

Heathrow Airport

Airport Charges for 2022 Consultation Document

Date: Version 0.2 27/08/21

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Status: Draft for Consultation

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Executive Summary

Over a year after COVID-19 was declared a pandemic, the impacts on the aviation industry remain dramatic, including at Heathrow.

At the start of the pandemic, we worked quickly to protect the business through keeping people safe, maintaining service standards, mitigating costs, protecting revenues and preserving liquidity. We worked with other airports and airlines around the world to set and achieve high standards of COVID-19 safety in the end to end passenger journey, and we implemented them at Heathrow. Our investment in the latest COVID-19 secure technologies and processes has seen Heathrow awarded the Skytrax 4* rating, the highest achieved by a UK airport.

Whilst fewer than 4 million people travelled through Heathrow in the first six months of 2021, a level that would have taken just 18 days to reach in 2019, recent changes to the Government's traffic light system are encouraging. Progress in vaccination rollouts and testing technologies coupled with lower infection rates both in the UK and abroad have enabled governments to start easing travel restrictions, however, expensive testing requirements and travel restrictions are still holding back the UK's economic recovery.

As we prepare for increasing demand, we have taken the step to recommence operations in Terminal 3 and are once again operating from two runways. This provides additional capacity and ensures passengers can travel safely and securely through Heathrow in the coming months. In addition, in June, Terminal 4 was re-opened as a dedicated facility for arrivals from 'red list' countries. These 'red list' routes have become a crucial part of the UK Government's risk-based framework for international travel and this facility serves 'red list' passengers arriving on direct flights only. We anticipate the need for a dedicated facility for red arrivals for the foreseeable future.

This summer, we started undertaking trials with British Airways and Virgin Atlantic designed to support the Government in lifting some of the restrictions for travellers arriving from 'amber list' countries. These new trials will provide the Government with evidence that inbound travellers from all nationalities can present their fully vaccinated status in digital or paper format as proof of their vaccination status. It can be quickly and easily checked away from the border and allow safe entry to the UK. The aim is to provide sufficient reassurance that Government can and will ease restrictions on travel from those who have protected themselves and others through completing a recognised vaccination programme.

Decarbonising the aviation sector remains a key priority in our sustainable growth plan and will become a prerequisite for the sector's growth. In 2020, we achieved a significant milestone with our airport operation becoming carbon neutral. We welcome the Government's sixth Carbon Budget which will add further impetus on aviation decarbonisation.

In early June 2021, Heathrow became the first major UK airport to successfully integrate Sustainable Aviation Fuels (SAF) into its operation, ahead of the G7 Summit. Sustainable Aviation Fuels are key to taking the carbon out of flying – but the Government must act now to introduce a mandate that requires a minimum of 10% SAF use by airlines by 2030, rising to at least 50% by 2050. Currently, 62% of Heathrow airlines have committed to 10% SAF by 2030, ahead of the Climate Change Committee target of 7.5%. Additionally, we are leading an 18 month ten-strong consortium, funded by the Innovate UK 'Future Flight' programme, researching the introduction of hydrogen and electric aircraft into the aviation system.

Taking the carbon emissions out of flying remains an ethical and business imperative for Heathrow. We are playing a leadership role to create momentum to solve the problem across all our carbon emission scopes.

In addition to our focus on carbon, we continue to take our overall sustainability objectives seriously. We anticipate that 2022 will be a year of recovery, when passenger confidence and ability to fly starts to build back; it is important that we encourage this to happen in the most sustainable and responsible way, minimising impacts on those who live around the airport, on our local environment and noise.

Challenges remain, but long-term recovery will be secured through stimulating and stabilising passenger volumes – this objective sits at the heart of Heathrow's proposed pricing structure. We will do this while retaining our collective focus on sustainability.

To secure the recovery of passenger volumes, the ultimate objective of our pricing proposal is to attract passengers, while maintaining responsible investment in our world class passenger terminals and operational facilities which is key to maintaining the levels of service that our airlines and passengers expect. We will do this while maintaining a safe, reliable operation which balances service and financeability.

Heathrow is proposing to set 2022 prices to recover a yield of £37.636 per passenger.

Our 2022 consultation proposal includes:

- Increasing the proportion of the maximum allowable yield recovered via movement charges to incentivise efficient and sustainable use of airport assets through higher load factors;
- Incentives to encourage efficient airline build-back, increase consumer choice and promote UK connectivity;
- Introducing a new Sustainable Aviation Fuels incentive to encourage uptake at Heathrow and stimulate UK production by signalling a multi-year commitment;
- Introducing a weight-based cargo charge to reflect proportionate, efficient and sustainable use of airport assets; and
- A new super low noise chapter to continue efforts to reduce impacts on the environment via the use of best in class aircraft and mitigate the impact of flying on those who live around the airport.

Publication of this consultation document initiates the consultation process. We are keen to listen to customer feedback throughout this process and we thank those who have already expressed early views.

Heathrow will be holding a consultation meeting on 9 September 2021. To help inform the consultation, Heathrow requests written responses from the airline community by 1 October 2021. Heathrow will consider all comments received during the consultation period, ahead of issuing a decision by 31 October 2021 for implementation from 1 January 2022.

Chapter 1 – Introduction and Consultation Programme

Purpose

- 1.1 The purpose of this document is to set out Heathrow's proposal for the level of airport charges and invite the airline community to provide views on the proposals.
- 1.2 We are proposing to set airport charges for 2022 based on our latest business plan, submitted to the Civil Aviation Authority as part of the H7 price control review process¹. Our plan is in the interests of consumers, it is based on extensive stakeholder engagement, and it has been formulated from a solid evidence base. We are therefore confident that using this price is in the best interest of all airport users.

Economic Regulation

- 1.3 In December 2012, the Civil Aviation Act 2012 (the "Act") came into force. The Act allows the CAA to set the maximum yield per passenger that may be levied by Heathrow through the application of the price control conditions under a new licence. The existing price control conditions expire at the end of 2021, and no price control condition is in place for the start of 2022. The CAA is currently in the process of determining the price control condition for the period 2022 to 2026 and has not yet confirmed their intentions for this. This process is anticipated to result in new price control conditions in Q2 2022.
- 1.4 Airport charges are levied on operators of aircraft in connection with the landing, parking, or take-off of aircraft at the airport (including charges that are to any extent determined by reference to the number of passengers on board the aircraft)².
- 1.5 Under the terms of the Q6 Licence the CAA requires Heathrow to (i) meet service quality conditions and (ii) consult on capital investment and other regulated charges. Whilst these provisions will cease to have effect from 1 January 2022 Heathrow is voluntarily committing to continue to operate, and charge, as though they were effective.
- 1.6 The CAA conditions for service quality require Heathrow to make payments to airlines if it fails to meet the assigned targets. The service quality measures include: terminal seat availability; cleanliness; way-finding; flight information; passenger-sensitive equipment; arrivals reclaim; stands; jetties; pier service; fixed electrical ground power; pre-conditioned air; central security queuing; transfer security queuing; staff security queuing; control post queuing; stand entry guidance; and track transit system. Further details on the service quality measures and performance can be found at www.heathrow.com³. Our service quality regime will remain in place in 2022.
- 1.7 Details of Heathrow's capital investment plan can be found at www.heathrow.com⁴, a list of other regulated facilities and services can be found at www.heathrow.com/orc and a list of property accommodation can be found at www.heathrow.com/property. In addition, the full schedule of airport charges is listed in the Conditions of Use, which can be found at www.heathrow.com/cou.

¹ <https://www.heathrow.com/company/about-heathrow/economic-regulation/h7-update>

² The Airport Charges Regulations 2011

³ <https://www.heathrow.com/company/about-heathrow/performance/airport-operations/quality-rebate-and-bonus-scheme>

⁴ <https://www.heathrow.com/company/about-heathrow/economic-regulation/h7-update>

Impact of COVID-19

- 1.8 The years 2020 and 2021 have been the toughest years by far in Heathrow's 75-year history. By 30 June 2021, Heathrow's cumulative losses from COVID-19 had grown to £2.9bn. We have taken decisive management action from the start of the pandemic to protect jobs and the financial resilience of the business. We reduced cash burn by over 50% versus H1 2019, with a 35% reduction in operating costs by 35% and cut capital expenditure by 77%.
- 1.9 Nonetheless, there has been a significant impact on the regulatory building blocks which calculate the minimum required revenue and set out the required airport charge on an annual basis. If Heathrow were proposing to use a pure building block formula for calculating the charge for 2022 – a year which will start without a price control in force – the result would be a charge of £62.55 (2018 prices). Recognising the negative implications such an increase on the charge would have on all users of the airport, we are proposing an alternative for the 2022 airport charge which is driven by financeability responsibilities to the airport ecosystem rather than purely using regulatory building blocks to determine the required revenue. Further detail is set out in Chapter 2.

Approach to setting the 2022 airport charge

- 1.10 The CAA modified Heathrow's licence on 21 December 2016 under section 22 of the Act. The modifications extended the current price control for Heathrow, which initially ran from 1 April 2014 to 31 December 2018, by one year so that it would end on 31 December 2019. The modification rolled over the existing control in the last year of Q6 on the same terms, i.e. a price path of the Retail Price Index (RPI) -1.5%. In April 2018, the CAA confirmed that an interim regulatory period would be implemented ahead of the H7 period. This period started on 1 January 2020 and runs until 31 December 2021 and is known as the interim H7 period or iH7. The CAA confirmed the implementation of the iH7 period through its notice of licence modifications in November 2019, with modifications effective from 1 January 2020.
- 1.11 The price control condition in Heathrow's Licence expires on 31 December 2021. This means that pending further information or decisions from the CAA, the previous RPI-X formula does not apply in respect of 2022 charges. The CAA is currently considering the price conditions that should apply between 2022 and 2026 and this process is anticipated to complete in Q2 2022.
- 1.12 Given the lack of information from CAA regarding its decision on the H7 price control or its approach to 2022, Heathrow has engaged separately with the CAA and airline community on the approach to setting charges for the start of 2022. We provided information supporting the 2022 charge in our Revised Business Plan (RBP) that was published in June 2021. As at the time of publishing this consultation, no decision has been reached by the CAA or agreement between CAA, airline community and Heathrow on a specific charge level for the start of 2022. Therefore, Heathrow is consulting on the basis of the 2022 yield set out in the update to its RBP, published in June 2021.
- 1.13 The charge is the profiled 2022 charge as set out in the RBP Update 1, which is £39.848 (outturn price).
- 1.14 We plan to apply these charges in a manner consistent with the price formula that applied in previous years, and therefore we have included an adjustment to reflect over-recovery compared to the price cap in 2020. When the Correction (K) Factor of £2.212 (outturn price) is applied, the charge reduces to £37.636.

- 1.15 The CAA is currently working towards its view of the price control formula that should apply from 2022 to 2026 (H7) and has indicated that it plans to publish its Initial Proposals later this year with a final decision currently likely in Q2 2022. The charge the CAA determines for 2022 may be different from that on which we are currently consulting. The implications of this for the 2022 charge are not currently clear and Heathrow will work with airlines and the CAA as the H7 outcome becomes clear. We welcome views as part of consultation responses on the best response to the CAA final proposal with respect to the aeronautical charge.

Consultation Programme

- 1.16 Heathrow is consulting on the level of charges for 2022 with the airline community and plans to announce its final decision by 31 October 2021, in accordance with the requirements of the Airport Charges Regulations 2011. The publication of this consultation document is the start of our consultation on the annual setting of airport charges.
- 1.17 The consultation programme is as follows:

Table 1

Date	Milestone
31 Aug 2021	Publication of Heathrow consultation document
09 Sep 2021	Consultation meeting
01 Oct 2021	Airline written responses submitted by close of business
31 Oct 2021	Heathrow announces 2021 prices
1 Jan 2022	Prices and updated Conditions of Use applicable

- 1.18 The consultation meeting will be held on 9 September 2020 which will provide the airline community with the opportunity to comment on the pricing and Conditions of Use proposals, in addition to providing any written comments by 1 October 2020. The meeting will be open to all airlines and their representative bodies.

Date: Thursday 9 September 2020
 Time: 14:30 to 16:30
 Location: Microsoft Teams Meeting

- 1.19 Please let us know if you would like to attend the consultation meeting using the email address provided below.

How to Respond

- 1.20 We invite interested parties to submit written responses to the proposals set out in this document by close of business on 1 October 2020. Responses should be sent to: airline_relations@heathrow.com. You should also use this email address in the event you have any questions on the consultation document or associated process.
- 1.21 Please clearly mark any information that should be treated as confidential in responses to this consultation.

Chapter 2 – Calculating the Maximum Allowable Yield

- 2.1 The price control condition in Heathrow's Economic Licence expires on 31 December 2021. The previous RPI-X formula is therefore no longer legally applicable in respect of calculating the 2022 airport charges.
- 2.2 Heathrow is therefore consulting on the basis of the 2022 yield set out in the update to its RBP, published in June 2021. Our plan is in the interests of consumers, it is based on extensive stakeholder engagement, and it has been formulated from a solid evidence base. Full details of our business plan can be found at:

<https://www.heathrow.com/company/about-heathrow/economic-regulation/h7-update>

- 2.3 The proposed maximum allowable yield as set out in RBP update 1 is £39.848 (outturn price).
- 2.4 Table 1 below sets out the basis of the charge.

Table 1: RBP Building blocks for the 2022 airport charge options

£ millions, 2018 prices		RBP Charge
Opex		1,054
Non aero		-733
Cargo revenue		-16
Return on RAB		1,514
Depreciation		882
Revenue requirement	B	2,701
Passengers	A	43.2
Unprofiled yield, £	B / A	62.55
Depreciation deferral	C	-635
Profiling adjustment	D	-520
Aero revenue	E = B + C + D	1,546
Final RBP yield, £	E / A	35.81

Source: Heathrow

- 2.5 The 2018 prices are converted to outturn in the table below using the following calculation, which is consistent with the conversion approach used previously through the price control condition:

$$\text{Charge (2018p)} \times (\text{RPI April '21: } 301.1 / \text{RPI April '17: } 270.6) = \text{Charge (Outturn)}$$

- 2.6 While it is not required to use the normal RPI-X formula to calculate the 2022 airport charge, we have adopted an approach that is consistent with the iH7 price control condition. Therefore, we have applied the correction (K) factor in a way which is consistent with the Q6 licence to ensure that any over or under recovery against the maximum allowable yield from 2020 has been accounted for. The K Factor sets out the level of over-recovery or under-recovery on a per passenger basis. Over-recovery is when Heathrow exceeds the maximum allowable yield on a per

passenger basis. Under-recovery is when Heathrow does not achieve the maximum allowable yield on a per passenger basis. Since Heathrow over-recovered in 2020, the charge has been reduced by £2.212. The K factor has been calculated using the pre-shock factor 2022 passenger forecast, which is consistent with the approach used in previous years. Further details are provided in Chapter 3 – Correction Factor for 2020.

2.7 The final charge is £37.636 (outturn price), as presented in Table 2 below.

Table 2: Final 2022 charge adjusted for inflation and K factor

	2018p	Convert to outturn using April 17 to April 21 RPI	K factor (2020 over-recovery) (outturn)	2022 Charge adjusted for K factor (outturn)
RBP Charge	£35.812	£39.848	£2.212	£37.636

Source: Heathrow

Minimum revenue requirement

- 2.8 By 30 June 2021, Heathrow's cumulative losses from COVID-19 had grown to £2.9bn. We have taken decisive management action from the start of the pandemic to protect jobs and the financial resilience of the business. We reduced cash burn by over 50% versus H1 2019, with a 35% reduction in operating costs by 35% and cut capital expenditure by 77%. Despite these actions, as with most infrastructure businesses, there remain material fixed elements of our cost base, which are spread across a significantly reduced passenger base; fewer than 4 million people travelled through Heathrow in the first six months of 2021, a level that would have taken just 18 days to reach in 2019. Our passenger forecast for 2022 is far below the pre-pandemic 80.9m passengers we served in 2019.
- 2.9 COVID-19 has resulted in a significant impact on the regulatory building blocks which calculate the minimum required revenue. The result of using the building block formula, based on the forecast reduction in passenger numbers for 2022, would be a charge far greater than the option we are presenting in this consultation. The proposal under consultation reflects the yield required to meet Heathrow's minimum revenue requirement to meet financeability obligations for 2022, and results in less revenue than the cost of providing the service. The building block cost would be equivalent to a £62.55 charge (2018p) in 2022. The proposed charge of £35.81 (2018p pre-K factor) in 2022 is therefore significantly less than this amount.
- 2.10 The charge for 2022 in the RBP is significantly below that required to recover the cost of providing airport services and has been determined by assessing the minimum level of revenue required to ensure that Heathrow does not suffer from a further downgrade by credit rating agencies (see RBP Update 1 Chapter 5.7). Such a downgrade would lead to higher costs in the long run and would reduce the ability of the airport to invest in appropriate service and resilience leading to worse outcomes for passengers. We consider that the proposed charge is in the long-term interests of consumers.

H7 Changes to the 2022 Charge

- 2.11 Our business plan includes changes related to Other Regulated Charges (ORCs), firstly removing business rates from the airport charge and placing them into a separate ORC, and secondly recovering allocated costs and annuities through the airport charge rather than through ORCs. Both of these H7 proposals have been factored into the 2022 airport charge options.
- 2.12 The impact of removing business rates from the airport charge is a reduction of £95m (2018 price).
- 2.13 The impact of including allocated costs and annuities in the 2022 airport charge is £49m (2018 price).
- 2.14 Further detail on the rationale for these changes is set out in our RBP Update ⁵.
- 2.15 As part of the price control condition in setting the maximum allowable yield, we would normally include an SQRB bonus adjustment to account for any bonuses that have been accrued two years prior (for 2022 charges the relevant year is 2020). We earned £296,000 in bonuses in 2020. These have not been included in the charge for 2022 to maintain simplicity and transparency. However, we expect the 2020 bonus to be included within the calculation of the K factor correction mechanism in 2024. We also expect any bonuses incurred for 2022 to be recovered through future charges.
- 2.16 For completeness, the 2022 airport charge options do not reflect any proposed H7 changes to the Service Quality Rebates and Bonuses / Outcomes Based Regulation scheme.
- 2.17 The CAA plans to publish its final decision for H7 sometime in 2022 and we will reflect on whether this requires Heathrow to amend its charge when we have clarity on the CAA's decision making. We welcome views as part of consultation responses on the appropriate course of action at this stage.

⁵ <https://www.heathrow.com/company/about-heathrow/economic-regulation/h7-update> - RBP Update 1 pp252-253, June 2021

Chapter 3 – Correction Factor for 2020

The Correction factor

- 3.1 The K Factor sets out the level of over-recovery or under-recovery on a per passenger basis. Over-recovery is when Heathrow exceeds the maximum allowable yield on a per passenger basis. Under-recovery is when Heathrow does not achieve the maximum allowable yield on a per passenger basis. This over/under-recovery generally reflects a change in mix of actual passengers and movements compared to the forecasts used to set the airport charges for that relevant year. During the period from the start of the pandemic, we have been subject to significant forecast uncertainty which has led to the over-recovery we experienced in 2020. While it is not required to use the normal RPI-X formula to calculate the 2022 airport charge, we have applied the correction (K) factor to ensure that any over or under-recovery in 2020 has been accounted for in a manner consistent with the Q6 licence.
- 3.2 The K Factor formula has a component to calculate the actual allowable yield, the K Factor formula is shown below:

$$K_t = \frac{R_{t-2} - (Q_{t-2}M_{t-2})}{Q_t} \left(1 + \frac{I_{t-2}}{100}\right)^2$$

Formula for 2020 actual maximum allowable yield

- 3.3 The combined impact of all the elements of the formula results in 2020 actual maximum allowable yield of £21.738 (passenger only flights). 2020 is the Regulatory Period from 1 January 2020 to 31 December 2020. The section below presents the components of the formula.

- 3.4 M_{t-2} relates to 2020 and its calculation is shown below:

$$M_{2020} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2020}	=	maximum revenue yield per passenger using Heathrow airport in Regulatory Year (“2020”) expressed in pounds.
RPI_{t-1}	=	is the percentage change (positive or negative) in the Office for National Statistics (ONS) CHAW Retail Price Index between April in year t-1 and the immediately preceding April. For 2020 this would be the change from April 2018 to April 2019.
X	=	-1.5%
B_{t-2}	=	The formula includes a bonus factor that allows the airport to recover a bonus when performance on certain service quality measures exceed a specified service standard. The bonus

term in any given year is based on actual service quality, based on the two year period preceding the relevant year.

Y_{t-1}	=	specified average revenue yield per passenger for the period t-1 (2019).
D_t	=	cumulative development capex adjustment.
T_t	=	reduction in maximum allowable charges when the airport has not achieved specific trigger dates associated with relevant projects (Triggers).
A_t	=	cost pass-through for runway expansion.
BR_t	=	business rates revaluation factor.
K_t	=	correction factor (K Factor) per passenger (whether positive or negative value) for 2018.
Q_t	=	actual passengers using Heathrow airport in 2020.

Application of the Regulatory Pricing Formula

Where :

RPI_{t-1}	=	3.00%	
X	=	-1.5%	
B_{t-2}	=	0.042%	- this figure is an actual
Y_{t-1}	=	£23.183	
D_t	=	-£40,154k	- this figure is an actual
T_t	=	£3,072	- this figure is an actual
A_t	=	£10,000	- this figure is an actual
BR_t	=	-£34,638	
Q_t	=	22,110k	- this figure is an actual
K_t	=	-1.267	- this figure is an actual

Hence:

$$M_{2020} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2020} = (1 + 3.00\% + -1.5\% + 0.042\%)23.183 + \frac{(-40,154)}{22,110} - \frac{3,072}{22,110} + \frac{10,000}{22,110} + \frac{-34,638}{22,110} - (-1.267)$$

$$M_{2020} = (1.015 * 23.183) + (-1.816) - 0.139 + 0.452 + (-1.567) - 1.267$$

$$M_{2020} = 21.738$$

3.5 The actual maximum allowable yield for 2020 is £21.738.

3.6 The components of the formula are explained in the following sections.

Bonus term (2018)

3.7 The regulatory pricing formula includes a bonus factor that allows the airport to recover a bonus when performance on certain service quality measures exceed a specified service standard. The bonus term in any given year is based on actual service quality, based on the two year period preceding the relevant year

3.8 Therefore the k factor for 2020 includes a bonus for the period 2018, of 0.042%.

Cumulative development capex adjustment

3.9 The cumulative development capex adjustment adjusts the actual maximum allowable yield to account for the actual difference between the development capex allowance and actual development capex spend. Heathrow has used less than the development capex allowance on a cumulative basis to 2020.

3.10 The below table sets out the formula used to calculate the cumulative development capex adjustment. The 2020 formula is used:

Year t =	9mo.2014	2015	2016	2017	2018	2019	2020
Additional revenue requirement for 2014 projects	$0.5 \times d_{2014}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-5}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-6}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-7}} \times d_{2014}$
Additional revenue requirement for 2015 projects	0	$0.5 \times d_{2015}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-5}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-6}} \times d_{2015}$
Additional revenue requirement for 2016 projects	0	0	$0.5 \times d_{2016}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2016}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2016}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2016}$	$\frac{P_{t-1}}{P_{t-5}} \times d_{2016}$
Additional revenue requirement for 2017 projects	0	0	0	$0.5 \times d_{2017}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2017}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2017}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2017}$
Additional revenue requirement for 2018 projects	0	0	0	0	$0.5 \times d_{2018}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2018}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2018}$
Additional revenue requirement for 2019 projects	0	0	0	0	0	$0.5 \times d_{2019}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2019}$
Additional revenue requirement for 2020 projects							$0.5 \times d_{2020}$
D_t =	Sum Rows x W	Sum Rows x W	Sum Rows x W	Sum Rows x W	Sum Rows x W	Sum Rows x W	Sum Rows x W

Where:

- W = Weighted Average Cost of Capital which shall have a value of 5.35%
- d₂₀₁₄ = Annual development capex adjustment in 2014
- d₂₀₁₅ = Annual development capex adjustment in 2015
- d₂₀₁₆ = Annual development capex adjustment in 2016
- d₂₀₁₇ = Annual development capex adjustment in 2017
- d₂₀₁₈ = Annual development capex adjustment in 2018
- d₂₀₁₉ = Annual development capex adjustment in 2019
- d₂₀₂₀ = Annual development capex adjustment in 2020
- P_{t-1} = ONS CHAW Retail Price Index in April in 2019 is 288.2
- P_{t-2} = ONS CHAW Retail Price Index in April in 2018 is 279.7
- P_{t-3} = ONS CHAW Retail Price Index in April in 2017 is 270.6
- P_{t-4} = ONS CHAW Retail Price Index in April in 2016 is 261.4
- P_{t-5} = ONS CHAW Retail Price Index in April in 2015 is 258.0
- P_{t-6} = ONS CHAW Retail Price Index in April in 2014 is 255.7
- P_{t-7} = ONS CHAW Retail Price Index in April in 2013 is 249.5

D₂₀₁₇: Annual development capex adjustment is calculated as follows:

$$d_{2014} = O_{2014} - \left(V_{2014} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2014} = \text{£}363,400\text{k}$$

$$V_{2014} = \text{£}439,100\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2013 is 249.5}$$

$$d_{2014} = 363,400 - \left(439,100 * \frac{249.5}{222.8} \right)$$

$$d_{2014} = \text{-£}128,321\text{k}$$

Hence d_{2015} :

$$d_{2015} = O_{2015} - \left(V_{2015} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2015} = \text{£}590,000\text{k}$$

$$V_{2015} = \text{£}669,000\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2014 is 255.7}$$

$$d_{2015} = 590,000 - \left(669,000 * \frac{255.7}{222.8} \right)$$

$$d_{2015} = \text{-£}177,789\text{k}$$

Hence d_{2016} :

$$d_{2016} = O_{2016} - \left(V_{2016} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2016} = \text{£}683,000\text{k}$$

$$V_{2016} = \text{£}645,600\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2015 is 258.0}$$

$$d_{2016} = 683,000 - \left(645,600 * \frac{258.0}{222.8} \right)$$

$$d_{2016} = \text{-£}64,598\text{k}$$

Hence d_{2017} :

$$d_{2017} = O_{2017} - \left(V_{2017} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2017} = \text{£}665,000\text{k}$$

$$V_{2017} = \text{£}528,800$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2016 is } 261.4$$

$$d_{2017} = 665,000 - \left(528,800 * \frac{261.4}{222.8} \right)$$

$$d_{2017} = \text{£}44,586$$

Hence d_{2018} :

$$d_{2018} = O_{2018} - \left(V_{2018} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2018} = \text{£}626,000\text{k}$$

$$V_{2018} = \text{£}533,900\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2017 is } 270.6$$

$$d_{2018} = 626,000 - \left(533,900 * \frac{270.6}{222.8} \right)$$

$$d_{2018} = \text{-£}22,444\text{k}$$

Hence d_{2019} :

$$d_{2019} = O_{2019} - \left(V_{2019} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2019} = \text{£}594,000\text{k}$$

$$V_{2019} = \text{£}517,769\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2018 is } 279.7$$

$$d_{2019} = 594,000 - \left(517,769 * \frac{279.7}{222.8} \right)$$

$$d_{2019} = \text{-£}56,000\text{k}$$

Hence d_{2020} :

$$d_{2020} = O_{2020} - \left(V_{2020} * \frac{P_{t-1}}{222.80} \right)$$

$$O_{2020} = \text{£}356,000\text{k}$$

$$V_{2020} = \text{£}734,927\text{k}$$

$$P_{t-1} = \text{ONS CHAW Retail Price Index in April 2019 is 288.2}$$

$$d_{2020} = 356,000 - \left(734,927 * \frac{288.2}{222.8} \right)$$

$$d_{2020} = \text{-£}594,655\text{k}$$

3.11 Therefore d_{2014} , d_{2015} , d_{2016} , d_{2017} , d_{2018} , d_{2019} , and d_{2020} is applied to the development capex adjustment table, as follows to determine the adjustment:

Year t =	2017	Results in
Additional revenue requirement for 2014 projects	$\frac{288.2}{249.5} \times -128,321$	-148,225
Additional revenue requirement for 2015 projects	$\frac{288.2}{255.7} \times -177,789$	-200,386
Additional revenue requirement for 2016 projects	$\frac{288.2}{258.0} \times -64,598$	-72,159
Additional revenue requirement for 2017 projects	$\frac{288.2}{261.4} \times -44,586$	49,157
Additional revenue requirement for 2018 projects	$\frac{288.2}{270.6} \times -22,444$	-23,904
Additional revenue requirement for 2019 projects	$\frac{288.2}{279.7} \times -56,000$	-57,702
Additional revenue requirement for 2020 projects	$0.5 \times -594,655$	-297,328
$D_t =$		-750,547 x 5.35%

$$D_t = \text{-£}40,154\text{k}$$

Triggers

- 3.12 The K Factor for 2020 adjusts the completion dates for trigger projects that had trigger completion dates in 2020.
- 3.13 There was one project that had a completion date falling into 2020: B216 – Hold Baggage Screening standard 3 machines installed in T2.
- 3.14 One project, the Main Tunnel Life Safety Systems has not met its milestone dates. Therefore, there is a trigger payment in 2020.

Table 9

	Trigger Month	Forecast Completion Date
Main Tunnel Life Safety Systems	Dec-16	Mar-23

- **Main Tunnel Life Safety Systems**

Trigger date	= December 2016
Forecast Completion	= March 2023
Delay	= 75 months
Months falling into 2020	= 12 months
Monthly Payment	= £91,400 in 2011/12 prices
Actual Payment	= £1,096,800 in 2011/12 prices
Inflation Index (RPI)	= 1.294 ⁶
Actual Payment	= £1,418,751 in 2020 prices
Actual Passengers (000s)	= 22,110 in 2020
Impact on Yield	= £0.064 in 2020

Table 10

	Trigger Month	Actual Completion Date
Hold baggage screening standard 3 machines installed in Terminal 2	Sep-18	Mar-20

- **Hold baggage screening standard 3 machines installed in Terminal 2**

Trigger date	= September 2018
Actual Completion	= March 2020
Delay	= 18 months

⁶ The monthly payment for triggers is shown in 2011/12 prices and then is required to be adjusted to account for the difference in ONS CHAW Retail Price Index in April 2018 and April 2010 i.e. 288.2/222.8

Months falling into 2020	= 3 months
Monthly Payment	= £426,000 in 2011/12 prices
Actual Payment	= £1,278,000 in 2011/12 prices
Inflation Index (RPI)	= 1.294
Actual Payment	= £1,653,140 in 2020 prices
Actual Passengers (000s)	= 22,110 in 2020
Impact on Yield	= £0.075 in 2020

K factor for 2020

Actual passengers	22,110
Actual airport charges revenue	572,000
Actual yield	25.871
Actual maximum allowable yield	21.738
Under/Over-Recovery	<i>Over-Recovery</i>

Total revenue from airport charges (passenger only flights) at Heathrow in	2020	Actual (£000s)	R_{t-2}	572,000
Passengers using Heathrow Airport in	2020	Actual (000s)	Q_{t-2}	22,110
Maximum allowable revenue yield at Heathrow in	2020	Actual (£)	M_{t-2}	21.738
Interest rate from weekly Treasury Bill Discount rate	2020	Actual %	I_{t-2}	3.000
Forecast Passengers using Heathrow in	2022	Forecast (000s)	Q_t	43,819
Correction amount	$K_t = ((R_{t-2} - (Q_t \times M_{t-2})) / Q_t \times (1 + I_{t-2} / 100))^2$		K_t	2.212

Table 11

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
01-May-20	03-Aug-20	3,000	3.16	0.136
07-May-20	10-Aug-20	3,000	2.73	0.130
15-May-20	17-Aug-20	2,500	3.05	0.096
22-May-20	24-Aug-20	2,000	2.51	0.090
29-May-20	01-Sep-20	1,000	4.14	0.051
05-Jun-20	07-Sep-20	1,000	4.40	0.034
12-Jun-20	14-Sep-20	1,000	4.48	0.023
19-Jun-20	21-Sep-20	1,000	3.63	0.023
26-Jun-20	28-Sep-20	500	6.62	0.007
03-Jul-20	05-Oct-20	1,000	3.13	0.004
10-Jul-20	12-Oct-20	2,500	1.73	0.020
17-Jul-20	19-Oct-20	2,000	2.30	0.036
24-Jul-20	26-Oct-20	1,000	4.19	0.031
31-Jul-20	02-Nov-20	1,000	4.68	0.027
07-Aug-20	09-Nov-20	1,000	4.81	0.024
14-Aug-20	16-Nov-20	1,000	4.38	0.015
21-Aug-20	23-Nov-20	750	4.11	0.010
28-Aug-20	30-Nov-20	750	4.80	0.004
04-Sep-20	07-Dec-20	750	3.88	0.008
11-Sep-20	14-Dec-20	750	5.82	0.004
18-Sep-20	21-Dec-20	750	6.03	-0.004
25-Sep-20	29-Dec-20	500	5.73	-0.004
02-Oct-20	04-Jan-21	500	8.52	-0.019
09-Oct-20	11-Jan-21	500	7.39	-0.023
16-Oct-20	18-Jan-21	500	9.12	-0.039
23-Oct-20	25-Jan-21	500	6.77	-0.045
30-Oct-20	01-Feb-21	500	6.99	-0.053
06-Nov-20	08-Feb-21	500	6.73	-0.062
13-Nov-20	15-Feb-21	500	8.76	-0.093
20-Nov-20	22-Feb-21	500	6.32	-0.102
27-Nov-20	01-Mar-21	1,000	3.88	-0.118
04-Dec-20	08-Mar-21	2,000	2.33	-0.107
11-Dec-20	15-Mar-21	2,000	1.90	-0.080
18-Dec-20	22-Mar-21	2,000	2.88	-0.068
24-Dec-20	29-Mar-21	1,000	3.93	-0.061
08-Jan-21	12-Apr-21	1,000	5.28	-0.069
15-Jan-21	19-Apr-21	1,000	3.15	-0.025
22-Jan-21	26-Apr-21	1,000	5.01	-0.009
29-Jan-21	04-May-21	1,000	4.03	-0.003
05-Feb-21	10-May-21	1,000	3.49	0.008
12-Feb-21	17-May-21	500	6.96	0.008
19-Feb-21	24-May-21	500	6.64	-0.001
26-Feb-21	01-Jun-21	1,000	3.86	0.007
05-Mar-21	07-Jun-21	1,000	3.52	0.000
12-Mar-21	14-Jun-21	1,000	2.08	0.016
19-Mar-21	21-Jun-21	1,000	3.64	0.016

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
26-Mar-21	28-Jun-21	1,000	3.32	0.005
01-Apr-21	05-Jul-21	1,500	1.92	0.025
09-Apr-21	12-Jul-21	1,000	3.73	0.029
16-Apr-21	19-Jul-21	1,000	3.13	0.027
23-Apr-21	26-Jul-21	1,000	2.36	0.039
30-Apr-21	02-Aug-21	1,000	2.45	0.041

Application of the Regulatory Pricing Formula

- 3.15 The actual maximum allowable yield for 2020 is £21.738 compared to the actual yield recovered of £25.871 which results in an over-recovery of £2.212 (taking into account interest rate). This over-recovery is included in the K Factor for 2020 in setting airport charges in 2022, thereby lowering the charge.

Chapter 4 – Overview of charges

COVID-19

- 4.1 COVID-19 has continued to have significant impact on travel demand in 2021 and on the maximum allowable yield requirement in 2022. Heathrow's pricing proposals for 2022 have been constructed to help stimulate the best and most sustainable use of airport assets and promote sustainable growth.

Passenger Charges

- 4.2 Heathrow proposes to reduce the amount of revenue recovered through the passenger charge from 62% in 2021, to 52.5% in 2022. This is driven by a transition of 5% to movement charges and a further 4.4% via the creation of the cargo charge. It will help to reduce the impact of the yield increase on passenger prices vs 2021 and will encourage the return of passenger volumes. Stimulating passenger growth in 2022 is a key component for unlocking the efficient and sustainable use of assets and air traffic movements at the airport. It is therefore in the interests of consumers and all airport users to target sustainable growth in 2022.
- 4.3 The revenue recovered through the Rest of World passenger charge has also been increased, following the reduction in 2021, to reflect the changing mix of passengers forecast. Further detail is outlined in Chapter 10.

European passenger charges

- 4.4 On 1 January 2017 Heathrow introduced a £5.00 passenger discount on European routes with a further £5.00 discount on UK routes. The passenger discount to European routes was increased to £10.00 on 1 January 2018.
- 4.5 The decision to introduce a departing passenger charge discount for European destination passengers was taken to address an imbalance in the load factors of flights to European destinations when compared with flights to Non-European destinations. Since the introduction of the discounts in 2017 and prior to COVID-19, the European load factor increased by 3 percentage points.
- 4.6 The IATA average load factor figure for 2019 was 81.9%⁷. As shown in table 13, European load factors at Heathrow continue to be lower than average while Non-European load factors remain close to the global ICAO average.

Table 13⁸

Year	EU	Non-EU	Δ
2012	70.70%	80.10%	9.40%
2013	71.70%	80.60%	8.90%
2014	73.20%	79.70%	6.50%
2015	73.50%	79.30%	5.80%
2016	73.60%	78.10%	4.50%
2017	75.30%	80.60%	5.30%
2018	76.65%	81.27%	4.62%
2019	76.61%	82.78%	6.17%
Av	73.85%	80.30%	6.46%

⁷ <https://www.iata.org/contentassets/a686ff624550453e8bf0c9b3f7f0ab26/wats-2019-mediakit.pdf>

⁸ Data Source: Heathrow Database

- 4.7 It is reasonable to expect that a European destination total ticket price is more open to influence by small fluctuations to Heathrow's passenger charges when compared with Non-European destinations where Heathrow's charges represent a significantly lower percentage in the total ticket price. For this reason, Heathrow proposes to continue to discount the European passenger charge.

UK Connectivity and Common Travel Area passenger charges

- 4.8 From 1 January 2017 Heathrow introduced a departing passenger charge discount of a further £5.00 to the existing European Destination passenger departing to UK destinations (including nations and crown dependencies). This passenger discount was in direct response to the National Connectivity Task Force (NCTF) report. The NCTF identified the need to make routes to regional airports more attractive to airlines to support them.
- 4.9 As explained in relation to the price of tickets to European destinations, it is reasonable to expect that the ticket prices to these destinations are more open to changes in the passenger charge. Heathrow therefore proposes to increase the UK connectivity discount to the European Destination passenger charge to £7.50 from £5.00. Therefore, during 2021 departing passengers to UK destinations will receive a total £17.50 discount (this is based on a £10.00 European departing passenger load factor discount and £7.50 UK connectivity discount). This will further encourage efficient and sustainable use of airport assets.
- 4.10 In 2021, a new category of passenger charge was introduced for those destinations defined as the Common Travel Area, being the Crown Dependencies (Bailiwick of Jersey, Bailiwick of Guernsey and the Isle of Man) and Ireland. Passengers travelling between UK and CTA destinations are subject to different government requirements from those passengers travelling domestically within the UK or travelling between the UK and European destinations. This includes variation in the customs arrangements for these passengers. In addition, there are differing infrastructure requirements between UK and CTA passengers. To recognise this a £0.25p differential was included and this is retained.

Transfer and Transit passenger charges

- 4.11 Heathrow currently has a discount applied to departing passenger charges for passengers transferring or transiting through the airport. This discount was introduced to encourage transfer passengers to travel through Heathrow to support the hub status of the Airport. The key to any hub is to have a good mix of transfer and origin and destination passengers, to feed the entire network and this is beneficial for all airlines in maintaining the hub network and ensuring assets are used as efficiently as possible.
- 4.12 The following table sets out a summary of the level of transfer/transit passengers at Heathrow:

Table 14⁹

Period	Total Passengers	Transfer passengers	Transfer passengers %
2012	69,985k	19,199k	27.4%
2013	72,333k	19,479k	26.9%
2014	73,375k	19,966k	27.2%
2015	74,959k	19,754k	26.4%
2016	75,676k	19,500k	25.8%
2017	78,040k	19,588k	25.1%

⁹ Data source: ADB Heathrow Airport Limited

2018	80,102k	19,895k	24.8%
2019	80,900k	18,577k	23.0%
2020	22,115k	4,572k	20.7%

- 4.13 As the above table shows, transfer passengers make up a significant proportion of Heathrow's passenger volume. Transfer passengers are key to a hub operation and provide benefit to the connecting network. In some cases, transfer passengers are vital to route viability. Therefore, Heathrow proposes to continue with transfer discounts for 2022.

Seasonal Passenger Charge Temporary Suspension

- 4.14 In 2020, Heathrow introduced seasonality across all passenger charges to address the periods where the majority of empty seats across the year were held.
- 4.15 With the impact of COVID-19 on passenger numbers and the uncertainty regarding the shape in which demand will return, seasonality was suspended as part of the passenger charge for 2021. We propose to maintain this position in 2022.

Minimum Departure Charge

- 4.16 In 2021, changes to the categories of Minimum Departure Charge (MDC), were introduced to reflect the departing passenger charge structure. We propose to maintain both this approach and the load factor assumptions that underpin them. The table below shows the current passenger threshold and equivalent load factor for volumes to fall below before the MDC is triggered by market.

Market	2021 Charge	2022 RBP Charge	Pax
UK	£636.84	£711.08	58
CTA	£673.80	£750.60	60
EU	£1,230.46	£1,521.52	77
RoW	£1,916.50	£3,393.00	50

Sustainable Build Back Incentive Scheme

- 4.17 As governments open their borders and passengers start to return to the skies, it is important that we encourage a sustainable build back of demand to the airport, encouraging growth while maintaining efficient and sustainable use of Heathrow's assets.
- 4.18 With the impact of COVID-19 on passenger numbers, a growth incentive in 2021 was considered to be a key aspect of airport charges in a recovery year, allowing airlines to target the routes and distribution channels that could have the most impact based on their insight into, and experience of, consumer behaviour. This would have meant a targeting of routes with inherently higher demand and load factors as well as stimulating growth in key markets. As a result of the continued uncertainty caused by the COVID-19 pandemic, the proposed incentive was not taken forward.
- 4.19 However, in line with our commitment to review this position in 2022, we see incentivising growth as an increasingly significant aspect of encouraging sustainable behaviour through airport charges and propose to again run an incentive scheme within the structure.

- 4.20 The scheme will operate with an incentive rebate per incremental passenger above specified baselines. In order for an airline to receive the rebate, Heathrow's total passenger numbers must also exceed its specified baseline.
- 4.21 Due to the impact of COVID-19 on 2020 and 2021 passenger numbers, baselines will be calculated by way of applying the percentage reduction of the 2022 passenger forecast at Heathrow versus the 2019 passenger level on an airline pro rata basis. Heathrow's total departing passenger forecast for 2022 is 42.9m passengers. This equates to 53% of 2019 total departing passengers and creates the airport level baseline. Therefore, the airline departing passenger baselines will be set at 53% of their 2019 passenger volumes.
- 4.22 New entrants who were not operating from Heathrow in 2019 will start with a baseline of 0.
- 4.23 In addition, there will be a new markets incentive and any passenger flown to a destination not flown in 2019 will also qualify for the incentive credit.
- 4.24 The incentive scheme will be recovered within the structure of charges for 2022, the incentive has been allocated a pot of £20 million and any under-recovery would be adjusted through the correction factor in 2023.
- 4.25 The sustainable build back incentive will be calculated by dividing the incentive pot by all qualifying passengers and paid proportionally to all qualifying Airlines.
- 4.26 Full proposed terms for the passenger sustainable build back incentive scheme are laid out in the Conditions of Use Draft Consultation Proposal for 2021 in Schedule 5.

Environmental Charges

- 4.27 In 2017, Heathrow introduced a new structure of environmental charges, recognising the implementation of the Chapter 14 noise classification and incentivising airlines to bring their cleanest and quietest aircraft to Heathrow.
- 4.28 These charges have been successful in increasing the proportion of clean and quiet aircraft which arrive at Heathrow, as laid out in the table below.

Table 17¹⁰

% Mix	2016	2017	2018	2019	2020
Chapter 3	0.1%	0.1%	0.1%	0.0%	0.1%
Chapter 4 High	12.8%	11.2%	8.8%	8.9%	6.6%
Chapter 4 Base	27.6%	28.6%	28.6%	25.7%	22.4%
Chapter 14 High	8.8%	8.6%	7.6%	8.4%	8.6%
Chapter 14 Base	35.9%	35.4%	34.0%	30.5%	25.2%
Chapter 14 Low	14.8%	16.2%	21.0%	26.6%	37.1%

- 4.29 We propose to rebalance the reduction in revenue recovered through the passenger charge, to the movement charges to further strengthen our commitment to drive the cleanest and quietest fleet at Heathrow.

¹⁰ Data source: Heathrow Database

- 4.30 In addition, to continue to encourage the quietest and cleanest aircraft to Heathrow, we are proposing to introduce a new 'Chapter 14 Super Low' noise chapter. Chapter 14 Low will now be between -23 and -28 EPNdB and the new super low noise chapter more than -28 EPNdB. The banding has been selected with reference to the recommendations within CAA CAP 1576.
- 4.31 This chapter will have a multiplier of 15% and has been funded by increased charges in Chapter 4 Base and Chapter 4 High.

Sustainable Aviation Fuel Incentive

- 4.32 We have continuously set charges to drive the most sustainable behaviours at Heathrow. During both the 2020 and 2021 Airport Charges Consultations, we stated our intent to further focus on sustainability and build sustainable incentives into our pricing structure.
- 4.33 Climate change is possibly the greatest long-term challenge faced by aviation. There are different initiatives which can contribute to decarbonising flying but it is widely accepted that sustainable aviation fuels (SAF) will play a significant role in decoupling aviation growth and emissions.
- 4.34 At Heathrow, we see SAF as key to achieving net zero and we want to be a leading hub for the development and deployment of sustainable aviation fuels. To this end, we are proposing to introduce a multi-year sustainable fuel incentive, recovered via the Emissions charge, which will reduce the high-cost premium of SAF compared to standard aviation fuel and incentivise the investment in domestic SAF production in the UK which in turn will reduce the SAF premium and encourage further take up.
- 4.35 The proposal is a 4-year commitment which covers 50% of the SAF cost premium to reach a SAF mix at Heathrow of 1% in 2022 and increasing by 1% point each year up to 4% by 2025. The UK Government is also consulting on a SAF mandate and whether further policies are required to incentivise the use of SAF. We want our scheme to provide a helpful incentive that complements the Government's plan and is also available before any Government incentive scheme is confirmed. We welcome views on how we can best complement the Government's plans.
- 4.36 The incentive pot proposed for 2022 is £20m and this has been calculated using the assumed fuel requirements for Heathrow as a whole, applying a 1% target SAF mix, multiplying by a market premium of £920¹¹ and using 50%.

Weight-based cargo charge

- 4.37 Flying cargo in and out of Heathrow shares much of the same infrastructure as passenger movements. It is our intention to recognise this by introducing a weight-based charge for departing cargo into the aeronautical charging structure
- 4.38 The proposal is that 4.4% of the MAY is recovered via this charge and reflects an element of infrastructure usage at Heathrow such as control posts, runway and the airside road network.
- 4.39 This charge will also apply to cargo only movements.
- 4.40 When calculating the Minimum Departure Charge, the cargo charges will be factored into account determining whether a departing flights qualifies for the MDC.

¹¹ Based on SAF cost at 3x kerosene; kerosene base price = \$650USD per metric tonne

Chapter 5 – Calculating airport charges tariffs for 2022

- 5.1 The following steps have been applied to calculate the individual tariffs for 2022, as follows:
- 5.2 The forecast maximum allowable yield for 2022 is £37.636 per passenger.
- 5.3 The proposed proportion of the movement and passenger charges have been rebalanced, the introduction of cargo charging has also resulted in a rebalancing from passenger charges and parking charges remain unchanged.
- 5.4 New charges propose a 5% rebalance levying further charges onto the Movement charges, thus a reduction in passenger charges and a further reduction of 4.4% from the new weight-based cargo charge. Charges are recovered through the following apportionment: Passenger 52.5%, Movement 39.3%, Parking 3.8% and Cargo 4.4%.

Pax charges

- 5.5 The 2022 maximum allowable yield uses a passenger forecast of 43.2 million.
- 5.6 In 2022 passenger charges comprise of charges for Origin & Destination and Transfer & Transit passengers which are then split by market (Domestic, EEA, CTA and RoW). As in 2021, these proposed charges have removed seasonality (see table below).

Pax charge table	Market	2022 Single Tariff
O&D	Domestic	£12.26
O&D	EEA	£12.51
O&D	CTA	£19.76
O&D	RoW	£67.86
Transfer	Domestic	£9.20
Transfer	EEA	£9.39
Transfer	CTA	£14.83
Transfer	RoW	£50.90

- 5.7 The departure charge shall be calculated with reference to the set baseline charge then apportioned out based on transfer and UK connectivity discount. There will be two individual baseline charges one for RoW and one for Domestic/EEA/CTA. The first step is to set the baseline charges which are determined by the departing passenger revenue required, this total revenue is then split into market shares where RoW is allocated 80% and Domestic/EEA/CTA is allocated 20%.
- 5.8 For Domestic, EEA and CTA Origin & Destination the baseline calculation is calculated in four separate steps:
- 5.9 Step 1 applies a transfer multiplier to the baseline charge, 100% for O&D passengers and 75% for transfer passengers.
- 5.10 Step 2 is only applicable to the flights where a Domestic connectivity discount of £7.50 exists. The Domestic connectivity discount has the appropriate transfer multiplier applied as defined above to determine the final connectivity discount for the fare. This means that an O&D passenger receives the full £7.50 discount whereas transfer passengers receive a proportion of the £7.50 discount.
- 5.11 Step 3 is only applicable to flights where a CTA differentiator of £0.25 exists. The CTA differentiator has the appropriate transfer multiplier applied as defined above

to determine the final additional differential for the fare. This means that an O&D passenger receives the full additional £0.25 differential whereas transfer passengers receive a proportion of the additional £0.25 differential.

- 5.12 The final step is to deduct the calculated applicable Domestic connectivity discount (Step 2) and to add the CTA differentiator (Step 3) from the value calculated in Step 1.
- 5.13 For RoW Origin & Destination the baseline calculation is calculated in one step:
- 5.14 Step 1 the baseline charge applies a transfer multiplier to the baseline charge, 100% for O&D passengers and 75% for transfer passengers.
- 5.15 No change to remote stand rebate held at £4.00 per passenger.
- 5.16 Sustainable Build Back incentive rebate is proposed to be £20 million which will be added to the departing passenger charge.



Movement

- 5.17 The applicability of movement charges remains unchanged, where airlines will incur a movement charge for both take-off and landing. Proposed changes to the modulation of charges are described in section 4 above.
- 5.18 The movement charge shall be calculated with reference to the set baseline charge then apportioned out based on the multiplier. The first step is to set the baseline charge which is determined by the environmental and noise revenue required. This baseline is then apportioned out based on a multiplier to the individual noise chapters, this multiplier is structured by weightings which are measured to incentivise the cleanest, quietest fleet i.e. cleaner and quieter aircraft results in a lower multiplier therefore a lower movement charge. This focus on the cleanest and quietest fleet has resulted in price uplift in the Chapter 4 High and Chapter 4 Base aircraft with limited change to Chapter 14's to further incentivise positive environmental choices. The actual charge will be calculated by multiplying the baseline charge against the multiplier.
- 5.19 No change to continued balancing of environmental charges so that 80% of the total environmental charge is recovered through noise charges and 20% of the total environmental charge is recovered through NOx charges.

Parking

- 5.20 There are no proposed amendments to either the parking charge multiplier or the ratio of narrow to wide body.

Cargo

- 5.21 The forecast departing cargo tonnage has been divided by the revenue requirement determined by the share of MAY.

Chapter 6 – Forecast Revenue for 2022

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Movement Charge				
Noise Charge				
<u>Peak</u>				
Chapter 3	[Landings]	0	£11,916.81	£0
Chapter 4 High	[Landings]	10,031	£4,806.45	£48,213,846
Chapter 4 Base	[Landings]	21,735	£3,773.66	£82,018,673
Chapter 14 High	[Landings]	6,628	£2,244.33	£14,874,684
Chapter 14 Base	[Landings]	29,914	£1,600.82	£47,887,073
Chapter 14 Low	[Landings]	29,670	£961.29	£28,521,308
Chapter 14 Super Low	[Departures]	56,169	£595.84	£33,467,817
Total	[Landings]	154,146		£254,983,401
<u>Peak</u>				
Chapter 3	[Departures]	0	£11,916.81	£0
Chapter 4 High	[Departures]	10,031	£4,806.45	£48,213,846
Chapter 4 Base	[Departures]	21,735	£3,773.66	£82,018,673
Chapter 14 High	[Departures]	6,628	£2,244.33	£14,874,684
Chapter 14 Base	[Departures]	29,914	£1,600.82	£47,887,073
Chapter 14 Low	[Departures]	29,670	£961.29	£28,521,308
Chapter 14 Super Low	[Departures]	56,169	£595.84	£33,467,817
Total	[Departures]	154,146		£254,983,401
<u>Super Night Peak</u>				
Chapter 3	[Landings]	0	£59,584.05	£0
Chapter 4 High	[Landings]	1	£24,032.25	£24,032
Chapter 4 Base	[Landings]	6	£18,868.30	£113,210
Chapter 14 High	[Landings]	3	£11,221.65	£33,665
Chapter 14 Base	[Landings]	15	£8,004.10	£120,062
Chapter 14 Low	[Landings]	15	£4,806.45	£72,097
Chapter 14 Super Low	[Departures]	10	£2,979.20	£29,792
Total	[Landings]	50		£392,857
<u>Super Night Peak</u>				
Chapter 3	[Departures]	0	£59,584.05	£0
Chapter 4 High	[Departures]	1	£24,032.25	£24,032
Chapter 4 Base	[Departures]	6	£18,868.30	£113,210
Chapter 14 High	[Departures]	3	£11,221.65	£33,665
Chapter 14 Base	[Departures]	15	£8,004.10	£120,062
Chapter 14 Low	[Departures]	15	£4,806.45	£72,097
Chapter 14 Super Low	[Departures]	10	£2,979.20	£29,792
Total	[Departures]	50		£392,857
Emissions Charge on landing				
Total kg Nox rating	[kg]	3,806,620	£38.80	£147,696,856
Average kg Nox per landing	[kg]	24.7		£147,696,856
SAF Incentive				-£20,000,000
Total Movement Revenue	(a)			£638,449,373

Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount	[Dep Pax]	1,166,702	£12.26	£14,303,772
CTA	[Dep Pax]	524,523	£12.51	£6,561,777
European charge with single discount	[Dep Pax]	6,177,217	£19.76	£122,061,804
Other	[Dep Pax]	8,426,513	£67.86	£571,823,147
Total	[Dep Pax]	16,294,954		£714,750,500
Departing Transfer Passenger Charge				
European charge with dual discount	[Dep Pax]	362,390	£9.20	£3,333,990
CTA	[Dep Pax]	162,922	£9.39	£1,529,840
European charge with single discount	[Dep Pax]	1,918,709	£14.83	£28,454,457
Other	[Dep Pax]	2,617,364	£50.90	£133,223,846
Total	[Dep Pax]	5,061,386		£166,542,133
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	2,332,229	£4.00	£-9,328,915
Passenger Growth; Incentive Rebate				£-20,000,000
Total Departing Passenger Charge Revenue	(b)			£851,963,717

Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	418,094	£36.46	£15,243,713
Wide bodied				
Chargeable Period	[Units of 15 minutes]	614,407	£76.57	£47,045,180
Total Parking Charge	(c)	1,032,502		£62,288,893

Cargo Charge				
Cargo Charge	[Tonne]	810,000	£88.63	£71,790,300
Total Cargo Charge	(d)	810,000		£71,790,300

Terminal Pax Flights: Total Revenue				£1,624,492,283
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Non-Terminal Pax Flights (GA, Troops etc)		
Non-Terminal Pax Flights		
Movement Revenue	(e)	£221,285
Departing Passenger Revenue	(f)	£320,191
Parking Revenue	(g)	£21,590
Cargo Revenue	(h)	£0
Total Non-Terminal Pax Flights Revenue		£563,065

Total Regulated Revenue		
Total Regulated Revenue		
Movement Revenue	(a) + (e)	£638,670,657
Departing Passenger Revenue	(b) + (f)	£852,283,908
Parking Revenue	(c) + (g)	£62,310,483
Cargo Revenue	(d) + (h)	£71,790,300
Total Regulated Revenue		£1,625,055,348
Total Passengers		43,179,295
Total Regulated Yield		£37.636

Chapter 7 – Proposed Airport Charges Tariffs effective 1 Jan 2022

	Final 2022 £ GBP	Final 2021 £ GBP
Charges on Movement		
Peak - Landings		
Chapter 3	£11,916.81	£5,972.46
Chapter 4 High	£4,806.45	£2,209.81
Chapter 4 Base	£3,773.66	£1,692.20
Chapter 14 High	£2,244.33	£1,124.81
Chapter 14 Base	£1,600.82	£802.30
Chapter 14 Low	£961.29	£481.78
Chapter 14 Super Low	£595.84	
Peak - Departures		
Chapter 3	£11,916.81	£5,972.46
Chapter 4 High	£4,806.45	£2,209.81
Chapter 4 Base	£3,773.66	£1,692.20
Chapter 14 High	£2,244.33	£1,124.81
Chapter 14 Base	£1,600.82	£802.30
Chapter 14 Low	£961.29	£481.78
Chapter 14 Super Low	£595.84	
Super Night Peak - Landings		
Chapter 3	£59,584.05	£29,862.30
Chapter 4 High	£24,032.25	£11,049.05
Chapter 4 Base	£18,868.30	£8,461.00
Chapter 14 High	£11,221.65	£5,624.05
Chapter 14 Base	£8,004.10	£4,011.50
Chapter 14 Low	£4,806.45	£2,408.90
Chapter 14 Super Low	£2,979.20	
Super Night Peak - Departures		
Chapter 3	£59,584.05	£29,862.30
Chapter 4 High	£24,032.25	£11,049.05
Chapter 4 Base	£18,868.30	£8,461.00
Chapter 14 High	£11,221.65	£5,624.05
Chapter 14 Base	£8,004.10	£4,011.50
Chapter 14 Low	£4,806.45	£2,408.90
Chapter 14 Super Low	£2,979.20	
Emissions charge (on landing)	£38.80	£20.99

Charges on Departing Passengers		
Origin and Destination		
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	£12.26	£10.98
Common Travel Area	£12.51	£11.23
European charge with single discount <i>(with EU load factor discount)</i>	£19.76	£15.98
Other	£67.86	£38.33
Transfer and Transit		
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	£9.20	£8.24
Common Travel Area	£9.39	£8.43
European charge with single discount <i>(with EU load factor discount)</i>	£14.83	£11.99
Other	£50.90	£28.75
Remote Stand Rebate	-£4.00	-£4.00
Minimum charge - Domestic	£711.08	£636.84
Minimum charge - Common Travel Area	£750.60	£673.80
Minimum charge - European	£1,521.52	£1,230.46
Minimum charge - Other	£3,393.00	£1,916.50

Charges on aircraft parking		
Narrow bodied	£36.46	£25.95
Wide bodied	£76.57	£54.50

Charges on Cargo		
Cargo per Tonne	£88.63	

Chapter 8 - Financial and Traffic Information

Traffic statistics and charging parameters

- 8.1 The actual traffic statistics from 2008/09 to 2020 are set out below to provide more detailed data on those elements of the traffic mix at Heathrow airport which affect the airport charges yield per passenger.

Regulatory accounting information

- 8.2 Heathrow is a privately-owned company and a summary of its regulatory accounts are presented for the 12-month period to 31 December 2020. These accounts compare the airport's financial performance for the year ended 31 December 2020 to the year ended 31 December 2019.
- 8.3 The regulatory accounts include revenue and cost comparisons, and calculations of the Regulated Asset Base.
- 8.4 The full regulatory accounts and annual reports are available from <http://www.heathrow.com/company/investor-centre/regulation/regulatory-accounts>.

£million (unless otherwise stated)	Section	2020 Actual	2019 Actual	Variance	%
Total Passengers (thousands)	2	22,110	80,886	(58,776)	(73%)
Revenue	3				
Airport Charges		647	1,831	(1,184)	(65%)
Other Revenue		512	1,220	(708)	(58%)
Total Revenue		1,159	3,051	(1,892)	(62%)
Expenditure	4				
Operating costs		(911)	(1,155)	244	(21%)
Assumed ordinary depreciation		(830)	(823)	(7)	(1%)
Total expenditure		(1,741)	(1,978)	237	(12%)
Regulatory operating (loss)/profit (before exceptional operating costs)		(582)	1,073	(1,655)	(154%)
Exceptional operating costs	5	(184)	-	(184)	N/A
Regulatory operating (loss)/profit		(766)	1,073	(1,839)	(171%)
Capital expenditure	6	424	856	(432)	(50%)
Opening RAB	7	16,598	16,202	396	2%
Closing RAB	7	16,492	16,598	(106)	(1%)
Average RAB		16,545	16,400	145	1%
Return on average RAB		(4.63%)	6.54%	(11%)	(171%)

Passenger only flights – actual and forecast

	Actual														Actuals 2021 Jan-Jul	Forecast 2021 Jan - Dec
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014 Apr - Dec	2014 Jan - Dec	2015 Jan - Dec	2016 Jan - Dec	2017 Jan - Dec	2018 Jan - Dec	2019 Jan - Dec	2020 Jan - Dec		
	Arriving Passengers	33,055,283	33,167,916	33,282,772	35,092,421	35,305,114	36,597,073	28,931,264	37,099,981	38,007,791	38,366,587	39,412,880	40,462,508	40,942,699		
Departing passengers																
Origin and destination																
Europe	14,688,784	14,661,948	14,743,673	11,716,309	11,661,207	12,079,601	9,626,253	12,265,144	12,624,009	12,741,755	13,174,509	13,668,591	13,930,655	4,308,040	1,215,559	3,427,175
Other	18,185,232	18,302,809	18,084,452	14,213,133	13,699,869	14,069,905	11,034,173	14,113,855	14,531,642	14,903,829	15,695,509	16,105,068	16,805,579	4,356,843	1,020,177	4,468,873
Transfer passengers																
Europe	Transfer passengers not separately identified			3,856,432	4,028,131	4,081,838	3,307,956	4,220,781	4,299,434	4,274,123	4,346,998	4,306,358	3,973,195	1,003,570	187,841	1,022,412
Other				5,172,212	5,579,652	5,585,627	4,439,514	5,675,064	5,496,182	5,389,922	5,358,837	5,559,489	5,234,538	1,259,014	202,639	1,459,755
Transit passengers																
Europe	1,859	2,834	1,623	646	1,462	1,293	699	1,103	349	3,757	1,258	2,617	1,371	476	0	n/a
Other	160,859	119,384	96,303	47,738	47,004	34,106	25,337	32,467	30,625	35,273	24,126	21,686	2,503	479	560	n/a
Departing passengers	33,036,734	33,086,975	32,926,051	35,006,470	35,017,325	35,852,370	28,433,932	36,308,414	36,982,241	37,348,659	38,601,237	39,663,809	39,947,841	10,928,422	2,626,776	10,378,215
Total terminal passengers	66,092,017	66,254,891	66,208,823	70,098,891	70,322,439	72,449,443	57,365,196	73,408,395	74,990,032	75,715,246	78,014,117	80,126,317	80,890,540	22,110,658	5,359,560	21,524,235
PATMs	467,130	453,780	453,938	473,761	464,686	467,779	356,773	468,359	469,671	470,764	471,082	472,744	473,235	177,281	56,943	163,757

