 Target	CAA proposed H7 target	H7 target
	Availability 1 train target Availability 2 trains target	99.0% 97.0%	99.0% 97.0%	99.0% 97.0%
Basic Comforts	Cleanliness	4.00	4.15	4.05
Basic Comforts	Hygiene Safety Testing Amber Test results resolved < 12 hours and Red Test results resolved < 2 hours	N/A	100%	100%
Basic Comforts	Pier service – % passengers accessing pier served stand (excl. T5)	95.0%	95%	95.0%
Basic Comforts	Baggage System Reclaim Availability – arrivals carousel	99.0%	99%	99.0%
Enjoyable and Connected	Wi-Fi performance	N/A	4.05	4.00
Cared For	Helpfulness/Attitude of security staff	N/A	4.10	4.10

Reputational Measures

Consumer Outcome	Measure	2019 Actual	CAA proposed H7 target	H7 target
Overarching Measure	Overall Satisfaction	4.24	4.26	4.26
Overarching Measure	Customer Effort (Ease)	Target will be set in Q1 2022 once baseline has been established		once baseline
Airport Choice	Value for money of Overall Journey	Target will be set in Q1 2022 once baseline has been established		once baseline
Airport Choice	Offers flights that I want	Target will be set in Q1 2022 once baseline has been established		
Airport	Reducing Heathrow's Carbon Footprint	259.974	-	252.304

Consumer Outcome	Measure	2019 Actual	CAA proposed H7 target	H7 target
Choice	(CO2e/PAX)	CO2e/PAX		CO2e/PAX
To and from the airport	Ease of access to the airport	4.39	-	4.44
To and from the airport	% of the UK population within 3 hours (and one interchange) of Heathrow by public transport	29.0%	-	32.5%
Predictable and Reliable	Departures flight punctuality - % flights depart off stand within 15 mins	78.4%	80.5%	80.5%
Predictable and Reliable	Wheels down to doors open	Target will be se has been estable		once baseline
Predictable and Reliable	Time to last bag on reclaim belt Small Aircraft Medium Aircraft Large Aircraft	31 minutes 35 minutes 43 minutes	Measure not included	35 minutes 35 minutes 50 minutes
Predictable and Reliable	Immigration queue time EEA < 25 mins Non EEA < 45 mins	95% 95%	95% 95%	95% 95%
Basic Comforts	Baggage Misconnect Rate	9 bags in a 1000	Measure not included	7-9 bags in a 1000
Basic Comforts	Timely Delivery from Departures Baggage system	Target will be se can be establish		once baseline
Basic Comforts	An Airport that meets my needs	Target will be set in Q2 2022 once baseline has been established		
Basic Comforts	Number of passenger injuries per 1,000,000 passengers (excl. ill health)	5.6	4.5	4.5
Basic Comforts	Feeling safe and secure	97.5% of passengers agreeing	97.5% of passengers agreeing	95.5% of passengers agreeing

Consumer Outcome	Measure	2019 Actual	CAA proposed H7 target	H7 target	
Basic Comforts	Understanding Covid-19 Target will be set in Q3 2 has been established			022 once baseline	
Enjoyable and Connected	Enjoy my time at the airport	Target will be set in Q1 2022 once baseline has been established		once baseline	
Cared for	Helpfulness / Attitude of Airport Staff	4.35	-	4.36	
Cared for	Passengers with Reduced Mobility (PRM/PRS) satisfaction	3.95 (April 2019 – March 2020)	4.00	4.00	

3. Rebates and Bonuses

3.1. Incentive structure

- 3.1.1. We are disappointed that the CAA's Initial Proposals and CAP2274 continue to assume a knife edge incentive structure for rebates and bonuses in H7. As set out in Section 11.5 of our response to the CAA's Initial Proposals, this decision goes against the CAA's own policy on OBR in CAP1540¹⁵, regulatory best practice and breaks the link between clear consumer valuations of service and the regulatory incentives in place.
- 3.1.2. This is another example of the CAA failing to focus on the breadth of its primary statutory duty when setting the H7 price control. While the CAA's Initial Proposals document focuses keenly on price, its approach to OBR shows that its proposals do not focus on ensuring the quality of airport operation services as set out in the Civil Aviation Act 2012. By breaking the link to consumer views and valuations, the CAA is not ensuring that the quality of services at Heathrow corresponds to consumer needs.
- 3.1.3. Our consumer insight shows us that passengers place a clear monetary value on both increases and decreases in service levels. Moving to a sliding scale incentive structure would ensure a clear golden thread between this consumer valuation and our rebates and bonuses. We provided extensive evidence of these valuations in our submission to the CAA of 20 August 2021 and in Section 11.5 of our Initial Proposals. To
- 3.1.4. Appendix 19 of our response from Frontier Economics also highlights that a sliding scale incentive structure would represent the best economic incentive for Heathrow to deliver in the interests of consumers: "Sliding scales also represent sound

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¹⁵ "Incentives must be justified and calibrated with respect to consumer priorities and willingness to pay" CAA, CAP1540, Page 23, Paragraph 2.15

¹⁶ Systra, Heathrow Airport Customer Valuation Research, November 2018, Systra, Understanding Consumer Need Priorities in a (Post) Covid-19 World, November 2020

¹⁷ See Table 1 in Chapter 11 of our response to CAP2265

economic principles, as they can more adequately incentivise outcome delivery by sending strong signals around the detriment and benefit corresponding to different service levels"¹⁸.

- 3.1.5. Given the above, we urge the CAA to review the evidence base we have provided ahead of the Final Proposals to ensure that its chosen incentive structure is in line with its statutory duties, consumer insight, regulatory best practice and sound economic principles.
- 3.2. Methodology for weighting rebates and bonuses
- 3.2.1. In its document the CAA states that:

We also noted that HAL had included proposals in its Revised Business Plan for the allocation of rebates and bonuses between those measures it considered should be subject to financial incentives. However, we stated that we had some reservations about these proposals, which were sensitive to the specific way that HAL had generated weightings for different measures or groups of measures from the findings of a single consumer research study, and which led to some counter-intuitive changes from the current allocation of rebates.¹⁹

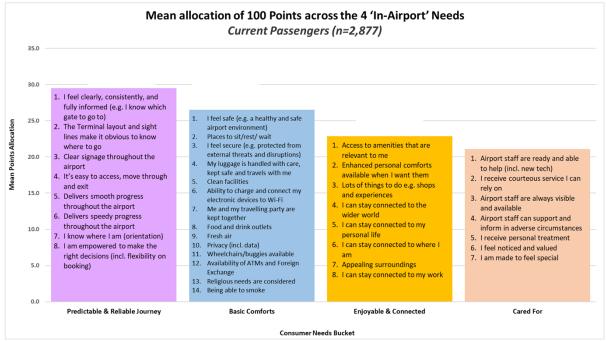
- 3.2.2. This assessment is not correct. Our proposed methodology for weighting rebates and bonuses was driven by but not based on the findings of a single consumer research study. In fact our methodology cross-checked and triangulated our proposal across a number of studies²⁰ as well as the overall Consumer Insight Synthesis²¹ to arrive at a consumer focused weighting through the following process:
 - a. In order to calibrate our rebates and bonuses, we carried out an exercise to understand the relative importance of aspects of service to consumers. This allowed us to derive a relative importance weighting for each financial measure in our proposed package. We used this to ensure that our potential bonus and rebate exposure was aligned to how important each service aspect was to consumers.

¹⁸ Frontier Economics,"H7 INITIAL PROPOSALS ON OUTCOME-BASED REGULATION - Frontier Economics' independent review of the CAA's Initial Proposals for OBR", December 2021, Section 7.1 ¹⁹ CAA, CAP2274, Page 15, Paragraph 3.2

²⁰ InSites Consulting, Post COVID Travel Behaviour Update, February 2021, Systra, Heathrow Airport Customer Valuation Research, November 2018, Accent, H7 Service Package Choices Part 2 Research, June 2020

²¹ Blue Marble Research, Consumer needs synthesis, November 2020

Figure 3: Allocation of importance of passenger needs



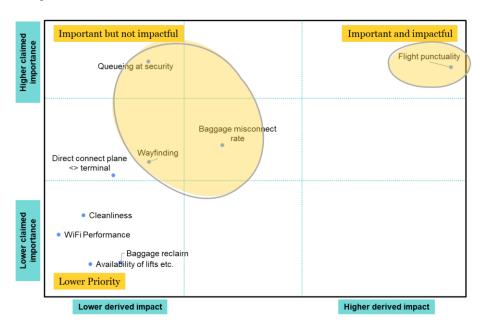
Source: Systra, Passenger Priorities Post Covid-19 Research, 2020

- b. When establishing which measures should have both rebates and bonuses we reviewed our proposed measures to ensure that our proposals only set bonuses for all areas where these would be appropriate to drive better outcomes for consumers. We are not proposing bonuses on two measures where we judged that a bonus would not be appropriate or incentivise the right outcomes for consumers:
 - Runway Operational Resilience: This measure looks at cancellations and delays caused by congestion on the airfield for reasons under Heathrow's control. A bonus would not be appropriate here
 - ii. Hygiene testing: Our proposed hygiene safety test measure has a target set at 100% with no opportunity for bonus due to the safety critical nature of the measure.
- c. We then applied this relative weighting across the 7% downside exposure, which was agreed by the airline community through Constructive Engagement. From the relative weighting we assigned a unit rate to each measure. This reflects the findings from our extensive consumer research, which shows that passengers value every unit of increased performance and that they attach a value to every unit of service degradation.²²
- d. To ensure that no drop in service is considered to be 'acceptable' we set our incentive structure so that Heathrow would pay rebates as soon as

²² Systra, Heathrow Airport Passenger Priorities in a Post-Covid World, December 2020, 20. A smaller-scale survey of current passengers also obtained a priority order of proposed deteriorations in service quality. The most acceptable of the service deteriorations proposed was '7 out of 10 times you will go through security in less than 5 minutes' from a base of 9 out of 10 times. However, this reduction in service would be equivalent to an increase in average fare of 0.9%. The least acceptable deterioration would be '10 out of 1000 passengers' baggage will not travel with them on the same flight' from a current base of 9 out of 1000. This would be the equivalent of a 1.24% increase in air fare.

- performance drops below the target set with no deadband. This ensures that Heathrow continues to be incentivised to meet this minimum service level.
- e. To ensure that bonuses were challenging to achieve and only paid for exceptional service, well above the level expected and planned for within the settlement, we included a deadband before Heathrow earns a bonus. For satisfaction measures, this is a deadband of 0.25. For asset availability measures, as the service level for the majority of these measures is set at 99%, there was limited scope for bonuses. We therefore set a deadband of 100% performance for these bonuses to be paid. For other measures below 99% we set a deadband of 2% before bonuses are paid.
- 3.2.3. Ahead of publishing our RBP update 2 in December 2021, we undertook two further pieces of consumer engagement. The results from these work packages continue to confirm that the relative importance Heathrow assigned to each measure in the December 2020 RBP remains in line with consumer preferences.
 - a. Passenger priorities post COVID 19: October 2021 update: This showed that consumer priorities against each consumer outcome have remained consistent since Heathrow's original proposal in the RBP update 1 in June 2021, meaning that the ranking that Heathrow applied to create the maximum rebate remains consistent.
 - b. **Service Degradation Research**: Like all other studies, this study confirmed that flight punctuality remains the most important aspect to consumers. This is followed by Security queues, Baggage misconnect rates and wayfinding. This aligns with our proposed maximum rebates for Runway Operational Resilience (1.0%), 5- and 10-minute security queues (0.80%), Baggage System Reclaim Availability arrivals carousel (0.4%) and Wayfinding (0.46%).

Figure 4: Service degradation results



3.2.4. In using this methodology, we are ensuring that there is a clear golden thread between the proposed weightings of rebates and bonuses and the views of consumers. This is in line with the OBR policy set out by the CAA in CAP1540:

- "Incentives must be justified and calibrated with respect to consumer priorities and willingness to pay"23.
- 3.2.5. In contrast, the CAA uses the Q6 regime as a starting point. This does not reflect consumer priorities and is not based on consumer evidence. As per the CAA's statutory duties, the right starting point should be the views of consumers.
- 3.2.6. The methodology used by the CAA leads to a number of counterintuitive outcomes, including:
 - A weighting for check-in infrastructure availability, which is equal to the weighting of Runway Operational Resilience. We know from our research that flight punctuality, which is impacted by runway operational resilience, is the most highly valued attribute by consumers, while availability of check-in infrastructure is only a small factor in consumer priorities for the check-in experience.
 - Similarly, the provision of stand facilities is more considerably more important to consumers than having an operational runway for them to take off and land on (Runway Operational Resilience) or the terminal building being clean and hygienic (Cleanliness and Hygiene Safety testing).
 - A weighting for availability of lifts escalators and travelators is seen as nearly twice as important to consumers than making sure that they can find their way to their plane on time.
 - That the performance of Wi-Fi in the terminal is just as important as ensuring passengers are able to reclaim their bags in the Arrivals hall.
- 3.2.7. The CAA's overall weighting of upside and downside is also inappropriate. The CAA's proposed weighting is heavily skewed to the downside and, as set out in our response to the CAA's Initial Proposals, this is neither in line with the CAA's policy set out in CAP1540, nor in line with regulatory precedent and sound economic principles.
- 3.2.8. In its report, Frontier Economics highlights that the CAA's Initial Proposals point to a downside which is c. 4.9x larger than the potential upside for Heathrow. This is out of step with the approach taken by Ofgem and Ofwat, which only have a downside for outcome incentives of around 2.3-2.4x larger than its upside ranges.²⁴
- 3.2.9. The CAA should question whether this approach is really serving to incentivise and protect service levels for consumers. A more balanced package of bonuses and rebates is likely to be appropriate to further the interests of consumers in regard to service at Heathrow, as it would incentivise us to deliver high levels of service through innovation and efficiencies.

3.3. Rebates

We have carried out a review of the CAA's proposals and proposed our own 3.3.1. weighting of rebates. This includes:

²³ CAA, CAP1540, Page 23, Paragraph 2.15

²⁴ Frontier Economics,"H7 INITIAL PROPOSALS ON OUTCOME-BASED REGULATION - Frontier Economics' independent review of the CAA's Initial Proposals for OBR", December 2021, Section 7.2

- Removing the rebates for the availability of check-in infrastructure and time delivery from the departures baggage system, which cannot be subject to financial incentives at the start of H7
- Changing our proposed split of rebates for Security Queues following further
 analysis of consumers satisfaction levels against their security waiting times.
 This showed that in terms of delivering at least a 'good' level of service, waits
 of over 10 minutes saw a greater than x4 increase in the level of rating less
 than Good (see Figure 3). Based on this consumer evidence we have reweighted the rebate percentage for less than 5 minute queues and less than
 10 minute queues accordingly.

[×]

Source: Departures QSM

3.3.2. This leads to the following allocation of rebates:

Measure	Q6 max rebate	CAA proposed H7 rebate	H7 max rebate
Runway Operational Resilience	1.00%	0.46%	1.00%
Provision of stand facilities	N/A	0.74%	0.40%
Stand Availability	0.25%	0.19%	0.40%
Wayfinding	0.36%	0.33%	0.46%
Central search queue time:			

Measure	Q6 max rebate	CAA proposed H7 rebate	H7 max rebate
% queue times < 5 mins	0.50%	0.93%	0.20%
% queue times < 10 mins	0.50%		0.60%
Transfer search queue time			
% queue times < 10 mins	0.50%	0.47%	0.40%
Staff search queue time			
% queue times < 10 mins	0.38%	0.35%	0.40%
Control post vehicle Queue Time			
% vehicle queue times < 15 mins	0.38%	0.35%	0.40%
Availability of lifts, escalators, travellators (renamed from PSE)	0.25%	0.65%	0.33%
Terminal 5 Track Transit System (TTS)			
Availability 1 train target	0.15%	0.25%	0.17%
Availability 2 trains target	0.15%		0.17%
Cleanliness	0.36%	0.33%	0.36%
Hygiene Safety Testing			

Measure	Q6 max rebate	CAA proposed H7 rebate	H7 max rebate
Amber Test results resolved < 24 hours and Red Test results resolved < 4 hours	N/A	0.17%	0.36%
Pier service – % passengers accessing pier served stand (excl. T5)	0.25%	0.25%	0.33%
Baggage System Reclaim Availability – arrivals carousel	0.25%	0.33%	0.40%
Wi-Fi performance	N/A	0.33%	0.32%
Helpfulness/ Attitude of security staff	N/A	0.33%	0.32%

3.4. Bonuses

- 3.4.1. In line with the approach taken by the CAA to the allocation of rebates, its approach to the allocation of bonuses also appears to be arbitrary. While we agree that the four areas identified by the CAA as largely being appropriate for the application of a bonus given consumer valuations of service increases, there are other areas which are also valued by consumers where the CAA has not proposed a bonus.
- 3.4.2. This inconsistency is highlighted by Frontier Economics in their report²⁵:

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²⁵ Frontier Economics,"H7 INITIAL PROPOSALS ON OUTCOME-BASED REGULATION - Frontier Economics' independent review of the CAA's Initial Proposals for OBR", December 2021, Figure 6

Measure	Improvement aspect	Benefit (% airfare)	Outperformance rewarded?
Central search	9 out of 10 times you will go through security in less than 3 mins	1.27%	/
Cleanliness	 Enhanced cleaning so surfaces are Covid-19 safe (UV cleaning, Covid-19 safe coatings, sanitisation surface tests) There is always a member of the cleaning staff present, assuring everything is constantly cleaned 	1.13 to 1.33%	~
Wayfinding	 Real time information [on wayfinding] is provided Physical signage and personalised wayfinding on your mobile device in multiple languages 	1.04 to 1.23%	~
Timely delivery of baggage	9 out of 1000 passengers' baggage will not travel with them on the same flight to 7 out of 1000 passengers' baggage will not travel with them	0.95%	~
Availability of arrivals baggage carousels	9 out of 10 times you wait no more than 35 mins [for your bags to be delivered after your plane lands]	1.38%	×
Wi-Fi performance	Ultra-High-speed Wi-Fi with total coverage throughout airport at any time	1.24%	×
Security staff helpfulness / attitude performance	Staff deployed to help anywhere along the passenger journey	1.19%	×
Availability of check- in infrastructure	You are able to choose self-service bag drop machines if you want	0.99%	×

3.4.3. Based on our consumer evidence, we have proposed the following weighting of bonuses:

Measure	Q6 max bonus	CAA proposed H7 bonus	H7 max bonus
Provision of stand facilities	N/A	-	0.20%
Stand Availability	N/A	-	0.20%
Wayfinding	0.36%	0.36%	0.46%
Central search queue time:			
% queue times < 5 mins	N/A	-	0.20%

Measure	Q6 max bonus	CAA proposed H7 bonus	H7 max bonus
% queue times < 10 mins	N/A	0.36%	0.20%
Transfer search queue time			
% queue times < 10 mins	N/A	-	0.20%
Staff search queue time			
% queue times < 10 mins	N/A	-	0.20%
Control post vehicle Queue Time			
% vehicle queue times < 15 mins	N/A	-	0.20%
Availability of lifts, escalators, travellators (renamed from PSE)	N/A	-	0.17%
Terminal 5 Track Transit System (TTS)			
Availability 1 train target	N/A	-	0.08%
Availability 2 trains target	N/A		0.08%
Cleanliness	0.36%	0.36%	0.36%
Pier service – % passengers accessing pier served stand (excl. T5)	N/A	-	0.17%

Measure	Q6 max bonus	CAA proposed H7 bonus	H7 max bonus
Baggage System Reclaim Availability – arrivals carousel	N/A	-	0.20%
Wi-Fi performance	N/A	-	0.32%
Helpfulness/ Attitude of security staff	N/A	-	0.32%

4. Licence Changes

4.1. Introduction

4.1.1. We have more detailed views regarding the CAA's proposals for implementing continuous improvement and its proposals for dispute resolution. Specific licence wording is being consulted on as part of the CAA's CAP2275 consultation. We provide our detailed views on wording as part of our response to that consultation.

4.2. Continuous improvement

4.2.1. While we support the general principle of continuous improvement and ensuring that we are measuring the things that really matter to consumers through the period, we are concerned that the CAA's currently proposals go further and could allow for a change in the incentives faced by Heathrow during the price control. This would undermine the price control package set at the start of the period and would be inappropriate.

4.2.2. If continuous improvement is to be introduced, it should:

- Be narrowly focused on facilitating the introduction or removal of measures based on robust consumer insight. It is important that any changes maintain a clear link back to consumer evidence and the overall outcome that it would be delivering.
- Allow for time to establish a suitable level of baseline for any brand-new measures to ensure that realistic targets can be set.
- Ensure that any changes to reputational targets made during the period are closely aligned to changes in the capital expenditure allowances for the period, so that Heathrow has a fair chance of being able to achieve the new target.
- 4.2.3. The CAA should also ensure that any continuous improvement changes through the period are appropriately challenged and reviewed by consumers or consumer representatives. As set out by Frontier in their report, in disbanding the Consumer Challenge Board, the CAA has effectively removed the voice of the consumer

- representative body from the creation of OBR for H7. This has led to a lack of consumer focus in the CAA's proposals.
- 4.2.4. Therefore, as set out through Constructive Engagement, we propose that a consumer body should be included within any discussions on continuous improvement in H7 to ensure that any changes are made with a golden thread back to consumer evidence and that consumers' interests are appropriately reflected.
- 4.2.5. We therefore ask that the CAA reviews its wording to ensure that the flexibility to modify the licence is focused solely on the introduction or removal of measures and reputational targets.

4.3. Force Majeure Events

- 4.3.1. We agree with the CAA that the Covid-19 pandemic has highlighted some weaknesses in the current mechanisms available to Heathrow in the event of force majeure impacts on airport operations. In Heathrow's view a force majeure mechanism may be the most appropriate way of dealing with such circumstances. We are keen to explore this option further with the CAA.
- 4.3.2. This mechanism would enable Heathrow to inform the airlines should it need to apply exclusions for measures in the event of matters beyond its reasonable control. Should the airline community object, this objection would then be referred to a third party to be decided. The third party would then investigate based on the submissions of Heathrow and the airlines and issue a declaration that there either had, or had not, been a force majeure event.
- 4.3.3. This approach ensures that there is a failsafe mechanism should the airlines not agree with Heathrow's approach. This would provide stakeholders with a resolution, whilst ensuring that any CAA role in the detailed operation of the mechanism is targeted and proportionate. Such an approach is also similar to the regimes used in telecoms for such issues.²⁶
- 4.3.4. The mechanism could be put into effect through a contract, avoiding the need for the CAA to seek to expand its role under the licence.
- 4.3.5. We also have concerns that the CAA has not been targeted or proportionate in its amendments to Condition F in CAP2275, and so we are considering our response to dispute resolution and any CAA role in this area in the round. We provide further views as part of our response to CAP2275.
- 4.3.6. While we consider there may be some benefit in the additional provision relating to exclusion (o), we are also cognisant that any CAA role in dispute resolution should be targeted and proportionate.

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²⁶ See for example the MBORC regime used in telecoms in circumstances beyond Openreach's reasonable control