

Heathrow Airport

Airport Charges for 2018 Consultation Document

Date: 04 August 2017

Prepared by: Heathrow Airport Limited

Status: Published

Contents

Executive Summary	3
Chapter 1 – Introduction and Consultation Programme	4
Chapter 2 – Calculating the Maximum Allowable Yield	7
Chapter 3 – Bonus Factor	11
Chapter 4 - Development Capital	13
Chapter 5 – Capital Triggers	19
Chapter 6 – Cost pass through of Category B.....	21
Chapter 7 – Business Rates Revaluation Factor.....	22
Chapter 8 - Correction Factor for 2016.....	25
Chapter 9 – Overview of Charges	35
Chapter 10 – Calculating airport charges tariffs for 2018	41
Chapter 11 – Forecast Revenue for 2018	42
Chapter 12 – Proposed Airport Charges Tariffs effective 1 January 2018	43
Chapter 13 - Financial and Traffic Information	44
Appendix A – Structure of Charges - Step One.....	47
Appendix B – Structure of Charges - Step Two.....	48

Executive Summary

Heathrow saw excellent progress in 2016 towards its vision to give passengers the best airport service in the world. Heathrow continued to deliver its best ever passenger service, maintaining a record service quality score for the second quarter of 2017 of 4.16 in the Airport Service Quality ('ASQ') survey directed by Airports Council International ('ACI'). Heathrow has been ranked first among major European hub airports for service quality in this survey for twelve successive quarters.

Heathrow has received other recognition for its high service standards, being named the 'Best Airport in Western Europe' for the third consecutive year at the Skytrax World Airport Awards. The award, voted for globally by passengers, came in addition to Heathrow being voted 'Best Airport for Shopping' for the eighth consecutive time. For the second time, Heathrow received the prestigious award of 'Europe's Best Airport' in the category of over 40 million passengers in the 2016 ASQ Awards.

Improvements to passengers' journeys through the airport continue. Passengers continue to enjoy efficient queuing to pass through security, passing through central security within the five minute period prescribed under the Service Quality Rebate scheme 97.7% of the time in the first half of 2017 (2016: 97.7%) compared with a 95% service standard. The service quality regime penalty threshold was not triggered in the first six months of 2017 in respect of any performance standard.

Following the Government Decision to support Heathrow expansion in late 2016 and the publication of the draft Airports National Policy Statement in early 2017, Heathrow is now preparing and developing its application for a Development Consent Order.

This document frames Heathrow's consultation on the level of airport charges for 2018, level of passenger discounts and the transfer passenger discount. Heathrow is proposing to set 2018 prices to recover the maximum allowable yield permitted by the regulatory settlement. The forecast maximum allowable yield for 2018 is £22.057 per passenger.

The consultation proposal includes:

- increasing the passenger discount to European routes to £10.00 to address the continuing European load factor imbalance
- increasing the transfer and transit discount by a further 5% to encourage passenger growth across the entire network
- the introduction of a UK minimum departure charge
- a change in the application of the remote stand rebate
- a change to the Night Period times in environmental charges

The UK connectivity discount of £5.00 on top of the European departing passenger charge will continue. There is an increased emphasis on environmental charges, with a larger proportion of the charges recovered through environmental charges.

Publication of this consultation document initiates the consultation process. Heathrow will be holding a consultation meeting on 19 September 2017. To help inform the consultation, Heathrow requests written responses from the airline community by 29 September 2017. Heathrow will then consider all comments received during the consultation period, with a view to issuing a decision on 27 October 2017, for implementation from 1 January 2018.

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 2018 to recover the forecast maximum allowable yield.
- 1.3 This consultation document sets out the calculations for the 2018 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 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, that 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%.
- 1.7 2018 is the fifth year of the sixth *regulatory period* at Heathrow. 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 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

¹ The Airport Charges Regulations 2011

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>

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 that will connect all of Britain to the world, bringing new jobs and economic growth to every nation and region of the UK.
- 1.13 In July 2016, the CAA commenced consultation on the regulatory treatment of costs incurred in obtaining the development consent order 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.

Consultation Programme

- 1.14 Heathrow is consulting on the level of charges with the airline community and plans to announce its decision on 27 October 2017. The publication of this consultation document is the start of our consultation on the annual setting of 2018 airport charges.
- 1.15 The consultation programme is as follows:

Table 1

Date	Milestone
4 Aug 2017	Publication of Heathrow consultation document
19 Sep 2017	Consultation meeting
29 Sep 2017	Airline written responses submitted by close of business
27 Oct 2017	Heathrow announces 2018 prices
1 Jan 2018	Prices applicable from

- 1.16 The consultation meeting will be held on 19 September 2017, which will provide the airline community with the opportunity to comment on the price proposals, in addition to written comments. The meeting will be open to all airlines and their representative bodies.

Date: Tuesday 19 September 2017
Time: 14:00 to 16:00
Location: The Compass Centre
Meeting room – Hyde Park
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 29 September 2017. 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 confidential information 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 2018 yield:

$$M_{2018} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2018}	=	maximum revenue yield per passenger using Heathrow airport in Regulatory Year ("2018") 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 2018 this would be the change from April 2016 to April 2017.
X	=	-1.5%
B_{t-2}	=	bonus factor based on certain service quality performance in 2016.
Y_{t-1}	=	specified average revenue yield per passenger for the period $t-1$ (2017).
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 2016.
Q_t	=	forecast passengers using Heathrow airport in 2018.

- 2.2 The relevant year "2018", means the period of twelve months from 1 January 2018 to 31 December 2018.

Maximum allowable yield forecast for 2018

2.3 The combined impact of all the elements of the formula results in a forecast 2018 maximum allowable yield of £22.057 (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 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 i.e. 2016. Heathrow achieved a bonus in 2016. 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 2018 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 achieved particular capital investment project dates. As at 1 June 2017, fifteen trigger projects have been agreed with the airline community, and of these five trigger projects have a completion date that fall into 2018:

- Replacement of 12 airbridges on 9 stands across T3
- To deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323
- New Cellular platform available for MNO connection (G5)
- Hold baggage screening standard 3 machines installed in Terminal 2
- Proposed % of Hold baggage screening standard 3 machines installed and in use in Terminal 5.

All five projects are forecast to be delivered to their trigger milestone dates. Therefore in setting airport charges for 2018 there is no forecast trigger payment.

2.7 Any trigger payment that may arise in 2018 due to new triggered projects or any deviation in actual completion dates will be corrected through the K Factor when setting 2020 airport charges.

Cost pass through of Category B costs

2.8 Cost pass through of Category B costs increase 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).

2.9 Heathrow is recovering £10 million for 2016 through the 2016 K Factor and £10 million for 2018. Full details are shown in Chapter 6.

Business rates revaluation factor

- 2.10 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 2017 compared to the 9% allowance in the settlement.
- 2.11 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

- 2.12 Heathrow passenger forecast for 2018 is 76,953k (twelve months – January 2018 to December 2018).

K Factor

- 2.13 The K Factor in the formula has reduced the 2018 forecast maximum allowable yield to compensate for the unanticipated over-recovery against the maximum allowable yield in 2016, together with an allowance for interest (with an additional 3% points for an over-recovery). The K Factor calculation is shown in Chapter 8.

Application of the Regulatory Pricing Formula

- 2.14 Based on the regulatory pricing formula, the 2018 forecast maximum allowable is set out below.

$$M_{2018} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where :

RPI _{t-1}	=	3.5%	
X	=	-1.5%	
B _{t-2}	=	0.021%	- actual bonus achieved in 2016
Y _{t-1}	=	£22,305	
D _t	=	-£15,772k	- this figure is a forecast
A _t	=	£10,000k	
T _t	=	0	- this figure is a forecast
BR _t	=	£-34,750k	
K _t	=	0.172	- this positive figure is a forecast
Q _t	=	76,953k	- this figure is a forecast

Hence:

$$M_{2018} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2018} = (1 + 3.5\% + -1.5\% + 0.021\%)22.305 + \frac{(-15,772)}{76,953} - \frac{0}{76,953} + \frac{10,000}{76,953} + \frac{(-34,750)}{76,953} - 0.172$$

$$M_{2018} = (1.0202 * 22.305) + (-0.205) - 0 + 0.130 + (-0.452) - 0.172$$

$$M_{2018} = 22.057$$

Charges in 2017

2.15 The forecast maximum allowable yield at Heathrow in 2017 was calculated at £21.907.

Table 2

Specified yield 2016	£22.349
12 months RPI movement to April 2016	£0.291
X	-£0.335
Bonus term	£0.000
Trigger payments	£0.000
Development capex	-£0.298
Business rates	£0.000
K factor from 2015 over recovery	-£0.100
Forecast 2017 maximum allowable yield	£21.907

Proposed pricing for 2018

2.16 Heathrow is proposing to set prices for 2018 to recover the forecast maximum allowable yield of £22.057 per passenger (details of the charges are shown in Chapter 10). This is a 0.7% increase on the 2017 yield however this represents a real terms reduction in the yield of 2.8%.

2.17 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 2018 forecast maximum allowable yield the service quality bonus can be recovered for the Regulatory Period 2016 from 1 January 2016 to 31 December 2016.
- 3.3 Heathrow has achieved the service quality bonus for 2016 at 0.021%. This is included in the 2018 forecast maximum allowable yield.
- 3.4 Table 3 sets out the 2016 performance of these measures for the purposes of the bonus.

Table 3

Departure lounge seating availability (QSM)	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	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	4.50
Terminal 2 (actual)	4.38	4.39	4.40	4.40	4.41	4.41	4.41	4.41	4.41	4.42	4.43	4.43	4.43
Terminal 3 (actual)	4.22	4.21	4.20	4.20	4.18	4.17	4.15	4.12	4.13	4.11	4.10	4.08	
Terminal 4 (actual)	4.34	4.33	4.34	4.35	4.35	4.36	4.36	4.37	4.37	4.35	4.34	4.34	
Terminal 5 (actual)	4.07	4.07	4.06	4.06	4.05	4.05	4.05	4.06	4.05	4.04	4.05	4.05	
BNS(T1)kj	0.0300%	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)kj	0.0210%	0.0218%	0.0225%	0.0225%	0.0233%	0.0233%	0.0233%	0.0233%	0.0240%	0.0248%	0.0248%	0.0248%	0.0248%
BNS(T3)kj	0.0090%	0.0083%	0.0075%	0.0075%	0.0060%	0.0053%	0.0038%	0.0015%	0.0023%	0.0008%	0.0000%	-0.0015%	
BNS(T4)kj	0.0180%	0.0173%	0.0180%	0.0188%	0.0188%	0.0195%	0.0195%	0.0203%	0.0203%	0.0188%	0.0180%	0.0180%	
BNS(T5)kj	-0.0022%	-0.0022%	-0.0030%	-0.0030%	-0.0037%	-0.0037%	-0.0037%	-0.0030%	-0.0037%	-0.0045%	-0.0037%	-0.0037%	
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%	0.0000%
Cleanliness (QSM)	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	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)	4.41	4.41	4.42	4.42	4.42	4.43	4.43	4.44	4.44	4.45	4.45	4.45	
Terminal 3 (actual)	4.18	4.18	4.17	4.18	4.18	4.18	4.17	4.17	4.18	4.19	4.19	4.20	
Terminal 4 (actual)	4.18	4.19	4.19	4.20	4.20	4.20	4.20	4.22	4.24	4.24	4.25	4.24	
Terminal 5 (actual)	4.28	4.28	4.28	4.29	4.29	4.29	4.29	4.30	4.31	4.31	4.31	4.31	
BNS(T1)kj	0.0300%	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)kj	0.0210%	0.0210%	0.0220%	0.0220%	0.0220%	0.0230%	0.0230%	0.0240%	0.0240%	0.0250%	0.0250%	0.0250%	0.0250%
BNS(T3)kj	-0.0020%	-0.0020%	-0.0030%	-0.0020%	-0.0020%	-0.0020%	-0.0030%	-0.0030%	-0.0020%	-0.0010%	-0.0010%	0.0000%	
BNS(T4)kj	-0.0020%	-0.0010%	-0.0010%	0.0000%	0.0000%	0.0000%	0.0000%	0.0020%	0.0040%	0.0040%	0.0050%	0.0040%	
BNS(T5)kj	0.0080%	0.0080%	0.0080%	0.0090%	0.0090%	0.0090%	0.0100%	0.0110%	0.0110%	0.0110%	0.0110%	0.0110%	
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%	0.0000%
Way finding (QSM)	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	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)	4.28	4.28	4.29	4.30	4.30	4.31	4.31	4.32	4.33	4.33	4.33	4.33	
Terminal 3 (actual)	4.23	4.23	4.22	4.23	4.23	4.22	4.22	4.22	4.22	4.23	4.22	4.22	
Terminal 4 (actual)	4.28	4.27	4.27	4.27	4.27	4.27	4.26	4.27	4.26	4.26	4.26	4.26	
Terminal 5 (actual)	4.20	4.21	4.21	4.22	4.22	4.22	4.23	4.24	4.24	4.24	4.25	4.25	
BNS(T1)kj	0.0300%	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)kj	0.0080%	0.0080%	0.0090%	0.0100%	0.0100%	0.0110%	0.0110%	0.0120%	0.0130%	0.0130%	0.0130%	0.0130%	0.0130%
BNS(T3)kj	0.0030%	0.0030%	0.0020%	0.0030%	0.0030%	0.0020%	0.0020%	0.0020%	0.0030%	0.0020%	0.0020%	0.0020%	0.0020%
BNS(T4)kj	0.0080%	0.0070%	0.0070%	0.0070%	0.0070%	0.0070%	0.0060%	0.0070%	0.0060%	0.0060%	0.0060%	0.0060%	0.0060%
BNS(T5)kj	0.0000%	0.0010%	0.0010%	0.0020%	0.0020%	0.0020%	0.0030%	0.0040%	0.0040%	0.0040%	0.0050%	0.0050%	
Bonus term =	0.0000%	0.0010%	0.0010%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0030%	0.0020%	0.0020%	0.021%
Bonus term =	0.0000%	0.0010%	0.0010%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	
Rounded to 3 decimal places Bt =	0.000%	0.001%	0.001%	0.002%	0.002%	0.002%	0.002%	0.002%	0.002%	0.003%	0.002%	0.002%	0.021%

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 are 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 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, after which 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 approach to the two tier 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 2017, indicates that fewer projects are transitioning to Core than originally anticipated in the settlement. Therefore a lower cumulative capex spend to 2018 than the CAA's Q6 settlement of up to £265.5m (2018 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). 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 2018 prices.

Table 4

£m and in 2018 prices	2014 9 months	2015	2016	2017	2018	Year to date
Development plus core	394.1	624.4	716.4	713.2	707.0	3,155.1
Settlement	533.3	812.5	784.1	642.3	648.4	3,420.6
Difference	(139.2)	(188.1)	(67.7)	70.9	58.6	(265.5)

- 4.8 The lower cumulative spend translates into a lower 2018 average RAB of £295m. Applying the cumulative development adjustment results in the 2018 maximum allowable yield reducing by £15.8m, equivalent to 21 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 2020.
- 4.10 The formula to calculate the 2018 cumulative development capex adjustment of £15.8m is set out below:

Year t =	9mo.2014	2015	2016	2017	2018
Additional revenue requirement for 2014 projects	$0.5 \times d_{2014}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-5}} \times d_{2014}$
Additional revenue requirement for 2015 projects	0	$0.5 \times d_{2015}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2015}$
Additional revenue requirement for 2016 projects	0	0	$0.5 \times d_{2016}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2016}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2016}$
Additional revenue requirement for 2017 projects	0	0	0	$0.5 \times d_{2017}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2017}$
Additional revenue requirement for 2018 projects	0	0	0	0	$0.5 \times d_{2018}$
D_t=	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
P _{t-1}	=	ONS CHAW Retail Price Index in April 2017 is 270.6
P _{t-2}	=	ONS CHAW Retail Price Index in April 2016 is 261.4
P _{t-3}	=	ONS CHAW Retail Price Index in April 2015 is 258.0
P _{t-4}	=	ONS CHAW Retail Price Index in April 2014 is 255.7
P _{t-5}	=	ONS CHAW Retail Price Index in April 2013 is 249.5

The annual development capex adjustment for d₂₀₁₄, d₂₀₁₅, d₂₀₁₆, d₂₀₁₇ and d₂₀₁₈ 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 d₂₀₁₄:

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

O_{2014} = £363,400k

V_{2014} = £439,100k

P_{t-1} = 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} = -£128,321k

Hence d_{2015} :

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

O_{2015} = £590,000k

V_{2015} = £669,000k

P_{t-1} = 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} = -£177,789k

Hence d_{2016} :

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

O_{2016} = £683,000k

V_{2016} = £645,600k

P_{t-1} = 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} = -£64,598k

Hence d_{2017} :

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

O_{2017} = £689,000k

V_{2017} = £528,800k

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

$$d_{2017} = 689,000 - \left(528,800 * \frac{261.4}{222.8} \right)$$

d_{2017} = £68,586k

Hence d_{2018} :

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

O_{2018} = £707,000k

V_{2018} = £533,900k

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

$$d_{2018} = 707,000 - \left(533,900 * \frac{270.6}{222.8} \right)$$

d_{2018} = £58,556k

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

Hence:

Year t =	2017	Results in
Additional revenue requirement for 2014 projects	$\frac{270.6}{249.5} \times -128,321$	-139,173
Additional revenue requirement for 2015 projects	$\frac{270.6}{255.7} \times -177,789$	-188,149
Additional revenue requirement for 2016 projects	$\frac{270.6}{258.0} \times -64,598$	-67,753
Additional revenue requirement for 2017 projects	$\frac{270.6}{261.4} \times 68,586$	71,000
Additional revenue requirement for 2018 projects	$0.5 \times 58,556$	29,278
$D_t =$		-294,797 x 5.35%

D_t = -£15,772k

- 4.11 Therefore for the 2018 forecast maximum allowable yield is adjusted to account for the -£15,772k 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 2017, fifteen 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	Forecast
Access via new South escalator from transfer arrivals (from level 10 to level 30)	May-16	Mar-16	Actual
Main Tunnel Life Safety Systems	Dec-16	Dec-17	Forecast
T3 Pier 7 Roof - Permanent M&E services to be fully operational and temporary plant	Mar-17	Mar-17	Actual
Bravo taxiway open for code F operations	Sep-17	Sep-17	Forecast
T5 additional fast track capacity – new fast track facility ready for operational readiness	Jun-17	Jun-17	Actual
Replacement of 12 airbridges on 9 stands across T3	Jan-18	Jan-18	Forecast
To deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323	Jul-18	Jul-18	Forecast
New Cellular platform available for MNO connection (G5)	Mar-18	Mar-18	Forecast
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 development – 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

- 5.4 Five projects have a completion date that fall into 2018, (i) Replacement of 12 airbridges on 9 stands across T3; (ii) To deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323; (iii) New Cellular platform available for MNO connection (G5); (iv) Hold baggage screening standard 3 machines installed

in Terminal 2; and (v) Proposed % of Hold baggage screening standard 3 machines installed and in use in Terminal 5.

- 5.5 All five projects are forecast to be delivered to their trigger milestone dates. Therefore in setting airport charges for 2018 there is no forecast trigger payment.
- 5.6 Any triggers that are attached to projects that have trigger dates for 2018, which are finalised after 1 June 2017, will be accounted through the K Factor when setting 2020 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. 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.
- 6.3 Heathrow is including £10 million for 2016 (through the K factor) and £10 million for 2018. This increases the 2018 forecast maximum allowable yield.
- 6.4 Table 6 sets out total estimated Category B costs for 2016 to 2018. The 2016 to 2017 costs were provided to the CAA on 31 January 2017.

Table 6

£million	2016	2017	2018
Category B	10.5	94.4	96.6

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 2017 compared to the 9% allowance in the settlement. This takes effect for the Regulatory Year 2018 i.e. 2018 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 rates bill are phased in gradually, and applies to all UK properties.
- 7.4 Heathrow must apply the Government's transitional arrangements for the 2017 business rates revaluation. This 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 rates bill is decreasing (i.e. downwards cap) are as follows:

Table 7

Transitional Arrangements 2017 revaluation (before inflation) funded by 3 caps on reductions ⁴						
	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 and 2018. 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 -3.08% and -7.41% are 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 £34.8m. The formula to calculate the business rates revaluation factor is set out below:

$$BR_t = 0.8[(Z_{2017}) * (1 + RPI_{t-1}) + Z_{2018})]$$

Where:

RPI_{t-1} = percentage change (positive or negative) in the ONS CHAW Retail Price Index between April in Regulatory Period or Regulatory Year t-1 and the immediate preceding April.

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

Where:

U_t = regulatory allowance for business rates (that is £136,900,000 in 2017 and £136,800,000 in 2018) 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_{2017} :

$$Z_{2017} = (U_t - £136,900,000) * \frac{P_{t-1}}{222.80}$$

$$U_t = [£136,900,000 / (1 + 9\%)] * (1 + -3.08\%)$$

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

$$Z_{2017} = (£121,727,963 - £136,900,000) * \frac{261.4}{222.8}$$

$$Z_{2017} = -17,800,585$$

Hence Z_{2018} :

$$Z_{2018} = (U_t - £136,800,000) * \frac{P_{t-1}}{222.80}$$

$$U_t = [£136,800,000 / (1 + 9\%)] * (1 + -7.41\%)$$

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

$$Z_{2018} = (£116,204,697 - £136,800,000) * \frac{270.6}{222.8}$$

$$Z_{2018} = -25,013,864$$

Therefore:

BR_t formula is applied:

Where:

RPI_{t-1} = 3.5% is the percentage change in the Office for National Statistics CHAW Retail Price Index between April 2016 to April 2017.

$$Z_{2017} = -17,800,585$$

$$Z_{2018} = -25,013,864$$

$$BR_{2018} = 0.8[(-17,800,585) * (1 + 3.5\%) + -25,013,864]$$

$$BR_{2018} = -34,749,976$$

Chapter 8 - Correction Factor for 2016

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, trigger completion dates and recovery of actual service quality bonus.
- 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 2016 actual maximum allowable yield

- 8.3 The combined impact of all the elements of the formula results in 2016 actual maximum allowable yield of £22.180 (passenger only flights). 2016 is the Regulatory Period from January 2016 to December 2016. The section below presents the components of the formula.

- 8.4 M_{t-2} relates to 2016 and its calculation is shown below:

$$M_{2016} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2016} = maximum revenue yield per passenger using Heathrow airport in Regulatory Year ("2016") 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 2016 this would be the change from April 2014 to April 2015.

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 $t-1$ (2015).

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 2014.
Q_t	=	actual passengers using Heathrow airport in 2016.

Application of the Regulatory Pricing Formula

Where :

RPI_{t-1}	=	0.9%
X	=	-1.5%
B_{t-2}	=	0% - this figure is an actual
Y_{t-1}	=	£22.484
D_t	=	-£18,424k - this figure is an actual
T_t	=	-£2,542 - this figure is an actual
A_t	=	£10,000 - this figure is an actual
BR_t	=	0 - only applicable in 2018
Q_t	=	75,715k - this figure is an actual
K_t	=	-0.024 - this figure is an actual

Hence:

$$M_{2016} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{A_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2016} = (1 + 0.9\% + -1.5\% + 0\%)22.484 + \frac{(-18,424)}{75,715} - \frac{2,542}{75,715} + \frac{10,000}{75,715} + \frac{0}{75,715} - 0.024$$

$$M_{2016} = (0.994 * 22.484) + (-0.243) - 0.034 + 0.132 + 0 - 0.024$$

$$M_{2016} = 22.180$$

8.5 The actual maximum allowable yield for 2016 is £22.180.

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

Bonus term (2014)

- 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 2018 shall be calculated by reference to the Licence Conditions that came into force 1 April 2014.
- 8.10 No bonus was achieved in 2014.

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 2016.
- 8.12 The below table sets out the formula to calculate the cumulative development capex adjustment. And the 2016 formula is used:

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

Year t =	9mo.2014	2015	2016	2017	2018
Additional revenue requirement for 2014 projects	$0.5 \times d_{2014}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2014}$	$\frac{P_{t-1}}{P_{t-5}} \times d_{2014}$
Additional revenue requirement for 2015 projects	0	$0.5 \times d_{2015}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2015}$	$\frac{P_{t-1}}{P_{t-4}} \times d_{2015}$
Additional revenue requirement for 2016 projects	0	0	$0.5 \times d_{2016}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2016}$	$\frac{P_{t-1}}{P_{t-3}} \times d_{2016}$
Additional revenue requirement for 2017 projects	0	0	0	$0.5 \times d_{2017}$	$\frac{P_{t-1}}{P_{t-2}} \times d_{2017}$
Additional revenue requirement for 2018 projects	0	0	0	0	$0.5 \times d_{2018}$
D _t =	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%
 d_{2014} = Annual development capex adjustment in 2014
 d_{2015} = Annual development capex adjustment in 2015
 d_{2016} = Annual development capex adjustment in 2016
 P_{t-1} = ONS CHAW Retail Price Index in April in 2015 is 258.0
 P_{t-2} = ONS CHAW Retail Price Index in April in 2014 is 255.7
 P_{t-3} = ONS CHAW Retail Price Index in April in 2013 is 249.5

D_{2016} : Annual development capex adjustment is calculated as follows:

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

$$O_{2014} = £363,400k$$

$$V_{2014} = £439,100k$$

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

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

$$d_{2014} = -£128,321k$$

Hence d_{2015} :

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

$$O_{2015} = \text{£590,000k}$$

$$V_{2015} = \text{£669,000k}$$

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

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

$$d_{2015} = -\text{£177,789k}$$

Hence d_{2016} :

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

$$O_{2016} = \text{£683,000k}$$

$$V_{2016} = \text{£645,600k}$$

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

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

$$d_{2016} = -\text{£64,598k}$$

- 8.13 Therefore d_{2014} , d_{2015} and d_{2016} is applied to the development capex adjustment table, as follows to determine the adjustment:

Therefore:

Year t =	2016	Results in
Additional revenue requirement for 2014 projects	$\frac{258.0}{249.5} \times -128,321$	-132,693
Additional revenue requirement for 2015 projects	$\frac{258.0}{255.7} \times -177,789$	-179,388
Additional revenue requirement for 2016 projects	$0.5 \times -64,598$	-32,299
Additional revenue requirement for 2017 projects	0	0
Additional revenue requirement for 2018 projects	0	0
D _t =		-344,380 x 5.35%

$$D_t = -£18,424k$$

Triggers

- 8.14 The K Factor for 2016 adjusts the completion dates for trigger projects that have trigger completion dates in 2016.
- 8.15 At the time of setting the 2016 charges, only one project had a trigger falling in 2016, T3 Integrated Baggage Cut-Ins Completed and Baggage System Operational. This project was forecast not to meet its trigger date by four months. However the actual completion date was delivered six months after the trigger date.
- 8.16 Therefore there is an increased trigger payment in 2016.

Table 9

	Trigger Month	Actual Completion Date
T3 Integrated Baggage Cut-Ins Completed and Baggage System Operational	Jan-16	Jul-16

- **T3 Integrated Baggage Cut-Ins Completed and Baggage System Operational**

Trigger date	= January 2016
Actual Completion	= July 2016
Actual Delay	= 6 months
Months falling into 2016	= 6 months
Monthly Payment	= £365,900 in 2011/12 prices
Expected Payment	= £2,195,400 in 2011/12 prices
Inflation Index (RPI)	= 1.158 ⁷
Expected Payment	= £2,542,273 in 2016 prices
Actual Passengers (000s)	= 75,715 in 2016
Impact on Yield	= £0.034 in 2016

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 2015 and April 2010 i.e. 258/222.8

K factor for 2016

Actual passengers 000s	75,715
Actual airport charges £000s	1,691,779
Actual yield £	22.344
Actual maximum allowable yield £	22.180
Under/Over Recovery	Over Recovery

Total revenue from airport charges (passenger only flights) at Heathrow in	2016	Actual (£000s)	R_{t-2}	1,691,779
Passengers using Heathrow Airport in	2016	Actual (000s)	Q_{t-2}	75,715
Maximum allowable revenue yield at Heathrow in	2016	Actual (£)	M_{t-2}	22.180
Interest rate from weekly Treasury Bill Discount rate*	2016	Actual %	I_{t-2}	3.197
Forecast Passengers using Heathrow in	2018	Forecast (000s)	Q_t	76,953
Correction amount	$K_t = (R_{t-2} - (Q_{t-2} \times M_{t-2})) / Q_t \times ((1 + I_{t-2} / 100)^2)$		Forecast (£)	K_t
				0.172

*Table 7. Note that 3% points have been added to the Interest Rate to the positive K Factor.

Table 10

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
06-May-16	08-Aug-16	1,000	3.65	0.447
13-May-16	15-Aug-16	1,000	3.98	0.443
20-May-16	22-Aug-16	1,000	5.13	0.431
27-May-16	30-Aug-16	1,000	4.91	0.426
03-Jun-16	05-Sep-16	1,000	5.24	0.416
10-Jun-16	12-Sep-16	2,500	2.89	0.414
17-Jun-16	19-Sep-16	2,500	1.80	0.426
24-Jun-16	26-Sep-16	1,500	2.48	0.370
01-Jul-16	03-Oct-16	2,500	1.48	0.400
08-Jul-16	10-Oct-16	2,500	3.50	0.366
15-Jul-16	17-Oct-16	2,500	2.94	0.399
22-Jul-16	24-Oct-16	2,500	2.81	0.388
29-Jul-16	31-Oct-16	2,500	3.22	0.343
05-Aug-16	07-Nov-16	2,500	3.32	0.236
12-Aug-16	14-Nov-16	2,500	2.64	0.227
19-Aug-16	21-Nov-16	2,500	2.98	0.224
26-Aug-16	28-Nov-16	2,500	2.50	0.221
02-Sep-16	05-Dec-16	2,500	2.35	0.219
09-Sep-16	12-Dec-16	1,500	3.55	0.212
16-Sep-16	19-Dec-16	1,500	2.96	0.208
23-Sep-16	28-Dec-16	1,500	2.78	0.230
30-Sep-16	03-Jan-17	1,500	3.70	0.184
07-Oct-16	09-Jan-17	1,000	5.87	0.178
14-Oct-16	16-Jan-17	1,000	3.71	0.177
21-Oct-16	23-Jan-17	1,000	4.56	0.170
28-Oct-16	30-Jan-17	1,000	5.48	0.160
04-Nov-16	06-Feb-17	1,500	3.67	0.155
11-Nov-16	13-Feb-17	1,500	4.20	0.145
18-Nov-16	20-Feb-17	1,000	4.77	0.134
25-Nov-16	27-Feb-17	1,000	4.39	0.121
02-Dec-16	06-Mar-17	1,500	4.07	0.110
09-Dec-16	13-Mar-17	1,500	3.90	0.089
16-Dec-16	20-Mar-17	1,500	3.95	0.039
23-Dec-16	27-Mar-17	1,000	2.87	0.011
06-Jan-17	10-Apr-17	2,000	2.40	0.099
13-Jan-17	18-Apr-17	2,000	2.04	0.151
20-Jan-17	24-Apr-17	2,000	2.49	0.163
27-Jan-17	02-May-17	1,500	2.65	0.164
03-Feb-17	08-May-17	1,000	5.76	0.153
10-Feb-17	15-May-17	1,000	5.67	0.138
17-Feb-17	22-May-17	1,000	5.70	0.127
24-Feb-17	30-May-17	500	7.89	0.034
03-Mar-17	05-Jun-17	500	6.53	0.006
10-Mar-17	12-Jun-17	500	6.09	-0.030
17-Mar-17	19-Jun-17	500	3.35	0.042
24-Mar-17	26-Jun-17	500	6.08	0.035
31-Mar-17	03-Jul-17	500	6.69	0.062
07-Apr-17	10-Jul-17	500	5.29	0.072
13-Apr-17	17-Jul-17	500	5.88	0.088
21-Apr-17	24-Jul-17	500	6.71	0.072
28-Apr-17	31-Jul-17	500	6.16	0.069
05-May-17	07-Aug-17	500	8.35	0.064
Average				0.197

Application of the Regulatory Pricing Formula

- 8.17 The actual maximum allowable yield for 2016 is £22.180 compared to the actual yield recovered £22.344, which results in an over recovery of £0.172 (taking into account interest rate). This over recovery is included in the K Factor for 2016 in setting airport charges in 2018, which lowers the forecast maximum allowable yield.
- 8.18 The 2016 over recovery is driven by a slight increase in the proportion of Non EU passengers.

Chapter 9 – Overview of charges

- 9.1 On 5 August 2015 Heathrow announced its decision on Airport Charges Structural Review. This decision came into effect on 1 January 2017.
- 9.2 The key features of the 2015 decision included the introduction of a £5.00 passenger discount to European routes with a further £5.00 discount to 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

Passenger discounts

European and Non-European passenger charges

- 9.3 The 2015 decision to introduce a departing passenger charge discount of £5.00 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.
- 9.4 The key driver for the decision was to increase load factors for European destinations thereby making more efficient use of a scarce resource, namely Heathrow slots. It was noted from the following table that over the past 6 years there has been an imbalance between European and Non- European load factors of 8.05% on average:

Table 11⁸

Year	EU	Non-EU	Δ
2009	69.60%	77.00%	7.40%
2010	70.70%	79.00%	8.30%
2011	71.10%	78.90%	7.80%
2012	70.70%	80.10%	9.40%
2013	71.70%	80.60%	8.90%
2014	73.20%	79.70%	6.50%
Av	71.16%	79.21%	8.05%

- 9.5 The most recent ICAO average load factor at the time of the decision was 2014, 79.8%, which suggested that European load factors at Heathrow are lower than average while Non-European load factors are very close to the global ICAO average.
- 9.6 More data is now available to assess whether there remains an imbalance between loads factors.

⁸ Data source ADB Heathrow Airport Ltd

Table 12⁹

Year	EU	Non-EU	Δ
2011	71.10%	78.90%	7.80%
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%
Av	72.30%	79.50%	7.20%

- 9.7 Based on the latest figures it may be noted that there continues to be an imbalance between European and Non-European load factors. Over the last six years an imbalance of 7.20% on average.
- 9.8 The most recent ICAO average load factor figure for 2016 was 80.3%¹⁰, 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.
- 9.9 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.
- 9.10 In order to address the load factor imbalance for EU destinations Heathrow proposes to extend the existing £5.00 reduction in the EU departing passenger charge to £10.00.
- 9.11 The proposed increase to £10.00 per passenger reduction is justified on the basis that it is directly relevant to the load factor imbalance. It is reasonable to expect an increase in aircraft load factors and seat take up for European destinations if the departing passenger charge is reduced. The expected increase in load factors and seat take up for European destinations will have a positive effect on the environment as more passengers are expected to travel on the same number of aircraft (i.e. more passengers for the same environmental impact) and thereby making more efficient use of a scarce resource namely Heathrow slots.

UK Connectivity

- 9.12 From 1 January 2017 Heathrow introduced a departing passenger charge discount of £5.00 to the existing European Destination passenger departing to UK regions (including nations and crown dependencies). Therefore, during 2017, departing passengers to UK regions receive a total £10.00 discount (this is based on a £5.00 EU departing passenger aircraft load factor incentive discount and £5.00 UK connectivity discount).
- 9.13 This passenger discount was in direct response to the National Connectivity Task Force (NCTF). The NCTF conducted a review of the ability for all UK regions, nations and crown dependencies to connect not only to London but through London to growth markets across the globe. One of the key barriers to this connectivity

⁹ Data source ADB Heathrow Airport Ltd

¹⁰ https://www.icao.int/sustainability/Documents/Yearly%20Monitor/YearlyMonitor_2016.pdf

identified by the NCTF is “affordable pricing” for regional aviation services which are more readily influenced by the economics of airport charges than other services.

- 9.14 The NCTF identified the need to make routes to regional airports more attractive to airlines to support them whilst Heathrow remains constrained. There are significant numbers of UK originating passengers that hub at airports outside of the UK which may choose to hub at Heathrow if departing passenger charges were more competitive. At the time of the consultation on the UK connectivity discount there were 1.7 million UK passengers that could use Heathrow to connect to their destination.
- 9.15 Based on 2016 data there are over 1.7m passengers who transfer through other major hubs from UK airports, compared to less than 1.0m which transfer through Heathrow. Therefore there continues to be a significant number of passengers that could use Heathrow to connect to their destination.
- 9.16 Heathrow proposes to maintain the £5.00 UK connectivity discount to the European Destination passenger charge. Therefore departing passengers to UK regions will receive a total £15.00 discount (this is based on a £10.00 EU departing passenger aircraft load factor incentive discount and £5.00 UK connectivity discount).

The impact of the proposed discounts when applied to the 2018 proposed charges may be summarised as:

Charge	2017 charge net of discounts	2018 charge net of discounts¹¹
EU Departing Passenger	£24.13	£18.72
EU Transfer Passenger	£18.10	£13.10
UK Departing Passenger	£19.13	£13.72
UK Transfer Passenger	£14.35	£9.60

Transfer and Transit passenger charges

- 9.17 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 at Heathrow to 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.
- 9.18 The following table sets out a summary of the level of transfer/transit passengers at Heathrow:

¹¹ 2018 charge includes the effect of the proposal to increase the transfer discount from 25% to 30%

Table 13¹²

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%

- 9.19 It can be noted from the above table that Heathrow's absolute level of transfer passengers has remained consistent over the last five years. However the proportion of transfer passengers to total passenger numbers has declined from 27.4% in 2012 to 25.8% for 2016.
- 9.20 Passengers have a choice of airport to transfer through to their end destination. The table below shows how Heathrow's transfer passenger numbers changed from 2012 to 2016 compared to the average of other major hub airports.

Table 14¹³

	2012	2016	%
Average other hubs	15.9m	19.4m	22%
LHR	19.2m	19.5m	2%

- 9.21 It can be noted that Heathrow has had a slower rate of growth for transfer passengers than the average of the other major hub airports. Therefore to address this Heathrow proposes to increase the transfer discount by 5% to 30%.

Minimum Departure Charge

- 9.22 Heathrow's passenger charges include a minimum departure charge levied on all flights of £1,378.08. This means that if the number of passengers on board a departing aircraft equates to a total departing passenger charge lower than £1,378.08, the aircraft operator is charged the minimum departing passenger charge of £1,378.08. This is applied irrespective of how many passengers there are on board.
- 9.23 To align with our response to the NCTF recommendations and following the introduction of the UK connectivity discount it is proposed that the minimum passenger departure charge is rebalanced in order to further encourage higher load factors and to incentivise better use of scarce resources by introducing a UK destination minimum departure charge of £761.40.
- 9.24 The minimum departure charge for EU and non-EU destinations will remain at £1,378.08.
- 9.25 The proposed new minimum departure charges may be summarised as:

Destination	Minimum Departure Charge
UK	£761.40
All other destinations	£1,378.08

¹² Data source ADB Heathrow Airport Ltd

¹³ Data source Airport websites

Remote Stand Rebate

9.26 A remote stand rebate (currently set at £4.00 per passenger) applies to any passenger arriving or departing from stands which have been designated remote.

9.27 The Heathrow Airport Conditions of Use at Schedule 5 provides:

"The remote stand rebate applies per Passenger for scheduled flights arriving or departing from a stand which has been designated as remote by us. Such rebate will not apply to the extent that it reduces the charges on departing Passengers to below the level of the relevant minimum charge on departure." The origin of the rebate was recognition that passengers using remote stands do not receive the same level of service as those using contact stands. The rebate also acts as a compensatory factor for the cost incurred by airlines to coach passengers from remote stands to the terminal.

9.28 In a review of the application of the remote stand rebate it has been deemed fairer to apply the rebate whether the minimum charge on departure has been reached or not.

9.29 Heathrow is proposing to amend the Heathrow Airport Conditions of Use at Schedule 5 to:

"The remote stand rebate applies per Passenger for scheduled flights arriving or departing from a stand which has been designated as remote by us."

Night Period Charges

9.30 Heathrow 2.0, Heathrow's plan for sustainable growth has a core objective to provide "respite for residents" and under the Environmental Noise Directive (END) Heathrow has a legal requirement to draft Noise Action Plans for adoption by the UK Government. The next round of END noise action planning is underway and we expect to go to public consultation early in 2018 and will need to submit a draft action plan to DEFRA by 31 August 2018.

9.31 Currently Heathrow's overall strategic objective for aircraft noise is: "To limit aircraft noise impacts and gain the trust of our stakeholders that we are using best practicable means to achieve this goal, and to continue this approach into the future, within the framework established by government." Reducing the impact of night operations is central to achieving both the aspirations of Heathrow 2.0 and requirements of the END Noise Action Plan.

9.32 The Government define the "night period" as 2300-0700 (local time) and the night quota period as 2330-0600 (local time). In contrast and largely for historic reasons, the Heathrow Airport Conditions of Use at Schedule 5 defines the Night Period as "Night Period: Between 00:00-03:29 UTC (GMT) 1 April to 31 October, and 01:00-04:29 UTC (GMT) 1 November to 31 March, Noise Charges are 2.5 times the normal charges in the Night Period."

9.33 Heathrow is actively seeking to reduce the number of unscheduled non dispensed operations running late into the night quota period in line with the objectives and actions set out in Heathrow 2.0 and END Noise Action Plan. To align with the UK Governments recognised definitions of night-time and strategic objectives Heathrow proposes to align the Conditions of Use Schedule 5 Night Period definition with the night quota period for unscheduled non dispensed operations.

9.34 We also note that the CAA has recently published a report (CAP1576) which makes a number of observations and recommendations in relation to landing charges at Heathrow. We would expect to consider this report, wider research as

well as feedback from all community and industry stakeholders in drafting the Noise Action Plan. Any subsequent actions that relate to landing charges would then be reflected in the 2019 annual airport charges consultation which will begin this time next year.

Overall balance of environmental, passenger and parking charges

- 9.35 In setting airport charges there is naturally a balance between the different types of charges. Currently the environmental charges act as a balancing factor for the shortfall in revenue from the passenger discounts.
- 9.36 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 transfer charge discount.
- 9.37 This rebalance reflects the increased emphasis on environmental performance and best in class aircraft fleet operations while at the same time addressing load factor and empty seat issues the support of which are in the public interest.

Chapter 10 – Calculating airport charges tariffs for 2018

- 10.1 Following the change to the structure of charges effective 1 January 2017, the following steps have been applied to calculate the individual tariffs for 2018, as follows:
 - 10.1.1 £10.00 passenger discount to European routes, compared to the non-discounted European passenger;
 - 10.1.2 £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;
 - 10.1.3 Remote stand rebate held at £4.00 per passenger;
 - 10.1.4 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;
 - 10.1.5 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
 - 10.1.6 No change to overall proportion of the parking charge.
- 10.2 The above changes have been applied through three stages to come to the final proposed tariffs for 1 January 2018.
- 10.3 The **first step** is to calculate the tariffs based on the structure excluding any ANS component. The calculation of these tariffs takes account of the proposed 2018 forecast maximum allowable yield and the 2018 forecast data. This sets a baseline to apply the changes. The first step is presented in Appendix A.
- 10.4 The **second step** is to apply the passenger discounts and fixed remote stand rebate. The second step takes account number 1 to 3 from the list in paragraph 10.1. The second step is presented in Appendix B.
- 10.5 The **third and final step**, recovers the shortfall in revenue of £183m from the passenger discounts to recover the 2018 forecast maximum allowable yield. This step also increases NOx emissions Charge. Finally, there is no change to the parking charge proportion. The third step takes account number 4 to 6 from the list in paragraph 10.1. This final step translates into the proposed tariffs for 2018 and are shown in Chapter 12.

Chapter 11 – Forecast Revenue for 2018

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
Peak				
Chapter 3		116	£10,483.17	£1,216,048
Chapter 4 High		28,873	£2,995.19	£86,480,121
Chapter 4 Base		69,641	£2,695.67	£187,729,154
Chapter 14 High		19,834	£2,096.63	£41,584,559
Chapter 14 Base		84,675	£1,497.60	£126,809,280
Chapter 14 Low		31,554	£898.56	£28,353,162
Total		234,693		£472,172,324
Super Night Peak				
Chapter 3	[Landings]	0	£26,207.93	£0
Chapter 4 High	[Landings]	0	£7,487.98	£0
Chapter 4 Base	[Landings]	0	£6,739.18	£0
Chapter 14 High	[Landings]	0	£5,241.58	£0
Chapter 14 Base	[Landings]	0	£3,744.00	£0
Chapter 14 Low	[Landings]	0	£2,246.40	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£19.02	£118,069,902
Average kg Nox per landing	[kg]	26.5		£118,069,902
Total Landing Revenue	(a)			£590,242,226
Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount	[Dep Pax]	1,344,414	13.72	£18,445,365
European charge with single discount	[Dep Pax]	11,166,044	18.72	£209,028,340
Other	[Dep Pax]	15,279,273	40.21	£614,379,569
Total	[Dep Pax]	27,789,731		£841,853,274
Departing Transfer Passenger Charge				
European charge with dual discount	[Dep Pax]	1,000,701	9.60	£9,606,727
European charge with single discount	[Dep Pax]	3,361,387	13.10	£44,034,165
Other	[Dep Pax]	5,582,718	28.15	£157,153,520
Total	[Dep Pax]	9,944,806		£210,794,412
Departing Transit Passenger Charge				
European charge with dual discount	[Dep Pax]	0	9.60	£0
European charge with single discount	[Dep Pax]	0	13.10	£0
Other	[Dep Pax]	53,713	28.15	£1,512,011
Total	[Dep Pax]	53,713		£1,512,011
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Total Departing Passenger Charge Revenue	(b)	37,788,250		£1,038,215,697
Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	629,911	22.94	14,450,149
Wide bodied				
Chargeable Period	[Units of 15 minutes]	961,055	55.06	52,915,661
Total Parking Charge	(c)			£67,365,810
Terminal Pax Flights: Total Revenue				
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£590,827,072
Departing Passenger Revenue	(b) + (e)			£1,038,663,070
Parking Revenue	(c) + (f)			£67,898,029
Total Regulated Revenue				£1,697,388,171
Total Passengers				
Total Regulated Yield				
				£22.057

Chapter 12 – Proposed Airport Charges Tariffs effective 1 January 2018

	Proposed 2018 £ GBP
Charges on Landing	
Peak	
Chapter 3	10,483.17
Chapter 4 High	2,995.19
Chapter 4 Base	2,695.67
Chapter 14 High	2,096.63
Chapter 14 Base	1,497.60
Chapter 14 Low	898.56
Super Night Peak	
Chapter 3	26,207.93
Chapter 4 High	7,487.98
Chapter 4 Base	6,739.18
Chapter 14 High	5,241.58
Chapter 14 Base	3,744.00
Chapter 14 Low	2,246.40
Emissions charge	19.02
Charges on Departing Passengers	
Origin and Destination	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	13.72
European charge with single discount <i>(with EU load factor discount)</i>	18.72
Other	40.21
Transfer and Transit	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	9.60
European charge with single discount <i>(with EU load factor discount)</i>	13.10
Other	28.15
Remote Stand Rebate	-4.00
Minimum charge - UK destinations	761.40
Minimum charge - Other destinations	1,378.08
Charges on aircraft parking	
Narrow bodied	22.94
Wide bodied	55.06

Chapter 13 - Financial and Traffic Information

Traffic statistics and charging parameters

- 13.1 The actual traffic statistics from 2008/09 to 2016 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 2016. These accounts compare the airport's financial performance for the year ended 31 December 2016 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 2016 Regulatory Performance £m (nominal)				
	2016 Actual	2016 Settlement	Var	Var %
Terminal passengers (000's)	75,715	72,700	3,015.0	4%
Revenue				
Airport charges	1,699	1,601	98	6%
Retail	562	539	23	4%
Property	115	117	-2	-2%
Other regulated charges	232	228	4	2%
Rail	134	129	5	4%
Other	44	27	17	63%
Total revenue	2,786	2,641	145	5%
Expenditure				
Staff costs	422	383	-39	-10%
Maintenance & equipment costs	174	169	-5	-3%
Rent and rates	146	155	9	6%
Utility costs	75	117	42	36%
Other costs	321	275	-46	-17%
Transfer of exceptional costs included in CAA forecast	0	0	0	
Depreciation	723	723	0	0%
Total expenditure	1,861	1,822	-39	-2%
Regulatory operating profit (before exceptional operating costs)	925	819	106	13%
Exceptional operating costs	0	0	0	
Regulatory operating profit	925	819	106	13%
Capital expenditure	668	716	-48	-7%
Opening RAB	14,921	15,165	-244	
Closing RAB	15,237	15,536	-299	
Weighted average RAB	15,079	15,350	-271	
Return on weighted average RAB	6.13%	5.33%	0.80%	

Note: Negative indicates adverse

Passenger only flights - actual and forecast

Arriving Passengers	Actual										Forecast 2017 Jan - Dec 39,091,635
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014 Apr - Dec	2014 Jan - Dec	2015 Jan - Dec	2016 Jan - Dec	
	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	
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	12,911,023
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	15,603,427
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	4,309,688
Other				5,172,212	5,579,652	5,585,627	4,439,514	5,675,064	5,496,182	5,389,922	5,316,506
Transit passengers											
Europe	1,859	2,834	1,623	646	1,462	1,293	699	1,103	349	3,757	660
Other	160,859	119,384	96,303	47,738	47,004	34,106	25,337	32,467	30,625	35,273	20,741
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	38,162,045
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	77,253,680
PATMs	467,130	453,780	453,938	473,761	464,686	467,779	356,773	468,359	469,671	470,764	468,615
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	1,345,220
UK (departing - transfers)				949,214	975,181	1,031,366	840,890	1,067,349	1,089,749	988,715	1,044,578
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	2,329,504	2,389,797

Appendix A – Structure of Charges - Step One

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
<u>Peak</u>				
Chapter 3		116	£7,638.54	£886,071
Chapter 4 High		28,873	£2,182.44	£63,013,590
Chapter 4 Base		71,641	£1,964.20	£140,717,252
Chapter 14 High		19,834	£1,527.71	£30,300,600
Chapter 14 Base		82,675	£1,091.22	£90,216,614
Chapter 14 Low		31,554	£654.73	£20,659,350
Total		234,693		£345,793,477
<u>Super Night Peak</u>				
Chapter 3	[Landings]	0	£19,096.35	£0
Chapter 4 High	[Landings]	0	£5,456.10	£0
Chapter 4 Base	[Landings]	0	£4,910.50	£0
Chapter 14 High	[Landings]	0	£3,819.28	£0
Chapter 14 Base	[Landings]	0	£2,728.05	£0
Chapter 14 Low	[Landings]	0	£1,636.83	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£9.82	£60,959,329
Average kg Nox per landing	[kg]	26.5		£60,959,329
Total Landing Revenue	(a)			£406,752,806
Departing Passenger Charge				
Departing OD Passenger Charge				
Europe	[Dep Pax]	12,510,458	28.72	£359,300,359
Other	[Dep Pax]	15,279,273	40.21	£614,379,569
Total	[Dep Pax]	27,789,731		£973,679,928
Departing Transfer Passenger Charge				
Europe	[Dep Pax]	4,362,087	21.54	£93,959,363
Other	[Dep Pax]	5,582,718	30.16	£168,374,784
Total	[Dep Pax]	9,944,806		£262,334,147
Departing Transit Passenger Charge				
Europe	[Dep Pax]	0	21.54	£0
Other	[Dep Pax]	53,713	30.16	£1,619,973
Total	[Dep Pax]	53,713		£1,619,973
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Total Departing Passenger Charge Revenue	(b)	37,788,250		£1,221,690,048
Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	629,911	22.94	14,450,149
Wide bodied				
Chargeable Period	[Units of 15 minutes]	961,055	55.06	52,915,661
Total Parking Charge	(c)			£67,365,810
Terminal Pax Flights: Total Revenue				£1,695,808,664
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£407,337,652
Departing Passenger Revenue	(b) + (e)			£1,222,137,421
Parking Revenue	(c) + (f)			£67,898,029
Total Regulated Revenue				£1,697,373,102
Total Passengers				76,953,154
Total Regulated Yield				£22.057

Appendix B – Structure of Charges - Step Two

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
Peak				
Chapter 3	116	£7,638.54	£886,071	
Chapter 4 High	28,873	£2,182.44	£63,013,590	
Chapter 4 Base	71,641	£1,964.20	£140,717,252	
Chapter 14 High	19,834	£1,527.71	£30,300,600	
Chapter 14 Base	82,675	£1,091.22	£90,216,614	
Chapter 14 Low	31,554	£654.73	£20,659,350	
Total	234,693		£345,793,477	
Super Night Peak				
Chapter 3	[Landings]	0	£19,096.35	£0
Chapter 4 High	[Landings]	0	£5,456.10	£0
Chapter 4 Base	[Landings]	0	£4,910.50	£0
Chapter 14 High	[Landings]	0	£3,819.28	£0
Chapter 14 Base	[Landings]	0	£2,728.05	£0
Chapter 14 Low	[Landings]	0	£1,636.83	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£9.82	£60,959,329
Average kg Nox per landing	[kg]	26.5		£60,959,329
Total Landing Revenue	(a)			£406,752,806
Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount	[Dep Pax]	1,344,414	13.72	£18,445,365
European charge with single discount	[Dep Pax]	11,166,044	18.72	£209,028,340
Other	[Dep Pax]	15,279,273	40.21	£614,379,569
Total	[Dep Pax]	27,789,731		£841,853,274
Departing Transfer Passenger Charge				
European charge with dual discount	[Dep Pax]	1,000,701	9.60	£9,606,727
European charge with single discount	[Dep Pax]	3,361,387	13.10	£44,034,165
Other	[Dep Pax]	5,582,718	28.15	£157,153,520
Total	[Dep Pax]	9,944,806		£210,794,412
Departing Transit Passenger Charge				
European charge with dual discount	[Dep Pax]	0	9.60	£0
European charge with single discount	[Dep Pax]	0	13.10	£0
Other	[Dep Pax]	53,713	28.15	£1,512,011
Total	[Dep Pax]	53,713		£1,512,011
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Total Departing Passenger Charge Revenue	(b)	37,788,250		£1,038,215,697
Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	629,911	22.94	14,450,149
Wide bodied				
Chargeable Period	[Units of 15 minutes]	961,055	55.06	52,915,661
Total Parking Charge	(c)			£67,365,810
Terminal Pax Flights: Total Revenue				£1,512,334,313
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£407,337,652
Departing Passenger Revenue	(b) + (e)			£1,038,663,070
Parking Revenue	(c) + (f)			£67,898,029
Total Regulated Revenue				£1,513,898,751
Total Passengers				76,953,154
Total Regulated Yield				£19.673
Shortfall in Revenue from Departing Passenger Charge discounts				
				-£183,474,351

Heathrow
Making every journey better