

# Heathrow Airport – Structure of Aircraft Parking Charges

## Decision Document

Date: 17 June 2011

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## Introduction

Heathrow Airport Limited (HAL) issued a formal consultation document on 18 March 2011 which outlined in detail proposals for changes to the structure of aircraft parking charges at Heathrow Airport. The proposed changes were designed to support Heathrow's vision of becoming Europe's hub of choice and reinforce Heathrow's position as the UK's direct connection to the world. The consultation document was developed and informed by informal airline community engagement conducted in February 2011.

In the consultation document we set out our proposals for a new structure for aircraft parking charges which were designed to:

- support Heathrow's hub status;
- encourage efficient use of scarce resources;
- simplify the charging structure;
- promote environmentally responsible behaviour; and
- safeguard legal and regulatory compliance.

HAL developed its proposals having regard to its legal and regulatory obligations and the impact of the potential changes. To support this understanding, HAL carried out modelling to assess the impact of changes in the aircraft parking charge structure on individual airlines and airline groups.

The consultation document highlighted the current structure of aircraft parking charges and the proposed structural changes identifying the reasoning for the proposed change and its alignment with the airport's objectives. The consultation document also provided a cost based analysis of the proposed structure, aircraft category data and indicative tariffs.

During the consultation period HAL received 10 formal responses to the consultation document from airlines. HAL has reviewed all of these responses in detail and those responses have been taken into account in the decision making process. The purpose of this document is to set out HAL's aircraft parking charges decision following formal consultation and to outline the next steps HAL will take in the implementation of its decision.

## Chapter 1

### Legal Background

- 1.1 The Civil Aviation Authority (CAA) is responsible for the administration of the Airports Act 1986 and is required to set the maximum amount that may be levied by HAL during five-year periods, known as quinquennia. In the current quinquennium (known as Q5), which runs from 1 April 2008 to 31 March 2014, (including a one year extension applied by the CAA) HAL is permitted by the CAA to increase the level of airport charges at Heathrow each year by RPI plus 7.5 per cent from an initial base of £12.80 per passenger in 2007/08 prices (where RPI is the 'Retail Price Index' measure of inflation). HAL is required to set the level of charges at Heathrow within the price cap.
- 1.2 The CAA does not regulate the structure of airport charges and as such, it is generally for the airport operator to decide how airport charges should be structured within the price cap specified by the CAA. This decision therefore is concerned only with the structure of aircraft parking charges at Heathrow rather than the level of aircraft parking charges which will be subject to a separate consultation process. However, the tables set out in Annex 1 provide hypothetical examples of what parking charges would have been had the revised aircraft parking charge structure been implemented in April 2011.
- 1.3 The European Airport Charges Directive (2009/12/EC) (the ACD) should have been brought into force in the United Kingdom by 15 March 2011. It is now expected that the ACD will be implemented in the United Kingdom by 1 September 2011. The ACD establishes a common framework for the regulation and setting of airport charges across the European Union. In the conduct of the consultation and review of the aircraft parking charges structure HAL has taken the requirements of the ACD into account.

## Chapter 2

### Review of Responses and Decision

- 2.1 HAL received 10 responses to the consultation document during the specified consultation period. All responses received were from individual airlines currently operating at Heathrow.
- 2.2 In this chapter we set out each of the proposals and give a brief resume of the points made by respondents. We then go on to consider those responses and set out HAL's decisions on each of the proposals in turn.

#### Timing of Charge

- 2.3 The consultation document provided three options for the timing of aircraft parking periods, these were :
- i. retention of the current 8 minute dispensation period (whereby aircraft are allowed an 8 minutes to reach their designated stand before parking charges are levied);
  - ii. measure the aircraft parking period from aircraft wheels-down to wheels-up; and
  - iii. measure the aircraft parking period from chocks-on to chocks-off at the stand.
- 2.4 HAL proposed to take advantage of the technology that now exists on the airport which can accurately capture aircraft stand chocks-on and chocks-off times (option iii). HAL propose to use this timing technology to support a parking time measurement system which would allow parking charges to be levied on the basis of the amount of time aircraft actually spend on stand. The implementation of this proposal would permit multiple chocks-on/chock-off stand usage and facilitate stand to stand movement without having the additional taxiing time included in the overall timed parking period.
- 2.5 All responses received from stakeholders in respect of this proposal were wholly supportive or supportive subject to the technology employed to measure time on stand being proven.
- 2.6 HAL considers the measurement of aircraft parking periods on a chocks-on/chocks-off basis to offer the fairest charging structure as it will ensure aircraft parking charges are only levied in respect of the time an aircraft actually spends on stand. HAL is confident that the concerns raised by some respondents in relation to the accuracy and operation of the measurement technology can be addressed prior to implementation of the proposal. HAL has therefore decided to implement the proposal (option iii) as outlined in the consultation document.

### Free Period - Type

- 2.7 The consultation document provided three options for the type of free parking period that could be offered at Heathrow, these were:
- i. no free period (current position);
  - ii. a single free period for all aircraft types; and
  - iii. a narrow body and wide body free period.
- 2.8 HAL proposed a narrow body and wide body free period (option iii) to encourage more efficient use of aircraft stands by reducing the amount of time aircraft spend on stand. The more efficient use of stands would provide more flexibility for terminal groupings and stand preferences. It must be noted that at the expiration of the relevant free period normal aircraft parking charges would apply.
- 2.9 HAL favoured separate free periods for narrow and wide bodied aircraft as this best captures the minimum stand turnaround times applicable to each type of aircraft and improves stand capacity.
- 2.10 One of the respondents to the consultation did not support the introduction of any free parking period. One respondent was neutral on the proposal. The other respondents were either wholly supportive of the proposed free period or supportive but proposed different free period timings. Noting the fact that narrow bodied aircraft generally take less time to turnaround than wide bodied aircraft a shorter period of free parking is proposed for narrow bodied aircraft. The topic of free period timing is covered in more detail below at paragraphs 2.12 - 2.16.
- 2.11 HAL has considered the responses received in respect of this proposal and notes that the majority of respondents favoured the introduction of free parking periods. HAL has therefore decided to implement free parking periods for narrow and wide bodied aircraft (option iii) as outlined in the consultation document.

### Free Period - Length

- 2.12 The consultation document provided four options for the length of free parking period that could be offered at Heathrow, these were (figures in minutes):

Opt.	Narrow Bodied Aircraft	Wide Bodied Aircraft
i	0	60
ii	30	90
iii	60	120
iv	240	240

- 2.13 HAL proposed a free on stand parking period of 30 minutes for narrow bodied aircraft and 90 minutes for wide bodied aircraft (option ii). The proposal encourages all airport users to improve stand performance and reduce turnaround times. The proposal involves a single free period per aircraft visit, with those aircraft arriving on stand at the end of the day time period (05:59 – 22:00 hours) automatically having any residual free period applied to the following day.
- 2.14 The responses received in respect of this proposal, with the exception of one, all favoured a free parking period. There was no clear consensus on the length of the free time periods that should apply to narrow and wide bodied aircraft. One respondent suggested an intermediate free period for “mid-haul” narrow bodied aircraft should be applied. HAL considers the use of aircraft destination to determine applicable free parking periods as an unworkable delineator because it has the potential to discriminate against carriers using wide bodied aircraft on short and mid-haul routes.
- 2.15 HAL has considered all of the responses and believes that the proposed free stand parking period of 30 minutes for narrow bodied aircraft and 90 minutes for wide bodied aircraft (option ii) provides the best incentive for improved stand performance. This is because on stand turnarounds inside the free periods have been demonstrated to be achievable and their introduction will incentivise airport users to reduce the amount of time they spend on stand. Under the proposal, even if the time on stand of typical aircraft using Heathrow exceeds the relevant free period by that free period again, the amount of parking charge payable in respect of that aircraft will be less than the parking charge payable for the same period under the current charging structure.
- 2.16 HAL has therefore decided to implement free on stand parking periods of 30 minutes for narrow bodied aircraft and 90 minutes for wide bodied aircraft (option ii) to incentivise improved stand performance across the airport.

#### **Basis of Charge – After Free Period**

- 2.17 The consultation document provided four options for applying aircraft parking charges after the expiration of the relevant free parking period that could be offered at Heathrow, these were:
- i. time only based charging;
  - ii. a mixture of time and weight based charging (as currently applies);
  - iii. a mixture of time and aircraft type (narrow or wide bodied) based charging;
- and
- iv. a mixture of time and stand size based charging.
- 2.18 HAL proposed the introduction of a mixture of time and aircraft type charging (option iii) as this offers the best means of encouraging the most efficient use of stands having account of the physical space each aircraft type uses on stand. HAL proposed a ratio of 1 : 2.4 (narrow :

wide bodied aircraft) be applied to the aircraft type charge as this reflects the stand size required for each aircraft type. An analysis of the stand based charge ratio was set out in Appendix B of the 18 March 2011 Consultation Document.

- 2.19 The proposal (option iii) would involve the application of a charge (determined using the narrow and wide bodied ratio of 1 : 2.4) for each 15 minute period (or part thereof) an aircraft is on stand after the expiration of the relevant free period. As the time based parking charge will be determined by the type of aircraft parked and not the stand used, there will not be any extra charge for narrow bodied aircraft using a wide bodied stand if operational requirements necessitate such stand usage.
- 2.20 The responses received in respect of this proposal offered no clear consensus. Three respondents proposed the retention of weight based charging, four respondents supported the principle of a time and aircraft type charge mix but put forward different charge ratios whilst others supported the proposal. The differing aircraft type ratios requested by some respondents are not supported by the analysis of the stand based charge ratio as set out in Appendix B of the 18 March 2011 Consultation Document.
- 2.21 HAL has considered the responses received in respect of this proposal and notes that the majority of respondents favoured the introduction of a time and aircraft type mix. HAL has therefore decided to implement a mixture of time and aircraft type (narrow and wide bodied) based charging (option iii) as outlined in the consultation document.

### **Time and Weight Ratio**

- 2.22 The consultation document provided three options for the basis upon which the aircraft parking charges could be applied at Heathrow, these were:
- i. 20:80 ratio (time : weight) (current ratio);
  - ii. 50:50 ratio (time : weight); and
  - iii. No ratio
- 2.23 HAL proposed to discontinue using time and weight based aircraft parking charges (option iii) in favour of a time and aircraft type charge as set out above in paragraphs 2.17 - 2.21. HAL believes that this proposal will simplify the structure of parking charges and align parking charges with costs.
- 2.24 The responses received in respect of this proposal offered no clear consensus. Three respondents requested the retention of weight based parking charges and one respondent requested a flat charge for all stand sizes. The remainder of the respondents wholly supported the proposal, supported the proposal but put forward different charge ratios or offered no comment.

- 2.25 HAL has therefore decided to implement the proposed discontinuance of time and weight based aircraft parking charges (option iii) in favour of time and aircraft type charge as outlined in the consultation document.

### **Overnight Parking**

- 2.26 The consultation document provided three options in respect of free on stand aircraft parking during the night period which could be applied at Heathrow, these were:

- i. retain the current free night period (22:00-05:59 hours);
- ii. extend the free night period; and
- iii. reduce the free night period.

- 2.27 HAL proposed to continue to offer free on stand parking during the night period (22:00-05:59 hours) (option i) as it did not foresee any clear operational benefit in adjusting the present free period given current externally applied curfew periods.

- 2.28 The majority of respondents fully supported the retention of the current free on stand parking during the night period noting that the only other responses to this proposal offered no comment.

- 2.29 HAL has therefore decided to retain free on stand parking during the night period (22:00-05:59 hours) (option i) as outlined in the consultation document.

### **Automatic 24 Hour Charge**

- 2.30 The consultation document provided two options in respect of the current automatic 24 hour parking charge which could be applied at Heathrow, these were:

- i. retain the current automatic 24 hour charge; and
- ii. discontinue the current automatic 24 hour charge.

- 2.31 HAL proposed to discontinue the current automatic parking charge (option ii) which is equivalent to eight times the standard parking charge for aircraft which remain on HAL stands for periods in excess of 24 hours. The purpose of the charge is to discourage prolonged and unnecessary parking and free up scarce parking resources. The implementation of this option will discourage unnecessary aircraft towing to off stand areas of the airfield. Prolonged stand use can be controlled through the aircraft movement provisions of the Heathrow Conditions of Use (see paragraphs 2.38 - 2.41 below).

- 2.32 The majority of respondents fully supported the discontinuance of the current 24 hour automatic parking charge (option ii) noting that the only other responses to this proposal offered no comment.

- 2.33 HAL has therefore decided to discontinue the current automatic parking charge (option ii) as outlined in the consultation document.

### **Summer Peak Charge**

- 2.34 The consultation document provided two options in respect of the summer peak charge which could be applied at Heathrow, these were:

- i. retain the current summer peak charge; and
- ii. discontinue the current summer peak charge.

- 2.35 HAL currently levies a summer peak aircraft parking charge of three times the standard parking charge between 07:00 and 12:29 hours from 1 April to 31 October each year. HAL proposed to discontinue the summer peak charge (option ii) as the airport is at almost full capacity at all times throughout the year not just during the summer peak period and therefore the additional summer period charge, which was originally applied to encourage airport use outside of the summer peak period, can no longer be justified.

- 2.36 The majority of respondents fully supported the discontinuance of the current summer peak charge (option ii) noting that the only other responses to this proposal offered no comment.

- 2.37 HAL has therefore decided to discontinue the current automatic parking charge (option ii) as outlined in the consultation document.

### **Operational Charge (Aircraft Management)**

- 2.38 The consultation document provided two options in respect of the operational charge which could be applied at Heathrow, these were:

- i. retain current operational charge; and
- ii. discontinue current operational charge.

- 2.39 HAL are currently able to levy an operational charge equivalent to eight times the standard parking charge in respect of aircraft parked at the airport which have been ordered to move by the Airport Operations Manager and have not moved. HAL proposes to retain the current operational charge (option i) and rely on the new aircraft movement provisions in the 2011/12 Heathrow Airport Conditions of Use at condition 11.

- 2.40 The majority of respondents fully supported the retention of the current operational charge (option i) noting that the only other responses to this proposal offered no comment.

- 2.41 HAL has therefore decided retain the current operational charge (option i) outlined in the consultation document.

## Chapter 3

### Implementation

- 3.1 The consultation document invited comments on the implementation of the proposed structure of parking charges. There was no clear consensus in the consultation responses on the implementation of the structure of parking charges.
- 3.2 The consultation document provided three start date options for implementation of the proposed parking charge structure at Heathrow, these were:
- i. 1 April 2012;
  - ii. 1 October 2011; and
  - iii. 30 October 2011.
- 3.3 Implementation concerns expressed by the respondents in particular included:
- airline business plans already set for the 2011/12 charging year and therefore implementation should be set for 2012/13 charging year;
  - should allow 3 years for structure to be applied gradually;
  - structure should be implemented as soon as possible; and
  - support HAL's original proposal of implementation from 30 October 2011.
- 3.4 HAL has considered these responses together with the overall objectives of the proposed changes to the structure parking charges. The responses raised concerns in relation to the accuracy and operation of the chocks-on/chock-off measurement technology (see paragraph 2.5 above).
- 3.5 HAL has therefore decided to implement all of the proposed parking charge structural changes in the 2012/13 charging year (option i) as this implementation period best ensures that airport users can gain full confidence in the time measurement technology and requisite system changes can be completed.
- 3.6 HAL will liaise with airport users in the intervening period to ensure they are provided with adequate information to assure themselves of the accuracy and operation of the measurement technology.

## Chapter 4

### Summary of Proposals

4.1 The table below summarises the parking charges structure in its current, proposed and final form:

Charge Element	Options from engagement sessions	Proposal	Decision	Rationale
Timing of Charge	Landing time + 8 minutes / Chocks Off (current) Chocks On / Chocks Off Wheels down to wheels up	Chocks On / Chocks Off	Chocks On / Chocks Off	Technology now exists to capture accurate chocks on time. All taxi time is excluded avoiding arguments over who causes taxi time delays. May be multiple chocks on / off per visit, all time when occupying a HAL stand is chargeable, but not taxiing between them.
Free Period - type	None (current) Single free period Narrow Body/ Wide Body free periods	Narrow Body / Wide Body	Narrow Body / Wide Body	Encourages all types of carriers to reduce turnaround performance to best in class.
Free Period - length	0 / 60 minutes 30 / 90 minutes 60 / 120 minutes 240 / 240 minutes	30 / 90 minutes	30 / 90 minutes	Encourages all types of carriers to reduce turnaround performance to best in class.
	Ends at start of free night period Cumulative, continues next morning or after towing onto another stand	Cumulative	Cumulative	Non-discriminatory. Only one free period is applicable per visit, even if an aircraft tows to a remote stand or maintenance area and back.
Basis of charge after free period	Time Time & Weight (MTOW) (current) Time & Aircraft Type Time & Stand Size	Time & Aircraft Type Ratio: Narrow Body 1: 2.4 Wide Body	Time & Aircraft Type Ratio: Narrow Body 1: 2.4 Wide Body	Ratio is asset cost related.
Time / Weight ratio	20 / 80 (current) 50 / 50	Not applicable in Time & Aircraft Type scenario	Not applicable in Time & Aircraft Type scenario	n/a
Overnight Parking - charge	Retain free night period (current) Extend free night period Reduce free night period	Retain free night period	Retain free night period	Not clear that any change would help drive objective behaviours.
Overnight Parking - timing	Retain 2200 – 0559 (current)	Retain 2200 - 0559	Retain 2200 - 0559	
Automatic 24 hour charge	Retain Discontinue	Discontinue	Discontinue	Reduces unnecessary towing.
Summer peak Charging	Retain Discontinue	Discontinue	Discontinue	No longer a summer peak to justify the charge.
Operational (Policing) Charge	Policing - manual charge	Retain	Retain	Already in Conditions of Use
Implementation	1 April 2012 1 October 2011 30 October 2011 (start of Winter Season)	30 October 2011	1 April 2012	Dependent on system change requirements

## Chapter 5

### List of Respondents

Aer Lingus

Air France, S.A./ KLM Royal Dutch Airlines

British Airways plc

British Midland Airways

Cathay Pacific Airways Ltd.

Delta Air Lines, Inc.

Deutsche Lufthansa AG

Swiss International Air Lines AG

United Airlines Inc.

Virgin Atlantic Airlines Ltd

## Annex 1

### Parking Charge Examples

The following tables provide indicative comparisons of the current parking charge structure and the proposed time and aircraft type parking charge structure using an average 320 weight for narrow body aircraft, an average 77A weight for wide body aircraft and 2011/12 prices. Please note that the examples below are for information only and airlines will need to take account of their own aircraft fleet profile and weights; an aircraft fleet classification table has been provided below and a table showing the average weight of aircraft using Heathrow has also been provided below to assist airlines with charge comparison.

#### Example 1 (45 minutes Narrow Body parking and 135 Wide Body parking)

	Unit Charge		Total Charge	
	Narrow Body Aircraft	Wide Body Aircraft	Narrow Body Aircraft	Wide Body Aircraft
<b>Assumption</b>				
Weight (tonnage)	n/a	n/a	73	276
Parking Time (min)	n/a	n/a	45	135
<b>Current Charge - 2011/12 tariff</b>				
£ Time charge	3.38	3.38	10	30
£ Weight charge (per metric tonne)	0.053	0.053	12	132
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>22</b>	<b>162</b>
<b>Proposed</b>				
Free period (min)	n/a	n/a	30	90
Charge after free period (per 15 min)	14.0	33.6	n/a	n/a
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>14</b>	<b>101</b>
<b>Difference</b>	n/a	n/a	<b>8</b>	<b>61</b>
<b>Difference %</b>	n/a	n/a	<b>55%</b>	<b>61%</b>

This example is based on stand time (i.e. chocks on and chocks off)

**Example 2** (60 minutes Narrow Body parking and 195 Wide Body parking)

	Unit Charge		Total Charge	
	Narrow Body Aircraft	Wide Body Aircraft	Narrow Body Aircraft	Wide Body Aircraft
<b>Assumption</b>				
Weight (tonnage)	n/a	n/a	73	276
Parking Time (min)	n/a	n/a	60	195
<b>Current Charge - 2011/12 tariff</b>				
£ Time charge	3.38	3.38	14	44
£ Weight charge (per metric tonne)	0.053	0.053	15	190
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>29</b>	<b>234</b>
<b>Proposed</b>				
Free period (min)	n/a	n/a	30	90
Charge after free period (per 15 min)	14.0	33.6	n/a	n/a
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>28</b>	<b>235</b>
<b>Difference</b>	n/a	n/a	<b>1</b>	<b>-1</b>
<b>Difference %</b>	n/a	n/a	<b>4%</b>	<b>0%</b>

This example is based on stand time (i.e. chocks on and chocks off)

**Example 3** (90 minutes Narrow Body parking and 240 Wide Body parking)

	Unit Charge		Total Charge	
	Narrow Body Aircraft	Wide Body Aircraft	Narrow Body Aircraft	Wide Body Aircraft
<b>Assumption</b>				
Weight (tonnage)	n/a	n/a	73	276
Parking Time (min)	n/a	n/a	90	240
<b>Current Charge - 2011/12 tariff</b>				
£ Time charge	3.38	3.38	20	54
£ Weight charge (per metric tonne)	0.053	0.053	23	234
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>43</b>	<b>288</b>
<b>Proposed</b>				
Free period (min)	n/a	n/a	30	90
Charge after free period (per 15 min)	14.0	33.6	n/a	n/a
<b>£ Total charge</b>	<b>n/a</b>	<b>n/a</b>	<b>56</b>	<b>336</b>
<b>Difference</b>	n/a	n/a	<b>-13</b>	<b>-48</b>
<b>Difference %</b>	n/a	n/a	<b>-22%</b>	<b>-14%</b>

This example is based on stand time (i.e. chocks on and chocks off)

## Aircraft Classification

Narrow Bodied	Wide Bodied
100	332
318	333
319	343
320	346
321	380
733	744
738	763
73G	764
AT5	772
AT7	74Y
CR7	76B
E90	77A
E95	77W
ER3	
ER4	
F70	
M81	
75W	
752	

## Aircraft Weight

(Weights are an average for the listed aircraft type using Heathrow)

Narrow bodied Aircraft	Average LHR Tonnage
100	44,453
318	62,769
319	64,358
320	73,191
321	85,060
733	58,008
738	74,273
73G	67,933
AT5/7	21,629
CR7	37,717
E90/95	43,990
ER3/4	20,023
F70	37,995
M81	67,683
75W	114,739
752	107,110

Wide Bodied Aircraft	Average LHR Tonnage
332	213,800
333	230,824
343	277,949
346	362,653
380	546,531
744	394,626
763	159,373
764	204,117
772	280,061
74Y	403,697
76B	180,917
77A	276,473
77W	344,575

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