

# Heathrow Airport

## Airport Charges for 2013/14

### Consultation Document

Date: 26<sup>th</sup> October 2012

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 2013/14. Heathrow is proposing to set 2013/14 prices to recover the maximum allowable yield permitted by the Regulator. The forecast maximum allowable yield for 2013/14 is £21.664.

The proposed charges are in line with the six year price cap (2008/09 to 2013/14)<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's vision is to become "Europe's hub of choice and UK's direct connection to the world by making every journey better". Heathrow has made considerable progress in its 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 four years to 31 March 2012 were 25.3 million or 8.6% lower than anticipated. In terms of income generated in the first four years of Q5 for airport charges (net) this meant a shortfall of £505.0 million or 11.2%.

The lower passenger numbers has resulted in Heathrow achieving a much lower rate of return than was allowed for by the CAA in Q5.

Issuing the consultation document marks the start of the consultation process. Heathrow will be holding a formal consultation meeting on 29<sup>th</sup> November 2012 and will be seeking formal responses from the airline community by 21<sup>st</sup> December 2012. Heathrow then intends to announce its final decision, having considered all the comments received during the consultation period, on 18<sup>th</sup> January 2013, for implementation from 1<sup>st</sup> April 2013.

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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 2013/14 to recover the forecast maximum allowable yield.
- 1.3 This consultation document sets out the calculations for the 2013/14 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 29<sup>th</sup> November 2012, and will then announce the final level of prices for airport charges on 18<sup>th</sup> January 2013.

### 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. The CAA introduced an extension to Q5 of one year – the details of which were finalised in June 2012. This will enable the Department for Transport to finalise the Civil Aviation Bill before the next regulatory period commences. The new Bill is expected to be in place by April 2013. During the one year extension, Heathrow's aeronautical tariffs will continue to be determined using the existing RPI + 7.5% formula.
- 1.7 2013/14 is the sixth 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 "and subsequent "Extending the current price regulation at Heathrow and Gatwick airports, The CAA's Decision, March 2011".

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>, a list of non regulated facilities and services can be found at [www.heathrowairport.com/nrc](http://www.heathrowairport.com/nrc) and a list of property accommodation can be found at [www.heathrowairport.com/property](http://www.heathrowairport.com/property). 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).

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<sup>4</sup><http://www.heathrowairport.com/about-us/facts-and-figures/our-performance/service-quality-rebate-scheme>

<sup>5</sup><http://www.baa.com/investor-centre/document-centre/capital-investment-plans/heathrow-scbp-2012>



## Consultation Programme

- 1.12 Heathrow will be consulting on the level of charges with the airline community and will then announce its final prices on 18<sup>th</sup> January 2013.
- 1.13 The publication of this consultation document on 26<sup>th</sup> October 2012 is the start of our consultation on the annual setting of airport charges for 2013/14.
- 1.14 The consultation programme is as follows:

**Table 1**

<b>Date</b>	<b>Milestone</b>
26 Oct 2012	Heathrow published consultation document on 2013/14 price proposals
29 Nov 2012	Formal consultation meeting
21 Dec 2012	Airline written responses due
18 Jan 2013	Heathrow announces 2013/14 prices
1 Apr 2013	Prices applicable from

- 1.15 Heathrow will be holding a formal consultation meeting on 29<sup>th</sup> November 2012 to provide the airline community the opportunity to comment on the price proposals. The meeting will be open to all airlines and their representative bodies.

Date: Thursday 29<sup>th</sup> November 2012

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

Location: Heathrow Academy  
Newall Road  
Hayes  
Middlesex  
UB3 5AP  
UK

- 1.16 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**

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

1.18 We also invite interested parties to submit written responses to the proposals set out in this document by 21<sup>st</sup> December 2012. Responses should be sent to: [airlinerelations@baa.com](mailto:airlinerelations@baa.com)

1.19 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.

1.20 This document sets out the calculation of the forecast maximum allowable yield, methodology used and the proposed airport charges for 2013/14. 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 2013/14 yield:-

$$M_{2013/14} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where :-

$M_{2013/14}$	=	maximum average revenue yield per passenger using Heathrow airport in relevant year (2013/14) 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 2013/14 this would be the change from August 2011 to August 2012
$X$	=	7.5
$B_t$	=	forecast bonus term in 2013/14
$Y_{t-1}$	=	specified average revenue yield per passenger for the period t-1 (2012/13)
$TRIGGER_t$	=	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 2013/14
$K_t$	=	correction factor (k factor) per passenger (whether of a positive or negative value)

### Maximum allowable yield forecast for 2013/14

2.2 The combined impact of all the elements of the formula results in a forecast 2013/14 maximum allowable yield of £21.664 (passenger only flights). The full details of the formula are shown below.

### Specified average yield

2.3 The specified average revenue yield for 2012/13 is £19.806.

<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>
12 months RPI movement to August 11	5.200%	£0.914
X	7.500%	£1.318
<b>Specified yield 2012/13</b>		<b>£19.806</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 2013/14 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 2013/14. Therefore, setting airport charges for 2013/14 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 and k factor for 2011/12 corrects the trigger payment.

- 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. Completion of Outer Pier North will continue to incur trigger payments in 2013/14.
- 2.9 The Completion of Outer Pier North project has been changed to T2B South trigger with the same trigger milestone date, which was endorsed by the CAA in October 2012. For the purposes of this document this project is referred to by its original name.
- 2.10 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.
- 2.11 All trigger projects with milestone dates in 2012/13 were forecast not to be completed by their milestone date and will continue to incur trigger payments in 2013/14.
- 2.12 In setting airport charges for 2013/14 there are two trigger projects, (i) MSCP T2 which is forecast to incur a trigger payment and (ii) Runway Refurbishment project, which is forecast to be completed on time and is a new project endorsed by CAA in September 2012.

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

**Table 2**

<b>2013/14</b>	<b>Milestone month</b>	<b>Forecast Completion Date</b>
MSCP T2 sufficiently progressed for operational trials to commence	Mar-13	Aug-13
<b>Projects carried forward into 2013/14</b>		
T5TTS Enhancements <sup>7</sup>	May-11	Mar-14
Completion of T3 Integrated Baggage system	Mar-12	Sep-14
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-14
Eastern maintenance base	Mar-10	Mar-14
Completion of the Outer Pier North	Jan-12	Mar-14

**K Factor**

2.13 The k factor in the formula for 2013/14 has increased the maximum allowable yield to compensate for the unanticipated under-recovery against the maximum allowable yield in 2011/12, together with an allowance for interest. The calculation is shown in Chapter 3.

**Passengers**

2.14 Heathrow forecast passengers for 2013/14 are 71,374k.

<sup>7</sup> New trigger project endorsed by CAA in March 2012 which has a completion date of May 2011.

### Application of the Regulatory Pricing Formula

2.15 Based on the regulatory pricing formula, the forecast maximum allowable yield for Heathrow in 2013/14 is set out below.

$$M_{2013/14} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where :-

$$RPI_{t-1} = 2.9$$

$$X = 7.5$$

$$B_t = 0.0 \quad - \text{this figure is a forecast}$$

$$Y_{t-1} = \text{£}19.806$$

$$\text{Trigger}_t = \text{£}53,694k \quad - \text{this figure is a forecast}$$

$$Q_t = 71,374k \quad - \text{this figure is a forecast}$$

$$K_t = \text{£}0.550 \quad - \text{this figure is a forecast}$$

Hence;

$$M_{2013/14} = \left( 1 + \frac{2.9 + 7.5 + 0}{100} \right) 19.806 - \frac{53,694}{71,374} - (0.550)$$

$$M_{2013/14} = (1.104 * 19.806) - 0.752 - (0.550)$$

$$M_{2013/14} = 21.664$$

## Charges in 2012/13

2.16 The forecast maximum allowable yield at Heathrow in 2012/13 was calculated at £19.316.

<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>
12 months RPI movement to August 11	5.200%	£0.914
X	7.500%	£1.318
Bonus term	0.000%	£0.000
Trigger payments (000s)	£38,575	-£0.544
K factor from 2010/11 under recovery		£0.054
<b>Forecast 2012/13 maximum allowable yield</b>		<b>£19.316</b>

## Proposed pricing for 2013/14

2.17 Heathrow is proposing to set prices for 2013/14 to recover the forecast maximum allowable yield of £21.664 per passenger (details of the charges are shown in Chapter 7).



## Chapter 3 - Correction Factor for 2011/12

### 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 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.
- 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 2011/12 actual maximum allowable yield

- 3.3 The combined impact of all the elements of the formula results in 2011/12 actual maximum allowable yield of £17.596 (passenger only flights). The section below presents the components of the formula.
- 3.4  $M_{t-2}$  relates to 2011/12 and its calculation is shown below:

$$M_{2011/12} = \left( 1 + \frac{RPI_{t-1} + X + B_t}{100} \right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where: -

$M_{2011/12}$	=	actual maximum average revenue yield per passenger using Heathrow airport in relevant year (2011/12) expressed in £
$RPI_{t-1}$	=	August 2009 to August 2010
X	=	7.5
$B_t$	=	actual bonus factor in 2011/12
$Y_{t-1}$	=	£15.663
$TRIGGER_t$	=	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 2011/12
$K_t$	=	correction factor per passenger

### Application of the Regulatory Pricing Formula

3.5 Based on the regulatory pricing formula, the actual maximum allowable yield in 2011/12 for the k factor is set out below.

$$M_{2011/12} = \left(1 + \frac{RPI_{t-1} + X + B_t}{100}\right) Y_{t-1} - \frac{TRIGGER_t}{Q_t} - K_t$$

Where: -

$RPI_{t-1}$	=	4.7
$X$	=	7.5
$B_t$	=	0.521
$Y_{t-1}$	=	£15.663
$TRIGGER_t$	=	£4,579k
$Q_t$	=	70,116k
$K_t$	=	0.006

**Hence;**

$$M_{2011/12} = \left(1 + \frac{4.7 + 7.5 + 0.521}{100}\right) 15.663 - \frac{4,579}{70,116} - (0.006)$$

$$M_{2011/12} = (1.1272 * 15.663) - 0.065 - (0.006)$$

$$M_{2011/12} = 17.596$$

3.6 The actual maximum allowable yield for 2011/12 is £17.596.

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 2011/12 actual performance is captured in the k factor for 2011/12 in setting airport charges for 2013/14. 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>8</sup>*

<sup>8</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 2012.

3.12 In March 2012, 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 2012 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	= 99.59%
T2 Actual performance result	= 100.00% <sup>9</sup>
T3 Actual performance result	= 99.79%
T4 Actual performance result	= 99.76%
T5 Actual performance result	= 99.77%

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

$$MP(T1)_{kj} = 99.59\%$$

$$LPL_k = 99.00\%$$

$$UPL_k = 100.00\%$$

$$MAB_k = 0.40\%$$

Hence:

$$BNS(T1)_{kj} = \frac{1}{12} \cdot 0.40\% \cdot \frac{99.59\% - 99.00\%}{100\% - 99.00\%}$$

$$BNS(T1)_{kj} = (0.033\%) \cdot ((0.590\%)/(1.000\%))$$

$$BNS(T1)_{kj} = 0.0197\%$$

$$BNS(T1)_{kj} = 0.020\% \text{ (rounded to 3 decimal places)}$$

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. 99.59/100 = 0.9959).

3.14 The formula is performed for all areas to determine the bonus term. The bonus term for 2011/12 is 0.521%. The breakdown of the full calculation is shown in Table 4.

<sup>9</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-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	4.03	4.03	4.03	4.04	4.04	4.04	4.05	4.06	4.06	4.07	4.08	4.09	
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)	3.69	3.67	3.65	3.62	3.62	3.61	3.61	3.60	3.61	3.59	3.60	3.60	
Terminal 4 (actual)	4.13	4.13	4.13	4.12	4.13	4.11	4.12	4.12	4.11	4.12	4.12	4.12	
Terminal 5 (actual)	4.02	4.00	3.97	3.96	3.95	3.96	3.96	3.96	3.97	3.98	3.98	3.98	
BNS(T1) <sub>KJ</sub>	0.0099%	0.0099%	0.0099%	0.0103%	0.0103%	0.0103%	0.0107%	0.0111%	0.0111%	0.0116%	0.0120%	0.0124%	
BNS(T2) <sub>KJ</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>KJ</sub>	-0.0047%	-0.0056%	-0.0064%	-0.0077%	-0.0077%	-0.0081%	-0.0081%	-0.0086%	-0.0081%	-0.0090%	-0.0086%	-0.0086%	
BNS(T4) <sub>KJ</sub>	0.0141%	0.0141%	0.0141%	0.0137%	0.0141%	0.0133%	0.0137%	0.0137%	0.0133%	0.0137%	0.0137%	0.0137%	
BNS(T5) <sub>KJ</sub>	0.0094%	0.0086%	0.0073%	0.0069%	0.0064%	0.0069%	0.0069%	0.0069%	0.0073%	0.0077%	0.0077%	0.0077%	
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-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	3.98	3.99	4.00	4.00	4.01	4.02	4.02	4.02	4.02	4.03	4.03	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)	3.95	3.95	3.94	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	
Terminal 4 (actual)	4.07	4.07	4.06	4.06	4.06	4.05	4.06	4.06	4.06	4.07	4.07	4.07	
Terminal 5 (actual)	4.19	4.18	4.18	4.19	4.19	4.20	4.20	4.20	4.20	4.21	4.21	4.22	
BNS(T1) <sub>KJ</sub>	0.0040%	0.0045%	0.0050%	0.0050%	0.0055%	0.0060%	0.0060%	0.0060%	0.0060%	0.0065%	0.0065%	0.0065%	
BNS(T2) <sub>KJ</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>KJ</sub>	0.0025%	0.0025%	0.0020%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	
BNS(T4) <sub>KJ</sub>	0.0085%	0.0085%	0.0080%	0.0080%	0.0080%	0.0080%	0.0080%	0.0080%	0.0080%	0.0085%	0.0085%	0.0085%	
BNS(T5) <sub>KJ</sub>	0.0145%	0.0140%	0.0140%	0.0145%	0.0145%	0.0150%	0.0150%	0.0150%	0.0155%	0.0155%	0.0160%	0.0165%	
Bonus term =	0.0025%	0.0025%	0.0020%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.0015%	0.021%
Way finding (QSM)	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	4.03	4.04	4.05	4.05	4.05	4.06	4.06	4.06	4.07	4.07	4.07	4.08	
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)	4.06	4.06	4.06	4.05	4.05	4.05	4.06	4.05	4.06	4.06	4.06	4.06	
Terminal 4 (actual)	4.11	4.11	4.09	4.10	4.11	4.10	4.11	4.13	4.12	4.12	4.13	4.14	
Terminal 5 (actual)	4.22	4.21	4.19	4.19	4.19	4.19	4.19	4.19	4.20	4.20	4.21	4.22	
BNS(T1) <sub>KJ</sub>	0.0018%	0.0024%	0.0030%	0.0030%	0.0030%	0.0036%	0.0036%	0.0036%	0.0042%	0.0042%	0.0042%	0.0048%	
BNS(T2) <sub>KJ</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>KJ</sub>	0.0036%	0.0036%	0.0036%	0.0030%	0.0030%	0.0030%	0.0036%	0.0036%	0.0036%	0.0036%	0.0036%	0.0036%	
BNS(T4) <sub>KJ</sub>	0.0066%	0.0066%	0.0054%	0.0060%	0.0066%	0.0060%	0.0066%	0.0078%	0.0072%	0.0072%	0.0078%	0.0084%	
BNS(T5) <sub>KJ</sub>	0.0132%	0.0126%	0.0114%	0.0114%	0.0114%	0.0114%	0.0114%	0.0114%	0.0120%	0.0120%	0.0126%	0.0132%	
Bonus term =	0.0018%	0.0024%	0.0030%	0.0030%	0.0030%	0.0036%	0.0036%	0.0036%	0.0036%	0.0036%	0.0036%	0.0036%	0.037%
Flight information (QSM)	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	4.27	4.26	4.26	4.26	4.27	4.27	4.26	4.26	4.28	4.29	4.29	4.30	
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)	4.32	4.32	4.31	4.30	4.30	4.29	4.30	4.30	4.28	4.28	4.28	4.27	
Terminal 4 (actual)	4.26	4.26	4.26	4.26	4.26	4.26	4.25	4.26	4.26	4.27	4.28	4.28	
Terminal 5 (actual)	4.27	4.28	4.30	4.30	4.30	4.31	4.31	4.32	4.33	4.34	4.35	4.36	
BNS(T1) <sub>KJ</sub>	0.0070%	0.0060%	0.0060%	0.0060%	0.0070%	0.0070%	0.0060%	0.0070%	0.0080%	0.0090%	0.0090%	0.0100%	
BNS(T2) <sub>KJ</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>KJ</sub>	0.0120%	0.0120%	0.0110%	0.0100%	0.0100%	0.0090%	0.0100%	0.0100%	0.0080%	0.0080%	0.0080%	0.0070%	
BNS(T4) <sub>KJ</sub>	0.0060%	0.0060%	0.0060%	0.0060%	0.0060%	0.0060%	0.0050%	0.0060%	0.0060%	0.0070%	0.0080%	0.0080%	
BNS(T5) <sub>KJ</sub>	0.0070%	0.0080%	0.0100%	0.0100%	0.0100%	0.0110%	0.0110%	0.0120%	0.0130%	0.0140%	0.0150%	0.0160%	
Bonus term =	0.0060%	0.0060%	0.0060%	0.0060%	0.0060%	0.0060%	0.0050%	0.0060%	0.0060%	0.0070%	0.0080%	0.0070%	0.075%
Pax Sensitive Equip. (general)	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	99.75%	99.75%	99.75%	99.77%	99.75%	99.65%	99.73%	99.82%	99.67%	99.80%	99.79%	99.80%	
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)	99.72%	99.72%	99.72%	99.81%	99.70%	99.81%	99.78%	99.77%	99.80%	99.79%	99.85%	99.78%	
Terminal 4 (actual)	99.70%	99.73%	99.73%	99.65%	99.60%	99.63%	99.53%	99.31%	99.73%	99.09%	99.77%	99.84%	
Terminal 5 (actual)	99.70%	99.68%	99.68%	99.78%	99.79%	99.77%	99.78%	99.80%	99.70%	99.75%	99.80%	99.78%	
BNS(T1) <sub>KJ</sub>	0.0250%	0.0250%	0.0250%	0.0257%	0.0250%	0.0217%	0.0243%	0.0273%	0.0223%	0.0267%	0.0263%	0.0267%	
BNS(T2) <sub>KJ</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>KJ</sub>	0.0240%	0.0240%	0.0240%	0.0270%	0.0233%	0.0270%	0.0260%	0.0257%	0.0267%	0.0263%	0.0283%	0.0260%	
BNS(T4) <sub>KJ</sub>	0.0233%	0.0243%	0.0243%	0.0217%	0.0200%	0.0210%	0.0177%	0.0103%	0.0243%	0.0303%	0.0257%	0.0280%	
BNS(T5) <sub>KJ</sub>	0.0233%	0.0227%	0.0227%	0.0260%	0.0263%	0.0257%	0.0260%	0.0267%	0.0233%	0.0250%	0.0267%	0.0260%	
Bonus term =	0.0233%	0.0227%	0.0227%	0.0217%	0.0200%	0.0210%	0.0177%	0.0103%	0.0223%	0.0030%	0.0257%	0.0260%	0.236%
Arrivals reclaim	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Total
Terminal 1 (actual)	99.44%	99.42%	99.15%	99.34%	99.44%	99.31%	99.60%	99.62%	99.57%	99.19%	99.27%	99.59%	
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)	99.49%	99.62%	99.37%	99.46%	99.72%	99.39%	99.80%	99.65%	99.82%	99.53%	99.76%	99.79%	
Terminal 4 (actual)	99.67%	99.69%	99.80%	99.57%	99.32%	99.39%	99.40%	99.56%	99.61%	99.67%	99.67%	99.76%	
Terminal 5 (actual)	99.78%	99.80%	99.79%	99.77%	99.82%	99.66%	99.70%	99.85%	99.78%	99.80%	99.71%	99.77%	
BNS(T1) <sub>KJ</sub>	0.0147%	0.0140%	0.0050%	0.0113%	0.0147%	0.0103%	0.0200%	0.0207%	0.0190%	0.0063%	0.0090%	0.0197%	
BNS(T2) <sub>KJ</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>KJ</sub>	0.0163%	0.0207%	0.0123%	0.0153%	0.0240%	0.0130%	0.0267%	0.0217%	0.0273%	0.0177%	0.0253%	0.0263%	
BNS(T4) <sub>KJ</sub>	0.0223%	0.0230%	0.0267%	0.0190%	0.0107%	0.0130%	0.0133%	0.0187%	0.0203%	0.0223%	0.0223%	0.0253%	
BNS(T5) <sub>KJ</sub>	0.0260%	0.0267%	0.0263%	0.0257%	0.0273%	0.0220%	0.0233%	0.0283%	0.0260%	0.0267%	0.0237%	0.0257%	
Bonus term =	0.0147%	0.0140%	0.0050%	0.0113%	0.0107%	0.0103%	0.0133%	0.0187%	0.0190%	0.0063%	0.0090%	0.0197%	0.152%
Bonus term =	0.0483%	0.0476%	0.0387%	0.0435%	0.0412%	0.0418%	0.0411%	0.0395%	0.0524%	0.0214%	0.0478%	0.0578%	0.5210%
Rounded to 3 decimal places Bt =	0.048%	0.048%	0.039%	0.044%	0.041%	0.042%	0.041%	0.040%	0.052%	0.021%	0.048%	0.058%	0.521%

## Triggers

3.15 There were eight trigger projects with trigger completion dates in 2011/12, shown in Table 5.

**Table 5**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>10</sup></b>	<b>Forecast Completion Date</b>
T5TTS Enhancements	May-11	n/a	Mar-14
T5C Nodes and link bridge stands 563/564	May-11	May-11	May-11
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	Nov-11
Completion of the Outer Pier North	Jan-12	Mar-13	Mar-14
T2A phase 1 completion – Weather tight	Feb-12	Jan-12	Feb-12

3.16 Three projects are included in the k factor for 2011/12:

- “Completion of the Outer Pier North” was forecast not to be complete by its milestone date by two months when setting airport charges for 2011/12.
- “T5 TTS Enhancement” project was a new trigger project introduced in March 2012 with a milestone date May 2011 therefore resulting in a trigger payment of 10 months in 2011/12.
- “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 2011/12.

### **Summary of trigger payment**

Completion of the Outer Pier North	= £1,116,220 in 2011/12 prices
T5 TTS Enhancement	= £1,139,000 in 2011/12 prices
Eastern Maintenance Base	= £2,323,560 in 2011/12 prices
<b>Total Payment</b>	<b>= £4,578,780 in 2011/12 prices</b>

3.17 In addition, two projects were forecast not be delivered by their milestone dates when setting airport charges for 2011/12 but have subsequently been delivered to their milestone dates. The k factor for 2011/12 in setting airport charges in 2013/14 makes a retrospective adjustment to recover these trigger payments. The two

<sup>10</sup> The forecast completion date is consistent to the forecast presented in the “Heathrow Airport Limited, 2011/12 Airport Charges Consultation” document.

projects are (i) T3 Refurbishment Completion of check-in & Security Search and (ii) T2A Phase 1 demolition of T2.

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

**K factor for 2011/12**

	2011/12 Passengers 000s	Actual yield (£)	2011/12 Revenue £000s	Allowable yield (£)	Under/Over-recovery
Heathrow	70,116	17.040	1,194,811	17.596	Under-Recovery

Total revenue from airport charges (passenger only flights) at Heathrow in	2011/12	Actual (£000s)	<b>T<sub>t-2</sub></b>	1,194,811	
Passengers using Heathrow Airport in	2011/12	Actual (000s)	<b>Q<sub>t-2</sub></b>	70,116	
Maximum allowable revenue yield at Heathrow in	2011/12	Actual (£)	<b>M<sub>t-2</sub></b>	17.596	
Interest rate from weekly Treasury Bill Discount rate*	2011/12	Actual	<b>I<sub>t-2</sub></b>	0.3707%	
Forecast Passengers using Heathrow in	2013/14	Forecast (000s)	<b>Q<sub>t</sub></b>	71,374	
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>-0.550</b>

\*Based on Sep 11 to Aug 12 average (see table 6).



**Table 6**

Tender Date	Maturity date	Size (£ mn)	Cover	Avg Yield (%)
09-Sep-11	12-Dec-11	1,000	4.46	0.465
16-Sep-11	19-Dec-11	1,000	3.19	0.472
23-Sep-11	28-Dec-11	1,000	3.70	0.460
30-Sep-11	03-Jan-12	1,000	4.24	0.465
07-Oct-11	09-Jan-12	1,000	4.22	0.464
14-Oct-11	16-Jan-12	1,000	4.42	0.462
21-Oct-11	23-Jan-12	1,000	2.71	0.461
28-Oct-11	30-Jan-12	1,000	2.05	0.459
04-Nov-11	06-Feb-12	1,000	2.52	0.456
11-Nov-11	13-Feb-12	1,000	3.77	0.451
18-Nov-11	20-Feb-12	1,000	3.74	0.439
25-Nov-11	27-Feb-12	1,000	4.27	0.410
02-Dec-11	05-Mar-12	1,000	4.78	0.397
09-Dec-11	12-Mar-12	1,000	5.31	0.334
16-Dec-11	19-Mar-12	1,000	4.33	0.264
30-Dec-11	02-Apr-12	1,000	3.21	0.241
06-Jan-12	10-Apr-12	1,500	2.81	0.290
13-Jan-12	16-Apr-12	1,500	2.86	0.312
20-Jan-12	23-Apr-12	1,500	2.50	0.329
27-Jan-12	30-Apr-12	1,500	2.52	0.365
03-Feb-12	08-May-12	1,500	2.51	0.383
10-Feb-12	14-May-12	1,500	2.44	0.385
17-Feb-12	21-May-12	1,500	2.62	0.397
24-Feb-12	28-May-12	1,500	2.99	0.402
02-Mar-12	06-Jun-12	1,500	2.22	0.410
09-Mar-12	11-Jun-12	1,500	2.25	0.419
16-Mar-12	18-Jun-12	1,500	2.55	0.424
23-Mar-12	25-Jun-12	1,500	3.12	0.430
30-Mar-12	02-Jul-12	1,500	2.27	0.443
05-Apr-12	09-Jul-12	1,500	2.84	0.444
13-Apr-12	16-Jul-12	1,000	4.12	0.429
20-Apr-12	23-Jul-12	1,000	4.55	0.421
27-Apr-12	30-Jul-12	1,000	5.02	0.403
04-May-12	06-Aug-12	1,000	5.10	0.393
11-May-12	13-Aug-12	1,000	6.15	0.374
18-May-12	20-Aug-12	1,000	4.56	0.351
25-May-12	28-Aug-12	1,000	3.30	0.331
01-Jun-12	03-Sep-12	1,500	3.20	0.334
08-Jun-12	10-Sep-12	1,500	3.47	0.330
15-Jun-12	17-Sep-12	1,500	2.55	0.333
22-Jun-12	24-Sep-12	1,500	2.15	0.346
29-Jun-12	01-Oct-12	1,000	2.58	0.354
06-Jul-12	08-Oct-12	1,000	3.81	0.325
13-Jul-12	15-Oct-12	1,000	3.97	0.315
20-Jul-12	22-Oct-12	1,000	3.88	0.274
27-Jul-12	29-Oct-12	1,000	3.11	0.263
03-Aug-12	05-Nov-12	1,000	3.64	0.243
10-Aug-12	12-Nov-12	1,000	3.53	0.238
17-Aug-12	19-Nov-12	1,000	3.13	0.238
24-Aug-12	26-Nov-12	500	3.25	0.239
31-Aug-12	03-Dec-12	500	3.43	0.242
Average:				0.371%

### **Application of the Regulatory Pricing Formula**

3.19 The actual maximum allowable yield for 2011/12 is £17.596 compared to the actual yield recovered £17.040, which results in an under recover of £0.550. This under recovery is recovered through the k factor for 2011/12 in setting airport charges in 2013/14.

3.20 The 2011/12 under recovery is primarily driven by a change in the departing passenger mix between EU and Other, where there has been a higher proportion of EU departing passengers compared to the forecasts used to set airport charges in 2011/12. In addition, there has been a higher proportion of lower category noise chapters compared to the forecasts used to set airport charges in 2011/12. Both of these factors have resulted in a change in mix leading to an under recovery.

## 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 2013/14, and provides a status of all trigger projects.
- 4.2 There are two trigger project with milestone completion dated within 2013/14:
- MSCP T2 and Runway refurbishment
- 4.3 In addition, the following projects primarily from 2012/13 are forecast not to be complete by their milestone dates and continue to incur trigger payments during 2013/14, these projects are:
- 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
  - T5TTS Enhancement
  - 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 2013/14.

### 2008/09 Triggers

**Table 7**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>11</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

<sup>11</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.

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:

- 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>12</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.

<sup>12</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>13</sup></b>	<b>Latest 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	Mar-14

- 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 made 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). Similarly the k factor for 2011/12 included in airport charges for 2013/14 makes a retrospective adjustment to recover the trigger payment made when airport charges were set for 2011/12.
- 4.10 In addition, Eastern Maintenance Base is further delayed until March 2014. This results in twelve months being captured in setting airport charges for 2013/14.

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<sup>13</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	= March 2014
Expected Delay	= 48 months
Months falling into 2013/14	= 12 months
Monthly Payment	= £170,000 in 2007/08 prices
Expected Payment	= £2,040,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140 <sup>14</sup>
Expected Payment	= £2,325,600 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.033 in 2013/14 prices

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<sup>14</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%, average RPI forecast for 2012/13 is 3.5% and average RPI for 2013/14 is 2.5% (subject to rounding differences).

## 2011/12 Triggers

**Table 10**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>15</sup></b>	<b>Latest Forecast Completion Date</b>
T5TTS Enhancements	May-11	n/a	Mar-14
T5C Nodes and link bridge stands 563/564	May-11	May-11	May-11
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	Nov-11
Completion of the Outer Pier North	Jan-12	Mar-13	Mar-14
T2A phase 1 completion – Weather tight	Feb-12	Jan-12	Feb-12

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

- T5C Nodes and link bridge stands 563/564
- T2A Phase 1 demolition of T2
- T3 refurbishment of Immigration, landside departures and baggage hall refurbishment
- Completion of T5 Satellite C
- Post T5 transfer baggage (T5-T3)
- T2A phase 1 completion – Weather tight

4.12 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 is reflected in the k factor for 2011/12 in setting airport charges for 2013/14.

4.13 T5TTS Enhancement project is a new trigger project which was introduced in March 2012 with a milestone date of May 2011. Therefore this project incurs a trigger payment in k factor for 2011/12 in setting airport charges for 2013/14 and is

<sup>15</sup> The forecast completion date is consistent to the forecast presented in the "Heathrow Airport Limited, 2011/12 Airport Charges Consultation" document.



forecast to continue to incur trigger payments for the full 12 month period of 2013/14.

4.14 T3 Refurbishment Completion of check-in & Security Search was a trigger project with an original milestone date of March 2010 and forecast completion date of September 2010 resulting in a trigger payment when setting airport charges in 2010/11. Subsequently when setting airport charges for 2011/12 this project had a revised forecast completion date of July 2011 hence incurring trigger payments of four months in setting airport charges for 2011/12. Since then it had its milestone completion date changed to July 2011 with an actual completion date of May 2011, therefore meeting its milestone date. This results in a retrospective adjustment through the 2011/12 k factor for setting airport charges in 2013/14 to adjust for the trigger payment made in 2011/12.

4.15 However, Completion of the Outer Pier North project and T5TTS Enhancement projects will continue to miss its milestone trigger date and will incur trigger payments in setting airport charges for 2013/14.

• **Completion of Outer Pier North**

Milestone Month	= January 2012
Forecast Completion	= March 2014
Expected Delay	= 26 months
Months falling into 2013/14	= 12 months
Monthly Payment	= £490,000 in 2007/08 prices
Expected Payment	= £5,880,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £6,703,200 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.094 in 2013/14 prices

• **T5TTS Enhancement**

Milestone Month	= May 2011
Forecast Completion	= March 2014
Expected Delay	= 34 months
Months falling into 2013/14	= 12 months
Monthly Payment	= £100,000 in 2007/08 prices
Expected Payment	= £1,200,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £1,368,000 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.019 in 2013/14 prices

## 2012/13 Triggers

**Table 11**

	<b>Milestone Month</b>	<b>Forecast Completion Date<sup>16</sup></b>	<b>Latest Forecast Completion Date</b>
Completion of T3 Integrated Baggage system	Mar-12	Oct-13	Sep-14
T2A Phase 1 Construction sufficiently progressed for operational trials to commence	Nov-12	Oct-13	Oct-13
Completion of Midfield Pier Centre	Nov-12	Nov-13	Nov-13
Completion of Passenger Connectivity to the Midfield Pier	Nov-12	Nov-13	Nov-13
Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System	Jun-12	Mar-13	Mar-14

4.16 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 continue to be forecast not to be delivered to their milestone dates and incur trigger payments in setting airport charges for 2013/14.

4.17 The forecast trigger calculation associated with the trigger project with completion dates in 2012/13 for trigger payments in 2013/14 are shown below:

- **Completion of T3 Integrated Baggage system**

Milestone Month	= March 2012
Forecast Completion	= September 2014
Expected Delay	= 30 months
Months falling into 2013/14	= 12 months
Monthly Payment	= £1,190,000 in 2007/08 prices
Expected Payment	= £14,280,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £16,279,200 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.228 in 2013/14 prices

<sup>16</sup> The forecast completion date is consistent to the forecast presented in the "Heathrow Airport Limited, 2012/13 Airport Charges Consultation" document.

- **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 2013/14	= 7 months
Monthly Payment	= £1,220,000 in 2007/08 prices
Expected Payment	= £8,540,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £9,735,600 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.136 in 2013/14 prices

- **Completion of Midfield Pier Centre**

Milestone Month	= November 2012
Forecast Completion	= November 2013
Expected Delay	= 12 months
Months falling into 2013/14	= 8 months
Monthly Payment	= £670,000 in 2007/08 prices
Expected Payment	= £5,360,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £6,110,400 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.086 in 2013/14 prices

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

Milestone Month	= November 2012
Forecast Completion	= November 2013
Expected Delay	= 12 months
Months falling into 2013/14	= 8 months
Monthly Payment	= £310,000 in 2007/08 prices
Expected Payment	= £2,480,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £2,827,200 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.039 in 2013/14 prices

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

Milestone Month	= June 2012
Forecast Completion	= March 2014
Expected Delay	= 21 months
Months falling into 2013/14	= 12 months
Monthly Payment	= £410,000 in 2007/08 prices
Expected Payment	= £4,920,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £5,608,800 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.079 in 2013/14 prices

## 2013/14 Triggers

Table 12

	Milestone Month	Forecast Completion Date
MSCP T2	Mar-13	Aug-13

- **MSCP T2**

Milestone Month	= March 2013
Forecast Completion	= August 2013
Expected Delay	= 5 months
Months falling into 2013/14	= 5 months
Monthly Payment	= £480,000 in 2007/08 prices
Expected Payment	= £2,400,000 in 2007/08 prices
Inflation Index (RPI)	= 1.140
Expected Payment	= £2,736,000 in 2013/14 prices
Forecast Passengers (000s)	= 71,374 in 2013/14
Impact on Yield	= £0.038 in 2013/14 prices

4.18 MSCP T2 is forecast to incur a trigger payment in setting airport charges for 2013/14 by five months. In addition there is an additional trigger project which was included by CAA in September 2012, Runway refurbishment which is forecast to be completed to its milestone date of December 2013.

4.19 The below summarises the total trigger payments included in the forecast maximum allowable yield for 2013/14 (2013/14 prices).

Project with milestone dates in 2013/14

MSCP T2	=£2,736,000
<u>Projects carried forward into 2013/14</u>	
Completion of T3 Integrated Baggage system	=16,279,200
T2A Phase 1 Construction sufficiently progressed for operational trials to commence	=£9,735,600
Completion of Midfield Pier Centre	=£6,110,400
Completion of Passenger Connectivity to the Midfield Pier	=£2,827,200
Post T5 Transfer Baggage System Completion of the T3-T1 Tunnel & Baggage System	=£5,608,800
Eastern maintenance base	=£2,325,600
Completion of Outer Pier North	=£6,703,200
T5TTS Enhancement	=£1,368,000
<b>Expected Payment</b>	<b>=£53,694,000</b>

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## **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 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 In 2010/11, 2011/12 and 2012/13 the rebates totalled £17.4m (nominal), £20.9m (nominal) and £24.0m (nominal) respectively.
- 5.7 As agreed with the airline community the same approach applies in the Q5 extension year, 2013/14. This will be based upon actual expenditure incurred, agreed with the airline community. Heathrow proposes rebating the airlines the difference between the implied return on PSDH expenditure assumed at the end of Q5 in the regulatory settlement, and the regulatory return on actual 2012/13 expenditure recovered on an ex-post basis from 2013/14.
- 5.8 Forecast expenditure for 2012/13 is £126m, giving forecast cumulative PSDH expenditure to the end of 2012/13 of £353m. This level of expenditure equates to a forecast PSDH rebate of £23.1m (nominal).

**Table 13**

	<b>2013/14</b>
	<b>£(000s)</b>
Cumulative capex to 2013/14 in Settlement (outturn prices)	737,607
Implied RAB (1)	737,607
Accounting return (2)	6.014%
Implied return	44,357
Latest forecast spend 2012/13 (outturn prices)	125,544
Implied RAB (3)	352,844
Accounting return (2)	6.014%
Implied return	21,219
Implied PSDH Rebate in 2013/14 (outturn prices)	23,138
<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, actual 2011/12 and forecast spend for 2012/13.</p>	

5.9 The conversion of price bases (i.e. real to nominal) for the PSDH calculations are based on CAA forecast RPI.

5.10 The actual PSDH rebate will be refunded to airlines as a cash sum outside the maximum allowable yield in 2013/14. The refund to airlines will be made on a monthly basis based on individual airline's share of total airport charges invoiced.



## Chapter 6 – Forecast Revenue for 2013/14

	Traffic Volume Units	Traffic Volume	Proposed Charge	Forecast Revenue
<b>Landing Charge</b>				
<b>Noise Charge</b>				
<u>Peak</u>				
Chapter 2	[Landings]	0	£7,817.88	£0
Chapter 3 High	[Landings]	0	£7,817.88	£0
Chapter 3 Base	[Landings]	4,220	£2,605.96	£10,997,151
Chapter 4 High	[Landings]	53,015	£1,563.58	£82,893,194
Chapter 4 Base	[Landings]	61,400	£1,302.98	£80,002,972
Chapter 4 Minus	[Landings]	116,864	£781.79	£91,363,107
<b>Total</b>	[Landings]	<b>235,499</b>		<b>£265,256,424</b>
<u>Super Night Peak</u>				
Chapter 2	[Landings]	0	£19,544.70	£0
Chapter 3 High	[Landings]	0	£19,544.70	£0
Chapter 3 Base	[Landings]	0	£6,514.90	£0
Chapter 4 High	[Landings]	0	£3,908.95	£0
Chapter 4 Base	[Landings]	0	£3,257.45	£0
Chapter 4 Minus	[Landings]	0	£1,954.48	£0
<b>Total</b>	[Landings]	<b>0</b>		<b>£0</b>
<b>Emissions Charge</b>				
Total kg Nox rating	[kg]	6,031,104	£7.76	£46,801,367
Average kg Nox per landing	[kg]	25.6		£46,801,367
Revenue exc ANS Charges				£312,057,791
<b>ANS Charge</b>				
Per ATM Charge	[Landings]	235,499	£78.58	£18,505,511
Per Metric Tonne		35,593,168	£1.06	£37,728,758
<b>Total</b>		<b>0</b>		<b>£56,234,269</b>
Average Weight (Tonnes)		151.1		
<b>Total Landing Revenue</b>	<b>(a)</b>			<b>£368,292,060</b>
<i>check</i>				
<b>Departing Passenger Charge</b>				
<b>Departing OD Passenger Charge</b>				
Europe	[Dep Pax]	11,102,549	£28.30	£314,202,137
Other	[Dep Pax]	13,744,078	£39.75	£546,327,101
<b>Total</b>	[Dep Pax]	<b>24,846,627</b>		<b>£860,529,238</b>
<b>Departing Transfer Passenger Charge</b>				
Europe	[Dep Pax]	4,657,965	£21.23	£98,888,597
Other	[Dep Pax]	6,055,250	£29.82	£180,567,555
<b>Total</b>	[Dep Pax]	<b>10,713,215</b>		<b>£279,456,152</b>
<b>Departing Transit Passenger Charge</b>				
Europe	[Dep Pax]	0	£21.23	£0
Other	[Dep Pax]	51,866	£29.82	£1,546,644
<b>Total</b>	[Dep Pax]	<b>51,866</b>		<b>£1,546,644</b>
<b>Remote Stand Rebate</b>				
Remote Stand Rebate	[Dep Pax + Arr Pax]	5,242,920	-£5.15	-£27,001,038
<b>Total Departing Passenger Charge Revenue*</b>	<b>(b)</b>	<b>35,611,708</b>		<b>£1,114,530,996</b>
<b>Parking Charge</b>				
Narrow bodied Chargeable Period	[Units of 15 minutes]	686,216	22.68	15,563,379
Wide bodied Chargeable Period	[Units of 15 minutes]	805,558	54.45	43,862,633
<b>Total Parking Charge</b>	<b>(c)</b>			<b>£59,426,012</b>
<b>Terminal Pax Flights: Total Revenue</b>				<b>£1,542,249,068</b>
<b>Non-Terminal Pax Flights (GA, Troops etc)</b>				
<b>Non-Terminal Pax Flights</b>				
Landing Revenue	(d)			£2,136,036
Departing Passenger Revenue	(e)			£1,696,648
Parking Revenue	(f)			£190,334
<b>Total Non-Terminal Pax Flights Revenue</b>				<b>£4,023,018</b>
<b>Total Regulated Revenue (Pax Only Flights)</b>				
<b>Total Regulated Revenue</b>				
Landing Revenue	(a) + (d)			£370,428,096
Departing Passenger Revenue	(b) + (e)			£1,116,227,644
Parking Revenue	(c) + (f)			£59,616,346
<b>Total Regulated Revenue</b>				<b>£1,546,272,086</b>
<b>Total Passengers</b>				<b>71,373,913</b>
<b>Total Regulated Yield</b>				<b>£21.664</b>

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## Chapter 7 – Proposed Airport Charges Tariffs for 2013/14

	<b>Final 2012/13 £ GBP</b>	<b>Proposed 2013/14 £ GBP</b>
<b>Charges on Landing</b>		
Peak		
Chapter 2	5,772.24	7,817.88
Chapter 3 high	5,772.24	7,817.88
Chapter 3 base	1,924.08	2,605.96
Chapter 4 high	1,154.45	1,563.58
Chapter 4 base (equivalent)	962.04	1,302.98
Chapter 4 minus	577.22	781.79
Super Night Peak		
Chapter 2	14,430.60	19,544.70
Chapter 3 high	14,430.60	19,544.70
Chapter 3 base	4,810.20	6,514.90
Chapter 4 high	2,886.13	3,908.95
Chapter 4 base (equivalent)	2,405.10	3,257.45
Chapter 4 minus	1,443.05	1,954.48
Emissions charge (per kg)	6.69	7.76
ANS charge		
per ATM	78.97	78.58
Per Metric tonne	1.07	1.06
<b>Charge on departing passengers</b>		
Europe - Destination	24.55	28.30
Other - Destination	34.49	39.75
Europe - Transfer	18.41	21.23
Other - Transfer	25.87	29.82
Europe - Transit	18.41	21.23
Other - Transit	25.87	29.82
Remote Stand Rebate (All paxs)	-4.59	-5.15
Minimum charge	1,126.00	1,263.00
<b>Charges on aircraft parking</b>		
Narrow bodied	14.56	22.68
Wide bodied	34.95	54.45

Please note:

- Tariffs have been rounded

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## Chapter 8 - 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)
	2012/13	No structural change
	2013/14	No structural change
<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.
	2012/13	No structural change
	2013/14	No structural change
<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.
	2013/14	No structural change

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## Chapter 9 - Regulation Glossary of Frequently Used Terms

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

### Regulatory period

- 9.2 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*

- 9.3 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 reflected the fact that the Bill on airport economic regulation was 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

- 9.4 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

- 9.5 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.

- 9.6 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**

9.7 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**

9.8 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**

9.9 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 factor - K**

9.10 Because of the uncertainties of estimating the maximum allowable yield, any over or under-recoveries in airport charge revenues 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.

### **Charging parameters**

9.11 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**

9.12 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.

### **Service quality measures**

9.13 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.

*CAA Decision March 2008.*



## Chapter 10 - Financial and Traffic Information

### Traffic statistics and charging parameters

10.1 The actual traffic statistics for the four years to 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.

### Regulatory accounting information

10.2 Heathrow is a privately owned company and a summary of its regulatory accounts are presented for the 12 month period to 31 March 2012. These accounts compare the airport's financial performance for the year ended 31 March 2012 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>17</sup>.

10.3 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.

10.4 The full regulatory accounts and annual reports are available from [www.baa.com](http://www.baa.com).

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<sup>17</sup> CAA has extended Q5 from March 2013 to March 2014.

Passenger only flights - actual and forecast

	Actual				Forecast	
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
<b>Arriving Passengers</b>	<b>33,055,283</b>	<b>33,167,916</b>	<b>33,282,772</b>	<b>35,092,421</b>	<b>35,020,045</b>	<b>35,756,449</b>
<b>Departing passengers</b>						
Origin and destination						
Europe	14,688,784	14,661,948	14,743,673	11,716,309	11,332,687	11,343,857
Other	18,185,232	18,302,809	18,084,452	14,213,133	13,906,482	14,372,401
Transfer passengers						
Europe	Transfer passengers not separately identified			3,856,432	3,960,957	4,218,664
Other				5,172,212	5,502,428	5,624,918
Transit passengers						
Europe	1,859	2,834	1,623	646	0	0
Other	160,859	119,384	96,303	47,738	52,310	51,866
<b>Departing passengers</b>	<b>33,036,734</b>	<b>33,086,975</b>	<b>32,926,051</b>	<b>35,006,470</b>	<b>34,754,864</b>	<b>35,611,708</b>
<b>Total terminal passengers</b>	<b>66,092,017</b>	<b>66,254,891</b>	<b>66,208,823</b>	<b>70,098,891</b>	<b>69,774,910</b>	<b>71,368,157</b>
PATMs	467,130	453,780	453,938	473,761	467,555	470,993

<b>Heathrow Airport</b>				
<b>2011/12 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>70,099</b>	<b>76,200</b>	<b>-6,101.0</b>	<b>-8.0%</b>
<b>Revenue</b>				
Net revenue from airport charges	1,178.6	1,372.9	-194.3	-14.2%
Other traffic charges	12.1	8.6	3.5	40.7%
Retail	421.8	403.5	18.3	4.5%
Property	131.1	134.9	-3.8	-2.8%
Rail	113.2	109.5	3.7	3.4%
Non regulated charges & other	217.3	199.7	17.6	8.8%
Other revenue	895.5	856.2	39.3	4.6%
<b>Total revenue</b>	<b>2,074.1</b>	<b>2,229.1</b>	<b>-155.0</b>	<b>-7.0%</b>
<b>Expenditure</b>				
Staff costs	270.4	261.5	-8.9	-3.4%
Maintenance & equipment costs	118.0	115.3	-2.7	-2.3%
Rent and rates	116.9	109.3	-7.6	-7.0%
Utility costs	89.4	110.6	21.2	19.2%
Police costs	28.8	38.9	10.1	26.0%
Rail costs	58.9	63.3	4.4	7.0%
Other costs	146.0	152.0	6.0	3.9%
Intragroup costs	172.6	111.5	-61.1	-54.8%
Operating costs	1,001.0	962.4	-38.6	-4.0%
Depreciation	517.4	517.4	0.0	0.0%
<b>Total expenditure</b>	<b>1,518.4</b>	<b>1,479.8</b>	<b>-38.6</b>	<b>-2.6%</b>
<b>Regulatory operating profit (before exceptional operating costs)</b>	<b>555.7</b>	<b>749.4</b>	<b>-193.7</b>	<b>-25.8%</b>
Exceptional operating costs	158.9	0.0	-158.9	
<b>Regulatory operating profit</b>	<b>396.8</b>	<b>749.4</b>	<b>-352.6</b>	<b>-47.1%</b>
<b>Capital expenditure</b>	<b>963.5</b>	<b>1,008.5</b>	<b>-45.0</b>	<b>-4.5%</b>
<b>Opening RAB</b>	<b>11,773.0</b>	<b>12,973.9</b>	<b>-1,200.9</b>	<b>-9.3%</b>
<b>Closing RAB</b>	<b>12,705.3</b>	<b>13,996.3</b>	<b>-1,291.0</b>	<b>-9.2%</b>
<b>Weighted average RAB</b>	<b>12,239.1</b>	<b>13,485.1</b>	<b>-1,246.1</b>	<b>-9.2%</b>
<b>Return on weighted average RAB (before exceptional operating costs)</b>	<b>4.5%</b>	<b>5.6%</b>	<b>-1.0%</b>	<b>-18.3%</b>
<b>Return on weighted average RAB (after exceptional operating costs)</b>	<b>3.2%</b>	<b>5.6%</b>	<b>-2.3%</b>	<b>-41.7%</b>

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