

Heathrow Airport

Airport Charges for 2017

Consultation Document – Amended
Proposal

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Executive Summary

Heathrow's vision "to give passengers the best airport service in the world" puts passengers at the heart of all we do. Heathrow continues to deliver record passenger service, with the best ever service quality score of 4.16 in the second quarter of 2016. 82% of passengers surveyed rated their Heathrow experience 'Excellent' or 'Very Good', with strong recognition in areas such as security waiting times and the courtesy and helpfulness of Heathrow staff.

Heathrow has also been named the 'Best Airport in Western Europe' for the second consecutive year at the Skytrax World Airport Awards. The award, voted for globally by passengers, came in addition to Terminal 5 being voted the world's 'Best Airport Terminal' and Heathrow 'Best Airport for Shopping' for the fifth and seventh consecutive years respectively. For the first time, Heathrow received the prestigious award of 'Europe's Best Airport' (with over 40 million passengers) in the 2016 ASQ Awards and was named ACI Europe's Best Airport Award for the third time.

Heathrow's focus remains on transforming the service we give to our passengers and airlines, improving punctuality and resilience all in a safe and secure environment. Passenger demand remains strong at Heathrow and the extensive improvements made possible through capital expenditure over the past decade needs to be recovered.

Following the unanimous and clear recommendation of the independent Airports Commission for Heathrow's North West runway expansion proposal in July 2015, the UK Government agreed with the Commission in December that there is a need for more runway capacity in the south east of England by 2030. On 11 May 2016, Heathrow announced that it will meet and, in most cases, exceed the conditions set in the Airports Commission's recommendation for Heathrow expansion, which in particular included tough environmental, noise and community related conditions. This should enable the government to make the right choice for Britain. Heathrow is committed to working with the Government to deliver the hub capacity that Britain needs.

This document frames Heathrow's consultation on the level of airport charges for 2017. Heathrow is proposing to set 2017 prices to recover the maximum allowable yield permitted by the regulatory settlement. The forecast maximum allowable yield for 2017 is £21.907 per passenger, which is a 1.0% reduction compared to the 2016 forecast maximum allowable yield. The proposed charges are in line with the four year, nine month price cap (2014 to 2018), which limits the increase in the price cap to RPI plus -1.5%.

Publication of this consultation document initiates the consultation process. Heathrow will be holding a consultation meeting on 20 September 2016. To help inform the consultation, Heathrow requests written responses from the airline community by 4 October 2016. Heathrow will then consider all comments received during the consultation period, with a view to issuing a decision on 28 October 2016, for implementation from 1 January 2017.

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 invites the airline community to provide views on the proposals.
- 1.2 Heathrow is proposing to set airport charges for 2017 to recover the forecast maximum allowable yield.
- 1.3 This consultation document sets out the calculations for the 2017 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 2017 is the fourth 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.
- 1.7 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.
- 1.8 The CAA also requires Heathrow to (i) meet service quality conditions, and (ii) consult on capital investment and other regulated charges.
- 1.9 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.
- 1.10 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

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/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

- 1.11 In July 2015 the Airports Commission made a unanimous and unambiguous recommendation for Heathrow expansion. The UK Government agreed that there is a need for more runway capacity in the south east of England, validating the findings of the Airports Commission. The Government is expected to make a final decision on Heathrow expansion by the end of 2016.
- 1.12 If Heathrow is selected, CAA has proposed that it will make a modification to Heathrow's Licence to allow Category B expenditure (planning costs associated with delivering the new runway) of up to £10 million per annum to be automatically added to annual charges during the Q6 period, similar to a provision in Gatwick Airport's Licence⁴. If this modification is made, recovery of this expenditure would be reflected in future airport charges consultation proposals.

Consultation Programme

- 1.13 Heathrow is consulting on the level of charges with the airline community and plans to announce its decision on 28 October 2016. The publication of this consultation document is the start of our consultation on the annual setting of 2017 airport charges.
- 1.14 The consultation programme is as follows:

Table 1

Date	Milestone
5 Aug 2016	Publication of Heathrow consultation document
20 Sep 2016	Consultation meeting
4 Oct 2016	Airline written responses submitted by close of business
28 Oct 2016	Heathrow announces 2017 prices
1 Jan 2017	Prices applicable from

⁴ The recovery of costs associated with obtaining planning permission for new runway capacity: initial proposals CAP1435

1.15 The consultation meeting will be held on 20 September 2016, which will provide the airline community with the opportunity to comment on the price proposals. The meeting will be open to all airlines and their representative bodies.

Date: Tuesday 20 September 2016
Time: 15:00 to 17:00
Location: The Compass Centre
Meeting room – Kew Gardens
Nelson Road
Hounslow
Middlesex
TW6 2GW

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

How to Respond

1.17 We invite interested parties to submit written responses to the proposals set out in this document by close of business on 4 October 2016. Responses should be sent to: airline_relations@heathrow.com

1.18 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 – Structural Review of Airport Charges

- 2.1 Heathrow commenced the review of its airport charges structure in late 2014. One of the key drivers for this review has been our desire to ensure that the structure of airport charges supports Heathrow's shared vision with our airline customers. We also responded to requests from our airline customers for the airport to undertake a thorough review of the structure of charges.
- 2.2 To help us inform the development of our proposals we held a number of informal engagement sessions with the airline community in late 2014 and early 2015. The proposals and decision was designed to:
- support passenger growth;
 - improve environmental performance;
 - promote efficient use of the airport; and
 - support the hub.
- 2.3 The key features of the decision included a £10 passenger discount to UK routes and a £5 passenger discount to European routes, compared to the existing European passenger charge. This was supported with an increased emphasis on environmental charges, with more of the charges recovered through environmental charges, and the introduction of a quieter noise chapter.
- 2.4 Heathrow started the formal consultation process by issuing its proposals on 2 April 2015, followed by a formal consultation meeting on 30 April 2015. Heathrow invited interested parties to submit written responses to its proposals and held a second consultation meeting on 4 June 2015.
- 2.5 Heathrow received mixed views but a common theme was a request to defer the implementation of the structure of charges, providing airlines with more time to plan for any necessary changes to respond to the incentives within the proposed structure of charges.
- 2.6 Heathrow then issued a notice informing the airline community of two proposed changes from the original proposal, (i) deferred implementation of the structure of charges to 1 January 2017 rather than 1 January 2016, and (ii) an amendment to the minimum departure charge.
- 2.7 Heathrow then announced its final decision on 5 August 2015 that the structure of charges is planned to be implemented on 1 January 2017.
- 2.8 The charges for 2017 reflect the decision from the structural review of airport charges.

Chapter 3 – Calculating the Maximum Allowable Yield

Calculating the Maximum Allowable Yield

3.1 Based on the CAA's Q6 price control licence condition the following price formula has been used for calculation of the 2017 yield:

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

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} = bonus factor based on certain service quality performance in 2015.

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).

BR_t = business rates revaluation factor.

K_t = correction factor (K Factor) per passenger (whether positive or negative value) for 2015.

Q_t = forecast passengers using Heathrow airport in 2017.

3.2 The relevant year "2017", means the period of twelve months from 1 January 2017 to 31 December 2017.

Maximum allowable yield forecast for 2017

3.3 The combined impact of all the elements of the formula results in a forecast 2017 maximum allowable yield of £21.907 (passenger only flights). The full details of the formula are shown below.

Bonus Factor

3.4 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. 2015. No bonus was achieved in 2015.

Cumulative development capex adjustment

3.5 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 2017 than the CAA's allowance. Further detail is provided in Chapter 5.

Triggers

3.6 Triggers reduce the maximum allowable charges when the airport has not achieved particular capital investment project dates. As at 1 June 2016, nine trigger projects have been agreed with the airline community, and of these nine trigger projects, four projects have a completion date that fall 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) Replacement of 12 airbridges on 9 stands across T3 and (iv) Main Tunnel Life Safety Systems. All four projects are forecast to be delivered to their trigger milestone dates. Therefore in setting airport charges for 2017 there is no forecast trigger payment.

3.7 Any trigger payment that may arise in 2017 due to new triggered projects or any deviation in actual completion dates will be corrected through the K Factor when setting 2019 airport charges.

Passengers

3.8 Heathrow passenger forecast for 2017 is 75,126k (twelve months – January 2017 to December 2017). This is based on our latest estimate as at May 2016.

K Factor

3.9 The K Factor in the formula has reduced the 2017 forecast maximum allowable yield to compensate for the unanticipated over-recovery against the maximum allowable yield in 2015, together with an allowance for interest (with an additional 3% points for an over-recovery).

3.10 The K Factor calculation is shown in Chapter 7.

Application of the Regulatory Pricing Formula

3.11 Based on the regulatory pricing formula, the 2017 forecast maximum allowable is set out below.

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

Where :

RPI _{t-1}	=	1.3%	
X	=	-1.5%	
B _{t-2}	=	0%	- no bonus was achieved in 2015
Y _{t-1}	=	£22.349	
D _t	=	-£22,371k	- this figure is a forecast
T _t	=	0	- this figure is a forecast
BR _t	=	0	- only applicable in 2018
K _t	=	0.100	- this positive figure is a forecast
Q _t	=	75,126k	- this figure is a forecast

Hence:

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

$$M_{2017} = (1 + 1.3\% + -1.5\% + 0\%)22.349 + \frac{(-22,371)}{75,126} - \frac{0}{75,126} + \frac{0}{75,126} - 0.100$$

$$M_{2017} = (0.998 * 22.349) + (-0.298) - 0 + 0 - 0.100$$

$$M_{2017} = 21.907$$

Charges in 2016

3.12 The forecast maximum allowable yield at Heathrow in 2016 was calculated at £22.118.

Table 2

Specified yield 2015	£22.484
12 months RPI movement to April 2015	£0.202
X	-£0.337
Bonus term	£0.000
Trigger payments	-£0.023
Development capex	-£0.184
Business rates	£0.000
K factor from 2014 over recovery	-£0.024
Forecast 2016 maximum allowable yield	£22.118

Proposed pricing for 2017

3.13 Heathrow is proposing to set prices for 2017 to recover the forecast maximum allowable yield of £21.907 per passenger (details of the charges are shown in Chapter 9).

3.14 The 2017 forecast maximum allowable yield reduces by 1.0% compared to the 2016 forecast maximum allowable yield.

3.15 Full details of the individual tariffs are shown in chapter 9 and 10.

Chapter 4 – Bonus Factor

- 4.1 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.
- 4.2 The service quality bonus can be recovered from 2014 to 2018 for departure lounge seating availability, cleanliness, way-finding and flight information. For the purposes of the 2017 forecast maximum allowable yield the service quality bonus can be recovered for the Regulatory Period 2015 from 1 January 2015 to 31 December 2015.
- 4.3 However, Heathrow did not achieve a service quality bonus for 2015 and therefore this is set at zero for the purposes of the 2017 forecast maximum allowable yield.
- 4.4 Table 3 sets out the 2015 performance of these measures for the purposes of the bonus.

Table 3

Departure lounge seating availability (QSM)	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Terminal 1 (actual)	4.20	4.22	4.23	4.24	4.26	4.28	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.44	4.45	4.43	4.43	4.40	4.40	4.38	4.39	4.38	4.37	4.38	4.37	
Terminal 3 (actual)	4.07	4.09	4.10	4.14	4.18	4.20	4.21	4.24	4.25	4.25	4.24	4.23	
Terminal 4 (actual)	4.27	4.28	4.30	4.32	4.30	4.31	4.31	4.30	4.32	4.33	4.32	4.33	
Terminal 5 (actual)	4.02	4.03	4.04	4.05	4.06	4.06	4.07	4.06	4.07	4.07	4.06	4.07	
BNS (T1)κ	0.0075%	0.0090%	0.0098%	0.0105%	0.0120%	0.0135%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%
BNS (T2)κ	0.0255%	0.0263%	0.0248%	0.0248%	0.0225%	0.0225%	0.0210%	0.0218%	0.0210%	0.0203%	0.0210%	0.0203%	
BNS (T3)κ	-0.0022%	-0.0007%	0.0000%	0.0030%	0.0060%	0.0075%	0.0083%	0.0105%	0.0113%	0.0113%	0.0105%	0.0098%	
BNS (T4)κ	0.0128%	0.0135%	0.0150%	0.0165%	0.0150%	0.0158%	0.0158%	0.0150%	0.0165%	0.0173%	0.0165%	0.0173%	
BNS (T5)κ	-0.0060%	-0.0052%	-0.0045%	-0.0037%	-0.0030%	-0.0030%	-0.0022%	-0.0030%	-0.0022%	-0.0022%	-0.0030%	-0.0022%	
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-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Terminal 1 (actual)	4.14	4.15	4.15	4.15	4.16	4.16	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.46	4.46	4.45	4.44	4.44	4.44	4.42	4.41	4.40	4.40	4.40	4.41	
Terminal 3 (actual)	4.12	4.12	4.13	4.14	4.14	4.14	4.15	4.17	4.17	4.17	4.17	4.17	
Terminal 4 (actual)	4.14	4.15	4.15	4.15	4.16	4.16	4.16	4.16	4.16	4.16	4.17	4.18	
Terminal 5 (actual)	4.24	4.24	4.25	4.26	4.26	4.27	4.27	4.26	4.26	4.27	4.27	4.28	
BNS (T1)κ	-0.0060%	-0.0050%	-0.0050%	-0.0050%	-0.0040%	-0.0040%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%
BNS (T2)κ	0.0260%	0.0260%	0.0250%	0.0240%	0.0240%	0.0240%	0.0220%	0.0210%	0.0200%	0.0200%	0.0200%	0.0210%	
BNS (T3)κ	-0.0080%	-0.0080%	-0.0070%	-0.0060%	-0.0060%	-0.0060%	-0.0050%	-0.0030%	-0.0030%	-0.0030%	-0.0030%	-0.0030%	
BNS (T4)κ	-0.0060%	-0.0050%	-0.0050%	-0.0050%	-0.0040%	-0.0040%	-0.0040%	-0.0040%	-0.0040%	-0.0040%	-0.0030%	-0.0020%	
BNS (T5)κ	0.0040%	0.0040%	0.0050%	0.0060%	0.0060%	0.0070%	0.0070%	0.0060%	0.0060%	0.0070%	0.0070%	0.0080%	
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-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Terminal 1 (actual)	4.11	4.10	4.09	4.08	4.08	4.08	4.50	4.50	4.50	4.50	4.50	4.50	
Terminal 2 (actual)	4.25	4.25	4.25	4.25	4.26	4.25	4.25	4.26	4.26	4.27	4.27	4.28	
Terminal 3 (actual)	4.20	4.21	4.22	4.21	4.22	4.22	4.22	4.22	4.22	4.22	4.23	4.23	
Terminal 4 (actual)	4.20	4.21	4.20	4.21	4.21	4.22	4.22	4.23	4.25	4.25	4.26	4.27	
Terminal 5 (actual)	4.17	4.16	4.17	4.17	4.16	4.17	4.17	4.17	4.18	4.19	4.20	4.20	
BNS (T1)κ	-0.0090%	-0.0100%	-0.0110%	-0.0120%	-0.0120%	-0.0120%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%
BNS (T2)κ	0.0050%	0.0050%	0.0050%	0.0050%	0.0060%	0.0050%	0.0050%	0.0060%	0.0060%	0.0070%	0.0070%	0.0080%	
BNS (T3)κ	0.0000%	0.0010%	0.0020%	0.0010%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0020%	0.0030%	0.0030%	
BNS (T4)κ	0.0000%	0.0010%	0.0000%	0.0010%	0.0010%	0.0020%	0.0020%	0.0030%	0.0050%	0.0050%	0.0060%	0.0070%	
BNS (T5)κ	-0.0030%	-0.0040%	-0.0030%	-0.0030%	-0.0040%	-0.0030%	-0.0030%	-0.0030%	-0.0020%	-0.0010%	0.0000%	0.0000%	
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%
Flight information (QSM)	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Terminal 1 (actual)	4.26	4.26	4.26	4.25	4.22	4.22	4.70	4.70	4.70	4.70	4.70	4.70	
Terminal 2 (actual)	4.40	4.41	4.41	4.41	4.40	4.39	4.39	4.40	4.40	4.40	4.40	4.41	
Terminal 3 (actual)	4.35	4.36	4.35	4.35	4.35	4.35	4.35	4.37	4.37	4.36	4.37	4.37	
Terminal 4 (actual)	4.26	4.27	4.27	4.28	4.29	4.28	4.30	4.30	4.31	4.32	4.33	4.33	
Terminal 5 (actual)	4.29	4.29	4.29	4.28	4.28	4.29	4.30	4.30	4.31	4.32	4.32	4.32	
BNS (T1)κ	-0.0140%	-0.0140%	-0.0140%	-0.0150%	-0.0180%	-0.0180%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%	0.0300%
BNS (T2)κ	0.0000%	0.0010%	0.0010%	0.0010%	0.0000%	-0.0010%	-0.0010%	0.0000%	0.0000%	0.0000%	0.0000%	0.0010%	
BNS (T3)κ	-0.0050%	-0.0040%	-0.0050%	-0.0050%	-0.0050%	-0.0050%	-0.0030%	-0.0030%	-0.0030%	-0.0040%	-0.0030%	-0.0030%	
BNS (T4)κ	-0.0140%	-0.0130%	-0.0130%	-0.0120%	-0.0110%	-0.0120%	-0.0100%	-0.0100%	-0.0090%	-0.0080%	-0.0070%	-0.0070%	
BNS (T5)κ	-0.0110%	-0.0110%	-0.0110%	-0.0120%	-0.0120%	-0.0110%	-0.0100%	-0.0100%	-0.0090%	-0.0080%	-0.0080%	-0.0080%	
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%
Bonus term =	0.0000%												
Rounded to 3 decimal places Bt =	0.000%												

Chapter 5 - Development Capital

- 5.1 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.
- 5.2 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).
- 5.3 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.
- 5.4 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, which 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.
- 5.5 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 2016, indicates that fewer projects are transitioning to Core than originally anticipated in the settlement. Therefore a lower cumulative capex spend to 2017 than the CAA's Q6 settlement of up to £394m (2017 prices) is now expected.
- 5.6 The current trajectory of projects transitioning to Core reflects Heathrow's current view of investing £2.9bn in Q6. The portfolio will continue to evolve over Q6 to meet the needs of passengers and airlines. Heathrow will invest above £2.9bn in Q6 where strong business cases exist including essential asset replacement, resilience projects, capacity projects and projects which deliver good returns. We will continue to work with all the relevant parties to achieve successful outcomes and continue to improve passenger experience.

- 5.7 Table 4 sets out the actual and projected development and core capex compared to the settlement in 2017 prices.

Table 4

£m and in 2017 prices	2014 9 months	2015	2016	2017	Year to date
Development plus core	380.7	603.2	631.2	669.0	2,284.1
Settlement	515.2	784.9	757.4	620.4	2,677.9
Difference	(134.5)	(181.7)	(126.2)	48.6	(393.8)

- 5.8 The lower cumulative spend translates into a lower 2017 average RAB of £418m. Applying the cumulative development adjustment results in the 2017 maximum allowable yield reducing by £22.4m, equivalent to 30 pence per passenger.
- 5.9 Any subsequent change in actual development capex transitioning to core capex will be adjusted in the K Factor when setting charges for 2019.
- 5.10 The formula to calculate the 2017 cumulative development capex adjustment of £22.4m 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
P _{t-1}	=	ONS CHAW Retail Price Index in April 2016 is 261.4
P _{t-2}	=	ONS CHAW Retail Price Index in April 2015 is 258.0
P _{t-3}	=	ONS CHAW Retail Price Index in April 2014 is 255.7
P _{t-4}	=	ONS CHAW Retail Price Index in April 2013 is 249.5

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

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

$$O_{2016} = \text{£}623,000\text{k}$$

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

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

$$d_{2016} = 623,000 - \left(645,600 * \frac{258.0}{222.8} \right)$$

$$d_{2016} = \text{£}124,598\text{k}$$

Hence d_{2017} :

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

$$O_{2017} = \text{£}669,000\text{k}$$

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

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

$$d_{2017} = 669,000 - \left(528,800 * \frac{261.4}{222.8} \right)$$

$$d_{2017} = \text{£}48,586\text{k}$$

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

Hence:

Year t =	2017	Results in
Additional revenue requirement for 2014 projects	$\frac{261.4}{249.5} \times -128,321$	-134,441
Additional revenue requirement for 2015 projects	$\frac{261.4}{255.7} \times -177,789$	-181,752
Additional revenue requirement for 2016 projects	$\frac{261.4}{258.0} \times -124,598$	-126,240
Additional revenue requirement for 2017 projects	$0.5 \times 48,586$	24,293
Additional revenue requirement for 2018 projects	0	0
D_t =		-418,140 x 5.35%

$$D_t = -£22,371k$$

5.11 Therefore for the 2017 forecast maximum allowable yield is adjusted to account for the -£22,371k cumulative development capex adjustment.

Chapter 6 – Capital Triggers

- 6.1 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.
- 6.2 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 will be 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.
- 6.3 As at 1 June 2016, nine 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-16	Forecast
T3 Pier 7 Roof - Permanent M&E services to be fully operational and temporary plant	Mar-17	Mar-17	Forecast
Bravo taxiway open for code F operations	May-17	May-17	Forecast
Replacement of 12 airbridges on 9 stands across T3	Nov-17	Nov-17	Forecast
To deliver a new Permanent FCC to T3 and demolish the interim Facility on Stand 323	Jul-18	Jul-18	Forecast

- 6.4 Four projects have a completion date that fall 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) Replacement of 12 airbridges on 9 stands across T3; and (iv) Main Tunnel Life Safety Systems.
- 6.5 All four projects are forecast to be delivered to their trigger milestone dates. Therefore in setting airport charges for 2017 there is no forecast trigger payment.
- 6.6 Any triggers that are attached to projects that have trigger dates for 2017, which are finalised after 1 June 2016, will be accounted through the K Factor when setting 2019 airport charges.

Chapter 7 - Correction Factor for 2015

The Correction factor

- 7.1 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.
- 7.2 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 2015 actual maximum allowable yield

- 7.3 The combined impact of all the elements of the formula results in 2015 actual maximum allowable yield of £22.467 (passenger only flights). 2015 is the Regulatory Period from January 2015 to December 2015. The section below presents the components of the formula.
- 7.4 M_{t-2} relates to 2015 and its calculation is shown below:

$$M_{2015} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

Where:

M_{2015}	=	maximum revenue yield per passenger using Heathrow airport in Regulatory Year ("2015") 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 2015 this would be the change from April 2013 to April 2014.
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. The

CAA has set out that the bonus for actual Q5 performance will continue to be recovered through the K Factor.

Y_{t-1}	=	specified average revenue yield per passenger for the period t-1 (2014).
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).
BR_t	=	business rates revaluation factor.
K_t	=	correction factor (K Factor) per passenger (whether positive or negative value) for 2013/14.
Q_t	=	actual passengers using Heathrow airport in 2015.

Application of the Regulatory Pricing Formula

Where :

RPI_{t-1}	=	2.5%	
X	=	-1.5%	
B_{t-2}	=	0%	- recovered through the K Factor
Y_{t-1}	=	£22.261	
D_t	=	-£11,792k	- this figure is an actual
BR_t	=	0	- only applicable in 2018
T_t	=	0	- this figure is an actual
Q_t	=	74,999k	- this figure is an actual
K_t	=	-0.141	- this figure is an actual

Hence:

$$M_{2015} = (1 + RPI_{t-1} + X + B_{t-2})Y_{t-1} + \frac{D_t}{Q_t} - \frac{T_t}{Q_t} + \frac{BR_t}{Q_t} - K_t$$

$$M_{2015} = (1 + 2.5\% + -1.5\% + 0\%)22.261 + \frac{(-11,792)}{74,999} - \frac{0}{74,999} + \frac{0}{74,999} - (-0.141)$$

$$M_{2015} = (1.010 * 22.261) + (-0.157) - 0 + 0 - (-0.141)$$

$$M_{2015} = 22.467$$

7.5 The actual maximum allowable yield for 2015 is £22.467.

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

Bonus term (2013/14)

- 7.7 The regulatory pricing formula includes a bonus component for performance of certain service quality measures.
- 7.8 The CAA has 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 will be 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 2014⁵.
- 7.9 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.
- 7.10 Therefore the 2013/14 actual performance was captured at the time of setting the 2015 charges.

Cumulative development capex adjustment

- 7.11 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 2015.
- 7.12 The below sets out the formula to calculate the cumulative development capex adjustment. And the 2015 formula is used:

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

⁵ Economic regulation at Heathrow from April 2014: Notice granting the licence, page 131.

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
P_{t-1}	=	ONS CHAW Retail Price Index in April in 2014 is 255.7
P_{t-2}	=	ONS CHAW Retail Price Index in April in 2013 is 249.5

D_{2014} : Annual development capex adjustment is calculated as follows:

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

Where:

O_{2014}	=	total capex in 2014 (9 months) associated with 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_{2014}	=	development capex allowance in 2014
P_{t-1}	=	Value of the ONS CHAW Retail Price Index in April 2013

Hence:

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
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D₂₀₁₅: Annual development capex adjustment is calculated as follows:

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

Where:

O₂₀₁₅ = total capex in 2015 associated with 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)

V₂₀₁₅ = development capex allowance in 2015

P_{t-1} = Value of the ONS CHAW Retail Price Index in April 2014

Hence:

O₂₀₁₅ = £590,000k

V₂₀₁₅ = £669,000k

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

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

d₂₀₁₅ = -£177,789k

7.13 Therefore d₂₀₁₄ and d₂₀₁₅ is applied to the development capex adjustment table, as follows to determine the adjustment:

Therefore:

Year t =	2015	Results in
Additional revenue requirement for 2014 projects	$\frac{255.7}{249.5} \times -128,321$	-131,510
Additional revenue requirement for 2015 projects	$0.5 \times -177,789$	-88,894
Additional revenue requirement for 2016 projects	0	
Additional revenue requirement for 2017 projects	0	
Additional revenue requirement for 2018 projects	0	
D _t =		-220,404 x 5.35%

$$D_t = -£11,792k$$

Triggers

7.14 The K Factor for 2015 adjusts the completion dates for trigger projects that have trigger completion dates in 2015.

7.15 At the time of setting the 2015 charges, only one project had a trigger falling in 2015, Reconfigure Stand 410, which was forecast to be delivered to its trigger date and has since been delivered to its trigger date.

7.16 Therefore there is no trigger payment in 2015.

Table 6

	Trigger Month	Actual Completion Date
Reconfigure Stand 410	Dec-14	Nov-14

K factor for 2015

Actual passengers 000s	74,999
Actual airport charges £000s	1,692,000
Actual yield £	22.560
Actual maximum allowable yield £	22.467
Under/Over Recovery	Over Recovery

Total revenue from airport charges (passenger only flights) at Heathrow in	2015	Actual (£000s)	R_{t-2}	1,692,000
Passengers using Heathrow Airport in	2015	Actual (000s)	Q_{t-2}	74,999
Maximum allowable revenue yield at Heathrow in	2015	Actual (£)	M_{t-2}	22.467
Interest rate from weekly Treasury Bill Discount rate*	2015	Actual %	I_{t-2}	3.468
Forecast Passengers using Heathrow in	2017	Forecast (000s)	Q_t	75,126
Correction amount	$K_t = (R_{t-2} - (Q_t \times M_{t-2})) / Q_t \times ((1 + I_{t-2} / 100)^2)$		Forecast (£)	0.100

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

Table 7

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
08-May-15	10-Aug-15	1,500	2.53	0.442
15-May-15	17-Aug-15	1,500	2.33	0.445
22-May-15	24-Aug-15	1,500	2.41	0.454
29-May-15	01-Sep-15	1,000	1.42	0.465
05-Jun-15	07-Sep-15	1,000	3.34	0.436
12-Jun-15	14-Sep-15	1,500	2.26	0.466
19-Jun-15	21-Sep-15	1,500	2.62	0.473
26-Jun-15	28-Sep-15	1,500	1.79	0.496
03-Jul-15	05-Oct-15	1,500	2.18	0.494
10-Jul-15	12-Oct-15	1,500	2.55	0.492
17-Jul-15	19-Oct-15	1,500	3.32	0.491
24-Jul-15	26-Oct-15	1,500	2.91	0.489
31-Jul-15	02-Nov-15	1,500	2.80	0.485
07-Aug-15	09-Nov-15	1,500	2.60	0.472
14-Aug-15	16-Nov-15	1,500	2.50	0.476
21-Aug-15	23-Nov-15	500	4.57	0.456
28-Aug-15	30-Nov-15	500	3.94	0.455
04-Sep-15	07-Dec-15	1,000	3.52	0.440
11-Sep-15	14-Dec-15	1,000	2.96	0.457
18-Sep-15	21-Dec-15	500	4.11	0.451
25-Sep-15	29-Dec-15	500	3.51	0.467
02-Oct-15	04-Jan-16	1,000	3.58	0.463
09-Oct-15	11-Jan-16	2,000	1.67	0.488
16-Oct-15	18-Jan-16	2,000	2.52	0.490
23-Oct-15	25-Jan-16	2,000	2.78	0.482
30-Oct-15	01-Feb-16	2,500	2.62	0.481
06-Nov-15	08-Feb-16	2,500	2.14	0.480
13-Nov-15	15-Feb-16	2,500	2.26	0.480
20-Nov-15	22-Feb-16	2,500	1.93	0.481
27-Nov-15	29-Feb-16	2,500	1.67	0.484
04-Dec-15	07-Mar-16	2,500	2.45	0.471
11-Dec-15	14-Mar-16	2,500	3.04	0.444
18-Dec-15	21-Mar-16	2,500	1.54	0.452
24-Dec-15	29-Mar-16	1,500	2.10	0.474
31-Dec-15	04-Apr-16	250	6.52	0.470
08-Jan-16	11-Apr-16	2,000	2.32	0.483
15-Jan-16	18-Apr-16	2,000	1.62	0.491
22-Jan-16	25-Apr-16	1,500	3.95	0.475
29-Jan-16	03-May-16	2,000	2.30	0.482
05-Feb-16	09-May-16	2,000	2.33	0.482
12-Feb-16	16-May-16	2,000	3.06	0.469
19-Feb-16	23-May-16	2,000	2.93	0.468
26-Feb-16	31-May-16	2,000	2.51	0.468
04-Mar-16	06-Jun-16	1,500	3.29	0.457
11-Mar-16	13-Jun-16	1,500	4.23	0.443
18-Mar-16	20-Jun-16	1,500	3.18	0.438
24-Mar-16	27-Jun-16	1,500	2.27	0.454
01-Apr-16	04-Jul-16	1,500	2.95	0.460
08-Apr-16	11-Jul-16	1,500	2.79	0.462
15-Apr-16	18-Jul-16	1,500	3.67	0.451
22-Apr-16	25-Jul-16	1,000	4.33	0.439
Average				0.468

Application of the Regulatory Pricing Formula

7.17 The actual maximum allowable yield for 2015 is £22.467 compared to the actual yield recovered £22.560, which results in an over recover of £0.100 (taking into account interest rate). This over recovery is included in the K Factor for 2015 in setting airport charges in 2017, hence lowering the maximum allowable yield.

7.18 The 2015 over recovery is primarily driven by the reduction in the actual maximum allowable yield reflecting the cumulative development adjustment.

Chapter 8 – Calculating the airport charges tariffs with the new structure

- 8.1 The application of the structure of charges effective 1 January 2017 used to calculate the proposed tariffs requires a number of steps.
- 8.2 The structure of charges effective 1 January 2017 includes the following changes;
- 1) £5 passenger discount to European routes, compared to the existing European passenger;
 - 2) £10 passenger discount to UK routes (£5 discount on European routes and £5 UK connectivity discount), compared to the existing European passenger;
 - 3) Commitment for 2017 charges that the Non-European departing passenger charge will not increase beyond the 2016 level;
 - 4) Remote stand rebate set at £4.00 per passenger;
 - 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;
 - 6) The revenue allocated to the ANS charge rolled into the environmental charges, therefore there is no separate ANS charge;
 - 7) Rebalancing 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;
 - 8) Introduction of new noise chapter and increased NOx emissions charge; and
 - 9) No change to overall proportion of the parking charge.
- 8.3 The above changes have been applied through three stages to come to the final proposed tariffs for 1 January 2017.
- 8.4 The **first step** is to calculate the tariffs based on the existing structure without any of the new changes taking effect. The calculation of these tariffs takes account of the proposed 2017 forecast maximum allowable yield and the 2017 forecast data. This sets a baseline to apply the new changes. The first step is presented in Appendix A.
- 8.5 The **second step** is to apply the passenger discounts and revised remote stand rebate. With our commitment to 2017 charges the Non-European passenger charge does not exceed the level in 2016. The second step takes account number 1 to 4 from the list in paragraph 8.2. The second step is presented in Appendix B.
- 8.6 The **third step**, which is the final step recovers the shortfall in revenue of £84m from the passenger discounts to recover the 2017 forecast maximum allowable yield. This step also introduces a new noise chapter, Chapter 14 and increasing NOx emissions Charge. Finally, there is no change to the parking charge proportion. The third step takes account number 5 to 9 from the list in paragraph 8.2. This final step translates into the proposed tariffs for 2017 and are shown in Chapter 9.

Chapter 9 – Forecast Revenue for 2017

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
Peak				
Chapter 3		768	£8,274.00	£6,354,432
Chapter 4 High		37,687	£2,364.00	£89,092,068
Chapter 4 Base		58,470	£2,127.60	£124,400,772
Chapter 14 High		24,791	£1,654.80	£41,024,147
Chapter 14 Base		87,159	£1,182.00	£103,021,938
Chapter 14 Low		26,794	£709.20	£19,002,305
Total		235,669		£382,895,662
Super Night Peak				
Chapter 3	[Landings]	0	£20,685.00	£0
Chapter 4 High	[Landings]	0	£5,910.00	£0
Chapter 4 Base	[Landings]	0	£5,319.00	£0
Chapter 14 High	[Landings]	0	£4,137.00	£0
Chapter 14 Base	[Landings]	0	£2,955.00	£0
Chapter 14 Low	[Landings]	0	£1,773.00	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£15.42	£95,722,287
Average kg Nox per landing	[kg]	26.3		£95,722,287
Total Landing Revenue	(a)			£478,617,949
Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	1,398,981	19.13	£26,762,507
European charge with single discount (with EU load factor discount)	[Dep Pax]	10,938,782	24.13	£263,952,810
Other	[Dep Pax]	14,096,424	40.90	£576,543,742
Total	[Dep Pax]	26,434,187		£867,259,059
Departing Transfer Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	996,160	14.35	£14,294,896
European charge with single discount (with EU load factor discount)	[Dep Pax]	3,337,115	18.10	£60,401,782
Other	[Dep Pax]	5,723,944	30.68	£175,610,602
Total	[Dep Pax]	10,057,219		£250,307,280
Departing Transit Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	0	14.35	£0
European charge with single discount (with EU load factor discount)	[Dep Pax]	0	18.10	£0
Other	[Dep Pax]	35,816	30.68	£1,098,835
Total	[Dep Pax]	35,816		£1,098,835
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Total Departing Passenger Charge Revenue	(b)	36,527,222		£1,102,721,174
Parking Charge				
Narrow bodied Chargeable Period	[Units of 15 minutes]	656,763	21.82	14,330,569
Wide bodied Chargeable Period	[Units of 15 minutes]	922,252	52.37	48,298,337
Total Parking Charge	(c)			£62,628,906
Terminal Pax Flights: Total Revenue				£1,643,968,029
Non-Terminal Pax Flights (GA, Troops etc)				
Non-Terminal Pax Flights				
Landing Revenue	(d)			£622,002
Departing Passenger Revenue	(e)			£451,422
Parking Revenue	(f)			£706,717
Total Non-Terminal Pax Flights Revenue				£1,780,142
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£479,239,951
Departing Passenger Revenue	(b) + (e)			£1,103,172,596
Parking Revenue	(c) + (f)			£63,335,623
Total Regulated Revenue				£1,645,748,171
Total Passengers				75,125,625
Total Regulated Yield				£21.907
Shortfall in revenue to Total Regulated Yield				£0

Chapter 10 – Proposed Airport Charges Tariffs effective 1 January 2017

	Proposed 2017 £ GBP
Charges on Landing	
Peak	
Chapter 3	8,274.00
Chapter 4 High	2,364.00
Chapter 4 Base	2,127.60
Chapter 14 High	1,654.80
Chapter 14 Base	1,182.00
Chapter 14 Low	709.20
Super Night Peak	
Chapter 3	20,685.00
Chapter 4 High	5,910.00
Chapter 4 Base	5,319.00
Chapter 14 High	4,137.00
Chapter 14 Base	2,955.00
Chapter 14 Low	1,773.00
Emissions charge	15.42
Charges on Departing Passengers	
Origin and Destination	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	19.13
European charge with single discount <i>(with EU load factor discount)</i>	24.13
Other	40.90
Transfer and Transit	
European charge with dual discount <i>(with EU load factor and UK connectivity discount)</i>	14.35
European charge with single discount <i>(with EU load factor discount)</i>	18.10
Other	30.68
Remote Stand Rebate	-4.00
Minimum charge	1,378.08
Charges on aircraft parking	
Narrow bodied	21.82
Wide bodied	52.37

Chapter 11 - Financial and Traffic Information

Traffic statistics and charging parameters

11.1 The actual traffic statistics from 2008/09 to 2015 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

11.2 Heathrow is a privately owned company and a summary of its regulatory accounts are presented for the 12 month period to 31 December 2015. These accounts compare the airport's financial performance for the year ended 31 December 2015 to the CAA forecast for revenues and operating costs underpinning the Q6 price cap.

11.3 The regulatory accounts include revenue and cost comparisons, and calculations of the Regulated Asset Base.

11.4 The full regulatory accounts and annual reports are available from <http://www.heathrow.com/company/investor-centre/regulation/regulatory-accounts>.

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
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	38,218,446
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	12,625,257
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	14,705,946
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	4,284,602
Other				5,172,212	5,579,652	5,585,627	4,439,514	5,675,064	5,496,182	5,427,024
Transit passengers										
Europe	1,859	2,834	1,623	646	1,462	1,293	699	1,103	349	166
Other	160,859	119,384	96,303	47,738	47,004	34,106	25,337	32,467	30,625	39,745
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	37,082,739
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	75,301,185
PATMs	467,130	453,780	453,938	473,761	464,686	467,779	356,773	468,359	469,671	471,717
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	1,385,318
UK (departing - transfers)				949,214	975,181	1,031,366	840,890	1,067,349	1,089,749	993,336
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	2,378,654

Heathrow Airport 2015 Regulatory Performance £m (nominal)				
	2015 Actual	2015 Settlement	Var	Var %
Terminal passengers (000's)	74,999	72,000	2,999.0	4%
Revenue				
Airport charges	1,699	1,579	120	8%
Retail	529	510	19	4%
Property	112	116	-4	-3%
Other regulated charges	240	233	7	3%
Rail	131	125	6	5%
Other	34	26	8	31%
Total revenue	2,745	2,589	156	6%
Expenditure				
Staff costs	423	395	-28	-7%
Maintenance & equipment costs	184	187	3	2%
Rent and rates	141	153	12	8%
Utility costs	89	116	27	23%
Other costs	324	270	-54	-20%
Transfer of exceptional costs included in CAA forecast	0	0	0	
Depreciation	703	703	0	0%
Total expenditure	1,864	1,824	-40	-2%
Regulatory operating profit (before exceptional operating costs)	881	765	116	15%
Exceptional operating costs	0	0	0	
Regulatory operating profit	881	765	116	15%
Capital expenditure	586	729	-143	-20%
Opening RAB	14,860	14,959	-99	
Closing RAB	14,921	15,165	-244	
Weighted average RAB	14,891	15,062	-172	
Return on weighted average RAB	5.92%	5.08%	0.84%	

Note: Negative indicates adverse

Appendix A – Structure of Charges - Step One

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
Peak				
Chapter 2		62	£8,791.47	£545,071
Chapter 3 High		0	£8,791.47	£0
Chapter 3 Base		1,401	£2,930.49	£4,105,616
Chapter 4 High		39,743	£1,743.64	£69,297,485
Chapter 4 Base		77,074	£1,428.61	£110,108,687
Chapter 4 Minus		117,389	£835.19	£98,042,119
Total		235,669		£282,098,978
Super Night Peak				
Chapter 2	[Landings]	0	£21,978.68	£0
Chapter 3 High	[Landings]	0	£21,978.68	£0
Chapter 3 Base	[Landings]	0	£7,326.23	£0
Chapter 4 High	[Landings]	0	£4,359.10	£0
Chapter 4 Base	[Landings]	0	£3,571.53	£0
Chapter 4 Minus	[Landings]	0	£2,087.98	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£8.01	£49,723,445
Average kg Nox per landing	[kg]	26.3		£49,723,445
Revenue exc ANS Charges				£331,822,423
ANS Charge				
Per ATM Charge	[Landings]	235,669	£83.24	£19,617,088
Per Metric Tonne		37,554,059	£1.14	£42,811,627
Total		0		£62,428,715
Average Weight (Tonnes)		158.6		
Total Landing Revenue	(a)			£394,251,138
Departing Passenger Charge				
Departing OD Passenger Charge				
Europe	[Dep Pax]	12,337,763	29.13	£359,399,036
Other	[Dep Pax]	14,096,424	40.90	£576,543,742
Total	[Dep Pax]	26,434,187		£935,942,778
Departing Transfer Passenger Charge				
Europe	[Dep Pax]	4,333,275	21.85	£94,682,059
Other	[Dep Pax]	5,723,944	30.68	£175,610,602
Total	[Dep Pax]	10,057,219		£270,292,661
Departing Transit Passenger Charge				
Europe	[Dep Pax]	0	21.85	£0
Other	[Dep Pax]	35,816	30.68	£1,098,835
Total	[Dep Pax]	35,816		£1,098,835
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-5.07	-£20,209,020
Total Departing Passenger Charge Revenue	(b)	36,527,222		£1,187,125,254
Parking Charge				
Narrow bodied				
Chargeable Period	[Units of 15 minutes]	656,763	21.82	14,330,569
Wide bodied				
Chargeable Period	[Units of 15 minutes]	922,252	52.37	48,298,337
Total Parking Charge	(c)			£62,628,906
Terminal Pax Flights: Total Revenue				£1,644,005,298
Non-Terminal Pax Flights (GA, Troops etc)				
Non-Terminal Pax Flights				
Landing Revenue	(d)			£622,002
Departing Passenger Revenue	(e)			£451,422
Parking Revenue	(f)			£706,717
Total Non-Terminal Pax Flights Revenue				£1,780,142
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£394,873,140
Departing Passenger Revenue	(b) + (e)			£1,187,576,676
Parking Revenue	(c) + (f)			£63,335,623
Total Regulated Revenue				£1,645,785,440
Total Passengers				75,125,625
Total Regulated Yield				£21.907

Appendix B – Structure of Charges - Step Two

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
Landing Charge				
Noise Charge				
Peak				
Chapter 2		62	£8,791.47	£545,071
Chapter 3 High		0	£8,791.47	£0
Chapter 3 Base		1,401	£2,930.49	£4,105,616
Chapter 4 High		39,743	£1,743.64	£69,297,495
Chapter 4 Base		77,074	£1,428.61	£110,108,687
Chapter 4 Minus		117,389	£835.19	£98,042,119
Total		235,669		£282,098,978
Super Night Peak				
Chapter 2	[Landings]	0	£21,978.68	£0
Chapter 3 High	[Landings]	0	£21,978.68	£0
Chapter 3 Base	[Landings]	0	£7,326.23	£0
Chapter 4 High	[Landings]	0	£4,359.10	£0
Chapter 4 Base	[Landings]	0	£3,571.53	£0
Chapter 4 Minus	[Landings]	0	£2,087.98	£0
Total	[Landings]	0		£0
Emissions Charge				
Total kg Nox rating	[kg]	6,207,671	£8.01	£49,723,445
Average kg Nox per landing	[kg]	26.3		£49,723,445
Revenue exc ANS Charges				£331,822,423
ANS Charge				
Per ATM Charge	[Landings]	235,669	£83.24	£19,617,088
Per Metric Tonne		37,554,059	£1.14	£42,811,627
Total		0		£62,428,715
Average Weight (Tonnes)		158.6		
Total Landing Revenue	(a)			£394,251,138
Departing Passenger Charge				
Departing OD Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	1,398,981	19.13	£26,762,507
European charge with single discount (with EU load factor discount)	[Dep Pax]	10,938,782	24.13	£263,952,810
Other	[Dep Pax]	14,096,424	40.90	£576,543,742
Total	[Dep Pax]	26,434,187		£867,259,059
Departing Transfer Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	996,160	14.35	£14,294,896
European charge with single discount (with EU load factor discount)	[Dep Pax]	3,337,115	18.10	£60,401,782
Other	[Dep Pax]	5,723,944	30.68	£175,610,602
Total	[Dep Pax]	10,057,219		£250,307,280
Departing Transit Passenger Charge				
European charge with dual discount (with EU load factor and UK connectivity discount)	[Dep Pax]	0	14.35	£0
European charge with single discount (with EU load factor discount)	[Dep Pax]	0	18.10	£0
Other	[Dep Pax]	35,816	30.68	£1,098,835
Total	[Dep Pax]	35,816		£1,098,835
Remote Stand Rebate				
Remote Stand Rebate	[Dep Pax + Arr Pax]	3,986,000	-4.00	-£15,944,000
Total Departing Passenger Charge Revenue	(b)	36,527,222		£1,102,721,174
Parking Charge				
Narrow bodied Chargeable Period	[Units of 15 minutes]	656,763	21.82	14,330,569
Wide bodied Chargeable Period	[Units of 15 minutes]	922,252	52.37	48,298,337
Total Parking Charge	(c)			£62,628,906
Terminal Pax Flights: Total Revenue				£1,559,601,218
Non-Terminal Pax Flights (GA, Troops etc)				
Non-Terminal Pax Flights				
Landing Revenue	(d)			£622,002
Departing Passenger Revenue	(e)			£451,422
Parking Revenue	(f)			£706,717
Total Non-Terminal Pax Flights Revenue				£1,780,142
Total Regulated Revenue (Pax Only Flights)				
Total Regulated Revenue				
Landing Revenue	(a) + (d)			£394,873,140
Departing Passenger Revenue	(b) + (e)			£1,103,172,596
Parking Revenue	(c) + (f)			£63,335,623
Total Regulated Revenue				£1,561,381,360
Total Passengers				75,125,625
Total Regulated Yield				£20.784
Shortfall in revenue to Total Regulated Yield				-£84,355,697

Appendix C – Airport Charges Tariffs effective 1 January 2016

HEATHROW AIRPORT AIRPORT CHARGES 2016	
	Final 2016 £ GBP
Charges on Landing	
Peak	
Chapter 2	8,877.84
Chapter 3 high	8,877.84
Chapter 3 base	2,959.28
Chapter 4 high	1,760.77
Chapter 4 base (equivalent)	1,442.65
Chapter 4 minus	843.39
Super Night Peak	
Chapter 2	22,194.60
Chapter 3 high	22,194.60
Chapter 3 base	7,398.20
Chapter 4 high	4,401.93
Chapter 4 base (equivalent)	3,606.63
Chapter 4 minus	2,108.48
Emissions charge (per kg)	8.15
ANS charge	
per ATM	81.66
Per Metric tonne	1.11
Charge on departing passengers	
Europe - Destination	29.30
Other - Destination	41.14
Europe - Transfer	21.96
Other - Transfer	30.84
Europe - Transit	21.96
Other - Transit	30.84
Remote Stand Rebate (All pax)	-5.10
Minimum charge	1,392.00
Charges on aircraft parking	
Narrow bodied	21.79
Wide bodied	52.30

