

# Heathrow Airport

## Airport Charges for 2012/13

### Consultation Document

Date: 28<sup>th</sup> October 2011

Prepared by: Heathrow Airport Limited



*Making every journey better.*

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## Executive Summary

This document sets out Heathrow Airport's (Heathrow) proposals on the level of airport charges for 2012/13. Heathrow is proposing to set 2012/13 prices to recover the maximum allowable yield permitted by the Regulator. The forecast maximum allowable yield for 2012/13 is £19.316.

The proposed charges are in line with the five year price cap (2008/09 to 2012/13)<sup>1</sup>, which limits the increase in the price cap to RPI + 7.5%<sup>2</sup>. The following summary sets out the rationale for Heathrow's proposal to recover the forecast maximum allowable yield.

Heathrow and the airline community have a shared vision "to be a world class airport - the UK's direct connection to the world and Europe's hub of choice by making every journey better". Heathrow is in the middle of a major regeneration programme which is improving facilities for our passengers and airlines, making it easier to attract new passengers.

The rate of increase allowed in the Q5 settlement reflected the need for Heathrow to be able to pay for the investment programme of around £5 billion during the five years to 31 March 2013. However, passenger volumes have fallen significantly short of the Q5 settlement forecast, leaving Heathrow with a material shortfall in income. Passenger numbers for the first three years to 31 March 2011 were 19.3 million or 8.9% lower than anticipated. In terms of income generated in the first three years of Q5 for airport charges (net) this meant a shortfall of £310.7 million or 9.9% than anticipated.

The lower passenger numbers has resulted in Heathrow achieving a much lower rate of return than was allowed for by the CAA in Q5. Although, there has been recent growth, with Heathrow serving a record number of passengers this summer, passenger numbers for 2011/12 remain significantly below the level anticipated for Q5.

Issuing the consultation document marks the start of the consultation process. Heathrow will be holding a formal consultation meeting on 30<sup>th</sup> November 2011 and will be seeking formal responses from the airline community by 4<sup>th</sup> January 2012. Heathrow then intends to announce its final decision, having considered all the comments received during the consultation period, on 27<sup>th</sup> January 2012, for implementation from 1<sup>st</sup> April 2012.

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<sup>1</sup> Q5 has been extended by 1 year to March 2014.

<sup>2</sup> There are other components in the formula to calculate the forecast maximum allowable yield including triggers, bonus, and k factor.

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## Chapter 1 – Introduction and Consultation Programme

### Purpose

- 1.1 Heathrow consults every year with the airline community on setting the level of airport charges, applicable from 1<sup>st</sup> April. 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 2012/13 to recover the forecast maximum allowable yield.
- 1.3 This consultation document sets out the calculations for the 2012/13 forecast maximum allowable yield based on CAA's Q5 settlement<sup>3</sup>.
- 1.4 Heathrow is inviting comments from the airline community on the proposal so that these can be considered when we make our final decision. Heathrow will be holding a consultation meeting on 30<sup>th</sup> November 2011, and will then announce the final level of prices for airport charges on 27<sup>th</sup> January 2012.

### Economic Regulation

- 1.5 Under the Airports Act 1986 the CAA is required to set the maximum amount that may be levied by Heathrow during successive five-year periods, known as quinquennia. The CAA published its final decision in March 2008 on the price caps which apply to the fifth quinquennium (Q5) from 2008/09 to 2012/13, which included the opening yield for 2008/09 and the necessary formula for calculating the maximum allowable yield for subsequent years.
- 1.6 Subsequent to its March 2008 decision, in February 2011 the CAA launched a consultation on the potential extension of Heathrow's current regulatory period by one year to 31 March 2014. This reflects the fact that the Bill on economic regulation is unlikely to be introduced into parliament before the 2012 session and the CAA's desire that the Bill is enacted prior to determining the terms for the next regulatory period. Following consultation with Heathrow and its airline community, in March 2011 the CAA announced the extension of Heathrow's current regulatory period by one year from 31 March 2013 to 31 March 2014. During the one year extension, Heathrow's aeronautical tariffs will continue to be determined using the existing RPI + 7.5% formula.
- 1.7 2012/13 is the fifth year of the fifth *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 taking off of aircraft at the airport (including charges that are

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<sup>3</sup> Economic Regulation of Heathrow and Gatwick Airports, 2008-2013, CAA decision, 11 March 2008

to any extent determined by reference to the number of passengers on board the aircraft).

- 1.9 The CAA also imposes service quality conditions and the requirement for consultation on capital investment and non regulated charges.
- 1.10 The CAA conditions for service quality measures penalise Heathrow 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; fixed electrical ground power; central security queuing; transfer security queuing; staff security queuing; control post queuing; and stand entry guidance. Further details on the service quality measures including targets and penalties can be found at [www.heathrowairport.com](http://www.heathrowairport.com)<sup>4</sup>.
- 1.11 Details of Heathrow's capital investment plan can be found at [www.baa.com](http://www.baa.com)<sup>5</sup> and a list of non regulated facilities and services can be found at [www.heathrowairport.com/nrc](http://www.heathrowairport.com/nrc). In addition, full schedule of airport charges are listed in the Conditions of Use, which can be found at [www.heathrowairport.com/cou](http://www.heathrowairport.com/cou).
- 1.12 The CAA has launched a consultation on how it will implement the Airport Charges Directive, which is scheduled to come into force in the UK during winter 2011.

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<sup>4</sup> [http://www.heathrowairport.com/portal/page/Heathrow%5EGeneral%5EOur+business+and+community%5EHeathrow+lowdown%5EOur+performance%5ECustomer+service/37389bab6c932010VgnVCM100000147e120a\\_\\_\\_\\_\\_/448c6a4c7f1b0010VgnVCM200000357e120a\\_\\_\\_\\_\\_/](http://www.heathrowairport.com/portal/page/Heathrow%5EGeneral%5EOur+business+and+community%5EHeathrow+lowdown%5EOur+performance%5ECustomer+service/37389bab6c932010VgnVCM100000147e120a_____/448c6a4c7f1b0010VgnVCM200000357e120a_____/)

<sup>5</sup> [http://www.baa.com/portal/page/Investor/BAA+Airports%5EInvestor+centre%5EDocument+centre%5ECapital+investment+plans/86bc47822fa31210VgnVCM10000036821c0a\\_\\_\\_\\_\\_/448c6a4c7f1b0010VgnVCM200000357e120a\\_\\_\\_\\_\\_/%20centre](http://www.baa.com/portal/page/Investor/BAA+Airports%5EInvestor+centre%5EDocument+centre%5ECapital+investment+plans/86bc47822fa31210VgnVCM10000036821c0a_____/448c6a4c7f1b0010VgnVCM200000357e120a_____/%20centre)

## Consultation Programme

- 1.13 Heathrow will be consulting on the level of charges with the airline community and will then announce its final prices on 27<sup>th</sup> January 2012.
- 1.14 The publication of this consultation document on 28<sup>th</sup> October 2011 is the start of our consultation on the annual setting of airport charges for 2012/13.
- 1.15 The consultation programme is as follows:

**Table 1**

<b>Date</b>	<b>Milestone</b>
28 Oct 2011	Heathrow published consultation document on 2012/13 price proposals
30 Nov 2011	Formal consultation meeting
4 Jan 2012	Airline written responses due
27 Jan 2012	Heathrow announces 2012/13 prices
1 Apr 2012	Prices applicable from

- 1.16 Heathrow will be holding a formal consultation meeting on 30<sup>th</sup> November 2011 to give the airline community the opportunity to comment on the price proposals. The meeting will be open to all airlines and their representative bodies.

Date: Wednesday 30<sup>th</sup> November 2011

Time: 10:00 to 12:00 (GMT)

Location: The Compass Centre  
Nelson Road  
Hounslow  
Middlesex  
TW6 2GW  
UK

- 1.17 Please let us know if you would like to attend the consultation meeting using the contact details provided in the “how to respond” section.

## **How to respond**

1.18 We will be holding a consultation meeting where interested parties can comment on the proposals.

1.19 We also invite interested parties to submit written responses to the proposals set out in this document by 4<sup>th</sup> January 2012. Responses should be sent to: [airlinerelations@baa.com](mailto:airlinerelations@baa.com)

1.20 Alternatively, comments may be posted to:

Airline Business Development  
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 relations on the above e-mail address.

Please clearly mark any confidential information in responses to this consultation.

1.21 This document sets out the calculation of the forecast maximum allowable yield, methodology used and the proposed airport charges for 2012/13. The document also includes information on completion dates of major capital investment projects subject to capital triggers, passenger forecasts/actuals, financial information on revenues and costs.

## Chapter 2 – Calculating the Airport Charges Yield

### Calculating the airport charge yield - The formula

2.1 Based on the final CAA decision document the following price formula has been used for calculation of the 2012/13 yield:-

$$M_{2012/13} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where :-

$M_{2012/13}$  = maximum average revenue yield per passenger using Heathrow airport in relevant year (2012/13) expressed in £

$RPI_{t-1}$  = the percentage change (whether positive or negative in value) in the Retail Price Index between that published with respect to August in the relevant year t-1 and that published with respect to the immediately preceding August. For 2012/13 this would be the change from August 2010 to August 2011

$X$  = 7.5

$B_t$  = forecast bonus term in 2012/13

$Y_{t-1}$  = specified average revenue yield per passenger for the period t-1 (2011/12)

$TRIGGER_t$  = reduction in maximum allowable charges when the airport has not achieved particular capital investment project milestones on time

$Q_t$  = forecast passengers using Heathrow airport in relevant year 2012/13

$K_t$  = correction factor (k factor) per passenger (whether of a positive or negative value)

### Maximum allowable yield forecast for 2012/13

2.2 The combined impact of all the elements of the formula results in a forecast 2012/13 maximum allowable yield of £19.316 (passenger only flights). The full details of the formula are shown below.

### Specified average yield

2.3 The specified average revenue yield for 2011/12 is £17.574.

<b>Specified yield 2008/09</b>		<b>£13.134</b>
12 months RPI movement to August 08	4.800%	£0.630
X	7.500%	£0.985
<b>Specified yield 2009/10</b>		<b>£14.749</b>
12 months RPI movement to August 09	-1.300%	-£0.192
X	7.500%	£1.106
<b>Specified yield 2010/11</b>		<b>£15.663</b>
12 months RPI movement to August 10	4.700%	£0.736
X	7.500%	£1.175
<b>Specified yield 2011/12</b>		<b>£17.574</b>

### Bonus Term

2.4 The CAA has included a bonus term in the yield formula. This term is positive if performance on certain service quality measures exceed a specified service standard. The bonus term in any given year is based on forecast service quality for that year. As in previous years, Heathrow has decided that no forecast bonus should be included in the yield calculation.  $B_t$  is set at 0% in the 2012/13 yield calculation. The bonus element of the formula will be calculated on actual performance and recovered through the k factor in subsequent years.

### Triggers

2.5 All trigger projects due to be completed in 2008/09 have been completed. However, T4 baggage sorter and T4-T1 tunnel refurbishment were not completed by their milestone dates so have therefore incurred trigger payments. The trigger payments were captured through the k factor for 2008/09 in setting of airport charges for 2010/11 and through the k factor for 2009/10 in setting of airport charges for 2011/12.

2.6 All trigger projects due to be completed in 2009/10 have been completed. In setting airport charges for 2009/10, T4 check-in extension – South West Bank project was forecast not to be completed by its milestone date. Since setting the charges for 2009/10, T3 refurbishment of Pier 7 has not been completed to its milestone date. This project was captured through the k factor for 2009/10 in setting airport charges for 2011/12.

2.7 There are two projects with milestone completion dates in 2010/11 (i) Eastern Maintenance Base and (ii) T3 refurbishment of check-in and security search. Both were forecast not to be completed by their milestone dates in setting airport charges for 2010/11. Eastern Maintenance Base will remain incomplete against its milestone date into 2012/13. Therefore, setting airport charges for

2012/13 will capture this project. In addition, T3 refurbishment of check-in and security search project was forecast not to be complete to its milestone date (milestone date of March 2010), and forecast payments were included in setting airport charges for 2010/11 and 2011/12. Subsequent to this, the milestone date has been changed to July 2011 which has been endorsed by the CAA<sup>6</sup>. This results in this project now being complete to its milestone date, and the k factor for 2010/11 included in setting airport charges for 2012/13 corrects for the trigger payment that was included when setting airport charges for 2010/11.

- 2.8 Two trigger projects with milestone dates for 2011/12 were forecast not to be completed by their milestone dates when setting airport charges for 2011/12; (i) T2A Phase 1 demolition of T2 and (ii) Completion of Outer Pier North.
- 2.9 In addition, Eastern Maintenance Base and T3 refurbishment of check-in and security search (before milestone date change) continued to incur trigger payments in setting airport charges for 2011/12.
- 2.10 All trigger projects with milestone dates in 2012/13 are forecast not to be completed by their milestone date. In addition, Eastern Maintenance Base and Completion of Outer Pier North will remain incomplete against their milestone dates and will continue to incur trigger payments into 2012/13. Therefore the total trigger payment associated with 2012/13 is £38.6m (nominal). The Q5 amount of trigger payments to 2012/13 is £51.7m (nominal).

**Table 2**

<b>2012/13</b>	<b>Milestone month</b>	<b>Forecast Completion Date</b>
Completion of T3 Integrated Baggage system	Mar-12	Oct-13
T2A Phase 1 Construction sufficiently progressed for operational trials to commence	Nov-12	Oct-13
Completion of Midfield Pier Centre	Nov-12	Nov-13
Completion of Passenger Connectivity to the Midfield Pier	Nov-12	Nov-13
Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System	Jun-12	Mar-13
<b>Projects carried forward into 2012/13</b>		
Eastern maintenance base	Mar-10	Jun-13
Completion of the Outer Pier North	Jan-12	Mar-13

<sup>6</sup> Endorsed by CAA on 17<sup>th</sup> March 2011.

## K Factor

2.11 The k factor in the formula for 2012/13 has increased the maximum allowable yield to compensate for the unanticipated under-recovery against the maximum allowable yield in 2010/11, together with an allowance for interest. The calculation is shown in Chapter 3.

## Passengers

2.12 Heathrow forecast passengers for 2012/13 are 70,919k.

## Application of the Regulatory Pricing Formula

2.13 Based on the regulatory pricing formula, the forecast maximum allowable yield for Heathrow in 2012/13 is set out below.

$$M_{2012/13} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where :-

RPI <sub>t-1</sub>	=	5.2	
X	=	7.5	
B <sub>t</sub>	=	0.0	- this figure is a forecast
Y <sub>t-1</sub>	=	£17.574	
Trigger <sub>t</sub>	=	£38,575k	- this figure is a forecast
Q <sub>t</sub>	=	70,919k	- this figure is a forecast
K <sub>t</sub>	=	£0.054	- this figure is a forecast

Hence;

$$M_{2012/13} = \left( 1 + \frac{5.2 + 7.5 + 0}{100} \right) 17.574 - \frac{38,575}{70,919} - (0.054)$$

$$M_{2012/13} = (1.127 * 17.574) - 0.544 - (0.054)$$

$$M_{2012/13} = 19.316$$

## Charges in 2011/12

2.14 The forecast maximum allowable yield at Heathrow in 2011/12 was calculated at £17.443.

<b>Specified yield 2008/09</b>		<b>£13.134</b>
12 months RPI movement to August 08	4.800%	£0.630
X	7.500%	£0.985
<b>Specified yield 2009/10</b>		<b>£14.749</b>
12 months RPI movement to August 09	-1.300%	-£0.192
X	7.500%	£1.106
<b>Specified yield 2010/11</b>		<b>£15.663</b>
12 months RPI movement to August 10	4.700%	£0.736
X	7.500%	£1.175
Bonus term	0.000%	£0.000
Trigger payments (000s)	£9,654	-£0.136
K factor from 2009/10 under recovery		£0.005
<b>Forecast 2011/12 maximum allowable yield</b>		<b>£17.443</b>

## Proposed pricing for 2012/13

2.15 Heathrow is proposing to set prices for 2012/13 to recover the forecast maximum allowable yield of £19.316 per passenger (details of the charges are shown in Chapter 7).

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## Chapter 3 - Correction Factor for 2010/11

### The Correction factor

- 3.1 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 movements compared to the forecasts used to set the airport charges for that relevant year, trigger completion dates and recovery of actual bonus.
- 3.2 The k factor formula has a component to calculate the actual allowable yield, the k factor formula is shown below:

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

### Formula for 2010/11 actual maximum allowable yield

- 3.3 The combined impact of all the elements of the formula results in 2010/11 actual maximum allowable yield of £15.352 (passenger only flights). The section below presents the components of the formula.
- 3.4  $M_{t-2}$  relates to 2010/11 and its calculation is shown below:

$$M_{2010/11} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where: -

$M_{2010/11}$	=	actual maximum average revenue yield per passenger using Heathrow airport in relevant year (2010/11) expressed in £
$RPI_{t-1}$	=	August 2008 to August 2009
X	=	7.5
$B_t$	=	actual bonus factor in 2010/11
$Y_{t-1}$	=	£14.749
$TRIGGER_t$	=	actual reduction in maximum allowable charges when the airport has not achieved particular capital investment project milestones on time
$Q_t$	=	actual passengers using Heathrow airport in relevant year 2010/11
$K_t$	=	correction factor per passenger

### Application of the Regulatory Pricing Formula

3.5 Based on the regulatory pricing formula, the actual maximum allowable yield in 2010/11 for the k factor is set out below.

$$M_{2010/11} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where: -

$RPI_{t-1}$	=	-1.3
$X$	=	7.5
$B_t$	=	0.473
$Y_{t-1}$	=	£14.749
$TRIGGER_t$	=	£2,217k
$Q_t$	=	66,126k
$K_t$	=	0.347

**Hence;**

$$M_{2010/11} = \left( 1 + \frac{-1.3 + 7.5 + 0.473}{100} \right) 14.749 - \frac{2,217}{66,126} - 0.347$$

$$M_{2010/11} = (1.0667 * 14.749) - 0.034 - 0.347$$

$$M_{2010/11} = 15.352$$

3.6 The actual maximum allowable yield for 2010/11 is £15.352.

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

## Bonus term

3.8 The regulatory pricing formula includes a bonus component for performance of certain service quality measures. Heathrow has decided that this will be recovered through the k factor. Therefore the 2010/11 actual performance is captured in the k factor for 2010/11 in setting airport charges for 2012/13. This approach will be subject to review in future years. The pricing formula set by the CAA is as follows:

$$B_t = \sum_{\substack{\text{April} \\ \text{MarchSpecified} \\ \text{Elements}}} \sum \text{MAX}[0, \text{MIN}[BNS(T1)_{kj}, BNS(T2)_{kj}, BNS(T3)_{kj}, BNS(T4)_{kj}, BNS(T5)_{kj}, BNS(HET)_{kj}]]$$

**Table 3**

“Specified Element”	Performance Metric	Lower performance limit (LPL <sub>k</sub> )	Upper performance limit (UPL <sub>k</sub> )	Maximum annual bonus (MAB <sub>k</sub> )
Departure lounge seat availability	QSM	3.8	4.5	0.36
Cleanliness	QSM	3.9	4.5	0.36
Way-finding	QSM	4.0	4.5	0.36
Flight information	QSM	4.2	4.5	0.36
Passenger sensitive equipment (general)	Availability	99% of time	100% of time	0.40
Arrivals reclaim (Baggage Carousels)	Availability	99% of time	100% of time	0.40

3.9 Full details of the bonus formula is available in “Heathrow and Gatwick Airports, CAA price control proposals, November 2007, Chapter 5” and “Airport Regulation, Economic Regulation of Heathrow and Gatwick Airports 2008-2013, CAA Decision, Annex C”. In particular:

3.10 *“The total annual bonus would be built up from the aggregate of any monthly bonuses for each qualifying element over the year. The bonus receivable in respect of any month would be determined as follows:*

- *a bonus in respect of any element will only be payable if the minimum performance being achieved for that element in all terminals at that airport exceeds the standard in the SQR scheme. The scale of the bonus will be determined by the performance achieved in the worst performing terminal, thus providing that users would not be paying a bonus for a level of service higher than that achieved at their own terminal; and*
- *the quantification of relevant bonuses will be based pro rata on where the monthly performance lies between an upper and lower performance limit and the maximum bonus in any particular month.<sup>7</sup>*

<sup>7</sup> Heathrow and Gatwick Airports, CAA price control proposals, November 2007, Chapter 5, page 68.

3.11 An example of the calculation is shown below for March 2011.

3.12 In March 2011, arrivals reclaim measure was applicable for the bonus term. The bonus term is determined by the performance of the worst performing Terminal when all Terminals exceed the lower performance limit.

In March 2011 all Terminals exceeded the lower performance limit and Terminal 1 was the worst performing Terminal. Therefore, Terminal 1 result is used to calculate the bonus term for that month.

T1 Actual performance result	= 99.70%
T2 Actual performance result	= 100.00% <sup>8</sup>
T3 Actual performance result	= 99.76%
T4 Actual performance result	= 99.80%
T5 Actual performance result	= 99.82%

$$BNS(T1)_{kj} = \frac{1}{12} \cdot MAB_k \cdot \frac{MP(T1)_{kj} - LPL_k}{UPL_k - LPL_k}$$

$$MP(T1)_{kj} = 99.70\%$$

$$LPL_k = 99.00\%$$

$$UPL_k = 100.00\%$$

$$MAB_k = 0.40\%$$

Hence:

$$BNS(T1)_{kj} = \frac{1}{12} \cdot 0.40\% \cdot \frac{99.70\% - 99.00\%}{100\% - 99.00\%}$$

$$BNS(T1)_{kj} = (0.033\%) \cdot ((0.700\%)/(1.000\%))$$

$$BNS(T1)_{kj} = 0.0233\%$$

$$BNS(T1)_{kj} = 0.023\% \text{ (rounded to 3 decimal places)}$$

3.13 An alternative to using percentages to calculate the bonus term as expressed above, is to divide the percentage by a multiple of 100 (i.e. 99.70/100 = 0.9970).

3.14 The formula is performed for all areas to determine the bonus term. The bonus term for 2010/11 is 0.473%. The breakdown of the full calculation is shown in Table 4.

<sup>8</sup> For months including or after "Such Time as T2 is Decommissioned" then:  $MP(T2)_{kj} = 100\%$ .

**Table 4**

Departure lounge seating availability (QSM)	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	4.07	4.07	4.06	4.06	4.05	4.04	4.03	4.02	4.03	4.04	4.04	4.03	
Terminal 2 (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 3 (actual)	3.73	3.74	3.75	3.74	3.73	3.74	3.72	3.71	3.71	3.71	3.71	3.70	
Terminal 4 (actual)	4.14	4.15	4.14	4.14	4.15	4.17	4.16	4.16	4.14	4.15	4.14	4.13	
Terminal 5 (actual)	4.04	4.06	4.08	4.06	4.07	4.04	4.04	4.04	4.04	4.03	4.04	4.03	
BNS(T1) <sub>KU</sub>	0.0116%	0.0116%	0.0111%	0.0111%	0.0107%	0.0103%	0.0099%	0.0094%	0.0099%	0.0103%	0.0103%	0.0099%	
BNS(T2) <sub>KU</sub>	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(T3) <sub>KU</sub>	-0.0030%	-0.0026%	-0.0021%	-0.0026%	-0.0030%	-0.0026%	-0.0034%	-0.0039%	-0.0039%	-0.0039%	-0.0039%	-0.0043%	
BNS(T4) <sub>KU</sub>	0.0146%	0.0150%	0.0146%	0.0146%	0.0150%	0.0159%	0.0154%	0.0154%	0.0146%	0.0150%	0.0146%	0.0141%	
BNS(T5) <sub>KU</sub>	0.0103%	0.0111%	0.0120%	0.0111%	0.0116%	0.0103%	0.0103%	0.0103%	0.0103%	0.0099%	0.0103%	0.0099%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.000%
Cleanliness (QSM)	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	3.98	3.97	3.97	3.97	3.98	3.96	3.97	3.98	3.98	3.98	3.98	3.98	3.98
Terminal 2 (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 3 (actual)	3.87	3.88	3.89	3.90	3.91	3.93	3.94	3.94	3.95	3.95	3.95	3.96	
Terminal 4 (actual)	4.05	4.06	4.07	4.08	4.07	4.08	4.07	4.07	4.07	4.07	4.07	4.07	4.07
Terminal 5 (actual)	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.20	4.20	4.20	4.19	
BNS(T1) <sub>KU</sub>	0.0040%	0.0035%	0.0035%	0.0035%	0.0040%	0.0030%	0.0035%	0.0040%	0.0040%	0.0040%	0.0040%	0.0045%	
BNS(T2) <sub>KU</sub>	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(T3) <sub>KU</sub>	-0.0015%	-0.0010%	-0.0005%	0.0000%	0.0005%	0.0015%	0.0020%	0.0020%	0.0025%	0.0025%	0.0025%	0.0030%	
BNS(T4) <sub>KU</sub>	0.0075%	0.0080%	0.0085%	0.0090%	0.0085%	0.0090%	0.0085%	0.0085%	0.0085%	0.0085%	0.0085%	0.0085%	
BNS(T5) <sub>KU</sub>	0.0155%	0.0155%	0.0155%	0.0155%	0.0155%	0.0155%	0.0155%	0.0155%	0.0150%	0.0150%	0.0150%	0.0145%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0005%	0.0015%	0.0020%	0.0020%	0.0025%	0.0025%	0.0025%	0.0030%	0.017%
Way finding (QSM)	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	3.98	3.98	3.97	3.99	3.99	3.99	4.01	4.02	4.01	4.01	4.02	4.03	
Terminal 2 (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 3 (actual)	4.04	4.04	4.05	4.04	4.05	4.06	4.06	4.07	4.06	4.05	4.05	4.06	
Terminal 4 (actual)	4.08	4.09	4.12	4.12	4.12	4.13	4.12	4.11	4.11	4.12	4.11	4.11	
Terminal 5 (actual)	4.18	4.20	4.22	4.22	4.24	4.24	4.24	4.24	4.23	4.23	4.22	4.22	
BNS(T1) <sub>KU</sub>	-0.0012%	-0.0012%	-0.0018%	-0.0006%	-0.0006%	-0.0006%	0.0006%	0.0012%	0.0006%	0.0006%	0.0012%	0.0018%	
BNS(T2) <sub>KU</sub>	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(T3) <sub>KU</sub>	0.0024%	0.0024%	0.0030%	0.0024%	0.0030%	0.0036%	0.0036%	0.0042%	0.0036%	0.0030%	0.0030%	0.0036%	
BNS(T4) <sub>KU</sub>	0.0048%	0.0054%	0.0072%	0.0072%	0.0072%	0.0078%	0.0072%	0.0066%	0.0066%	0.0072%	0.0066%	0.0066%	
BNS(T5) <sub>KU</sub>	0.0108%	0.0120%	0.0132%	0.0132%	0.0144%	0.0144%	0.0144%	0.0138%	0.0138%	0.0138%	0.0132%	0.0132%	
Bonus term =	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0006%	0.0012%	0.0006%	0.0006%	0.0012%	0.0018%	0.006%
Flight information (QSM)	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	4.22	4.23	4.23	4.23	4.24	4.25	4.25	4.25	4.25	4.25	4.26	4.27	
Terminal 2 (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 3 (actual)	4.33	4.33	4.32	4.32	4.32	4.33	4.33	4.33	4.34	4.34	4.33	4.33	
Terminal 4 (actual)	4.27	4.29	4.28	4.29	4.30	4.29	4.29	4.29	4.28	4.26	4.27	4.26	
Terminal 5 (actual)	4.36	4.34	4.30	4.30	4.30	4.29	4.30	4.29	4.28	4.28	4.28	4.27	
BNS(T1) <sub>KU</sub>	0.0020%	0.0030%	0.0030%	0.0030%	0.0040%	0.0050%	0.0050%	0.0050%	0.0050%	0.0050%	0.0060%	0.0070%	
BNS(T2) <sub>KU</sub>	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(T3) <sub>KU</sub>	0.0130%	0.0130%	0.0120%	0.0120%	0.0120%	0.0130%	0.0130%	0.0130%	0.0140%	0.0140%	0.0130%	0.0130%	
BNS(T4) <sub>KU</sub>	0.0070%	0.0090%	0.0080%	0.0090%	0.0100%	0.0090%	0.0090%	0.0080%	0.0080%	0.0060%	0.0070%	0.0060%	
BNS(T5) <sub>KU</sub>	0.0160%	0.0140%	0.0100%	0.0100%	0.0100%	0.0090%	0.0100%	0.0090%	0.0080%	0.0080%	0.0080%	0.0070%	
Bonus term =	0.0020%	0.0030%	0.0030%	0.0030%	0.0040%	0.0050%	0.0050%	0.0050%	0.0050%	0.0050%	0.0060%	0.0060%	0.052%
Pax Sensitive Equip. (general)	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	99.61%	99.35%	99.70%	99.51%	99.68%	99.73%	99.73%	99.70%	99.61%	99.57%	99.66%	99.73%	99.69%
Terminal 2 (actual)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Terminal 3 (actual)	99.57%	99.68%	99.67%	99.55%	99.63%	99.72%	99.64%	99.73%	99.78%	99.78%	99.69%	99.73%	
Terminal 4 (actual)	99.71%	99.71%	99.63%	99.70%	99.57%	99.60%	99.68%	99.62%	99.80%	99.77%	99.80%	99.75%	
Terminal 5 (actual)	99.84%	99.85%	99.80%	99.78%	99.75%	99.79%	99.76%	99.77%	99.76%	99.78%	99.81%	99.80%	
BNS(T1) <sub>KU</sub>	0.0203%	0.0117%	0.0233%	0.0190%	0.0227%	0.0243%	0.0233%	0.0203%	0.0190%	0.0220%	0.0243%	0.0230%	
BNS(T2) <sub>KU</sub>	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	
BNS(T3) <sub>KU</sub>	0.0190%	0.0227%	0.0223%	0.0183%	0.0210%	0.0240%	0.0213%	0.0213%	0.0243%	0.0260%	0.0230%	0.0243%	
BNS(T4) <sub>KU</sub>	0.0237%	0.0237%	0.0210%	0.0233%	0.0190%	0.0200%	0.0227%	0.0207%	0.0267%	0.0257%	0.0267%	0.0250%	
BNS(T5) <sub>KU</sub>	0.0280%	0.0283%	0.0267%	0.0260%	0.0250%	0.0263%	0.0253%	0.0257%	0.0253%	0.0260%	0.0270%	0.0267%	
Bonus term =	0.0190%	0.0117%	0.0210%	0.0183%	0.0190%	0.0200%	0.0213%	0.0203%	0.0190%	0.0220%	0.0230%	0.0230%	0.238%
Arrivals reclaim	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
Terminal 1 (actual)	99.59%	99.69%	99.43%	99.51%	99.40%	99.53%	99.56%	99.27%	99.39%	99.42%	99.41%	99.70%	
Terminal 2 (actual)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Terminal 3 (actual)	99.63%	99.67%	99.77%	99.62%	99.48%	99.72%	99.38%	99.68%	99.79%	99.79%	99.66%	99.76%	
Terminal 4 (actual)	99.38%	99.51%	99.58%	99.55%	99.37%	99.24%	99.18%	99.70%	99.70%	99.56%	99.86%	99.80%	
Terminal 5 (actual)	99.85%	99.88%	99.82%	99.81%	99.81%	99.77%	99.80%	99.67%	99.70%	99.84%	99.84%	99.82%	
BNS(T1) <sub>KU</sub>	0.0197%	0.0230%	0.0143%	0.0170%	0.0133%	0.0177%	0.0187%	0.0090%	0.0130%	0.0140%	0.0137%	0.0233%	
BNS(T2) <sub>KU</sub>	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	0.0333%	
BNS(T3) <sub>KU</sub>	0.0210%	0.0223%	0.0257%	0.0207%	0.0160%	0.0240%	0.0127%	0.0227%	0.0263%	0.0263%	0.0220%	0.0253%	
BNS(T4) <sub>KU</sub>	0.0127%	0.0170%	0.0193%	0.0183%	0.0123%	0.0080%	0.0060%	0.0233%	0.0233%	0.0187%	0.0287%	0.0267%	
BNS(T5) <sub>KU</sub>	0.0283%	0.0293%	0.0273%	0.0270%	0.0270%	0.0270%	0.0267%	0.0223%	0.0233%	0.0280%	0.0280%	0.0273%	
Bonus term =	0.0127%	0.0170%	0.0143%	0.0170%	0.0123%	0.0080%	0.0060%	0.0090%	0.0130%	0.0140%	0.0137%	0.0233%	0.160%
Bonus term =	0.0337%	0.0317%	0.0383%	0.0383%	0.0358%	0.0345%	0.0349%	0.0375%	0.0401%	0.0441%	0.0464%	0.0571%	0.4725%
Rounded to 3 decimal places Bt =	0.034%	0.032%	0.038%	0.038%	0.036%	0.034%	0.035%	0.038%	0.040%	0.044%	0.046%	0.057%	0.473%

## Triggers

3.15 There were two trigger projects due for completion within 2010/11 as shown in Table 5.

**Table 5**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>9</sup></b>	<b>Completion Date</b>
T3 Refurbishment Completion of check-in & Security Search	Mar-10	Sep-10	May-11
Eastern Maintenance Base Redevelopment Completion of the diversion of East Church Road	Mar-10	Jan-12	Jun-13

3.16 Two projects are included in the k factor for 2010/11:

- “T3 Refurbishment Completion of check-in & Security Search” was forecast not to be complete by its milestone date by six months when setting airport charges for 2010/11.

However, this project had its Milestone Month changed to July 2011. This change was subject to the CAA change control process and consultation. Therefore, this project has been completed on time and k factor for 2010/11 makes a retrospective adjustment to recover the trigger payment included when setting airport charges in 2010/11 (i.e. no trigger payment is included in the calculation of the k factor for 2010/11).

- “Eastern Maintenance Base Redevelopment Completion of the diversion of East Church Road” was forecast not to be delivered to its milestone date when setting airport charges for 2010/11. This project will continue to incur trigger payments and the k factor for 2010/11 adjusts for actual RPI for 2010/11.

### **Summary of trigger payment** (see Table 9 for detail)

Eastern Maintenance Base = £2,217,480 in 2010/11 prices  
**Total Payment = £2,217,480 in 2010/11 prices**

3.17 Full details of the trigger calculations can be found in Chapter 4.

<sup>9</sup> The forecast completion date is consistent to the forecast presented in the “BAA Heathrow Airport, 2010/11 Airport Charges Consultation” document.

**K factor for 2010/11**

	2010/11 Passengers 000s	Actual yield (£)	2010/11 Revenue £000s	Allowable yield (£)	Under/Over-recovery
Heathrow	66,126	15.295	1,011,381	15.352	Under-Recovery

Total revenue from airport charges (passenger only flights) at Heathrow in	2010/11	Actual (£000s)	<b>T<sub>t-2</sub></b>	1,011,381	
Passengers using Heathrow Airport in	2010/11	Actual (000s)	<b>Q<sub>t-2</sub></b>	66,126	
Maximum allowable revenue yield at Heathrow in	2010/11	Actual (£)	<b>M<sub>t-2</sub></b>	15.352	
Interest rate from weekly Treasury Bill Discount rate*	2010/11	Actual	<b>I<sub>t-2</sub></b>	0.5142%	
Forecast Passengers using Heathrow in	2012/13	Forecast (000s)	<b>Q<sub>t</sub></b>	70,919	
Correction amount	<b><math>K_t = ((T_{t-2} - (Q_{t-2} \times M_{t-2})) / Q_t \times (1 + I_{t-2} / 100))^2</math></b>		Forecast (£)	<b>K<sub>t</sub></b>	<b>-0.054</b>

\*Based on Sep 10 to Aug 11 average (see table 6).

**Table 6**

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
06-Sep-10	06-Dec-10	1,500	2.42	0.494
13-Sep-10	13-Dec-10	1,500	2.28	0.492
20-Sep-10	20-Dec-10	1,500	2.58	0.492
27-Sep-10	29-Dec-10	1,500	1.90	0.496
04-Oct-10	04-Jan-11	1,500	1.57	0.511
11-Oct-10	10-Jan-11	1,500	2.79	0.506
18-Oct-10	17-Jan-11	1,500	2.18	0.508
25-Oct-10	24-Jan-11	1,500	2.08	0.507
01-Nov-10	31-Jan-11	1,000	3.13	0.505
08-Nov-10	07-Feb-11	1,000	3.93	0.503
15-Nov-10	14-Feb-11	1,000	3.84	0.494
22-Nov-10	21-Feb-11	1,000	4.40	0.494
29-Nov-10	28-Feb-11	1,000	2.57	0.486
06-Dec-10	07-Mar-11	1,000	2.11	0.489
13-Dec-10	14-Mar-11	1,000	2.79	0.488
20-Dec-10	21-Mar-11	1,000	3.14	0.491
04-Jan-11	04-Apr-11	1,000	3.38	0.501
10-Jan-11	11-Apr-11	1,000	4.01	0.501
17-Jan-11	18-Apr-11	1,000	3.22	0.504
24-Jan-11	26-Apr-11	1,000	3.87	0.509
31-Jan-11	03-May-11	1,000	4.48	0.510
07-Feb-11	09-May-11	1,000	3.30	0.546
14-Feb-11	16-May-11	1,000	3.24	0.531
21-Feb-11	23-May-11	1,000	3.19	0.532
28-Feb-11	31-May-11	1,000	4.51	0.540
07-Mar-11	06-Jun-11	1,500	3.49	0.553
14-Mar-11	13-Jun-11	1,500	2.36	0.546
21-Mar-11	20-Jun-11	1,500	3.37	0.540
28-Mar-11	27-Jun-11	1,500	2.37	0.561
04-Apr-11	04-Jul-11	1,500	2.00	0.605
11-Apr-11	11-Jul-11	1,500	2.45	0.595
18-Apr-11	18-Jul-11	1,500	3.43	0.565
26-Apr-11	25-Jul-11	1,500	3.18	0.553
03-May-11	01-Aug-11	1,500	2.09	0.561
09-May-11	08-Aug-11	1,500	5.16	0.539
16-May-11	15-Aug-11	1,500	3.93	0.525
23-May-11	22-Aug-11	1,500	3.72	0.518
31-May-11	30-Aug-11	1,500	2.57	0.527
06-Jun-11	05-Sep-11	1,500	2.61	0.528
13-Jun-11	12-Sep-11	1,500	4.43	0.522
20-Jun-11	19-Sep-11	1,000	5.33	0.518
27-Jun-11	26-Sep-11	1,000	6.30	0.513
04-Jul-11	03-Oct-11	1,000	3.85	0.509
11-Jul-11	10-Oct-11	1,000	4.09	0.509
18-Jul-11	17-Oct-11	1,000	3.25	0.505
25-Jul-11	24-Oct-11	1,000	5.69	0.499
01-Aug-11	31-Oct-11	1,000	4.42	0.488
08-Aug-11	07-Nov-11	1,000	4.25	0.466
15-Aug-11	14-Nov-11	1,000	4.07	0.446
22-Aug-11	21-Nov-11	1,000	2.44	0.444
30-Aug-11	28-Nov-11	1,000	2.50	0.458
<b>Average:</b>				<b>0.5142%</b>

### Application of the Regulatory Pricing Formula

3.18 The actual maximum allowable yield for 2010/11 is £15.352.

3.19 The below table sets out the k factor with actual maximum allowable yield:

<b>K factor analysis</b>		
Actual airport charges revenue 2010/11	A	1,011,381
Actual passengers 2010/11	B	66,126
Actual yield		£15.295
Forecast to recover 2010/11	C	£15.352
Interest rate	D	0.514%
Forecast passengers 2012/13	E	70,919
<b>K factor from 2010/11 under recovery =</b> $((A-(B*C))/E*((1+D)^2))$		<b>-£0.054</b>

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## Chapter 4 - Trigger Implications

- 4.1 The CAA formula for Q5 includes a trigger element which means that if a project is not complete by a specified project milestone date then the allowable yield is reduced. This chapter sets out the trigger calculations that have been used in the calculation of the forecast maximum allowable yield for 2012/13, and provides a status of all trigger projects to 2012/13.
- 4.2 Five trigger projects have milestone completion dates within 2012/13:
- Completion of T3 Integrated Baggage System
  - T2A Phase 1 Construction sufficiently progresses for operational trials to commence
  - Completion of Midfield Pier Centre
  - Completion of Passenger Connectivity to the Midfield Pier
  - Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System
- 4.3 In addition, two projects were not complete by their milestone dates which follow into 2012/13, these projects are:
- Eastern Maintenance Base
  - Completion of the Outer Pier North
- 4.4 The following sets out the trigger project status for each year from 2008/09 to 2012/13.

### 2008/09 Triggers

**Table 7**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>10</sup></b>	<b>Completion Date</b>
T4 new CIP - shell & core	Feb-09	Dec-08	Dec-08
T4 completion of baggage sorter	Jan-09	Jan-09	Jul-09
T1 completion of T1 bmi Nose Building	Jan-09	Jan-09	Oct-08
Completion of T4-T1 tunnel refurbishment	Jan-09	Jan-09	Mar-09

- 4.5 All four projects in 2008/09 were forecast to be delivered on time when setting airport charges for 2008/09. However, two projects were not completed by the relevant milestone dates:

<sup>10</sup> In setting airport charges for 2008/09 the final price control decision was not announced. Therefore the price proposals put forward by the CAA in November 2007 were used (Heathrow and Gatwick airports, CAA price control proposals, November 2007). The November 2007 proposals only included three trigger projects for 2008/09 (i) T4 new CIP - shell & core, (ii) T4 completion of baggage sorter, and (iii) T1 completion of T1 bmi Nose Building. These projects were forecast to be completed on time.

- T4 completion of baggage sorter  
This project was not delivered to the milestone date by six months. Two months of this project were captured by the k factor for 2008/09 in setting airport charges for 2010/11. The remaining four months were captured in the k factor for 2009/10 in setting airport charges for 2011/12.
- Completion of T4-T1 tunnel refurbishment  
This project was not delivered to its milestone date by two months and both months were captured in the k factor for 2008/09 when setting airport charges for 2010/11.

## 2009/10 Triggers

**Table 8**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>11</sup></b>	<b>Completion Date</b>
T4 check-in extn - South West bank of desks	Jun-09	Sep-09	Aug-09
T4 check-in extn - North East bank of desks	Jan-10	Oct-09	Oct-09
T4 A380 jetty facilities	May-09	May-09	Apr-09
T3 refurbishment - completion of Pier 5 refurbishment	Jul-09	Jun-09	May-09
T3 refurbishment - completion of Pier 7 refurbishment	Aug-09	Aug-09	Oct-09
Completion of Mid-field Pier North	Jan-10	Jan-10	Nov-09

4.6 All projects due to be completed in 2009/10 are now complete.

- The following projects have been delivered on time:
  - T4 check-in extn - North East bank of desks
  - T4 A380 jetty facilities
  - T3 refurbishment - completion of Pier 5 refurbishment
  - Completion of Mid-field Pier North
  
- The following projects were not complete by their milestone dates and were captured in the k factor for 2009/10 in setting airport charges for 2011/12.
  - T3 refurbishment - completion of Pier 7 refurbishment  
This project was not completed by its milestone date by two months.
  
  - T4 check-in extension - South West bank of desks  
This project was forecast not to be complete by its milestone date by three months when airport charges were set for 2009/10. However, this project was actually completed two months after its milestone date. This adjustment was captured in the k factor for 2009/10 in setting airport charges for 2011/12.

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<sup>11</sup> The forecast completion date is consistent to the forecast presented in the "BAA Heathrow Airport, 2009/10 Airport Charges Consultation" document.

## 2010/11 Triggers

**Table 9**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>12</sup></b>	<b>Forecast Completion Date</b>
T3 Refurbishment Completion of check-in & Security Search	Mar-10	Sep-10	May-11
Eastern Maintenance Base Redevelopment Completion of the diversion of East Church Road	Mar-10	Jan-12	Jun-13

- 4.7 Both projects scheduled to be delivered in 2010/11 were forecast not to be completed by their milestone dates when airport charges were set for 2010/11.
- 4.8 “T3 Refurbishment Completion of check-in & Security Search” was forecast to be delayed by six months to September 2010 when setting airport charges for 2010/11. In addition, when setting airport charges for 2011/12 the forecast completion date changed to July 2011, therefore resulting in four months being captured in setting airport charges for 2011/12.
- 4.9 However subsequently, this project had its Milestone Month changed to July 2011. This change was subject to the CAA change control process and consultation. Therefore, this project has been completed on time and the k factor for 2010/11 included in setting airport charges for 2012/13 makes a retrospective adjustment to recover the payment included when setting airport charges in 2010/11 (i.e. no trigger payment is included in the calculation of the k factor for 2010/11).
- 4.10 In addition, Eastern Maintenance Base is further delayed until June 2013. This results in twelve months being captured in setting airport charges for 2012/13.
- 4.11 The following sets out the trigger calculation that is captured in the k factor for 2010/11 in setting airport charges for 2012/13.

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<sup>12</sup> The forecast completion date is consistent to the forecast presented in the “Heathrow Airport Limited, 2010/11 Airport Charges Consultation” document.

- **Eastern Maintenance Base**

Milestone Month	= March 2010
Forecast Completion	= June 2013
Expected Delay	= 39 months
Months falling into 2010/11	= 12 months
Monthly Payment	= £170,000 in 2007/08 prices
Actual Payment	= £2,040,000 in 2007/08 prices
Inflation Index (RPI)	= 1.087 <sup>13</sup>
Actual Payment	= £2,217,480 in 2010/11 prices
Actual Passengers (000s)	= 66,126 in 2010/11
Impact on Yield	= £0.034 in 2010/11 prices

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<sup>13</sup> Actual average RPI for 2008/09 is 3.0%, actual average RPI for 2009/10 is 0.5%, and actual average RPI for 2010/11 is 5.0% (subject to rounding differences).

## 2011/12 Triggers

**Table 10**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>14</sup></b>	<b>Forecast Completion Date</b>
T2A Phase 1 demolition of T2	Mar-11	May-11	Mar-11
T3 refurbishment of Immigration, landside departures and baggage hall refurbishment	Mar-11	Mar-11	Mar-11
Completion of T5 Satellite C	May-11	Jan-11	May-11
Post T5 transfer baggage (T5-T3)	Nov-11	Nov-11	Mar-12
Completion of the Outer Pier North	Jan-12	Mar-13	Mar-13
T2A phase 1 completion – Weather tight	Feb-12	Jan-12	Feb-12

4.12 Table 10 lists all the projects that have milestone dates that fall into the period for 2011/12. Of these projects, three projects have now been completed to their milestone dates:

- T2A Phase 1 demolition of T2
- T3 refurbishment of Immigration, landside departures and baggage hall refurbishment
- Completion of T5 Satellite C

4.13 T2A Phase 1 demolition of T2 was forecast not to be completed to its milestone trigger date by two months when setting airport charges for 2011/12. However, since then this project has been completed to its milestone date. The trigger payment adjustment to reflect this correction will be captured in the k factor for 2011/12 when setting airport charges for 2013/14.

4.14 Post T5 transfer baggage was forecast to be completed to its milestone date when setting airport charges for 2011/12. However, since then this project is now forecast not to be completed to its milestone date. The trigger payment adjustment to reflect this correction will be captured in the k factor for 2011/12 when setting airport charges for 2013/14.

4.15 T2A phase 1 completion – Weather is forecast to be completed by its milestone date.

4.16 In addition, T5 Satellite C project has been separated into two project; (i) T5 Satellite C project and (ii) T5C Nodes and link bridges stands 563/564 (i.e. the latter part project has been removed from the original T5C Satellite project into its own distinct milestone project<sup>15</sup>. Both projects have milestone dates of May-11 with

<sup>14</sup> The forecast completion date is consistent to the forecast presented in the “Heathrow Airport Limited, 2011/12 Airport Charges Consultation” document.

<sup>15</sup> This trigger change was subject to CAA consultation and endorsed by the CAA on 17<sup>th</sup> March 2011.

monthly trigger payments at risk of £1.37m and £0.10m (2007/08 prices) respectively. Both projects have been completed to their milestone dates.

4.17 However, Completion of the Outer Pier North project will continue to miss its milestone trigger date and will incur trigger payments in setting airport charges for 2012/13.

- **Completion of Outer Pier North**

Milestone Month	= January 2012
Forecast Completion	= March 2013
Expected Delay	= 14 months
Months falling into 2012/13	= 12 months
Monthly Payment	= £490,000 in 2007/08 prices
Expected Payment	= £5,880,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112 <sup>16</sup>
Expected Payment	= £6,538,560 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.092 in 2012/13 prices

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<sup>16</sup> Actual average RPI for 2008/09 is 3.0%, average RPI forecast for 2009/10 is -0.7%, average RPI forecast for 2010/11 is 1.5%, average RPI forecast for 2011/12 is 3.7% and average RPI forecast for 2012/13 is 3.5% (subject to rounding differences).

## 2012/13 Triggers

**Table 11**

	<b>Milestone Month</b>	<b>Forecast Completion Date</b>
Completion of T3 Integrated Baggage system	Mar-12	Oct-13
T2A Phase 1 Construction sufficiently progressed for operational trials to commence	Nov-12	Oct-13
Completion of Midfield Pier Centre	Nov-12	Nov-13
Completion of Passenger Connectivity to the Midfield Pier	Nov-12	Nov-13
Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System	Jun-12	Mar-13

4.18 Table 11 lists all the projects that have milestone dates that fall into the period for 2012/13. All projects with milestone dates in 2012/13 are forecast not to be delivered to their milestone dates.

4.19 The forecast trigger calculation associated with the 2012/13 projects are shown below:

- **Completion of T3 Integrated Baggage system**

Milestone Month	= March 2012
Forecast Completion	= October 2013
Expected Delay	= 19 months
Months falling into 2012/13	= 12 months
Monthly Payment	= £1,190,000 in 2007/08 prices
Expected Payment	= £14,280,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112 <sup>17</sup>
Expected Payment	= £15,879,360 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.224 in 2012/13 prices

<sup>17</sup> Actual average RPI for 2008/09 is 3.0%, average RPI forecast for 2009/10 is -0.7%, average RPI forecast for 2010/11 is 1.5%, average RPI forecast for 2011/12 is 3.7% and average RPI forecast for 2012/13 is 3.5% (subject to rounding differences).

- **T2A Phase 1 Construction sufficiently progressed for operational trials to commence**

Milestone Month	= November 2012
Forecast Completion	= October 2013
Expected Delay	= 11 months
Months falling into 2012/13	= 4 months
Monthly Payment	= £1,220,000 in 2007/08 prices
Expected Payment	= £4,880,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112
Expected Payment	= £5,426,560 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.077 in 2012/13 prices

- **Completion of Midfield Pier Centre**

Milestone Month	= November 2012
Forecast Completion	= November 2013
Expected Delay	= 12 months
Months falling into 2012/13	= 4 months
Monthly Payment	= £670,000 in 2007/08 prices
Expected Payment	= £2,680,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112
Expected Payment	= £2,980,160 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.042 in 2012/13 prices

- **Completion of Passenger Connectivity to the Midfield Pier**

Milestone Month	= November 2012
Forecast Completion	= November 2013
Expected Delay	= 12 months
Months falling into 2012/13	= 4 months
Monthly Payment	= £310,000 in 2007/08 prices
Expected Payment	= £1,240,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112
Expected Payment	= £1,378,880 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.019 in 2012/13 prices

- **Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System**

Milestone Month	= June 2012
Forecast Completion	= March 2013
Expected Delay	= 9 months
Months falling into 2012/13	= 9 months
Monthly Payment	= £410,000 in 2007/08 prices
Expected Payment	= £3,690,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112
Expected Payment	= £4,103,280 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.058 in 2012/13 prices

4.20 In addition, two projects that had milestone dates in 2010/11 and 2011/12 will continue to incur trigger payments into 2012/13.

- **Eastern Maintenance Base**

Milestone Month	= March 2010
Forecast Completion	= June 2013
Expected Delay	= 39 months
Months falling into 2012/13	= 12 months
Monthly Payment	= £170,000 in 2007/08 prices
Expected Payment	= £2,040,000 in 2007/08 prices
Inflation Index (RPI)	= 1.112
Expected Payment	= £2,268,480 in 2012/13 prices
Forecast Passengers (000s)	= 70,919 in 2012/13
Impact on Yield	= £0.032 in 2012/13 prices

- **Completion of Outer pier North** (See Table 10).

4.21 The below summarises the trigger payments in 2012/13 (2012/13 prices).

Projects with milestone dates in 2012/13

Completion of T3 Integrated Baggage system	=£15,879,360
T2A Phase 1 Construction sufficiently progressed for operational trials to commence	=£5,426,560
Completion of Midfield Pier Centre	=£2,980,160
Completion of Passenger Connectivity to the Midfield Pier	=£1,378,880
Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System	=£4,103,280
<u>Projects carried forward into 2012/13</u>	
Eastern maintenance base	=£2,268,480
Completion of Outer Pier North	=£6,538,560
<b>Expected Payment</b>	<b>=£38,575,280</b>

## **Chapter 5 - Project for the Sustainable Development of Heathrow (PSDH)**

- 5.1 This chapter sets out the calculations associated with changes in the expected spend on the Project for the Sustainable Development of Heathrow (PSDH).
- 5.2 In the final Q5 regulatory settlement the CAA allowed assumed investment in PSDH on the basis of spend forecasts. This spend would be added to the RAB and a return would be generated in line with the allowed cost of capital.
- 5.3 2008/09 airport charges were set in line with the CAA assumed PSDH investment. Pending the Government's announcement regarding the expansion of Heathrow, there was minimal expenditure on PSDH in 2008/09. Therefore the expected yield from airport charges in 2009/10 was set below the forecast maximum allowable yield to compensate for 2008/09 PSDH over recovery by 7.4 pence.
- 5.4 Subsequent to the 2009/10 Airport Charges Consultation meeting, it was agreed with airlines that Heathrow in future would take an ex-post approach to the remuneration of PSDH expenditure, rather than an ex-ante approach; i.e. PSDH costs from 2009/10 are recovered in the year after they are incurred.
- 5.5 Therefore, Heathrow agreed to rebate the airlines the full amount of the implied return on PSDH expenditure included in the 2009/10 regulatory settlement. This equated to £12.89m (nominal), and was refunded to airlines as a cash sum outside the maximum allowable yield during the course of 2009/10. The refund to airlines was made on a monthly basis based on individual airline's share of total airport charges invoiced.
- 5.6 The same approach applied in 2010/11, with Heathrow refunding the difference between the full amount of the implied return on PSDH expenditure included in the 2010/11 regulatory settlement and the regulatory return on the actual 2009/10 PSDH spend (actual PSDH spend in 2009/10 was £23.7m (nominal)). The refund for 2010/11 equated to £17.4m (nominal).
- 5.7 Similarly in 2011/12, Heathrow refunded the difference between the full amount of the implied return on PSDH expenditure included in the 2011/12 regulatory settlement and the regulatory return on the actual 2010/11 PSDH spend (actual PSDH spend in 2010/11 was £71.5m (nominal)). The refund for 2011/11 equated to £20.9m (nominal), which is being paid to airlines.
- 5.8 The same approach applies in 2012/13. This will be based upon actual expenditure incurred, agreed with the airline community. Heathrow proposes to continue rebating the airlines the difference between the implied return on PSDH expenditure included in the 2012/13 regulatory settlement, and the regulatory return on actual 2011/12 expenditure recovered on an ex-post basis from 2012/13.
- 5.9 Forecast expenditure for 2011/12 is £141m, giving forecast cumulative PSDH expenditure to the end of 2011/12 of £236m. This level of expenditure equates to a forecast PSDH rebate of £23.5m (nominal).

**Table 12**

	<b>2012/13</b>
	<b>£(000s)</b>
Cumulative capex to 2012/13 in Settlement (outturn prices)	737,607
Implied RAB (1)	626,977
Accounting return (2)	6.014%
Implied return	37,704
Latest forecast spend 2011/12 (outturn prices)	141,000
Implied RAB (3)	236,243
Accounting return (2)	6.014%
Implied return	14,207
Implied PSDH Rebate in 2011/12 (outturn prices)	23,497
<p>(1) The implied RAB takes the cumulative PSDH spend at the start of the year and at the end of the year and averages them.</p> <p>(2) 6.014% is the accounting return equivalent to the allowed cost of capital.</p> <p>(3) The implied RAB takes the actual 2009/10, actual 2010/11 and forecast spend for 2011/12.</p>	

5.10 The conversion of price bases (i.e. real to nominal) for the PSDH calculations are based on CAA forecast RPI and the implied return is based on CAA forecast passengers used in the Q5 regulatory settlement, this will be subject to review.

5.11 The actual PSDH rebate will be refunded to airlines as a cash sum outside the maximum allowable yield in 2012/13. The refund to airlines will be made on a monthly basis based on individual airline's share of total airport charges invoiced.

## Chapter 6 – Structural Review of Aircraft Parking Charges

- 6.1 Heathrow concluded a review of its airport charges structure in 2010. The outcome of this review included, Heathrow's structure of airport charges based on cost relatedness and to promote environmentally responsible behaviours.
- 6.2 Heathrow then commenced the review of its structure of aircraft parking charges in March 2011. Heathrow's structural review was set out to support Heathrow's vision of becoming Europe's hub of choice and reinforce Heathrow's position as the UK's gateway to the world. The structural changes were designed to meet the following objectives:
- support Heathrow's hub status;
  - encourage efficient use of scarce resources;
  - simplify the charging structure;
  - promote environmentally responsible behaviours; and
  - safeguard legal and regulatory compliance.
- 6.3 The structural review of parking charges focused on Heathrow's desire to promote behaviours to encourage efficient use of scarce resources at the airport. The key driver for this review was operational behaviours Heathrow wants to promote by making most efficient use of the airfield, particularly with regard to stand utilisation, stand capacity and resilience. The review also sought to simplify the parking charge structure, align parking charges with costs and promote environmentally responsible behaviours.
- 6.4 An informal engagement session was held in February 2011 to help inform Heathrow's consultation proposal. Heathrow then started the formal consultation process by issuing its proposals on 18<sup>th</sup> March 2011, followed by a formal consultation meeting on 14<sup>th</sup> April 2011.
- 6.5 Heathrow invited interested parties to submit written responses to its proposals by 14<sup>th</sup> May 2011. Heathrow received a number of responses by the stipulated date, which were all considered by Heathrow in making its final decision.
- 6.6 Heathrow concluded this consultation by announcing its final structure on 17<sup>th</sup> June 2011, which will be implemented on 1<sup>st</sup> April 2012.
- 6.7 The final structural decision was to change the parking charges from a time and weight based charge to two different free parking periods for narrow bodied and wide bodied aircraft, 30 minutes and 90 minutes respectively. Thereafter a parking charge will start for each 15 minute slot for a narrow bodied aircraft and wide bodied aircraft with a charge differential of 1:2.4 ratio.
- 6.8 The proposed parking charges shown in the airport charges tariffs in Chapter 7 and 8 are based on the final decision on the parking structure and its implementation timescales.
- 6.9 The consultation and decision documents on the review of aircraft parking charges and airport charges structure are available on [www.heathrowairport.com/cou](http://www.heathrowairport.com/cou).

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## Chapter 7 – Forecast Revenue for 2012/13

	Traffic Volume	Proposed Charge	Forecast Revenue
<b>Landing Charge</b>			
<b>Noise Charge</b>			
<u>Peak</u>			
Chapter 2	[Landings]	0	£5,772.24
Chapter 3 High	[Landings]	140	£5,772.24
Chapter 3 Base	[Landings]	9,232	£1,924.08
Chapter 4 High	[Landings]	50,759	£1,154.45
Chapter 4 Base	[Landings]	138,070	£962.04
Chapter 4 Minus	[Landings]	40,278	£577.22
<b>Total</b>	[Landings]	<b>238,479</b>	<b>£233,248,079</b>
<u>Super Night Peak</u>			
Chapter 2	[Landings]	0	£14,430.60
Chapter 3 High	[Landings]	0	£14,430.60
Chapter 3 Base	[Landings]	0	£4,810.20
Chapter 4 High	[Landings]	0	£2,886.13
Chapter 4 Base	[Landings]	0	£2,405.10
Chapter 4 Minus	[Landings]	0	£1,443.05
<b>Total</b>	[Landings]	<b>0</b>	<b>£0</b>
<b>Emissions Charge</b>			
Total kg Nox rating	[kg]	6,152,758	£6.69
Average kg Nox per landing	[kg]	25.8	£41,161,951
Revenue exc ANS Charges			£274,410,030
<b>ANS Charge</b>			
Per ATM Charge	[Landings]	238,479	£78.97
Per Metric Tonne		36,201,112	£1.07
<b>Total</b>		<b>0</b>	<b>£57,567,877</b>
Average Weight (Tonnes)		151.8	
<b>Total Landing Revenue</b>	<b>(a)</b>		<b>£331,977,907</b>
<b>Departing Passenger Charge</b>			
<b>Departing OD Passenger Charge</b>			
Europe	[Dep Pax]	11,598,032	£24.55
Other	[Dep Pax]	14,691,199	£34.49
<b>Total</b>	[Dep Pax]	<b>26,289,231</b>	<b>£791,431,140</b>
<b>Departing Transfer Passenger Charge</b>			
Europe	[Dep Pax]	3,696,699	£18.41
Other	[Dep Pax]	5,363,121	£25.87
<b>Total</b>	[Dep Pax]	<b>9,059,820</b>	<b>£206,800,169</b>
<b>Departing Transit Passenger Charge</b>			
Europe	[Dep Pax]	0	£18.41
Other	[Dep Pax]	33,604	£25.87
<b>Total</b>	[Dep Pax]	<b>33,604</b>	<b>£869,335</b>
<b>Remote Stand Rebate</b>			
Remote Stand Rebate	[Dep Pax + Arr Pax]	4,132,000	-£4.59
<b>Total Departing Passenger Charge Revenue*</b>	<b>(b)</b>	<b>35,382,655</b>	<b>£980,134,764</b>
<b>Parking Charge</b>			
<b>Narrow bodied</b>			
Chargeable Period	[Units of 15 minutes]	997,082	14.56
<b>Wide bodied</b>			
Chargeable Period	[Units of 15 minutes]	1,080,173	34.95
<b>Total Parking Charge</b>	<b>(c)</b>		<b>£52,269,560</b>
<b>Terminal Pax Flights: Total Revenue</b>			<b>£1,364,382,231</b>
<b>Non-Terminal Pax Flights (GA, Troops etc)</b>			
<b>Non-Terminal Pax Flights</b>			
Landing Revenue	(d)		£3,055,749
Departing Passenger Revenue	(e)		£2,051,647
Parking Revenue	(f)		£379,594
<b>Total Non-Terminal Pax Flights Revenue</b>			<b>£5,486,990</b>
<b>Total Regulated Revenue (Pax Only Flights)</b>			
<b>Total Regulated Revenue</b>			
Landing Revenue	(a) + (d)		£335,033,656
Departing Passenger Revenue	(b) + (e)		£982,186,411
Parking Revenue	(c) + (f)		£52,649,154
<b>Total Regulated Revenue</b>			<b>£1,369,869,221</b>
<b>Total Passengers</b>			<b>70,918,887</b>
<b>Total Regulated Yield</b>			<b>£19.316</b>

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## Chapter 8 – Proposed Airport Charges Tariffs for 2012/13

	<b>Final 2011/12 £ GBP</b>	<b>Proposed 2012/13 £ GBP</b>
<b>Charges on Landing</b>		
Peak		
Chapter 2	4,912.05	5,772.24
Chapter 3 high	4,912.05	5,772.24
Chapter 3 base	1,637.35	1,924.08
Chapter 4 high	982.41	1,154.45
Chapter 4 base (equivalent)	818.68	962.04
Chapter 4 minus	491.21	577.22
Super Night Peak		
Chapter 2	12,280.13	14,430.60
Chapter 3 high	12,280.13	14,430.60
Chapter 3 base	4,093.38	4,810.20
Chapter 4 high	2,456.03	2,886.13
Chapter 4 base (equivalent)	2,046.70	2,405.10
Chapter 4 minus	1,228.03	1,443.05
Emissions charge (per kg)	6.09	6.69
ANS charge		
per ATM	75.61	78.97
Per Metric tonne	1.03	1.07
<b>Charge on departing passengers</b>		
Europe - Destination	21.80	24.55
Other - Destination	30.63	34.49
Europe - Transfer	16.35	18.41
Other - Transfer	22.97	25.87
Europe - Transit	16.35	18.41
Other - Transit	22.97	25.87
Remote Stand Rebate (All paxs)	-4.08	-4.59
Minimum charge	650.00	1,126.00
<b>Charges on aircraft parking</b>		
Narrow bodied	14.00	14.56
Wide bodied	33.60	34.95

Please note:

- Tariffs have been rounded; and
- Charges on aircraft parking in final 2011/12 £GBP column are “hypothetical” charges that have been set out in the “Heathrow Airport - Structure of Aircraft Parking Charges Proposal, Consultation Document, 18 March 2011”.

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## Chapter 9 - Q5 Summary of Structural Changes

<b>Overall</b>	2010/11	Change in overall balance (excluding ANS) to Landing 17%, Passenger 73% and Parking 10%.
	2011/12	Change in overall balance (excluding ANS) to Landing 21%, Passenger 75% and Parking 4%.
<b>Weight</b>	2008/09	Introduction of Chapter 4 noise category with a charge differential of 90% of Chapter 3 base charge.  Rate of increase in emissions charge will be double the rate of increase in landing charge  Inclusion of ANS charge on a one third movement and two thirds tonnage basis
	2009/10	Introduction of a separate Chapter 4 equivalent noise category with a charge differential of 85% of Chapter 3 base charge.  Rate of increase in emissions charge maintained at double the rate of increase in landing charge
	2010/11	Rate of increase in emissions charge maintained at double the rate of increase in landing charge
	2011/12	Introduction of differential in Chapter 4 noise category and increased differentials between noise Chapters  Rebalancing Noise and emissions charge to 85% and 15% respectfully (excluding ANS)
<b>Dep Pax</b>	2008/09	No structural change
	2009/10	No structural change
	2010/11	No structural change
	2011/12	Introduction of new structure of departing passenger charge to Europe and Other  Introduction of 25% discount to departing passenger charge for transfer passengers  Introduction of departing passenger charge for transit passengers at the same rate charged to transfer passengers  Increased minimum charge on departure to £1000, phased over two years. 2011/12 level at £650.
<b>Parking</b>	2008/09	No structural change
	2009/10	No structural change
	2010/11	No structural change
	2011/12	Rebalance of Parking charge to 4%
	2012/13	Introduction of two different free parking periods for narrow bodied and wide bodied aircraft, 30 minutes and 90 minutes respectively. Thereafter a parking charge will start for each 15 minute slot for a narrow bodied aircraft and wide bodied aircraft with a charge differential of 1:2.4 ratio.

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## Chapter 10 - Q4 Summary of Structural Changes

Weight	2003/04	Non Certified & Chapter 2 Vs Chapter 3 differential 300%
	2004/05	Weight band >16mt & <=55mt reduced to >16mt & <=50mt  Emissions charge: £1 per kg of NO <sub>x</sub> , surcharges & rebates, break even point 23 kg
	2005/06	No structural change
	2006/07	Removed break even point in emissions scheme and adjusted underlying landing charges to ensure change is revenue neutral to BAA.
	2007/08	No weight differential, noise and emissions surcharges and rebates remain
Dep Pax	2003/04	No structural change
	2004/05	Irish Republic charge 30 % mark up on domestic
	2005/06	No structural change
	2006/07	No structural change
	2007/08	No structural change, exemption on minimum charge for aircraft under 5 metric tonnes removed
Parking	2003/04	No structural change
	2004/05	No structural change
	2005/06	No structural change
	2006/07	No structural change
	2007/08	No structural change, parking discount for aircraft under 16 metric tonnes removed

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## Chapter 11 - Regulation Glossary of Frequently Used Terms

- 11.1 The following are a number of terms and concepts relating to airport charges. Where appropriate, reference is made to further published sources.

### Regulatory period

- 11.2 As determined by the Airports Act 1986, the CAA is required to review the level and conditions of airport charges at Heathrow Airport every five years. The first period was from 1 April 1987 to 31 March 1992, the second from 1 April 1992 to 31 March 1997 the third from 1 April 1997 to 31 March 2003 (six year period), the fourth from 1 April 2003 to 31 March 2008 and the fifth period began on 1 April 2008 and will continue to 31 March 2013. These five year periods, or quinquennia, have been labelled Q1, Q2, Q3, Q4 and Q5 by the CC/CAA.

*Airports Act 1986, MMC4 1996 Ch2*

- 11.3 Subsequent to its March 2008 decision, in February 2011 the CAA launched a consultation on the potential extension of Heathrow's current regulatory period by one year to 31 March 2014. This reflects the fact that the Bill on airport economic regulation is unlikely to be introduced into parliament before the 2012 session and the CAA's desire that the Bill is enacted prior to determining the terms for the next regulatory period. Following consultation with Heathrow and its airline community, in March 2011 the CAA announced the extension of Heathrow's current regulatory period by one year from 31 March 2013 to 31 March 2014. During the one year extension, Heathrow's aeronautical tariffs will continue to be determined using the existing RPI + 7.5% formula.

*Extending the current price regulation at Heathrow and Gatwick airports, The CAA's Decision, March 2011*

### Price control regulation

- 11.4 Before BAA was privatised in 1987, the UK Department of Transport sought the advice of various economic consultants on the most appropriate form of economic regulation for BAA London Airports. The incentive type regulation implicit in the RPI-X formula was adopted. This is similar to that used in regulating other UK privatised industries such as telecoms, gas and water, rather than the rate of return regulation favoured by regulators in other countries.

*MMC 2 1991 4.107, MMC4 Ch5*

### RPI-X formula

- 11.5 In specifying the RPI-X formula in 1987, the UK Department of Transport decided that it should apply to the airport charges revenue yield, i.e. total airport charge revenue divided by total passengers, rather than applying to a basket of BAA airport charges. This formulation has been re-examined at each of the regulatory reviews and has been adopted for the fifth regulatory period. In the first period X was equal to 1, i.e. the airport charge yield should increase by one percentage point below the UK rate of inflation as forecast. In the second period, X was profiled as 8,8,4,1,1 over the five years and RPI was the value in the September prior to the financial year. In both periods, the yield entity was that derived for Heathrow and Gatwick separately and for the Heathrow, Gatwick and Stansted total, referred to as the SEAL (South East Airports Limited). In the third regulatory period the RPI-X formula, with X equal to 3, applied to the combined Heathrow and Gatwick yield. In the fourth regulatory period an RPI +6.5 formula was applied at Heathrow.

- 11.6 In the fifth regulatory period, which commenced in April 2008, an RPI+7.5 formula was applied at Heathrow.

*MMC 2 1991 Ch4, MMC 4 1996 Ch5, CAP 664 para 170 on, CAA Decision Feb 2003 Annex 9, CAA Decision March 2008 Annex C.*

### **Maximum allowable yield**

11.7 The CAA state that when the airport operator fixes the amount to be levied by it by way of airport charges in respect of relevant air services they shall fix those charges at the levels best calculated to secure that the total airport charges divided by the total number of passengers does not exceed the maximum average yield per passenger.

*CAA Decision, March 2008, Annex C*

### **Relevant air services**

11.8 These are defined as air services carrying passengers that join or leave an aircraft at the airport, including air services operated for the purpose of business or general aviation.

*CAA Decision, March, 2008, Annex C*

### **+S security claim factor**

11.9 Allows for the pass through of costs arising from new security requirements such that 90% of additional costs above a defined threshold would be subject to pass through. The hurdles apply against the total annualised spends of all new requirements in the five year period.

*CAA Decision, March 2008, Annex C*

### **Correction factors - K**

11.10 Because of the uncertainties of estimating the maximum allowable yield, any over or under-recoveries in airport charge revenues in the first three years of the regulatory period are corrected in the formula two years later by the application of a k factor, which allows for the difference in yield and adjustment for interest.

*CAP 664 paras 168,169*

### **Charging parameters**

11.11 These are the individual values of numbers of aircraft in weight/noise categories and peak/off peak charging periods, their absolute weight and their NOx emissions rating. Numbers of passengers by charging type are used for calculating departing passenger charges and values of various weight and time values used for parking charges. Airport charges are applied to the appropriate actual and forecast values of these parameters to determine overall airport charge revenues and yields.

### **Aircraft using remote stands**

11.12 At the regulatory reviews, users have raised issues of passenger service and charges for aircraft using non-pier stands. At present a reduction in the departing passenger charge at Heathrow applies for flights using stands designated as remote. This is in recognition of the costs imposed on airlines in providing coaching and the additional airport capital costs of providing piers and jetties.

11.13 There is also service quality rebates scheme in place, where rebates are paid to airlines when the quality of service fails to meet specified service levels.

*CAP664 paras 139,140, CAA Decision March 2008.*

## Chapter 12 - Financial and Traffic Information

### Traffic statistics and charging parameters

- 12.1 The traffic statistics for 2010/11 and the first half of 2011/12 are set out to provide more detailed data on those elements of the traffic mix at Heathrow airport which significantly affect the airport charges yield per passenger.
- 12.2 Further traffic information is contained in the BAA documents “Patterns of Traffic” and “Traffic Statistics” which have been circulated to users separately.

### Regulatory accounting information

- 12.3 Heathrow is a privately owned company and its regulatory accounts are presented for the 12 month period to 31 March 2011. These accounts compare the airport’s financial performance for the year ended 31 March 2011 on a comparable basis with the forecasts used by the CAA in determining the airport charges price caps for the 5 year period to 31 March 2013<sup>18</sup>.
- 12.4 The regulatory accounts include revenue and cost comparisons, and calculations of the Regulated Asset Base as determined by the CAA in its Decision document dated March 2008.
- 12.5 The full regulatory accounts and annual reports are available from [www.baa.com](http://www.baa.com).

### Security costs

- 12.6 An analysis of security costs at Heathrow airport is provided for 2010/11.

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<sup>18</sup> CAA has extended Q5 from March 2013 to March 2014.

**HEATHROW AIRPORT TRAFFIC STATISTICS**  
**FINANCIAL YEAR 2010/11 and first 6 MONTHS 2011/12**

	<b>Financial Year 2010/11</b>	<b>April-September 2011</b>
<b>Movements (000s)</b>		
Passenger - ATM	453.9	242.2
Cargo - ATM	2.5	1.3
<b>TOTAL ATMS</b>	<b>456.4</b>	<b>243.4</b>
Non-Commercial flights	5.1	2.5
<b>TOTAL</b>	<b>461.6</b>	<b>245.9</b>
<b>Passengers (000s)</b>		
International	61,204.9	35,212.3
Domestic	4,905.8	2,417.6
<b>TERMINAL TOTAL</b>	<b>66,110.7</b>	<b>37,630.0</b>
<b>Non - Terminal (Transit)</b> (counted once)	97.9	24.5
<b>TOTAL PASSENGERS</b>	<b>66,208.6</b>	<b>37,654.6</b>

Sources : BAA Ltd, Forecasting & Stats and Finstat Report

<b>Heathrow Airport</b>				
<b>2010/11 Regulatory Performance</b>				
<b>£m (nominal)</b>				
	<b>Actual</b>	<b>Forecast</b>	<b>Var</b>	<b>Var %</b>
<b>Terminal passengers (000's)</b>	<b>66,111</b>	<b>74,500</b>	<b>-8,389.0</b>	<b>-11.3%</b>
<b>Revenue</b>				
Net revenue from airport charges	997.5	1,193.5	-196.0	-16.4%
Other traffic charges	9.3	8.3	1.0	12.0%
Retail	379.1	367.2	11.9	3.2%
Property	129.6	130.7	-1.1	-0.8%
Rail	105.4	101.8	3.6	3.5%
Non regulated charges & other	232.7	197.1	35.6	18.1%
Other revenue	856.1	805.1	51.0	6.3%
<b>Total revenue</b>	<b>1,853.6</b>	<b>1,998.6</b>	<b>-145.0</b>	<b>-7.3%</b>
<b>Expenditure</b>				
Staff costs	247.0	253.2	6.2	2.4%
Maintenance & equipment costs	105.1	111.4	6.3	5.7%
Rent and rates	104.2	103.1	-1.1	-1.1%
Utility costs	92.7	102.4	9.7	9.5%
Police costs	28.1	36.4	8.3	22.8%
Rail costs	57.2	59.1	1.9	3.2%
Other costs	147.9	139.2	-8.7	-6.3%
Intragroup costs	168.3	107.8	-60.5	-56.1%
Operating costs	950.5	912.6	-37.9	-4.2%
Depreciation	480.1	480.1	0.0	0.0%
<b>Total expenditure</b>	<b>1,430.6</b>	<b>1,392.7</b>	<b>-37.9</b>	<b>-2.7%</b>
<b>Regulatory operating profit (before exceptional operating costs)</b>	<b>423.0</b>	<b>605.9</b>	<b>-182.9</b>	<b>-30.2%</b>
Exceptional operating costs	-115.3	0.0	115.3	
<b>Regulatory operating profit</b>	<b>538.3</b>	<b>605.9</b>	<b>-67.6</b>	<b>-11.2%</b>
<b>Capital expenditure</b>	<b>812.0</b>	<b>1,150.0</b>	<b>-338.0</b>	<b>-29.4%</b>
<b>Opening RAB</b>	<b>10,728.5</b>	<b>11,539.1</b>	<b>-810.6</b>	<b>-7.0%</b>
<b>Closing RAB</b>	<b>11,773.0</b>	<b>12,973.9</b>	<b>-1,200.9</b>	<b>-9.3%</b>
<b>Weighted average RAB</b>	<b>11,250.7</b>	<b>12,256.5</b>	<b>-1,005.9</b>	<b>-8.2%</b>
<b>Return on weighted average RAB (before exceptional operating costs)</b>	<b>3.8%</b>	<b>4.9%</b>	<b>-1.2%</b>	<b>-23.9%</b>
<b>Return on weighted average RAB (after exceptional operating costs)</b>	<b>4.8%</b>	<b>4.9%</b>	<b>-0.2%</b>	<b>-3.2%</b>

Please note: Forecast is Heathrow airport's estimate of the disaggregation of the CAA forecast for total other revenue and total opex.

## HEATHROW AIRPORT - SECURITY COSTS 2010/11

Total costs of security at Heathrow airport, including the cost of policing

<b>Direct expenditure</b>	<b>£000</b>
Staff costs	141,270
Property related	182
Maintenance and equipment	717
General expenses	1,288
Capitalisation of revenue	(2,339)
Depreciation	8,319
Indirect charges	0
Police	28,094
<b>sub total</b>	<b>177,531</b>
<b>Allocated expenditure</b>	
Airside safety and security	136
Rates	1,004
Finance	6,522
Personnel	3,055
Medical	538
Airport management	2
Corporate charge	21,618
<b>sub total</b>	<b>32,875</b>
<b>Total security costs</b>	<b>210,406</b>
<b>Total passengers</b>	<b>66,126</b>
<b>Security cost/passenger (£)</b>	<b>3.18</b>