

Heathrow Airport

Airport Charges for 2019 Consultation Document

Date: 03 August 2018

Prepared by: Heathrow Airport Limited

Status: PUBLISHED

Contents

Executive Summary	3
Chapter 1 – Introduction and Consultation Programme.....	5
Chapter 2 – Calculating the Maximum Allowable Yield.....	8
Chapter 3 – Bonus Factor	12
Chapter 4 - Development Capital	14
Chapter 5 – Capital Triggers	21
Chapter 6 – Cost pass through of Category B.....	23
Chapter 7 – Business Rates Revaluation Factor	24
Chapter 8 - Correction Factor for 2017.....	27
Chapter 9 – Overview of charges.....	37
Chapter 10 – Calculating airport charges tariffs for 2019.....	43
Chapter 11 – Forecast Revenue for 2019	45
Chapter 12 – Proposed Airport Charges Tariffs effective 1 January 2019	46
Chapter 13 - Financial and Traffic Information.....	47

Executive Summary

Heathrow is a company working hard for its passengers and airlines today, and committed to delivering value for them in the decades to come. In recent years, Heathrow has consistently improved service levels at the airport, whilst reducing operating costs and passenger charges.

Following a £12bn investment programme, Heathrow has been transformed into reliable airport that our passengers now consistently rank as one of the best in the world. Already in H1 2018, Heathrow is outperforming all other European hub airports in service with an Airport Service Quality (ASQ) score of 4.17 (out of 5.00) and 82% of passengers rating their experience as “Excellent” or “Very Good” – compared to just 50% in 2008. For the first time ever, Terminal 2 was voted the “World’s Best Airport Terminal” at the 2018 Skytrax World Airport Awards, building on Heathrow’s fourth consecutive win as ‘Best Airport in Western Europe’ and ‘Best Airport for Shopping’ for the ninth consecutive year.

Responsible investments in our operation have also yielded results. The UK experienced one of the most challenging winters on record in 2018, and whilst overall punctuality decreased slightly, nearly 80% of flights departed within 15 minutes of schedule. Baggage connection performance remains strong at 98.8% of passengers travelling with their bags and in the 12 months to 31st May 2018, no rebates were paid by Heathrow under the SQR scheme.

But investments in passenger experience are only part of the equation. Balanced by a relentless focus on working with our airlines to grow passenger volumes, streamline our operations and reduce operating costs, Heathrow continues to be Europe’s airport of choice for airlines – with over 30 waiting to gain access to the UK’s hub airport. We have achieved strong growth and record passenger numbers, with Heathrow having its busiest ever first half in 2018. The continued passenger growth and commercial revenues will mean an improving passenger charge as we move into delivering the airport’s expansion.

On 25th June 2018, Parliament voted overwhelmingly in favour of expanding Heathrow – ending decades of political debate about the future of the airport. Heathrow is currently preparing its planning application which will be submitted following an additional public consultation early next year. Joint working with airlines has already resulted in £2.5bn of identified savings, reducing the overall projected cost of the project to £14bn and helping Heathrow to meet the Government’s affordability challenge to deliver expansion with airport charges remaining close to today’s levels. Heathrow remains fully committed to delivering an expansion plan that is affordable, sustainable and financeable.

This document frames Heathrow’s consultation on the level of airport charges for 2019, the level of passenger discounts and the transfer passenger discount in order to achieve the objective of growing passenger numbers sustainably.

Heathrow is proposing to set 2019 prices to recover the maximum allowable yield permitted by the regulatory settlement. The forecast maximum allowable yield for 2019 is £22.913 per passenger which remains below the 2014 yield of £23.155 per passenger. The proposed 2019 yield increase reflects the UK’s economic inflation rate and an under recovery of the 2017 yield.

The consultation proposal includes:

- maintaining the European load factor and UK connectivity departing passenger discounts;
- introducing a seasonal transfer/transit discount of 50% in the Winter season and 10% in the Summer season;
- introducing a passenger growth incentive scheme; and
- continuing the increased focus on environmental charges

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 12 September 2018. To help inform the consultation, Heathrow requests written responses from the airline community by 28 September 2018. Heathrow will then consider all comments received during the consultation period, ahead of issuing a decision on 31 October 2018 for implementation from 1 January 2019.

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 Heathrow is proposing to set airport charges for 2019 to recover the forecast maximum allowable yield.
- 1.3 This consultation document sets out the calculations for the 2019 forecast maximum allowable yield based on the CAA's Q6 price control licence condition.
- 1.4 This document also includes information on major capital investment projects subject to capital triggers, passenger number forecasts/actuals and financial information on revenues and costs.

Economic Regulation

- 1.5 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.
- 1.6 The CAA modified Heathrow's licence on 21 December 2016 under section 22 of the Act. The modifications extend the current price control for Heathrow, which currently runs from 1 April 2014 to 31 December 2018, by one year so that it will end on 31 December 2019. The modification rolls 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%. The CAA has since confirmed that there will be a further extension to Q6 so that it will now end on 31 December 2021. This two-year period will be referred to as iH7. The CAA is yet to confirm the exact terms for this period.
- 1.7 2019 is the sixth year of the sixth *regulatory period* at Heathrow, following the above-mentioned extension to the current price control period. The basis of the price control regulation is the application of the RPI-X formula under Single Till regulation to determine the maximum airport charge revenue yield.
- 1.8 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)¹.
- 1.9 The CAA also requires Heathrow to (i) meet service quality conditions and (ii) consult on capital investment and other regulated charges.
- 1.10 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: 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

¹ The Airport Charges Regulations 2011

system. Further details on the service quality measures, including targets and penalties, can be found at www.heathrow.com².

- 1.11 Details of Heathrow's capital investment plan can be found at www.heathrow.com³, 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.

Heathrow Expansion

- 1.12 On 25 October 2016, Heathrow welcomed the Government's decision to support its expansion and confirmed it will begin work to deliver the new runway, which will connect all of Britain to the world, bringing new jobs and economic growth to every nation and region in the UK. Plans for Heathrow expansion have since been approved by Parliament and Heathrow will now continue on its path to obtain planning permission through the DCO process.
- 1.13 In July 2016, the CAA commenced its consultation on the regulatory treatment of costs incurred in obtaining the DCO required to proceed with expansion, Category B costs. The CAA modified Heathrow's licence on 21 December 2016 to allow it to recover up to £10 million per annum of Category B costs through airport charges.
- 1.14 On 25 June 2018, Parliament unambiguously backed Heathrow's expansion by voting in favour of the Airports National Policy Statement ('NPS'). The Secretary of State for Transport subsequently designated the NPS the following day, clearing the way for Heathrow to submit a DCO application for the project.

Consultation Programme

- 1.14 Heathrow is consulting on the level of charges for 2019 with the airline community and plans to announce its final decision on 31 October 2018. The publication of this consultation document is the start of our consultation on the annual setting of airport charges.
- 1.15 The consultation programme is as follows:

Table 1

Date	Milestone
3 Aug 2018	Publication of Heathrow consultation document
12 Sep 2018	Consultation meeting
28 Sep 2018	Airline written responses submitted by close of business
31 Oct 2018	Heathrow announces 2019 prices
1 Jan 2019	Prices applicable from

- 1.16 The consultation meeting will be held on 12 September 2018 which will provide the airline community with the opportunity to comment on the price proposals, in addition to any written comments. The meeting will be open to all airlines and their representative bodies.

Date: Wednesday 12 September 2018
 Time: 14:00 to 16:00
 Location: The Compass Centre

²<http://www.heathrow.com/company/investor-centre/results-and-performance/service-quality>

³<http://www.heathrow.com/company/investor-centre/document-centre/capital-investment-plans>

Meeting room – Geneva
Nelson Road
Hounslow
Middlesex
TW6 2GW

- 1.17 Please let us know if you would like to attend the consultation meeting using the contact details provided below.

How to Respond

- 1.18 We invite interested parties to submit written responses to the proposals set out in this document by close of business on 28 September 2018. Responses should be sent to: airline_relations@heathrow.com.

- 1.19 Alternatively, comments may be posted to:

Airline Business Development
Heathrow Airport Limited
The Compass Centre
Nelson Road
Hounslow
Middlesex
TW6 2GW
UK

Or, if you have any questions on the consultation document or consultation process, please contact Airline Business Development on the above e-mail address.

Please clearly mark any information that should be treated as confidential in responses to this consultation.

Chapter 2 – Calculating the Maximum Allowable Yield

Calculating the Maximum Allowable Yield

2.1 Based on the CAA's Q6 price control licence condition the following price formula has been used for calculation of the 2019 yield:

$$M_{2019} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2019}	=	maximum revenue yield per passenger using Heathrow airport in Regulatory Year ("2019") 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 2019 this would be the change from April 2017 to April 2018.
X	=	-1.5%
B_{t-2}	=	bonus factor based on certain service quality performance in 2017.
Y_{t-1}	=	specified average revenue yield per passenger for the period t-1 (2018).
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 2017.
Q_t	=	forecast passengers using Heathrow airport in 2019.

2.2 The relevant year "2019", means the period of twelve months from 1 January 2019 to 31 December 2019.

Maximum allowable yield forecast for 2019

2.3 The combined impact of all the elements of the formula results in a forecast 2019 maximum allowable yield of £22.913 (passenger only flights). The full details of the formula are shown below.

Bonus Factor

2.4 The formula includes a bonus factor that allows the airport to recover a bonus when performance on certain service quality measures exceeds 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 i.e. 2017. Heathrow achieved a bonus in 2017. Full details in Chapter 3.

Cumulative development capex adjustment

2.5 The cumulative development capex adjustment adjusts the maximum allowable yield to account for the cumulative difference between the development capex allowance in the Q6 settlement and forecast development capex spend. Heathrow forecast to transition less cumulative development capex up to 31 December 2019 than the CAA's allowance. Further detail is provided in Chapter 4.

Triggers

2.6 Triggers reduce the maximum allowable charges when the airport has not met specified capital investment project dates. As at 1 June 2018, seventeen trigger projects have been agreed with the airline community, and four of these trigger projects have a completion date that falls in 2019:

- to deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323;
- Kilo apron developments - delivery of stands 211, 212 and 213 into operational use;
- T4 LV power on to the replaced final switch; and
- completion of the conversion of 4 racks to 6 racks in existing bag store in Terminal 5

All four of these projects are forecast to be completed by their respective milestone dates.

2.7 In addition, the Main Tunnel Life Safety Systems has a milestone date of December 2016. This project is forecast to be completed by February 2019. This trigger payment for the period 2017 is captured in the K Factor and two months in 2019 maximum allowable yield.

2.8 Any trigger payment which may arise in 2019 due to new triggered projects or any deviation in actual completion dates will be corrected through the K Factor when setting 2021 airport charges.

Cost pass through of Category B costs

- 2.9 Cost pass through of Category B costs increases the maximum allowable yield. Heathrow can recover up to £10 million per year for costs associated with obtaining planning permission for a new northwest runway (i.e. Category B costs).
- 2.10 Heathrow is recovering £10 million for 2017 through the 2017 K Factor and £10 million for 2019. Full details are shown in Chapter 6.

Business rates revaluation factor

- 2.11 The business rates revaluation factor adjusts the forecast maximum allowable yield to account for the difference between the actual change in the rates revaluation undertaken by the Valuation Office Agency in 2018 compared to the 9% allowance in the settlement.
- 2.12 The actual business rates revaluation has been lower than the 9%. This reduces the forecast maximum allowable yield. Full details are shown in Chapter 7.

Passengers

- 2.13 Heathrow passenger forecast for 2019 is 79,252k (twelve months – January 2019 to December 2019).

K Factor

- 2.14 The K Factor in the formula has increased the 2019 forecast maximum allowable yield to compensate for the unanticipated under-recovery against the maximum allowable yield in 2017, together with an allowance for interest. The K Factor calculation is shown in Chapter 8.

Application of the Regulatory Pricing Formula

- 2.15 Based on the regulatory pricing formula, the 2019 forecast maximum allowable is set out below.

$$M_{2019} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where :

RPI _{t-1}	=	3.4%	
X	=	-1.5%	
B _{t-2}	=	0.031%	- actual bonus achieved in 2017
Y _{t-1}	=	£22.751	
D _t	=	-£19,154k	- this figure is a forecast
A _t	=	£10,000k	
T _t	=	-£229k	- this figure is a forecast
BR _t	=	-£27,188k	
K _t	=	-0.184	- this figure is a forecast
Q _t	=	79,252k	- this figure is a forecast

Hence:

$$M_{2019} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2019} = (1 + 3.4\% + -1.5\% + 0.031\%)22.751 + \frac{(-19,154)}{79,252} - \frac{229}{79,252} + \frac{10,000}{79,252} + \frac{(-27,188)}{79,252} - (-0.184)$$

$$M_{2019} = (1.0193 * 22.751) + (-0.242) - 0.003 + 0.126 + (-0.343) - (-0.184)$$

$$M_{2019} = 22.913$$

Charges in 2018

2.16 The forecast maximum allowable yield at Heathrow in 2018 was calculated at £22.057.

Table 2

Specified yield 2017	£22.305
12 months RPI movement to April 2017	£0.781
X	-£0.335
Bonus term	£0.005
Trigger payments	£0.000
Development capex	-£0.205
Category B	£0.130
Business rates	-£0.452
K factor from 2016 over recovery	-£0.172
Forecast 2018 maximum allowable yield	£22.057

Proposed pricing for 2019

2.17 Heathrow is proposing to set prices for 2019 to recover the forecast maximum allowable yield of £22.913 per passenger (details of the charges are shown in Chapter 10).

2.18 Full details of the individual tariffs are shown in chapter 10 and 11.

Chapter 3 – Bonus Factor

- 3.1 The price control licence condition for the maximum allowable yield includes a bonus component for performance of certain service quality measures. A service quality bonus can be achieved when performance for certain measures exceeds the specified target levels. Full details of the bonus can be found in the Licence granted to Heathrow Airport Limited.
- 3.2 The service quality bonus can be recovered from 2014 to 2019 for departure lounge seating availability, cleanliness, way-finding and flight information. For the purposes of the 2019 forecast maximum allowable yield the service quality bonus can be recovered for the Regulatory Period 2017 from 1 January 2017 to 31 December 2017.
- 3.3 Heathrow has achieved the service quality bonus for 2017 at 0.031%. This is included in the 2019 forecast maximum allowable yield.
- 3.4 Table 3 sets out the 2017 performance of these measures for the purpose of the bonus.

Table 3

Departure lounge seating availability (QSM)	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Terminal 1 (actual)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.42	4.42	4.42	4.42	4.43	4.43	4.42	4.40	4.40	4.38	4.37	4.36	
Terminal 3 (actual)	4.08	4.08	4.08	4.07	4.07	4.08	4.08	4.09	4.08	4.08	4.09	4.12	
Terminal 4 (actual)	4.33	4.33	4.32	4.32	4.31	4.31	4.31	4.31	4.29	4.29	4.31	4.31	
Terminal 5 (actual)	4.05	4.05	4.06	4.06	4.08	4.08	4.09	4.08	4.09	4.09	4.07	4.06	
BNS(T1) _κ	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	
BNS(T2) _κ	0.0240%	0.0240%	0.0240%	0.0240%	0.0248%	0.0248%	0.0240%	0.0225%	0.0225%	0.0210%	0.0203%	0.0195%	
BNS(T3) _κ	-0.0015%	-0.0015%	-0.0015%	-0.0022%	-0.0022%	-0.0015%	-0.0015%	-0.0007%	-0.0015%	-0.0015%	-0.0007%	0.0015%	
BNS(T4) _κ	0.0173%	0.0173%	0.0165%	0.0165%	0.0158%	0.0158%	0.0158%	0.0158%	0.0143%	0.0143%	0.0158%	0.0158%	
BNS(T5) _κ	-0.0037%	-0.0037%	-0.0030%	-0.0030%	-0.0015%	-0.0015%	-0.0007%	-0.0015%	-0.0007%	-0.0007%	-0.0022%	-0.0030%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.000%

Cleanliness (QSM)	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Terminal 1 (actual)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.45	4.45	4.45	4.44	4.44	4.44	4.43	4.41	4.41	4.40	4.40	4.39	
Terminal 3 (actual)	4.20	4.20	4.19	4.20	4.19	4.19	4.20	4.19	4.19	4.18	4.18	4.18	
Terminal 4 (actual)	4.24	4.24	4.24	4.24	4.25	4.24	4.23	4.23	4.22	4.21	4.21	4.21	
Terminal 5 (actual)	4.31	4.31	4.31	4.30	4.30	4.29	4.28	4.28	4.27	4.27	4.27	4.27	
BNS(T1) _κ	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	
BNS(T2) _κ	0.0250%	0.0250%	0.0250%	0.0240%	0.0240%	0.0240%	0.0230%	0.0210%	0.0210%	0.0200%	0.0200%	0.0190%	
BNS(T3) _κ	0.0000%	0.0000%	-0.0010%	0.0000%	-0.0010%	-0.0010%	0.0000%	-0.0010%	-0.0010%	-0.0020%	-0.0020%	-0.0020%	
BNS(T4) _κ	0.0040%	0.0040%	0.0040%	0.0040%	0.0050%	0.0040%	0.0030%	0.0030%	0.0020%	0.0010%	0.0010%	0.0010%	
BNS(T5) _κ	0.0110%	0.0110%	0.0110%	0.0100%	0.0100%	0.0090%	0.0080%	0.0080%	0.0070%	0.0070%	0.0070%	0.0070%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.000%

Way finding (QSM)	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Terminal 1 (actual)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.33	4.32	4.32	4.32	4.32	4.33	4.32	4.32	4.31	4.31	4.31	4.31	
Terminal 3 (actual)	4.22	4.22	4.23	4.23	4.22	4.23	4.23	4.23	4.22	4.22	4.23	4.23	
Terminal 4 (actual)	4.25	4.26	4.26	4.26	4.27	4.26	4.26	4.25	4.25	4.24	4.24	4.24	
Terminal 5 (actual)	4.25	4.24	4.24	4.24	4.24	4.24	4.24	4.24	4.23	4.23	4.23	4.23	
BNS(T1) _κ	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	
BNS(T2) _κ	0.0130%	0.0120%	0.0120%	0.0120%	0.0120%	0.0130%	0.0120%	0.0120%	0.0110%	0.0110%	0.0110%	0.0110%	
BNS(T3) _κ	0.0020%	0.0020%	0.0030%	0.0030%	0.0020%	0.0030%	0.0030%	0.0030%	0.0020%	0.0020%	0.0030%	0.0030%	
BNS(T4) _κ	0.0050%	0.0060%	0.0060%	0.0060%	0.0070%	0.0060%	0.0060%	0.0050%	0.0050%	0.0040%	0.0040%	0.0040%	
BNS(T5) _κ	0.0050%	0.0040%	0.0040%	0.0040%	0.0040%	0.0040%	0.0040%	0.0040%	0.0030%	0.0030%	0.0030%	0.0030%	
Bonus term =	0.0020%	0.0020%	0.0030%	0.0030%	0.0020%	0.0030%	0.0030%	0.0030%	0.0020%	0.0020%	0.0030%	0.0030%	0.031%

Flight information (QSM)	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Terminal 1 (actual)	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	
Terminal 2 (actual)	4.45	4.44	4.44	4.44	4.45	4.44	4.44	4.43	4.42	4.42	4.42	4.42	
Terminal 3 (actual)	4.37	4.38	4.37	4.36	4.36	4.37	4.38	4.39	4.39	4.39	4.39	4.39	
Terminal 4 (actual)	4.40	4.41	4.40	4.40	4.41	4.41	4.40	4.40	4.40	4.39	4.40	4.41	
Terminal 5 (actual)	4.40	4.39	4.39	4.39	4.39	4.38	4.38	4.39	4.39	4.39	4.37	4.37	
BNS(T1) _κ	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	
BNS(T2) _κ	0.0050%	0.0040%	0.0040%	0.0040%	0.0050%	0.0040%	0.0040%	0.0030%	0.0020%	0.0020%	0.0020%	0.0020%	
BNS(T3) _κ	-0.0030%	-0.0020%	-0.0030%	-0.0040%	-0.0040%	-0.0030%	-0.0020%	-0.0010%	-0.0010%	-0.0010%	-0.0010%	-0.0010%	
BNS(T4) _κ	0.0000%	0.0010%	0.0000%	0.0000%	0.0010%	0.0010%	0.0000%	0.0000%	0.0000%	-0.0010%	0.0000%	0.0010%	
BNS(T5) _κ	0.0000%	-0.0010%	-0.0010%	-0.0010%	-0.0010%	-0.0020%	-0.0020%	-0.0010%	-0.0010%	-0.0010%	-0.0030%	-0.0030%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.000%

Bonus term =	0.0020%	0.0020%	0.0030%	0.0030%	0.0020%	0.0030%	0.0030%	0.0030%	0.0020%	0.0020%	0.0030%	0.0030%	0.0310%
Rounded to 3 decimal places Bt =	0.002%	0.002%	0.003%	0.003%	0.002%	0.003%	0.003%	0.003%	0.002%	0.002%	0.003%	0.003%	0.031%

Chapter 4 - Development Capital

- 4.1 Heathrow, the airlines and the CAA have recognised that agreeing investment plans at the time of the price review for the next five to six years does not reflect the need for flexibility. Therefore, it was agreed that a two-tier approach would be adopted where capital investment would be classified as either Development or Core, to ensure flexibility of the capital investment programme throughout Q6.
- 4.2 Core capital represents firm investment commitments where scope and cost estimates can be reasonably certain. Core capital investment is estimated at a P50 level (where the likelihood of the cost being higher than the estimate is equal to the likelihood being lower). Development capital projects have a lower definition of scope and cost estimations than Core projects (and are estimated at a P80 level).
- 4.3 Development and Core capital investment are subject to the Gateway process with airlines. The Gateway process has a number of Gateway events. The first two Gateways are where the scope and cost estimates are developed. The project is transitioned to Core after Gateway 3 when the scope and cost estimates are well defined. The project is then progressed through the remaining Gateways.
- 4.4 This two-tier approach to capital investment is designed so that Heathrow does not earn a return on any Development capital allowance that has not been used. The mechanism to take this into effect is the cumulative development capex adjustment in the maximum allowable yield. This requires Heathrow to make an estimate (on a cumulative basis throughout Q6) of how much Development capital allowance will be spent or transitioned to Core. This adjustment only applies to Development capital investment.
- 4.5 Capital projects are subject to the on-going Gateway process with the airline community and the current trajectory of project approvals, as at 1 June 2018, indicates that fewer projects are transitioning to Core than originally anticipated in the settlement. Therefore a lower cumulative capex spend to 2019 than the CAA's Q6 settlement of up to £358m (2019 prices) is now expected.
- 4.6 The current trajectory of projects transitioning to Core reflects Heathrow's current view of investing £3.0bn in Q6 (to the end of 2018). Heathrow and the airlines have agreed capital investment for 2019, i.e. Q6+1, of £650m. The portfolio will continue to evolve over Q6 to meet the needs of passengers and airlines.
- 4.7 Table 4 sets out the actual and projected Development and Core capex compared to the settlement in 2019 prices.

Table 4

£m and in 2019 prices	2014*	2015	2016	2017	2018	2019	Q to date
Development plus core	407.4	645.4	740.4	711.6	672.9	650.0	3,827.7
Settlement	551.2	839.9	810.5	663.8	670.3	650.0	4,185.7
Difference	(143.8)	(194.5)	(70.1)	47.8	2.6	0.0	(358.0)

*9 months

- 4.8 The lower cumulative spend translates into a lower 2019 average RAB of £358m. Applying the cumulative development adjustment results in the 2019 maximum allowable yield reducing by £19m, equivalent to 24 pence per passenger.
- 4.9 Any subsequent change in actual development capex transitioning to Core capex will be adjusted in the K Factor when setting charges for 2021.
- 4.10 The formula to calculate the 2019 cumulative development capex adjustment of £19m is set out below:

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

Where:

W	=	Weighted Average Cost of Capital of 5.35%
d ₂₀₁₄	=	Annual development capex adjustment in 2014
d ₂₀₁₅	=	Annual development capex adjustment in 2015
d ₂₀₁₆	=	Annual development capex adjustment in 2016
d ₂₀₁₇	=	Annual development capex adjustment in 2017
d ₂₀₁₈	=	Annual development capex adjustment in 2018
d ₂₀₁₉	=	Annual development capex adjustment in 2019
P _{t-1}	=	ONS CHAW Retail Price Index in April 2018 is 279.7
P _{t-2}	=	ONS CHAW Retail Price Index in April 2017 is 270.6
P _{t-3}	=	ONS CHAW Retail Price Index in April 2016 is 261.4
P _{t-4}	=	ONS CHAW Retail Price Index in April 2015 is 258.0
P _{t-5}	=	ONS CHAW Retail Price Index in April 2014 is 255.7
P _{t-6}	=	ONS CHAW Retail Price Index in April 2013 is 249.5

The annual development capex adjustment for d₂₀₁₄, d₂₀₁₅, d₂₀₁₆, d₂₀₁₇, d₂₀₁₈ and d₂₀₁₉ is calculated as follows:

$$d_t = O_t - \left(V_t * \frac{P_{t-1}}{222.80} \right)$$

Where:

O _t	=	total capex in Regulatory Period or Regulatory Year t associated with all development capex that has transitioned to core projects including the actual capital spend incurred during development stages of projects (irrespective of whether projects have transitioned from development to core)
V _t	=	development capex allowance in Regulatory Period or Regulatory Year t
P _{t-1}	=	Value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1

Hence d_{2014} :

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

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

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

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

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

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

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} :

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

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

$$V_{2017} = \text{£}528,800\text{k}$$

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

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

$$d_{2017} = \text{£}44,586$$

Hence d_{2018} :

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

$$O_{2018} = \text{£}651,000\text{k}$$

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

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

$$d_{2018} = 651,000 - \left(533,900 * \frac{270.6}{222.8} \right)$$

$$d_{2018} = \text{£}2,556\text{k}$$

Hence d_{2019} :

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

$$O_{2019} = \text{£}650,000\text{k}$$

$$V_{2019} = \text{£}517,800\text{k}$$

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

$$d_{2019} = 650,000 - \left(517,800 * \frac{279.7}{222.8} \right)$$

$$d_{2019} = \text{£}0$$

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

Hence:

Year t =	2019	Results in
Additional revenue requirement for 2014 projects	$\frac{297.7}{249.5} \times -128,321$	-143,853
Additional revenue requirement for 2015 projects	$\frac{297.7}{255.7} \times -177,789$	-194,476
Additional revenue requirement for 2016 projects	$\frac{297.7}{258.0} \times -64,598$	-70,031
Additional revenue requirement for 2017 projects	$\frac{297.7}{261.4} \times 44,586$	47,707
Additional revenue requirement for 2018 projects	$\frac{297.7}{270.6} \times 2,556$	2,642
Additional revenue requirement for 2019 projects	0.5×0	0
D_t =		-358,011 x 5.35%

$$D_t = -£19,154$$

- 4.11 Therefore for the 2019 forecast maximum allowable yield is adjusted to account for the -£19,154k cumulative development capex adjustment.

Chapter 5 – Capital Triggers

- 5.1 The CAA’s maximum allowable yield formula for Q6 includes a trigger element which means that if a trigger project is not complete by a specified project trigger date then the allowable yield is reduced.
- 5.2 Q6 triggers are placed around a subset of “key projects”. However, unlike Q5, projects that triggers will be attached to have not been defined in the CAA’s Q6 price control licence condition. In Q6, triggers are attached to projects at Gateway 3 of the projects process. This means trigger projects will be developed during the Gateway Process with airlines, where triggers for individual projects will be developed, and then formally attached to applicable key projects at Gateway 3.
- 5.3 As at 1 June 2018, seventeen capital trigger projects have been agreed with the airline community. Table 5 sets out the agreed trigger projects.

Table 5

Project	Trigger date	Completion date	Actual/Forecast
Northern Runway Returned to Cat III Operations	Sep-14	Sep-14	Actual
Reconfigure Stand 410 to handle Code F Aircraft	Dec-14	Nov-14	Actual
T3IB cut-ins completed and baggage system operational	Jan-16	Jul-16	Actual
Main Tunnel Life Safety Systems	Dec-16	Feb-19	Forecast
Bravo taxiway open for code F operations	Sep-17	Oct-17	Actual
Access via new South escalator from transfer arrivals (from level 10 to level 30)	May-16	Mar-16	Actual
T3 Pier 7 Roof - Permanent M&E services to be fully operational and temporary plant	Mar-17	Mar-17	Actual
Replacement of 12 airbridges on 9 stands across T3	Jan-18	Jan-18	Actual
To deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323	Jan-19	Jan-19	Forecast
T5 additional fast track capacity	Jun-17	Feb-17	Actual
New Cellular platform available for MNO connection (G5)	Mar-18	Feb-18	Actual
Hold baggage screening standard 3 machines installed in Terminal 2	Sep-18	Sep-18	Forecast
Proposed % of Hold baggage screening standard 3 machines installed and in use in Terminal 5	Sep-18	Sep-18	Forecast
Kilo apron developments - delivery of stands 211, 212 and 213 into operational use	Mar-19	Mar-19	Forecast
T4 LV power on to the replaced final switch	Oct-19	Oct-19	Forecast
Completion of the conversion of 4 racks to 6 racks in existing bag store in Terminal 5	Oct-19	Oct-19	Forecast
Completion of the kilo substructure excavation	Sep-20	Sep-20	Forecast

- 5.4 Four projects have a completion date that fall into 2019. These are (i) to deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323; (ii) Kilo apron developments - delivery of stands 211, 212 and 213 into operational use; (iii) T4 LV power on to the replaced final switch; and (iv) completion of the conversion of 4 racks to 6 racks in existing bag store in Terminal 5.
- 5.5 All four projects are forecast to be delivered by their trigger milestone dates.
- 5.6 However, Main Tunnel Life Safety Systems has a trigger date of Dec-16 and is forecast to be completed by Feb-19. Therefore, in setting airport charges for 2019 there is a two-month trigger payment.
- 5.7 Any triggers that are attached to projects and have trigger dates for 2019, which are finalised after 1 June 2018, will be accounted through the K Factor when setting 2021 airport charges.

Chapter 6 – Cost pass through of Category B

- 6.1 Heathrow's Licence was modified by the CAA on 21 December 2016 to allow an annual recovery of £10 million of Category B costs for a new northwest runway. This followed the Government's announcement on 25 October 2016 that it was in favour of a northwest runway and associated infrastructure at Heathrow.
- 6.2 The CAA has allowed Heathrow to recover up to £10 million per annum in each Regulatory Year for reasonably incurred costs (capital and operating) used for applying for planning permission for a new northwest runway (i.e. Category B costs). These Category B costs must, in the CAA's view, have been efficiently incurred.
- 6.3 Category B costs above £10 million will be added to Heathrow's Regulatory Asset Base (RAB) in accordance with the Q6 methodology to roll forward the RAB. These costs will be recovered after the outcome of the Heathrow Expansion DCO process is known.
- 6.4 Heathrow is including £10 million for 2019. This increases the 2019 forecast maximum allowable yield.
- 6.5 Table 6 sets out total estimated Category B costs for 2016 to 2019.

Table 6

£million	2016	2017	2018	2019
Category B	10.5	77.8	131.2	76.0*

*Does not include operating costs.

Chapter 7 – Business Rates Revaluation Factor

- 7.1 The business rates revaluation factor (i.e. BR_t) adjusts the forecast maximum allowable yield to account for the difference between the actual change in the rates revaluation undertaken by the Valuation Office Agency in 2018 compared to the 9% allowance in the settlement. This impacts the Regulatory Year 2019 i.e. the 2019 forecast maximum allowable yield.
- 7.2 The actual business rates revaluation has been lower than the 9%. The final revaluation outcome at Heathrow resulted in a 17% decrease in potential liability. Heathrow will not benefit from the full saving generated through revaluation until 2021.
- 7.3 However, the Government has put in place transitional relief. Transitional relief limits how much a rates bill can change each year as a result of the revaluation. This applies when rates increase or decrease to avoid any shocks in the market. This means changes to the rates bill are phased in gradually and apply to all UK properties.
- 7.4 Heathrow must apply the Government's transitional arrangements for the 2017 business rates revaluation which in effect phases the reductions. Heathrow will not benefit from the 17% decrease because it is greater than the actual saving after the transitional relief. The Government's transitional arrangements for the 2017 business rates revaluation when a rates bill is decreasing (i.e. downwards cap) are as follows:

Table 7

Transitional Arrangements 2017 revaluation (before inflation) funded by 3 caps on reductions⁴						
	Property Size	2017/18	2018/19	2019/20	2020/21	2021/22
Upwards cap	Small	5.0%	7.5%	10.0%	15.0%	15.0%
	Medium	12.5%	17.5%	20.0%	25.0%	25.0%
	Large	45.0%	50.0%	50.0%	16.0%	5.0%
Downwards cap	Small	20.0%	30.0%	35.0%	55.0%	55.0%
	Medium	10.0%	15.0%	20.0%	25.0%	25.0%
	Large	4.1%	4.6%	5.9%	5.8%	4.8%

- 7.5 Transitional relief is applied to calculate the actual change in the business rates revaluation for the purposes of the business rates revaluation factor. For the purposes of the transitional arrangement, Heathrow is designated as a large property (i.e. property with rateable value over £100,000). Therefore, the downward cap percentage for a large company is used.
- 7.6 This involves two steps before applying to the business rates revaluation factor. Firstly, to adjust to a calendar year to reflect the regulatory year. Secondly to accumulate the annual percentage for the relevant years, 2017, 2018 and 2019. This is set out below:

⁴https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/572823/Transitional_Relief_consultation_response.pdf

Table 8

Regulatory Year	Adjusted relief	transitional	Cumulative
2017		-3.08%	-3.08%
2018		-4.48%	-7.41%
2019		-5.58%	-12.57%
2020		-5.83%	-17.67%
2021		-5.05%	-21.82%

7.7 Therefore -12.57% is used for the purposes of the calculation as actual percentage change in the Cumulo Rateable Value due to the revaluation and the actual percentage increase in the national Uniform Business Rate. This results in a lower forecast maximum allowable yield by £27.2m. The formula to calculate the business rates revaluation factor is set out below:

$$BR_t = 0.8 * Z_{2019}$$

Where:

Z_t = business rate forecast variance in Regulatory period or Regulatory Year t, calculated in accordance with the below table:

Period t =	$Z_t =$
9mo. 2014	0
2015	0
2016	0
2017	$(U_t - £136,900,000) * \frac{P_{t-1}}{222.80}$
2018	$(U_t - £136,800,000) * \frac{P_{t-1}}{222.80}$
2019	$(U_t - £136,800,000) * \frac{P_{t-1}}{222.80}$

Where:

U_t = regulatory allowance for business rates (that is £136,800,000 in 2019) multiplied by the revaluation impact⁵.

P_{t-1} = value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1.

⁵ revaluation impact is equal to one plus the difference between the actual increase in rateable value measured as a percentage change and +9%, (being the percentage increase assumed in the regulatory allowance) occurring as a result of the rate revaluation undertaken by the Valuation Office Agency in 2017. The actual change will be calculated by multiplying the actual percentage increase in the Cumulo Rateable Value due to the revaluation and the actual percentage increase in the national Uniform Business Rate.

Hence Z_{2019} :

$$Z_{2019} = (U_t - \text{£}136,800,000) * \frac{P_{t-1}}{222.80}$$

$$U_t = [\text{£}136,800,000 / (1+9\%)] * (1+-12.57\%)$$

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

$$Z_{2019} = (\text{£}109,728,661 - \text{£}136,800,000) * \frac{279.7}{222.8}$$

$$Z_{2019} = -33,984,980$$

BR_t formula is applied:

$$BR_{2019} = 0.8 * -33,984,980$$

$$BR_{2019} = -27,187,984$$

Chapter 8 - Correction Factor for 2017

The Correction factor

- 8.1 The K Factor sets out the level of over recovery or under recovery on a per passenger basis. This over recovery is when Heathrow exceeds the maximum allowable yield on a per passenger basis. The 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.
- 8.2 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 2017 actual maximum allowable yield

- 8.3 The combined impact of all the elements of the formula results in 2017 actual maximum allowable yield of £22.070 (passenger only flights). 2017 is the Regulatory Period from 1 January 2017 to 31 December 2017. The section below presents the components of the formula.

- 8.4 M_{t-2} relates to 2017 and its calculation is shown below:

$$M_{2017} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2017}	=	maximum revenue yield per passenger using Heathrow airport in Regulatory Year ("2017") 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 2017 this would be the change from April 2015 to April 2016.
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 (2016).

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 2015.
Q_t	=	actual passengers using Heathrow airport in 2017.

Application of the Regulatory Pricing Formula

Where :

RPI_{t-1}	=	1.3%	
X	=	-1.5%	
B_{t-2}	=	0%	- this figure is an actual
Y_{t-1}	=	£22.349	
D_t	=	-£19,225k	- this figure is an actual
T_t	=	£1,597	- this figure is an actual
A_t	=	£10,000	- this figure is an actual
BR_t	=	0	- only applicable in 2018
Q_t	=	77,989k	- this figure is an actual
K_t	=	0.096	- this figure is an actual

Hence:

$$M_{2017} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2017} = (1 + 1.3\% + -1.5\% + 0\%)22.349 + \frac{(-19,225)}{77,989} - \frac{1,597}{77,989} + \frac{10,000}{77,989} + \frac{0}{77,989} - 0.096$$

$$M_{2017} = (0.998 * 22.349) + (-0.247) - 0.02 + 0.128 + 0 - 0.096$$

$$M_{2017} = 22.070$$

8.5 The actual maximum allowable yield for 2017 is £22.070.

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

Bonus term (2015)

- 8.7 The regulatory pricing formula includes a bonus component for performance of certain service quality measures.
- 8.8 The CAA decided through its Q6 price control licence condition to formalise the recovery of the bonus on actual performance based on two-year lag. The recovery of the actual bonus for 2012/13 and 2013/14 is recovered through the K Factor when setting charges for 2014 and 2015, respectively. The actual bonus for these two periods, 2012/13 and 2013/14, shall be calculated by reference to the conditions as to airport charges imposed to the Airport under the Airports Act 1986 in force at 31 March 2014⁶.
- 8.9 The actual bonus for the period 2014 to 2019 shall be calculated by reference to the Licence conditions that came into force 1 April 2014.
- 8.10 No bonus was achieved in 2015.

Cumulative development capex adjustment

- 8.11 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 2017.
- 8.12 The below table sets out the formula used to calculate the cumulative development capex adjustment. The 2017 formula is used:

⁶ Economic regulation at Heathrow from April 2014: Notice granting the licence, page 131.

Year t =	9mo.2014	2015	2016	2017
Additional revenue requirement for 2014 projects	$0.5 \times d_{2014}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2014}$
Additional revenue requirement for 2015 projects	0	$0.5 \times d_{2015}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2015}$
Additional revenue requirement for 2016 projects	0	0	$0.5 \times d_{2016}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2016}$
Additional revenue requirement for 2017 projects	0	0	0	$0.5 \times d_{2017}$
D_t =	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%
d_{2014}	=	Annual development capex adjustment in 2014
d_{2015}	=	Annual development capex adjustment in 2015
d_{2016}	=	Annual development capex adjustment in 2016
d_{2017}	=	Annual development capex adjustment in 2017
P_{t-1}	=	ONS CHAW Retail Price Index in April in 2016 is 261.4
P_{t-2}	=	ONS CHAW Retail Price Index in April in 2015 is 258.0
P_{t-3}	=	ONS CHAW Retail Price Index in April in 2014 is 255.7
P_{t-4}	=	ONS CHAW Retail Price Index in April in 2013 is 249.5

D_{2017} : 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} :

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

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

$$V_{2017} = \text{£}528,800$$

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

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

$$d_{2017} = \text{£}44,586$$

8.13 Therefore d_{2014} , d_{2015} , d_{2016} and d_{2017} 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	$\frac{261.4}{249.5} \times -128,312$	-134,441
Additional revenue requirement for 2015 projects	$\frac{261.4}{255.7} \times -177,789$	-181,752
Additional revenue requirement for 2016 projects	$\frac{261.4}{258.0} \times -64,589$	-65,449
Additional revenue requirement for 2017 projects	$0.5 \times 44,586$	22,293
$D_t =$		-359,350 x 5.35%

$$D_t = -£19,225k$$

Triggers

8.14 The K Factor for 2017 adjusts the completion dates for trigger projects that had trigger completion dates in 2017.

8.15 There are four projects that have a completion date falling into 2017: (i) T3 Pier 7 Roof – Permanent M&E services to be fully operational and temporary plant; (ii) Bravo Taxiway Open for Code F Operations; (iii) T5 additional fast track capacity; and (iv) Main Tunnel Life Safety Systems.

8.16 Two projects, Main Tunnel Life Safety Systems and Bravo Taxiway Open for Code F Operations have not met their milestone date. Therefore, there is a trigger payment in 2017.

Table 9

	Trigger Month	Forecast Completion Date
Main Tunnel Life Safety Systems	Dec-16	Feb-19

- Main Tunnel Life Safety Systems**

Trigger date	= December 2016
Forecast Completion	= February 2019
Actual Delay	= 26 months
Months falling into 2017	= 12 months
Monthly Payment	= £91,400 in 2011/12 prices
Actual Payment	= £1,096,800 in 2011/12 prices
Inflation Index (RPI)	= 1.173 ⁷
Actual Payment	= £1,286,820 in 2017 prices
Actual Passengers (000s)	= 77,989 in 2017
Impact on Yield	= £0.017 in 2017

Table 10

	Trigger Month	Actual Completion Date
Bravo Taxiway Open for Code F Operations	Sep-17	Oct-17

- Bravo Taxiway Open for Code F Operations**

Trigger date	= September 2017
Actual Completion	= October 2017
Actual Delay	= 1 month
Months falling into 2017	= 1 month
Monthly Payment	= £264,000 in 2011/12 prices
Actual Payment	= £264,000 in 2011/12 prices
Inflation Index (RPI)	= 1.173
Actual Payment	= £309,672 in 2017 prices
Actual Passengers (000s)	= 77,989 in 2017
Impact on Yield	= £0.004 in 2017

⁷ 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 2016 and April 2010 i.e. 261.4/222.8

K factor for 2017

Actual passengers	77,989
Actual airport charges revenue	1,706,679
Actual yield	21.884
Actual maximum allowable yield	22.070
Under/Over Recovery	<i>Under Recovery</i>

Total revenue from airport charges (passenger only flights) at Heathrow in	2017	Actual (£000s)	R_{t-2}	1,706,679
Passengers using Heathrow Airport in	2017	Actual (000s)	Q_{t-2}	77,989
Maximum allowable revenue yield at Heathrow in	2017	Actual (£)	M_{t-2}	22.070
Interest rate from weekly Treasury Bill Discount rate	2017	Actual %	I_{t-2}	0.250
Forecast Passengers using Heathrow in	2019	Forecast (000s)	Q_t	79,252
Correction amount	$K_t = ((R_{t-2} - (Q_{t-2} \times M_{t-2})) / Q_t \times (1 + I_{t-2} / 100))^2$		K_t	-0.184

Table 11

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
05-May-17	08-May-17	500	8.35	0.064
12-May-17	15-May-17	500	6.03	0.060
19-May-17	22-May-17	500	6.88	0.056
26-May-17	30-May-17	500	5.68	0.058
02-Jun-17	05-Jun-17	500	5.38	0.037
09-Jun-17	12-Jun-17	500	3.78	0.061
16-Jun-17	19-Jun-17	500	5.95	0.063
23-Jun-17	26-Jun-17	1,000	3.76	0.093
30-Jun-17	03-Jul-17	1,000	3.86	0.126
07-Jul-17	10-Jul-17	1,000	3.04	0.141
14-Jul-17	17-Jul-17	1,000	3.44	0.139
21-Jul-17	24-Jul-17	1,500	2.02	0.150
28-Jul-17	31-Jul-17	500	5.54	0.128
04-Aug-17	07-Aug-17	1,000	2.96	0.140
11-Aug-17	14-Aug-17	1,500	2.38	0.155
18-Aug-17	21-Aug-17	1,500	2.99	0.166
25-Aug-17	29-Aug-17	1,500	3.13	0.171
01-Sep-17	04-Sep-17	2,000	1.80	0.186
08-Sep-17	11-Sep-17	2,000	2.36	0.194
15-Sep-17	18-Sep-17	1,000	3.88	0.216
22-Sep-17	25-Sep-17	1,000	3.60	0.169
29-Sep-17	02-Oct-17	1,000	2.67	0.221
06-Oct-17	09-Oct-17	1,000	4.52	0.248
13-Oct-17	16-Oct-17	2,000	1.84	0.279
20-Oct-17	23-Oct-17	2,000	1.71	0.332
27-Oct-17	30-Oct-17	2,000	1.88	0.357
03-Nov-17	06-Nov-17	1,000	4.65	0.381
10-Nov-17	13-Nov-17	1,000	5.16	0.365
17-Nov-17	20-Nov-17	1,000	3.98	0.360
24-Nov-17	27-Nov-17	1,000	5.38	0.351
01-Dec-17	04-Dec-17	1,000	4.15	0.330
08-Dec-17	11-Dec-17	1,000	2.81	0.321
15-Dec-17	18-Dec-17	1,000	3.68	0.291
22-Dec-17	27-Dec-17	1,000	1.98	0.273
05-Jan-18	08-Jan-18	500	5.11	0.349
12-Jan-18	15-Jan-18	500	6.79	0.309
19-Jan-18	22-Jan-18	500	6.58	0.290
26-Jan-18	29-Jan-18	500	5.74	0.240
02-Feb-18	05-Feb-18	500	4.85	0.270
09-Feb-18	12-Feb-18	500	5.93	0.260
16-Feb-18	19-Feb-18	500	3.63	0.272
23-Feb-18	26-Feb-18	500	5.89	0.248
02-Mar-18	05-Mar-18	2,000	1.94	0.258
09-Mar-18	12-Mar-18	1,000	2.70	0.334
16-Mar-18	19-Mar-18	1,000	2.71	0.343
23-Mar-18	26-Mar-18	1,000	1.73	0.381
29-Mar-18	03-Apr-18	1,000	1.15	0.505
06-Apr-18	09-Apr-18	1,000	3.13	0.506
13-Apr-18	16-Apr-18	1,000	1.85	0.582
20-Apr-18	23-Apr-18	500	6.63	0.510
27-Apr-18	30-Apr-18	500	4.45	0.418
Average				0.250

Application of the Regulatory Pricing Formula

8.17 The actual maximum allowable yield for 2017 is £22.070 compared to the actual yield recovered of £21.884 which results in an under recovery of £0.184 (taking into account interest rate). This under recovery is included in the K Factor for 2017 in setting airport charges in 2019, which raises the forecast maximum allowable yield.

8.18 The 2017 under recovery is largely driven by the inclusion of Category B costs for 2017 and an increase in the proportion of European passengers.

Chapter 9 – Overview of charges

- 9.1 Since the beginning of Q6, the yield has reduced in both nominal and real terms, and in 2019 remains below the 2014 value of £23.155 per passenger.

Table 12⁸

	2014	2015	2016	2017	2018	2019	CAGR
Nominal	£23.155	£22.627	£22.118	£21.907	£22.056	£22.913	-0.2%
Real	£23.155	£22.407	£21.528	£20.585	£20.032	£20.249	-2.2%

- 9.2 The 2019 yield of £22.913 increases by £0.856 compared to 2018, mainly as a result of RPI and the 2017 under-recovery as detailed in Chapter 8.

Passenger discounts

European and Non-European passenger charges

- 9.3 On 1 January 2017 Heathrow introduced a £5.00 passenger discount on European routes with a further £5.00 discount on UK routes, compared to the existing European passenger charge. This was supported through an increased emphasis on environmental charges and the introduction of a quieter noise chapter.
- 9.4 The passenger discount to European routes was increased to £10.00 on 1 January 2018. This was supported through an increased emphasis on environmental charges and a partial rebalancing through non-European departing passenger charges.
- 9.5 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, thereby making more efficient use of the scarce resource of Heathrow slots.
- 9.6 Since the introduction of the discounts in 2017, the European load factor increased by 1.7 percentage points, the first notable increase since 2014, and an additional 0.9 million European passengers travelled through Heathrow compared with 2016.
- 9.7 However, the ICAO average load factor figure for 2017 was 81.2%⁹, which suggests that European load factors at Heathrow continue to be lower than average while Non-European load factors remain close to the global ICAO average, as shown in table 13.

⁸ Using Oxford Economics Forecast January 2018

⁹ <https://www.icao.int/Newsroom/Pages/Continued-passenger-traffic-growth-and-robust-air-cargo-demand-in-2017.aspx>

Table 13¹⁰

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%
Av	72.73%	79.61%	6.89%

- 9.8 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.
- 9.9 Heathrow proposes to maintain the existing £10.00 reduction in the European departing passenger charge to continue to address the European load factor imbalance.

UK Connectivity

- 9.10 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). Therefore, during 2018 departing passengers to UK destinations receive a total £15.00 discount (this is based on a £10.00 European departing passenger load factor discount and £5.00 UK connectivity discount).
- 9.11 This passenger discount was in direct response to the National Connectivity Task Force (NCTF). The NCTF identified the need to make routes to regional airports more attractive to airlines to support them whilst Heathrow remains capacity constrained.
- 9.12 Based on 2017 data there are over 2.9 million passengers who transfer through other major hubs from UK airports, compared to fewer than 1.8 million that transfer through Heathrow. Therefore, there continues to be a significant number of passengers who could use Heathrow to connect to their destination.
- 9.13 Heathrow therefore proposes to maintain the £5.00 UK connectivity discount to the European Destination passenger charge. As a result, departing passengers to UK destinations will receive a total £15.00 discount (this is based on a £10.00 EU departing passenger load factor incentive discount and £5.00 UK connectivity discount).

Transfer and Transit passenger charges

- 9.14 Heathrow currently has in place a 25% discount applied to departing passenger charges for passengers transferring or transiting through the airport. This discount was introduced to encourage such passengers to travel through Heathrow to

¹⁰ Source Heathrow Database

support the hub. The key to any hub is to have a good mix of transfer and origin and destination passengers to feed the entire network.

- 9.15 The following table sets out a summary of the level of transfer/transit passengers at Heathrow:

Table 14¹¹

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%

- 9.16 It can be noted from the above table that Heathrow's absolute level of transfer passengers has remained consistent over the last six years. However, the proportion of transfer passengers to total passenger numbers has declined from 27.4% in 2012 to 25.1% for 2017.

- 9.17 Passengers have a choice of airport which they transfer through in order to reach their end destination. The table below shows how Heathrow's transfer passenger numbers have changed from 2012 to 2017 compared to the average of other major hub airports.

Table 15¹²

	2012	2017	%
LHR	19.2m	19.6m	2%
Average other hubs	18.4m	26.9m	46%

- 9.18 Heathrow's transfer share does not significantly vary between the Winter and Summer seasons, however, there are a higher proportion of empty seats in the Winter season that could be filled with additional transfer volume and average air fares in the Winter season can be up to 16% lower than in the Summer season:

Table 16¹³

	Short Haul	Long Haul	Total
Summer season % of transfer passengers	10%	14%	25%
Summer season number of empty seats per month	0.9m	0.7m	1.7m
Winter season % of transfer passengers	10%	14%	25%
Winter season number of empty seats per month	1.2m	0.9m	2.0m

- 9.19 Heathrow has had a slower rate of growth for transfer passengers than the average of the other major hub airports and the majority of empty seats exists in

¹¹ Data source ADB Heathrow Airport Ltd

¹² Data source Airport websites

¹³ Data source Heathrow Database

the Winter Season which is when a reduction in price is reasonably expected to drive additional passenger volumes.

- 9.20 Therefore, Heathrow proposes to implement a seasonal transfer and transit discount of 50% in the Winter season, reducing to 10% in Summer in order to attract additional transfer passengers and make the best use of Heathrow's scarce capacity.

Growth Incentive Scheme

- 9.21 In 2017, Heathrow launched its first incentive scheme to encourage passenger growth in order to optimise scarce capacity at Heathrow, called the Winter 2017-18 Air Transport Movement (ATM) Incentive Scheme. This was designed to incentivise airlines to reduce the number of slots that were handed back to Airport Coordination Limited (ACL). It provided an incentive for every additional slot that was utilised in Winter 2017-18 above Winter 2016-17 by giving a rebate of £10.00 per incremental departing passenger. The incentive scheme was outside of the structure of airport charges, and contributed to an increase of 2,600 flights and over 0.3 million passengers. Due to this success, Heathrow relaunched the ATM incentive scheme for Winter 2018-19.
- 9.22 Heathrow has evaluated options to include a passenger growth incentive within the structure of charges and held an informal engagement session with the airline community on 3 July 2018 to seek feedback on a proposed growth incentive. We have received feedback on this proposal from a number of airlines about how to structure an incentive scheme within the structure of charges.
- 9.23 The airport is permitted to operate up to 480,000 ATMs per year and, in 2017, its runways operated at 99% of this limit. Heathrow is near full capacity for air transport movements.
- 9.24 Within this capacity constraint, the key driver for passenger growth is to increase the number of passengers on each plane, in other words, by maximising the average load factor. There remain 21.6 million empty seats flying through Heathrow in the year to June 2018.
- 9.25 In order to support airline partners to help fill these 21.6 million empty seats, Heathrow proposes to introduce a passenger growth incentive scheme in the structure of airport charges within the maximum allowable yield. Inclusion within the structure of charges will align Heathrow and the airlines' objectives to grow passenger numbers whilst keeping future airport charges as close to current charges as possible.
- 9.26 The incentive scheme would operate with a £10 incentive rebate per incremental departing passenger in 2019 above the 2018 actual passenger volumes. In order for an airline to receive the rebate, Heathrow's total passenger numbers must also increase from 2018 to 2019.
- 9.27 Implementing a growth incentive scheme in the structure of charges allows airlines to target incentive payments to the routes and distribution channels which have the most impact based on their insight into, and experience of, consumer behaviour. The 2017-18 Winter ATM incentive scheme helps to demonstrate that a discount of this value has the ability to incentivise airline behaviour to target incentive payments on specific routes.
- 9.28 Heathrow proposes to include an allowance of £15 million for the growth incentive scheme within in the structure of charges for 2019 which represents a capped

growth incentive reward equivalent to an additional 1.5 million departing passengers.

- 9.29 In the event that the total growth incentive reward would exceed £15 million, the reward will be paid proportionally to all qualifying Airlines.
- 9.30 To limit the risk of a proportional payment, the top end of the capped growth incentive reward of a potential additional 1.5 million departing passengers, 3 million total, has been included in the calculation of the 2019 airport charges, which is above the 79.25 million passengers used in the calculation of the yield per passenger.
- 9.31 It is proposed that the £15 million allowance is recovered through departing passenger charges and any over/under recovery would be adjusted through the correction factor in 2021.
- 9.32 Full proposed terms for the passenger growth incentive scheme are laid out in the Conditions of Use Draft Consultation Proposal for 2019.

Environmental Charges

- 9.33 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.
- 9.34 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 17¹⁴

% Mix	2016	2017	2018 to May 2018	2019 Forecast
Chapter 3	0.1%	0.1%	0.1%	0.0%
Chapter 4 High	12.8%	11.2%	8.8%	5.9%
Chapter 4 Base	27.6%	28.6%	29.3%	27.2%
Chapter 4 Low	8.8%	8.6%	7.9%	7.0%
Chapter 14 Base	35.9%	35.4%	34.4%	34.1%
Chapter 14 Low	14.8%	16.2%	19.5%	25.9%

- 9.35 Heathrow proposes to continue the emphasis on environmental performance by it acting as the balancing factor to recover the shortfall in revenues from the passenger discounts and the increase in the yield of £0.856.
- 9.36 This rebalance reflects the continuing increased emphasis on environmental performance and best in class aircraft fleet operations, while at the same time addressing the load factor and empty seat issues, both of which are in the public interest.
- 9.37 As a result of the change in the proportion of noise chapters, the 2019 proposed environmental noise charges increase by 10% (as laid out in table 18 below) as more revenue will be recovered from noise and emissions charges than in 2018,

¹⁴ Data source Heathrow Database

reflecting that during 2017 and 2018 airlines benefited from lower prices as a result of using cleaner and quieter fleet at Heathrow.

- 9.38 The proportion of noise chapters will be reviewed again ahead of the airport charges decision on 31st October and will be revised should the latest information available indicate further change.

Future Airport Charges

- 9.39 On 25 June 2018, Parliament unambiguously backed Heathrow's expansion by voting in favour of the Airports National Policy Statement (NPS). The Secretary of State for Transport subsequently designated the NPS the following day, clearing the way for Heathrow to submit a Development Consent Order (DCO) application for the project.

- 9.40 The NPS has laid out commitments that Heathrow must achieve in order to meet the requirements of the DCO. Future airport charges will need to recognise those commitments at the right time. This will include, but is not limited to:

- the incentivisation of the use of bio-fuels and electric aircraft;
- working with airlines to phase out ageing fleet types such as 747 and older 767 aircraft using Heathrow;
- revisiting the noise chapter differentials in environmental charges;
- meeting the night curfew requirements; and
- incentivising the efficient use of cargo and airport infrastructure, e.g. stands, to create capacity for airlines to grow.

- 9.41 Heathrow will consult with all stakeholders when considering these future changes.

Summary of all proposals

- 9.42 As a result of these proposals, environmental noise charges would increase by 33%, and parking charges by 10% as detailed in the following table.

Table 18

2019 Prices compared to 2018 Prices	Environmental charges - Noise	Environmental charges – Emissions	Departing Passenger Charges	Parking Charges
Change in proportion of Noise Chapters	10%	0%	0%	0%
2019 volume changes	3%	-2%	-1%	6%
Seasonal discount	0%	0%	0%	0%
Allowed yield increase of £0.856	4%	3%	4%	4%
Growth incentive scheme additional passengers	5%	4%	0%	4%
Growth incentive scheme £15m	0%	0%	1%	0%
Allowed yield increase targeted on environmental charges	11%	10%	-4%	-4%
Total changes compared to 2018 Prices	33%	15%	0%	10%

Chapter 10 – Calculating airport charges tariffs for 2019

- 10.1 The following steps have been applied to calculate the individual tariffs for 2019, as follows:
- 10.2 The 2019 maximum allowable yield is £22.913. This is a £0.856 increase from 2018 maximum allowable yield. The increase of £0.856 is recovered through the environmental charges;
- 10.3 £10.00 passenger discount to European routes and £15.00 passenger discount to UK routes (£10.00 discount on European routes and £5.00 UK connectivity discount), compared to the non-discounted European passenger;
- 10.4 Remote stand rebate held at £4.00 per passenger;
- 10.5 Environmental charge proportion of total airport charges deviates to act as the balancing factor to ensure Heathrow recovers the regulated price cap with the introduction of the proposed passenger charge discounts. This applies to the first £5.00 passenger discount to European routes and £10.00 passenger discount to UK routes (£5.00 discount on European routes and £5.00 UK connectivity discount). The further £5.00 passenger discount is continued to be rebalanced through the Non-European departing passenger charge;
- 10.6 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; and
- 10.7 Transfer passenger volumes are disaggregated into Summer and Winter season volumes. Winter tariffs are discounted by 55% compared to the Summer tariff. This is revenue neutral;
- 10.8 Growth incentive rebate of £15 million added to the departing passenger charge;
- 10.9 The 2019 maximum allowable yield uses a passenger forecast of 79 million whereas the passenger forecast to set the departing passenger charges is 82 million reflecting the anticipated growth in passenger volume related to the growth incentive scheme; and
- 10.10 The above changes have been applied through four stages to come to the final proposed tariffs for 1 January 2019.
- 10.11 No change to overall proportion of the parking charge.
- 10.12 The **first step** is to calculate the tariffs based on the existing structure. The calculation of these tariffs takes account of the 2019 forecast maximum allowable yield where the increase from 2018 forecast maximum allowable yield is applied to the environmental charges . This sets a baseline to apply the changes.
- 10.13 The **second step** is to apply the growth incentive to departing passenger charges with an offset rebate amount. An estimated 3 million passenger growth for the purposes is used to calculate the departing passenger charges.
- 10.14 The **third step** is to apply the passenger discounts and fixed remote stand rebate.
- 10.15 The **fourth and final step**, recovers the shortfall in revenue of £183m from the passenger discounts to recover the 2019 forecast maximum allowable yield. This step also increases NOx emissions Charge. Finally, there is no change to the

parking charge proportion. This final step translates into the proposed tariffs for 2019 and are shown in Chapter 12.

Chapter 11 – Forecast Revenue for 2019

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
<i>Peak</i>				
Chapter 3	[Landings]	0	£11,705.68	£0
Chapter 4 High	[Landings]	13,867	£3,344.48	£46,377,904
Chapter 4 Base	[Landings]	69,056	£3,010.03	£207,860,632
Chapter 14 High	[Landings]	16,539	£2,341.14	£38,720,114
Chapter 14 Base	[Landings]	78,343	£1,672.24	£131,008,298
Chapter 14 Low	[Landings]	58,841	£1,003.34	£59,037,529
Total	[Landings]	236,646		£483,004,477
<i>Super Night Peak</i>				
Chapter 3	[Landings]	0	£29,264.20	£0
Chapter 4 High	[Landings]	0	£8,361.20	£0
Chapter 4 Base	[Landings]	0	£7,525.08	£0
Chapter 14 High	[Landings]	0	£5,852.85	£0
Chapter 14 Base	[Landings]	0	£4,180.60	£0
Chapter 14 Low	[Landings]	0	£2,508.35	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,586,369	£18.33	£120,728,144
Average kg Nox per landing	[kg]	27.8		£120,728,144
Total Landing Revenue	(a)			£603,732,621
Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount	[Dep Pax]	1,344,291	13.77	£18,510,893
European charge with single discount	[Dep Pax]	12,631,547	18.77	£237,094,138
Other	[Dep Pax]	16,547,302	44.51	£736,586,616
Total	[Dep Pax]	30,523,141		£992,191,647
Departing Transfer Passenger Charge (Summer - peak)				
European charge with dual discount	[Dep Pax]	653,891	12.46	£8,147,478
European charge with single discount	[Dep Pax]	2,284,378	16.98	£38,788,746
Other	[Dep Pax]	3,376,094	40.27	£135,955,324
Total	[Dep Pax]	6,314,364		£182,891,548
Departing Transfer Passenger Charge (Winter - off peak)				
European charge with dual discount	[Dep Pax]	404,185	6.89	£2,784,834
European charge with single discount	[Dep Pax]	1,412,027	9.39	£13,258,932
Other	[Dep Pax]	2,120,043	22.27	£47,213,348
Total	[Dep Pax]	3,936,254		£63,257,114
Departing Transit Passenger Charge				
European charge with dual discount	[Dep Pax]	0	12.46	£0
European charge with single discount	[Dep Pax]	0	16.98	£0
Other	[Dep Pax]	53,713	40.27	£2,163,008
Total	[Dep Pax]	53,713		£2,163,008
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Passenger Growth; Incentive Rebate				-£15,000,000
Total Departing Passenger Charge Revenue	(b)	40,827,471		£1,209,559,317
Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	579,196	24.25	14,045,503
Wide bodied				
Chargeable Period	[Units of 15 minutes]	957,915	58.20	55,750,653
Total Parking Charge	(c)			£69,796,156
Terminal Pax Flights: Total Revenue				£1,883,088,094
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£604,317,467
Departing Passenger Revenue	(b) + (e)			£1,210,006,690
Parking Revenue	(c) + (f)			£70,328,375
Total Regulated Revenue				£1,884,652,532
Total Passengers				82,251,947
Total Regulated Yield				£22.913

Chapter 12 – Proposed Airport Charges Tariffs effective 1 January 2019

	Proposed 2019 £ GBP
Charges on Landing	
Peak	
Chapter 3	11,705.68
Chapter 4 High	3,344.48
Chapter 4 Base	3,010.03
Chapter 14 High	2,341.14
Chapter 14 Base	1,672.24
Chapter 14 Low	1,003.34
Super Night Peak	
Chapter 3	29,264.20
Chapter 4 High	8,361.20
Chapter 4 Base	7,525.08
Chapter 14 High	5,852.85
Chapter 14 Base	4,180.60
Chapter 14 Low	2,508.35
Emissions charge	18.33
Charges on Departing Passengers	
Origin and Destination	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	13.77
European charge with single discount <i>(with EU load factor discount)</i>	18.77
Other	44.51
Transfer and Transit	
<i>Summer season (peak)</i>	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	12.46
European charge with single discount <i>(with EU load factor discount)</i>	16.98
Other	40.27
<i>Winter season (off peak)</i>	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	6.89
European charge with single discount <i>(with EU load factor discount)</i>	9.39
Other	22.27
Remote Stand Rebate	-4.00
Minimum charge - UK destinations	761.40
Minimum charge - Other destinations	1,378.08
Charges on aircraft parking	
Narrow bodied	24.25
Wide bodied	58.20

Chapter 13 - Financial and Traffic Information

Traffic statistics and charging parameters

- 13.1 The actual traffic statistics from 2008/09 to 2017 are set out 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

- 13.2 Heathrow is a privately owned company and a summary of its regulatory accounts are presented for the 12 month period to 31 December 2017. These accounts compare the airport's financial performance for the year ended 31 December 2017 to the CAA forecast for revenues and operating costs underpinning the Q6 price cap.
- 13.3 The regulatory accounts include revenue and cost comparisons, and calculations of the Regulated Asset Base.
- 13.4 The full regulatory accounts and annual reports are available from <http://www.heathrow.com/company/investor-centre/regulation/regulatory-accounts>.

Heathrow Airport 2017 Regulatory Performance £m (nominal)				
	2017 Actual	2017 Settlement	Var	Var %
Terminal passengers (000's)	77,898	73,400	4,498.0	6%
Revenue				
Airport charges	1,716	1,640	76	5%
Retail	640	576	64	11%
Property	119	122	-3	-2%
Other regulated charges	240	235	5	2%
Rail	136	135	1	1%
Other	13	22	-9	-41%
Total revenue	2,864	2,730	134	5%
Expenditure				
Staff costs	422	362	-60	-17%
Maintenance & equipment costs	174	174	0	0%
Rent and rates	145	165	20	12%
Utility costs	86	117	31	26%
Other costs	301	276	-25	-9%
Transfer of exceptional costs included in CAA forecast	0	0	0	
Depreciation	772	772	0	0%
Total expenditure	1,900	1,866	-34	-2%
Regulatory operating profit (before exceptional operating costs)	964	864	100	12%
Exceptional operating costs	0	0	0	
Regulatory operating profit	964	864	100	12%
Capital expenditure	693	607	86	14%
Opening RAB	15,237	15,536	-299	
Closing RAB	15,786	16,011	-225	
Weighted average RAB	15,512	15,774	-262	
Return on weighted average RAB	6.2%	5.5%	0.7%	

Note: Negative indicates adverse

Passenger only flights – actual and forecast

	Actual											Forecast
	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
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	39,872,018
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	13,271,214
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	15,926,370
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	4,316,577
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	5,587,631
Transit passengers												
Europe	1,859	2,834	1,623	646	1,462	1,293	699	1,103	349	3,757	1,258	0
Other	160,859	119,384	96,303	47,738	47,004	34,106	25,337	32,467	30,625	35,273	24,126	24,742
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	39,126,534
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	78,998,552
PATMs	467,130	453,780	453,938	473,761	464,686	467,779	356,773	468,359	469,671	470,764	471,082	473,100
UK (departing - origin and destination)	Transfer passengers not separately identified			1,363,803	1,370,661	1,508,293	1,212,869	1,558,413	1,480,713	1,340,789	1,367,353	1,336,306
UK (departing - transfers)				949,214	975,181	1,031,366	840,890	1,067,349	1,089,749	986,012	1,058,093	1,031,188
UK (departing - total)	2,741,311	2,573,120	2,460,251	2,313,017	2,345,842	2,539,659	2,053,759	2,625,762	2,570,462	2,326,801	2,425,446	2,367,493

