Economic regulation of Heathrow Airport Limited: H7 Initial Proposals (CAP2265)

Putting in place a price cap for HAL's 2022 charges

Heathrow's response

Date: 17 November 2021

Prepared by: Heathrow Airport Limited

Status: Non-Confidential

Contents

Executive Summary ... 3
Introduction ... 6
The passenger outlook for 2022 ... 6
The level of the CAA's proposed cap ... 8
Material errors in the CAA's assumptions for 2022 ... 9
- The CAA range for H7 is unsound ... 9
  - Operating Costs ... 9
  - Commercial Revenues ... 9
  - Passenger Forecast ... 10
  - WACC ... 11
  - Charge Range for H7 ... 11
- Financeability ... 11
- Operating costs ... 13

The CAA's proposed Licence modification ... 15

Executive Summary

1. Consumers are at the heart of our future plans, and we welcome the CAA's stated ambition to establish a price control that delivers for consumers.

2. The CAA has proposed an interim holding cap for 2022 by selecting the mid-point between its profiled airport charges of £24.50 - £34.40 on a per passenger basis, resulting in an interim price cap at £29.50 (all 2020p). The CAA has set out that the interim holding cap would take effect through a Licence modification at the end of November 2021 and ultimately be replaced by the CAA's H7 Final Proposals.

3. The holding cap proposed by the CAA is too low and would significantly undermine Heathrow's financial resilience. The consequence of the CAA cap for Heathrow would be a loss before tax of over [REDACTED] based on a notionally financed company. It is unprecedented for a regulator to set a price cap that leads to such a degree of loss.

4. The CAA has erred in its judgement in respect of the appropriate charge for 2022 in that:
    - It has made errors in its financeability analysis;
    - It has made errors in its assessment of operating costs; and
    - There are a range of errors in its assessment of passenger forecast, commercial revenues and WACC that mean its range for H7 is not viable and significantly below the range it should have identified.

5. Heathrow has substantial concerns over the process that has been followed by the CAA to set the range from which it has derived its interim charge, as well as the timing of its intervention. The poor process followed by the CAA has contributed to the errors in its assessment of the range for H7. These could have been avoided if the CAA had engaged with Heathrow in a more timely manner and had been more thorough in validating its approach. In addition, the late CAA intervention in the 2022 charge process is inconsistent with the timeline ordinarily required under the Airport Charges Regulations 2011 ('ACR2011') and is creating unnecessary uncertainty during this period.

6. As acknowledged by the CAA, airport charges represent a modest proportion of airfares at Heathrow. Whilst we agree that the interests of consumers would not be furthered by an inefficient Heathrow and an artificially inflated charge, we firmly believe that the interests of consumers will be furthered by the CAA prioritising a charge which allows for investment in service and resilience and a price control framework which incentivises it.

7. Our proposed charge of £37.64 (2022p) (£34.79 in 2020p) was based on our RBP Update 1 forecasts and calibrated to ensure that Heathrow could meet the significant financeability challenges we are facing since Covid-19. Heathrow must protect its access to capital markets to ensure we can obtain sufficient liquidity and access cost efficient financing. The Covid 19 pandemic has shown the importance of adequate liquidity in being able to maintain appropriate financial resilience. Without access to sufficient liquidity, the financial resilience of Heathrow would be eroded and its ability to withstand another shock reduced. In addition, access to cost efficient financing will keep costs as low as possible for consumers whilst enabling the delivery of the service levels they require; our proposed charge does this. In contrast, the CAA's proposed charge fails to do this and creates a significant risk of credit rating downgrade in 2022. This does not further the interests of consumers.

8. In this response we have limited our submissions on financeability to the minimum necessary to demonstrate the flaws in the CAA's 2022 price proposal. We remain deeply concerned about the longer term financeability impacts of the CAA's H7 proposals and will respond in

detail in our full Initial Proposals response. This submission is therefore without prejudice to anything covered in that later response.

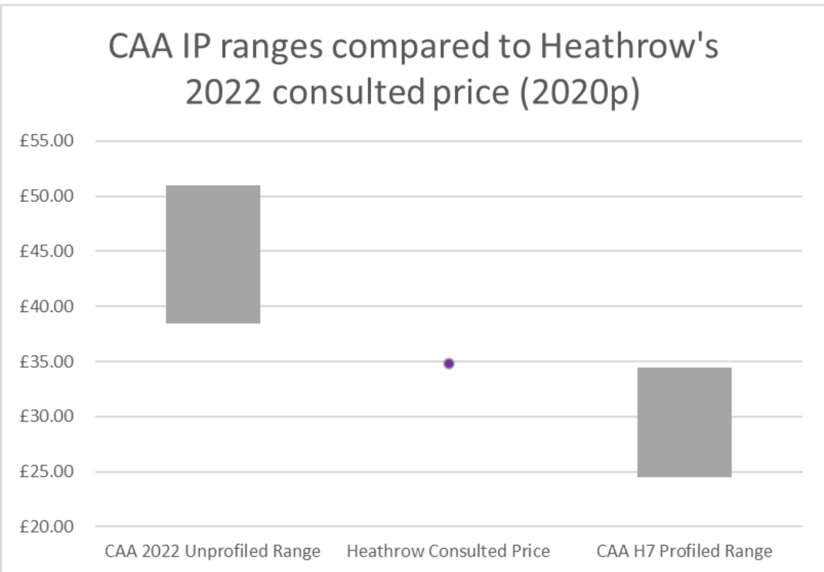
9. We do not accept the CAA's view that "the absence of a price cap in the intervening period would create very significant risks of consumers being exposed to charges that would be unduly high in 2022". The charge outlined in our 2022 airport charges consultation was only marginally higher than the top of the CAA's own profiled H7 range and is also below the lower quartile of the unprofiled charge calculated by the CAA for 2022 itself. This demonstrates that our proposed charge was not unduly high under the CAA's own assumptions. The CAA's statement also appears to ignore the fact that Heathrow faces strong competition from other airports, all of which will have ample capacity in the coming years.

10. The range used to derive the CAA's mid-point 2022 charge is underpinned by its consultants' views on operating costs and commercial revenues, its view on traffic, and its view on WACC. We will comment on all of the CAA's assumptions across the regulatory building blocks in our full Initial Proposals response. However, there are a number of serious errors in the CAA's approach that mean the overall range identified by the CAA is far too low and cannot be relied upon.

11. The assumptions made for operating costs in 2022 are particularly problematic in respect of the assessment of financeability in 2022. The consultants' estimate on which the CAA's range is based is flawed and significantly underestimates actual expenditure in 2021 and forecast expenditure in 2022. It is significantly below the actual operating cost to deliver a safe, compliant and resilient airport for 2022. We believe the CAA's overall range is fundamentally compromised as a result.

12. The CAA acknowledges that there are arguments that a price in the upper end of its unprofiled range could be appropriate for 2022 in isolation (£38 to £51 – 2020p) but considers profiling charges over H7 is appropriate. The CAA's profiled range for H7 closely overlaps with Heathrow's proposed charge for 2022 (£37.64 is £34.79 in 2020p vs the CAA's £34.40 in 2020p). The CAA has therefore added risk and complexity into the airport charges process where there is not necessarily a significant difference in opinion on the appropriate level of airport charge for 2022. Given the errors in the CAA analysis, we view the use of a mid-point in an incorrectly calibrated range is a fundamental error by the CAA. The CAA should move to the top of its range and adopt the charge that Heathrow has already consulted on with airlines.

Figure 1 - CAA IP ranges compared to Heathrow's consulted price



13. Notwithstanding the above we understand the CAA's position to be that it wishes to provide certainty on the level of charge for 2022 to enable airlines to start levying the charge through their airfares. Heathrow, therefore, has some sympathy in principle for the idea of a holding cap for 2022. However, as set out above, given the widespread and significant errors underpinning the CAA's analysis for the Initial Proposals, the CAA should set a charge of £37.64 (2022p) that has already been consulted on and that is at the top end of its range. This would help maintain the integrity of the ACR process and avoids putting Heathrow's financeability at risk.

14. Heathrow is therefore provisionally accepting the notion of a holding cap for 2022 whilst reserving its right to fully evaluate the CAA's H7 Final Decision on the basis of the provisos set out in the following paragraph.

15. The provisos are:

    - that in the event that the final decision for H7 (including following any appeal) specifies a maximum revenue yield per passenger (averaged across the period of the control) which is ***higher*** than the final price the CAA sets for 2022, then an adjustment is made to H7 to make Heathrow whole for the difference. Heathrow understands that to be the CAA's intention.
    - That Heathrow's provisional position on the idea of a holding cap for 2022 is entirely without prejudice to its position on H7 in general. In particular (and without limitation) our comments on substantive questions (including opex, financeability) in this response are intended to deal only with certain questions; we intend to make more extensive comments in our response to the Initial Proposals.

16. We also wish to express disappointment in the process the CAA followed in its proposal for the 2022 charge. The CAA had full and advanced sight that Heathrow would be in a position where there was no price cap in 2022 given the delays in the H7 timescales. Yet the CAA formally made its view known only two months before the start of 2022 and outside of the consultation timescales mandated by the ACR2011. These factors have put Heathrow in a position where we have been required to comment on the price for 2022 without sufficient time; they have undermined the consultation process and created unnecessary uncertainty for consumers and stakeholders.

Introduction

17. In this response to the CAA's consultation, we put forward our position on the CAA's 2022 interim holding cap.

18. In particular, we set out further detail on:

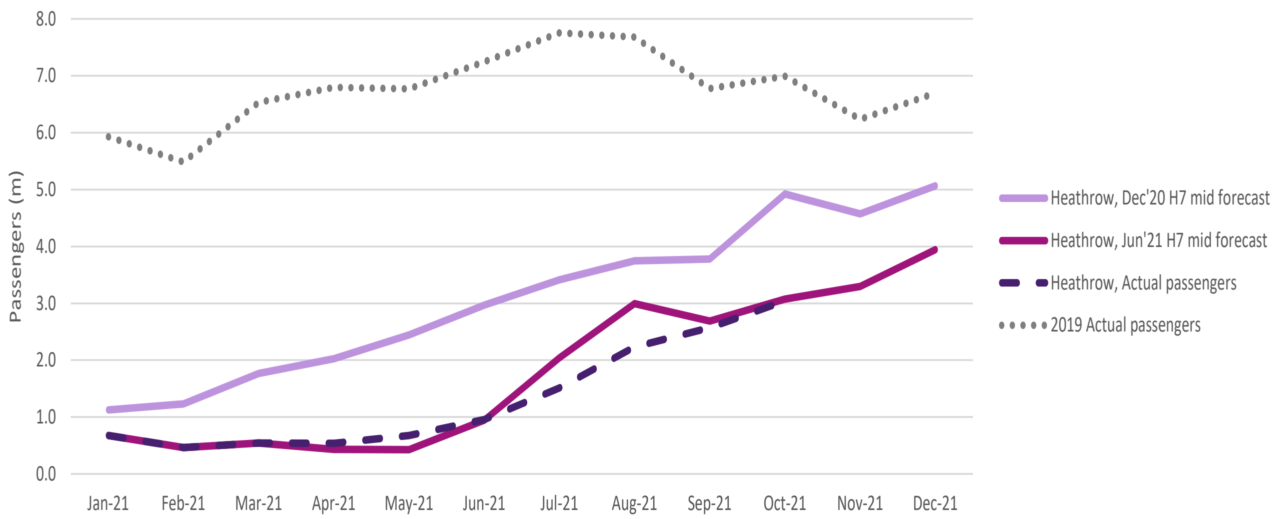
- The outlook for 2022 passenger numbers;
- The level of the cap;
- Material errors in the CAA's assumptions for 2022; and
- Our view on the CAA's proposed Licence modification.

The passenger outlook for 2022

19. The number of passengers in 2022 will have a significant impact on income and financeability.

20. The forecast made in RPB update 1 has proved to be a reasonable, albeit slightly optimistic, predictor of traffic during 2021. Figure 1 below compares the forecast to actual passenger numbers.

Figure 2 - Heathrow Forecast and Outturn Traffic



21. We note that caution should be applied to forecasts in the current situation. Forecasts made by Heathrow, IATA and others during the pandemic have been repeatedly shown to be optimistic, and recovery has taken longer and been slower than expected. This is demonstrated in Table 1 below that sets out Heathrow's forecasts for traffic in 2020 and 2021 during the pandemic. The Table shows that each forecast has subsequently been found to have been optimistic.

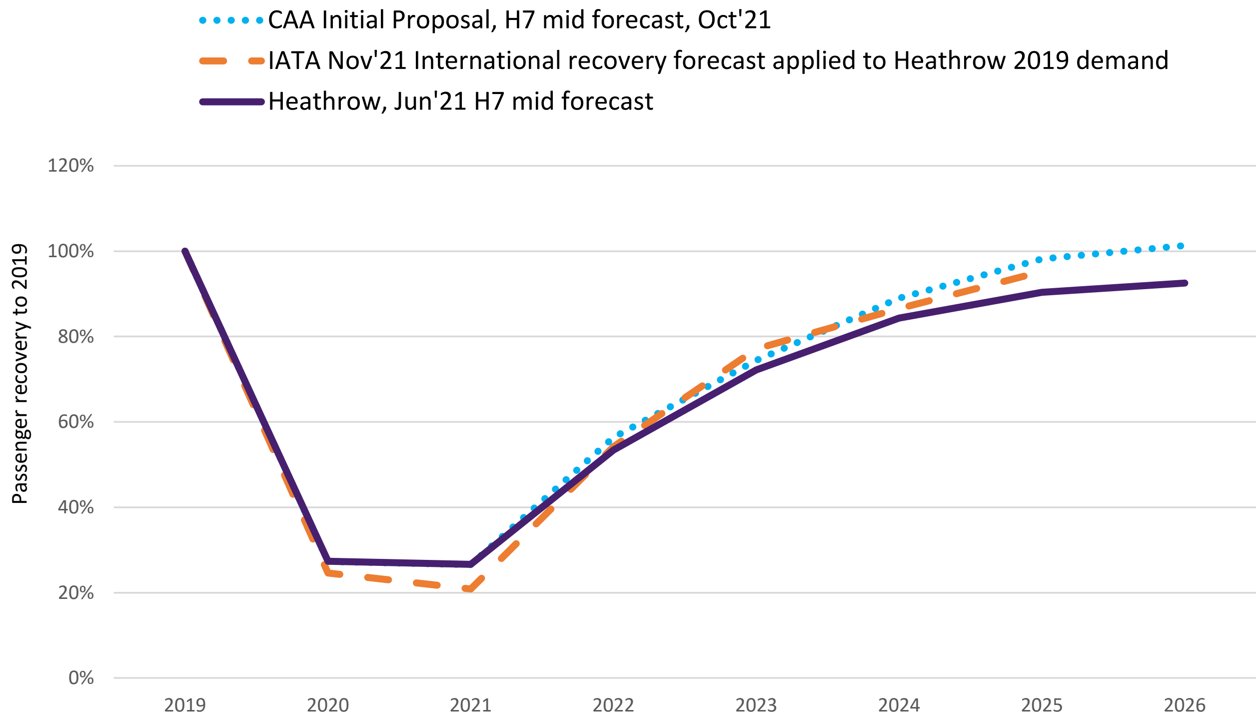
Table 1 - Passenger forecasts for 2020 and 2021 over time

		June 2020 Investor Report	December 2020 Investor Report	June 2021 Investor Report
2019	80.9m			
2020		29.2m	22.3m	22.1m
2021		62.8m	37.1m	21.5m

Source: Heathrow Investor Reports

22. We are aware that in their discussions with the CAA, airlines have been arguing that the Heathrow (and CAA) forecast for 2022 is now out of date and is unduly pessimistic. This approach by the airlines is inconsistent with the wider forecasts of the airline industry. For example, IATA updated its global forecast for air traffic at the end of October 2021. This IATA forecast can be applied to Heathrow by using the forecasts for each market in proportion to the 2019 share of each market. The resultant forecast is set out below and compared to the CAA forecast and the forecast in RBP Update 1.

Figure 3 - Comparison of October IATA Forecast with RPB and CAA Forecasts



23. This Figure shows that the IATA forecast for 2022 is consistent with the existing forecast by Heathrow and the CAA. The IATA forecast clearly demonstrates the significant gap between the message airlines are giving to the CAA in respect of the H7 process and what the detailed evidence is revealing.

24. In addition, there is a considerable risk of new restrictions being imposed in the UK or in key destinations and markets. Case numbers in Europe are currently increasing, and partial lockdowns are being implemented in some countries. These could have a significant downward impact on demand during 2022.

25. The available evidence demonstrates that the existing forecasts for 2022 traffic remain reasonable central forecasts, but the balance of risk is to the downside of these forecasts.

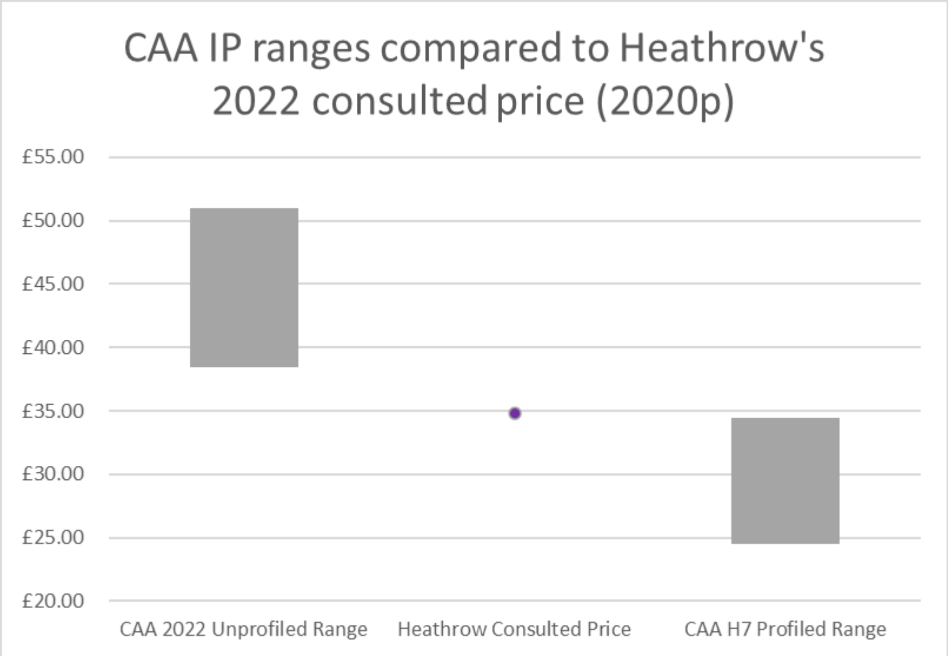
The level of the CAA's proposed cap

26. As we describe in detail in the following sections, the CAA's range is bounded by unrealistically low forecasts, both at the top and bottom of the ranges. In particular, the assumptions on opex are undeliverable and do not reflect the real operating circumstances of Heathrow Airport. Our RBP Update 1 forecast was a challenging central estimate based on externally validated evidence and thus cannot be considered 'extreme'. While we accept the concept of a holding cap we believe that the CAA's unrealistic range undermines the credibility of the CAA's currently proposed 2022 charge.

27. The CAA acknowledges that there are arguments that a price in the upper end of its unprofiled range (£38 to £51 – 2020p) could be appropriate for 2022 in isolation. However, it considers that profiling charges over H7 is appropriate. It should be noted that Heathrow's 2022 charge proposal was not considered in isolation. Rather than proposing a charge beyond the level necessary, our proposal reflected financeability challenges, and going below this amount poses increased financeability risks.

28. The CAA's profiled range for H7 closely overlaps with Heathrow's proposed charge for 2022 (£37.64 is £34.79 in 2020p vs the CAA's £34.40 in 2020p). The CAA has therefore added risk and complexity into the airport charges process where there is not necessarily a significant difference in opinion on the appropriate level of airport charge for 2022. We view the use of a mid-point in an incorrectly calibrated range as a considerable error by the CAA. Further, the near overlap between Heathrow's proposed charge and the CAA's profiled range makes the statement that consumers are at risk of Heathrow "unduly increasing charges" untenable and inappropriate.

Figure 4: CAA IP ranges compared to Heathrow's consulted price



Material errors in the CAA's assumptions for 2022

29. Given the significant time constraints resulting from the consultation timeline Heathrow will be responding to the CAA's assumptions across the regulatory building blocks in our full Initial Proposals response. For this response, we are only focusing on the most material errors for setting charges for 2022. These focus on errors that mean the CAA range for the overall period is unsound, and separately on errors that mean the assessment of financeability for 2022 is unsound.

30. The CAA is setting a cap for 2022. This means that, irrespective of any later potential truing-up, it is absolutely incumbent on the CAA to form a view on the actual forecast costs for 2022, not just take a range for a longer period from a consultant's report. It is not lawful for the CAA to ignore facts about 2022.

The CAA range for H7 is unsound

31. The CAA's range for H7 is based on its consultants' reports for opex and commercial revenues, its passenger forecast, and its assessment of WACC. There are significant errors in each of these elements of the CAA's assessment that cause the CAA's charge range to be too low.

Operating Costs

32. The CAA's consultants' estimate of operating costs includes a number of significant errors that result in their estimate of operating costs being significantly too low. This is demonstrated clearly by the consultants' estimate of costs for 2021 being £123m lower than the forecast outturn included in RBP Update 1. This degree of difference for 2021 is not credible and demonstrates a critical lack of due diligence by the CAA in its approach to estimating its range for opex in the Initial Proposals. Its lack of due diligence in reviewing Heathrow's RBP update 1 means that the charge range identified in the Initial Proposals has been significantly under-estimated and the CAA mid-point is not credible. More detail on the errors contributing to this difference are set out in the operating costs section below.

Commercial Revenues

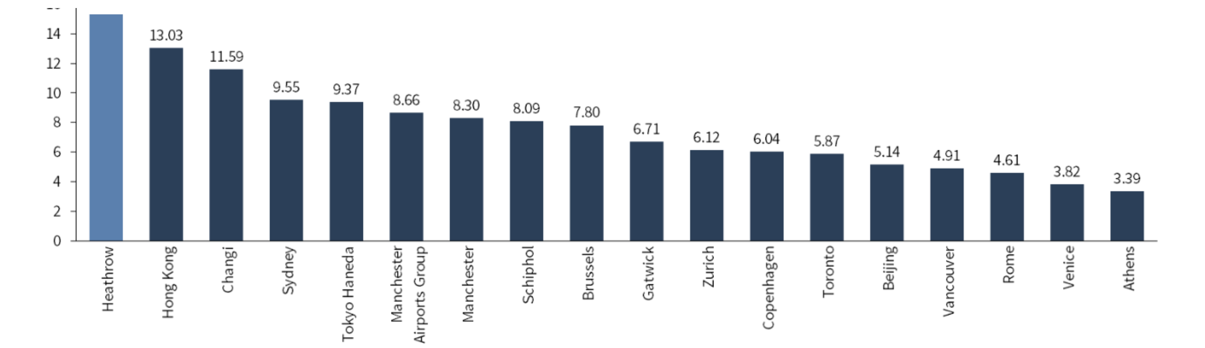
33. The CAA consultant's approach to estimating commercial revenues includes a number of errors:

- The cargo revenue estimate does not reflect the charging basis for Cargo, which is based on charges for cargo only movements. Consequently, the forecast is incorrect and significantly overestimates this revenue;
- The analysis of the impact of VAT changes excludes the impact on UK residents who will be equally impacted by the change in prices that result from the change. This means that the impact of the VAT changes has also been significantly underestimated;
- The CAA Initial Proposals does not include any allowance for capital expenditure on commercial projects. Without such expenditure retail income will fall, but no account of this has been taken by the CAA. The need for capital expenditure on commercial projects was recognised by the CAR in its determination for Dublin Airport.

"*The CIP contains a number of projects specific to this category of revenue, a number of capacity projects that include retail elements and a couple of IT projects that contain enabling technology. We do not propose uplifting retail revenues for these projects as, first, similar* *projects in previous periods would be captured in our elasticity and, second, part of this expenditure is required to protect this revenue stream into the future."*[1]

34. In addition, the consultant's approach makes a number of unsubstantiated assumptions. The most critical of these is that they assume a management stretch of 2% p.a. on top of CPI leading to assumed growth in commercial revenue per passenger of 4% p.a. The actual rate of Heathrow growth in commercial revenue per passenger over the 8 years up to 2018 is 2% nominal, consistent with the median rate of all airports. An independent benchmark study carried out in 2019 for Heathrow by retail and commercial strategy consultants, Pragma showed that Heathrow set a global benchmark for airports in generating non-aeronautical revenues:[2]

Figure 5: Non-aeronautical revenue per passenger, latest year available and CAGR latest period



CAGR, Latest period (up to 8 years)	2.1%	5.7%	2.6%	3.0%	6.2%	0.3%	2.0%	-4.1%	3.7%	1.1%	0.4%	-0.9%	2.9%	6.5%	1.4%	3.3%	-0.4%	-4.1%	Median 2.0%

35. The overall impact of these errors and unsubstantiated assumptions is that the consultant's report significantly overestimates commercial revenue in H7. As a consequence, the CAA charge range has been significantly underestimated.

Passenger Forecast

36. The CAA's approach to passenger forecasting is in error as it has not taken account of the constraints and physical capacity limits of Heathrow airport. The off-model adjustments made by the CAA to make the 'correction' for asymmetric distributions means that the 480,000 movement limit has been ignored and load factors are not constrained below 1. As a consequence, the forecast in later years is neither realistic nor deliverable. The result of the errors in the CAA process leads to a charge range for H7 that is too low.

[1] Commission for Aviation Regulation, *Maximum Level of Airport Charges at Dublin Airport 2020-2024 Draft Determination*, May 2019, Page 28, Paragraph 7.15

[2] Pragma, *Heathrow Airport Limited Commercial Benchmarking 2019*, November 2019, page 18, Figure 19

WACC

37. The CMA assessed the asset beta of airports pre-pandemic in its assessment of the beta for NERL. It identified a range for NERL, with traffic risk sharing, of 0.52 to 0.62.

38. The CAA assessment of the asset beta for Heathrow has a range of 0.52 to 0.67. The bottom of this range is not credible as it effectively assumes that Covid has had no impact upon investors' risk perception at all. In addition, the top end of the range is grossly below current estimates of market beta for comparator airports that are around 1, as set out both in the RBP Update 1 and in the Flint Global report produced for the CAA. Therefore, the top end of the CAA range is inconsistent with relevant market data and also not credible.

39. In determining its range for asset beta, the CAA has relied heavily on the analysis by Flint Global. This analysis has two serious errors in it:

- Flint Global's approach for estimating the beta is not consistent with CAPM. Their 'sum of the parts' method effectively treats risk as linear, which is inconsistent with established financial theory.
- In addition, the Flint Global approach assumes without any evidence that the current observed level of beta will fall immediately to their 'sum of the parts' estimate. Flint Global has not justified why this would be expected and has provided no evidence or theory to support this assumption. Market beta's take into account the forward-looking expectations of current investors. Flint Global have provided no justification as to why these current views should be ignored.

40. These errors in analysis by Flint Global and the CAA mean that the asset beta range identified by the CAA is in error and that the appropriate WACC for H7 has been significantly underestimated. As a consequence, the charge range set out by the CAA for H7 is too low.

Charge Range for H7

41. The errors set out above in opex, commercial revenue, passenger numbers and WACC, only represent a few of the issues in the Initial Proposals on which we will respond in December. However, these clear errors have all acted to reduce the price range identified by the CAA for H7. Correcting these errors would lead to a significantly higher range. Consequently, the charge proposed for 2022 is not the centre of a reasonable range, but rather is well below the centre of the range the CAA would have identified if it had avoided the errors set out above. The extent of these errors means that the CAA should not apply a cap of £29.50 for 2022. Instead, we propose that the CAA should set a cap at the top of its range at £37.64 (2022p), as this has already been consulted on by Heathrow through the ACR process.

Financeability

42. The CAA's approach of using a charge of £29.50 (2020p) for the 2022 charge creates a significant risk of credit rating downgrade during 2022. Our proposed charge, which is equivalent to the top of the CAA charge range, was set to deliver funds from operations of £650m and an FFO/net debt ratio of 5.6% in the notional company. This is the minimum level in 2022 that we considered compatible with retaining our current credit rating (see paragraphs 44 and 45).

43. A reduction in credit rating during 2022 would have material consequences. Heathrow plans to refinance its £1.15bn Revolving Credit Facility ('RCF') during the first half of 2022 to ensure the business can maintain an appropriate liquidity position in the coming years. The events of 2020 and 2021 have demonstrated the importance of maintaining a significant liquidity buffer. The RCF comprises both a Class A and Class B tranche and is provided by a group of over 20 banks.

44. A downgrade in credit rating would reduce Heathrow's Class B rating to sub investment grade and its Class A rating to BBB. This would materially reduce the size of liquidity facility that Heathrow is able to access as banks' willingness to provide facilities at these lower ratings is significantly more limited. Furthermore, any banks willing to provide facilities would do so at materially higher costs. As such, a downgrade would reduce the liquidity buffer available to Heathrow, increase financing costs and significantly jeopardise its ability to cope with another downturn in demand were it to materialise. Additionally, a downgrade would result in much less capacity from banks to provide hedging coupled with much higher hedging costs. This is fundamental for Heathrow in terms of accessing foreign currency debt markets to achieve cost efficient debt financing. Any downgrade would result in a much higher cost of debt.

45. As we have explained in detail to the CAA in discussions in respect of the 2022 charge, the key credit rating metric for 2022 is Funds From Operations ('FFO') / Net Debt (FFO = revenue – opex – interest – tax).

46. The CMA has set out clear thresholds for the level of FFO to net debt needed to target different ratings for a company geared at 60%. These are a ratio of 9% for BBB+, 8% for BBB and 6% for BBB-. Below a 6% ratio, the FFO/Debt metric is not consistent with an investment grade credit rating[3]. We have explained to the CAA that to retain our rating we need to ensure that the FFO/Net Debt should not fall significantly below 6% in any one year and not below 8% over a three-year period.

47. Our proposed charge for 2022 results in a forecast FFO/net debt for the notional company[4] of 4.6% - and with the charges proposed in the RBP a three-year average between 2022 and 2024 of 7.2%. Our proposal therefore already significantly challenges the lower end of the credit rating agency metrics. Note that the position for the actual company in 2022 is very similar to that for the notional company.

48. The CAA's analysis in the Initial Proposals results in an FFO to net debt of 5.2% in 2022 and a 3-year average of 9.9% (based on £29.50 (2020p) in subsequent years). Therefore, even under the CAA analysis the risk being taken for the credit rating in 2022 is very high.

49. In addition to the high risk position the CAA has taken in its Initial Proposals there are a number of errors in the CAA's analysis of financeability for 2022 which further exacerbates the problems:

- The CAA modelling includes an error in the opening gearing of Heathrow in 2019, setting it at 55% rather than 60%. This means that the amount of debt in 2022 is underestimated, and that the amount of FFO is also overestimated (due to interest costs being underestimated). The effect of correcting this error reduces the FFO to net debt for the CAA's analysis in 2022 to 4.5%.
- The CAA range for opex in 2022 is not credible (see below). Substituting Heathrow's forecast opex for the opex in the CAA's cases results in FFO / net debt falling further to 3.8%, and the three-year average to 8.2%. Rating agencies will base their assessment on Heathrow's actual forecast for operating costs so this is more relevant for 2022.

[3] Paragraph 10.98 from CMA water decision; https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf

[4] This takes account of the lower ORC revenue resulting from rates being moved to the aero charge in the CAA IP

50. These errors mean that the CAA is taking a significant risk with the ability of Heathrow to finance itself in 2022 and is creating a risk that its financial resilience will be significantly reduced. This is not in the interests of consumers and is not consistent with the CAA's duties.

Operating costs

51. In this section we highlight certain particularly significant issues we wish to raise in relation to the CAA's position on operating costs. We stress that in the time available – for the purposes of the 2022 consultation - we have not been able to undertake a full analysis. This will follow in response to the Initial Proposals consultation. What is set out below represents what we have been able to do in the time available and is the minimum set of changes the CAA should make to their range before setting the 2022 price.

52. The 2022 mid-point proposal for operating costs is £975m (2018 RPI, £1,028m 2020 CPI). The CAA have used the mid-point of their range, where the range is constructed taking the upper and lower quartiles using Heathrow's operating cost forecast as the ceiling and the CEPA/Taylor Airey forecast as the floor.

53. The CAA has not engaged with any of the issues relating to our operating costs in 2022, discussed the deliverability of the proposed operating cost target or specified the service levels we would be expected to deliver. This latter point is particularly problematic and concerning as it means Heathrow is unable to fully understand the context of the CAA's proposals.

54. Our operating cost forecast of £1,033m (2018 RPI) for 2022 in the RBP Update 1 was already highly stretching. The top of the CAA's range is below this forecast, and the mid-point of the range, which is relevant for the proposed charge in 2022, is £58m below our forecast from Update 1. We are in the process of updating our 2022 forecast which will need to reflect increases in costs driven by higher energy prices, changes to National Insurance contributions and other emerging cost pressures. This will increase the difference to the CAA estimate.

55. The CEPA/Taylor Airey forecast is simply not realistic or credible. Table 2: below shows a comparison of our 2020 actuals, 2021 forecast and the CEPA/Taylor Airey operating cost forecast. The table shows that the errors in the CEPA/Taylor Airey modelling assumptions result in a forecast for 2021 that is £123m below the expected outturn, highlighting fundamental issues with the realism of their approach. In 2022, CEPA/Taylor Airey are expecting us to run the airport with double the passenger volumes and only £12m (vs 2021) more operating costs. We will also no longer benefit from one-off and temporary savings including furlough, having Terminal 3 closed and a one runway operation for 6 months of the year, as we have done in 2021.

Table 2: Comparison of CEPA/Taylor Airey 2022 forecast with 2020/2021 performance

	2020	2021	2022
Passengers (m)	22.1	21.5	43.2
Infrastructure	T3/4 closed for 8 months 1 runway closed for 8 months	T3 Closed for 6 months T4 Closed* 1 runway closed for 6 months	T4 Closed
Outturn / Heathrow Forecast (£m, 2018 RPI)	922	879	1,033
CEPA/TA Operating Costs (£m, 2018 RPI)		756	891

**T4 was open for red list arrivals, however, these costs were recovered from the government*

56. The CEPA/Taylor Airey forecast fails to consider the overall deliverability of their forecast and is based on a number of incorrect assumptions. We will provide a full discussion of all their modelling assumptions in our response to the Initial Proposals. However, it is important to highlight some key issues which impact the 2022 forecast:

- The inclusion of a 1.4% reduction to the 2019 baseline – CEPA/Taylor Airey did not engage with the evidence presented in the KPMG report that demonstrates our cost base is at the efficiency frontier. They based their adjustment on a simplistic high-level view of operating costs per passenger ignoring the other key factors that drive our costs such as the complexity of the operation and the level of non-aero revenue generated. In addition, the permanent savings brought forward in 2020 more than offset any increases in operating costs that occurred in 2019 and including a further saving is double counting. Correcting for this error would increase the forecast for 2022 by around £16m.
- The inclusion of a saving of £25m per annum related to reorganisation is double counting the Cost of Change savings already included in the plan which includes the benefits of the negotiated grades reorganisation.
- The estimate for security staff costs is based on incorrect assumptions, which we were not consulted on and do not reflect the operational reality and cost impacts of our current operation, the regulated security programme or the security transformation programme. The additional application of frontier efficiency to security costs is also double counting with the bottom-up estimate of security efficiency. In addition, the assumption that we can deliver benefits regardless of the level of capital investment highlights a fundamental lack of understanding of our operation and is completely unrealistic and flawed.
- We will provide an update to our input price inflation forecasts in our RBP Update 2. However, it should be noted that there have been significant changes to external forecasts, most notably the recent increases in energy prices where initial work suggests the 2022 utilities forecast will increase by around £15m.

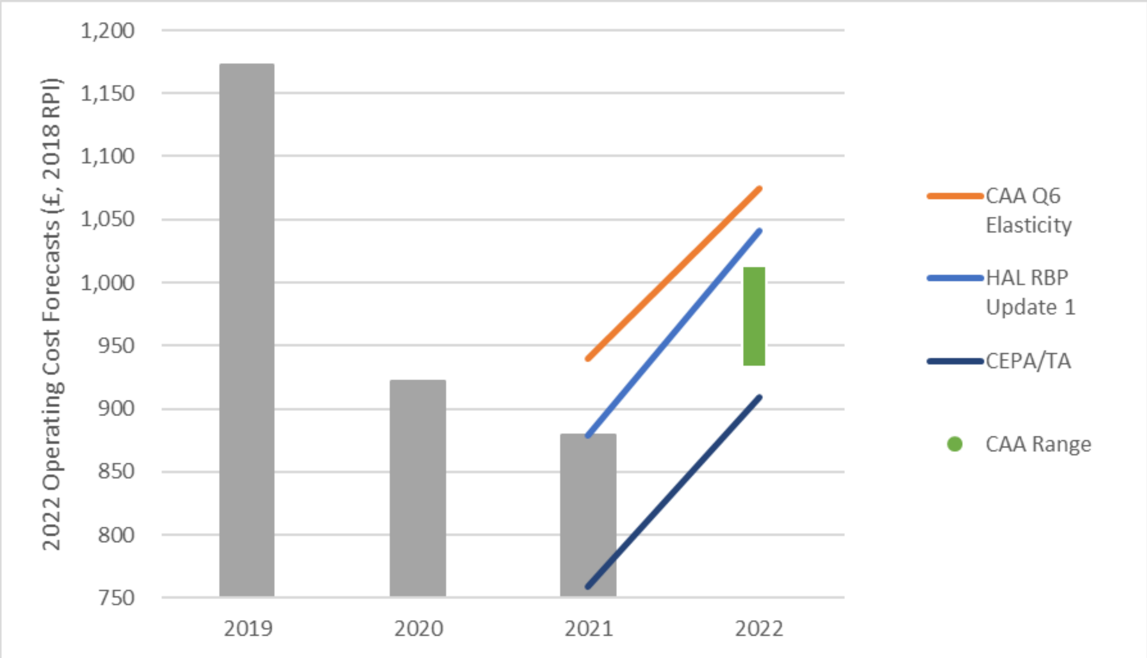
57. Not only has CEPA / Taylor Airey failed to assess the deliverability of their forecast: for the purposes of the holding cap for 2022, the CAA has apparently not engaged in it either. This is a crucial error.

58. The CAA have used our forecast as the ceiling of the range. This is poor regulatory practice and the CAA is setting precedent for the wrong regulatory incentives. For Q6, the CAA used an elasticity of 0.3 between operating costs and passenger numbers for the final determination[5]. An alternative approach would have been to use this as a basis for forecasting the top of the range. Indeed, we understand that the CAA used this elasticity when adjusting our RBP Update 1 forecast for their passenger volume forecast when constructing the range.

59. Figure 6 below compares the Heathrow, CAA and CEPA/Taylor Airey operating cost forecasts for 2022 with those if we were to use the elasticity used by the CAA in Q6. This has been modelled using the 2019 base year, applying the passenger volume elasticity of 0.3 respectively to all cost categories excluding rates and including a 1% per annum efficiency from 2020 consistent with the CMA approach in energy and water.

[5] CAA, CAP 1151 Economic regulation at Heathrow from April 2014: Notice granting the licence, Appendix E: Operating Expenditure, Paragraph E103, p261, Feb 2014.

Figure 6: Comparing regulatory precedent with the Heathrow, CAA and CEPA/Taylor Airey operating cost forecasts



Note: CAA Q6, RBP Update 1 and CEPA/TA forecasts for 2022 use the CAA passenger forecast

60. This shows that our forecast is already more stretching than the CAA's expectations at Q6 and the CAA's 2022 H7 ranges are significantly lower than Q6 expectations, ranging from 5% to 12% lower. The operating cost ranges set out by the CAA for 2022 are not deliverable for consumers.

61. The effect of these errors for the holding cap is that the bottom end of the CAA's range for operating costs is simply not rational. Correcting for them does not correct the range fully, but results in something more plausible for the purposes of the holding cap.

The CAA's proposed Licence modification

62. Heathrow is concerned that a licence modification at this stage is unlikely to provide Heathrow, airlines or consumers with certainty given that it fails to address some of the gaps that arise as a consequence of removing the C1 condition formula. Further, a licence modification opens up the appeals process, which results in further delays and uncertainty. Heathrow has offered to make a voluntary, public and legally binding commitment regarding the maximum charge level for 2022 to provide airlines and the CAA with additional assurance beyond the ACR2011 requirements but airlines have not engaged meaningfully with this offer. We remain open to making such a commitment.

63. In the event the CAA continues with its proposals to impose an interim Licence condition, Heathrow has provided a mark-up of the proposed Licence conditions for the CAA to consider below. Heathrow understands the CAA is intending to 'set a simple price cap' and in the event that the final decision for H7 (including following any appeal) specifies a maximum revenue yield per passenger (averaged across the period of the control) that is higher than the CAA's determined price (RPI adjusted), then an adjustment is made to H7 to make Heathrow whole for the difference. We further understand that it is the CAA's intention that future adjustments would be based on the same principles as those currently employed, e.g., that actual revenues and passenger numbers would be used in calculations. If that is not to be the case Heathrow will need further time to consider the modifications as, with the information and time currently available, we have not been able to fully analyse what the CAA is proposing.

64. Heathrow is concerned that the proposal to remove the price control formula removes a number of key tenets of the price control. For example, the mechanisms by which Heathrow is able to account for and recover crucial elements such as capex. The proposal to include a condition for Heathrow to maintain the current governance arrangements in C1.7 only impacts how Heathrow manages capex, the removal of key formulas such as the annual development capex adjustment creates uncertainty for Heathrow as well as stakeholders and Heathrow urges the CAA to provide further guidance on how it intends to address this issue should it choose to proceed with its Licence modification.

65. The proposed duration for a single holding cap is from the regulatory year 1 January 2022 until 31 December 2022. However, table 4 of the response states that in July/ August 2022 the licence modifications take effect. As currently drafted, in the event that the H7 price control becomes effective in July/ August 2022, the CAA would need to delete the then existing price rule set out in the holding cap. This would have significant consequences, for example in relation to bonus factor rebates available to Heathrow under schedule 1 which are currently proposed to run for the entire Regulatory Year, and could create a disparity between the way in which Heathrow is able to accrue bonuses for the duration of the holding cap and within the first few months of H7. This is clearly inconsistent with the CAA's intentions to set a simple cap, and risks simply delaying or adding to the inevitable complexity that will take place when truing up for the interim period and setting the charges for H7. We request further assurance from the CAA on how it proposes to proceed with addressing these risk factors.

66. Finally, the proposed licence modification condition C1.1 refers to the per passenger yield of £29.50 in 2020 prices CPI real. Ordinarily if a price is a 2020 price then it is a nominal price, this is consistent with the CAA's previous approach and Heathrow's current licence conditions.[6] Therefore the use of CPI here is confusing and unnecessary. To achieve the CAA's objectives of setting a simple single price cap, the proposed yield per passenger should be set in nominal 2020 prices and indexed using RPI, which is the index used for the rest of the cap.

[6] For example, C1.2 in Heathrow's current licence condition

Relevant Condition	Summary of the Modification	Details of changes to the condition	Heathrow Comment
A3.1(f) andC2.5, C4.1, E1.3, E1.5(a)&(b),E2.2, E3.5, Schedule 1: 2.1(e),(f) &(j), 2.28(a)&(b), 3.2, 3.4, 3.4(a)&(b), 3.5, 3.7, 3.11, 3.13, 3.15, 4.2, 4.4, 4.5, 5.2(b) 6.2, 6.3(c).	Delete the definition of Regulatory Period and replace with "NOT USED" and all delete all references to the term throughout the licence in text and formulae.	~~(the Regulatory Period means the period of nine months between1 April 2014 and 31 December 2014 and this period shall also be considered to be the Licensee's financial year for the purposes of thisLicence~~ (f) **NOT USED**	Accepted

A3.1(g) andC2.1, C2.2, C2.3, C3.7, C4.1, E1.3,E3.1, Schedule 1: 2.4, 3.4(a), 3.5, 3.11, 6.6.	Modify the definition of Regulatory Year, Change referencesto "each" and/or "subsequent [number]" Regulatory Years to "any" RegulatoryYear.	(g) the Regulatory Year means ~~for each of the seven years from 2015to 2021,~~ the period beginning on 1 January and ending on 31 December. ~~These years shall also be considered to be the Licensee's financialyear for the purposes of this Licence.~~	Accepted
C1	Delete the whole of the current Condition C1 Price Control and replace with new Conditions C1.1 and C1.2.	New condition C1 Holding Price Control for 2022 C1.1 The Licensee shall fix the amounts to be levied by it by way of airport charges in respect of relevant air transport services in the Regulatory Year 2022 at the levels best calculated to secure that, in that Regulatory Year, the total revenue at the Airport from such charges divided by the total number of passengers using the Airport does not exceed the maximum revenue yield per passenger, which shall be £[XXX] (2020 prices) Where the Licensee has fixed the amounts levied by way of airport charges in respect of the relevant air transport services in the Regulatory Year 2022 in accordance with C1.1 and a final decision for the H7 Price Control for the amounts levied by way of airport charges in respect of the relevant air transport services specifies a maximum revenue yield per passenger, when averaged across the period of the control, that is higher than the amount allowed in Condition C1.1 for the Regulatory Year 2022 then an adjustment shall be made to the H7 price control to ensure that the Licensee is able to recover the difference	Drafting clarifications made. As set out above we are concerned that the current drafting provides no clarity on how and in what format any applicable correction factors will be re-inserted in to Heathrow's licence.

		C1.2 Where the charges fixed by the Licensee in respect of air transport services for the Regulatory Year 2022 are forecast at the start of the Regulatory Year 2022 to exceed the maximum yield per passenger set out in Condition C1.1 the Licensee shall consult airlines under the Airport Charges Regulations 2011 (2011 No. 2491) to reset its prices at a level that does not exceed the level set out in Condition C1.1 The Licensee shall consult airlines under the Airport Charges Regulations 2011 within 1 month of the Condition C1 Price Control coming into effect at the start of the Regulatory Year 2022.	Drafting amended for clarity.
C1	Insert a new Condition C1.3 to require HAL to maintain the existing capex governance arrangements.	C1.3 The Licensee will continue to use reasonable endeavours to comply with governance arrangements and the Q6 Capital Investments Triggers Handbook in relation it is core capex projects and development capex projects.	Given the uncertainty regarding the interim period we consider it more appropriate that any interim process has some flexibility.

C1	Retain relevant existing definitions from Condition C1.16 and restate them as Condition C1.4.	Definitions In this Condition C.1: **core capex project** is any project that has passed Gateway 3, being taken forward for implementation in accordance with the governance arrangements; **development capex project** is any project under development that has not passed Gateway 3 in accordance with the governance arrangements, but for which an allowance has been included in the development capex allowance; **Gateway 3** has the meaning set out in the governance arrangements; **the governance arrangements** means the arrangements set out in the Q6 Capital Efficiency Handbook published by the Licensee by 1 October 2014 as agreed by the CAA, and updated in April 2015; **passenger using the Airport** means a terminal passenger joining or leaving an aircraft at the Airport. A passenger who changes from one aircraft to another, carrying the same flight number is treated as a terminal passenger, as is an interlining passenger; **the Q6 Capital Investment Triggers Handbook** means the handbook in existence when this Licence comes into force, having been agreed by the Licensee and the airlines. This handbook contains details of the triggers, milestone months and monthly trigger payments for core capex projects and details of how future changes to those elements can be made with the agreement of the Licensee and the airlines; and **relevant air transport services** means air transport services carrying passengers that join or leave an aircraft at the Airport, including air transport services operated for the purpose of	Definition added to assist with drafting clarifications to C1

		business or general aviation. **H7 Price Control** is the next price control for the Licensee expected to commence upon the expiry or revocation of the C1 Holding Price Control for 2022.	
C2	In Condition C2.5 and C2.6, remove references to "2019, 2020 and 2021" and replace with "2022"	Where in respect of any relevant ~~Regulatory Period or~~ Regulatory Year (apart from the ~~2019, 2020 and 2021~~ Regulatory Year~~s~~ 2022) actual revenue for any of the Specified Facilities differs from that forecast for the purposes of the price control review for the period 1 April 2014 to 31 December 2018 (as specified by the CAA), the Licensee shallprovide to the CAA and to users of the Specified Facilities or their representatives detailed reasons for the differences. C2.6 Where in respect of the ~~2019, 2020 and 2021~~ Regulatory Year 2022~~s~~ actual revenue from any of the Specified Facilities differs from actual revenue in the preceding Regulatory Year, the Licensee shall provide to the CAA and to users of the Specified Facilities or their representatives detailed reasons for the differences.	Accepted

Schedule 1 Statement ofStandards, Rebates andBonuses.	modify paras 4.1, 4.2,4.3,4.4,4.5 and 4.6. (Bonuses)	**(a) Payment** The Licensee may recover bonuses from Relevant parties. Bonus payments shall be included in the calculation of the ~~Airport Charges~~ maximum revenue yield per passenger in respect of relevant air transport services in ~~Condition C1~~Relevant Year 2024. **4(b) Calculation** B_{t2022}, the bonus factor ~~as specified in Condition C1~~, is based on performance achieved in respect of specified elements k in the relevant ~~Regulatory Period or~~ Regulatory Year ~~t~~2022 as set out in Table 8 of this Schedule.	

		~~For the purposes of calculating M_t as specified in Condition C1, t~~ The corresponding periods for which bonuses are recoverable by the Licensee ~~to be included in the calculation of M_t~~ are set out in Table 9 of this Schedule. Not used. ~~For the purposes of calculating M_t for the Regulatory Period, $B_{t-2} = B_{2012/13}$ is set to zero; for thepurposes of calculating M_t for the Regulatory Year t startingon 1 January 2015, $B_{t-2} = B_{2013/14}$ is set to zero. This isbecause bonuses earned in 2012/13 and 2013/14 shouldhave been recovered through the K factor as specified inCondition C1.~~ Not used. ~~B_t for the Regulatory Period, i.e. B_{2014}, shall be calculated as follows:~~ ~~$B_t = \sum_{j=April}^{j=December} \sum_{k} Max\,[0, Min[BNS(T2)_{kj}, BNS(T3)_{kj}, BNS(T4)_{kj}, BNS(T5)_{kj}]]$~~ ~~For each month j and specified element k;~~ ~~$BNS(T2)_{kj} = \frac{1}{9} \times MB_k \frac{Min[UPL_k, MP(T2)_{kj}] - LPL_k}{UPL_k - LPL_k}$~~ ~~$BNS(T3)_{kj} = \frac{1}{9} \times MB_k \frac{Min[UPL_k, MP(T3)_{kj}] - LPL_k}{UPL_k - LPL_k}$~~ ~~$BNS(T4)_{kj} = \frac{1}{9} \times MB_k \frac{Min[UPL_k, MP(T4)_{kj}] - LPL_k}{UPL_k - LPL_k}$~~	

$$\cancel{BNS(T5)_{kj} = \frac{1}{9} \times MB_k \times \frac{Min[UPL_k, MP(T5)_{kj}] - LPL_k}{UPL_k - LPL_k}}$$

~~where:~~

~~MB_k, LPL_k and UPL_k are defined in paragraphs 2.1(j), 2.1(k)and 2.1(l) respectively; and~~

~~$MP(T2)_{kj}$, $MP(T3)_{kj}$, $MP(T4)_{kj}$ and $MP(T5)_{kj}$ are the moving annual average monthly performance for specified element kin month j weighted by monthly passengers numbers in Terminal 2, Terminal 3, Terminal 4 and Terminal 5, respectively. It is calculated using the formulae set out in paragraph 2.3.~~

4.6 B_{t2022} for ~~any subsequent relevant~~ the Regulatory Year$_{2022}$ $_{\cancel{t}}$ shall be calculated as follows:

$$B_{t2022} = \sum_{j=January}^{j=December} \sum_{k} Max\,[0, Min[BNS(T2)_{kj}, BNS(T3)_{kj}, BNS(T4)_{kj}, BNS(T5)_{kj}]]$$

For each month j and specified element k;

$$BNS(T2)_{kj} = \frac{1}{12} \times MB_k \times \frac{Min[UPL_k, MP(T1)_{kj}] - LPL_k}{UPL_k - LPL_k}$$

$$BNS(T2)_{kj} = \frac{1}{12} \times MB_k \times \frac{Min[UPL_k, MP(T1)_{kj}] - LPL_k}{UPL_k - LPL_k}$$

$$BNS(T4)_{kj} = \frac{1}{12} \times MB_k \times \frac{Min[UPL_k, MP(T4)_{kj}] - LPL_k}{UPL_k - LPL_k}$$

$$BNS(T4)_{kj} = \frac{1}{12} \times MB_k \times \frac{Min[UPL_k, MP(T4)_{kj}] - LPL_k}{UPL_k - LPL_k}$$

		where:	

<table>
<tr><td></td><td></td><td>MB_k, LPL_k and UPL_k are defined in paragraphs 2.1(j), 2.1(k)and 2.1(l) respectively; and

$MP(T2)_{kj}$, $MP(T3)_{kj}$, $MP(T4)_{kj}$ and $MP(T5)_{kj}$ are the moving annual average monthly performance for specified element $k$in month j weighted by monthly passengers numbers in Terminal 2, Terminal 3, Terminal 4 and Terminal 5, respectively. It is calculated using the formulae set out in paragraph 2.3.</td><td></td></tr>
<tr><td></td><td>Modify Table 9 to remove redundant information relatingto the Regulatory Period 2014 and Regulatory Years 2015 -2021 and insert relevant information for 2022.</td><td>Table 9: Periods of bonuses earned to be taken into account ~~whensetting M_{t2022} as specified in Condition C1[11]~~
<table>
<tr><th>To set the maximum revenue yield per passenger M_{t2024}</th><th>M_{t2024} representing theperiod</th><th>Take account bonuses earned in $B_{\cancel{t-2}2022}$</th><th>$B_{\cancel{t-2}2022}$ representin gthe period</th></tr>
<tr><td>~~M_{2014}~~</td><td>~~April 2014 – December 2014~~</td><td>~~$B_{2012/13}$~~</td><td>~~April 2012 – March 2013~~</td></tr>
<tr><td>~~M_{2015}~~</td><td>~~January 2015 – December 2015~~</td><td>~~$B_{2013/14}$~~</td><td>~~April 2013 – March 2014~~</td></tr>
<tr><td>~~M_{2016}~~</td><td>~~January 2016 – December 2016~~</td><td>~~B_{2014}~~</td><td>~~April 2014 – December 2014~~</td></tr>
</table></td><td></td></tr>
</table>

		~~M_{2017}~~	~~January 2017 – December 2017~~	~~B_{2015}~~	~~January 2015 – December 2015~~
		~~M_{2018}~~	~~January 2018 – December 2018~~	~~B_{2016}~~	~~January 2016 – December 2016~~
		~~M_{2019}~~	~~January 2019 – December 2019~~	~~B_{2017}~~	~~January 2017 – December 2017~~
		~~M_{2020}~~	~~January 2020 – December 2020~~	~~B_{2018}~~	~~January 2018 – December 2018~~
		~~M_{2021}~~	~~January 2021 – December 2021~~	~~B_{2019}~~	~~January 2019 – December 2019~~
		M_{2024}	Regulatory Year 2024	B_{2022}	Regulatory Year 2022
		~~[11] In Table 9, for the purposes of calculating M_{2014}, $B_{2012/13}$ is set to zero; for the purposes of calculating M_{2015}, $B_{2013/14}$ is set to zero.~~			