Civil Aviation Authority

Economic regulation at Heathrow from April 2014: Notice granting the licence

CAP 1151

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Executive Summary

1. This document gives notice under sections 15(5) and (7) of the Civil Aviation Act 2012 (the Act) that the CAA is granting a licence to Heathrow Airport Limited (the Licensee or HAL) in relation to London Heathrow Airport. The CAA is issuing this notice pursuant to its powers and duties in the Act. This document sets out the conditions included in the licence and the CAA's reasons for including those conditions.

HAL's licence

2. The licence consists of the following parts:

- Part A: Scope and Interpretation. This part of the licence provides details of the airport, the airport operator, and the airport area for which the licence is granted. It also specifies the date on which the licence comes into force, and clarifies points of interpretation in the licence.
- Part B: General Conditions (Payment of fees and licence revocation). This part requires HAL to pay to the CAA any charges that are set under a scheme made under section 11 of the Civil Aviation Act 1982 (the 1982 Act). It also sets out the circumstances under which the licence may be revoked.
- Part C: Price Control Conditions. This part governs HAL's price control for Q6, which is an RPI-X control that reduces HAL's passenger yield by 1.5% per year in real terms during Q6. It also contains a condition requiring HAL to secure its procurement of capital projects efficiently and economically, and a condition governing charges for cargo operators.
- Part D: Service Quality Conditions. This part gives effect to the Statement of Standards, Rebates and Bonuses which is included as a Schedule to the licence. It also includes a self-modification provision for agreed changes to the Schedule and a condition governing operational resilience.

- Part E: Financial Conditions. This part requires HAL to produce regulatory accounts. It also sets out a regulatory ringfence.
- Part F: Consultation Conditions. This part requires HAL to develop and agree with relevant parties protocols setting out how it will consult and take stakeholders' views into account.

Next steps

3. Between now and the coming into force of HAL's licence there are three steps.

   - February-March 2014: Following the publication of this notice, HAL and any provider of air transport services whose interests are materially affected by the CAA's decision have six weeks from the date of this notice to apply to the Competition Commission (CC)/CMA for permission to appeal the CAA’s decision. Applications are subject to the procedural requirements of Schedule 2 of the Act and the Airport Licence Condition Appeal Rules recently published by the CC. The Rules specify the information that must be included in any application. Applicants must submit both the required information in full and a version of it with any sensitive information excised. Copies of both the full and excised versions must also be sent to the CAA preferably at the same time as the application is made to the CC. As required by paragraph 1(4) of Schedule 2 to the Act, the CAA will publish the excised version of the application and send a copy to the persons listed in paragraph 1(5) of Schedule 2. It will aim to publish the application on its website no later than the working day after receipt. To assist in this process, the CAA would ask any applicant to submit an electronic version of its application to the CAA (in PDF format) at airportregulation@caa.co.uk.
   - 1 April 2014: The licence and the Q6 price control will come into force. If permission to appeal against any of the conditions in the licence is applied for and an application to suspend a condition is made to the CC/CMA within six weeks of the licence being granted, that condition is automatically suspended for 10 weeks from the date the licence was granted. The CC/CMA’s decision on the application must be taken before the end of that period.

- April 2014: The CC/CMA has ten weeks from the date of the licence grant (not from the receipt of the stakeholder's decision to lodge an appeal) to decide whether to give the stakeholder leave to present an appeal. The CC/CMA then has 24 weeks (again, from the date of the grant of the licence) to determine the appeal. The CC/CMA may grant itself an eight-week extension to its deadline or an indefinite extension to this deadline if there is a relevant appeal to the Competition Appeal Tribunal (CAT) on the market power determination.

CAA

February 2014

CHAPTER 1

Introduction

1.1 This introduction sets out:

- the notice which the CAA is publishing under section 15 of the Act;
- the steps before the licence comes into force;
- the process that has shaped the licence conditions;
- the statutory context to this process; and
- the structure of the remainder of the document.

Notice under section 15 of the Act

1.2 This document gives notice under sections 15(5) and (7) of the Act that the CAA is granting a licence to Heathrow Airport Limited in relation to the core area of London Heathrow Airport (Heathrow). The CAA is making this notice pursuant to its powers and duties in the Act. The majority of the provisions in Part 1 of the Act came into force on 6 April 2013 and will replace the framework for airport economic regulation under the Airports Act 1986 (AA86) that has governed all previous quinquennial reviews.

1.3 The airport area for which the licence would be granted is located at London Heathrow Airport and comprises:

- the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft at the airport (excluding the Northern Receipt Fuel Facility, the Southern Receipt Fuel Facility, the Sandringham Road Fuel Farm, the Perry Oaks Fuel Farm, the Airport Transfer Pipes and the Fuel Hydrant Systems);
- the passenger terminals; and
- the cargo processing areas.

1.4 The licence will come into force on 1 April 2014[1].

1.5 This document sets out the conditions included in the licence and the CAA's reasons for including those conditions. The CAA has already consulted extensively on the licence conditions and the supporting analysis in:

- its initial proposals in April 2013;
- a letter to stakeholders in May 2013;
- its final proposals in October 2013; and
- its notice of the proposed licence in January 2014.[2]

1.6 The CAA has taken into account representations from all stakeholders in those consultations in developing the licence conditions specified in this notice. During this process, stakeholders have provided extensive representations on the individual regulatory asset base (RAB)-based calculations and the CAA's price control policies. While new information may always come to light on these issues, for example as outturns become available or forecasts are updated, the CAA is mindful that this could create a never ending process. The CAA was also clear in its initial and final proposals and with stakeholders individually that this document would constitute the CAA's decision on economic regulation and the licence conditions.

1.7 On 10 January 2014, the CAA consulted under sections 15(1) and (3) on its proposal to grant a licence (the proposed licence or final view)[3]. The CAA received four representations[4]. This notice sets out how the CAA has taken account of those representations and gives reasons for any differences between the proposed licence and the licence set out in this notice. In accordance with section 15(6), the CAA does not consider any of these differences to be significant.

1 A licence may not come into force before 6 weeks after the notice of the decision to grant the licence was published.

2 All consultations, responses and associated documentation can be found on the CAA website at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15152

3 The January notice can be found at: http://www.caa.co.uk/cap1138

4 HAL, the Heathrow Airline Community, British Airways (BA) and Virgin Atlantic Airways (Virgin).

1.8 On 10 January 2014, the CAA made an operator determination[5] that HAL does not have overall responsibility for the management of the fuel facilities within the airport area known as the Northern Receipt Fuel Facility, the Southern Receipt Fuel Facility, the Sandringham Road Fuel Farm, the Perry Oaks Fuel Farm, the Airport Transfer Pipes and the Fuel Hydrant Systems.

1.9 In January 2014, the CAA also published its market power determination in relation to Heathrow.[6] Under the market power determination, the CAA has concluded that the market power test is met by HAL in relation to the core area of Heathrow and so HAL will require a licence.

1.10 This notice sets out the CAA's reasons for the licence conditions. In coming to its decision on the licence conditions, the CAA has taken into account the views of stakeholders based on their submissions to the CAA. The CAA has endeavoured to check the accuracy of all these attributed statements. Should any stakeholder consider that the attributed statement does not reflect their previous submissions to the CAA, it is open to the stakeholder to raise this with the CAA.

1.11 References in this document to 'the airlines' mean views submitted to the CAA by the representative body for airlines for the purposes of Constructive Engagement (CE). In the case of Heathrow, it means the London Airline Consultative Committee (LACC). The CAA acknowledges that the views of individual airlines may differ on particular issues. The responses of some airlines did not comment on individual issues, but endorsed the response of the LACC, referred to in this document by its request as the Heathrow Airline Community. The CAA has taken note of such endorsements but has not noted them explicitly in this document.

1.12 This is a redacted version of the CAA's notice. Some information has been removed at the request of HAL and the airlines on the basis that it is commercially confidential. Redactions are clearly marked. In accepting redactions for the purposes of this document, the CAA reserves its right to revisit its position for subsequent publications.

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5 This can be found at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15151

6 Available from the CAA's website: www.caa.co.uk

Next steps

1.13 There are a number of steps before HAL's licence comes into force on 1 April 2014.

- 13 February 2014: publication of this notice granting the licence with a copy of the licence that will come into force on 1 April 2014.
- February and March 2014: following the publication of this grant notice and a copy of the licence under section 15(5) of the Act, HAL and any provider of air transport services whose interests are materially affected by the CAA's decision have six weeks from the date of this notice to apply to the Competition Commission (CC)/ CMA[7] for permission to appeal the CAA's decision. Applications are subject to the procedural requirements of Schedule 2 of the Act and the Airport Licence Condition Appeal Rules recently published by the CC. The Rules specify the information that must be included in any application. Applicants must submit both the required information in full and a version of it with any sensitive information excised. Copies of both the full and excised versions must also be sent to the CAA preferably at the same time as the application is made to the CC. As required by paragraph 1(4) of Schedule 2 to the Act, the CAA will publish the excised version of the application and send a copy to the persons listed in paragraph 1(5) of Schedule 2. It will aim to publish the application on its website no later than the working day after receipt. To assist in this process, the CAA would ask any applicant to submit an electronic version of its application to the CAA (in PDF format) at airportregulation@caa.co.uk.
- 1 April 2014: the licence and, in the absence of any application to seek permission to appeal, the Q6 price control will come into force. If permission to appeal is sought and an application is made to the CC/CMA to suspend a condition within six weeks of

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[7] The Competition and Markets Authority will take over the functions of the Competition Commission along with the competition and certain consumer functions of the Office of Fair Trading (OFT). The CMA is currently in operation as a shadow body but will take over any existing CC casework when it becomes fully operational on 1 April 2014.

the licence being granted, that condition is automatically suspended for 10 weeks from the date the licence was published. The CMA's decision on the application for permission to appeal and suspend the condition beyond that 10-week period must be taken before the end of that period.

1.14 The CMA has 10 weeks from the date of the publication of this grant notice (not from the receipt of the stakeholder's decision to seek permission to appeal) to decide whether to give the stakeholder leave to appeal. The CMA then has 24 weeks (again, from the date of publication of the grant notice) to determine the appeal. The CMA may grant itself an eight-week extension to this deadline.

1.15 Interested parties can also appeal the CAA's determination on whether the market power test (MPT) is met to the CAT within 60 days of the publication of the CAA's reasons for the determination. The CMA may extend the period for considering an appeal on licence conditions if there is an appeal to the CAT which it considers relevant to the appeal on licence conditions.

The process that has shaped the licence conditions

1.16 The licence conditions have been informed by a number of factors.

- Previous significant CAA consultations in July 2011 and May 2012 designed to establish the key issues of concern to stakeholders and explore the interpretation of the CAA's new duties under the Act.[8]
- A process of CE between April 2012 and December 2012, overseen by the CAA, whereby HAL and the airlines discussed the main building blocks that could be used to calculate future charges. This process culminated in a report to the CAA approved by the Joint Steering Group.

8 CAA, July 2011, Setting the Scene for Q6, http://www.caa.co.uk/default.aspx?catid=2162&pageid=12352 and CAA, May 2012, Q6 Policy Update, http://www.caa.co.uk/docs/5/Q6PolicyUpdate.pdf

- An initial business plan (IBP) (April 2012) and full business plan (FBP) (January 2013) from HAL setting out its view on the main building blocks that could be used to calculate future charges in the period April 2014 to March 2019.
- The CAA's initial proposals for HAL, published in April 2013, in which it proposed a RAB-based price control,[9] and written representations from stakeholders in response to the CAA's initial proposals.[10]
- Further submissions from the airlines and HAL in response to a CAA request to reach agreement on key issues on the service quality and capital expenditure regimes.
- A stakeholder session with the CAA Board in July 2013 at which both HAL and representatives from the Heathrow airline community explained their respective positions on economic regulation at Heathrow.[11]
- A revised business plan (RBP) in June 2013 and an alternative business plan (ABP) in July 2013, developed without consultation with the airlines.
- A consultation in October 2013 on the CAA’s final proposals, including proposed licence conditions[12] and written representations in response to the CAA's final proposals and separate representations in response to developments in October and November 2013.
- A consultation in January 2014 on the CAA's proposed licence and the notice of its proposal to grant the licence to HAL[13] and written representations to that notice.

9 CAA, April 2013, CAP 1029: Economic Regulation at Heathrow from April 2014: Initial Proposals, http://www.caa.co.uk/cap1027

10 The responses to the initial proposals are published at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=14929

11 CAA, July 2013, Minutes from Board stakeholder sessions for Heathrow, http://www.caa.co.uk/docs/78/CAA%20Board%20&%20Heathrow%20Meeting04072013.pdf

12 CAA, October 2013, Economic regulation of Heathrow Airport Limited after April 2014: the CAA's final proposals, http://www.caa.co.uk/cap1103

13 CAA, January 2014, Economic regulation of Heathrow from April 2014: Notice of the proposed licence, http://www.caa.co.uk/cap1138

- Several independent studies commissioned by the CAA on the efficiency and appropriateness of HAL's business plan projections (see figure 1.1). In a number of cases, the CAA commissioned updates to these reports to address the points raised by stakeholders in their responses to the initial proposals.
- Advice from the CAA's Consumer Panel.[14]

Figure 1.1: Independent consultancy studies commissioned by the CAA

Topic	Consultant
Cost of capital	PricewaterhouseCoopers
Scope for future efficiency gains at Heathrow, Gatwick and Stansted	Cambridge Economic Policy Associates
Q6 capex review	Alan Stratford Associates
Assessment of maintenance and renewal costs at Heathrow and Gatwick	Steer Davies Gleave
Assessment of commercial revenues at Heathrow and Gatwick	Steer Davies Gleave
Other operating expenditure at Heathrow and Gatwick	Steer Davies Gleave
Central support costs	Helios
Comparing and capping airport charges at regulated airports	Leigh Fisher
Employment cost study at Heathrow, Gatwick and Stansted	IDS Thomson Reuters
Q5 capex and consultation review, Heathrow	Alan Stratford Associates
Review of distribution of economic rents	SLG economics
Review of pension costs for Heathrow Airport	Government Actuary Department

Source: CAA
Note: These consultancy studies have been published on the CAA's website.

1.17 The CAA is also under a duty, by virtue of section 73(2A) of the Regulatory Enforcement and Sanctions Act 2008, not to impose or maintain unnecessary burdens while performing its regulatory functions under Chapter 1 of Part 1 of the Act.

[14] The minutes of the CAA Consumer Panel meetings are published at: http://www.caa.co.uk/default.aspx?catid=2488&pagetype=90&pageid=14123

Statutory context to this process

Outline of the CAA's statutory duties

1.18 The Act creates a new framework to govern the application of economic regulation to the airport sector. In essence, it modernises the previous arrangements and brings the CAA's duties and powers into line with regulatory best practice. This includes the CAA having a single primary duty focused on the interests of passengers and those with rights in cargo. The scope of this duty concerns the range, availability, continuity, cost and quality of airport operation services[15] and the CAA must carry out its functions, where appropriate, in a manner that will promote competition in the provision of airport operation services. The CAA must also have regard to a range of matters (figure 1.2). The Act also enables the CAA to regulate through a flexible licensing approach.

Figure 1.2: the CAA's duties under the Act

S1	CAA's general duty
(1)	The CAA must carry out its functions...in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.
(2)	The CAA must do so, where appropriate, by carrying out the functions in a manner which it considers will promote competition in the provision of airport operation services.
(3)	In performing its duties under subsections (1) and (2) the CAA must have regard to: (a) the need to secure that each holder of a licence...is able to finance its provision of airport operation services in the area for which the licence is granted, (b) the need to secure that all reasonable demands for airport operation services are met, (c) the need to promote economy and efficiency on the part of each holder of a licence...in its provision of airport operation services at the airport to which the licence relates, (d) the need to secure that each holder of a licence...is able to take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport to which the licence relates, facilities used or intended to be used in connection with that airport…and aircraft using that airport, (e) any guidance issued to the CAA by the Secretary of State...,

15 Airport operation services are further defined in the Act at section 68.

S1	CAA's general duty
	(f) any international obligation of the United Kingdom notified to the CAA by the Secretary of State..., and (g) the principles in subsection (4).
(4)	Those principles are that - (a) regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and (b) regulatory activities should be targeted only at cases in which action is needed.
S104	Regulatory burdens
	The CAA also has a duty not to impose or maintain unnecessary burdens while performing its regulatory functions under Chapter 1 of Part 1 of the Act.

Source: The Act

Note: In performing its duties under sections 1(1) and 1(2) of the Act the CAA must have regard to any international obligations of the UK notified to it by the Secretary of State. On 12 April 2013 the CAA was notified of the following international obligations, as they affect charges on airlines: Article 15 of the Chicago Convention; air services agreements in force between the European Union (EU) and its member states and any third country or countries; and air services agreements in force between the UK and any third country or countries. These same obligations applied to the CAA in previous price control reviews conducted under the AA86.

Who should be regulated?

1.19 The Act prohibits an operator of a dominant airport area at a dominant airport from charging for airport operation services unless it has a licence granted by the CAA. An airport area is dominant if the CAA determines (and publishes) that the MPT is met in relation to the area. The MPT is met if Tests A to C are met by or in relation to the operator of the airport area:

- Test A: the relevant operator has, or is likely to acquire, substantial market power (SMP) in a market, either alone or taken with such other persons as the CAA considers appropriate;
- Test B: that competition law does not provide sufficient protection against the risk that the relevant operator may engage in conduct that amounts to an abuse of that SMP; and
- Test C: that, for users of air transport services, the benefits of regulating the relevant operator by means of a licence are likely to outweigh the adverse effects.

1.20 In January 2014, the CAA published its determination on the MPT in relation to Heathrow.[16] The CAA determined that the MPT is met in relation to the core area[17] (as defined in section 5(4) of the Act) of London Heathrow Airport (Heathrow) and this is likely to endure over the period 2014 to 2019.

Furthering the CAA's statutory duties

1.21 The CAA considers that the decisions contained in this document are best calculated to further its statutory duties in the Act. The CAA's primary duty is to further the interests of users (passengers and owners of air freight) regarding the range, availability, continuity, cost and quality of air operation services, where necessary, by promoting competition. The CAA must also have regard to a range of matters and regulatory principles.

1.22 In assessing users' interests, the CAA has taken account of airlines' views (among others), recognising that airlines' interests often align with those of users. However, this is not always the case, and the CAA has also reviewed a wide range of direct research about users' views and preferences. The CAA has also been advised by its Consumer Panel. More information on the CAA's consumer research is on the CAA's website.[18]

1.23 In assessing users' interests, the CAA must balance the interests of present users in lower airport charges with the interests of future users in HAL's ability to continue to be able to invest in modern infrastructure and services in a timely manner. Present and future users may often be the same people. Under section 1(5) of the Act, if there is a potential conflict between the interests of different classes of users or between their interests in the various different parameters set out in section 1(1), the CAA is directed to carry out its functions in a way that will further such interests as it thinks best.

1.24 The level of prices contained in the licence and reproduced in the licence will enable HAL to build on its improvements in the passenger experience achieved during Q5, while delivering an affordable service to passengers, airlines and cargo owners. In particular, the CAA's

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16 Available at www.caa.co.uk

17 The core area is defined in section 5(4) of the Act as the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft at the airport, passenger terminals and the cargo processing areas.

18 http://www.caa.co.uk/default.aspx?catid=1350&pagetype=90&pageid=14745

decision is:

- Pro-investment. The RAB and RPI-X form of control continue the stable regime of economic regulation at the airport, which provides stability for investors and users alike. The form of regulation adopted for HAL provides an unusually benign climate for investment compared to companies in competitive markets. For instance, the RAB gives a high degree of confidence that investments can be remunerated, subject to efficient operations; and, under the CAA's approach, investments are remunerated from when they are made, rather than from when they begin to operate.

- Pro-growth. Although the CAA has no statutory duty to promote economic growth, it is mindful of the importance of efficient transport infrastructure for the economy as a whole. The best contribution that the CAA as economic regulator can make to economic recovery is to promote competition and to incentivise the operator of the UK's largest airport to operate efficiently and provide value-for-money services of high quality. This will provide passengers with a sound platform against which airlines can provide the best range of routes, and can invest in fleet renewal to reduce emissions and noise. The pace of progress on delivery of HAL's Masterplan implied by the CAA's proposals reflects the importance of ensuring that HAL's charges are affordable. This will enable it to deliver on its mission statement, agreed with the airlines, to be "the UK's direct connection to the world and Europe's hub of choice by making every journey better".

- Fair to users as well as shareholders. The CAA has taken great care to ensure that the proposed price control can provide a fair return on the RAB and on future investments. Its proposals embody considerable stability compared to the last decade, during which HAL has invested more than £10 billion. Where the WACC has declined compared to Q5, this reflects observable reductions in external costs (debt and equity market conditions and reductions in taxation). The CAA sees no merit in arguments that the allowed WACC is insufficient to support the capital plan envisaged in the price control.

- Challenging but fair. The control will incentivise HAL to reduce its operating expenditure, while enabling it to recover sufficient funds to pay its staff and suppliers. The CAA considers that its decision on the price control is consistent with continuous improvements in quality of service and operational resilience. The onus for efficiency is placed on the company and its shareholders, rather than expecting users to pay for inefficiency (or airlines, in a way that could affect their investment plans and route development).
- Enabling high-quality services. The capital expenditure forecast and the service quality regulation will ensure that HAL continues to improve its quality of service and operational resilience. The service quality regime will build on the achievements of the successful Q5 framework to incentivise HAL to improve both passenger- and airline-facing performance.

1.25 The licence will be the key document in enforcing the price control, and other components of the regulatory framework. It must be operational by 1 April 2014, containing all the main provisions for the price control and service quality. The CAA is required to ensure that its process in developing the licence is transparent, accountable and consistent, and the licence obligations themselves must be proportionate, consistent and targeted where necessary.

1.26 In the light of its better regulation duties, the CAA considers that it is not appropriate to aim to cover all possible issues in the initial licence. As the licence can be modified, this new regime can adapt to address further issues if this proves to be justified over time. The CAA has highlighted some issues for further consideration during 2014, once the initial licence is in place.

1.27 As an airport area operated by HAL meets the MPT and it is a dominant area at a dominant airport, the CAA may include in a licence such conditions that it thinks are needed to prevent the risk of abuse of market power as well as any other condition that it thinks are necessary and expedient[19] to secure its statutory duties under section 1 of the Act, to further the interests of users of air transport services and, where appropriate, promote competition in the provision of airport operation services.

19 Section 18 of the Act.

1.28 A licence must specify the airport area and the airport for which it is granted and it must include any price control conditions that the CAA decides are required, as well as provisions for revoking the licence.[20] In addition, the licence may include obligations requiring payment of fees to the CAA.[21] Licence conditions can also include provisions relating to activities carried on outside the airport area for which the licence is granted.

1.29 In January 2012, at the request of the Secretary of State to assist parliamentary scrutiny of the Act, the CAA published an indicative licence setting out the types of licence conditions that it might include. The CAA has subsequently consulted on potential licence conditions as part of the initial proposals and in the final proposals. The conditions the CAA considers are required in the HAL licence are discussed in Chapter 2 and set out in Chapter 3.

1.30 HAL and the airlines have rights to appeal the CAA's final decision on the inclusion, or absence, of licence conditions to the CMA subject to certain qualifying criteria being met.[22] In the event an appeal is made that meets the qualifying criteria, the CAA's decision will stand until the CMA determines the appeal – unless it has granted interim relief or the appeal relates to specific financial arrangements. While CMA appeals should normally be determined within 24 weeks, this can be extended if a relevant appeal to the CAT is ongoing.[23]

Structure of the remainder of this document

1.31 Following this Introduction, the remainder of this decision is structured as follows:

- Chapter 2: Reasons for the Licence Conditions
- Chapter 3: The Licence.

1.32 There are 12 appendices:

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20 Sections 17 and 19 of the Act.

21 Section 20 of the Act.

22 As set out in section 24 of the Act. The appeal body is currently the CC but will be the CMA from April 2014.

23 Details of the CMA appeal process are set out in Schedule 2 to the Act.

- Appendix A: Form of Regulation
- Appendix B: Traffic Forecasts
- Appendix C: Capital Expenditure
- Appendix D: Capital Efficiency
- Appendix E: Operating Expenditure
- Appendix F: Commercial Revenues
- Appendix G: Non-regulated Charges
- Appendix H: Q6 RAB
- Appendix I: WACC and Financeability
- Appendix J: Service Quality Regulation.
- Appendix K: Rolling forward the RAB.
- Appendix L: Glossary

1.33 In addition, the CAA is publishing a Technical Appendix on the WACC simultaneously with this licence grant.[24]

1.34 The CAA received a number of representations in response to its proposed licence. It has carefully read and considered all the points made in each representation. This document contains summaries of, and answers to, many of those points. Respondents should be assured that each point raised has been carefully considered, whether or not it is addressed specifically in this document.

[24] Available from www.caa.co.uk

CHAPTER 2

Reasons for the Licence Conditions

2.1 This chapter sets out the conditions included in HAL's licence and the CAA's reasons for including those conditions. The licence is set out in Chapter 3 of this document. It consists of the following parts:

- Part A: Scope and Interpretation
- Part B: General conditions (payment of fees and licence revocation)
- Part C: Price control conditions
- Part D: Service quality conditions
- Part E: Financial conditions
- Part F: Consultation conditions

2.2 In developing the licence conditions, the CAA has consulted stakeholders extensively, particularly in April 2013, May 2013, October 2013 and January 2014,[25] and has taken into account any representations made to those consultations. Where appropriate, the CAA has also taken into account responses to other relevant consultations[26] for consistency. The CAA received four[27] responses to the notice on the proposed licence that it published in January 2014.

Part A: Scope and Interpretation

The licence condition

2.3 This part of the licence provides details of the airport, the airport operator, and the airport area for which the licence is granted. It also

25 All consultations on the proposed licence conditions and responses can be found at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15151

26 Such as responses to the final proposals for Gatwick Airport Limited (GAL) which can be found at http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15152

27 HAL, British Airways, Heathrow Airline Community (AOC and LACC), and Virgin Atlantic Airways.

specifies that the licence comes into force on 1 April 2014, as well as details on interpreting the licence. The airport is London Heathrow Airport. The airport area included in the licence consists of:

- the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft at the airport excluding the Northern Receipt Fuel Facility, the Southern Receipt Fuel Facility, the Sandringham Road Fuel Farm, the Perry Oaks Fuel Farm, the Airport Transfer Pipes and the Fuel Hydrant Systems;
- the passenger terminals; and
- the cargo processing areas.

Reasons for the licence condition

2.4 The CAA is required under section 17 of the Act to include the details of the airport and airport area and these details are not licence conditions. All other details on interpreting the licence are included to provide clarity and certainty.

2.5 In proposing the airport area for the licence, the CAA considered that, in line with its duties under section 1 of the Act to carry out its functions in a targeted and proportionate manner, the airport area should be linked to the scope of the relevant market and limited to the area in which HAL is found to have SMP. The CAA therefore took the airport area considered in the 'minded to' market power assessment as its starting point. This found that HAL has SMP in the market for airport services for full service carriers and associated feeder traffic and that these were delivered from the core area of the airport.[28] Given these findings, the CAA proposed to include in the airport area covered by the licence, all those parts of the core area of the airport except for any specific areas where the CAA has made an operator determination under section 10. An operator determination assesses whether an operator has overall responsibility for the management of an area based on the extent of control the operator has over the type, quality and price of services offered in that area, development of the area and access to that area.

[28] This is defined in section 5(4) of the Act as the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft at the airport, passenger terminals and the cargo processing areas.

2.6 In response to representations from HAL, the CAA reviewed the terms of the leases for the fuel facilities to determine whether the area should, or should not be included in the airport area covered by the licence. The CAA's initial findings in the final proposals were that HAL does not have overall responsibility for the management of the area and the CAA therefore proposed to exclude the fuel facilities from the airport area covered by the licence.[29]

2.7 In the proposed licence, the CAA explained that it had published its market power determination (MPD) which confirms the 'minded to' position with regards to the core area and had made an operator determination[30] that HAL is not the operator of the fuel facilities as it does not have overall responsibility for the management of that area taking into account the matters set out in section 9(4) of the Act. The CAA therefore included in the airport area covered by the licence, all of the core area of the airport except the fuel facilities.

2.8 Stakeholders had made representations following the final proposals questioning how this decision would affect fuel resilience at the airport, particularly in relation to the provision of additional fuel facilities. HAL considered that, if used appropriately, additional fuel storage could help improve the resilience of fuel supply, but the development of such infrastructure was removed from its Q6 plans as it had been unable to negotiate reasonable commercial terms with the operator and developer of the proposed fuel assets and it would therefore have been premature to commit to the delivery of enabling works. It also noted that existing fuel storage infrastructure had rarely been used to full capacity[31] and it therefore does not follow that new infrastructure will be filled to capacity.

2.9 British Airways (BA) considered that, as fuel provision is a critical function to an airport's efficient and resilient running, and a key piece of national infrastructure, the CAA must recognise HAL's obligation as a responsible airport operator in facilitating and ensuring a robust supply of fuel. Furthermore, given the focus that the CAA, its

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29 http://www.caa.co.uk/docs/33/CAP%201103.pdf. See page 216 for further information.

30 This can be found at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15151

31 For example, HAL cited that existing storage had only been filled to the agreed target overnight stock holding 47% of the time over the last 12 months.

Consumer Panel and the government have placed on improving operational resilience and the fact that Heathrow is currently operating at less than half of the International Air Transport Association (IATA) recommended standard of three days' minimum fuel, BA considered that the CAA should include a licence condition requiring HAL to positively engage and support airlines in facilitating developments in fuel capacity. BA supported a RAB-based capital investment over any capital investment by the fuel companies and would continue to actively participate to progress this debate.

2.10 The Heathrow Airline Community welcomed the CAA's recognition that a robust fuel infrastructure at Heathrow is critical for operational resilience and highlighted the urgent need to resolve fuel storage issues with reference to December 2012[32] and July 2013 where fuel stocks became dangerously low.[33] Therefore it considered that the CAA should establish a new service quality measure for fuel storage requiring HAL to maintain a minimum of 3.5 days of fuel supply.

2.11 The Heathrow Airline Community welcomed the CAA's insistence that all parties should meet and agree a mutually acceptable way forward in developing fuel infrastructure. It considered that HAL should make the total investment required, using Heathrow Airport Fuel Company (HAFCO) as the design authority and designated supplier to provide a facility to specification. It also suggested that active facilitation may be required and this will be requested from the CAA if it appeared that any party is blocking the process.

2.12 In the proposed licence, the CAA noted stakeholders' comments and considered the wider implications of the airport area in more detail. It said that, whilst the current fuel facilities will not be included in the licensed airport area, it noted the important role that HAL has in leading on coordination and communication between itself and relevant parties[34] to ensure a more robust response to disruption. As part of this, the CAA considered that the effect on the airport of

32 In December 2012 reserves fell to only 12 million litres against a next day forecast demand of 20 million litres before additional supplies were secured.

33 On both of these occasions the fuel contingency plan was activated with the discussion between HAL, the fuel company (HAFCO) and the airline community almost resulting in the rationing of fuel supply which would have had a serious impact on the planned flight schedule.

34 The airlines and groundhandlers (including fuel facility operators).

disruption to fuel supply can be mitigated through the licence, in the plans HAL must develop under the operational resilience licence condition. As set out in the section on operational resilience in paragraphs 2.64 and 2.91 of the proposed licence, the CAA said it does not expect to hold HAL to account for activities outside its control, such as the supply of the fuel itself, but HAL, in collaboration with relevant parties, should manage the direct and indirect impact of disruption to fuel supply on its own activities. The CAA considered that, as disruption can best be managed effectively through collaboration by all parties with clear leadership from the central hub organisation, HAL is well placed to plan for the effect that disruption to fuel supply could have on its own services.

2.13 The CAA is working with HAL and other relevant parties on long-term solutions to fuel resilience and will continue to use its influence and, where necessary, its powers to ensure that the interests of passengers and cargo owners are protected. Although the fuel facilities are outside the licensed airport area, the Act allows the CAA to intervene in passengers' interests. Under section 18 of the Act, the CAA may include such conditions as it considers necessary or expedient having regard to its duties under section 1 of the Act, as well as conditions it considers necessary or expedient to guard against the risk of abuse of SMP. Under section 21(1)(f) of the Act, it may also include conditions containing provisions relating to activities carried on outside the airport area for which the licence is granted. These give the CAA the power to go wider than the relevant market and the airport area when including conditions in the licence.

Representations on the proposed licence

2.14 The Heathrow Airline Community continued to hold the view that the Act indicates that the fuel facilities should be included in the airport area of HAL. The Heathrow Airline Community also continued to consider that fuel provision is an important dimension of operational resilience at Heathrow and HAL controls access to the facilities as the infrastructure is on HAL's land. In addition, the facilities provided for fuel are an integral part of the infrastructure required for 'servicing aircraft' as defined in section 5(4) of the Act. Furthermore, it also considered that it was instructive of this debate that HAL has, in its Conditions of Use for 2014, adopted a new geographic definition of the airport area which includes the fuel facilities at Heathrow, and was therefore disappointed that the CAA had not included the fuel facilities in the airport area.

2.15 Notwithstanding the CAA's position on the airport area, the Heathrow Airline Community welcomed the CAA's recognition of the critical role HAL plays in connection with fuel supply and the development of operational resilience, and the CAA's clear statement that the current level of resilience is unacceptably low compared with international norms. It also particularly welcomed the indication by the CAA that under section 21(1)(f) of the Act the CAA may also include conditions containing provisions relating to activities carried on outside the airport area for which the licence is granted.

2.16 The Heathrow Airline Community also welcomed the CAA's indication that it will continue to use its influence and, where necessary, its powers to ensure the interests of passengers are protected. The Heathrow Airline Community remained committed to pursuing the interests of passengers through increasing the fuel supply resilience of Heathrow and therefore welcomed the inclusion of the £130 million in the capital plan for the development of fuel infrastructure and looks forward to working with the CAA and HAL on the development of this infrastructure. Further information on the capital programme can be found in Appendix C.

2.17 The Heathrow Airline Community noted that it would welcome the reopening of commercial discussions between HAL and HAFCO with respect to the resolution of liability issues and rapid progress towards concluding a commercial agreement. The recognition by the CAA that a full capital allowance of £130 million implies that the funding allocation will not impose any financial constraints and mitigates the risk of HAL and HAFCO being unable to reach commercial terms. Continuous involvement by the CAA would be welcomed as a facilitator of progress, together with recognition that the interim recommendation from the Airports Commission regarding options for a third runway at Heathrow may have a bearing on the optimal location of new storage facilities.

2.18 BA was fully supportive of the Heathrow Airline Community's position on the investment required in the fuel supply at Heathrow. It considered that a robust fuel infrastructure is crucial for BA's operational resilience and it considered the current level of resilience at Heathrow to be unacceptable. It also noted that any interruption to the fuel supply could cripple its operation and fully supported the CAA's assertion that a full capital allowance of £130 million is justified and appropriate.

2.19 HAL noted that condition A1.3(a) as drafted in the proposed licence contained ambiguity in relation to the treatment of the land in which the Fuel Hydrant System and Airport Transfer Pipes were located. For clarity these assets should be based on the definition in existing lease arrangements. Condition A1.3(a) should be amended or a definition added to condition A3.1 to make this point clear.

2.20 HAL also noted that the licence contained several references to charges. Condition A1.4 authorises HAL to require a person to pay a relevant charge. Condition A3.1(a) defines airport charges as having the meaning assigned to it by Regulation 3(1) of the Airport Charges Regulation 2011 (No 2491), namely charges levied on operators of aircraft in connection with the landing, parking or taking off of aircraft at the airport (including charges that are to any extent determined by reference to the number of passengers on board the aircraft).

2.21 HAL noted that the Condition A3.1(a) definition, if having the meaning assigned to it by Regulation 3(1) of the Airport Charges Regulation 2011 (No 2491), specifically excludes people with reduced mobility (PRM) and noise control scheme charges from the definition of airport charges which when applied to the operation of condition C1.1 would see those charges effectively excluded from the price control. This is a departure from the previous price control arrangements and the CAA should clarify the relationship between these references to charges and how each is individually defined such that PRM and noise charges are covered.

CAA's response

2.22 The status of the fuel facilities in relation to the licence has already been decided in the operator determination. The CAA notes HAL's comments about the land in which the Hydrant Systems and Transfer Pipes sit. The airport area relates to “the land, buildings and structures” used for the purposes mentioned. For clarity, the CAA considers that the hydrant systems and transfer pipes are considered “structures” and the operator determination does not relate to the land under which they sit; the CAA's operator determination has confirmed that HAL is the operator of the airfield, taxiways, parking areas and stands etc. under which the structures sit.

2.23 The CAA notes the Heathrow Airline Community's comments on fuel resilience and reiterates its view that fuel resilience is an important element in the efficient operation of the airport (see Appendix C for further details). Under this licence, HAL has a responsibility to secure the availability and continuity of airport operation services at the airport, particularly in times of disruption, including developing resilience plans and collaborating with its stakeholders to achieve this. It is up to HAL to decide how it will meet its obligations in this area but the CAA will continue to work with all parties to resolve the issues around fuel resilience. If consensus cannot be reached, the CAA will, if necessary, use its powers to either enforce or modify the licence as appropriate to resolve any stalemate.

2.24 The CAA notes that the definition of airport charges was set out in the price control condition (Condition C3) in the licence that the CAA consulted on in its final proposals. The CAA moved the definition from Condition C3 to Part A of the licence as the term is also used in Condition C4 (charges for cargo only operators) and in Schedule 1 to the licence (the service quality rebates and bonuses scheme). The CAA considers that the definition is correct as neither PRM charges nor noise control scheme charges have previously been included in the price control and it was not the CAA's intention that they would be in the Q6 price control. PRM charges are classified as an ORC so the associated costs and income were taken into account when setting airport charges under the single till, in the same way as with other activities at the airport such as retail, car parking and property etc.

Part B: General Conditions

Payment of fees

The licence condition

2.25 The licence condition requires HAL to pay to the CAA any charges that are set under a scheme made under section 11 of the Civil Aviation Act 1982 (the 1982 Act). HAL must pay these charges from the date on which the licence comes into force. Payment of fees is enforceable using civil sanctions as well as the enforcement powers in the Act.

Under the 1982 Act, the CAA has an obligation, before making a charging scheme, to consult persons affected by the scheme and the Secretary of State.

Reasons for the licence condition

2.26 The Act allows the CAA to require the licence holder to pay charges to the CAA in respect of its functions under Chapter 1 of the Act. These charges are required to enable the CAA to finance those functions. The CAA has general powers to determine charges under a scheme or regulations made under section 11 of the 1982 Act. The CAA has not received any evidence through the consultation process that a scheme of charges under the 1982 Act would not be appropriate and it therefore proposed to continue to rely on that scheme.

2.27 The CAA noted in the proposed licence that it is consulting separately on its scheme of charges from 1 April 2014, including charges to be paid by holders of a licence issued under the Act. The consultation closed on 13 February 2014 and the CAA will publish its decision on charges during March 2014.

Representations on the proposed licence

2.28 There were no representations on this condition.

CAA's response

2.29 The CAA has included the condition on payment of fees as consulted on in the proposed licence with no further changes.

Licence revocation

The licence condition

2.30 The licence condition specifies that the grounds on which the CAA can revoke HAL's licence are:

- where the licence is no longer required, including:
  - the Licensee requests or agrees to revocation;
  - the Licensee is no longer the operator of all of the airport area, or
  - either the airport and/or airport area is no longer dominant; or
- where the Licensee fails to comply with an enforcement order[35]

[35] Within the meaning of section 33 of the Act, or an urgent enforcement order within the

or pay a penalty[36] (following any appeal proceedings under the Act and allowing at least 3 months for the Licensee to comply before starting revocation proceedings under section 48 of the Act).

Reasons for the condition

2.31 The CAA is required under section 17(4) of the Act to include provisions about the circumstances in which the licence may be revoked. The licence is issued in perpetuity so provisions are needed to revoke it if it is no longer required, for example because the airport or the airport area is no longer considered to be dominant.

2.32 In the proposed licence, the CAA reiterated the comments it made in the final proposals that it considers licence revocation to be a serious matter as the prohibition on charging in section 3 of the Act means it would not be lawful for HAL to charge for any airport operation services if its licence was revoked. In all likelihood, this means that HAL would have to cease operations.

2.33 However, the CAA considered that it should have the ability to revoke the licence if the behaviour of the licensee with regards to its regulatory obligations is such that the CAA no longer considers it is fit to hold the licence. This should be treated as the ultimate sanction for a licence breach by a regulated company and should be used only as a last resort when all other channels have been exhausted. Other than in extreme circumstances, the CAA does not consider that revocation as a sanction is likely to be in the best interests of passengers and cargo owners. Checks built into both the Act and the licence give several opportunities for HAL to correct any failures and HAL is able to appeal the CAA's decision at each stage. The CAA therefore included the condition on revocation as consulted on in the final proposals with no further changes.

Representations on the proposed licence

2.34 There were no representations on this condition.

CAA's response

2.35 The CAA has included the condition on revocation as consulted on in

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meaning of section 35 and 36 of the Act.

36 Within the meaning of sections 39, 40, 51 or 52 of the Act.

the proposed licence with no further changes.

Part C: Price control conditions

Price Control

The licence condition

2.36 The licence condition governs HAL's price control for Q6 and is in many respects similar to HAL's price control in Q1 to Q5. The substantive changes are:

- the inclusion of a BR factor to pass the difference between forecast and outturn rates revaluation costs partially through to customers;
- the S factor has been made symmetrical, including unanticipated cost reductions as well as cost increases;
- the arrangements for the core and development capex mechanisms. The CAA has designed these to ensure that HAL will be remunerated for investment undertaken. However, it would not recover a return on investment which is anticipated at the price control, but which it did not then undertake.

Reasons for the licence condition

2.37 The price control condition is largely based on conditions included in previous price controls for HAL (Q1 to Q5) under earlier regulatory regimes, following a RAB-based structure. The principle of the condition is that, in setting charges in respect of relevant air transport services each year, HAL must ensure that its total revenue from those charges, divided by the number of passengers using the airport, does not exceed the maximum revenue yield per passenger. The maximum revenue yield calculation for the first year of Q6 includes a number of elements:

- a fixed per passenger yield;
- a bonus factor based on HAL's performance in the previous year;
- a cumulative development capex adjustment;
- a capital 'trigger' factor;

- the number of passengers using the airport; and
- a passenger correction factor.

2.38 In each subsequent year of Q6, the maximum revenue yield is calculated using:

- the revenue yield per passenger in the previous year, adjusted for RPI and any allowable increase in security costs per passenger arising as a result of changes to security standards;
- a bonus factor based on HAL's performance two years previously, adjusted for RPI;
- a cumulative development capex adjustment.

2.39 Further details on the features of the licence condition, including more details on the reasons for the condition, are set out in the relevant Appendices to this document.

2.40 In its response to the final proposals, HAL questioned why the CAA proposed to change conditions C1.1 and C1.2 (relating to the recovery of the service quality bonus through the maximum revenue per passenger) from forecast to actual (based on a two-year lag). The CAA said it considered that HAL can earn bonuses for performance of certain service quality elements above the baseline level. As HAL would not know whether it will earn bonuses when it sets its airport charges it can either (1) forecast bonuses when setting charges and correct for over- or under-recovery through the K factor two years later, or (2) recover the actual amount of bonuses in full two years in arrears. At present, HAL adopts option (2). The CAA's proposed changes to the B factor in conditions C1.1 and C1.2 aimed at formalising, rather than introducing changes to, the current arrangement.

2.41 HAL and the Heathrow Airline Community also suggested some changes to definitions of "Ot" in relation to total capex and "core capex project" set out in the final proposals. The CAA accepted these changes as they reflected the CAA's policy intentions, as set out in the relevant Appendices of the proposed licence. The Heathrow Airline Community also considered that the previous inclusion of definitions for the "price growth" factor and "qualifying security claim per passenger" were useful and should be retained for clarity. However, the CAA noted that the 'price growth factor' was a term used to give meaning to “X” in the price control formula, prior to the CAA's final estimate. As this has now been removed and replaced with a number, the CAA considered that retention of this term was unnecessary, as suggested by the Heathrow Airline Community. The term “qualifying security claim per passenger” was changed to “allowable security claim per passenger”.

2.42 Further responses on the substantive issues contained in the price control condition can be found in the relevant Appendices to the proposed licence.

Representations on the proposed licence

2.43 The Heathrow Airline Community made the following representations on the definitions contained within the price control condition:

- Definition of Core Capex Project: It welcomed the recognition by the CAA[37] on the definition of a Core Capex Project to be specific in indicating that such a project is one which has been approved at Gateway 3. This is in contrast to the previous definition, being a project which simply reached Gateway 3. However the definition of Core Capex Project in the proposed licence[38] is defined as one that has “passed Gateway 3”’. The Heathrow Airline Community continued to consider this definition is vague and one which does not convey the CAA’s policy. “Passing a Gateway” does not necessarily indicate that a project was approved or agreed by stakeholders and it therefore considered that the definition should contain text indicating that a project has to be approved or agreed at Gateway 3 in order for it to transition from development capex to being a core capex project.
- Definition of Development Capex Allowance: It questioned whether the definition of Development Capex Allowance in the proposed licence should instead refer to a capex allowance in the Q6 ‘settlement’ (rather than RAB), based on the sum of development capex project P80 cost estimates as set out in the governance arrangements.

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37 See page 34 of the notice of the proposed licence: http://www.caa.co.uk/docs/33/CAP%201138.pdf

38 See page 88 of the notice of the proposed licence: http://www.caa.co.uk/docs/33/CAP%201138.pdf

- S factor: It welcomed the amendments made by the CAA. Noting that condition C1.4 referred to costs as a result of changes in “security standards”, condition C1.12(a) expanded on this by indicating that the change in security standards is something ‘certified by the CAA’. It therefore considered that the clarity of the costs allowed in an s factor being only as certified by the CAA was helpful and should be included in paragraph C1.4.

2.44 HAL made the following representations on the price control condition:

- It noted that the opening yield for 2014 (£20.398) is in 2011/12 prices but this should be uplifted to 2014 prices;
- The CAA has not changed the agreed definition of “O_t” in the licence; and
- The formula for the K factor in the licence appears incorrectly to give an allowance for interest for 21 months when recovering the k factor for 2012/13.

2.45 HAL also questioned the CAA’s decision to allow Gatwick Airport Limited (GAL) to include up to £10 million per annum in its airport charges to cover the costs for airport expansion but not to do the same for HAL. It noted that the expenditure is essential for both GAL and HAL to support submissions to the Airports Commission. It considered that the early expenditure, in advance of any government policy or Airports Commission recommendation, should be treated as opex rather than capex.[39] Furthermore, HAL considered that the governance process around flexible capex is wholly unsuitable for the very early stages of planning costs required in airport expansion. Airlines will have no incentive to sanction this expenditure at the early planning stage. This will contrast with GAL’s situation where the CAA could take a “whole life view” in allowing this expenditure. HAL requested that, in the interests of equity, fairness and consistency, and in accordance with the CAA’s duty to promote competition in the provision of airport operation services, that the CAA quickly moves to add £10 million per annum into HAL’s opex allowance.

[39] HAL considered that treating this expenditure as capex would risk a total write-down should HAL’s proposals for expansion not be recommended by the Airports Commission; the flexible capex approach is therefore not applicable.

CAA's response

2.46 The CAA considers that the requirements for approving or agreeing that a project has passed Gateway 3 should be set out in the Governance arrangements, rather than in the licence itself. The CAA has therefore retained the term "passed Gateway 3 ... in accordance with the Governance Arrangements".

2.47 The CAA considers that for clarity the definition of Development Capex Allowance should refer to the RAB. The Development Capex Allowance represents an estimate of future capex spending attributable to development projects and is included in the RAB calculation as part of the Q6 settlement. Any differences in the actual capex spend in Q6 will be accounted for through the cumulative development capex adjustment term in the price control formula.

2.48 The CAA considers that costs associated with changes in security standards must be certified by the CAA. The CAA has clarified this requirement in the definition of the terms of calculation for the s factor described in the price control formulae.

2.49 The CAA agrees that the opening yield should be uplifted to 2014 prices as this better reflects the CAA's policy intention set out in the proposed licence. The CAA has therefore amended the licence to reflect this change.

2.50 The CAA has amended the licence to reflect the definition of "O_t" as agreed in paragraph 2.37 of the proposed licence, although it has retained the link to the Governance Arrangements for clarity.

2.51 The CAA agrees with HAL that the K factor should be adjusted to account for the 9 month period in 2014, which affects the calculation of the K factor in 2015 and 2016. The CAA has amended the K factor in line with HAL's suggestion.

2.52 The CAA notes HAL's request regarding the recovery of costs for expansion following recommendations by the Airports Commission and government support but also notes that HAL has not made any previous representations on the proposals for the recovery of second runway costs at Gatwick. It also notes that the provisions for the recovery of second runway costs set out in GAL's commitments are for development costs and only apply to costs incurred after the Airports Commission has made its recommendations and the government has indicated its support for the project.

2.53 The CAA is willing to look at incorporating similar provisions into HAL's licence but notes that any changes to the licence at this stage would be a significant change requiring the CAA to consult other stakeholders. Instead, this could be achieved through a modification under section 22 of the Act once the licence is in force. The CAA is intending to consult on its treatment of additional runway costs for GAL once the licence is in force, and it will consider HAL's request further at the same time.

Charges for other services

The licence condition

2.54 The licence condition requires HAL to be transparent in how it sets charges for activities that are not otherwise covered by this licence through the price control. This condition is based on a similar condition in Q5. This is discussed in more detail in Appendix G.

Reasons for the licence condition

2.55 In the proposed licence, the CAA said that the previous conditions imposed on HAL following public interest findings by the Monopolies and Mergers Commission on agency staff and information desks related to conduct that occurred in 1996 and which is unlikely to recur. The issues only arose at Heathrow under its management at the time and not at other airports and so are not issues that are inherent to airport operators with SMP. In response to representations by the Heathrow Airline Community to the final proposals that the provisions should remain to prevent future abuse by HAL of its SMP, the CAA considered that it would be disproportionate to replicate these particular public interest conditions in the licence. In the unlikely event that HAL repeated this conduct, the CAA could deal with the situation using its licensing powers if appropriate at the time. Therefore, the CAA did not propose including conditions on agency staff and information desks in the final proposals.

2.56 HAL's response on the list of specified activities in Condition 2.6 was considered in Appendix G of the proposed licence. The reasons for the activities included in the list of specified activities in Condition 2.6 are also set out in Appendix G of this notice.

2.57 In its response to the final proposals, BA supported the concerns raised by the Independent Airport Parking Association (IAPA)[40] in relation to access to facility provision and restrictions on forecourt activity welcomed the statement by the CAA in paragraph 12.39 of the final proposals of an investigation into road and forecourt access. It requested that the CAA seek airline views on the subject in the terms of reference. In the proposed licence, the CAA said it would develop clearer timescales and seek stakeholders' views on the terms of reference for this review as soon as possible once the licence comes into force.

Representations on the proposed licence

2.58 There were no further representations on this condition.

CAA's response

2.59 The CAA has included the condition on charges for other services as consulted on in the proposed licence with no further changes.

Procurement of capital projects condition

The licence condition

2.60 The licence condition requires HAL to secure its procurement of capital projects efficiently and economically, so far as is reasonably practicable. In doing so, it must take account of a number of factors including the direct and indirect cost to airlines. If HAL cannot confirm those costs with the airlines, the CAA would assess whether HAL had, so far as reasonably practicable, made reasonable assumptions about those costs.

2.61 HAL is also required to publish a code of practice, setting out the principles, policies and processes by which it would meet its obligation to procure capital projects efficiently and economically and to update it as necessary. HAL must report annually, with reasons, on any instances where it had procured significant capital projects outside of the procurement code of practice.

Reasons for the licence condition

2.62 In the proposed licence, the CAA considered that, where capital investments are ultimately being paid for by the airlines, it would be in the interests of those airlines, for their customers, to ensure that HAL

[40] See page 222, paragraph 12.37 of the CAA's final proposals.

carries out procurement for its capital investment projects efficiently and effectively. There was evidence that this has not always been done effectively in the recent past, although the CAA acknowledged that HAL had already made improvements to its processes. It was important, particularly where there was a large capital programme with many different contractors and operational constraints, to ensure these improvements were followed through and built upon through clear processes and policies.

2.63 The CAA considered that the procurement code of practice would work better if developed and owned by HAL, rather than being imposed. The licence specified some elements that must be included but it would be up to HAL to ensure that the detail of these was enough to comply with the overall obligation. In response to representations from the Heathrow Airline Community to the final proposals, the CAA also included a requirement to review and update the procurement code of practice when necessary.

2.64 The CAA recognised that there could be some significant capital projects where an alternative procurement method would be more effective. The proposed licence required HAL to provide its reasons and justification to the CAA annually where this happened. However, the CAA did not include an explicit limit on the number of projects that HAL can procure without following the code of practice. The code of practice will set out how HAL will comply with the overall efficiency obligation so there should be few circumstances where it is not appropriate to follow the code. Should the annual report on such projects show that capital expenditure is not incurred in line with the code, the CAA can require HAL to review the effectiveness of the code.

2.65 In response to representations from the Heathrow Airline Community to the final proposals, the CAA agreed it would add clarity to the condition to define “significant capital projects” as those over £15 million, in line with the level at which the parties to CE agreed that projects should be triggered. However, in Appendix D of the proposed licence, the CAA stated that this figure should be £20 million.

Representations on the proposed licence

2.66 The Heathrow Airline Community continued to welcome the requirement for HAL to secure its procurement of capital projects efficiently and economically and to publish a Procurement Code of Practice by 1 October 2014 on how it will comply with the licence condition. However, it considered that the definition of a 'significant project' should be one above £10 million rather than one above £15 million. Alternatively, it suggested that the licence could require HAL to agree with the Heathrow Airline Community the occasions when a £15 million project is not subject to the requirements of the licence condition.

2.67 HAL considered that the CAA's definition of significant capital projects, at a level of £15 million which is linked to the £15 million level at which the stakeholders agreed that projects should be triggered[41], is incorrect, as HAL and the airlines have agreed a £20 million threshold for trigger projects. HAL also noted that paragraph D31 of the CAA's notice of the proposed licence stated that £20 million is the appropriate level.

2.68 The Heathrow Airline Community and BA separately also considered that the CAA should clarify that all capital projects over the determined threshold should be subject to the condition, including any projects which HAL wishes to provide through framework contractors or using resources internal to HAL or the wider Ferrovial Group. BA considered that this clarity would ensure the full value of these conditions are realised.

CAA's response

2.69 In the proposed licence, the CAA considered that the definition of significant capital projects should be linked to the level in the CE process at which the parties to CE agreed that projects should be triggered. This would ensure consistency and to avoid imposing any undue burdens from having different levels. However, in Chapter 2 of the proposed licence, the CAA erroneously stated that this level was £15 million. In fact, the level is £20 million, as correctly stated in Appendix D of the proposed licence. The CAA has therefore amended the licence to £20 million. The CAA does not consider this to be a significant change as the link was clearly stated, the £20 million threshold is well known and was correctly stated in Appendix D of the proposed licence.

41 See paragraph 2.53 of the notice of the proposed licence: http://www.caa.co.uk/docs/33/CAP%201138.pdf

2.70 The CAA confirms that all capital projects are subject to the procurement of capital projects condition, including those carried out through framework contractors and internal resources. The protocols that HAL must develop should include details of how it will appoint its framework contractors. The requirement to report on capital projects that have not been procured in line with the Procurement Code of Practice only applies to significant capital investment work over the £20 million threshold. The CAA considers that there may be occasions where passengers' interests could be better served by using an alternative procurement method and it is therefore useful to include this flexibility. However, If this report starts to list a significant number of projects in any year, the CAA may intervene, using its powers either to require changes to the Code of Practice or, if appropriate, to take enforcement action. The CAA does not consider that any further changes are required to the licence condition.

Charges for cargo only operators

The licence condition

2.71 The licence condition retains the condition used in Q5 restricting HAL from charging cargo only operators more than equivalent passenger service operators.

Reasons for the licence condition

2.72 The CAA proposed to retain the condition used in Q5 restricting HAL from charging cargo only operators more than equivalent passenger service operators. The price control calculation relates only to passenger airlines so this condition will ensure that cargo only operators are treated in an equitable manner.

Representations on the proposed licence

2.73 There were no further representations on this condition.

CAA's response

2.74 The CAA has included the condition on charges for cargo only operators as consulted on in the proposed licence with no further changes.

Part D: Service Quality Conditions

Service quality levels, rebates and bonuses

The licence condition

2.75 The licence condition gives effect to the Statement of Standards, Rebates and Bonuses which is included as a Schedule to the licence. The draft condition also includes a self-modification provision for changes to the Schedule where the CAA, HAL and the airlines agree to those changes.

2.76 The Statement of Standards, Rebates and Bonuses is based largely on the statement included in Q5. The main difference is that bonuses have been moved from the price control condition into this statement. Appendix J gives more detail of this and other changes.

Reasons for the licence condition

2.77 The reasons for the licence condition and the inclusion of the Statement of Standards, Rebates and Bonuses in Schedule 1, including discussion of the CAA's final proposals, stakeholders' views and the CAA's response to those views, are set out in Appendix J.

Representations on the proposed licence

2.78 Representations on the service quality condition and the service quality schedule are set out in Appendix J.

CAA’s response

2.79 The CAA’s decision is set out in Appendix J. In summary, the CAA has made the following changes to the Condition and the Schedule:

- Clarifying the calculation of Quality of Service Monitor (QSM) scores for Terminal 1 within 12 months of its closure;
- Adding a separate section ‘Queue times for vehicles’ to clarify service quality monitoring of control posts;
- Updating the formula of rebate calculation and the tables to reflect the additional rebates HAL has committed to pay if automated security queue measurement is not in place by 1 April 2014;
- Updating the tables to show the timing of harmonisation of central search and transfer search standards;

- Clarifying the amount of rebate payment during the nine-month regulatory period; and
- Updating paragraph numbers, table numbers and footnotes to reflect the above changes.

2.80 All the changes made are for clarifying the CAA's policy intent, which have been discussed and consulted on extensively. They do not represent significant changes in policies.

Operational Resilience

The licence condition

2.81 The licence condition requires HAL, so far as reasonably practicable, to secure the availability and continuity of airport operation services, particularly in times of disruption, to further the interests of passengers and cargo owners in accordance with best practice and in a timely, efficient and economical manner.

2.82 Under the condition, HAL would be required to:

- consult on, develop and maintain resilience plans and processes setting out how it would do this, where appropriate in line with any guidance issued by the CAA;
- facilitate a governance forum to foster a more cooperative and collaborative approach to managing disruption;
- lead on coordination and communication between itself, the airlines and the groundhandlers to ensure a more coherent response to disruption, including developing 'rules of conduct' for airlines and groundhandlers, in consultation with those bodies, setting out what HAL would need from those bodies to support HAL in meeting its obligations under this condition; and
- publish information relevant to other service providers and passengers so far as possible to help them plan their response to disruption.

Reasons for the licence condition

CAA's proposed licence

2.83 The CAA considered that a licence condition on operational resilience was necessary as part of a wider industry framework for dealing with disruption, which can best be managed effectively through collaboration by all parties with clear leadership and coordination from HAL as the central hub organisation. The CAA's reasons for including an operational resilience condition in the licence were set out in detail in paragraphs 12.2 to 12.21 of the CAA's initial proposals published in April 2013. In summary, examples of poorly managed events at airports generally over the last few years have shown that operational resilience is necessary as part of the wider industry framework for dealing with disruption. There needs to be a much more coordinated approach with the airport operator having a central role in planning and coordinating the industry's response. To achieve this, HAL should be required to plan for, and coordinate the wider industry response to, disruption. The CAA considers that, with good collaboration, clear expectations and plans setting out relevant roles and responsibilities, coupled with effective application of the denied boarding regulations, this will be a significant step forward towards a more efficient whole industry response.

2.84 The CAA made it clear that it expects this to be an ongoing process that will take some time to develop. HAL has already made significant progress since the disruption during the snow events in 2009 and 2010, but there is still more that can be done by both HAL and the other service providers at the airport. The CAA said it will continue to work with HAL and other service providers to develop a more robust response to disruption.

HAL's resilience plans

2.85 In the proposed licence, the CAA noted that disruption can be caused by many different factors, including severe weather, industrial action, security incidents, cyber attack, accidents at the airport or even incidents at facilities remote from the airport upon which the airport relies.[42] The CAA said it would expect to see that HAL has risk assessments for the infrastructure under its control and for all the services it offers at the airport, with clear management processes and clear communication plans in place for remedying and dealing with the impacts of the loss of that infrastructure or service. These should also include dissemination of information to passengers and a provision of a 'backstop' level of passenger welfare where the airlines are slow or

[42] For example, an accident at a major oil storage depot or disruption to the fuel pipeline could have a significant effect on fuel supply to the airport.

unable to do so. If these are in place, in the event of any investigation, the CAA would normally expect to concentrate on how well the company had reacted to, and managed the event. However, if the plans are not adequate, the CAA will take proportionate regulatory action, from requiring changes to the plans to taking enforcement action under the Act.

2.86 The CAA also stated that where services are provided by a third party and HAL only acts as a landlord for the facilities (such as fuel supply or groundhandling services), the CAA would not expect HAL to have contingency plans for ensuring continuity of supply of those services but it would expect HAL to have plans for the effect that disruption to those services would have on its own operations.

2.87 In particular, the CAA said that HAL should have contingency plans for the loss, for whatever reason, of:

- access to key infrastructure at the airport (such as the terminals, runway or airfield);
- IT systems;
- key suppliers; or
- key staff (including UK Border Force (UKBF)).

2.88 The CAA has also made it clear throughout the development of this licence condition that, in order for resilience plans to work effectively within the high-pressure environment caused by disruption, they must be underpinned by solid day-to-day working relations, possibly through the development of formal business continuity models. It noted that the government's guidance on resilience[43] states that "business continuity management must be regarded as an integral part of an organisation's normal on-going management processes." Therefore, the requirement goes wider than times of disruption and the CAA said it would expect HAL to maintain clear working arrangements with relevant parties.

2.89 In addition, the CAA said it would be content for HAL, in consultation with relevant parties, to develop terminal specific plans and rules so long as these are proportionate and do not distort competition.

43 https://www.gov.uk/resilience-in-society-infrastructure-communities-and-businesses

2.90 The CAA considered that HAL is best placed to assess the detail of what is needed in its plans to meet the outcomes required under this condition. The CAA may issue guidance to HAL on the plans, following consultation. The CAA considered that the preceding paragraphs constituted guidance on what it expects HAL to include in its resilience plans. The CAA is not planning to issue any further guidance at this stage, beyond that set out in this notice, but may do so if the need arises. In addition to issuing guidance, the CAA considered that it should retain a right to be able to require HAL to review and revise its resilience plan(s) if it considered that the plan(s) are likely to fall short of meeting the high level outcome or has been found wanting following practical experience.

Collaboration with stakeholders

2.91 As part of the collaboration requirement within the licence condition, the CAA said that it would expect HAL to liaise with its stakeholders about each other's resilience plans to ensure they are compatible, so far as necessary and reasonably practicable. As a minimum, the CAA said HAL should ensure that it understands the needs of those stakeholders and the actions they will need to take, so it can take these factors into account in its own plans.

2.92 Where the CAA expects HAL to liaise with its stakeholders about their own plans, to ensure compatibility, the CAA said it expects HAL to concentrate initially on key stakeholders, such as those airlines with a significant proportion of flights and passengers using the airport, stakeholders whose own actions may have a significant impact on HAL's operations (such as the police, UKBF etc) or those organisations on whom HAL may have to rely during disruption, such as local authorities. Where HAL has made reasonable attempts to invite a stakeholder to share and align their operational resilience plans, the CAA made clear that HAL would not be held to account if that stakeholder chooses not to engage. However, if a stakeholder wishes to involve HAL in its resilience plans, the CAA said it will expect HAL to engage positively and, so far as reasonably practicable, use its leadership and coordination role to help facilitate those plans if necessary.

Rules of Conduct

2.93 The CAA considered that some minimum standards or rules of conduct, setting out clearly the roles that each party will play, would be needed during disruption so that HAL could effectively coordinate and incentivise a response with other stakeholders. It suggested that any such rules should be negotiated voluntarily and agreed with the airlines and groundhandlers, so far as reasonably practicable. The rules must also be targeted at meeting the overarching obligation, must be proportionate and must not be unduly burdensome.

2.94 In the final proposals, the CAA said that where agreement could not be reached, the rules should not be imposed but that the CAA would look to the industry to continue to seek alternative solutions. The CAA recognised that this would be an ongoing process that would need time to develop fully but if it appeared that progress is stalling the CAA said it would consider whether there are other incentives or regulatory powers available to it to encourage progress, such as inserting provisions allowing the CAA to act as arbiter or to determine the rules. However, the licence itself made clear that HAL should include the rules in its Conditions of Use and other written arrangements for the supply of groundhandling licences and that HAL must take all reasonable steps to ensure the airlines and groundhandlers comply with the rules. The Heathrow Airline Community and BA separately were strongly opposed to the proposal that HAL should include rules of conduct in the Conditions of Use, and suggested that the licence be changed to require HAL to agree these rules with the airlines outside the Conditions of Use.

2.95 The CAA has stressed throughout the development of this licence condition that it considers operational resilience at airports needs strong, centralised leadership to coordinate planning for and response to disruption and it was clear that the airport operator is best suited to assume the role, with its direct links to all the service providers at the airport. In requiring HAL to take on this responsibility and associated accountability, the CAA recognised in the proposed licence that HAL needs to be able to set out some reasonable expectations of what it requires from its partners in this area to ensure an effective whole industry response. As far as possible, these expectations should be developed jointly and agreed on a more voluntary basis. However, the CAA noted that it cannot impose requirements on the airlines and groundhandlers (such as a requirement that agreement should not unreasonably be withheld) and there is a risk that only requiring HAL to agree the rules would create an unbalanced and dysfunctional system. Ultimately, the CAA considered that it should be up to HAL to understand the requirements of the airport and, as far as possible, its stakeholders during disruption and to take appropriate leadership decisions.

2.96 The CAA acknowledged the Heathrow Airline Community's concerns that the provisions on the rules of conduct, as drafted, could allow HAL to exert its SMP, particularly in a way that is not in the interests of passengers. However, the condition makes clear that any "rules of conduct" must be proportionate and relate specifically to the purpose of the licence condition to secure the availability and continuity of airport operation services to further the interests of passengers and that HAL must consult on any rules.

2.97 By proportionate, the CAA explained that it means proportionate to the requirements of an event as well as proportionate to the services offered by each stakeholder. The interests of passengers are paramount, but where other legislation applies (such as welfare obligations under EU 261[44]), the rules should not normally extend beyond the obligations of that other legislation.

2.98 The CAA had considered an option to require HAL to reach agreement with the airlines before it can impose the rules of conduct, with provision to refer any areas of disagreement to the CAA for determination. However, the CAA considered that this option would not be effective, risking further lengthy delays to resolving the problems caused by disruptive events.

2.99 The CAA has included provision in the consultation condition (Condition F1) that HAL must agree a protocol with the airlines on how it will consult on all its operational resilience activities under the operational resilience condition and how it will take into account the views expressed in that consultation. Where the parties cannot agree on the protocol, there is provision for the CAA to determine the matter. The CAA considered this gives interested parties enough input to the process for developing the rules whilst retaining HAL's ability to take strong leadership decisions.

44 Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) N0 295/91.

2.100 With these limitations in place, the CAA said it is unlikely that HAL would exert its SMP in this area in a way that was not in the interests of passengers. Should it try to do so, however, the CAA has concurrent powers under the Competition Act 1998 to address abuse, particularly where this distorts competition.

2.101 The CAA said it will continue to work closely with the industry in this area to use its influence and, where necessary, its powers under the licence or the Act to help find mutually acceptable solutions. However, it will be up to HAL to decide how to conduct its relations with airlines so as to comply with its licence requirements.

Provision of information

2.102 The rationale for requiring HAL to provide relevant information is so that passengers receive as much information as possible from both their airline and HAL so that they can make informed choices in the event of disruption.

2.103 In response to concerns expressed by BA about the clarity of the information requirements in this condition, the CAA confirmed that the condition does require HAL to pass on information about its own activities and operations, as well as coordinating what it knows about other service providers’ requirements, plans and activities. It clarified that D2.15(a) relates to the coordination and communication of relevant information to all relevant parties, as defined in the condition as including airlines, groundhandlers, NATS, fuel and energy suppliers and UKBF. The CAA confirmed that it considers relevant information would by necessity include information about HAL's own operations and decisions as well as providing a central hub for the dissemination of information provided by others. D2.15(b) is explicitly about ensuring passengers and cargo owners have adequate access to the information they need in relation to HAL's own operations.[45] D2.15(c) is more specifically about ensuring passengers have access to information about their rights from as many sources as possible to avoid any potential gaps during disruption.

Capacity allocation during disruption

2.104 In the final proposals, the CAA said that it would initiate development

[45] For example, information on closures, delays, evacuation plans etc through channels such as HAL's own website, electronic boards at the airport or informed staff in the terminals.

of guidance on the operation of Heathrow's HADACAB process[46], which is an industry forum chaired by HAL and attended by all airlines and NATS for agreeing the necessary reduction in capacity during forecast disruption.

2.105 The CAA has been working closely with the industry on changes to the HADACAB process to allow for planned part-day disruption as well as full day disruption and has been encouraged by the close collaboration from all parties. However, there is still evidence that the current process does not work that well in practice, with disagreements over whether the shares of cancellations between airlines is proportionate and complaints that some airlines are not honouring their agreement to cancel flights. Therefore, in the proposed licence, the CAA said it would consider whether HAL should take a more decisive role in determining how capacity will be reduced, in a similar way to some other airports in Europe such as Schiphol, rather than leaving it to the airlines to agree.

2.106 The CAA considered that this proposal could be implemented through guidance issued by the CAA under the current operational resilience obligation to have resilience plans and to take a leadership role in coordinating the planning for, and management of disruption. The CAA proposed to start engaging with relevant parties as soon as possible after the licence comes into force in April 2014, with a view to having guidance in place in time for winter 2014/15. The CAA said it understood that HAL has started implementing a new, more effective process and it proposed to look at this as part of this engagement. The CAA said it would initially consider:

- whether it would be in the interests of passengers to change the current arrangements;
- what changes would be required;
- whether there should be sanctions for not following the rules;
- links with requirements under EU 261; and
- whether guidance under the operational resilience condition would be the most effective method of implementing any changes.

[46] HADACAB: Heathrow Air traffic movement Demand And Capacity Balancing group.

Representations on the proposed licence

2.107 The Heathrow Airline Community considered that condition D2.15(a)'s referral to the inclusion of information from HAL in relation to its own performance should be more explicit as the reference in the proposed licence is simply to "relevant operational information" rather than a specific indication that this information should contain detail of the performance of HAL's own operation.

2.108 BA was very encouraged by the continued development by the CAA around the operation resilience licence condition and considered this as a particularly critical area to be addressed correctly and where passengers' interests will best be served by further focus. However, BA remained extremely concerned that the CAA had not included a requirement for HAL to consult on the Rules of Conduct, although it did note the CAA's commitment to use its concurrent powers should HAL fail to negotiate these in good faith.

2.109 BA noted that since the CAA's final proposals, additional information had become available as a result of the Airports Commission interim report and the Transport Select Committee report on Winter Resilience, and it is clear from both of these that in order to improve passenger outcomes, during, and in prevention of disruption, that it is critical that all available options to utilise existing potential capacity for resilience should be taken.

2.110 At a two runway Heathrow, BA does not support increasing the current air traffic movement (ATM) cap over the current 480,000 limit, extending operating hours, or implementing mixed mode in order to add ATMs. However, BA considered that the single most effective measure that could be introduced to improve HAL's resilience would be to allow mixed mode operation to be utilised to recover from disruption (e.g. unplanned runway closures) or to proactively address forecast adverse weather which would result in reduced departure and landing rates.

2.111 BA considered that there are major passenger benefits from this course of action to improve resilience. Disappointingly however, although it is within HAL's power to pursue this and it could be introduced far more quickly than other proposals as it would not require significant technological innovation or create a large training burden at the airport, HAL is currently refusing to do so. BA considered that this is in clear conflict with the stated requirement for "HAL to secure the availability and continuity of airport operational services, particularly in times of disruption" and therefore asked the CAA to include within the licence, a requirement for HAL to optimise utilisation of available capacity for resilience purposes, on the basis that it clearly is in the interests of protecting valuable national airport capacity and passengers' interests.

2.112 HAL considered that there are a number of examples where the licence condition or its interpretation appeared to rely upon statements in the final proposals and/or the final decision, or relate to the requirements of another licence condition. HAL considered that it was not clear which has 'primacy' or exactly how the CAA expects HAL to comply with the proposed obligations. The proposed framework must provide a clear and suitable basis such that HAL is in a position to effectively and efficiently meet its regulatory obligations.

2.113 As an example of this, HAL cited condition D2 (Operational Resilience) and how this related to both condition F (Consultation) and the CAA's statements in the main body of the notice. Condition D2 will be given effect partly through HAL's development of rules of conduct and these rules are to be consulted on under condition F. Condition F required HAL to consult upon, agree and publish rules of conduct. The CAA reserves a right to determine any matters of disagreement. However, as per paragraph 2.82 of the proposed licence, the CAA cannot impose requirements on airlines or groundhandlers (even where it considers any proposed rules reasonable). To that extent, and assuming the proposed rules are reasonable, it is not clear how the CAA would use its powers of determination to enforce third party compliance. Equally it is HAL's understanding that it cannot itself use the licence as a means of binding third parties.

2.114 Furthermore HAL considered that any rules of conduct implemented through third party agreements will have to comply with the Unfair Contract Terms Act 1977 in order to be enforceable and as such the 'reasonableness' of any such rules of conduct will need to be considered in that statutory context rather than the CAA's view of reasonableness.

CAA's response

2.115 The CAA notes the Heathrow Airline Community's continued concern that the obligation regarding the dissemination of relevant information is not clear that this must include information about HAL's own operations. The CAA remains of the view clearly stated in the proposed licence that relevant information includes sharing information about HAL's own operations during disruption. This is essential to ensuring all stakeholders have the information they need to make informed decisions about their own operations. However, given the continued concern, the CAA has added "in relation to its own operations and, where available to the Licensee, information regarding other stakeholders' operations" to Condition D2.16(a). The CAA does not consider this is a significant change as it only clarifies the CAA's policy.

2.116 The CAA notes BA's comments on capacity utilisation but considers this there needs to be wider debate on this aspect of operational resilience before it considers the need for a specific licence condition or guidance. The CAA has made clear that the work on improving operational resilience will take some time to complete and, as part of this, that it will work with HAL and the airlines to improve the capacity allocation processes. The CAA has therefore not made any changes to the condition in this respect.

2.117 In developing the licence condition through the consultation process, the CAA has sought to document its reasons and stakeholders' comments at each stage, and has referred back to previous consultations where appropriate, rather than repeating issues over again. This notice is the culmination of that process and builds on the previous consultations, and as such has primacy. The CAA's expectations for compliance are set out clearly in the paragraphs above, based on the reasons set out in previous consultations and earlier requests for clarity.

2.118 The operational resilience condition requires HAL to consult on and develop rules of conduct for other service providers at the airport relating to HAL's obligation to secure the availability and continuity of airport operation services at the airport. These rules of conduct should be set out in the Conditions of Use and any written arrangements that HAL has with groundhandlers and it is up to HAL to decide how it will enforce these arrangements. The CAA confirms that HAL cannot enforce the rules of conduct directly through the licence.

2.119 The consultation condition (Condition F1) requires HAL to agree with relevant stakeholders the process it will follow to consult on the rules of conduct. This may include details of the level of agreement on certain matters required during that consultation process, but Condition F1 itself does not require HAL to reach agreement on the rules of conduct. Where HAL cannot reach agreement with stakeholders on the consultation protocol, it may seek a determination on the matter from the CAA. The CAA will make a determination according to its statutory duties. Once the consultation protocol is agreed or determined, HAL should develop the rules of conduct in accordance with that consultation protocol.

2.120 The CAA welcomes HAL's clarification of its obligations under the Unfair Contract Terms Act 1977.

Part E: Financial conditions

Regulatory accounting requirements

The licence condition

2.121 HAL is required to produce audited regulatory accounts to the CAA to enable the CAA, airlines and users of air transport services to assess HAL's financial position and the financial performance of airport operation services and associated services at Heathrow and to assess the performance against the assumptions underlying the price control.

2.122 The regulatory accounts must be prepared in accordance with guidelines published by the CAA, which will provide more details of the information that the CAA considers necessary. The accounts must be audited and provided to the CAA, with the Auditor's report, within six months of the end of the relevant regulatory period or year. Both documents must be made publicly available.

Reasons for the licence condition

CAA's proposed licence

2.123 The licence is required for the purposes set out in the condition and explained above. The licence condition formalises the existing processes in Q5, combining the current regulatory accounts process with other financial reporting information provided by HAL. The CAA considered that the licence condition was unlikely to create additional costs, as there is already a fully functioning process in place, and it may give the opportunity for further streamlining.

Representations on the proposed licence

2.124 There were no further representations on this condition.

CAA's response

2.125 The CAA has included the condition on regulatory accounting requirements as consulted on in the proposed licence with no further changes.

Financial resilience

The licence condition

2.126 The following elements of the standard regulatory financial ringfence are included in HAL's licence:

- a requirement to provide an annual certificate of adequate resources;[47]
- a restriction on business activity;[48]
- a requirement for an ultimate holding company undertaking; and[49]
- an obligation to report changes in the banking ringfence.

Reasons for the licence condition

CAA's proposed licence

2.127 The CAA assessed, during the course of the consultation process, the implications of introducing either a full regulatory ringfence provision,

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47 HAL's company directors must annually certify to the CAA whether they expect to have (or not to have) adequate resources (including financial, staff and other resources) to continue to operate for the following 24 months. Where circumstances change, the CAA must be informed as soon as possible. The CAA proposed that this requirement can be designed to reduce any administrative burdens.

48 The proposed condition sets the restriction quite widely to cover 'the business activities of Heathrow airport'. The proposed condition also includes a de minimis qualification and/or provision for the CAA to grant exemptions, where this would be in passengers' interests.

49 The proposed condition places an obligation on HAL to obtain a legally binding undertaking from its ultimate holding company not to do anything that would place the Licensee in breach of the licence.

or a more tailored provision that comprises only those elements that do not cut across HAL's existing financial arrangements. Detailed explanation of the CAA's reasoning is set out in paragraphs 12.74-12.90 of the final proposals. In summary, the CAA reached the following conclusions:

- while there are reasonable grounds to support the inclusion of a full ringfence[50], the CAA does not consider that it is necessary since the incremental benefits to users could be significantly outweighed by the incremental costs.[51] It is therefore likely to be in passengers' interests that any ring fencing provisions do not cut across HAL's current financial conditions;[52]
- if the CAA is to rely on HAL's banking ringfence, there would need to be a licence condition that requires HAL to notify CAA of relevant changes before the changes come into effect; and
- the alternative approach would be to introduce a full ringfence provision but derogate those aspects that cut across existing financial arrangements.[53]

2.128 The Heathrow Airline Community continued to advocate a financial ringfence but noted the complications associated with the introduction of a full ringfence. It also considered that in time a full financial ringfence would be in passengers' best interests and urged the CAA to publish guidance on how it intends to progress to this end state to provide greater certainty to the financial resilience framework. It would therefore be appropriate to include a reference in the draft licence to a future policy statement from the CAA on these matters.

2.129 In its response to the final proposals, HAL said it was "extremely concerned" with the proposal requiring adequate resources for

50 Financial distress could cause detriment to passengers' interests, reduce expenditure and impact future service quality.

51 Other reasons include: HAL is already very financially secure and its existing financial arrangements are not compatible with a full regulatory ringfence, HAL's debt covenants already form a contractual ringfence, a change to HAL's financing structure could require complete re-financing of existing debt (£12 billion), the costs of which might be passed onto passengers.

52 This is consistent with the government's policy.

53 As these conditions would effectively remain dormant, this would provide greater certainty and clarity by setting out the restrictions on HAL's future financial arrangements.

24 months and it considered a 12-month requirement would be efficient and less burdensome. The CAA noted HAL's concerns and said it understood that HAL's banking and bond covenants require it to maintain 12 months' liquidity. However, it considered that the CAA's licence condition for adequate resources covers something slightly different – it is not a liquidity requirement but rather that management has the reasonable expectation that it has adequate financial and other resources, including financial and operational facilities, for the next two years. The CAA clarified that this does not mean that HAL has to have cash in place today, for example, to redeem a bond in 23 months' time, but rather that it has the reasonable expectation that it will have resources in place in time. In effect, management would be confirming that they expect over the next 24 months that the business has sufficient resources to operate.

2.130 The CAA also noted that the licence condition also requires HAL to bring to the attention of the CAA as soon as possible if it has reasons to believe that the latest certificate no longer holds true. Combined with the annual certificate this means that the CAA has early sight of any issues and can work with stakeholders to minimise any disruption or deterioration in service and thus act in passengers' interests.

2.131 The annual certificate covering 24 months means that the minimum oversight is approximately 12 months (i.e. the day before the next certificate is produced). If an annual certificate was provided covering only 12 months then towards the end of those 12 months the CAA would have very little forward visibility.

2.132 The CAA considered whether an alternative formulation could meet its needs. Alternatives included:

- a certificate covering 12 months but produced quarterly;
- a 12-month certificate, but a requirement to assess whether the latest certificate still holds true if issued today;
- a requirement for a tougher requirement covering the first 12 months and a looser requirement covering the subsequent 12 months.

2.133 However, the CAA considered that none of these provided any material benefit to passengers compared to the CAA's proposals but all were more complex and/or burdensome than the final proposals.

2.134 The CAA also considered that the financial resilience licence conditions should be considered as a whole. Other regulated sectors, such as water, energy and NATS, have more extensive financial resilience licence conditions and special administration regimes. For airports there is no special administration regime and the financial resilience conditions do not go as far as other sectors (for the reasons explained in paragraphs 15.37 to 15.77of the initial proposals and paragraphs 12.74-12.90 of the final proposals). As a consequence, the CAA needs to place greater reliance on this licence condition and therefore it is appropriate that it covers a longer period than found in some other sectors.

Representations on the proposed licence

2.135 HAL noted that in relation to the requirements of Condition E2.7 (ultimate holding company undertaking), it considered the timescales are unreasonable. Given the implications of a potential breach if this requirement is not met, the CAA should allow a more realistic timeframe for HAL to comply. For example, one could delete the current text and replace it with a requirement that HAL 'shall procure, as soon as reasonably practicable', or 'such undertaking shall be obtained as soon as reasonably practicable, following the company becoming a Covenantor …'

CAA's response

2.136 The CAA considers it important that the ultimate holding company undertaking is in place as quickly as possible to prevent the risk of HAL being put in breach of its licence. In the first instance, HAL will have an additional 6 weeks from the grant of this licence until it comes into force on 1 April 2014 to obtain the undertaking. Should further undertakings be required in the future, the CAA considers that there is sufficient lead time before a person or company becomes a Covenantor for HAL to seek the undertaking. The CAA notes that the requirement to obtain the undertaking within seven days is consistent with similar requirements in other regulated sectors such as rail and energy.

Continuity of service plan (CSP)

The licence condition

2.137 The licence condition requires HAL to have and maintain a continuity of service plan to describe the legal, regulatory, operational and financial information that an administrator, receiver, new management or similar could reasonably be expected to need to carry out its functions and remain compliant with this licence and HAL's aerodrome licence. This reduces the risk of service disruption whilst issues relating to financial distress are being resolved.

Reasons for the licence condition

CAA's proposed licence

2.138 The CAA considered that HAL should determine how it meets its licence obligations in an efficient manner. The CAA was content for HAL to combine the CSP and the resilience plans (required under the operational resilience licence condition) if this would be more efficient and effective. However, the CSP condition required specific activities and information to be included in the CSP for different purposes to the resilience plans, therefore the CAA retained the separate obligations in the final proposals.

Representations on the proposed licence

2.139 There were no further representations on this condition.

CAA’s response

2.140 The CAA has included the condition on the continuity of service plan as consulted on in the proposed licence with no further changes.

Part F: Consultation Conditions

The licence condition

2.141 The licence condition requires HAL to develop and agree with relevant parties protocols setting out how it will consult and take stakeholders' views into account in a number of areas. Where the parties cannot reach agreement on the consultation protocols, the CAA may determine the matter.

Reasons for the licence condition

CAA's proposed licence

2.142 The CAA considered that a condition in the licence is the most effective way of ensuring that HAL carries out this requirement consistently and diligently at all times. The CAA noted that Annex G of the Q5 price settlement concentrates on consultation for future planning. However, this licence requires consultation in a number of areas and the CAA considered that it would benefit all parties if these consultations were also backed by clear processes. The CAA therefore included a condition that required HAL to consult relevant stakeholders on a variety of matters[54] so that those stakeholders would have the information they need to take informed views. HAL must also take those views into account when deciding on the future development of its proposals.

2.143 The CAA considered that these processes would work best if they are developed and owned by the Licensee rather than having rules imposed by the CAA. The licence condition therefore specified that HAL must develop and agree with its stakeholders relevant protocols setting out how it will comply with this obligation. If necessary, the CAA can give guidance (following consultation) on what should be included in these protocols.[55] The protocols must be reviewed and updated as necessary and as a minimum at least once before the start of a new price control period. Where HAL could not agree the protocols, the CAA would determine the outstanding issues.

2.144 The CAA considered that the protocols currently in use for many of these matters[56] were a good starting point, although these would need to be updated to reflect the requirements of the Act and the Q6 price control. The CAA also noted that HAL was already developing other protocols such as the Q6 Governance arrangements for individual capex projects. In order to allow HAL sufficient time to develop (or review) and agree the protocols once the licence is in place, the condition required HAL to publish them no later than six months after the licence comes into force. However, the CAA said that protocols that are already agreed and in use should continue to be used and, if

[54] Such as future investment, delivery of capital projects, non-regulated charges, the service quality rebates and bonuses regime, traffic forecasts and operational resilience.

[55] The CAA is not intending to issue guidance on this immediately but will develop guidance as necessary based on decisions following any complaints from stakeholders about the application of this condition.

[56] Such as the Consultation and Information Protocol published in June 2011, which can be found at http://www.caa.co.uk/docs/5/HeathrowConsult&Info.pdf

not published already, should be published immediately. The CAA noted the work on the Q6 governance arrangements which is well advanced and it has written to HAL on the likely determination it will make with regards to areas where no agreement has been reached. The CAA will continue to work with all parties where necessary to facilitate timely agreement of these protocols.

2.145 In its response to the final proposals, the Heathrow Airline Community suggested that the CAA should require HAL to agree relevant investment and development plans consulted on under this condition. However, this is not the intention of the condition. The condition requires HAL to try to reach agreement on the consultation process for each area, including any arrangements for approval at specified stages. The CAA can only intervene in this process formally if invited by HAL to make a determination where it cannot reach agreement with the airlines. However, the CAA will continue to work with all parties to use its influence to help achieve agreed solutions where possible.

2.146 Both the Heathrow Airline Community and BA separately requested that the condition included rules for carrying out operational trials. However, the CAA did not include a specific requirement for HAL to consult on operational trials as these are likely to be very case-specific and the CAA considered that the rules and requirements for these should be built into the different protocols for the different work areas.

2.147 The CAA noted that the consultation condition does not prevent relevant parties from agreeing protocols in addition to those listed in Condition F1.1, such as a protocol on operational trials. Should relevant parties wish to negotiate and agree additional protocols, the CAA would expect HAL to approach this in a consistent and proportionate manner. The CAA will keep this matter under review and, if necessary, can consult on and issue guidance or make a determination to resolve any problems.

Representations on the proposed licence

2.148 The Heathrow Airline Community noted that condition F1.1(a)(ii) referred to condition F1.1.i(1). The Heathrow Airline Community questioned whether this should reference F1.1(a) instead.

2.149 HAL considered that it was particularly difficult to reconcile the CAA's proposed policy in Appendix D3 – D16 of the proposed licence with terms contained in condition F. Condition F1 does not allow a "symmetrical" right of appeal, rather it envisages that HAL will give effect to an appeal mechanism through the development of proposed governance protocols. See Appendix D of this notice for more information.

2.150 HAL considered that the CAA seemed to be conflating a number of different issues: the perceived need for capex obligations, procedures for effective consultation and "appeals" mechanisms in either context. HAL noted that Condition F1 is clearly not intended to provide for a formal appeal process. HAL also noted that the CAA is apparently using the wording of a condition originally intended to meet a generic obligation regarding effective consultation (leaving aside the fact that the condition is not yet in force) to impose an appeals regime for capex governance via the issuance of HAL guidance which is wholly inappropriate. Furthermore, the effect of such an appeal will depend on the nature of the dispute. While the appeals procedure is to be published in a governance protocol by HAL, the dispute will actually arise under HAL's obligation to consult. However the CAA's right to determine the dispute relates only to the content of the consultation protocol. HAL considered that this is a critical matter which must be resolved quickly if it is not to hold up progressing the Q6 capital plan. The scope of any proposed governance protocol must, by definition, be limited to the scope of the licence condition. Condition F1 relates to consultation and does not contain provision relating to levels of capital expenditure.

CAA's response

2.151 The CAA agrees with the Heathrow Airline Community that Condition F1.1(a)(ii) should refer to Condition F1.1(a)(i) and has amended the licence accordingly. The CAA does not consider this to be a significant change as it corrects a drafting error to insert the correct cross-reference.

2.152 The consultation condition requires HAL to agree a capex programme governance protocol with relevant stakeholders. This may include details of the level of agreement on certain matters required during that process and any dispute resolution mechanisms, but Condition F1 itself does not specify what any protocol should include. Where HAL cannot reach agreement with stakeholders on the content of a protocol, it may seek a determination on the matter from the CAA.

2.153 During the development of the licence and the capex programme, the CAA has also worked with HAL and the airlines to develop the capex programme governance protocol in line with the proposed consultation condition. One issue where there is no agreement is with regards to the extent to which airline agreement is needed at certain stages of project development. In Appendix D to the proposed licence the CAA said that HAL and the airlines should make good faith attempts to reach agreement on items in the capex programmes but that, where this was not possible, there should be an appeal mechanism built into the governance protocol. This would allow either party to appeal to the CAA for a determination on the matter.

2.154 As HAL and the airlines could not agree on the inclusion of an appeal mechanism in the governance protocol, the CAA wrote to HAL and the airlines on 12 November 2013 setting out how it was likely to determine any referral under Condition F1.7 on this matter[57]. This letter set out the CAA's view that it would be necessary to include a dispute mechanism. If this part of the governance protocol is not agreed when the licence comes into force and the matter is referred to the CAA for determination under Condition F1.7, the CAA will take into account HAL's comments on the asymmetry of the right of appeal when it makes its determination.

Other licence conditions to be considered and developed once the licence is in force

Capital expenditure programme condition

CAA's proposed licence

2.155 The CAA said that it intended to develop an additional licence condition relating to HAL's capex programme. The CAA considered that the interests of passengers and cargo owners are generally best served when the airport operator and airlines are working constructively together but following the CAA's initial proposals it became clear that CE had not worked as well as had been expected.

[57] The CAA's letter is at: http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15151

2.156 Following the initial proposals, HAL wrote to the airlines saying that the proposed WACC would not provide an adequate return on investment and it was therefore suspending the discussions on the proposed capex programme for Q6. HAL then reopened negotiations with a substantially reduced programme.

2.157 The CAA considered that this action highlighted the need for greater accountability for HAL with regards to the development and delivery of its capital spend. It said that the CE process was developed and agreed to ensure the capex for Q6 was based on the needs of all parties, including end users, and the airlines' willingness to pay for those projects. The CAA said that HAL should not be able unilaterally to determine the level of capital expenditure having gone through such an extensive CE process. Although the CAA noted HAL’s assertion that it had remained fully compliant with the CE process, the CAA considered that HAL's actions were at odds with the intentions of CE and significantly undermined the collaborative approach by all parties that had been key to the process up to that point. It was clear from the airlines' responses to HAL and the CAA at the time, and their responses to the final proposals, that they also considered that the CE process had not worked as intended. The CAA therefore remains of the view that there should be more formal accountability on HAL through the licence.

2.158 As discussed in the final proposals and Appendix I of the proposed licence, the CAA considered that it had proposed a fair and reasonable WACC and it would expect HAL to invest not just to meet the minimum obligations for its legal compliance but also to undertake investments that further the interests of users, proposals for which have been discussed and agreed through the CE process.

2.159 The CAA therefore proposed to develop a new licence condition that would ensure that the appropriate level of capex required, consistent with users' interests, was delivered efficiently. The CAA's initial thinking was that this licence condition would have four parts:

- requiring HAL to operate, maintain and enhance the airport efficiently and economically;
- incorporating clear processes and policies for CE into the licence;

- requiring HAL to deliver the agreed output from the CE process over the course of the control period; and
- the CAA would also consider whether it would be necessary to include additional obligations similar to those in other regulated sectors relating to enhancements. The CAA acknowledged that proposing to introduce a new licence condition as a modification to the new licence could lead to some uncertainty. However, any licence condition needs to be considered carefully with full consultation on the options. The CAA considered that, as any condition included in the new licence would not be in force in time to influence the development of the current capital programme, it would be better to wait to ensure that the issues were fully aired and debated. However, the CAA acknowledged HAL's concerns about regulatory certainty that it raised in response to the final proposals, so will therefore start to develop and consult on its proposals as soon as possible once the licence is in force.

2.160 The new condition is likely to address processes for the next round of CE for Q7, but the CAA will also explore how it can be used to influence the current capital programme and incentivise HAL to carry forward the full programme within the amount allowed under the Q6 price control.

2.161 The CAA has noted the representations that HAL and the Heathrow Airline Community made to the final proposals and will take these into account in developing the proposed licence condition In developing any such licence condition the CAA will balance its duties to have regard to the need to promote efficiency and economy on the part of the licence holder and to ensure that the licence holder is able to finance its activities and that all reasonable demands for airport operation services are met. Its aim will be to further the interests of users by ensuring that the right projects are included at an efficient and economical price.

Representations on the proposed licence

2.162 The Heathrow Airline Community welcomed the indication by the CAA of its intention to develop a condition for the licence to address the propensity of HAL to disengage from capital investment commitments which had been made by it in the process of CE. It particularly welcomed the indication by the CAA that it will explore if such a condition can influence the delivery of the capital programme which emerged from the Q6 Constructive Engagement discussions. It welcomed an opportunity to work with the CAA and HAL on the development of such a condition.

CAA's response

2.163 The CAA will begin discussions with HAL and the Heathrow Airline Community on this proposal as soon as possible once the licence is in force.

Responses on Licence conditions that the CAA decided not to include in the final proposals

2.164 The CAA had included a number of potential licence conditions in the initial proposals that it decided not to take forward in the final proposals. The reasons for these decisions are set out in the final proposals. Several consultees commented on these decisions in response to the final proposals and their responses are included here for consistency and transparency.

Revocation upon insolvency

2.165 The Heathrow Airline Community agreed that it is most likely to be in the interests of passengers to keep the airport running in the event of insolvency whilst response actions could be implemented. It welcomed the alternative condition requiring the licensee to inform CAA if it were to seek advice on insolvency.

Re-opening the price control

2.166 HAL considered that the CAA's proposal to use the section 22 of the Act licence modification process was confusing and in effect was not a re-opener as it would require CAA, HAL and airline support to proceed, and that it would be almost impossible to imagine a scenario in which all parties would agree to raise prices mid-quinquennium. HAL considered that the only valid alternative would be a prescribed trigger point with established consequences, as exists in some other regulated sectors. HAL noted that this would need to be formally consulted upon.

2.167 The Heathrow Airline Community continues to believe that any re-opening of the price cap should only be in extreme circumstances. Note that the CAA is not proposing to include a price cap re-opening provision but that stakeholders can request the CAA use its section 22 modification powers. The Heathrow Airline Community was satisfied that the section 22 modification provision offered sufficient opportunity for any party to request a modification of the licence.

2.168 The CAA notes that section 22 requires the CAA to consult on modifications but does not require the CAA to seek the agreement of any particular person. If the licence holder or an airline whose interests are materially affected is not content with the CAA's decision, they may apply to appeal against it to the CMA.

Non-discrimination

2.169 The Heathrow Airline Community considers that it would not be in passengers' interests to omit a non-discrimination clause. Whilst other legislation is available to address discrimination, such as section 41 of AA86, this is a cumbersome and time-consuming process and it would serve the interests of passengers better if HAL faced an ex-ante incentive in the licence not to discriminate.

2.170 Such a condition could be applied with greater immediacy to circumstances in which airport users considered HAL to be acting in a discriminatory manner and would also empower the CAA to apply breach of licence conditions on the licensee as remedial action. Furthermore such a condition would not add to HAL’s burdens, rather it would simply be available for the CAA to use if required. It would only be a burden to HAL if it considered that it was likely to act in a discriminatory manner and would seek to avoid any legislation which empowered the CAA to more readily to address such behaviours on the part of HAL.

2.171 The CAA notes that section 41 of AA86 will not be available from April 2014 and it will be repealed when the CAA's new concurrency powers come into force. The CAA considers that these new powers will provide a proportionate and effective way of dealing with discriminatory behaviour, along with the Airport Charges Regulations (ACRs) and Groundhandling Regulations (GHRs). Therefore the CAA continues to consider that including additional protection within the licence would not provide any greater benefit and would not be consistent with its duties to be proportionate and to target those areas where action is required and not to impose unnecessary burdens.

Complaints Handling

2.172 The Heathrow Airline Community welcomes the indication by the CAA that it will review if such a provision is needed in the future.

Sunset clause

2.173 HAL noted that the CAA incorrectly stated that sunset provisions are included in the licence when such provisions appear not to have been included. HAL was keen for the CAA to include such provisions.

2.174 In the executive summary of the final proposals, the CAA set out its overarching policy in developing the licences[58] and stated that where appropriate it would consider such conditions to give effect to this policy by ensuring the licence does not become out of date and can be refreshed, modified or removed in light of the interests of passengers and market circumstances. However, the CAA does not intend to include such provisions at this stage but will rely on the modification provisions in section 22 of the Act. Once the new regulatory regime has bedded in, the CAA will consider the use of sunset clauses where appropriate.

Liability in Conditions of Use

2.175 The Heathrow Airline Community considered that HAL's insulation of itself from liability through its Conditions of Use to absolve itself of any responsibilities for services or facilities operated against the public interest. The airlines were disappointed that the CAA had not addressed this in the current licence but welcomed recognition of this issue by the CAA and its indication that debate on this needs to take place once the licence is in place.

2.176 BA understood the CAA's reluctance to be involved in the determination of liability and act as an arbiter on matters outside the licence. As an alternative, it considered the CAA should revisit the Heathrow Airline Community's proposal to include within the licence, an obligation on HAL to include within their agreements a liability

[58] Paragraph 8 of the executive summary stated that "The CAA is required to ensure that its process in developing the licence is transparent, accountable and consistent, and the licence obligations themselves must be proportionate, consistent and targeted".

condition in line with what would be found between a competitive commercial supplier and customers.

2.177 The CAA notes the above responses and continues to consider it is not appropriate for the CAA to act as an arbiter, and that any licence condition that potentially cuts across existing contractual arrangements would need to be considered very carefully. The CAA considers this debate should be carried out at a later date, once the licence is in place, in light of parties' experience of the new regulatory regime.

Summary of the licence conditions

Part A: Scope and Interpretation

The licence condition

2.178 The CAA will link the airport area in the licence to the airport area covered in the MPD. Therefore, the airport area to be covered by the licence will cover:

- the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft at the airport excluding the Northern Receipt Fuel Facility, the Southern Receipt Fuel Facility, the Sandringham Road Fuel Farm, the Perry Oaks Fuel Farm, the Airport Transfer Pipes and the Fuel Hydrant Systems;
- the passenger terminals; and
- the cargo processing areas.

Part B: General Conditions

The licence conditions

2.179 *Payment of fees condition:* this condition requires HAL to pay charges under a scheme made under section 11 of the 1982 Act. The CAA is not proposing any changes to this condition compared to the proposed licence.

2.180 *Revocation condition*: this condition sets out the circumstances in which the CAA can revoke the licence. The CAA is not proposing any changes to this condition compared to the proposed licence.

Part C: Price Control Conditions

The licence conditions

2.181 *Price control:* this condition sets the charges HAL can charge and is based largely on previous price controls (Q1 to Q5). The price control will last for four years and nine months, to allow for the regulatory year to run from January to December each year, rather than from April to March as in Q5. The CAA has made the following changes to this condition compared to the proposed licence:

- The CAA has clarified in the definition of the terms of calculation for the s factor described in the price control formulae that costs associated with changes in security standards must be certified by the CAA;
- The CAA has uplifted the opening yield to 2014 prices;
- The CAA has amended the licence to reflect the definition of "Ot" as agreed in paragraph 2.37 of the proposed licence, although it has retained the link to the Governance Arrangements for clarity.
- The CAA has adjusted the K factor to account for the 9-month period in 2014, which affects the calculation of the K factor in 2015 and 2016.

2.182 *Charges for other services*: this condition sets out the requirements for HAL in how it charges others for activities not covered by the price control condition. The CAA is not proposing any changes to this condition compared to the proposed licence.

2.183 *Procurement condition*: the CAA is including a condition requiring HAL to ensure its procurement of capital projects is efficient and economical, and that it must publish its policies and procedures on how it will achieve this. Following the proposed licence, the CAA clarified that significant capital works are those projects with a value over £20 million.

2.184 *Cargo condition*: The CAA has included a condition relating to charges for cargo only carriers. The CAA is not proposing any changes to this condition compared to the proposed licence.

Part D: Service Quality Conditions

The licence conditions

2.185 *Service quality rebates and bonuses (SQRB) condition*: the condition incorporates Schedule 1: the Statement of Standards, Rebates and Bonuses. The CAA included a self-modification provision allowing the CAA, HAL and the airlines to make immediate changes to the SQRB scheme where all sides agreed. It also included a provision that allowed the CAA to act as an arbiter if the parties could not reach agreement on the proposed changes. The CAA has made the following changes to this condition compared to the proposed licence:

- clarifying the calculation of Quality of Service Monitor (QSM) scores for Terminal 1 within 12 months of its closure;
- adding a separate section 'Queue times for vehicles' to clarify service quality monitoring of control posts;
- updating the formula of rebate calculation and the tables to reflect the additional rebates HAL has committed to pay if automated security queue measurement is not in place by 1 April 2014;
- updating the tables to show the timing of harmonisation of central search and transfer search standards;
- clarifying the amount of rebate payment during the nine-month regulatory period; and
- updating paragraph numbers, table numbers and footnotes to reflect the above changes.

2.186 *Operational resilience*: this condition sets out the requirements for HAL in relation to planning for and coordinating the response to disruption at the airport. The CAA has made one change to clarify that the relevant information that HAL must coordinate with stakeholders includes information about its own operations and decisions, as well as any relevant information it has been provided by other stakeholders.

Part E: Financial Conditions

The licence condition

2.187 The CAA is not proposing to make any changes to the regulatory accounts, financial resilience or continuity of service plan conditions compared to the proposed licence.

Part F: Consultation Conditions

The licence condition

2.188 The CAA is including a licence condition requiring HAL to consult stakeholders on a number of issues. HAL will have to publish protocols setting out how it will do this. The CAA is making one change to correct a cross-reference.

Other conditions

2.189 In addition, the CAA has identified a possible need for a new licence condition, to be developed when the licence is in force, relating to the planning and delivery of capital projects. Following HAL’s reaction to the CAA's initial proposals on the WACC where it unilaterally revised the capex programme contrary to agreed CE process, the CAA has discussed with HAL including a licence condition relating to delivery of agreed capex, possibly putting greater accountability on HAL with regards to the CE process.

HAL's Licence

2.190 HAL's licence is set out in Chapter 3.

CHAPTER 3

The Licence

Licence granted to

HEATHROW AIRPORT LIMITED

by the Civil Aviation Authority

under section 15 of the Civil Aviation Act 2012

on 13 February 2014

Heathrow Airport Limited Licence

Part A: Scope and interpretation of the Licence

A1 Scope

A1.1 The CAA has made a market power determination under section 7 of the Act on 10 January 2014 that means, for the purposes of section 3 of the Act, Heathrow Airport Limited (the Licensee) is the operator of a dominant airport area at a dominant airport.

A1.2 The Airport (as defined in sections 66 and 67 of the Act) is London Heathrow Airport.

A1.3 The Airport Area is those areas of the Airport, that comprise:

(a) the land, buildings and other structures used for the purposes of the landing, taking off, manoeuvring, parking and servicing of aircraft, excluding the Northern Receipt Fuel Facility, the Southern Receipt Facility, the Sandringham Road Fuel Farm, the Perry Oaks Fuel Farm, the Airport Transfer Pipes and the Fuel Hydrant Systems;

(b) the passenger terminals; and

(c) the cargo processing areas.

A1.4 The CAA, in exercise of the powers conferred by section 15 of the Act, hereby grants to the Licensee this licence authorising the Licensee, and those persons listed in section 3(3) of the Act, to require a person to pay a relevant charge in respect of airport operation services that it provides at the Airport, subject to the conditions of this Licence.

A1.5 This Licence shall come into force on 1 April 2014 and shall continue in force until revoked in accordance with Condition B2 of this Licence.

A2 Interpretations

A2.1 Unless specifically defined within this Licence or in the Act or the context otherwise requires, words and expressions used in the Conditions shall be construed as if they were an Act of Parliament and the Interpretation Act 1978 applied to them. References to an enactment shall include any statutory modification or re-enactment thereof after the date this Licence comes into force.

A2.2 Any word or expression defined for the purposes of any provision of Part I of the Act shall, unless the contrary intention appears, have the same meaning when used in the Conditions.

A2.3 Any reference to a numbered Condition or Schedule is a reference to the Condition or Schedule bearing that number in this Licence, and any reference to a paragraph is a reference to the paragraph bearing that number in the Condition or Schedule in which the reference occurs.

A2.4 In construing the provisions of this Licence, the heading or title of any Condition, Schedule or paragraph shall be disregarded.

A2.5 Where the Licensee is required to perform any obligation by a specified date or within a specified period and has failed so to perform, such obligation shall continue to be binding and enforceable after the specified date or after expiry of the specified period, but without prejudice to any rights or remedies available against the Licensee under the Act or this Licence by reason of the Licensee's failure to perform by that date or within the period.

A2.6 The provisions of sections 74 and 75 of the Act shall apply for the purposes of the publication or sending of any document pursuant to this Licence.

A3 Definitions

A3.1 In this Licence:

(a) airport charges has the meaning assigned to it by regulation 3(1) of the Airport Charges Regulations 2011 (2011 No.2491);

(b) the CAA means the Civil Aviation Authority

(c) the Act means the Civil Aviation Act 2012;

(d) airlines means providers of air transport services;

(e) the AOC means Heathrow Airline Operators Committee, a company limited by guarantee representing all airlines at the Airport. Agreement of the AOC shall be decided according to the AOC's governance arrangements;

(f) the Regulatory Period means the period of nine months between

1 April 2014 and 31 December 2014 and this period shall also be considered to be the Licensee’s financial year for the purposes of this Licence; and

(g) the Regulatory Year means for each of the four years from 2015 to 2018, the twelve month period beginning on 1 January and ending on 31 December. These years shall also be considered to be the Licensee’s financial year for the purposes of this Licence.

Part B: General Conditions

B1 Payment of fees

B1 The Licensee shall pay to the CAA such charges and at such times as are determined under a scheme made under section 11 of the Civil Aviation Act 1982 in respect of the carrying out of the CAA's functions under Chapter I of the Act.

B2 Licence revocation

B2 The CAA may revoke this Licence in any of the following circumstances and only in accordance with sections 48 and 49 of the Act:

(a) if the Licensee requests or otherwise agrees in writing with the CAA that the Licence should be revoked;

(b) if:

(i) the Licensee ceases to be the operator of all of the Airport Area;

(ii) the Airport Area ceases to be a dominant airport area; or

(iii) the Airport ceases to be a dominant airport; or

(c) if the Licensee fails:

(i) to comply with:

1. an enforcement order (given under section 33 of the Act); or

2. an urgent enforcement order (given under section 35 which has been confirmed under section 36); or

(ii) to pay any penalty (imposed under sections 39, 40, 51 or 52 of the Act) by the due date for any such payment,

where any such a failure is not rectified to the satisfaction of the CAA within three months after the CAA has given notice in writing of such failure to the Licensee, provided that no such notice shall be given by the CAA before:

(iii) the proceedings relating to any appeal under section 47 brought in relation to the validity or terms of an order or the

CAA's finding or determination upon which it is based are finally determined; or (as the case may be);

(iv) the proceedings relating to any appeal under sections 47 or 55 brought in relation to the imposition of a penalty, the timing of the payment of the penalty or the amount of the penalty are finally determined.

Part C: The price control conditions

C1 Price Control

C1.1 When the Licensee fixes the amounts to be levied by it by way of airport charges in respect of relevant air transport services in the Regulatory Period it shall fix those charges at the levels best calculated to secure that; in the Regulatory Period, the total revenue at the Airport from such charges divided by the total number of passengers using the Airport does not exceed the maximum revenue yield per passenger, which shall be calculated as follows:

$$\mathrm{M}_{2014} = £22.261\left(1 + B_{2012/13}\right) + \frac{D_{2014}}{Q_{2014}} - \frac{T_{2014}}{Q_{2014}} - K_{2014}$$

Where:

- M_{2014} is the maximum revenue yield per passenger using the Airport in the Regulatory Period expressed in pounds;
- $B_{2012/13}$ is the bonus factor in the Regulatory Period based on the Licensee's performance in 2012/13, as defined in condition C1.8;
- D_{2014} is the cumulative development capex adjustment in the Regulatory Period defined in condition C1.9;
- T_{2014} is the capital 'trigger' factor in the Regulatory Period defined in condition C1.7;
- Q_{2014} is passengers using the Airport in the Regulatory Period; and
- K_{2014} is the per passenger correction factor in the Regulatory Period defined in condition C1.5.

C1.2 On each occasion on which the Licensee fixes the amounts to be levied by it by way of airport charges in respect of relevant air transport services in each of the four subsequent relevant Regulatory Years beginning with 1 January 2015, the Licensee shall fix those charges at the levels best calculated to secure that, in each relevant Regulatory Year, total revenue at the Airport from such charges divided by the total number of passengers using the Airport does not exceed the amount set in accordance with the formula below:

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

Where:

- M_t is the maximum revenue yield per passenger using the Airport in Regulatory Year t expressed in pounds, where;
- RPI_{t-1} is the percentage change (positive or negative) in the Office for National Statistics (ONS) CHAW Retail Price Index between April in year t-1 and the immediately preceding April;
- X = -1.5%;
- B_{t-2} is the bonus factor in Regulatory Year t, based on the Licensee's performance in t-2, as defined in condition C1.8;
- Y_{t-1} is the revenue yield per passenger in Regulatory Period or Regulatory Year t-1 defined in condition C1.3;
- D_t is the cumulative development capex adjustment in Regulatory Year t defined in condition C1.9;
- T_t is the capital 'trigger' factor in Regulatory Year t defined in condition C1.7;
- Q_t is passengers using the Airport in Regulatory Year t;
- BR_t is the business rate revaluation factor in Regulatory Year t defined in condition C1.11; and
- K_t is the per passenger correction factor in Regulatory Year t defined in condition C1.5.

Y_{t-1}: average revenue yield per passenger

C1.3 Yt-1 is the average revenue yield per passenger in Regulatory Period or Regulatory Year t-1 calculated in accordance with the following formula:

$$Y_{t-1} = Y_{t-2}(1 + RPI_{t-2} + X) + S_{t-1}$$

Where:

- $Y_{2014} = £22.261 + S_{2014}$

- RPI_{t-2} is the percentage change (positive or negative) in the Retail Price Index between that published with respect to April in Regulatory Period or Regulatory Year t-2 and that published with respect to the immediately preceding April;
- X = -1.5%
- S_{t-1} is the allowable security cost per passenger defined in condition C1.4.

S_{t-1}: allowable security cost *per passenger*

C1.4 St-1 is the allowable security cost per passenger in Regulatory Period or Regulatory Year t-1 arising as a result of changes to security standards. Additional costs from changes in security standards are considered as positive values. Reductions in cost from changes in security standards are considered as negative values. This mechanism only applies when the expected cumulative cost associated with changes to security standards are:

(a) above a cumulative £19,000,000 "deadband" figure; or

(b) below a cumulative - £19,000,000 "deadband" figure

S_{t-1} is calculated in accordance with the following formulae expressed in pounds:

For each relevant Regulatory Period or Regulatory Year t-1, in the case that EC is a positive value, with reference to the absolute value of EC:

If: $|EC_{t-1}| > £19,000,000$; and

$|EC_{t-2}| > £19,000,000$

Then: $S_{t-1} = 0.9C_{t-1}$

Or if: $|EC_{t-1}| > £19,000,000$; and

$|EC_{t-2}| < £19,000,000$

Then: $S_{t-1} = 0.9\frac{(EC_{t-1} - £19,000,000)}{(t^*)Q_{t-1}}$

Or if: $|EC_{t-1}| < £19{,}000{,}000$; and

$|EC_{t-2}| > £19{,}000{,}000$

Then: $S_{t-1} = -0.9\frac{(EC_{t-2} - £19{,}000{,}000)}{(t^*)Q_{t-1}}$

Otherwise: $S_{t-1} = 0$

For each relevant Regulatory Period or Regulatory Year t-1, if EC is a negative number, with reference to the absolute value of EC:

If: $|EC_{t-1}| > £19{,}000{,}000$; and

$|EC_{t-2}| > £19{,}000{,}000$

Then: $S_{t-1} = 0.9C_{t-1}$

Or if: $|EC_{t-1}| > £19{,}000{,}000$; and

$|EC_{t-2}| < £19{,}000{,}000$

Then: $S_{t-1} = 0.9\frac{(EC_{t-1} + £19{,}000{,}000)}{(t^*)Q_{t-1}}$

Or if: $|EC_{t-1}| < £19{,}000{,}000$; and

$|EC_{t-2}| > £19{,}000{,}000$

Then: $S_{t-1} = -0.9\frac{(EC_{t-2} + £19{,}000{,}000)}{(t^*)Q_{t-1}}$

Otherwise: $S_{t-1} = 0$

Where:

- Q_{t-1} is passengers using the Airport in Regulatory Period or Regulatory Year t-1.
- t* is a time variable, which is defined for each Regulatory Period or Regulatory Year in table C.1 below:

Table C.1: Time variable

Period t =	t* =
9mo. 2014	57/9
2015	4
2016	3
2017	2

- C_{t-1} is the total allowable security claim per passenger using the Airport in Regulatory Period or Regulatory Year t-1 (whether of a positive or negative value) expressed in pounds relative to security costs per passenger in the previous period;
- EC_t is the expected cumulative security claim over the relevant Regulatory Period and four Regulatory Years starting on 1 April 2014, in period t, which shall be calculated in accordance with table C.2 below:

Table C.2: Calculation of annualised allowable security costs

Period t =	2013	9mo. 2014	2015	2016	2017
Changes in 2014	0	$6.33 * C_{2014} * Q_{2014}$	$6.33 * C_{2014} * Q_{2014}$	$6.33 * C_{2014} * Q_{2014}$	$6.33 * C_{2014} * Q_{2014}$
Changes in 2015	0	0	$4 * C_{2015} * Q_{2015}$	$4 * C_{2015} * Q_{2015}$	$4 * C_{2015} * Q_{2015}$
Changes in 2016	0	0	0	$3 * C_{2016} * Q_{2016}$	$3 * C_{2016} * Q_{2016}$
Changes in 2017	0	0	0	0	$2 * C_{2017} * Q_{2017}$
EC_t =	Sum rows	Sum rows	Sum rows	Sum rows	Sum rows

Where:

- C_t is the total allowable security claim per passenger using the Airport in Regulatory Period or Regulatory Year t (whether of a positive or negative value) expressed in pounds, relative to security costs per passenger in the previous period; and
- Q_t is the actual number of passengers using the Airport in Regulatory Period or Regulatory Year t.

Kt: per passenger correction factor

C1.5 K_t is the per passenger correction factor (whether positive or negative value) to be made in Regulatory Period or Regulatory Year t, which is calculated as follows:

Where: t = 2015 or 2016

$$K_t = \frac{R_{t-2} - (Q_{t-2}M_{t-2})}{Q_t}\left(1 + \frac{I_{t-2}}{100}\right)^{21/12}$$

Where: t ≠ 2015 or 2016

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

Where:

- R_{t-2} is total revenue from airport charges in respect of relevant air transport services levied at the Airport in Regulatory Period or Regulatory Year t-2 expressed in pounds;
- Q_t is passengers using the Airport in Regulatory Period or Regulatory Year t;
- M_{t-2} is the maximum revenue yield per passenger using the Airport in Regulatory Period or Regulatory Year t-2;
- I_{t-2} is the appropriate interest rate for Regulatory Period or Regulatory Year t-2, which is equal to:
- the specified rate plus 3% where K_t is positive; or

- the specified rate where K_t is negative. In both cases K_t takes no account of I_t for this purpose.

C1.6 In relation to the Regulatory Period and the Regulatory Year 2015, the values of R_{t-2}, Q_{t-2}, M_{t-2} and I_{t-2} shall be calculated by reference to the conditions as to airport charges imposed in relation to the Airport under the Airports Act 1986 in force at 31 March 2014. In the case of the Regulatory Period, t-2 refers to the 12-month period from 1 April 2012 to 31 March 2013.

T_t: trigger factor

C1.7 T_t is the trigger factor, which is a reduction in the maximum revenue yield per passenger occurring when the Licensee has not achieved specific capital investment milestones associated with relevant projects. The factor shall be calculated as follows:

$$\mathrm{T_t} = \sum_{\mathrm{i}} \mathrm{TM_{it}TF_{it}}$$

Where:

For any specific trigger i, in Regulatory Period or Regulatory Year t:

- TF_{it} is the number of months between the milestone month and the earlier of; the project completion date or the end of Regulatory Period or Regulatory Year t, up to a maximum of 12. In 2014 TF_{it} is restricted to a maximum of 9.
- TM_{it} is the trigger payment associated with each trigger in Regulatory Period or Regulatory Year t;

Where: $\mathrm{TM_{ti}} = \mathrm{MTP_i}\frac{\mathrm{P_{t-1}}}{222.80}$

- MTP_i is the monthly trigger payment which is defined for each relevant project; and
- P_{t-1} is the value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1;
- The triggers, milestone month and monthly trigger payments are defined in the Q6 Capital Investment Triggers Handbook and may be modified in accordance with the modification processes set out in that handbook.

B_{t-2}: bonus factor

C1.8 B_{t-2} is the bonus factor based on performance achieved in respect of specified elements k of the Licensee's service quality rebates and bonuses scheme (SQRB) as defined in Condition D1. The bonus factor shall be calculated in accordance with Schedule 1 of this Licence.

D_t: cumulative development capex adjustment

C1.9 D_t is the cumulative development capex adjustment, which adjusts the maximum revenue yield per passenger in Regulatory Period or Regulatory Year t to account for cumulative changes in the revenue requirement associated with development capex projects. D_t shall be calculated in accordance with table C.3 below.

Table C.3: Development capex adjustment

Period t =	9mo. 2014	2015	2016	2017	2018
Additional revenue requirement in 2014	0.5 * d_{2014}	d_{2014} * P_{t-1} / 222.80	d_{2014} * P_{t-1} / 222.80	d_{2014} * P_{t-1} / 222.80	d_{2014} * P_{t-1} / 222.80
Additional revenue requirement in 2015	0	0.5 * d_{2015}	d_{2015} * P_{t-1} / 222.80	d_{2015} * P_{t-1} / 222.80	d_{2015} * P_{t-1} / 222.80
Additional revenue requirement in 2016	0	0	0.5 * d_{2016}	d_{2016} * P_{t-1} / 222.80	d_{2016} * P_{t-1} / 222.80
Additional revenue requirement in 2017	0	0	0	0.5 * d_{2017}	d_{2017} * P_{t-1} / 222.80
Additional revenue requirement in 2018	0	0	0	0	0.5 * d_{2018}
D_t =	Sum Rows * W	Sum Rows * W	Sum Rows * W	Sum Rows * W	Sum Rows * W

Where:

- W is the Weighted Average Cost of Capital which shall have a value of 5.35%;
- d_t is the annual development capex adjustment in Regulatory Period or Regulatory Year t defined in condition C1.10; and

- P_{t-1} is the value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1.

d_t: annual development capex adjustment

C1.10 The annual development capex adjustment in Regulatory Period or Regulatory Year t is an amount equal to the net difference between the development capex allowance included in the Q6 settlement and the total capex associated with new core capex projects in Regulatory Period or Regulatory Year t, to be calculated as follows:

$$d_t = O_t - (V_t * \frac{P_{t-1}}{222.80})$$

Where:

- O_t is the total capex in Regulatory Period or Regulatory Year t associated with all development capex projects that have transitioned to core capex project status after the Q6 settlement either during or before Regulatory Period or Regulatory Year t, which includes the capital spend incurred during the development stages of projects, irrespective of whether projects have transitioned from development to core as determined through the governance arrangements.
- V_t is the development capex allowance in Regulatory Period or Regulatory Year t; and
- P_{t-1} is the value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1.

BRt: business rate revaluation factor

C1.11 BR_t is the business rate revaluation factor in Regulatory Period or Regulatory Year t, calculated in accordance with the following formulae.

If: t = 2018;

Then:

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

Otherwise: $BR_t = 0$

Where:

- RPI_{t-1} is the percentage change (positive or negative) in the ONS CHAW Retail Price Index between April in Regulatory Period or Regulatory Year t-1 and the immediately preceding April.
- Z_t is the business rate forecast variance in Regulatory Period or Regulatory Year t, calculated in accordance with table C.4 below:

Table C.4: Business rate forecast variance

Period t =	Z_t =
9mo. 2014	0
2015	0
2016	0
2017	$(U_t - £136{,}900{,}000) * \frac{P_{t-1}}{222.80}$
2018	$(U_t - £136{,}800{,}000) * \frac{P_{t-1}}{222.80}$

Where:

- U_t is the regulatory allowance for business rates (that is £136,900,000 in 2017 and £136,800,000 in 2018) multiplied by the revaluation impact.
- P_{t-1} is the value of the ONS CHAW Retail Price Index in April in Regulatory Period or Regulatory Year t-1.

Definitions

C.1.12 In this Condition C.1:

(a) **allowable security claim per passenger** means the annual equivalent of the increase or decrease in security costs at the Airport in the relevant Regulatory Period or Regulatory Year which arise as a result of a change in required security standards at the Airport, as certified by the CAA, divided by the number of passengers using the Airport in that Regulatory Period or

Regulatory Year;

(b) **average revenue yield per passenger** means the revenue from airport charges levied in respect of relevant air transport services in the relevant Regulatory Period or Regulatory Year, before any deduction of rebates under the Service Quality Rebates and Bonuses Scheme, divided by the total number of passengers using the Airport in the relevant Regulatory Period or Regulatory Year;

(c) **business rate cost** is the tax paid by the Licensee associated with the Airport's land and property assets, as determined by the Valuation Office Agency;

(d) **core capex project** is any project that has passed Gateway 3, being taken forward for implementation in accordance with the governance arrangements;

(e) **development capex allowance** is a capex allowance included in the Q6 RAB based on the sum of development capex project P80 cost estimates as set out in the governance arrangements;

(f) **development capex project** is any project under development that has not passed Gateway 3 in accordance with the governance arrangements, but for which an allowance has been included in the development capex allowance;

(g) **Gateway 3** has the meaning set out in the governance arrangements;

(h) **the governance arrangements** means the arrangements set out in the Q6 Capital Efficiency Handbook published by the Licensee by 1 October 2014 as agreed by the CAA;

(i) **passenger using the Airport** means a terminal passenger joining or leaving an aircraft at the Airport. A passenger who changes from one aircraft to another, carrying the same flight number is treated as a terminal passenger, as is an interlining passenger;

(j) **project completion date** is the date when in the judgement of the CAA the Licensee has achieved the trigger criteria as defined for each project through the governance arrangements;

(k) **the Q6 Capital Investment Triggers Handbook** means the handbook in existence when this Licence comes into force, having been agreed by the Licensee and the airlines. This handbook contains details of the triggers, milestone months and monthly trigger payments for core capex projects and details of how future changes to those elements can be made with the agreement of the Licensee and the airlines;

(l) **relevant air transport services** means air transport services carrying passengers that join or leave an aircraft at the Airport, including air transport services operated for the purpose of business or general aviation;

(m) **revaluation impact is equal to one plus the difference between the actual increase in rateable value** measured as a percentage change and +9%, (being the percentage increase assumed in the regulatory allowance) occurring as a result of the rate revaluation undertaken by the Valuation Office Agency in 2017. The actual change will be calculated by multiplying the actual percentage increase in the Cumulo Rateable Value due to the revaluation and the actual percentage increase in the national Uniform Business Rate.

(n) **specified rate** means the average of the Treasury Bill Discount Rate (expressed as an annual percentage **interest** rate) published weekly by the Bank of England, during the 12 months from the beginning of May in Regulatory Period or Regulatory Year t-2 to the end of April in Regulatory Period or Regulatory Year t-1.

C2 Charges for other services

C2.1 By 30 September 2014 and by 30 September in each subsequent year the Licensee shall inform the CAA of the system used by it to allocate costs to the Specified Facilities. The Licensee shall make any amendments to its cost allocation system if so requested by CAA by 31 December prior to each charging year commencing on 1 January.

C2.2 By 30 September 2014 and by 30 September in each subsequent year the Licensee shall provide to the CAA statements of actual costs and revenues in respect of each of the Specified Facilities for the year ending the previous 31 December.

C2.3 By 31 December each year, the Licensee shall provide to the CAA and to users of the Specified Facilities or their representatives prior to implementing any price changes a statement of the pricing principles for each item charged including the assumptions and relevant cost information adequate to verify that the charges derive from the application of the pricing principles.

C2.4 Where charges for the Specified Facilities are not established in relation to cost the Licensee shall provide to the CAA and to users of the Specified Facilities or their representatives a statement of the principles on the basis of which the charges have been set with full background information as to the calculation of such charges including statements of any comparables used.

C2.5 Where in respect of any relevant Regulatory Period or Regulatory Year actual revenue for any of the Specified Facilities differs from that forecast for the purposes of the price control review for the period 1 April 2014 to 31 December 2018 (as specified by the CAA), the Licensee shall provide to the CAA and to users of the Specified Facilities or their representatives detailed reasons for the differences.

Definitions

C2.6 In this Condition C2 the Specified Facilities are:

(a) check-in desks;

(b) baggage systems;

(c) services for PRMs;

(d) staff car parking;

(e) staff ID cards;

(f) fixed electrical ground power;

(g) pre-conditioned air;

(h) airside licences;

(i) waste, recycling and refuse collection;

(j) taxi feeder park;

(k) heating and utility services (including electricity, gas, water and sewerage);

(l) facilities for bus and coach operators;

(m) common IT infrastructure; and

(n) HAL contribution to the funding of the AOC.

C3 Procurement of capital projects

C3.1 The Licensee shall, so far as is reasonably practicable, secure the procurement of capital projects in an efficient and economical manner, taking account of value for money including scope, aggregated direct and indirect costs for the airlines affected by the project, programme timing risk and benefit to users of air transport services.

C3.2 The following obligations in this Condition C3 are without prejudice to the generality of Condition C3.1 and compliance with the following obligations shall not necessarily be treated in itself as sufficient to secure compliance with Condition C3.1. In fulfilling these obligations, the Licensee shall at all times comply with Condition C3.1.

Publication of a Procurement Code of Practice

C.3.3 By 1 October 2014 the Licensee shall publish a Procurement Code of Practice setting out the principles, policies and processes by which it will comply with Condition C3.1.

C.3.4 As a minimum, the Procurement Code of Practice shall include the following information:

(a) the acquisition principles, which shall ensure that the design and delivery of relevant capital projects are carried out in a manner which provides an appropriate balance of responsibility between the parties for cost certainty, risk, schedule and specification;

(b) the options for acquisition models that the Licensee intends to apply;

(c) the critical criteria that the Licensee intends to apply for adopting a particular acquisition model; and

(d) the key principles that the Licensee will apply to all contractors with regards to the operational requirements of airlines and the Licensee's own airport operation services.

C.3.5 The information required under Condition C3.4 shall demonstrate how the Licensee will:

(a) further the objective for procurement in Condition C3.1;

(b) incentivise efficiency by its contractors; and

(c) take account of the overall performance of its contractors in awarding additional projects.

C3.6 The Licensee shall, in consultation with airlines, review the Procurement Code of Practice from time to time and update it as necessary, or if directed by the CAA by notice to do so.

C3.7 The Licensee shall publish by 1 February each year a report identifying instances where significant capital investment work has not been procured in line with the Procurement Code of Practice, providing in each case evidence and analysis as to why an alternative procurement method better met the objective.

Definitions

C3.8 In this Condition C3, significant capital investment work means a capital project with a value of over £20 million.

C4 Charges for cargo only operators

C4.1 In the Regulatory Period and the subsequent four Regulatory Years, the Licensee shall not levy airport charges in respect of air services that do not fall within the definition of passenger air services that are higher than are levied in respect of equivalent air services falling within that definition.

Definitions

C4.2 In this Condition C4 passenger air services means 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.

Part D: Service quality conditions

D1 Service quality standards, rebates, bonuses and publication

D1.1 The Licensee shall comply with the Statement of Standards, Rebates and Bonuses ("the Statement").

D1.2 The Statement is in Schedule 1 to this Licence and subject to the following provisions of this condition is a condition of this Licence.

D1.3 The Licensee shall maintain records of the actual quality of service, rebates and bonuses in such form and detail that the performance can be independently audited against the standards set out in the Statement.

D1.4 The Licensee shall publish relevant information about its performance in accordance with the requirements specified in the Statement.

D1.5 The Licensee shall facilitate and pay for regular, independent audits of the adequacy, measurement and workings of the service quality rebates and bonuses (SQRB) scheme, including the QSM. The independent auditors for this purpose will be appointed by the CAA and shall report to the CAA.

D1.6 The CAA may by notice modify the Statement with immediate effect where there is written agreement between:

a) the Licensee; and

b) the AOC.

D1.7 Where the Licensee and the AOC cannot reach agreement, either party may request that the CAA determines the modification.

D1.8 Where a request has been made under Condition D1.7, the CAA may by notice determine the modifications, following a reasonable period of consultation.

D1.9 The modifications that can be made under Conditions D1.6 and D1.8 are any modifications to Schedule 1 except:

a) any modifications to the elements listed in the 'Element' columns of Table 1a to Table 6 and Table 10a to Table 10e;

b) any modifications to the table of bonuses (Table 8) and to the calculation of the bonus factor set out in the Statement; and

c) any modifications to Table 9.

D1.10 Modifications can be made to the Statement under Conditions D1.6 and D1.8 no more frequently than one group of changes in each three month period.

Definitions

D1.11 In this Condition D1 the QSM has the meaning set out in the Statement.

D2 Operational Resilience

D2.1 The purpose is to secure the availability and continuity of airport operation services at the Airport, particularly in times of disruption, to further the interests of users of air transport services in accordance with best practice and in a timely, efficient and economical manner.

D2.2 The Licensee shall achieve the purpose so far as is reasonably practicable having regard to all relevant circumstances.

D2.3 The following obligations in this Condition D.2 are without prejudice to the generality of Condition D2.2 and compliance with the following obligations shall not necessarily be treated in itself as sufficient to secure compliance with Condition D2.2. In fulfilling these obligations the Licensee shall at all times comply with Condition D2.2.

Resilience plans

D2.4 By 1 October 2014 the Licensee shall publish one or more plan(s) or other documents setting out the principles, policies and processes by which it will comply with Condition D2.2.

D2.5 As a minimum, the plan(s) shall include those elements set out in any relevant guidance issued by the CAA as revised from time to time.

D2.6 In particular the plan(s) shall include details on how the Licensee, in cooperation with airlines using the Airport, will seek to ensure the welfare of users of air transport services during disruption.

D2.7 Prior to publishing any plan(s) or other documents under Condition D2.4 the Licensee shall consult all relevant parties on those plans or documents.

D2.8 The Licensee shall allow a reasonable time for relevant parties to respond to any consultation issued under Condition D2.7.

D2.9 The Licensee shall, from time to time or when so directed by the CAA, review and, if necessary and following consultation, revise any plan(s) or other documents published under Condition D2.4 so that they may better comply with Condition D2.2.

D2.10 No revision of any CAA guidance under Condition D2.5 or CAA direction under Condition D2.9 shall have effect unless the CAA has first consulted the Licensee and any relevant parties.

Coordination and cooperation

D2.11 The Licensee shall so far as is reasonably practicable coordinate and cooperate with all relevant parties at the Airport to meet the requirements of Condition D2.2.

D2.12 The Licensee shall set up and facilitate a committee of relevant parties or organisations representing those relevant parties. All relevant parties shall have the right to be on this committee or, if they so wish, to be represented on it by an organisation appointed to that effect.

D2.13 The Licensee shall develop rules of conduct for airlines and suppliers of groundhandling services to follow, particularly during disruption, in consultation with those parties. The rules of conduct shall be set out in the Licensee's Conditions of Use and in any written arrangements, including licences issued by the Licensee, for the supply of groundhandling services and shall comply with the following principles:

a) they shall be applied in a proportionate manner to the various airlines and suppliers of groundhandling services; and

b) they shall relate to the purpose in Condition D2.1.

D2.14 The Licensee shall take all reasonable steps to ensure that airlines and suppliers of groundhandling services comply with the rules of conduct.

Provision of information

D2.15 In the event of service disruption however caused the Licensee shall so far as is reasonably practicable:

a) coordinate the communication of timely, accurate, clear and relevant operational information, conditions and decisions to relevant parties, in relation to its own operations and, where available to the Licensee, the operations of other relevant parties;

b) provide, or ensure the provision of timely, accurate, clear and relevant information about its operations to, and adequate communication with, users of air transport services; and

c) provide timely, accurate, clear and relevant information to users of air transport services including, but not limited to, information about their relevant rights under the Denied Boarding Regulations during disruption.

Definitions

D2.16 In this Condition D.2

a) Conditions of Use means the Heathrow Airport Conditions of Use including Airport Charges, as reviewed and published by the Licensee on an annual basis;

b) The Denied Boarding Regulations means Regulation (EC) 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91; and

c) Relevant parties means those providing a service to users of air transport services at the Airport including airlines, providers of groundhandling services, the provider of aerodrome air navigation services, fuel and energy suppliers and the UKBF.

Part E Financial conditions

E1 Regulatory accounting requirements

E1.1 This Condition applies for the purpose of making available, in a form and to a standard reasonably satisfactory to the CAA, such audited regulatory accounting information as will, in furtherance of the requirements of this Licence:

a) enable the CAA, airlines and users of air transport services to assess on a consistent basis the financial position of the Licensee and the financial performance of provision of airport operation services and associated services provided in connection with the Airport;

b) assist the CAA, airlines and users of air transport services to assess performance against the assumptions underlying the price control conditions in Conditions C1 and C2 of this Licence; and

c) inform future price control reviews.

E1.2 The Licensee shall keep and, so far as it is able, procure that any related undertaking keeps the accounting records required by the Companies Act 2006 to keep in such form as is necessary to enable the Licensee to comply with this Condition and the Regulatory Accounting Guidelines.

E1.3 The Licensee shall prepare on a consistent basis from the accounting records referred to in Condition E1.2, in respect of the Regulatory Period and each subsequent Regulatory Year, regulatory accounts in conformity with the Regulatory Accounting Guidelines for the time being in force in accordance with this Condition.

E1.4 The Regulatory Accounting Guidelines prepared pursuant to Condition E1.3 shall, without limitation:

a) provide that, except so far as the CAA reasonably considers otherwise, the regulatory accounts shall be prepared in accordance with applicable law and International Financial Reporting Standards (IFRS) as adopted by the EU from time to time; and

b) state the accounting policies to be adopted.

E1.5 The Licensee shall:

a) procure, in respect of the regulatory accounts prepared in accordance with Condition E1.3 in respect of a Regulatory Period or Regulatory Year, a report by the Auditors addressed to the CAA stating whether in their opinion those accounts including accompanying commentary on performance have been properly prepared in accordance with this Condition and the Regulatory Accounting Guidelines and on that basis fairly present the financial position and the financial performance of the Licensee;

b) deliver to the CAA the Auditors' report referred to in sub-paragraph a) and the regulatory accounts referred to in Condition E1.3 as soon as reasonably practicable, and in any event not later than six months after the end of the Regulatory Period or Regulatory Year to which they relate; and

c) arrange for copies of the regulatory accounts and Auditors' report referred to in Conditions E1.5 a) and b), respectively, to be made publicly available and, so far as reasonably practicable, to do so when the annual statutory accounts of the Licensee are made available.

E1.6 In this Condition E1 Regulatory Accounting Guidelines means the guidelines, published from time to time by the CAA so as to fulfil the purpose set out in Condition E1.1, which govern the format and content of such regulatory accounts and the basis on which they are to be prepared.

E2 Financial Resilience

Certificate of adequacy of resources

E2.1 The Licensee shall at all times act in a manner calculated to secure that it has available to it sufficient resources including (without limitation) financial, management and staff resources, to enable it to provide airport operation services at the Airport.

E2.2 The Licensee shall submit a certificate addressed to the CAA, approved by a resolution of the board of directors of the Licensee and signed by a director of the Licensee pursuant to that resolution. Such certificate shall be submitted within four months of the end of the relevant Regulatory Period or Regulatory Year and shall include a statement of the factors which the directors of the Licensee have taken into account in preparing that certificate. Each certificate shall be in one of the following forms:

a) "After making enquiries based on systems and processes established by the Licensee appropriate to the purpose, the directors of the Licensee have a reasonable expectation that the Licensee will have available to it, after taking into account in particular (but without limitation) any dividend or other distribution which might reasonably be expected to be declared or paid, any amounts of principal and interest due under any loan facilities and any actual or contingent risks which could reasonably be material to their consideration, sufficient financial and other resources and financial and operational facilities to enable the Licensee to provide airport operation services at London Heathrow Airport of which the Licensee is aware or could reasonably be expected to make itself aware it is or will be subject for a period of two years from the date of this certificate."

b) "After making enquiries based on systems and processes established by the Licensee appropriate to the purpose, the directors of the Licensee have a reasonable expectation, subject to what is said below, that the Licensee will have available to it, after taking into account in particular (but without limitation) any dividend or other distribution which might reasonably be expected to be declared or paid, any amounts of principal and interest due under any loan facilities, and any actual or contingent risks which could reasonably be material to their consideration, sufficient financial and other resources and financial and operational facilities to enable the Licensee to provide airport operation services at London Heathrow Airport of which the Licensee is aware or could reasonably be expected to make itself aware it is or will be subject for a period of two years from the date of this certificate. However, they would like to draw attention to the following factors which may cast doubt on the ability of the Licensee to provide airport operation services at London Heathrow Airport for that period……."

c) "In the opinion of the directors of the Licensee, the Licensee will not have available to it sufficient financial or other resources and financial and operational facilities to provide airport operation services at London Heathrow Airport of which the Licensee is aware or of which it could reasonably be expected to make itself aware or to which it will be subject for a period of two years from the date of this certificate."

E2.3 The Licensee shall inform the CAA in writing as soon as practicable if the directors of the Licensee become aware of any circumstance which causes them no longer to have the reasonable expectation expressed in the then most recent certificate given under Condition E2.2.

E2.4 The Licensee shall obtain and submit to the CAA with each certificate provided under Condition E2.2 a report prepared by its Auditors stating whether or not the Auditors are aware of any inconsistencies between, on the one hand, that certificate and the statement submitted with it and, on the other hand, any information which they obtained during their audit of the relevant year end accounts of the Licensee.

E2.5 If the Licensee or any of its linked companies (or, where applicable the directors and officers of any of those undertakings) seeks, or is advised to seek, advice from an insolvency practitioner or any other person relating to

a) the Licensee's financial position or ability to continue to trade; or

b) that linked company's financial position or ability to continue to trade, only to the extent that it would affect the Licensee's financial position or ability to continue to trade,

c) the Licensee shall inform the CAA within 3 working days.

Restriction on activities

E2.6 The Licensee shall not, and shall procure that its subsidiary undertakings shall not, conduct any business or carry on any activity other than:

a) the Permitted Business; and/or

b) any other business or activity for which the CAA has given its written consent for the purposes of this Condition, such consent not to be unreasonably withheld or delayed.

Ultimate holding company undertakings

E2.7 The Licensee shall procure from each Covenantor a legally enforceable undertaking in favour of the Licensee in the form specified by the CAA that that Covenantor will:

(a) refrain from any action, and procure that every subsidiary of the Covenantor (other than the Licensee and its subsidiaries) will refrain from any action, which would then be likely to cause the Licensee to breach any of its obligations under this Licence;

(b) promptly upon request by the CAA (specifying the information required) provide to the CAA (with a copy to the Licensee) information of which they are aware and which the CAA reasonably considers necessary in order to enable the Licensee to comply with this Licence.

E2.8 Such undertaking shall be obtained within seven days of the company or other person in question becoming a Covenantor and shall remain in force for so long as the Licensee remains the holder of this Licence and the Covenantor remains a Covenantor.

E2.9 The Licensee shall:

(a) deliver to the CAA, within seven days of obtaining the undertaking required by Condition E2.8, a copy of such undertaking;

(b) inform the CAA as soon as practicable in writing if the directors of the Licensee become aware that the undertaking has ceased to be legally enforceable or that its terms have been breached; and

(c) comply with any direction from the CAA to enforce any such undertaking.

Change to banking ringfence

E2.10 The Licensee shall not amend, vary, supplement or modify or concur in the amendment, variation, supplementation or modification of any of the finance documents in respect of credit rating requirements (whether in each case in the form of a written instrument, agreement or document or otherwise) (a “Variation”) unless it has given prior written notice thereof to the CAA. The Licensee shall, as soon as reasonably practicable:

(a) notify the CAA of the possibility of any such Variation; and

(b) provide a summary of the executed change.

E2.11 The provisions of Condition E2.10 shall not apply to any administrative or procedural Variation.

Definitions

E2.12 In this Condition E2:

(a) **the Covenantor** means a company or other person which is at any time an ultimate holding company of the Licensee.

(b) **a linked company** means any company within the Licensee's Group where the financial position of that company or its inability to continue to trade would have an adverse effect on the Licensee's financial position or ability to continue to trade;

(c) Permitted Business means:

(i) any and all business undertaken by the Licensee and its subsidiary undertakings as at 1 April 2014;

(ii) to the extent that it falls outside the definition in Condition E2.12(c)(i), the business of owning, operating and developing the Airport and associated facilities by the Licensee and its subsidiary undertakings (including, without limitation, any and all airport operation services, provision of facilities for and connected with aeronautical activities including retail, car parks, advertising and surface access and the infrastructure development thereof); and

(iii) any other business, provided always that the average of any expenses incurred in connection with such businesses during any one financial year is not more than 2% of the value of the regulatory asset base (RAB) at the start of the financial year.

E3 Continuity of service plan

E3.1 The purpose of the continuity of service plan shall be to describe in detail the legal, regulatory, operational and financial information that an administrator, receiver, new management or similar could reasonably be expected to require in order for the administrator to efficiently carry out its functions and to remain compliant with this

Licence and the Licensee’s aerodrome licence.

E3.2 The Licensee shall prepare and at all times maintain a continuity of service plan fulfilling the requirements of Condition E3.1.

E3.3 The continuity of service plan prepared under Condition E3.2 shall be submitted to the CAA as follows:

(a) the first continuity of service plan shall be submitted as soon as practicable, and in any event not later than 1 October 2014;

(b) subsequent continuity of service plans within 20 business days of the CAA's written request.

E3.4 The form, scope and level of detail of the plan referred to in this Condition shall be approved by the CAA, (such approval not to be unreasonably withheld or delayed).

E3.5 At least every 12 months the Licensee shall review the appropriateness of its continuity of service plan and submit to the CAA a certificate addressed to the CAA, approved by a resolution of the board of directors of the Licensee and signed by a director of the Licensee pursuant to that resolution. Such certificate shall be submitted within four months of the end of the relevant Regulatory Period or Regulatory Year in the following form:

"The Licensee has reviewed its continuity of service plan. In the opinion of the directors of the Licensee the continuity of service plan is fit for purpose and complies with its obligations under its Licence."

Part F: Consultation conditions

F1.1 The Licensee shall ensure that:

(a) it consults relevant parties on, as a minimum:

(i) its proposals for future investment in the short, medium and long term that have the potential to affect those parties;

(ii) its proposals for the development and delivery of key capital projects identified in its future investment proposals in Condition F1.1.(a)(i)

(iii) charges that are subject to Condition C2;

(iv) the service quality regime in Condition D1, including the Statement of Standards, Rebates and Bonuses in Schedule 1 to this Licence;

(v) its traffic forecasts;

(vi) its operational resilience activities in Condition D2; and

(vii) its policies and proposals for any other airport operation service it provides;

(b) so that those parties have sufficient information to take an informed view; and

(c) the views of the relevant parties are taken into account in deciding on the future development of the proposals.

F.1.2 The Licensee shall by 1 October 2014 consult on, agree and publish one or more protocols setting out how it will satisfy the obligation in Condition F1.1.

F.1.3 As a minimum, the protocols shall include those elements set out in any relevant guidance issued from time to time by the CAA.

F.1.4 No revision of any CAA guidance under Condition F1.3 shall have effect unless the CAA has first consulted the Licensee and any other relevant parties.

F1.5 In compliance with Condition F1.2, the Licensee may publish any protocol that is already agreed with relevant parties and is in force at the date this Licence comes into force.

F1.6 The Licensee shall, in consultation with relevant parties, review the protocols from time to time and update them as necessary, or if directed by the CAA by notice to do so.

F1.7 Where the Licensee cannot reach agreement with the relevant parties under Conditions F1.2 or F1.6, it may refer the matter to the CAA for determination and the CAA may, by notice, determine it.

F1.8 In this Condition F1, relevant parties means those stakeholders that need to be consulted for each protocol, including any groups or boards already established for the purpose of developing protocols and in place at the date this Licence was granted.

Schedule 1

Statement of Standards, Rebates and Bonuses

1. Introduction

1.1 This Schedule sets out the Standards, Rebates and Bonuses as referred to in Conditions C1 and D1 of this Licence. This Schedule may be modified from time to time in accordance with Condition D1.

1.2 The remaining parts of this Schedule are:

2. Components of the service quality rebates and bonuses (SQRB) scheme
   - a) Quality of Service Monitor (QSM)
   - b) Queue times for passengers and staff
   - c) Queue times for vehicles
   - d) Availability
   - e) Aerodrome congestion term (ACT)
3. Rebates
   - a) Payment
   - b) Calculation
4. Bonuses
   - a) Payment
   - b) Calculation
5. Publication
6. General Matters
   - a) Rounding
   - b) Definitions
7. Tables

2. Components of the service quality rebates and bonuses (SQRB) scheme

2.1 The SQRB scheme consists of elements, standards, bonuses, rebates and publication requirements as set out in Table 1a to Table 10e of this Schedule. In these tables and in this Schedule:

a) Group defines the group in which the related elements belong to;

b) Element identifies the relevant element i of service;

c) Metric defines the basis of measurement for each relevant element i;

d) $\mathrm{Standard}_{i,j,a}$ defines the relevant standard of element i in month j in terminal a;

e) ANNMAX_i is the maximum percentage of Airport Charges (relating to air transport services for the carriage of passengers for the relevant terminal) payable by the Licensee as rebates for any service failure in element i in the relevant Regulatory Period or Regulatory Year as specified in Table 1a to Table 6 of this Schedule;

f) $R_{i,j}RP$ is a proportion of ANNMAX_i for any service failure in element i in month j for the Regulatory Period as specified in Table 1a to Table 6 of this Schedule;

g) $R_{i,j}RY$ is a proportion of ANNMAX_i for any service failure in element i in month j for any relevant Regulatory Year as specified in Table 1a to Table 6 of this Schedule;

h) Passenger-sensitive equipment (PSE) includes lifts, escalators and travelators. PSE (priority) is a set of assets for each terminal agreed locally between the Licensee and the AOC and notified in writing from time to time to the CAA;

i) Specified element identifies the relevant element k of service for which bonuses shall be recovered by the Licensee;

j) MB_k is the maximum percentage of Airport Charges (relating to air transport services for the carriage of passengers for the relevant terminal) recoverable by the Licensee as bonuses for performance of specified element k in the relevant Regulatory

Period or Regulatory Year as specified in Table 8 of this Schedule;

k) LPL_k is the lower performance limit for specified element k used in the calculation of bonuses as specified in section 4(b). It has the values assigned in Table 8 of this Schedule; and

l) UPL_k is the upper performance limit for specified element k used in the calculation of bonuses as specified in section 4(b). It has the values assigned in Table 8 of this Schedule.

2(a) Quality of Service Monitor (QSM)

2.2 QSM is the Quality of Service Monitor survey. The results of the QSM survey are used to assess the Licensee's performance in the passenger satisfaction elements as specified in Table 1a to Table 5d and Table 8 of this Schedule.

2.3 The performance for passenger satisfaction elements is measured by moving annual averages weighted by passenger numbers in the relevant terminal, using the formulae:

(a) Except for the 12 months before air transport services for the carriage of passengers cease at Terminal 1 and the 12 months after air transport services for the carriage of passengers commence at Terminal 2, performance of element i in month j in terminal a is:

$$\mathrm{Performance}_{i,j,a} = \frac{\sum_{m=1}^{m=12}\left[\pi_{j-m+1,a}\mathrm{Monthly\ performance}_{i,j-m+1,a}\right]}{\sum_{m=1}^{m=12}\pi_{j-m+1,a}}$$

(b) For the 12 months before air transport services for the carriage of passengers cease at Terminal 1, performance of element i in month j in Terminal 1 is:

$$\mathrm{Performance}_{i,j,1} = \frac{\sum_{m=1}^{m=\sigma}\left[\pi_{j-m+1,1}\mathrm{Monthly\ performance}_{i,j-m+1,1}\right]}{\sum_{m=1}^{m=\sigma}\pi_{j-m+1,1}}$$

(c) For the 12 months after air transport services for the carriage of passengers commence at Terminal 2, performance of element i in month j in Terminal 2 is:

$$\mathrm{Performance}_{i,j,2} = \frac{\sum_{m=1}^{m=\mu}\left[\pi_{j-m+1,2}\mathrm{Monthly\ performance}_{i,j-m+1,2}\right]}{\sum_{m=1}^{m=\mu}\pi_{j-m+1,2}}$$

where:

$\pi_{j,a}$ is the number of passengers in month j in terminal a;

$\text{Monthly performance}_{i,j,a}$ is the performance of element i in month j in terminal a;

m is a counter of the 12 months ending in month j;

σ is a counter of months where

- the twelfth month before air transport services for the carriage of passengers cease at Terminal 1 = 1;
- the eleventh month before air transport services for the carriage of passengers cease at Terminal 1 = 2, so on and so forth;
- the month before air transport services for the carriage of passengers commence at Terminal 1 = 12.

μ is a counter of months where

- the month after air transport services for the carriage of passengers commence at Terminal 2 = 1;
- the second month after air transport services for the carriage of passengers commence at Terminal 2 = 2, so on and so forth;
- the twelfth month after air transport services for the carriage of passengers commence at Terminal 2 = 12.

2.4 The QSM shall be conducted by the Licensee using the following approach:

a) the QSM shall be based on the results of survey interviews with not less than 30,000 passengers (departing and arriving interviews combined) per year at the airport;

b) the interviews obtained shall reflect the expected profile of passengers travelling through the airport weighted such that they are representative of:

i) country of destination for departing interviews;

ii) country of origin for arriving interviews;

c) in instances where the country total traffic is high, the sample may be sub-weighted by individual airport destinations;

d) the QSM scores shall be calculated through a weighted average of the individual scores, weighted by actual traffic statistics for the month;

e) departing passengers shall be interviewed at the gate or gate area immediately prior to boarding the aircraft, and/or other locations as agreed by the Licensee, the AOC and the CAA;

f) arriving passengers shall be interviewed on the arrivals concourse just before leaving the terminal building, and/or other locations as agreed by the Licensee, the AOC and the CAA;

g) selection of passengers to take part in the survey shall be random and unbiased with respect to demographic characteristics; and

h) during the course of a month, interviewing shall be conducted in each terminal on a selection of mornings/afternoons and weekdays/weekend days.

2.5 In respect of the relevant elements for measuring performance and calculating rebates and bonuses, the interviewing procedures specified in paragraph 2.6 to 2.12 shall apply.

Introduction

2.6 To invite passengers to take part in the QSM survey:

a) [for arriving and departing passengers] “I am now going to ask you a series of questions which require you to rate your answers on the same rating scale”. The showcard is then displayed with the following responses on it: Extremely poor (1), Poor (2), Average (3), Good (4), Excellent (5).

Departure lounge seating availability

2.7 A simple average of the QSM scores for the question on seating:

a) [for departing passengers] “Now, thinking about the departures lounge, how do you rate the ease of finding a seat?”

Cleanliness

2.8 A weighted average of the QSM scores for five cleanliness questions, weighted by the number of passengers using each type of facility:

a) [for arriving and departing passengers] “Generally, how would you rate the cleanliness of the Terminal overall?"

b) [for arriving and departing passengers] “How would you rate the toilet facilities level of cleanliness?”

c) [for departing passengers] "How would you rate the level of cleanliness of the check-in area?”

d) [for departing passengers] “How would you rate the cleanliness in the lounge?”

e) [for arriving passengers] “How would you rate the cleanliness of the arrivals concourse?”

Way-finding

2.9 A weighted average of the QSM scores for the three way-finding questions, weighted by the number of passengers using each form of way-finding:

a) [for departing passengers] “How easy for you was it to find your way around within this terminal?”

b) [for departing passengers] “Have you been between terminals today? How would you rate the ease of finding your way?”

c) [for arriving passengers] “How easy was it to find your way around within this terminal?”

Flight Information

2.10 A simple average of the QSM scores for the three flight information questions:

a) [for departing passengers] “Flight information (screens and boards only) – how do you rate the ease of finding?”

b) [for departing passengers] “Flight information (screens and boards only) – how do you rate the ease of reading?”

c) [for departing passengers] “Flight information (screens and boards only) – how do you rate the ease of understanding the information?”

Security

2.11 A simple average of the QSM scores for the four security questions:

a) [for departing passengers] “How would you rate the queuing time?”

b) [for departing passengers] “and the helpfulness/courtesy of the staff?”

c) [for departing passengers] “and the care taken with your belongings during the checks?”

d) [for departing passengers] “and the organisation/efficiency of the whole Security process?”

Wi-fi

2.12 A simple average of the QSM scores for the second question below

a) [for departing and arriving passengers, to filter out non-Wi-fi users] “Have you used the Wi-fi service today at Heathrow?”

b) [for departing and arriving passengers who answered ‘yes’ in (a)] “How would you rate the Wi-fi service in the Terminal on a scale of 1-5?”

2(b) Queue times for passengers and staff

2.13 **Queue times** for passengers and staff shall be used to assess the Licensee’s performance in central search, transfer search and staff search as specified in Table 1a to Table 5d of this Schedule.

2.14 Queue times for passengers and staff shall be calculated by:

$$A - B + C$$

where:

A is the elapsed time between passengers or staff passing a defined entry portal and reaching the security roller bed (the exit point);

B is an allowance for the free flow transit time from the point when passengers or staff reach the entry portal to the point where they reach the security roller bed (including an allowance for any intermediate processes conducted between the portal and the roller bed). This is referred to as the 'unimpeded walk time'; and

C is any additional time that passengers or staff spend in the queue for search before reaching the defined entry portal.

2.15 The unimpeded walk times, the inclusion of any uni-queue or maze systems, process delay times, entry and exit points allowed for in the above equation shall be agreed locally for each search area between the Licensee and the AOC with final endorsement at the joint airport-airline Service Quality Working Group.

2.16 Before the introduction of the automated security queue measurement technology, a queue time for central search, transfer search and staff search shall be the delay imposed by the queue for security including ticket presentation (central search and transfer search only) and facial capture, up to the point that the passenger or staff reaches the security roller bed.

2.17 Upon the introduction of the automated security queue measurement technology, the definition of a queue time for central search and transfer search shall be agreed between the Licensee, the AOC and the CAA.

2.18 The Defined Method of data collection shall be agreed locally for each search area between the Licensee and the AOC with final endorsement at the joint airport-airline Service Quality Working Group. The **Defined Method** is either:

a) Manual method – where queues are measured by the Manual method in the manner agreed by the CAA during Q5, times will be taken manually noting the queue time of the first passenger or staff presenting to either the portal (if the queue does not extend to the portal) or the back of the queue (if the queue extends beyond the portal) after a clockwise 15-minute period. For example, taking four measurements in every hour at hh:mm, hh:mm+15, hh:mm+30, hh:mm+45 where mm lies between 0 and 14) during the relevant time over which performance counts for rebates, up to the point that the passenger or staff reaches the security roller bed; or

b) Automated method – where queues are measured by the automated method, times will be taken by an electronic system that has been reviewed and endorsed by the Relevant Parties and the CAA.

2.19 The proportion of measurements under a specified number of minutes in a period shall be calculated by dividing the number of measurements under a specified number of minutes by the total number of measurements taken in the period.

2.20 Upon the introduction of the automated security queue measurement technology and agreement between the Licensee, the AOC and the CAA, a per passenger metric is to be adopted for central search and transfer search. The per passenger metric shall be calculated as:

$$\mathrm{PPM} = \sum_{\mathrm{m}} \frac{\mathrm{Pax_m}}{\sum_{\mathrm{m}} \mathrm{Pax_m}} \cdot \mathrm{C_m}$$

where:

$\mathrm{Pax_m}$ is the estimated number of passengers using the search facility in period m;

$\mathrm{C_m}$ is the proportion of measurements under a defined number of minutes in period m as specified in Table 1a to Table 5d of this Schedule and it shall be calculated by dividing the number of measurements under a defined number of minutes by the total number of measurements taken in period m; and

the periods m shall be agreed locally between the Licensee and the AOC with final endorsement at the joint airport-airline Service Quality Working Group and the CAA.[59]

2(c) Queue times for vehicles

2.21 **Queue times** for vehicles shall be used to assess the Licensee's performance in control posts as specified in Table 6 of this Schedule.

2.22 A queue time for vehicles shall be the time taken for a vehicle to move from the back of the vehicle queue to the start of the control post process (i.e. as the vehicle moves into the control post sterile area).

59 This specification allows for setting the number of periods m to 1 (the whole month), or to make a passenger weighted average of the measurements by defining two or more periods in the month (e.g. peak/off-peak or hourly periods).

2.23 The Defined Method of data collection shall be the automatic number plate recognition system. Queue times for all vehicles transiting through vehicular control posts are captured.

2.24 Passing the overall control post standard shall require the Licensee passing the control post standard in each of the control post groups. The control post groups shall be defined as follows:

CTA	:	CP5, CP8
Cargo	:	CP10, CP10a, CP25a
Eastside	:	CP14, CP16
Southside	:	CP24
Terminal 5	:	CP18, CP19, CP20

2(d) Availability

2.25 Availability shall be defined as 'serviceable and available for use, independent of any other element'. It shall be used to assess the Licensee's performance in respect of certain passenger operational elements and airline operational elements as specified in Table 1a to Table 5d of this Schedule.

2.26 Availability of relevant facilities is defined for element i in month j in terminal a as:

$$\mathrm{Availability}_{\mathrm{i,j,a}} = 100 \cdot \left(1 - \frac{\sum_{\mathrm{k=1}}^{\mathrm{n_{i,a}}} \mathrm{TU_{b,j,a}}}{\mathrm{n_{i,a}} \cdot \mathrm{Time_j}}\right)$$

where:

$\mathrm{Availability}_{\mathrm{i,j,a}}$ is the percentage availability of element i in month j in terminal a;

$\mathrm{TU_{b,j,a}}$ is the relevant time elapsed in month j during which asset b in terminal a is unavailable as set out in paragraph 2.27;

$\mathrm{n_{i,a}}$ is the number of assets included in element i in terminal a; and

$\mathrm{Time_j}$ is the total relevant time in month j as defined in Table 1a to Table 5d of this Schedule.

2.27 The time elapsed during which an asset is unavailable shall be measured from when a fault is reported by automatic back indication or by inspection or by a third party report, subject to the Exclusions in paragraph 2.28.

2.28 **Exclusions** are the limited circumstances when time will not be required to be counted towards the time when equipment is unavailable or when other standards are not met, such as

a) specific stands, jetties and fixed electrical ground power to accommodate annual and five yearly statutory inspections, where this work is done in consultation with the AOC, and the period specified in advance, the exclusion not to be more than two days over any relevant Regulatory Period or Regulatory Year for any particular relevant asset. If works extend beyond any notified period, then any additional downtime shall count against the serviceability standard;

b) specific passenger-sensitive equipment or arrivals baggage carousels to accommodate planned maintenance, where the work is done in consultation with the AOC, the period is specified in advance, the work falls in a deadband period as defined in paragraphs 6.3(g) and 6.3(h), and the exclusion is not more than 30 days over any relevant Regulatory Period or Regulatory Year for any particular relevant asset. If works extend beyond a notified period, then any additional downtime shall count against the serviceability standard. (If a specific asset is measured against both the passenger-sensitive equipment (general) standard and the passenger-sensitive equipment (priority) standard this exclusion shall apply to both);

c) security queues for central search, transfer search and staff search for two hours following evacuations in the relevant terminal(s), and control post search for two hours following evacuations in the relevant control post(s);

d) closure of passenger-sensitive equipment (lifts, escalators, travelators) in areas immediately adjacent to security queues where it is considered by the Licensee that their continued use is likely to lead to unacceptable health and safety risks due to increased congestion;

e) stands taken out of service to accommodate high security flights;

f) closure of stands to ensure passenger safety during evacuation, emergency or safety incidents and relevant passenger-sensitive equipment subject to the AOC agreeing after the event that such equipment was in the immediate vicinity of the stands or the incident;

g) downtime where equipment is automatically shut down by fire alarm activation and the fire alarm activation is not due to a system fault with the fire alarm;

h) passenger-sensitive equipment where downtime is due to the activation of an emergency stop button or break glass, limited to equipment where there is back indication of serviceability and limited to 10 minutes for each occurrence in the case of false alarms;

i) downtime to accommodate fire risk-assessed deep cleans where an assessment of the condition of the equipment has shown that a deep clean is needed to ensure a safe operation can be maintained and to reduce the risk of fire;

j) equipment downtime due to damage of, or misuse of, baggage carousels, jetties, stand equipment (e.g. lighting) or fixed electrical ground power units likely to have been caused by airlines or their agents or to passenger-sensitive equipment where an airline or airline agent has accepted responsibility or where the AOC agrees with the Licensee in writing that the likelihood is that the damage has been caused by an airline or its agent;

k) downtime where a fault has been reported by airlines or their agents, but, when the engineers attend the site, no fault is found and the equipment is working;

l) equipment or stands taken out of service whilst a major investment project is undertaken in the vicinity where this is done in consultation with users and the timing of work has been determined after consultation with the AOC, and the period specified in advance. If work extends beyond this period, then the additional downtime shall count against the serviceability target;

m) equipment or stands taken out of service for replacement or major refurbishment work, when the timing of work has been determined after consultation with the AOC, and the period specified in advance. If work extends beyond this period, then the additional downtime shall count against the serviceability target;

n) during trials of new security processes or equipment. The scope and terms of exclusion shall be for predetermined periods that have been agreed by the Licensee and the AOC; and

o) during major operational disruption events which have a major impact on security staff resource, passenger volumes or off-schedule activity. The applicability and duration of the exclusion in respect of these events shall be as agreed with the AOC where such agreement can be made retrospectively.

2(e) Aerodrome congestion term (ACT)

2(e)(1) Basis of rebates

2.29 $\mathrm{Rebate}_{\mathrm{ACT}}$ shall be calculated across all the air transport services for the carriage of passengers at the airport and the same rebates as a percentage of the relevant charges shall be paid to the Relevant Parties using all the terminals at the airport.

2.30 Except as set out in paragraph 2.44, a rebate shall be payable in respect of departures or arrivals where a **Material Event** has occurred and which was caused primarily by a failure on the part of the Licensee or of the provider of aerodrome air traffic services or their respective agents or contractors (where 'agents' exclude bodies carrying out activities specified in the annex of the EU Groundhandling Directive[60]); and this has generated a **Material Operational Impact** as defined in paragraph 2.34.

2(e)(2) Definitions of terms

Material Events

2.31 A **Material Event** is one or more of the following:

[60] Council Directive 96/67/EC of 15 October 1996 on access to the groundhandling market at Community airports (Official Journal L 272 25/10/1996 p 0036-0045).

a) radar or other critical air traffic control equipment or systems failure;

b) tower staff shortages;

c) tower industrial action;

d) industrial action by the Licensee's operational staff;

e) closure of runways;

f) closure of rapid exit taxiways, rapid access taxiways, and other runway exit or access taxiways or both;

g) closure of aircraft manoeuvring areas;

h) runway or taxiway lighting system failures;

i) failure of other critical equipment such as fire tenders; or

j) where bad weather has been forecast and has materialised and the **Relevant Bad Weather Equipment** as set out in paragraph 2.33 is not available or has not been deployed.

2.32 The Licensee shall not be liable to pay rebates for disruption due to bad weather unless one or more of the factors above apply.

Relevant Bad Weather Equipment

2.33 The **Relevant Bad Weather Equipment** is defined as in respect of:

a) Low visibility procedures:

i) Instrument Landing System (ILS), Instrumented Runway Visual Range (IRVR) system, Surface Movement Radar (SMR), Microwave Landing System (MLS) (where installed) and Advanced Surface Movement Guidance and Control System (ASMGCS) (where installed); and

ii) operational availability of lighting and signage systems to enable Category 2/3 operations to continue.

b) Ice

i) airfield (i.e. runways, taxiways and manoeuvring area) and aircraft stands anti/de-icing equipment and media (as specified to the AOC); and

ii) operational availability and deployment of trained staff to operate the equipment.

c) Snow

i) runway and taxiway snow clearance equipment (as specified to the AOC by the requirements of paragraph 2.41); and

ii) operational availability and deployment of trained staff to operate the equipment.

Material Operational Impact

2.34 A **Material Operational Impact** is defined as:

a) For arrivals:

i) a flow rate restriction (Air Transport Flow Management (ATFM) or local[61]) is applied which is less than the declared runway scheduling limit; and

ii) the cumulative number of actual movements is less than the cumulative reference number of movements by at least four movements for any **Relevant Measurement Period** during the period before the flow rate restriction is removed.

b) For departures:

i) the cumulative number of actual movements is less than the cumulative reference number of movements by at least four movements for any **Relevant Measurement Period** during the period of the material effect.

Maximum Cumulative Arrival Movements Deferred

2.35 **Maximum Cumulative Arrival Movements Deferred** is the maximum number of cumulative arrival movements deferred at any of the **Relevant Measurement Periods** for the particular **Material Event**, calculated as follows:

61 ATFM restrictions are air traffic flow movement restrictions imposed through the Central Flow Management Unit of Eurocontrol. Local restrictions are of a temporary duration and originate from the Tower watch supervisor.

$$= A_d \times \sum_{s=1}^{s=\theta} (\text{Expected ARR}_s - \text{Actual ARR}_s)$$

where:

s denotes any **Relevant Measurement Period** relating to the particular **Material Event**;

θ denotes the **Relevant Measurement Period** relating to that particular **Material Event** at which $\text{Expected ARR}_s - \text{Actual ARR}_s$ reached its maximum.

Expected ARR_s is the number of **Expected Arrival Movements** in the **Relevant Measurement Period** s as determined in accordance with paragraphs 2.40 to 2.43;

Actual ARR_s is the number of actual arrivals in the **Relevant Measurement Period** s; and

A_d is the **Proportion of Responsibility** for the d^{th} **Material Event** attributed to the Licensee or the provider of aerodrome air traffic services or their respective agents or contractors.

Maximum Cumulative Departure Movements Deferred

2.36 **Maximum Cumulative Departure Movements Deferred** is the maximum number of cumulative departure movements deferred at any of the **Relevant Measurement Periods** for the particular **Material Event**, calculated as follows:

$$= A_d \times \sum_{s=1}^{s=\theta} (\text{Expected DEP}_s - \text{Actual DEP}_s)$$

where:

s denotes any **Relevant Measurement Period** relating to the particular **Material Event**;

θ denotes the **Relevant Measurement Period** relating to that particular material event at which $\text{Expected DEP}_s - \text{Actual DEP}_s$

reached its maximum.

Expected DEP_s is the number of **Expected Departure Movements** in the **Relevant Measurement Period** s as determined in paragraphs 2.40 to 2.43;

Actual DEP_s is the number of actual departures in the **Relevant Measurement Period** s; and

A_d is the **Proportion of Responsibility** for the d^{th} **Material Event** attributed to the Licensee or the provider of aerodrome air traffic services or their respective agents or contractors.

Relevant Measurement Period

2.37 **Relevant Measurement Period** is defined as any period beginning with the **Clock-Face Hour** preceding the commencement of the **Material Event** and ending no later than the next **Clock-Face Hour** after the **Material Event** ends.

Clock-Face Hour

2.38 **Clock-Face Hour** is the period of 60 minutes which for any relevant hour hh, starts with hh:00:00 and ends at hh:59:59.

Proportion of Responsibility

2.39 Where the Licensee reasonably considers that a **Material Event** with a **Material Operational Impact** has been made more severe by contributory causes beyond the control of the Licensee or its agents, it shall estimate the proportion of the effect which it considers to have been due to the **Material Event** as set out in paragraph 2.31. The Licensee shall provide evidence to support its consideration of such contributory causes.

Expected Arrival Movements and Expected Departure Movements

2.40 The **Expected Arrival Movements** and **Expected Departure Movements** shall be estimates made by the Licensee retrospectively by hour for each **Material Event** and made available to users on the Licensee's extranet site or in a manner agreed with users, as soon as practicable after the **Material Event** to which it relates.

2.41 The Licensee shall use its best endeavours to calculate the **Expected Arrival Movements** and **Expected Departure Movements** to reflect the relevant movements in each hour in the absence of any **Material Event** or **Material Operational Impact**.

2.42 These calculations shall have regard to the actual arrival or departure movements during the relevant hour and day in the weeks preceding the relevant hour where there were no **Material Events** or other significant factors which affected arrivals or departure rates. These calculations may be supplemented by a consideration of other relevant factors which the Licensee regards as appropriate in order to make best estimates.

2.43 The Licensee shall set out the basis of its calculations with the estimates.

2(e)(3) Exceptions

2.44 The unavailability of facilities shall not require the rebates to be payable:

a) where the **Material Event** is due to runways, taxiways, other aircraft manoeuvring areas, or associated airfield lighting being taken out of service whilst a major investment project is undertaken in the vicinity and where this is done in consultation with users and the timing of work has been determined after consultation with the AOC, and the period specified in advance. If work extends beyond this period, then rebates shall be payable if the work causes **Material Events** as defined in paragraph 2.31; or

b) where the **Material Event** is due to runways, taxiways, other aircraft manoeuvring areas, or associated airfield lighting being taken out of service for replacement or major refurbishment work or tower related works and when the timing of work has been determined after consultation with the AOC, and the period specified in advance. If work extends beyond this period, then rebates shall be payable if the work causes **Material Events** as defined in paragraph 2.32.

2(e)(4) Data collection and communication

2.45 The Licensee shall:

a) provide to the AOC prior to each Winter season a list of the anti-icing or de-icing equipment and media and runway and taxiway snow clearance equipment in commission at the airport;

b) compile a log of all the events at the airport which it considers could have a potentially material effect on operations at the airport (the ‘Super-Log’). This shall include ATFM and local restrictions imposed on operations at the airport along with Material Events relating to departures (which may not necessarily have been linked to an ATFM or local restriction). The Licensee may also include other events where it considers that this materially adds to the value of the Super-Log as a complete record;

c) report to Relevant Parties the new events that have been recorded each week as soon as practicable after the end of the relevant week on its extranet site or in such other format as may be agreed by the Licensee and Relevant Parties; and

d) report to Relevant Parties as soon as practicable after the relevant week the calculations of the maximum number of movements deferred for each **Material Event** set out under paragraphs 2.31 and the assumptions supporting the expected level of arrivals or departures in each hour during the course of the **Material Event** and any estimate of the **Proportion of Responsibility** as set out in paragraph 2.39.

3. Rebates

3.1 The Licensee shall pay rebates to Relevant Parties as set out in this Schedule and as may be modified from time to time.

3(a) Payment

3.2 This Schedule sets out the total level of rebates that shall accrue over each relevant Regulatory Period or Regulatory Year. The Licensee shall, however, pay rebates to the Relevant Parties on a monthly basis in the month following the month in which they accrue.

3.3 The rebates applying to each individual terminal shall be allocated to the Relevant Parties that used the terminal in the relevant month pro rata with the Airport Charges incurred for air transport services for the carriage of passengers in that month.

3.4 The payments on a month-by-month basis shall be based on a forecast of the total Airport Charges paid in respect of air transport services for the carriage of passengers in the relevant Regulatory Period or Regulatory Year. The Licensee shall base the scale of monthly rebate payments on its best estimate of the total Airport Charges from such services for the relevant Regulatory Period or Regulatory Year. This is likely to lead to the sum of the monthly rebates paid during the course of the relevant Regulatory Period or Regulatory Year being less or more than the rebates required by this Schedule for the relevant Regulatory Period or Regulatory Year as a whole. Therefore,

a) where the amount of rebates paid during the course of the relevant Regulatory Period or Regulatory Year is less than the amount of annual rebates required by this Schedule, the Licensee shall be liable to pay further amounts to the Relevant Parties that have received rebates so that the amount of rebates paid in respect of the relevant Regulatory Period or Regulatory Year is brought up to the level required by this Schedule. Such additional amounts shall be paid to the Relevant Parties pro rata to the rebates already paid in the course of the year and shall be made as soon as practicable and no more than three calendar months after the publication of the Licensee’s audited accounts. Payment will be waived where the CAA receives a letter from the AOC to the effect that the sum is so small that to enforce payment would incur disproportionate processing costs for the Relevant Parties;

b) where the amount of rebates paid during the course of the relevant Regulatory Period or Regulatory Year is more than the amount of annual rebates required by this Schedule, the Licensee may recover the difference between the amount paid and the required amount from the Relevant Parties that have received rebates pro rata with the rebates paid.

3(b) Calculation

3.5 The Licensee shall pay rebates for each terminal calculated as follows:

$$\text{Total rebate} = \text{Rebate}_{\text{P\&A}} + \text{Rebate}_{\text{ACT}} + \text{Rebate}_{\text{ADD}}$$

where:

Total rebate is the total aggregate percentage rebate payable for the Regulatory Period and each subsequent Regulatory Year;

$\text{Rebate}_{\text{P\&A}}$ is the aggregate percentage rebate in the relevant Regulatory Period or Regulatory Year relating to the 'Passenger' and 'Airline' elements (P&A) set out in Table 1a to Table 6 of this Schedule and calculated in accordance with section 3(b)(1) of this Schedule

$\text{Rebate}_{\text{ACT}}$ is the aggregate percentage rebate in the relevant Regulatory Period or Regulatory Year relating to the Aerodrome Congestion Term as calculated in accordance with section 3(b)(2) of this Schedule; and

$\text{Rebate}_{\text{ADD}}$ is the additional monthly rebate payable by the Licensee if automated security queue measurements is not introduced by 1 April 2015.

3(b)(1) $Rebate_{P\&A}$

3.6 Except where explicitly stated, $\text{Rebate}_{\text{P\&A}}$ shall be calculated separately for each terminal based on the performance relevant to each individual terminal against the standards set out for that terminal.

3.7 $\text{Rebate}_{\text{P\&A}}$ for the Regulatory Period shall be calculated as follows:

$$\text{Rebate}_{\text{P\&A}} = \sum_{\text{a}} \sum_{\text{i}} \text{MIN}\left[\sum_{\text{j}} \text{R}_{\text{i,j}}\text{RP} \cdot \text{x}_{\text{i,j,a}}, \text{ANNMAX}_{\text{i}}\right]$$

where:

$\text{R}_{\text{i,j}}\text{RP}$ is defined in paragraph 2.1(f);

$\text{x}_{\text{i,j,a}}$ = 0 if $\text{Standard}_{\text{i,j,a}}$ in month j is met as defined in paragraph 3.9; or = 1 otherwise; and

ANNMAX_{i} is defined in paragraph 2.1(e).

3.8 The $\text{Rebate}_{\text{P\&A}}$ for any Regulatory Year shall be calculated as follows:

$$\mathrm{Rebate}_{P\&A} = \sum_{a} \sum_{i} \mathrm{MIN}\left[\sum_{j} R_{i,j}RY \cdot x_{i,j,a}, \mathrm{ANNMAX}_i\right]$$

where:

$R_{i,j}RY$ is defined in paragraph 2.1(g);

$x_{i,j,a}$ = 0 if $\mathrm{Standard}_{i,j,a}$ in month j is met as defined in paragraph 3.9; or
= 1 otherwise; and

ANNMAX_i is defined in paragraph 2.1(e).

3.9 The $\mathrm{Standard}_{i,j,a}$ of element i in month j in terminal a is met if:

a) for elements other than departure lounge seating availability, cleanliness, way-finding, flight information and pier-served stand usage:

$$\text{Monthly performance}_{i,j,a} \geq \mathrm{Standard}_{i,j,a}$$

b) for departure lounge seating availability, cleanliness, way-finding, flight information and pier-served stand usage:

$$\mathrm{Performance}_{i,j,a} \geq \mathrm{Standard}_{i,j,a}$$

where:

$\text{Monthly performance}_{i,j,a}$ is the recorded monthly performance of element i in month j in terminal a;

$\mathrm{Performance}_{i,j,a}$ is the moving annual average $\text{Monthly performance}_{i,j,a}$ weighted by monthly passenger numbers in terminal a and is calculated using the formulae set out in paragraph 2.3; and

$\mathrm{Standard}_{i,j,a}$ is the relevant standard of element i in month j in terminal a as defined in Table 1a to Table 6 of this Schedule.

3.10 In the calculation of $\mathrm{Rebate}_{P\&A}$, for control posts (element 20), the subscript a in $x_{i,j,a}$, $\text{Monthly performance}_{i,j,a}$ and $\mathrm{Standard}_{i,j,a}$ does not refer to a particular terminal. The same standard applies individually to all control post groups across the airport.

3.11 During the Regulatory Period, the Licensee shall pay a percentage rebate of $\mathrm{R_{i,j}RP}$ for the first four service failures of element i, and a percentage rebate of half of $\mathrm{R_{i,j}RP}$ for the fifth service failure of element i. During any subsequent Regulatory Year, the Licensee shall pay a percentage rebate of $\mathrm{R_{i,j}RY}$ for the first six service failures of element i. $\mathrm{R_{i,j}RP}$ is defined in paragraph 2.1(f) and $\mathrm{R_{i,j}RY}$ is defined in paragraph 2.1(g).

3.12 The performance for the elements security and Wi-fi are for publication only and shall not be used in the calculation of $\mathrm{Rebate_{P\&A}}$. No standards are set for these two elements.

3(b)(2) $Rebate_{ACT}$

3.13 The $\mathrm{Rebate_{ACT}}$ shall be calculated as follows:

$$\mathrm{Rebate_{ACT}} = \mathrm{Min}\left[100 \cdot \left(\frac{\mathrm{Rebate_{ARR}} + \mathrm{Rebate_{DEP}}}{\mathrm{R_t}}\right), \mathrm{MAXRebate_{ACT}}\right]$$

where:

$\mathrm{Rebate_{ARR}} = \sum_{\text{All material events}} \mathrm{v_{ARR_d}}$ is the element of this term related to arrival movements at the airport;

$\mathrm{Rebate_{DEP}} = \sum_{\text{All material events}} \mathrm{v_{DEP_d}}$ is the element of this term related to departure movements at the airport;

$\mathrm{R_t}$ is the total revenue from Airport Charges in respect of relevant air services levied at the relevant airport in the relevant Regulatory Period or Regulatory Year t; and

$\mathrm{MAXRebate_{ACT}}$ is the maximum percentage rebate (1.00%) for the relevant Regulatory Period or Regulatory Year for the aerodrome congestion term.

3.14 For each **Material Event** d:

a) $\mathrm{v_{ARR_d}}$ is the value in Table 7 of this Schedule, dependent on the **Maximum Cumulative Arrival Movements Deferred** for the $\mathrm{d^{th}}$ relevant **Material Event** as adjusted by inflation specified in paragraph 3.15; and

b) $\mathrm{v_{DEP_d}}$ is the value in Table 7 of this Schedule, dependent on the **Maximum Cumulative Departure Movements Deferred** for the

d^{th} relevant **Material Event** as adjusted by inflation specified in paragraph 3.15.

3.15 For $\mathrm{Rebate}_{\mathrm{ACT}}$ incurred in the relevant Regulatory Period or Regulatory Year t (i.e. $\mathrm{Rebate}_{\mathrm{ACT,t}}$), the amount payable shall be inflated to outturn prices by the formula:

$$\mathrm{Rebate}_{\mathrm{ACT,t}} = \mathrm{Rebate}_{\mathrm{ACT,2013/14}} \times \left(\frac{\mathrm{P_t}}{\mathrm{P_{2013/14}}}\right)$$

where:

$\mathrm{Rebate}_{\mathrm{ACT,2013/14}}$ is $\mathrm{Rebate}_{\mathrm{ACT}}$ in 2013/14 prices as listed in Table 7 of this Schedule;

$\mathrm{P_t}$ is the value of the CHAW series of the Retail Price Index published by the Office for National Statistics with respect to April in the relevant Regulatory Period or Regulatory Year t; and

$\mathrm{P_{2013/14}}$ is the value of the CHAW series of the Retail Price Index published by the Office for National Statistics with respect to April 2013.

3(b)(3) $Rebate_{ADD}$

3.16 The Licensee shall pay additional monthly rebates if automated security queue measurement is not introduced by 1 April 2015. The rebate is payable every month from April 2015 until the month in which automated security queue measurement is introduced in the relevant terminals. The amount of rebates is set out in Table 2a to Table 5d of this Schedule.

4. Bonuses

4(a) Payment

4.1 The Licensee may recover bonuses from Relevant Parties. Bonus payments shall be included in the calculation of the Airport Charges in respect of relevant air transport services in Condition C1.

4(b) Calculation

4.2 $\mathrm{B_t}$, the bonus factor as specified in Condition C1, is based on performance achieved in respect of specified elements in the relevant

Regulatory Period or Regulatory Year t as set out in Table 8 of this Schedule.

4.3 For the purposes of calculating $\mathrm{M_t}$ as specified in Condition C1, the corresponding periods for which bonuses are recoverable by the Licensee to be included in the calculation of $\mathrm{M_t}$ are set out in Table 9 of this Schedule.

4.4 For the purposes of calculating $\mathrm{M_t}$ for the Regulatory Period, $\mathrm{B_{t-2}} = \mathrm{B_{2012/13}}$ is set to zero; for the purposes of calculating $\mathrm{M_t}$ for the Regulatory Year t starting on 1 January 2015, $\mathrm{B_{t-2}} = \mathrm{B_{2013/14}}$ is set to zero. This is because bonuses earned in 2012/13 and 2013/14 should have been recovered through the K factor as specified in Condition C1.

4.5 $\mathrm{B_t}$ for the Regulatory Period, i.e. $\mathrm{B_{2014}}$, shall be calculated as follows:

$$\mathrm{B_t} = \sum_{\mathrm{j=April}}^{\mathrm{j=December}} \sum_{\mathrm{k}} \mathrm{Max}\left[0, \mathrm{Min}\left[\mathrm{BNS(T1)_{kj}}, \mathrm{BNS(T2)_{kj}}, \mathrm{BNS(T3)_{kj}}, \mathrm{BNS(T4)_{kj}}, \mathrm{BNS(T5)_{kj}}\right]\right]$$

For each month j and specified element k;

$$\mathrm{BNS(T1)_{kj}} = \frac{1}{9} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T1)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T2)_{kj}} = \frac{1}{9} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T2)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T3)_{kj}} = \frac{1}{9} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T3)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T4)_{kj}} = \frac{1}{9} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T4)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T5)_{kj}} = \frac{1}{9} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T5)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

where:

$\mathrm{MB_k}$, $\mathrm{LPL_k}$ and $\mathrm{UPL_k}$ are defined in paragraphs 2.1(j), 2.1(k) and 2.1(l) respectively; and

$\mathrm{MP(T1)_{kj}}$, $\mathrm{MP(T2)_{kj}}$, $\mathrm{MP(T3)_{kj}}$, $\mathrm{MP(T4)_{kj}}$ and $\mathrm{MP(T5)_{kj}}$ are the moving annual average monthly performance for specified element k in month j weighted by monthly passengers numbers in Terminal 1, Terminal 2, Terminal 3, Terminal 4 and Terminal 5, respectively. It is calculated using the formulae set out in paragraph 2.3.

4.6 $\mathrm{B_t}$ for any subsequent relevant Regulatory Year t shall be calculated as follows:

$$\mathrm{B_t} = \sum_{\mathrm{j=January}}^{\mathrm{j=December}} \sum_{\mathrm{k}} \mathrm{Max}\left[0, \mathrm{Min}\left[\mathrm{BNS(T1)_{kj}}, \mathrm{BNS(T2)_{kj}}, \mathrm{BNS(T3)_{kj}}, \mathrm{BNS(T4)_{kj}}, \mathrm{BNS(T5)_{kj}}\right]\right]$$

For each month j and specified element k;

$$\mathrm{BNS(T1)_{kj}} = \frac{1}{12} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T1)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T2)_{kj}} = \frac{1}{12} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T1)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T3)_{kj}} = \frac{1}{12} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T2)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T4)_{kj}} = \frac{1}{12} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T4)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

$$\mathrm{BNS(T5)_{kj}} = \frac{1}{12} \times \mathrm{MB_k} \frac{\mathrm{Min}\left[\mathrm{UPL_k}, \mathrm{MP(T4)_{kj}}\right] - \mathrm{LPL_k}}{\mathrm{UPL_k} - \mathrm{LPL_k}}$$

where:

$\mathrm{MB_k}$, $\mathrm{LPL_k}$ and $\mathrm{UPL_k}$ are defined in paragraphs 2.1(j), 2.1(k) and 2.1(l) respectively; and

$\mathrm{MP(T1)_{kj}}$, $\mathrm{MP(T2)_{kj}}$, $\mathrm{MP(T3)_{kj}}$, $\mathrm{MP(T4)_{kj}}$ and $\mathrm{MP(T5)_{kj}}$ are the moving annual average monthly performance for specified element k in month j weighted by monthly passengers numbers in Terminal 1, Terminal 2, Terminal 3, Terminal 4 and Terminal 5, respectively. It is calculated using the formulae set out in paragraph 2.3.

4.7 The calculations set out in paragraphs 4.5 and 4.6 are subject to the following conditions:

a) For the months including or after ‘Such time when Terminal 1 is decommissioned’, $\mathrm{BNS(T1)_{kj}}$ = 0.36%; and

b) For the months before or including ‘Such time when air transport services for the carriage of passengers commence at Terminal 2’, $\mathrm{BNS(T2)_{kj}}$ = 0.36%.

5. Publication

5.1 The Licensee shall publish in each terminal at the airport:

a) on a monthly basis, within four weeks of the end of the month,

i) its performance against the standards (where applicable) for each of the terminals at the airport with respect to:

- departure lounge seating availability (QSM);
- cleanliness (QSM);
- way-finding (QSM);
- flight information (QSM);
- security (QSM) [no standard is set for this element];
- Wi-fi (QSM) [no standard is set for this element];
- central search (either interim or automated measurement metrics depending on method in use during the month); and
- transfer search (either interim or automated measurement metrics depending on method in use during the month).

5.2 The Licensee shall publish on the Service Quality page on its website:

a) on a monthly basis, within four weeks of the end of the month,

i) its performance against the standards (where applicable) for each of the terminals at the airport with respect to all elements specified in Table 10a to Table 10e of this Schedule; and

ii) the estimated amount of rebates and bonuses, generated by the performance relating to all elements specified in Table 10a to Table 10e of this Schedule.

b) within two months of the end of the relevant Regulatory Period or Regulatory Year,

i) its confirmed performance against the standards (where applicable) for each of the terminals at the airport with respect to all elements specified in Table 10a to Table 10e of this Schedule; and

ii) the estimated amount of rebates and bonuses, generated by the performance relating to all elements specified in Table 10a to Table 10e of this Schedule.

5.3 The Licensee shall publish on the Regulatory Accounts page on its website:

a) on an annual basis, as soon as available,

i) the audited actual amount of rebates and bonuses, generated by the performance relating to all elements specified in Table 10a to Table 10e of this Schedule split by relevant element.

5.4 Detailed publication requirements are set out in Table 10a to Table 10e of this Schedule.

6. General Matters

6(a) Rounding

6.1 For the purposes of this Schedule, the calculation and reporting of all performance and standards shall be to two decimal places (in the case of percentages to two decimal places of a percentage point).

6.2 In Table 1a to Table 6 of this Schedule, the maximum rebates for the relevant Regulatory Period or Regulatory Year are measured to two decimal places, and the maximum monthly rebates are measured to four decimal places. In Table 7 of this Schedule, the amounts of $\mathrm{Rebate}_{\mathrm{ACT}}$ in thousands are measured to two decimal places. In Table 8 of this Schedule, the maximum bonuses are measured to two decimal places.

6(b) Definitions

6.3 In this Schedule:

a) Airport Charges has the meaning as in Regulation 3(1) of the Airport Charges Regulations 2011 (2011 No. 2491);

b) Relevant Parties means airlines that have paid Airport Charges in the relevant month in respect of air transport services for the carriage by air of passengers;

c) the Regulatory Period has the meaning set out in Part A of this Licence;

d) the Regulatory Year has the meaning set out in Part A of this Licence;

e) the AOC means the Airline Operators Committee;

f) Terminal excludes general aviation facilities and facilities for the handling of cargo; and

g) A relevant deadband period is:

   i) 1 November to 30 November;

   ii) 1 January to 31 January;

   iii) 1 February to 28 February (29 February in a leap year); and

   iv) 1 March to 14 days before Easter Sunday.

h) Dates that fall outside of the periods as defined in paragraph 6.3(g) shall not be regarded as falling in a deadband period.

7. Tables[62]

Table 1a: Terminal 1 – passenger satisfaction elements

i	Element	Metric	Time of day over which performance counts for rebates	$\mathrm{Standard}_{i,j,a}$	ANNMAX_i	$\mathrm{R}_{i,j}\mathrm{RP}$	$\mathrm{R}_{i,j}\mathrm{RY}$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers	Unrestricted	3.80	0.36%	0.0800%	0.0600%
2	Cleanliness			4.00	0.36%	0.0800%	0.0600%
3	Way-finding			4.10	0.36%	0.0800%	0.0600%
4	Flight information			4.30	0.36%	0.0800%	0.0600%
5	Security			Publication only			
6	Wi-fi			Publication only			

[62] In Tables 1a to Table 5d, for the time of day over which performance counts for rebates, where relevant, if the Licensee and the AOC fail to agree a period for a particular element, the default time period will be the period specified for central search. In Tables 1a to Table 6, ANNMAX_i is defined in paragraph 2.1(e) and is measured to two decimal places. $\mathrm{R}_{i,j}\mathrm{RP}$ and $\mathrm{R}_{i,j}\mathrm{RY}$ are defined in paragraphs 2.1(f) and 2.1(g) respectively and are measured to four decimal places. In Table 7, the calculation of ACT rebates in thousands is specified in section 2(e) and is measured to two decimal places. In Table 8, MB_k, LPL_k and UPL_k are defined in paragraphs 2.1(j), 2.1(k) and 2.1(l) and are measured to two decimal places.

Table 1b: Terminal 1 – security[63]

i	**Element**	**Metric**	**Time of day over which performance counts for rebates**	$\mathbf{Standard_{i,j,a}}$	$\mathbf{ANNMAX_i}$	$\mathbf{R_{i,j}RP}$	$\mathbf{R_{i,j}RY}$
7-i1	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	*05:00 to 22:30*	*95.00%*	*1.00%*	*0.2222%*	*0.1667%*
7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*99.00%*			
8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*95.00%*	*0.50%*	*0.1111%*	*0.0833%*
9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%

63 The standards for central and transfer search (interim) (elements 7-i1, 7-i2 and 8-i1) remain in effect until air transport services for the carriage of passengers cease in Terminal 1.

Table 1c: Terminal 1 – passenger operational elements

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
10	PSE (general)	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.35%	0.0778%	0.0583%
11	PSE (priority)			99.00%	0.35%	0.0778%	0.0583%
12	Arrivals baggage carousels			99.00%	0.35%	0.0778%	0.0583%
13a	Track transit system	% one train serviceable and available for use, independent of any other element	Not applicable	Not applicable			
13b		% two trains serviceable and available for use, independent of any other element					

Table 1d: Terminal 1 – airline operational elements[64]

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
14	Stands	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.25%	0.0556%	0.0417%
15	Jetties			99.00%	0.25%	0.0556%	0.0417%
16	Fixed electrical ground power			99.00%	0.20%	0.0444%	0.0333%
17	Stand entry guidance			99.00%	0.25%	0.0556%	0.0417%
18	Pre-conditioned air		Not applicable	Not applicable			
19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)	Unrestricted	95.00%	0.30%	0.0667%	0.0500%

64 In this table, pier-served stand usage (element 19) would be a combined Terminal 1/Terminal 2 element. Its standard is subject to exceptions to be agreed by the Licensee and the AOC.

Table 2a: Terminal 2 – passenger satisfaction elements

i	Element	Metric	Time of day over which performance counts for rebates	$\mathbf{Standard_{i,j,a}}$	$\mathbf{ANNMAX_i}$	$\mathbf{R_{i,j}RP}$	$\mathbf{R_{i,j}RY}$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers	Unrestricted	3.80	0.36%	0.0800%	0.0600%
2	Cleanliness			4.00	0.36%	0.0800%	0.0600%
3	Way-finding			4.10	0.36%	0.0800%	0.0600%
4	Flight information			4.30	0.36%	0.0800%	0.0600%
5	Security			Publication only			
6	Wi-fi			Publication only			

Table 2b: Terminal 2 – security[65]

i	Element	Metric	Time of day over which performance counts for rebates	$\mathrm{Standard}_{i,j,a}$	ANNMAX_{i}	$\mathrm{R}_{i,j}\mathrm{RP}$	$\mathrm{R}_{i,j}\mathrm{RY}$
7-i1	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	*05:00 to 22:30*	*95.00%*	*1.00%*	*0.2222%*	*0.1667%*
7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*99.00%*			
8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*95.00%*	*0.50%*	*0.1111%*	*0.0833%*
7	Central search	Percentage of passengers queuing less than 10 minutes	05:00 to 22:30	99.00%	1.00%	0.2222%	0.1667%
8	Transfer search		05:00 to 22:30	99.00%	0.50%	0.1111%	0.0833%
7-a	Central search	Delivery of automated security queue measurement by 1 April 2015	Not applicable	By 1 April 2015	1.00%	N.A.	0.0833%
8-a	Transfer search				0.50%		0.0417%
9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%

65 The standards for central and transfer search (elements 7 and 8) take effect on 1 April 2015, upon the introduction of automated security queue measurements (planned delivery by 1 April 2015). Prior to that, the standards for central and transfer search (interim) (elements 7-i1, 7-i2 and 8-i1) remain in effect. Additional monthly rebates (elements 7-a and 8-a) are payable every month from 1 April 2015 until the month in which automated security queue measurements is introduced.

Table 2c: Terminal 2 – passenger operational elements

i	Element	Metric	Time of day over which performance counts for rebates	$Standard_{i,j,a}$	$ANNMAX_i$	$R_{i,j}RP$	$R_{i,j}RY$
10	PSE (general)	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.35%	0.0778%	0.0583%
11	PSE (priority)			99.00%	0.35%	0.0778%	0.0583%
12	Arrivals baggage carousels			99.00%	0.35%	0.0778%	0.0583%
13a	Track transit system	% one train serviceable and available for use, independent of any other element	Not applicable	Not applicable			
13b		% two trains serviceable and available for use, independent of any other element					

Table 2d: Terminal 2 – airline operational elements[66]

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
14	Stands	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.20%	0.0444%	0.0333%
15	Jetties			99.00%	0.20%	0.0444%	0.0333%
16	Fixed electrical ground power			99.00%	0.15%	0.0333%	0.0250%
17	Stand entry guidance			99.00%	0.25%	0.0556%	0.0417%
18	Pre-conditioned air			98.00%	0.20%	0.0444%	0.0333%
19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)	Unrestricted	95.00%	0.25%	0.0556%	0.0417%

66 In this table, pier-served stand usage (element 19) would be a combined Terminal 1/Terminal 2 element. Its standard is subject to exceptions to be agreed by the Licensee and the AOC.

Table 3a: Terminal 3 – passenger satisfaction elements

$\mathbf{i}$	Element	Metric	Time of day over which performance counts for rebates	$\mathbf{Standard_{i,j,a}}$	$\mathbf{ANNMAX_i}$	$\mathbf{R_{i,j}RP}$	$\mathbf{R_{i,j}RY}$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers	Unrestricted	3.80	0.36%	0.0800%	0.0600%
2	Cleanliness			4.00	0.36%	0.0800%	0.0600%
3	Way-finding			4.10	0.36%	0.0800%	0.0600%
4	Flight information			4.30	0.36%	0.0800%	0.0600%
5	Security			Publication only			
6	Wi-fi			Publication only			

Table 3b: Terminal 3 – security[67]

i	Element	Metric	Time of day over which performance counts for rebates	$\mathrm{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
7-i1	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	*05:00 to 22:30*	*95.00%*	*1.00%*	*0.2222%*	*0.1667%*
7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*99.00%*			
8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*95.00%*	*0.50%*	*0.1111%*	*0.0833%*
7	Central search	Percentage of passengers queuing less than 10 minutes	05:00 to 22:30	99.00%	1.00%	0.2222%	0.1667%
8	Transfer search		05:00 to 22:30	99.00%	0.50%	0.1111%	0.0833%
7-a	Central search	Delivery of automated security queue measurement by 1 April 2015	Not applicable	By 1 April 2015	1.00%	N.A.	0.0833%
8-a	Transfer search				0.50%		0.0417%
9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%

67 The standards for central and transfer search (elements 7 and 8) take effect on a date not later than 1 June 2016, upon the introduction of automated security queue measurements (planned delivery by April 2015) and delivery of additional search capacity on a date not later than 1 June 2016. Prior to that, the standards for central and transfer search (interim) (elements 7-i1, 7-i2 and 8-i1) remain in effect. Additional monthly rebates (elements 7-a and 8-a) are payable every month from April 2015 until the month in which automated security queue measurements is introduced.

Table 3c: Terminal 3 – passenger operational elements

i	Element	Metric	Time of day over which performance counts for rebates	$\mathrm{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
10	PSE (general)	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.35%	0.0778%	0.0583%
11	PSE (priority)			99.00%	0.35%	0.0778%	0.0583%
12	Arrivals baggage carousels			99.00%	0.35%	0.0778%	0.0583%
13a	Track transit system	% one train serviceable and available for use, independent of any other element	Not applicable	Not applicable			
13b		% two trains serviceable and available for use, independent of any other element					

Table 3d: Terminal 3 – airline operational elements[68]

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
14	Stands	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.20%	0.0444%	0.0333%
15	Jetties			99.00%	0.20%	0.0444%	0.0333%
16	Fixed electrical ground power			99.00%	0.15%	0.0333%	0.0250%
17	Stand entry guidance			99.00%	0.25%	0.0556%	0.0417%
18	Pre-conditioned air			98.00%	0.20%	0.0444%	0.0333%
19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)	Unrestricted	95.00%	0.25%	0.0556%	0.0417%

68 In this table, the standard for pier-served stand usage (element 19) is 95% excluding Delta Airlines and BA off-pier short-haul services for April to June 2014, and is 93% for October 2015 to June 2016. It is subject to exceptions to be agreed by the Licensee and the AOC.

Table 4a: Terminal 4 – passenger satisfaction elements

i	Element	Metric	Time of day over which performance counts for rebates	$Standard_{i,j,a}$	$ANNMAX_i$	$R_{i,j}RP$	$R_{i,j}RY$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers	Unrestricted	3.80	0.36%	0.0800%	0.0600%
2	Cleanliness			4.00	0.36%	0.0800%	0.0600%
3	Way-finding			4.10	0.36%	0.0800%	0.0600%
4	Flight information			4.30	0.36%	0.0800%	0.0600%
5	Security			Publication only			
6	Wi-fi			Publication only			

Table 4b: Terminal 4 – security[69]

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
7-i1	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	*05:00 to 22:30*	*95.00%*	*1.00%*	*0.2222%*	*0.1667%*
7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*99.00%*			
8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*95.00%*	*0.50%*	*0.1111%*	*0.0833%*
7	Central search	Percentage of passengers queuing less than 10 minutes	05:00 to 22:30	99.00%	1.00%	0.2222%	0.1667%
8	Transfer search		05:00 to 22:30	99.00%	0.50%	0.1111%	0.0833%
7-a	Central search	Delivery of automated security queue measurement by 1 April 2015	Not applicable	By 1 April 2015	1.00%	N.A.	0.0833%
8-a	Transfer search				0.50%		0.0417%
9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%

69 The standards for central and transfer search (elements 7 and 8) take effect on 1 April 2015, upon the introduction of automated security queue measurements (planned delivery by April 2015). Prior to that, the standards for central and transfer search (interim) (elements 7-i1, 7-i2 and 8-i1) remain in effect. Additional monthly rebates (elements 7-a and 8-a) are payable every month from April 2015 until the month in which automated security queue measurements is introduced.

Table 4c: Terminal 4 – passenger operational elements

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
10	PSE (general)	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.35%	0.0778%	0.0583%
11	PSE (priority)			99.00%	0.35%	0.0778%	0.0583%
12	Arrivals baggage carousels			99.00%	0.35%	0.0778%	0.0583%
13a	Track transit system	% one train serviceable and available for use, independent of any other element	Not applicable	Not applicable			
13b		% two trains serviceable and available for use, independent of any other element					

Table 4d: Terminal 4 – airline operational elements[70]

$\mathbf{i}$	Element	Metric	Time of day over which performance counts for rebates	$\mathbf{Standard_{i,j,a}}$	$\mathbf{ANNMAX_i}$	$\mathbf{R_{i,j}RP}$	$\mathbf{R_{i,j}RY}$
14	Stands	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.25%	0.0556%	0.0417%
15	Jetties			99.00%	0.25%	0.0556%	0.0417%
16	Fixed electrical ground power			99.00%	0.20%	0.0444%	0.0333%
17	Stand entry guidance			99.00%	0.25%	0.0556%	0.0417%
18	Pre-conditioned air		Not applicable	Not applicable			
19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)	Unrestricted	95.00%	0.30%	0.0667%	0.0500%

70 In this table, the standard for pier-served stand usage (element 19) is subject to exceptions to be agreed by the Licensee and the AOC.

Table 5a: Terminal 5 – passenger satisfaction elements

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers	Unrestricted	3.80	0.36%	0.0800%	0.0600%
2	Cleanliness			4.00	0.36%	0.0800%	0.0600%
3	Way-finding			4.10	0.36%	0.0800%	0.0600%
4	Flight information			4.30	0.36%	0.0800%	0.0600%
5	Security			Publication only			
6	Wi-fi			Publication only			

Table 5b: Terminal 5 – security[71]

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
7-i1	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	*05:00 to 22:30*	*95.00%*	*1.00%*	*0.2222%*	*0.1667%*
7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*99.00%*			
8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*	*05:00 to 22:30*	*95.00%*	*0.50%*	*0.1111%*	*0.0833%*
7	Central search	Percentage of passengers queuing less than 10 minutes	05:00 to 22:30	99.00%	1.00%	0.2222%	0.1667%
8	Transfer search		05:00 to 22:30	99.00%	0.50%	0.1111%	0.0833%
7-a	Central search	Delivery of automated security queue measurement by 1 April 2015	Not applicable	By 1 April 2015	1.00%	N.A.	0.0833%
8-a	Transfer search				0.50%		0.0417%
9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%

71 The standards for central and transfer search (elements 7 and 8) take effect on a date not later than 1 April 2016, upon the introduction of automated security queue measurements (planned delivery by April 2015) and delivery of additional search capacity on a date not later than 1 April 2016. Prior to that, the standards for central and transfer search (interim) (elements 7-i1, 7-i2 and 8-i1) remain in effect. Additional monthly rebates (elements 7-a and 8-a) are payable every month from April 2015 until the month in which automated security queue measurements is introduced.

Table 5c: Terminal 5 – passenger operational elements

i	Element	Metric	Time of day over which performance counts for rebates	$\text{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
10	PSE (general)	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.25%	0.0556%	0.0417%
11	PSE (priority)			99.00%	0.25%	0.0556%	0.0417%
12	Arrivals baggage carousels			99.00%	0.25%	0.0556%	0.0417%
13a	Track transit system	% one train serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.30%	0.0667%	0.0500%
13b		% two trains serviceable and available for use, independent of any other element		97.00%			

Table 5d: Terminal 5 – airline operational elements[72]

i	Element	Metric	Time of day over which performance counts for rebates	$Standard_{i,j,a}$	$ANNMAX_i$	$R_{i,j}RP$	$R_{i,j}RY$
14	Stands	% time serviceable and available for use, independent of any other element	Period agreed locally between the Licensee and the AOC	99.00%	0.25%	0.0556%	0.0417%
15	Jetties			99.00%	0.25%	0.0556%	0.0417%
16	Fixed electrical ground power			99.00%	0.20%	0.0444%	0.0333%
17	Stand entry guidance			99.00%	0.30%	0.0667%	0.0500%
18	Pre-conditioned air			98.00%	0.25%	0.0556%	0.0417%
19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)	Not applicable	Not applicable			

[72] In this table, the standard and rebates for pier-served stand usage (element 19) are subject to change should there be a change in operation control of stand allocation or terminal occupancy or both.

Table 6: Control post rebates[73]

i	Element	Metric			Time of day over which performance counts for rebates	$\mathrm{Standard}_{i,j,a}$	ANNMAX_i	$R_{i,j}RP$	$R_{i,j}RY$
20	Control posts	Percentage of vehicle queue times measured once every 15 minutes that are less than 15 minutes at each of the control post groups.			Period agreed locally between the Licensee and the AOC	95.00%	0.38%	0.0844%	0.0633%
20-a	CTA	CTA	:	CP5, CP8					
20-b	Cargo	Cargo	:	CP10, CP10a, CP25a					
20-c	Eastside	Eastside	:	CP14, CP16					
20-d	Southside	Southside	:	CP24					
20-e	Terminal 5	Terminal 5	:	CP18, CP19, CP20					

Table 7: Aerodrome congestion term rebates

Maximum cumulative movements deferred per day	0 – 3	4 – 5	6 – 7	8 – 9	10 – 11	12 – 13	14 – 15	16 – 17	18 – 19	20 or more
Rebates in thousands (£'000 in 2013/14 prices)	–	12.11	19.61	28.09	38.87	51.94	67.20	84.88	104.73	121.08

73 In this table, the subscript a in $\mathrm{Standard}_{i,j,a}$ does not refer to a particular terminal. The same standard applies individually to each control post group.

Table 8: Bonuses

$\mathbf{k}$	Specified element	Metric	Maximum bonus $\mathbf{MB_k}$	Lower performance limit $\mathbf{LPL_k}$	Upper performance limit $\mathbf{UPL_k}$
1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers in the relevant terminal	0.36%	4.10	4.50
2	Cleanliness		0.36%	4.20	4.50
3	Way-finding		0.36%	4.20	4.50
4	Flight information		0.36%	4.40	4.70

Table 9: Periods of bonuses earned to be taken into account when setting $\mathbf{M_t}$ as specified in Condition C1[74]

To set the maximum revenue yield per passenger $\mathbf{M_t}$	$\mathbf{M_t}$ representing the period	Take account bonuses earned in $\mathbf{B_{t-2}}$	$\mathbf{B_{t-2}}$ representing the period
M_{2014}	April 2014 – December 2014	$B_{2012/13}$	April 2012 – March 2013
M_{2015}	January 2015 – December 2015	$B_{2013/14}$	April 2013 – March 2014
M_{2016}	January 2016 – December 2016	B_{2014}	April 2014 – December 2014
M_{2017}	January 2017 – December 2017	B_{2015}	January 2015 – December 2015
M_{2018}	January 2018 – December 2018	B_{2016}	January 2016 – December 2016

74 In Table 9, for the purposes of calculating M_{2014}, $B_{2012/13}$ is set to zero; for the purposes of calculating M_{2015}, $B_{2013/14}$ is set to zero.

Table 10a: Publication – passenger satisfaction elements

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
All terminals	1	Departure lounge seating availability	Moving annual average QSM scores weighted by monthly passenger numbers in the relevant terminal	Performance and standard	Performance, standard, estimated rebates and bonuses	Audited rebates and bonuses
	2	Cleanliness				
	3	Way-finding				
	4	Flight information				
	5	Security		Performance	Performance	Not applicable
	6	Wi-fi				

Table 10b: Publication – security

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
All terminals[75]	*7-i1*	*Central search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 5 minutes*	Performance and standard	Performance, standard and estimated rebates	Audited rebates
	7-i2		*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*			
	8-i1	*Transfer search (interim)*	*Percentage of queue times measured once every 15 minutes that are less than 10 minutes*			
T2, T3, T4, T5[76]	7	Central search	Percentage of passengers queuing less than 10 minutes			
	8	Transfer search				
T2, T3, T4, T5[77]	7-a	Central search	Delivery of automated security queue measurement by 1 April 2015.	Not applicable	Quarterly update on the website for delivery by 1 April 2015. The first update is due 1 April 2015.	
	8-a	Transfer search				

75 Until air transport services for the carriage of passengers cease in T1; until the planned delivery of automated security queue measurements by 1 April 2015 in T2 and T4; until the planned delivery of additional capacity on a date not later than 1 June 2016 in T3; until the planned delivery of additional capacity on a date not later than 1 April 2016 in T5.

76 Upon the planned delivery of automated security queue measurements by 1 April 2015 in T2 and T4; upon the planned delivery of additional capacity on a date not later than 1 June 2016 in T3; upon the planned delivery of additional capacity on a date not later than 1 April 2016 in T5.

77 Additional monthly rebates (elements 7-a and 8-a) are payable every month from April 2015 until the month in which automated security queue measurements is introduced in the relevant terminals.

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
All terminals	9	Staff search	Percentage of queue times measured once every 15 minutes that are less than 10 minutes	Not applicable	Performance, standard and estimated rebates	Audited rebates

Table 10c: Publication – passenger operational elements

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
All terminals	10	PSE (general)	% time serviceable and available for use, independent of any other element	Not applicable	Performance, standard and estimated rebates	Audited rebates
	11	PSE (priority)				
	12	Arrivals baggage carousels				
T5	13a	Track transit system	% one train serviceable and available for use, independent of any other element			
	13b		% two trains serviceable and available for use, independent of any other element			

Table 10d: Publication – airline operational elements

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
All terminals	14	Stands	% time serviceable and available for use, independent of any other element	Not applicable	Performance, standard and estimated rebates	Audited rebates
	15	Jetties				
	16	Fixed electrical ground power				
	17	Stand entry guidance				
T2, T3, T5	18	Pre-conditioned air				
T1, T2, T3, T4	19	Pier-served stand usage	Moving annual average of % passengers served (last 12 months)			

Table 10e: Publication – control posts and ACT

Area	i	Element	Metric	Terminal (monthly)	Website (monthly and annual)	Regulatory accounts (annual)
Campus	20	Control posts	Percentage of vehicle queue times measured once every 15 minutes that are less than 15 minutes at each of these control post groups	Not applicable	Performance by control post group, standard and estimated rebates	Audited rebates
	20-a	CTA	CTA : CP5, CP8			
	20-b	Cargo	Cargo : CP10, CP10a, CP25a			
	20-c	Eastside	Eastside : CP14, CP16			
	20-d	Southside	Southside : CP24			
	20-e	Terminal 5	Terminal 5 : CP18, CP19, CP20			
Airfield		Aerodrome congestion term	As specified in section 2(e) of Schedule 1			

APPENDIX A

Form of Regulation

A1 This section contains the CAA's decision on the design of the price control that will apply to HAL during Q6. It sets out the statutory duties that the CAA must follow in formulating a price control and then discusses:

- the form of the control and whether to continue with a RAB approach; and
- the duration of the Q6 control.

A2 It then considers a number of issues related to the detailed design of the price control including:

- whether to set the control on a single- or a dual-till basis;
- whether to include a mechanism for the recovery of the costs of major airport expansion projects;
- safeguarded assets;
- treatment of unanticipated changes in security costs, or the S factor;
- the proposed BR factor for the partial passthrough of changes in business rates costs owing to the 2017 revaluation;
- the proposed N factor for the passthrough of noise costs;
- a rolling opex incentive mechanism;
- traffic risk sharing; and
- treatment of over- or under-recoveries, or the K factor.

A3 In addition, the condition which rolls forward the RAB is published as Appendix K.

CAA's duties

A4 The Act creates a new framework to govern the application of economic regulation to the airport sector. In essence, it modernises the previous arrangements and brings the CAA's duties and powers into line with best practice. Under the revised framework, the CAA has a new primary duty focused on the interests of passengers and those with rights in cargo. The scope of this duty concerns the range, availability, continuity, cost and quality of airport operation services. The CAA must carry out its functions, where appropriate, in a manner that will promote competition in the provision of airport operation services. The Act enables the CAA to regulate through a flexible licensing approach.

A5 Those of the CAA's statutory duties which are most relevant to setting the Q6 price controls are set out in figure A.1 below.

Figure A.1: CAA statutory duties under the Act

S1	CAA's general duty
(1)	The CAA must carry out its functions...in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services.
(2)	The CAA must do so, where appropriate, by carrying out the functions in a manner which it considers will promote competition in the provision of airport operation services.
(3)	In performing its duties under subsections (1) and (2) the CAA must have regard to: (a) the need to secure that each holder of a licence...is able to finance its provision of airport operation services in the area for which the licence is granted, (b) the need to secure that all reasonable demands for airport operation services are met, (c) the need to promote economy and efficiency on the part of each holder of a licence...in its provision of airport operation services at the airport to which the licence relates, (d) the need to secure that each holder of a licence...is able to take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport to which the licence relates, facilities used or intended to be used in connection with that airport…and aircraft using that airport, (e) any guidance issued to the CAA by the Secretary of State..., (f) any international obligation of the United Kingdom notified to the CAA by the

S1	CAA's general duty
	Secretary of State..., and (g) the principles in subsection (4).
(4)	Those principles are that – (a) regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent, and (b) regulatory activities should be targeted only at cases in which action is needed.
S73(2)A	Regulatory burdens
	The CAA also has a duty not to impose or maintain unnecessary burdens while performing its regulatory functions under Chapter 1 of Part 1 of the Act.

Note: In performing its duties under section 1(1) and 1(2) of the Act the CAA must have regard to any international obligations of the UK notified to it by the Secretary of State. On 12 April 2013 the CAA was notified of the following international obligations, as they affect charges on airlines: Article 15 of the Chicago Convention; Air services agreements in force between the EU and its member states and any third country or countries; and Air services agreements in force between the UK and any third country or countries. These same obligations applied to the CAA in previous price control reviews conducted under the AA86.

Form of the control

Issue

A6 In previous quinquennia, the CAA has set price controls for UK regulated airports using a RAB-based price cap.

CAA's proposed licence

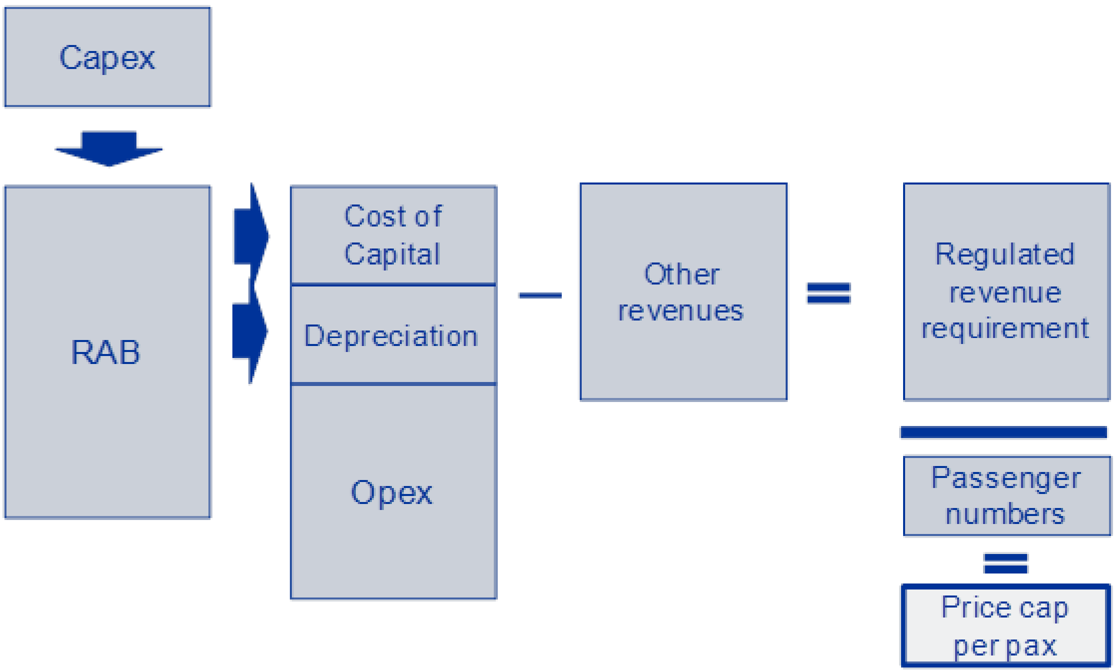
A7 The CAA's final proposal (confirmed in its proposed licence) for the form of HAL's control was to set another RAB-based price cap, for several reasons:

- the CAA considered that this form of regulation is appropriate given HAL’s degree of market power. The RAB is a well-known model for regulation for organisations which have SMP. For example, it is used in the UK in regulated sectors such as energy, water, rail, and wholesale telecommunications;

- the RAB approach is appropriate where there is a requirement to ensure that there is a well-understood way of balancing the needs of users today and users in the future. This is because the RAB approach ensures that airport prices should be no more than the minimum needed to remunerate an efficient airport operator, whilst ensuring a fair return on investment;
- during the business planning for CE, there appeared to be a high level of consensus between HAL and the airlines that the calculation of maximum price caps should be based on a RAB-based single-till methodology. HAL's business plans were prepared on this basis, as were responses from the airlines; and
- the CAA has consulted stakeholders, including HAL and the airlines, about alternative forms of regulation. However, there appears a broad consensus that none of these alternatives would be as effective as a RAB-based approach for HAL.

A8 Figure A.2 below illustrates a RAB-based control.

Figure A.2: Building blocks to calculate the HAL price cap



Source: CAA

Representations received

A9 The CAA received no representations to its proposed licence commenting on this issue.

CAA's response

A10 Given the high degree of stakeholder consensus on the issue, and the four reasons stated in its proposed licence, and reproduced above, the CAA's decision is to continue to use RAB-based regulation.

Duration of the control

Issue

A11 During CE and in their submissions to the CAA, both HAL and the airlines assumed that the price control period would remain at five years, with 31 March year ends. HAL requested that the CAA consider changing the regulatory year end from 31 March to 31 December to align it with HAL's year end for statutory accounting purposes. HAL’s FBP proposed aligning the periods by means of reducing the initial ‘year’ of Q6 to nine months, meaning that Q6 would be composed of an initial nine month period (1 April 2014 to 31 December 2014) followed by four years to 31 December 2018.

A12 HAL may request that its price control be reopened at any time. The CAA would consider such a request in the light of its statutory duties under the circumstances prevailing at the time.

CAA's proposed licence

A13 The CAA based its final proposals on a five year control, consistent with precedent and stakeholders' responses to the initial proposals. However, the CAA stated that it believed that a control coinciding with HAL's financial year could present benefits in transparency and in facilitating regulatory calculations. The CAA was therefore minded to change the duration of the price control in this way between the final proposals and the implementation of the price control on 1 April 2014 provided that the required financial modelling and licence changes could be implemented in time. If this proved impossible, it would implement these changes during the first year of Q6. However, such a change would be exceptional, and the CAA did not envisage changing the financial year again during Q6.

A14 For the purposes of modelling the control, the CAA converted its forecasts for the building blocks to take account of this decision. This meant that the forecasts at the end of each chapter have been derived using appropriate conversion factors and are presented on a four years and nine months basis. For ease of comparison with the final proposals and the output of CE, the CAA has also included forecasts for each building block on a five year basis. It has not, however, otherwise made use of the five year forecasts in setting the control. In addition, the CAA has made a number of minor amendments to the price control licence condition and the RAB roll forward condition to take account of this change. The most important of these are highlighted in the relevant chapters and appendices of this document.

Representations received

A15 The CAA received no representations to its proposed licence commenting on the duration of the control.

CAA's decision

A16 Given the advantages outlined in the proposed licence, and summarised above, the CAA has set HAL's price control based on a duration for Q6 of four years and nine months.

Issues

Single- and dual-till

Issue

A17 A single-till control deducts non-aeronautical revenues (such as commercial revenues) from forecast costs to arrive at the revenue requirement from airport charges. A dual-till control bases allowed revenues only on forecast costs. The CAA based its initial proposals for HAL on a single-till approach. The CAA noted that this was the basis of HAL's business plans and the responses from the airlines. There was a significant debate during previous regulatory reviews about the use of the single-till.[78]

[78] The single-till approach was discussed in detail in the Q4 regulatory process and the issue was considered again in Q5. Both price controls were set on the basis of a single-till approach.

CAA's proposed licence

A18 The CAA's proposed licence was to set a single-till control for HAL during Q6.

Representations received

A19 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A20 Consequently for the reasons set out in the proposed licence and repeated above, the CAA's decision is to set a single-till control for HAL during Q6.

Airport expansion cost recovery mechanism

Issue

A21 In 2003, the then government's White Paper into the future of air transport in the UK[79] backed the construction of a third runway and sixth terminal at Heathrow. However, following the 2010 election, the government withdrew its backing, and announced the Airports Commission, which is looking into the possible future expansion of Heathrow and other UK airports. The Commission released its interim report on 17 December 2013, and will release its final report after the 2015 election. It is possible that planning for, and construction of, a major expansion of Heathrow could start during Q6.

A22 Policy on airport expansion is a matter for the government. However, the CAA can decide whether to include a mechanism for the automatic recovery of airport expansion costs in HAL's Q6 price control, or whether other mechanisms could be more appropriate. These could include a licence condition automatically reopening the price control in the event that the government backs a major expansion of Heathrow or allowance of the costs in Q7 or subsequent reviews.

CAA's proposed licence

A23 The CAA's current policy on the recovery of preliminary airport expansion costs, such as the planning of the expansion, preliminary

79 Available at: http://webarchive.nationalarchives.gov.uk/+/http:/www.dft.gov.uk/about/strategy/whitepapers/air

consultation, or the airport operator's costs at the planning inquiry, was set out in the Regulatory Policy Statement of its Q5 decision on Heathrow's price control.[80] If the costs are known, or a reasonable estimate can be made at the price control review, the airport operator is given an allowance until the next review, at which point the CAA would conduct a review and allow efficiently incurred costs related to expansion into the RAB. However, at present, the costs of expansion, or indeed whether the expansion will take place, are uncertain. Therefore, no reasonable estimate can be made for the level of costs to be included in the Q6 RAB.

A24 The final proposals were based on HAL's two runway Masterplan, and did not include provision for a significant expansion of the airport. The CAA did not believe that an explicit mechanism in HAL's licence to incorporate expansion costs into HAL's allowed revenues was appropriate, because:

- it remained highly uncertain whether such costs would be incurred during Q6, if at all;
- it was likely that, if any airport expansion costs are incurred within Q6, they would be relatively small. Significant expenditure on the construction phase of a new runway or new terminal seemed highly unlikely during Q6;
- even if the government approved expansion at Heathrow, other parties, besides HAL, could be chosen to own or operate the new runway or terminals;
- it was theoretically possible that the CAA could consider that expansion approved by the government jeopardised its fulfilment of its statutory duties. Accordingly, including an automatic mechanism by which expenditure on expansion was included in the RAB without the CAA undertaking an assessment of that expenditure could be inappropriate;
- the CAA did not share HAL's view that a reopening condition in the price control would be too slow, uncertain and cumbersome. Such a condition could be activated relatively quickly once the government's plans for airport expansion were known; and

80 Available at http://www.caa.co.uk/docs/5/ergdocs/heathrowgatwickdecision_mar08.pdf. In particular, see Annex E, paragraphs E44-E49.

- the precise mechanism for the recovery of such costs was best decided once their magnitude and timing were known.

A25 However, the CAA committed to considering further its treatment of the costs of significant capacity expansion and to consulting on a policy statement.

A26 In its proposed licence, the CAA noted HAL's point that there could be developments in government policy that could not be reasonably included as part of the regulatory settlement, but may require additional further expenditure. It did not agree, however, that it was appropriate to address the treatment of these costs in the price control settlement without considerable analysis and consultation. The CAA proposed to consider the treatment of costs for any large expansion of Heathrow's capacity during Q6.

Representations received

A27 The CAA received one representation on this issue in response to its proposed licence. HAL found inexplicable the CAA's decision to allow Gatwick to include up to £10m per annum in its charges to cover the costs for airport expansion. HAL recognised that Gatwick's regulatory price control mechanism was different to that of Heathrow, but this was irrelevant to the fact that the CAA had chosen to explicitly recognise £10 million per annum of expansion costs for Gatwick, but not for Heathrow. This expenditure was essential for both Heathrow and Gatwick to support submissions to the Airports Commission.

CAA's response

A28 For the reasons set out in the proposed licence and repeated above, the CAA's decision is that it will consider the treatment of costs for any large expansion of Heathrow's capacity during Q6. It will consider HAL's argument for a capex allowance similar to GAL's at that time. The CAA does not accept that it has erred, or jeopardised its duty to promote competition, in giving an explicit allowance to GAL but not HAL for capacity expansion costs. The situation at Gatwick is not a good precedent for an explicit allowance for second runway costs for three reasons:

- GAL's price control contains a limit on second runway costs, rather than an explicit allowance.

- The duration of GAL's price control is longer than HAL's. This means that there is a greater probability that capacity expansion will be undertaken at Gatwick during the Q6 period.
- The Gatwick airlines explicitly support the mechanism included in GAL's price control.

Safeguarded assets

Issue

A29 In discussions with airlines, the CAA was encouraged to consider different ways of rewarding ‘safeguarded’ assets. Safeguarded assets are created as part of a larger capex programme when it makes economic and construction sense to build an asset (or the space for an asset) for future use. There are five assets safeguarded in Q5 with a value in excess of £5 million. In total these are valued at £276 million, of which the largest items were Terminal 2B baggage basement (£104 million) and Terminal 2B track transit system station box (£86 million). In addition, there are safeguarded assets in Terminal 5 which were added to the RAB in Q4. None of the Q6 capex plans include significant new safeguarded assets.

A30 The current approach provides a real return on the assets, adds inflation to the assets and does not depreciate them until they are in use. Current users pay the finance costs (the real WACC), while future users (those that use the assets) pay for the asset including the increase in value because of inflation. The current approach in effect means that users bear the risk of stranded assets. The costs are borne by both current and future users while only future users will receive any benefit from the use of the assets. The CAA aims to avoid, and stakeholders agree that it should aim to avoid, retrospective adjustments to the treatment of assets in the RAB. The CAA considers that if any change is to be made to the treatment of safeguarded assets then it should be prospective[81] only.

A31 An alternative to the current approach could be for HAL to invest in safeguarded assets at its own risk. If the assets ever came into use, they could be transferred into the RAB and valued at original cost,

81 In this case, prospective could mean safeguarded assets created in Q6 or thereafter, or could mean assets created as part of projects which commenced in Q6 or thereafter.

plus inflation plus a cost of capital (higher than the WACC used in the price cap to reflect the stranding risk borne by the airport operator).

CAA's proposed licence

A32 In its final proposals, the CAA accepted that, in principle, there was an argument for not including safeguarded assets in the RAB, or for allowing a lower cost of capital for those assets before they were used. This could ensure that users benefit from lower prices than would otherwise be the case, for assets which they did not yet use.

A33 However, altering the approach to calculating the RAB, even if only prospective assets were affected, could lead to increased regulatory uncertainty, and hence an increase in the overall cost of capital. Since the value of the safeguarded assets was small compared to the RAB as a whole, removing safeguarded assets while increasing the return on the RAB to compensate could increase, rather than reduce, overall airport charges.

A34 The CAA's proposed licence retained its current approach to safeguarded assets. While adjusting the rate of return on safeguarded assets would not require an adjustment to the overall size of the RAB, it remained an ex-post adjustment to the treatment of those assets, which could reduce regulatory certainty and increase HAL's cost of capital. Accordingly, it could result in an overall increase in prices.

Representations received

A35 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A36 For the reasons set out in the proposed licence and repeated above, the CAA's decision is that it will retain its current approach to safeguarded assets.

Security cost passthrough (S factor)

Issue

A37 The risks arising from future security requirements are subject to relatively wide bounds of uncertainty. Rather than deal with this uncertainty by making conservative (i.e. high) estimates of future security costs in the base case for setting the price cap, it seems more reasonable for HAL to passthrough more of the actual variances in costs as they arise.

A38 The Q5 price control design included a passthrough mechanism within the control period for security cost increases resulting from a security standard tighter than that assumed by the CAA in setting the price cap. The CAA set the pass-through factor at 90% of the cost increase above the given deadband (£17 million).

CAA's proposed licence

A39 The CAA's final proposals included an S factor on the same basis as during Q5, with the deadband increased to £20 million to take account of inflation since 2008. The CAA did not agree with HAL's response to its final proposals that it was unfair or inappropriate to require it to absorb a proportion of the significant costs of the implementation of security directives, as it was required to do with other legislative changes throughout the quinquennium. It considered that HAL's proposal of an individual claim for each item could be unnecessarily complicated.

A40 The CAA's proposed licence maintained the approach set out in the final proposals, of a symmetrical S factor with a £20 million dead band and a 90% sharing factor. The change in the duration of the control from five years to four years and nine months means that the £20 million deadband will be reduced to £19 million, to reflect the shorter duration over which the cumulative increase in costs will have to be incurred to exceed the envisaged amount.

Representations received

A41 The CAA received one response to its proposed licence on this issue. The Heathrow Airline Community welcomed the amendments made by the CAA to the S factor. The Heathrow Airline Community mentioned various points concerning the incorporation of the S factor into the licence, which are discussed further in the main text of this document.

CAA's response

A42 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that the S factor will contain a deadband of £19 million and be symmetrical.

Rates revaluation costs

Issue

A43 A national revaluation of commercial property for the purpose of calculating business rates is expected in 2017. HAL's January 2013 FBP assumed that the revaluation would increase national business rates by £35 million (equivalent to 26% increase[82]). The CAA's consultants, Steer Davies Gleave (SDG), stated in its report that this was likely to be an overestimate.

A44 Regulators often include a pass-through term in the price control to reduce the risk faced by regulated companies caused by a particular cost item. The CAA has used a partial pass-through for security costs (see the previous section). Another way is through a commitment by the regulator to allow the company to recover the actual level of costs in the future. The CAA understands that the Office of Rail Regulation (ORR) commits to passing through business rates costs incurred during each price control period at the next review, rather than including a specific term in the price control.

CAA's proposed licence

A45 The CAA's proposed licence included a BR term in HAL's Q6 price control. Business rates were a relatively significant cost item, over which HAL had relatively little control. The CAA would assess HAL's performance during the rates revaluation in the Q7 review, as it does with all other items of opex. The CAA considered that the BR term should be symmetrical, consistent with the S factor term, and incorporated this feature in the proposed licence condition.

Representations received

A46 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A47 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that a BR term, incorporating an 80% cost sharing factor, will be included in HAL's Q6 price control.

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[82] Steer Davies Gleave (2012) Review of Other Operating Expenditure at Heathrow Airport, page 12, available at www.caa.co.uk

Noise costs

Issue

A48 HAL is required under statute to fund a significant level of costs to local residents and businesses by aircraft noise. HAL has stated that it has no direct control over much of these noise costs. HAL's noise costs over the past five years were around £5 million per year.

CAA's proposed licence

A49 The CAA's final proposals did not contain a passthrough mechanism for noise costs. The CAA did not accept HAL's points that the magnitude of projected noise costs is irrelevant, or that it is jeopardising its environmental obligations by rejecting a passthrough mechanism. It believed that such mechanisms were only justified for significant cost items. Including many such mechanisms for smaller individual items would materially complicate HAL's price control, reducing transparency and complicating its incentives. It also questioned whether including a passthrough mechanism for noise costs would cause HAL to act differently, given that HAL already funded noise abatement schemes more generously than it could.

A50 In its proposed licence, the CAA did not include a passthrough mechanism for noise costs. It believed that to do so could jeopardise its fulfilment of its statutory duty to promote efficiency and economy.

Representations received

A51 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A52 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that there will be no noise cost passthrough factor in HAL's Q6 price control.

Rolling opex incentive mechanism

Issue

A53 In other sectors, such as the CAA’s economic regulation of NATS (En Route) plc (NERL), a mechanism to increase the incentive on regulated companies to make opex savings towards the end of the control period has been introduced. Such mechanisms give the regulated company greater incentive to make savings because it is allowed to keep those savings for a longer period (i.e. into the subsequent control period). The mechanism can also equalise the incentive to make efficiencies in each year of the control period. This mechanism is generally known as a rolling opex incentive mechanism. The CAA raised this idea earlier in the Q6 review and invited stakeholder feedback.

CAA's proposed licence

A54 The CAA did not include a rolling opex mechanism in the Q6 price control at any stage.

Representations received

A55 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A56 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that the Q6 price control will not include a rolling opex mechanism.

Traffic risk sharing mechanism

Issue

A57 At an earlier part of the Q6 review, the CAA asked whether there was merit in introducing a traffic risk sharing mechanism. The CAA has introduced such a mechanism for its regulation of NERL. During CE, neither HAL nor the airlines supported this concept, preferring to consider traffic risk through traffic forecasts and the WACC.

CAA's proposed licence

A58 Given the lack of stakeholder support and the uncertain benefits of such a mechanism, the CAA's final proposals for HAL's Q6 price control did not include a traffic risk sharing mechanism.

Representations received

A59 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A60 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that there will be no traffic risk sharing mechanism in HAL's Q6 price control.

K factor

Issue

A61 HAL sets its structure of charges so that it expects to earn a revenue yield per passenger equal to, or less than, the price cap (the permitted yield). In setting its structure of charges, HAL has to forecast traffic mix (for example, the share of domestic and international passengers who are subject to different charges or the number of passengers per aircraft). Such mix cannot always be accurately forecast. The actual yield in a year is only known precisely at the end of the year, when charges for the next year have been set. Over- or under-recovery of the permitted yield (in total) is currently subject to a correction factor applied two years later.

A62 In Q5, the correction mechanism allowed for financing costs. Claims for previous under-recoveries were uplifted by the Treasury Bill rate, while repayments for previous over-recoveries were uplifted by the Treasury Bill rate plus 3%. The purpose of the asymmetric finance costs was to give HAL a disincentive to over-recover deliberately.

CAA's proposed licence

A63 The CAA's final proposals and proposed licence retained the K factor mechanism in Q6 as during Q5.

Representations received

A64 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

A65 For the reasons set out in the proposed licence and summarised above, the CAA's decision is that the K factor in HAL's Q6 price control will be designed on the basis of the Q5 mechanism.

CAA's decision

A66 To summarise, the CAA's decision on the form of the price control is:

- Form of control: an RPI-X, RAB-based regulation.
- Duration of the control: a control lasting four years and nine months.
- Single- or dual-till: a single-till control.
- Airport expansion cost recovery mechanism: none is allowed.
- Safeguarded assets: to continue the present treatment of safeguarded assets.
- S factor: to continue the present S factor. The CAA has increased the deadband to £20 million in line with inflation during Q5. To reflect the reduction in the duration of the control to four years and nine months, the CAA has reduced this deadband to £19 million. The CAA will change the mechanism to ensure that 90% cost savings from unanticipated relaxations in security conditions are passed through to customers, subject to the £19 million deadband.
- BR factor: to contain provision for a BR factor.
- Noise costs: not to provide for a pass-through mechanism for noise costs.
- Rolling opex incentive mechanism: not to provide for such a mechanism.
- Traffic risk sharing mechanism: not to provide for such a mechanism.
- K factor: to continue the present correction mechanism.

APPENDIX B

Traffic Forecasts

B1 Traffic forecasts are important in a building block price control in a number of ways:

- they define the denominator in the price cap for Q6, which sets a maximum revenue yield;
- they influence other building blocks dependent on passenger numbers, such as opex, commercial revenues and service quality; and
- if the traffic forecasts include within them an allowance for traffic risk, this will need to be considered in estimating the appropriate WACC.

B2 This appendix describes the CAA's approach to forecasting passenger volumes at Heathrow. It sets out:

- the approach to forecasting used;
- the forecasts submitted by HAL in November 2013;
- issues of disagreement between HAL and the Heathrow Airline Community; and
- the forecasts on which the CAA's decision is based.

Approach to forecasting

B3 HAL’s traffic forecasting methodology consists of two separate forecasting models: an econometric model, which analyses likely future demand, and a capacity model, which extrapolates from trends in supply and known airline capacity plans. Both models include an allowance for non-economic demand ‘shocks’ and generate a probability distribution of future traffic through a ‘Monte Carlo’ technique.[83]

B4 The econometric model is based on a regression analysis of passenger traffic at Heathrow only for the period from 1996 until 2011, against economic, cost and airline fare variables. Forecasts are generated using ranges for each of these input variables based upon standard industry sources.

B5 The capacity model explains passenger numbers as a function of supply decisions: number of aircraft, average aircraft size and passenger load factor. The model considers long haul and short haul services separately, and therefore requires an assumption about the future proportion of such services at the airport.

HAL's November 2013 forecasts

B6 For HAL's January 2013 FBP, the two models produced very similar output for Q6. HAL chose to use the output from the econometric model. For the June 2013 RBP and the July 2013 ABP, HAL produced updated Q6 traffic forecasts, which were higher by 2.6 million passengers than those in the FBP. HAL gave five reasons for the change in traffic forecasts between the FBP and its response to the CAA's initial proposals:

- updates to the base year to reflect passenger traffic in the first three months of 2013 and the Olympics effect;
- a correction to the shocks methodology;
- updated Gross Domestic Product (GDP) growth forecasts;
- increased taxes on departing passengers; and
- an improved approach to the variance in GDP forecasts.

B7 In November 2013, HAL submitted a new set of forecasts to the CAA. It gave the following reasons for the differences between those and the forecasts used in the ABP/RBP forecasts:

83 Each input is considered as a range of possibilities and multiple forecasts are generated. Each uses particular input values chosen from those ranges.

  - an updated Olympics effect;
  - updated GDP forecasts from Consensus Economics (October 2013);
  - an updated oil price using the EIA Annual Energy Outlook 2013 and non-fuel efficiency gains (Department for Transport, Jan 2013); and
- revised base year traffic to account for business cycles.

B8 The forecasts are shown in figure B.1 below. For comparison, the figure also includes the forecasts in the ABP and those used by the CAA in its final proposals in October 2013.

Figure B.1: HAL Q6 traffic forecasts

Passengers (millions)	2014/15	2015/16	2016/17	2017/18	2018/19	Q6
HAL ABP/RBP	70.1	70.8	71.5	72.3	73.0	357.8
CAA's final proposals	70.8	71.0	71.7	72.5	73.2	359.2
HAL November 2013	70.4	71.2	71.9	72.7	73.5	359.7

Sources: HAL, CAA

B9 The revised forecasts based on HAL's econometric model include upward adjustments to the ABP/RBP forecasts by 1.8 million over the whole Q6. This is due to:

  - updated information on the oil price and non-fuel efficiency gains;
  - a more favourable GDP outlook; and
  - downward revisions of 0.6 million due to baseline adjustment to account for business cycles and 0.1 million due to an updated Olympics impact.[84]

[84] HAL also provided a revised Q6 forecast of 361.5 million based on its capacity model which represents a 3.4 million uplift from HAL's previous capacity model forecast for the whole Q6 due to airline fleet upgrades and updated airline performance and a 0.1 million reduction due to the updated assessment of the impact of the Olympics.

Issues

B10 The CAA's final proposals listed four issues of contention between HAL and the airlines concerning the methodology for forecasting traffic:

- the inclusion of demand shocks;
- the size of demand shocks;
- how to combine econometric and capacity forecasts; and
- truncated and non-symmetric input variables.

B11 In addition, respondents to the final proposals commented on the implications for the Q6 traffic forecasts of higher than expected traffic in the base year. This section considers each in turn.

Inclusion of demand shocks

Issue

B12 In its modelling, HAL defined demand shocks as significant departures from the expected trend in Heathrow's passenger numbers. It excluded the effects of the recession where variances between forecast and outturn passenger volumes are simply due to inaccuracies in forecasts of economic activity. None of the parties seriously challenged the proposition that the inclusion of shocks in the forecasting model is likely to produce a more accurate traffic forecast in total for Q6. However, there is concern that the risk faced by the airport operator through such shocks has previously been accounted for in the WACC. Thus, if the likely effect of shocks is to be explicitly included in the traffic forecast, HAL's risk from shocks should be removed from the WACC calculation.

CAA proposed licence

B13 The CAA considered that the effects of demand shocks on traffic could be split into two:

- an expected level of demand shocks, which may be accounted in the forecast level of traffic; and
- variations around this expected level, which may be accounted for in the cost of capital, as these constitute risk.

B14 The allowance for demand shocks in the traffic forecasts and in the cost of capital were two different concepts. The CAA did not, therefore, consider that its proposals constituted double-counting. For example, the CAA could set the price control on the basis of a forecast level of shocks of 1% per annum. However, there could be a 10% chance that the outturn level of shocks exceeds the forecast level by one percentage point or more. The risk that the outturn is different would be borne by the company and its shareholders. The CAA would therefore allow a higher rate of return for the company than would otherwise be the case to compensate for this risk.

B15 The CAA considered that the two different forecasting methods as adopted by HAL and GAL were both valid approaches in incorporating demand shocks. In particular, the CAA considered that the impact of demand shocks on traffic could be accounted for by either:

- first removing the impact of shocks in the historic data and then reintroduce their expected impact back into the forecast later as in the case of HAL; or
- incorporating them in the regression model based on the historic data and therefore in the forecasting parameters as has been the case for GAL. As such, the average impact of shocks has already been taken into account in GAL's underlying demand forecast.

B16 The CAA considered that the allowances for demand shocks in the traffic forecasts and in the cost of capital were two different concepts as explained above and in the final proposals; thus there was no double-counting of traffic risks as suggested by the airlines.

Representations received

B17 Respondents raised no substantive points on this issue in their responses.

CAA's response

B18 The CAA's decision remains as stated in its proposed licence and summarised above, namely that allowances for demand shocks in the traffic forecasts and in the cost of capital were two different concepts as explained above and in the final proposals; thus there was no double-counting of traffic risks as suggested by the airlines.

Size of demand shocks

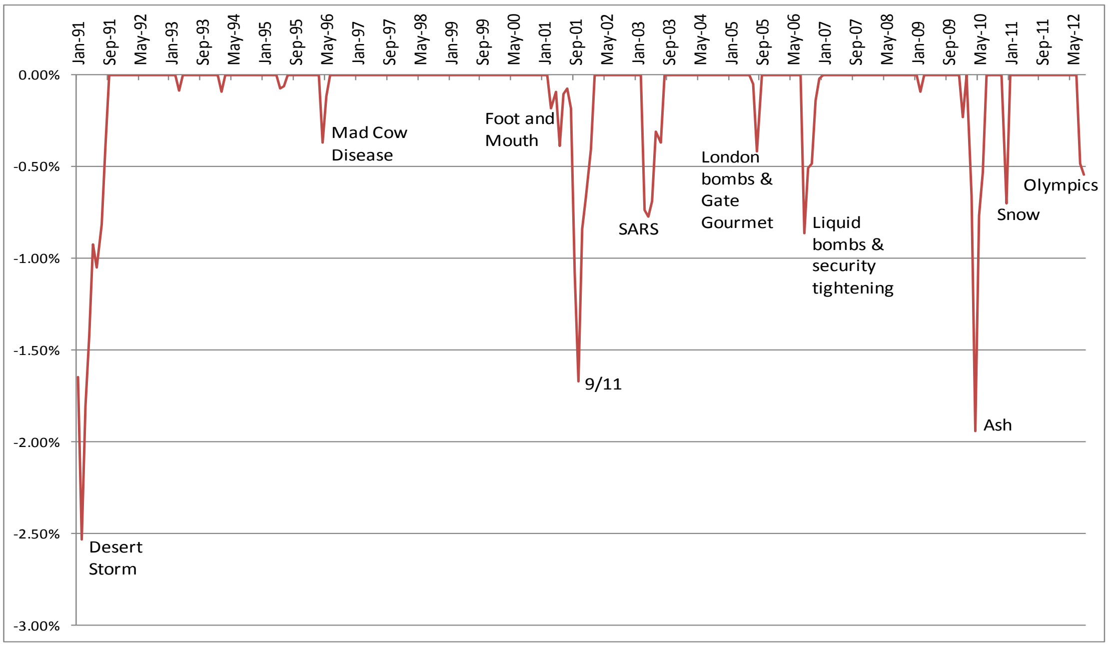
Issue

B19 The main shocks experienced at Heathrow since the turn of the century were the September 2001 terrorist attacks and the closure of airspace due to volcanic ash in April 2010. However, HAL has identified many smaller shocks, ranging from SARS to the 7 July London bombings, to disruption from snow during the winter of 2010/11.

B20 The airlines have commented that this analysis overestimates the impact of shocks since many trips affected by shocks, rather than being lost, are deferred into the following months or to other destinations, effects not large enough to be detected as a 'positive shock'. Also the size of many shocks is related to HAL's ability to recover from adverse events (e.g. winter weather) and so the risk should be borne by the airport operator and not mitigated through the traffic forecast.

B21 The distribution of shocks used in HAL's model has been derived from the period January 2001 to August 2012. However, as figure B.2 shows, this period had many more demand shocks identified than the years preceding it. HAL has used this period because it considers that shocks are more likely and their effects stronger at a capacity constrained airport, and because it is from 2001 that Heathrow's movements approached the annual 480,000 cap.

Figure B.2: Heathrow traffic shocks 1991–2012, effect on annual passengers



Source: HAL

CAA's proposed licence

B22 The CAA considered that:

- the selection of 1991, which was the date at which the data series in the CAA's possession started, as the start date was neither any more, nor any less, arbitrary than the selection of any other date;
- excluding Desert Storm from the analysis for no other reason than the magnitude of its effect would itself be arbitrary; and
- making judgements about the likelihood of overseas intervention in foreign conflicts during Q6, as one respondent suggested in its response to the initial proposals, would be beyond the expertise of an economic regulator.

B23 Accordingly, the CAA decided not to alter its approach and used post-1991 data in its calculation of the expected magnitude of shocks going forward. The CAA used post-1991 data in its calculation of the expected magnitude of shocks going forward.

Representations received

B24 The Heathrow Airline Community continued to disagree with the CAA's inclusion of demand shocks within the forecast. BA also commented that the CAA's treatment of the effects of the Olympics shows the arbitrary nature of its treatment of shocks.

CAA's response

B25 Respondents raised no new issues in their representations. The CAA's decision remains as stated in its proposed licence and summarised above, namely that 1991 is the appropriate date from which to calculate the shock effect.

How to combine econometric and capacity forecasts

Issue

B26 As described above, HAL has developed two models for forecasting traffic at the airport: an econometric model, which predicts demand, and a capacity model which predicts future supply. Although the latest forecasts from these models are similar through Q6, they could vary. It is therefore necessary to have a method for combining the two outputs to produce a single passenger forecast.

B27 HAL has used the output of the econometric forecast in its January 2013 business plan, on the basis that the outputs of the two models are sufficiently similar over the Q6 period. However, the airlines have commented that, in the short term, an airline is likely to amend its yield to ensure its services operate at around the target load factor. Therefore in the short term, the capacity forecast should be the more accurate, with the econometric forecast taking precedence in the mid to long term as supply is adjusted in line with demand.

CAA's proposed licence

B28 In the initial proposals, the CAA proposed to use the capacity model for the first year of Q6, and the econometric model for subsequent years. Having considered the responses received, the CAA believed that the approach set out in the initial proposals remained robust. The use of the capacity model in the first year reflected the fact that airline plans are relatively fixed in the short term. The CAA used the econometric model for the following years, on the other hand, because airlines could adjust their plans in the light of changing demand, which was heavily influenced by economic growth. The CAA therefore based its traffic forecasts for the final proposals on the approach set out in the initial proposals.

B29 The CAA considered that short term forecast based on airlines' capacity plans are more appropriate as they tend to reflect better both airlines' intentions and the demand conditions that airlines face over the near term. The CAA applied the capacity forecast for the first two years (up to 2015/16) at Gatwick as opposed to one year (up to 2014/15) at Heathrow because the airlines and the airport operator at Gatwick agreed to use capacity model for short term forecast up to 2015/16 for the particular types of traffic and airlines at the airport.[85]

B30 However, the CAA considered that network carriers serving Heathrow would be likely to have more flexible capacity management plans than low cost carriers at Gatwick given their range of fleet mix and route networks, and the high proportion of business and transfer passengers at Heathrow. However, beyond the first year, the econometric model should give a more accurate forecast at Heathrow as, after the first year, airlines would adjust their fleet plans in the light of changing demand, which is heavily influenced by the outlook of underlying economic environment.[86] Consequently, the CAA's forecast at Heathrow was based on the capacity model for 2014/15 and the econometric model for 2015/16 and subsequent years.

Representations received

B31 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

B32 The CAA's decision remains as stated in its proposed licence and summarised above, namely that it is appropriate to use the capacity model for the first year of Q6 and the econometric model for subsequent years.

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85 It is CAA’s understanding that both HAL and GAL airports received information from airlines about their short term capacity plans, and the capacity models would have made some allowance for structural bias towards optimism in the capacity plans for any given year.

86 Low cost carriers such as easyJet actively apply yield management to achieve target seat load factor on individual flights given their capacity plan.

Truncated and non-symmetric input variables

Issue

B33 Both the capacity and the econometric forecasting models use a Monte Carlo method, with the distribution of each input variable defined by a truncated normal distribution.[87] For many of the input variables, the distribution is not truncated symmetrically, and therefore the mean of the randomly chosen variable will not be equal to the mode (or peak) of the distribution. The airlines have suggested that this could introduce a downside bias into the traffic forecast.

B34 The CAA asked HAL to undertake sensitivity runs on its FBP forecasts to examine the effect on the central forecast of truncated and/or non-symmetric distributions of input variables. Figure B.3 shows selected outputs from this sensitivity analysis.

Figure B.3: Effect of truncated and non-symmetric input variables

Passengers (m)	2014/15	2015/16	2016/17	2017/18	2018/19	Q6
Econometric model						
With input distributions	69.5	70.3	71.0	71.8	72.6	355.2
No input distributions	69.9	70.7	71.5	72.4	73.3	357.8
Difference	0.4	0.4	0.5	0.6	0.7	2.6
Capacity model						
With input distributions	69.8	71.0	71.4	71.4	71.3	355.0
No input distributions	70.4	71.9	72.3	72.3	72.1	358.9
Difference	0.6	0.9	0.9	0.9	0.8	3.9

Source: CAA

CAA's proposed licence

B35 In its final proposals (and again in the proposed licence), the CAA noted that the changes HAL has made to its forecasting methodology in its latest RBP and ABP traffic forecasts addressed the above issue. Having considered the responses received, the CAA remained of the view that the approach towards correcting for the effect of non-symmetric truncation on the central forecast outlined in the initial proposals was also appropriate for passenger ATMs. Accordingly, it

87 A distribution is truncated if its upper and lower ends are removed.

adjusted HAL's ABP forecasts to remove the bias introduced by the non-symmetric nature of this distribution.

Representations received

B36 Respondents raised no substantive points on this issue in their responses.

CAA's response

B37 Respondents raised no new issues in their representations. The CAA's decision remains as stated in its proposed licence and summarised above, namely that HAL's ABP forecasts should be adjusted for the non-symmetric nature of the distribution of shocks.

Adjustment for base year traffic growth

Issue

B38 In HAL's RBP, the (shocked) traffic forecast for 2013/14 based on its econometric model was 69.8 million. In the CAA's final proposals, 2013/14 traffic was estimated to be 70.2 million (shocked forecast) based on the capacity model. Since then, traffic at Heathrow has significantly outperformed the forecast with a rolling 12-month passenger volume of 72.2 million to November 2013.

CAA's proposed licence

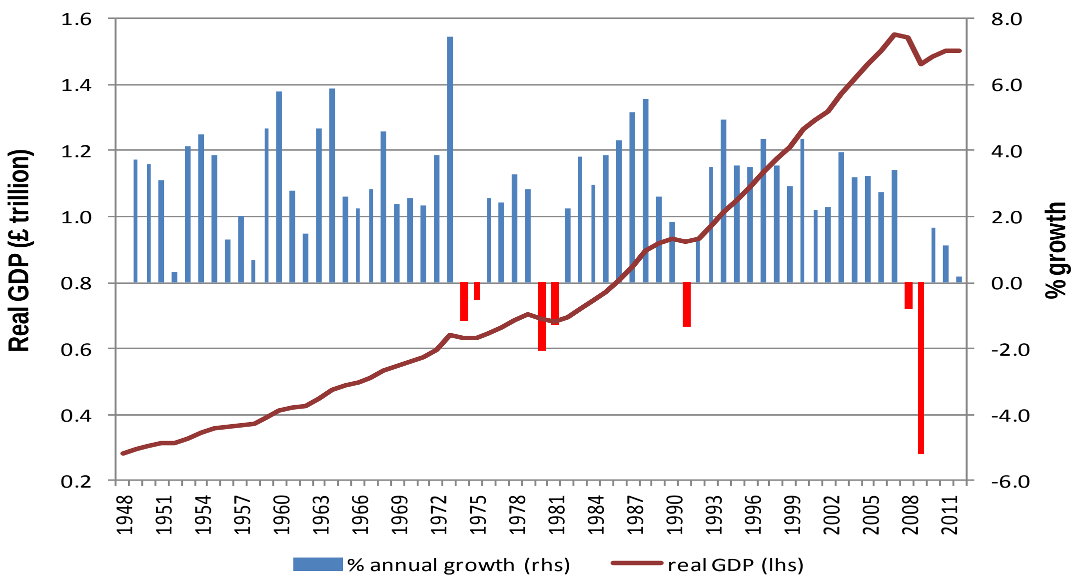
B39 The CAA agreed with the Heathrow Airline Community and BA that the stronger than expected growth of traffic so far this year should be reflected in the forecast passenger volume for the base and the following years, although the scale of the upward adjustment needs to be moderated to allow for the possibility of some 'one-off' factors (such as the summer Olympics and the severity of the winter) and the apparent absence of any significant shocks year to date. The CAA did not include an adjustment for the seven-year moving average, as HAL suggested.

B40 Although the CAA accepted that some of these ‘one-off’ factors could have generated certain positive but transitory effects, however, the strength and duration of these effects were very difficult to quantify and predict. For example, the alleged improvement in Britain’s global perception due to the Olympics could have a much shorter or longer lasting impact than HAL has assumed.

B41 More importantly, HAL suggested that there is a close link between the aviation and economic cycles as the cycles of airline market are considered to be a response to fluctuations in the GDP. In particular, HAL considered that the UK (and the world) business cycles appeared to have an average length of seven or eight years, and this would suggest that 2014 is at or near the peak of the current cycle.

B42 Figure B.4 shows that, between 1948 and 1973, UK GDP increased consistently on an annual basis. Since 1973, there had been one instance of contracting annual output in every decade. These occurred in 1974/75, 1980/81, 1991 and 2008/09.

Figure B.4: UK real GDP (in £ trillion) and % annual growth, 1948-2012

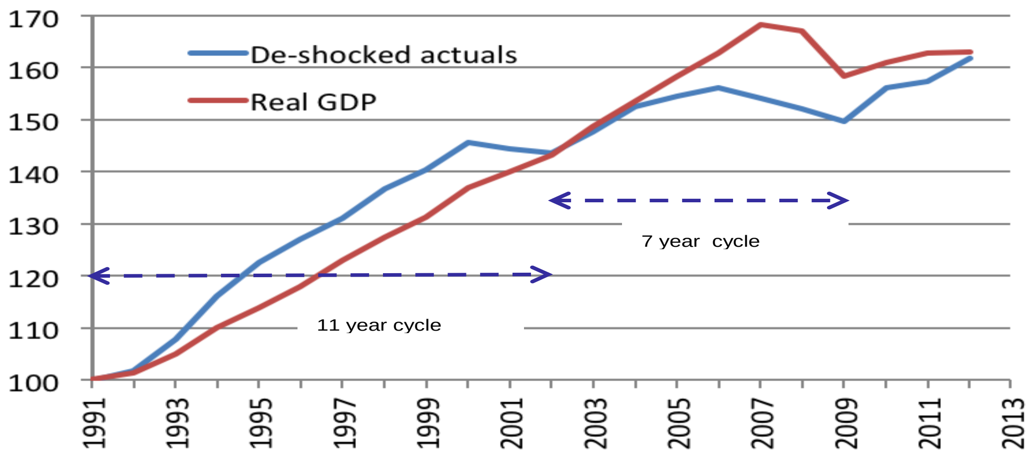


Source: ONS

B43 Measuring from peak to peak, the duration of these economic cycles varied substantially from six years (1973-79) to 11 years (1979-1990) to 17 years (1990-2007). While the expansion and contraction phases have varied substantially in magnitude and length, there is no evidence to support the claim that the current economic or aviation cycle would have a seven year duration peaking at or near 2014 as suggested by HAL.

B44 Furthermore, aviation cycles at Heathrow did not always follow economic cycles. Figure B.5 showed that, in contrast to the one long economic cycle of around 18 years from 1991 to 2009 measuring from trough to trough, de-shocked passenger traffic at Heathrow appeared to have experienced two cycles over the same period, lasting around 11 years (1991-2002) and 7 years (2002-2009) respectively. This clearly suggested that caution needs to be taken in presuming a "typical" economic or aviation cycle lasting for around seven or eight years as suggested by HAL.[88]

Figure B.5: Indexed de-shocked actual passenger traffic and real GDP (1991=100)

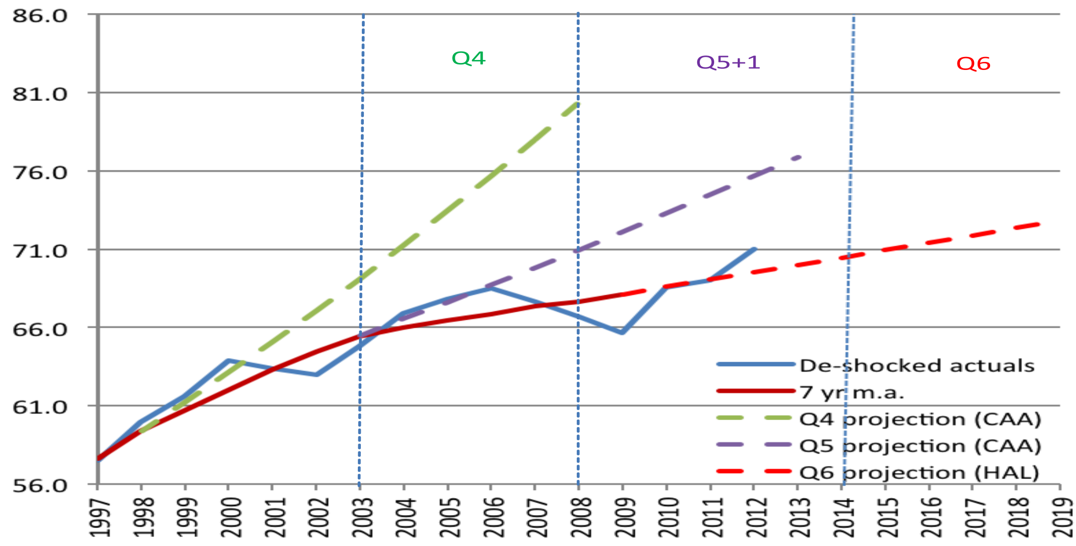


Source: ONS and HAL calculation

B45 HAL claimed that the compound annual growth rate (CAGR) calculated for the most recent seven year cycle and used to extrapolate from 2009 (the most recent year for which it is possible to calculate the seven year moving average) provided an indicative shocked traffic projection of 356.3 million for Q6. When account was taken of the +/-1% historical range around the CAGR, a Q6 range is calculated from this approach that encompasses the actual forecast using the econometric model. Figure B.6 showed the de-shocked actual passenger volumes from 1997 to 2012, the associated seven year moving average data and HAL's projection of the underlying trend growth in Q6. The CAA applied the same seven year moving average methodology to project the trend growth rates for Q4 and Q5 in order to test the robustness of this approach as proposed by HAL.

88 Dating business cycles can be technically challenging. The CAA took a simplistic approach here to illustrate that the cyclical patterns of the UK economy and the aviation market may vary substantially in magnitude and strength over time and from each other.

Figure B.6: Passenger forecast based on a seven year moving average underlying growth projection



Source: HAL and CAA calculations

B46 Moving averages could smooth the cyclicality and reveal the underlying growth trend in the historic data. However, figure B.6 showed that the use of profiled base year approach based on mechanically applying a 7 year moving average of a "typical" cycle as suggested by HAL without incorporating input from any underlying demand drivers was unlikely to be a reliable methodology for projecting passenger volumes into the future or as a validating tool for the econometric and capacity models. Forecast of the Q4 and Q5 traffic volumes based on this approach would have significantly exceeded outturn passenger numbers as illustrated in figure B.6. This suggested that using moving averages to identify a "representative" profiled base year traffic and then using it to extrapolate forward may not be appropriate in the context of forecasting Q6 traffic volume.[89]

B47 It was also the CAA's view that, to the extent that cyclical patterns are acknowledged to exist, it was more appropriate to model the economic/aviation cycles directly into the econometric and capacity forecasting approaches which HAL uses.

[89] It is also worth noting that this profiled base year approach by HAL led to a downward (rather than an upward) adjustment of 0.6m passengers over Q6.

B48 The Heathrow Airline Community and BA have suggested an uplift of around 2.2 million passengers per annum to the CAA's forecasts in the final proposals to reflect the higher base year outturn. In contrast, HAL, basing on a moving average profiled base year approach, suggested a 0.6 million downward adjustment over the Q6 period. The CAA considered that the extent of the proposed uplift by the Heathrow Airline Community was unwarranted as this would have ignored the fact that there could be some 'one-off' temporary factors that have contributed to the higher than expected outturn and that traffic is subject to fluctuation from year to year due to economic uncertainty and modelled and non-modelled "shocks".

B49 In light of the discussions above regarding the unreliability of using a 'typical' seven year moving average calculation to derive a profiled base year traffic and use it to rebase the traffic and extrapolate it forward for the Q6 forecast, the CAA considered that there was a need to uplift the HAL econometric forecasts by an average of 0.8 million per year to reflect the higher base year traffic. This upward adjustment has taken into account the possibility that the unexpected strong growth in 2013/14 could be partially driven by some 'one-off' factors such as an Olympics driven increase in tourism, the coldest and wettest winter on record[90], BA's purchase of bmi and other factors. The CAA's average uplift of around 0.8 million per year also reflected the uncertainty around the position of 2013/14 traffic on the current business/aviation cycle (whose shape and duration is still largely unknown). It also made allowance for some randomness from the Monte Carlo input/output modelling.

Representations received

B50 The CAA received three responses commenting on the base year adjustment:

- BA, the Heathrow Airline Community and Virgin welcomed the upward adjustment made to the CAA’s traffic projections over the Q6 period. To take no account of recent outperformance in the base year would have been a clear error of fact. However, it was disappointing that the CAA had not taken full account of this and

[90] HAL has pointed out the highest level of average rainfall from June to Dec 2012 since 1852 and that March 2013 was the coldest since 1883 with temperatures on average ~20% lower than the average for the last 100 years.

has therefore inflated the fair price the passengers will pay.

- The Heathrow Airline Community was unsure of the CAA's method of base year adjustment application. In addition, BA argued that including a further adjustment for "bounce-back" due to the Olympics had two effects: it suggested that the adverse shock generator was too large, and that the CAA had already accounted for the Olympics effect in the shock term, so a further downward adjustment in the base year was inappropriate.

CAA's response

B51 The CAA does not accept the Heathrow Airline Community's arguments that it should have taken account of the traffic increase in the base year in full. As stated above, the CAA considers that the impacts from some of the factors that increased traffic in the base year (such as the Olympics and an unusually severe winter) are unlikely to be permanent and that traffic is subject to fluctuation from year to year due to economic uncertainty and modelled and non-modelled shocks.

B52 The CAA's application of an average uplift of around 0.8 million passengers per annum to account for the unexpected strong traffic outturn in 2013/14 was derived as follows

- First the CAA compared its latest projection of (un-shocked) outturn traffic for 2013/14 (around 72.5 million) with its shocked forecast of 70.2 million in the final proposals. This suggested a discrepancy of around 2.3 million in the base year of 2013/14.[91]
- The CAA then made some downward adjustments due to the impact of an average shock (i.e. 1.2% of 72.5 million =0.87 million) and higher than expected economic recovery (0.14 million) in the base year. Together these adjustments reduced the discrepancy to around 1.3 million.
- The CAA considered that some of the 'bounce-back' in traffic in 2013/14 could be due to some plausible ‘one-off’ factors such as the Olympics 'halo' effect which improved the perception of the UK

[91] The discrepancy would have been 2.7million if compared with HAL's (shocked) forecast of 69.8 million for 2013/14.

as a leisure destination[92]. Although it is difficult to gauge precisely the extent and duration of this impact, the CAA disagreed with HAL that this would only have a transient 'one-off' impact. On the other hand, it is also the CAA's view that it is unlikely that it would lead to a ‘permanent’ increase in tourism as suggested by the Heathrow Airline Community. Consequently, the CAA considered that a 0.3 million downward adjustment due to the Olympics would be a prudent estimate of the effect which reduced the discrepancy to around 1.0 million in the base year.

- Finally, the CAA made a further allowance of 0.2 million to reflect the uncertainty around the position of 2013/14 traffic on the current business/aviation cycle (whose shape and duration is still largely unknown), randomness arising from the Monte Carlo input/output modelling and plausible short-term impact due to the severe winter weather in 2012/13.

B53 Taken together, these downward adjustments in the base year still left a discrepancy of around 0.8 million passengers to be accounted for when comparing the projected outturn traffic in 2013/14 with the CAA's previous forecast in the final proposals. Thus, a correction factor of around 0.8 million passengers per annum (gradually diminished to 0.7m by end of Q6) was then applied to HAL's latest (shocked) econometric forecasts.

B54 The CAA considered that incorporation of the Olympics effect in the econometric estimation of shocks using historic data is a different and separate issue to the 'bounce-back' adjustment to the projected base year traffic in 2013/14 which is an assessment of the extent and duration of the 'after effect' due to improved perception of the UK as a tourism destination. On the other hand, the treatment of the Olympics in the shock estimation using historic data would generally have two effects: an increase in the magnitude of the estimated average

92 According to HAL, the results of a survey of 3,453 departing foreign residents between Jul-Sep 2013 who strongly/slightly agreed with the statement “The 2012 Olympic Games in London influenced my decision to make this trip” suggested that the potential Olympic-driven short-term impact on tourism could be up to 0.55m passengers. However, it is the CAA's view that it is difficult to gauge the extent to which foreign passengers who strongly/slightly agreed with the statement would not have made the trip to the UK if the Olympics had not taken place. And if their trips were indeed influenced by the Olympics, whether this improved perception of the UK as a leisure destination would only have a short-term impact on them.

(negative) shock per annum and an upward adjustment to the underlying de-shocked traffic in the econometric modelling to account for the Olympics impact.

B55 After consideration of the representations, the CAA's decision remains as stated in its proposed licence and summarised above, namely that stronger than expected growth of traffic so far this year should be reflected in the forecast passenger volume for the base and the following year which amounts to an upward adjustment on average of around 0.8 million per annum.

CAA decision

CAA's proposed licence

B56 Figure B.7 shows the derivation of the CAA's Q6 traffic forecasts from HAL's November 2013 Q6 traffic forecasts. The CAA's (shocked) forecasts are based on HAL's capacity model for the first year of the Q6 and its econometric model for the following years. However, in order to correct the bias introduced by the non-symmetric nature of the distribution of total passenger ATMs and the expected magnitude of shocks going forward, the capacity model forecast for the first year was upwardly adjusted by about 0.4 million and 0.2 million respectively. On the other hand, the econometric forecasts for the remaining years were adjusted by about 0.2 million per year to correct for the shock effects only.

Figure B.7: CAA's Q6 passenger forecasts

Passengers (millions)	2014/15	2015/16	2016/17	2017/18	2018/19	Total
Econometric model						
HAL forecast (Nov-13)	70.4	71.2	71.9	72.7	73.5	359.7
Shocks from 1990	0.2	0.2	0.2	0.2	0.2	0.8
CAA base year adjustment	0.8	0.8	0.8	0.8	0.7	3.8
CAA forecast	71.3	72.1	72.8	73.6	74.3	364.3
Capacity model						
HAL forecast (Nov-13)	71.3	71.7	72.3	73.2	73.0	361.5
Shocks from 1990	0.2	0.2	0.2	0.2	0.2	0.8
Passenger ATMs bias	0.4	0.4	0.5	0.5	0.5	2.3
CAA forecast	71.9	72.3	73.0	73.8	73.6	364.6
Combined forecast						
CAA forecast	71.9	72.1	72.8	73.6	74.3	364.9

Source: CAA

CAA's decision

B58 In summary, the CAA's (shocked) traffic forecasts used for HAL's Q6 price control as shown in figure B.8 indicate a total of 364.9 million passengers over Q6, compared to 359.2 million in the final proposals, an increase of 1.6%. HAL's estimate of 359.7 million, submitted to the CAA in December 2013, is 1.4% lower than the CAA's final forecast[93].

Figure B.8: CAA's Q6 passenger forecasts - 5 year duration

Millions	2014/15	2015/16	2016/17	2017/18	2018/19	Q6 Total
Passengers	71.9	72.1	72.8	73.6	74.3	364.9

Source: CAA

93 In its 19th December 2013 Investor Report, HAL forecast 72.8m passengers for the calendar year 2014. According to HAL, this did not include any allowance for potential disruptions or shocks. The inclusion of such allowance would have brought the forecast down to around 71.9 million according to the CAA.

B59 Adjusting this forecast to reflect the revised duration of the control gave the traffic forecasts set out in figure B.9 below.

Figure B.9: CAA's Q6 passenger forecasts - 4 years and 9 months duration

Millions	9 mo. 2014	2015	2016	2017	2018	Q6 Total
Passengers	55.4	72.0	72.7	73.4	74.2	347.7

Source: CAA

APPENDIX C

Capital Expenditure

C1 This chapter considers the appropriate level of capex for the Q6 price control calculation. It consists of the following sections:

- issues: this summarises the major issues which the CAA must determine to set a capex allowance, for which, for various reasons, the new capex development process may be unsuited; and
- CAA's decision: this sets out the CAA's projections for HAL's efficient capex over Q6.

C2 Consistent with the building block methodology, new capex incurred during Q6 will be added to the RAB. Each year, a contribution to prices is made from a capital charge (i.e. the WACC multiplied by the average RAB) and a depreciation charge. Therefore, although Q6 capex may not have a significant effect on Q6 prices, it will be fully recovered from customers over subsequent quinquennia.

Issues

Magnitude of the Q6 investment programme

Issue

C3 In order to set a price control for Q6, the CAA must assess the level of capex which an efficient operator of Heathrow would incur over that period. It must do so in the light of its statutory duties, summarised in Chapter 1. HAL is not bound to incur exactly the level of capex which the CAA proposes. Indeed, the price control for Q5 encouraged the regulated company to underspend as long as it achieved the required outputs. The regulated company could keep the return on any underspend in capex between the time when the expenditure was projected to be incurred and the time when it was incurred. The proposed price control for HAL would remove this incentive but there would still be no requirement on HAL for a particular level of capex.

CAA's proposed licence

C4 Following successive regulatory settlements of relatively high capex of around £5 billion per quinquennium, the CAA's initial proposals accepted that HAL and the airlines planned to incur a lower level of capex, £3 billion, in Q6. The CAA commented that a programme on this scale would maintain the current level of service at Heathrow. In addition, it would improve resilience, which is supported by the airlines given their growth and fleet ambitions. For these reasons, the CAA based its initial proposals on the £3 billion capex programme contained in the January FBP. Respondents to both the initial and final proposals supported a £3 billion capex programme for Q6. Though HAL proposed a £2 billion programme in June 2013, it made it clear that its parallel proposal for a £3 billion programme would, in its view, be required to deliver its vision as agreed with the airlines.

C5 A £2 billion programme would reduce funding for important investment projects either in part or in whole. It seemed likely, for example, that there would be no or very limited expenditure on Automation of the Passenger Journey, Aircraft De-Icing or Enabling the New Generation of Wide Body Aircraft under the £2 billion programme. This could jeopardise improvements to the passenger experience and operational resilience.

C6 Most of the respondents to the CAA's consultation seemed to agree with the view that such a level of investment was appropriate. The CAA noted the general consensus that an investment programme of approximately £3 billion over Q6 was appropriate. Given the arguments put forward in the final proposals, and summarised above, the CAA remained of the view that this is the appropriate level, and based its proposed licence on this level of investment.

C7 The CAA did not accept BA's view that it should base its proposals on the Heathrow Airline Community Plan rather than HAL's ABP. The Heathrow Airline Community Plan was a detailed, useful and constructive contribution to the debate which the airlines will have with HAL over the scale and scope of the capex programme at Heathrow for Q6. However, the CAA believed that it is more appropriate to base the price control on the ABP capex programme, for three reasons.

- The ABP had been produced by the airport operator, which will have responsibility for delivering it, and which has experience in running an airport.
- While the ABP had not been agreed through CE, as BA argued, neither had the Heathrow Airline Community Plan.
- The purpose of the CAA's determination at the current review was not to decide on the merits of individual projects, but rather to form a view on an overall level of capex over Q6. Therefore which plan the CAA based its determination on was therefore less significant than it might appear, since all projects would in any case be discussed and agreed through the capex governance process at the airport.

C8 Since the publication of the final proposals, HAL had sent the CAA updated traffic forecasts. While there could in principle be an argument for updating the capex forecasts to allow for the increase in traffic, the CAA did not believe that this was appropriate, because:

- it was more difficult to form a robust estimate of the impact of the increase in costs on capex than on opex or commercial revenues;
- HAL's Q6 capex programme was at a relatively early stage of development. Forming a robust view on how individual projects might change as traffic changes is therefore more difficult than would otherwise be the case; and
- the impact of changes in capex on the price control was much smaller than the impact of changes in opex of a similar magnitude.

C9 Accordingly, the CAA did not update its capex projections to allow for the recent increase in HAL's traffic forecasts.

Representations received

C10 The CAA received three representations to its proposed licence on this issue:

- BA welcomed the CAA's determination that a capital programme of £3 billion was appropriate. BA expressed disappointment that the CAA had based its decision on HAL's ABP rather than the airlines' Capital Plan. BA raised a number of detailed concerns about the implications of a £2 billion capital expenditure plan, specifically the impact on investment in Terminal 3 and Terminal 5

Early Bag Store.

- The Heathrow Airline Community broadly welcomed the CAA's determination that a capital plan of around £3 billion, adjusted to £2.9 billion due to a 4 year and 9 month settlement period, was aligned with the results of CE and the Airline Capital Plan which has been regularly maintained throughout the Q6 process.
- Virgin broadly welcomed the size and shape of the proposed capital plan.

CAA's response

C11 The CAA shares BA's overall concern that a £2 billion plan would have a number of undesirable implications for competitive equivalence, operational resilience and the passenger experience. It therefore believes that that this lower level of capex would not be in passengers' interests. However, the CAA does not specifically endorse, or reject, BA's individual concerns with the projects set out in its response. Consequently for the reasons set out in the proposed licence and repeated above, the CAA's decision is that a £3 billion capex programme is appropriate for HAL.

Crossrail contribution

Issue

C12 In 2008, the DfT and HAL agreed that HAL would make a contribution of £180 million (in 2008 prices) to the DfT in exchange for a legally binding contractual obligation on the Crossrail train operators to operate a given level of services. The agreement was conditional on the approval of the CAA for it to be added to HAL's RAB. The agreement allowed the Secretary of State to make a counterproposal if there were any material conditions and/or a reduction in the contribution proposed by the CAA. It required HAL to put such a counterproposal to the CAA as long as it did not place HAL in an overall materially worse position than the 2008 agreement. The CAA has to consider whether such a contribution is consistent with its statutory duties.

CAA's proposed licence

C13 HAL's FBP had made an allowance for a £60 million contribution to Crossrail in addition to £40 million for station works and a further

£50 million for access to Crossrail from Terminal 2. While the CAA considered that that there was a case for capex for station works, it did not believe that there was a case for a contribution to Crossrail funding based on the business case developed up to that point by HAL as it indicated a significantly negative net present value (NPV).

C14 The CAA did, however, note that since HAL had prepared its business case, DfT had commissioned independent research on a wider range of benefits associated with Crossrail to the airport that it considered may be relevant to the CAA's primary duty. The CAA stated that it would consider any revised business case put forward by HAL which would need to be received and approved in time for the CAA's final proposals if any contribution is to be remunerated within Q6.

C15 The CAA also noted that, should government policy change, enabling substantial traffic growth at Heathrow, HAL and the airlines may stand to receive an unanticipated gain from the extra traffic attracted by the Crossrail link. In this context, the CAA considered that one possible option for further consideration between HAL, DfT and the airlines might involve making the contribution contingent on additional traffic at Heathrow being sufficient to make the business case positive.

C16 The DfT exercised the counterproposal provision in its agreement by making a proposal to HAL on 27 June 2013 based on the further work and analysis the DfT commissioned earlier in the year.[94] This was provided to the CAA as part of HAL's submission to the CAA.

C17 The DfT's counterproposal made the following core proposals.

- An airport contribution to the project of £137 million based on analysis by OXERA and DfT officials.[95]

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94 Crossrail to Heathrow: Supporting evidence for a contribution from Heathrow Airport - Department for Transport and OXERA reports : Phase 1, Phase 2 and Phase 3, available at: www.caa.co.uk

95 DfT's analysis estimates the quantified net benefit to HAL of up to £137 million (2012 prices). It identifies a number of additional benefits which could not be robustly quantified and which it argues should be additional to the £137 million. On this basis, the DfT considers that a justified contribution from the airport operator towards the Crossrail project is £137 million. This is based on 2012 prices and the (Q5) Heathrow rate of return of 6.2%. It argues that this would need to be adjusted to reflect the actual date of payment and the eventual rate of return decided upon for Q6.

- Flexibility as to the timing of the payment to link payments better with the delivery of Crossrail's benefits.
- All payments to be made in the Q6 period 2014 – 2019.

Figure C.1: Summary of the quantified financial impact on HAL (net present value, 2019 – 2034)

	NPV
Additional demand	
Aeronautical normal profit	£2 million
Value of scarcity	£128 million
Non aeronautical revenues	£12 million
	Surface access
Surface access (existing passengers and opex)	-£23 million
Surface access (new passengers)	£1 million
Sale of Connect stock	£15 million
Enabling works	-£5 million
Access charges	£3 million
Access charge margins	£4 million
Total	**£137 million**

Source: DfT

C18 The CAA considered that it should apply two tests when considering whether the Crossrail contribution should be added to the RAB:

- whether it would be in the interests of passengers and cargo owners; and
- whether it would be undertaken by an airport owner operating in a competitive market. In other words, whether the investment would have a positive NPV in terms of the costs and benefits that would accrue to the airport operator if it were operating in a competitive market.

C19 The first test was applied to reflect the requirement that the CAA's duty to the interests of passengers and cargo owners is limited to the range, availability, continuity, cost and quality of airport operation services rather than those not linked to airport operation. The analysis submitted by the DfT, based on analysis by its consultants and officials, had three significant differences (listed below) in the quantification of costs and benefits compared to the business case put forward by HAL prior to the FBP. The three significant differences were as follows.

2. A revision to the base case against which the costs and benefits of the four train an hour Crossrail service was compared. HAL's analysis had been assessed against a two train per hour Crossrail service whereas the DfT analysis was against a continuation of the current two train per hour Heathrow Connect service.

3. The identification of net benefits from a small increase in airport passengers resulting from the Crossrail service.

4. An increase in passengers' willingness to pay (WtP) for air services and the assumption that this increase due to "scarcity" could be captured by airlines by higher fares and by the airport operator in terms of higher airport charges.

C20 The third of these three differences was by far the most significant. This did, however, present issues in terms of both principle and quantification. After considering stakeholders' arguments, the CAA proposed a contribution of £70 million. The CAA did not consider that this decision constituted a precedent for future determinations on the allocation of surface access costs, such as for Western rail access to Heathrow (see the next section). Such determinations were likely to be highly idiosyncratic, and the 2008 Agreement was unlikely to be replicated exactly in future cases.

C21 In its proposed licence, the CAA maintained its position that a further contribution from Heathrow's passengers, in addition to the business rates levy charged to all London businesses, was appropriate. While it agrees with the Heathrow Airline Community that determining the size of that contribution requires judgement, it did not agree that it has made an error in the exercise of its discretion in allowing a contribution of £70 million. Accordingly, the CAA's proposed licence assumed a contribution of £70 million.

C22 However, the CAA amended the timing of the contribution. HAL's ABP and the CAA's final proposals assumed that half the contribution would be paid in the first year of Q6, with half in the final year. Paying the entire contribution in the final year of Q6 instead will have three advantages:

- the timing of the contribution will align more precisely with the benefits to passengers from the service provided. Crossrail service to Heathrow is currently scheduled to start in 2018, though the "exact opening strategy" for Crossrail has not been finalised[96];
- postponing the contribution to 2018 will enable the CAA and HAL to delay the contribution should the opening of Crossrail be delayed; and
- it will reduce significantly the impact on prices over Q6. Users of the airport will pay a rate of return on the Crossrail contribution only in the final year of Q6, rather than for each of the five years of the quinquennium.

C23 Accordingly, the CAA adjusted the timing of the contribution from the assumptions in HAL's ABP so that it is paid in 2018.

Representations received

C24 The CAA received two responses containing comments on the Crossrail contribution.

- The Heathrow Airline Community's position on Crossrail remained unchanged, namely, the business case was negative to the extent that there was no business rationale for any investment. This position was inconsistent as the CAA had not supported an allocation for Western Rail access on the basis that no business case had been presented by HAL. Furthermore, the rationale proposed by the DfT’s counter proposal remained unconvincing and the CAA’s statement regarding the impact of a third runway was outside the scope of its regulatory duties. The Heathrow Airline Community remained extremely concerned regarding the precedential aspects of this decision in regard to future allocations for surface access costs.
- Virgin was disappointed about the inclusion of the Crossrail funding within the settlement.

96 See Transport for London's 12 March 2013 press release: http://www.tfl.gov.uk/corporate/media/newscentre/archive/27439.aspx

CAA's response

C25 In response to the Heathrow Airline Community's point, the CAA has already made clear that it does not consider Crossrail to be a precedent for other surface access determinations. The CAA considers that the statement concerning the impact of a third runway is within its statutory duties. Further, the CAA does not consider that there is any inconsistency between its treatment of Crossrail and Western Rail access to Heathrow (see the next section). The CAA's decision remains as stated in its proposed licence and summarised above, namely that £70 million is the appropriate level for the Crossrail contribution.

Western Rail access

Issue

C26 In addition to enabling Crossrail services from central London, the CAA notes that there is a proposal to modify the rail junction to the north of Heathrow so that services from west of the airport can run directly into the Central Terminal Area (CTA). This is known as Western Rail access. Some enabling work has been included in HAL's business plan, though the infrastructure work specific to the project has not yet included in any of HAL's business cases as it is an early stage proposal by other parties.

CAA's proposed licence

C27 The CAA noted HAL's point that it had provided the CAA with a business case which included some of the business costs to support the integration of Western Rail access into Heathrow's infrastructure. However, HAL had not provided a business case setting out the remainder of the project, and there was currently no generally accepted timetable for the construction or operation of Western Rail access. The CAA's proposed licence maintained the decision given in its final proposals. Any further expenditure would be developed through the usual capex governance process.

Representations received

C28 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

C29 The CAA's decision remains as stated in its proposed licence and summarised above, namely that it will assess the case for Western Rail access on receipt of a full business case from HAL.

Fuel storage

Issue

C30 HAL's FBP provided for £29 million to be spent on developing the fuel infrastructure at Heathrow, to increase fuel stocks thereby improving the resilience of the airport's fuel supply. In the past, HAL has funded the enabling works while the fuel companies have paid for the actual storage infrastructure.

C31 At Heathrow, infrastructure for the storage of fuel contains only two days' supply. In order to meet additional fuel demand and reduce the risk of any reduction in fuel supply, HAL started to plan a major project to increase the storage capacity at the airport. The operational date for this additional storage was Autumn 2017. The delivery of this project was split between HAL, Heathrow Airline Community and third parties, in particular the Heathrow Airport Fuel Company (HAFCO), a joint venture company owned by BP, Esso, Shell, TotalElfFina, Texaco and Kuwait Petroleum. HAL retains freehold title over the land and fuel assets. HAFCO and the Heathrow Hydrant Operating Company (HHOPCO) are two oil company consortia that have taken out leases with HAL and have responsibility for developing infrastructure as well as managing and controlling the fuel supply at Heathrow. BA has an interest in HHOPCO. The high-level terms of the two leases are:

- the HAFCO lease includes land and existing assets on the land. Assets built by HAFCO will revert back to HAL when the lease expires. Lease commenced in 2005 for a period of 30 years. HAFCO has an automatic right to renew the lease.
- The HHOPCO lease includes land and existing assets on the land. The HHOPCO lease began in 2007 for a period of 23 years.

C32 In addition, a small number of fuel assets are in the RAB – these either relate to enabling works delivered by HAL (such as water mains, electricity connections and access to the road network) or for Hydrant System related construction. The CAA's initial proposals included capex forecasts based on the £3 billion capex programme in the FBP, and hence implicitly supported the £29 million plan for developing fuel infrastructure at Heathrow.

CAA's proposed licence

C33 The CAA sought detailed evidence from HAL and the Heathrow Airline Community concerning the level of fuel resilience at Heathrow and the best way to plan going forward. HAL responded that lower levels of projected demand over the next ten years had reduced the urgency to address this issue. HAFCO had asked for unacceptable terms to upgrade the fuel infrastructure as HAL had proposed.

C34 The airline presentation, however, claimed that Heathrow had only two days' fuel storage capacity, compared to considerably more at overseas airports. The airlines repeatedly emphasised the importance which they place on resilience and their willingness to fund this project if an appropriate solution could be found. While there could be reasons for this,[97] the airlines felt that an increase was called for, and cited instances in December 2012 where Heathrow's fuel resilience had been inadequate.

C35 The CAA's capex consultants, Alan Stratford Associates (ASA), undertook a detailed study of the plans for improving Heathrow's fuel infrastructure. ASA's conclusion was: "The business model of the airport providing enabling works and the consortium building the rest is long established and was used for the Terminal 5 Perry Oaks facility; we know of many circumstances where this is used at other airports. We agree with HAL's conclusion that there does not appear good reason to change the business model. HAL should seek to progress the project along these lines as quickly as possible though of course subject to good commercial sense."

C36 The CAA considered that a robust fuel infrastructure at Heathrow was crucial for operational resilience. The current level of resilience seemed to be unacceptably low to Heathrow's customers and also to be considerably lower than international norms. Moreover, airlines appeared to put sufficient value on more resilience that they were prepared to pay for the capital costs, if necessary through airport

[97] For example, Heathrow has three fuel intakes from five pipelines, while many airports have only one intake. This increases Heathrow's resilience for a given level of fuel storage.

charges. Accordingly, the CAA strongly encouraged HAL and the airlines to work with HAFCO to develop a proposal to increase the resilience from the current low levels towards the level in comparator airports.

C37 There was no agreed way forward for developing fuel infrastructure at Heathrow. This made setting a capex allowance for this project problematic. After careful consideration, the CAA included a £29 million allowance for the enabling works to deliver more robust fuel infrastructure at Heathrow in its final proposals. The airlines supported, and HAL "noted", this allowance.

C38 In addition, the Heathrow Airline Community proposed that the CAA should make extra provision for an increase in the fuel storage programme of £102 million in the event that the airlines and HAL agree that the assumption of the cost of the works previously allotted to the fuel companies was appropriate. The CAA did not believe that it should allow a failure by the parties to agree terms to jeopardise the development of infrastructure which would improve operational resilience at Heathrow significantly. While there were other factors, most notably the allocation of liability for disasters, preventing agreement between HAL and HAFCO, the CAA did not believe that the allocation of funding between HAL and HAFCO should be such a difficulty. Therefore, the CAA included the additional allowance of £102 million proposed by the airlines in its forecast for HAL's capex over Q6.[98] If HAL and HAFCO can in fact agree terms, the CAA expects that the £102 million would not be spent, but would either be reallocated to other investment projects or returned to users as appropriate. The CAA did not include a service standard for fuel resilience in the Q6 service quality proposals.

Representations received

C39 The CAA received two responses commenting on this issue.

- BA fully supported the inclusion of £130 million of expenditure for fuel infrastructure in the CAA's proposed licence. Robust fuel infrastructure was critical for its operational resilience.

98 There is no generally agreed profile for this expenditure, therefore the CAA has allocated it to individual price control years in the same proportion as the original £29 million of fuel storage works.

- The Heathrow Airline Community welcomed the inclusion of £130 million in the capital plan for the development of fuel infrastructure. It looked forward to working with the CAA and HAL on the development of this infrastructure.

CAA's response

C40 The CAA's decision remains as stated in its proposed licence and summarised above, namely that it has allowed £131 million into the capex plan for the construction of fuel storage works.

Personal Rapid Transit (PRT) system

Issue

C41 At the Q5 review, the CAA decided not to allow the PRT system between Terminal 5 and the business car park into the RAB, as it was a novel project which did not enjoy airlines' support. The CAA said at that time that it would be open to considering, as part of the Q6 price control review, the inclusion of both the Q4 and Q5 capex on this project within the Q6 opening RAB. In addition to the capex incurred to date, HAL is proposing to spend £8.6 million on the Terminal 5 PRT during Q6. It is also proposing to spend £20 million on a PRT between the car park and the CTA (Terminals 1, 2 and 3), to establish competitive equivalence between Terminal 5 and the other three terminals there.

CAA's proposed licence

C42 HAL included around £8.6 million of capex in the ABP. It argued that the PRT enjoyed significant passenger support, and therefore should be included in the RAB. The CAA's Q5 decision said that the CAA would include expenditure on the PRT if it obtained user support, and if the project was delivered efficiently. It was clear from the responses to the CAA's initial proposals that user support had not been forthcoming. The business case was negative. Accordingly, the CAA has decided to set HAL's price control excluding:

- the capex, both past and future, on the PRT;
- the return on the RAB and depreciation from the PRT expenditure;
- the projected opex on the PRT; and
- the associated revenues which the PRT generates.

C43 The CAA did not believe that HAL's argument that passengers score the T5 PRT highly on its QSM measure was a sufficient reason for it to be included in HAL's regulated airport charges. One of the reasons for excluding the PRT from the RAB was not that it was unpopular with passengers, but that other solutions, such as bussing passengers, could have represented better value for money. Given the CAA's statutory duty to promote efficiency and economy and passengers' interests in the cost and quality of services, this must be an important consideration. HAL may levy charges for the use of the PRT outside its regulated charges, and if the service was popular with passengers, it should be able to recoup some or all of its investment in this way. Accordingly, the CAA's proposed licence excluded the T5 PRT from the Q6 RAB.

Representations received

C44 The CAA received no representations on this issue.

CAA's response

C45 The CAA's decision remains as stated in its proposed licence and summarised above, namely that the T5 PRT should not be included in the Q6 RAB. HAL may levy charges for the use of the PRT outside its regulated charges.

Terminal 1 baggage system

Issue

C46 Terminal 2 is expected to be dependent on the continuing use of the existing Terminal 1 baggage system until a baggage system is built as part of the second phase of Terminal 2. HAL included £220 million for design and enabling works for the second phase of Terminal 2A in its IBP. Some airlines have questioned whether the investment should begin earlier. They consider that the pace of delivery and the capital spend within Q6 should be defined by the results of the risk assessment on the Terminal 1 baggage system and the associated mitigation strategy.

C47 The CAA supported on-going work to identify and mitigate any risks of the Terminal 1 baggage solution to ensure that there are not risks in this approach that would be unacceptable to future passengers. The CAA committed to reviewing this situation before its final proposals.

CAA's proposed licence

C48 In its final proposals, the CAA noted that a consultancy study commissioned by HAL from Suisseplan has concluded that the Terminal 1 baggage system is broadly fit for use in Terminal 2. However, the CAA encouraged HAL and the airlines to continue to work together to develop a robust risk mitigation plan for the failure of the baggage system. The CAA understood that the consultancy study had identified the transfer baggage sorter as a particular concern. The CAA therefore believed that any robust mitigation plan must address this issue.

C49 ASA reviewed HAL's plans for the Terminal 1 baggage system. In its report, it "agreed with HAL that the proposed contingency arrangements for the Terminal 1 transfer sorter appear to be the best option and that no further contingency budget could practicably be spent in Q6 to mitigate this risk." The CAA believed that it was important that robust risk mitigation planning is in place for the baggage system, including transfer baggage. A failure in this system could jeopardise the operations of the entire airport. The CAA noted the extra £11 million in expenditure on the Terminal 1 baggage system forecast by HAL and agreed by the airlines. The CAA noted that stakeholders have worked together to produce this solution, and expected that this cooperation will continue during Q6 to the benefit of all parties.

C50 The CAA recognised the Heathrow Airline Community's wishes that the CAA should endorse the development of a new Terminal 2 baggage system during Q7. The CAA believed that the development of any project necessary to the efficient and economical function of the airport in passengers' interests should proceed as expeditiously as possible. However, the CAA did not believe that a specific endorsement of this project was necessary or appropriate at this stage, before HAL has provided a robust business case, developed in conjunction with the airlines through the capex governance process.

Representations received

C51 The CAA received no representations on this issue.

CAA's response

C52 The CAA's decision remains as stated in its proposed licence and summarised above. For clarity, it notes that the £11 million of additional T1 baggage expenditure was not included in the July ABP on which it has based its decision. However, it does not believe an additional allowance is appropriate at this stage, while the project is at such an early level of development.

Construction price inflation

Issue

C53 In addition to an allowance for RPI, the CAA has in the past included an extra allowance to provide for the tendency of construction prices to rise faster than RPI.

CAA's proposed licence

C54 Forecasting construction price inflation over the next few years to the level of tolerance envisaged in the FBP and the responses received requires the exercise of judgement. ASA included an assumption of RPI+1% in its report. However, the CAA's consultants, Davis Langdon, have made detailed forecasts for construction price inflation over Q6. Their projections, and the Office of Budget Responsibility (OBR) projections for RPI, are reproduced in figure C.2 below.

Figure C.2: construction price inflation and RPI forecasts for Q6

Year	COPI	RPI – CAA
2014/15	1.20%	3.10%
2015/16	1.40%	2.90%
2016/17	2.60%	3.00%
2017/18	3.30%	3.70%
2018/19	3.70%	3.60%

Source: Davis Langdon, CAA analysis

C55 Thus, over the five year Q6, construction prices, which will increase by 12.8%, were forecast to increase slower than retail prices, which will increase by 17.4%. After considering the available evidence, the CAA believed that, on balance, setting an allowance for construction price inflation in excess of RPI could enable HAL significantly to over-recover. The CAA did not, therefore, include an allowance for construction price inflation in excess of RPI in its final proposals.

C56 The CAA reviewed the evidence provided by its consultants on construction price inflation. It noted HAL's opposition to the reduction in the level of increase forecast between the initial and the final proposals. However, it did not agree with HAL's reasons.

- The CAA used the construction price inflation measure at the Q5 review to forecast construction price inflation. The level of the CAA's forecast at that review was significantly in excess of the outturn. Using the same index in this review will promote regulatory consistency and reduce risk.
- The CAA did not agree necessarily that the construction market will demand a higher price than the underlying cost of plant, labour and materials, which HAL forecasts will increase by around RPI. In a competitive market, efficient procurement by HAL should limit cost increases to the rate of increases of underlying materials.

C57 The CAA did not accept HAL's point that it should use tender price indices (TPIs) as well as the construction price inflation index.

- In the CAA's view, TPIs (such as the Building Cost Information Service (BCIS) index referenced by HAL) are not "equally important" as outturn indices, as they are simply a measure of the prices construction firms bid, rather than the price paid by the clients (in this case HAL). This is consistent with the view adopted during the Q5 reviews by both the CAA and the CC.
- During the Q5 reviews, the CC's final report also noted that both firms and the Government had told it (the CC) that TPIs did not capture adequately prices paid in the context of framework agreements.[99]
- The CC also noted an academic study produced by "Glasgow Caledonian University on the accuracy of TPI forecasts which concluded that: 'the TPI forecast produced by the BCIS is generally overoptimistic [i.e. an overestimation of inflationary trends], leading to systematic forecast error. A naïve model, in which the value of the TPI in a quarter before the current one is assumed to be the forecasts for the current period and over "the next eight quarters, has better prediction accuracy…"'. The

99 HAL and GAL price control review, CC, September 2007, available at http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/noninquiry/rep_pub/reports/2007/fulltext/532ad.pdf

researchers noted that organisations in the industry responsible for construction price level forecasts depended mainly on judgement and professional experience and that quantity surveyors, the industry's custodians of construction price information lacked forecasting tools ... we have no reason to believe that the approach taken to TPI forecasting has changed since this study was carried out".

- The CC also noted that "historically TPIs have been on average 1.5 percentage points higher than DBERR's general construction price inflation index. TPI forecasts could therefore be expected to be 1.5 percentage points above construction price inflation forecasts".

C58 The Heathrow Airline Community criticised the CAA for not incorporating the negative real forecasts in its capex forecast. The CAA noted, however, that the forecasts were only negative in the first few years of Q6 and forecast to return above inflation in the second half of the Q6 period. In November 2013 the CAA reviewed more up to date forecasts available based on the index in the second quarter of 2013 which pointed towards expected increases in construction price inflation. These are presented in figure C.3 below.

Figure C.3: Forecast for real construction price inflation

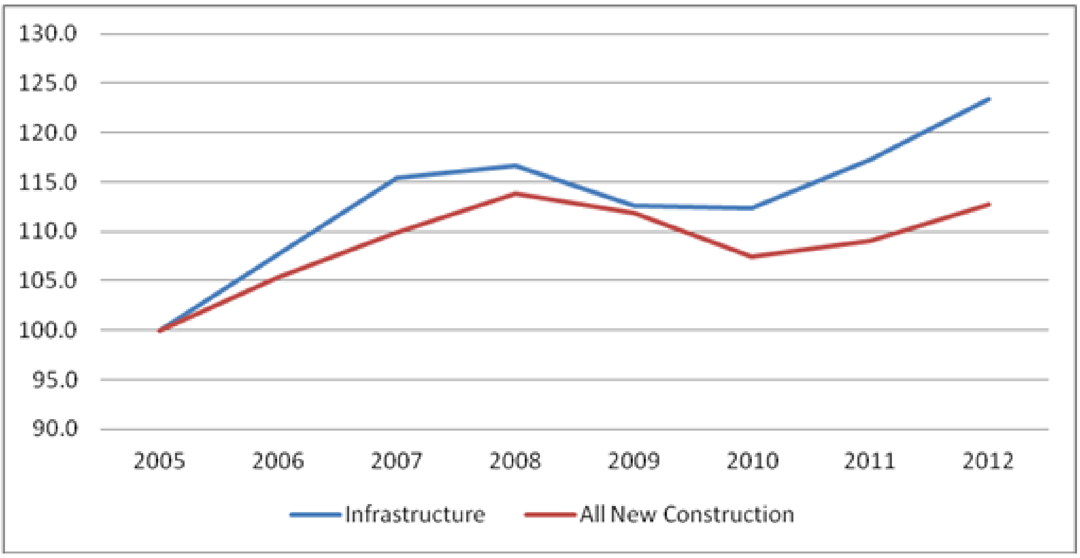
Year	COPI*	RPI**	Real COPI
2014/15	1.20%	3.10%	-1.90%
2015/16	1.40%	2.90%	-1.50%
2016/17	2.60%	3.00%	-0.40%
2017/18	3.30%	3.70%	-0.40%
2018/19	3.70%	3.60%	0.10%

Source: *Davis Langdon, **CAA

C59 The CAA noted that the forecast index will still fall below inflation in the first few years of Q6 but the difference would be more marginal than at the time of final proposals. The CAA noted that the forecast index is based on BCIS ALLCON Construction TPI for All New Construction. The CAA noted that All New Construction includes the following categories: Public Housing, Private Housing, Public Non-Housing, Private Industrial, Private Commercial and Infrastructure. Out of these, the CAA considers Infrastructure the most relevant for

HAL. The CAA noted that the Infrastructure component had been increasing at a higher rate than the overall All New Construction index in the past few years (see Figure C.4) and expected this trend to continue into Q6.

Figure C.4: Comparison of Infrastructure and All New Construction output price indices (2005 = 100)



Source: BIS[1] and CAA analysis

Representations received

C60 The Heathrow Airline Community supported the CAA's "pragmatic" approach to setting the level of construction inflation in Q6, based on evidence available in the market.

CAA's response

C61 The CAA's decision remains as stated in its proposed licence and summarised above. It has not included a specific allowance for construction price inflation in its projections for HAL's Q6 capex.

On-costs

Issue

C62 HAL defines on-costs as: “the development, design or project management cost which is expended ... in the delivery of a project.

1 BIS quarterly construction price and cost indices: quarter 2 2013, output price indices, available from: https://www.gov.uk/government/publications/bis-quarterly-construction-price-and-cost-indices-quarter-2-2013

Such expenditure would include both internal and external costs including all design costs up to Construction Decision (including concept design prior to the initiation of a project), planning, project leadership, Managed Service Provider, production management, and other costs that the business may capitalise as part of the project."

C63 The preliminary costings for the selected construction projects reviewed by ASA showed similar levels of on-costs ranging from 12.2% to 15.0%. A further project, ‘Automation of the passenger journey’, showed a lower level of on-costs (8.0%) although this included a high proportion of expenditure equipment.

CAA's proposed licence

C64 On behalf of the CAA, ASA investigated HAL's treatment of on-costs. Its findings were:

- HAL targeted on-costs at 15%-18% project expenditure. A stretch target, incorporated into many Q6 projects, was slightly lower, at 14.5%-18.5%;
- HAL's level of on-costs appeared comparable with those in other regulated utilities, and considerably lower than some (for example, some rail projects appeared to have on-costs of 25%). It was not clear, however, that these comparisons were like-for-like; and
- reductions in personnel numbers in HAL's capital solutions division would be effected once the level of capex in Q6 was known.

C65 Given these findings, the CAA did not incorporate any further reductions in HAL's capex into its projections for its final proposals. Based on the ASA study and responses received, the CAA considered that the level of on-costs incurred and projected by HAL was consistent with industry benchmarks and therefore no change to the forecasts in the ABP was appropriate.

Representations received

C66 The CAA received no representations on this issue.

CAA's response

C67 The CAA's decision remains as stated in its proposed licence for the reasons outlined in that document and restated above, namely that

HAL's on-costs seem consistent with appropriate benchmarks, and therefore no extra allowance is required.

Terminal 3 Integrated Baggage budget increase

Issue

C68 T3IB is a three storey baggage facility adjacent to Terminal 3, incorporating the Terminal 3 departure baggage system, an early bag store and Hold Baggage Storage, with interfaces for transfer bags through the Terminal 3-Terminal 5 baggage tunnel and the eastern campus via the Western Interface Building. It was initially estimated to cost £257 million in outturn prices but it has experienced a number of cost increases and project delays. As part of the Q5 capex review undertaken by ASA for the CAA, ASA conducted an extensive investigation and £30 million of inefficiencies was identified (see Appendix H of this document for more information). The issue for the CAA at the Q6 review is whether to allow any of the most recent budget increase, of £75 million, into HAL's projected and actual expenditure over Q5+1 and Q6, and if so, how much. This latest increase was after the finalisation of the ASA Q5 study. ASA commented on it in its Q6 study, though noting that further work would be useful to come to a robust view.

CAA's proposed licence

C69 The CAA did not accept the Heathrow Airline Community's view that it ignored the views of its consultants in formulating its final proposals in this area. The CAA did not believe that there was sufficient evidence to disallow expenditure permanently from the RAB. The CC's opinion in its final report on the Phoenix Natural Gas price control review in 2012 was that such adjustments should take place in exceptional circumstances only. The CAA's view was that such circumstances had not been demonstrated by the ASA study. The consultants themselves noted that "further more detailed analysis would be required to come to come to a more properly costed disallowable sum".

C70 Noting the Heathrow Airline Community's concern, the CAA decided to undertake a full review of the latest overspend on T3IB, to determine how much should be allowed into the RAB. Pending the conclusion of that study, but without prejudice to its conclusions, it will remove the £35 million identified in the ASA study from Q6 capex.

However, it will make no further reduction in the Q6 opening RAB. The CAA aims to conclude this study once T3IB is complete. Should the CAA find that the inclusion of any or all of the T3IB expenditure is justified in relation to its statutory duties, it will adjust HAL's price control accordingly.

Representations received

C71 The Heathrow Airline Community welcomed the CAA’s decision to remove £35 million from the RAB and that it will undertake a further review of the latest overspend on the T3IB project, together with further adjustments if inefficiencies and an absence of consultation are confirmed, as outlined in the airline evidence on T3IB to the CAA.

CAA's response

C72 The CAA's decision remains as stated in its proposed licence and summarised above, namely that it will remove the £35 million of expenditure forecast in Q6 from HAL's RAB, pending a review on the efficiency of that expenditure. Should the CAA find that the inclusion of any or all of the T3IB expenditure is justified in relation to its statutory duties, it will adjust HAL's price control accordingly.

CAA's decision

C73 For the proposed licence, the CAA adjusted HAL's ABP capex projections based on its decisions above. The adjustments made are shown in figure C.5 below.

Figure C.5: Adjustments to ABP capex

£ millions	2014/15	2015/16	2016/17	2017/18	2018/19	Total
ABP	602.4	699.0	638.6	521.3	552.2	3,013.5
Crossrail	(67.2)	–	–	–	3.6	(63.2)
Fuel storage	67.8	54.2	9.0	–	–	131.0
PRT	–	–	–	(2.3)	(6.3)	(8.6)
COPI	5.5	14.5	18.6	19.7	26.0	84.3
T3IB	(35.0)	-	-	-	-	(35.0)

Source: HAL, CAA

C74 Therefore the CAA's decision on HAL's efficient capex over Q6 is set out in figure C.6 below.

Figure C.6: CAA's decision for capex – 5 year duration

£ million	2014/15	2015/16	2016/17	2017/18	2018/19	Total
Capex	562.4	738.7	629.0	499.3	523.5	2,953.0

Source: CAA

C75 Adjusting these numbers to reflect the reduction in the duration of the control to four years and nine months yields the capex in figure C.7 below.

Figure C.7: CAA's decision for capex – 4 years 9 months duration

£ million	9 mo. 2014	2015	2016	2017	2018	Total
Capex	439.1	669.0	645.6	528.8	533.9	2,816.4

Source: CAA

APPENDIX D

Capital Efficiency

D1 This chapter consists of the following sections:

- capital efficiency in HAL's price control;
- issues concerning capital efficiency; and
- the CAA's decision on a new regulatory framework for promoting capital efficiency.

Capital efficiency in HAL's price control

D2 During Q5, HAL, the airlines and the CAA recognised that agreeing investment plans at the time of the price review for the next five or six years did not reflect the need for flexibility in the capital investment plan (CIP). With references made to the CAA's 2011 document "Setting the Scene for Q6", HAL presented a concept of classifying Q6 capex as 'fixed' or 'flexible'. The former designation would represent firm investment commitments at the start of the Q6 price control where the scope and cost estimate was reasonably certain. The latter would enable projects that were not sufficiently scoped or costed at the review, to be included over the Q6 price control period.

D3 HAL and the airlines subsequently agreed on the benefits of a two-tiered approach to capex for Q6, and re-named the two types of investment 'core' and 'development'. The parties made good progress in agreeing the key principles including the method for remunerating development capex in a more flexible way than previously. Specifically:

- the CAA would set an initial capex envelope for Q6 comprising a fixed allowance for core capex and an indicative allowance for development capex;
- cost allowances for individual development projects would be fixed within period; and

- the total allowance within the price cap calculation for development capex would also be revised within period, so that HAL is only remunerated for work that is actually carried out.

Issues

D4 The CAA has identified the following issues concerning capital efficiency:

- the proposed split between core and development capex;
- the right of appeal in the mechanisms set up to implement the regulatory mechanisms proposed;
- the triggers for Q5 projects uncompleted on 1 April 2014, which will therefore need triggers for Q6;
- the appropriate triggers for projects started during Q6;
- whether HAL should be intertemporally indifferent to the timing of capex; and
- the proposed establishment of an Independent Fund Surveyor (IFS).

Proposed split between core and development capex

Issue

D5 The high-level definition of the split between core and development capex is described in the previous section. The CAA notes the following features of the approach developed in discussions between HAL and the airlines.

- Development capex projects would be included in the RAB at a P80 level.[100] HAL would not be able to benefit from development capex for projects which were anticipated in the price control, but were not taken forward.

[100] P80 is a level of forecast cost at which there is an 80% probability of the outturn cost being at or below this level, and therefore a 20% chance of the outturn cost being above this level.

- Projects would move from development capex to core capex once they had passed Gateway 3 of HAL's project management process.
- Core capex projects would be included in the RAB at a P50 level.[101]

CAA's proposed licence

D6 Given the widespread support for the approach developed by HAL and the airlines and proposed by the CAA in its initial proposals, the CAA included provisions in the price control which implemented the split between core and development capex. The CAA believed that HAL should not receive a rate of return for projects anticipated in the price control allowance but not undertaken. The licence condition which the CAA proposed for HAL in its initial proposals contained mechanisms to ensure that this is the case. The CAA included these provisions in its final proposals.

D7 The CAA's proposed licence adopted the split between core and development capex proposed by HAL and agreed by the Heathrow Airline Community during CE. Its view on BA's three-pot solution remained that set out in the final proposals.

Representations received

D8 The Heathrow Airline Community welcomed the CAA's support for a requirement that HAL will obtain airline sign-off for investment programmes. This would ensure that an equitable and balanced approach is taken in the development and approval of projects. The Heathrow Airline Community was committed to engaging constructively in the further work that is required to determine the precise governance structure that will support this requirement.

CAA's response

D9 The CAA's decision remains as stated in its proposed licence and summarised above, namely to adopt the split between core and development capex agreed during CE.

[101] In other words, the value ascribed to the expenditure on these projects in the core phase in HAL's RAB would be such that there was a 50% chance of being at or below this level.

Right of appeal in capex governance

Issue

D10 The CAA, in consultation with HAL and the airline community, is currently developing arrangements to govern the capex consultation process during Q6. A key issue from the CAA's perspective is the extent to which the CAA should become involved if there is no agreement between HAL and the airlines on individual projects within the capex programme.

CAA's proposed licence

D11 In its final proposals, the CAA believed that requiring HAL to attempt to obtain airline sign-off, was appropriate. The CAA expected HAL and the airlines to negotiate in good faith, as they did during the CE process, and anticipated that most investment projects would be agreed in this way. However, the CAA identified two instances in which the CAA, as an arbiter, would have to step in:

- HAL and the airlines do not agree on the scope or cost of the projects; or
- HAL and the airlines agree on the projects but the CAA considers that the projects are not in passengers' or cargo owners' interests.

D12 The CAA noted HAL's points, made in response to the final proposals, that an appeals mechanism could increase the CAA's workload and delay capex. The CAA considered that:

- there was already a significant degree of agreement between HAL and the airlines on the appropriate capex programme for Q6, so any increase in workload for the CAA was likely to be limited;
- the CAA will undertake a review of HAL's investment during the quinquennial review. Rather than increasing the overall workload, therefore, the appeals mechanism could simply reschedule it;
- the envisaged split between core and development capex had advantages. However, it may reduce the incentives on HAL to deliver capital programmes efficiently. For this reason, greater regulatory oversight of the projects which comprise HAL's capex programme was appropriate;

- while this will increase the CAA's workload, it considered that this was worthwhile to avoid difficulties that might otherwise arise in assessing whether projects are consistent with its statutory duties after the event at a subsequent price review; and
- delays to capex could be minimised by designing a proportionate appeals mechanism.

D13 The CAA did not accept HAL's point that such a mechanism would increase regulatory uncertainty. In practice, it was likely that, if the CAA hears an appeal on a project during the quinquennium, when the project is at an early stage, HAL will be aware whether or not the project will be allowed into the RAB at the next review. This should increase, rather than reduce, regulatory certainty. Overall, therefore, the CAA considered that HAL's concerns were more than outweighed by the protection of users of the airport from HAL's monopoly power which an appeals mechanism should offer.

D14 The CAA considered that HAL and the airlines should make good faith attempts to reach agreement on items in the capex programme. However, if the parties could not reach agreement, either side may appeal to the CAA, subject to conditions set out in the governance protocol which HAL was developing with the airlines. The CAA would then judge the appeal according to its statutory duties, in particular its duties to represent the interests of passengers, and to promote HAL's efficiency and economy.

Representations received

D15 The CAA received one representation concerning this issue. HAL stated that the CAA's proposed policy requiring stakeholders to "agree" capital investment was both misguided and disproportionate, particularly in the context of acknowledged effective consultation during Q5. Furthermore, the CAA's position was confusing and HAL was struggling to make sense of the purpose of the policy and how it is to be applied in practice.

CAA's response

D16 For the reasons outlined in its proposed licence and in the main text of this document, the CAA does not agree with HAL that the proposed policy in this area is either misguided or disproportionate. The practical application of this policy will be established by HAL and the

CAA in the design of the new capex governance protocol required by the licence. The CAA's decision remains as stated in its proposed licence and summarised above, namely that the capex governance mechanisms for Q6 will contain a right of appeal for the airlines to the CAA. The mechanism will be designed and implemented along with the rest of the capex governance framework by 1 October 2014.

Q5 triggers

Issue

D17 The CAA notes that HAL will not complete some projects with capex triggers attached to them during Q5 by the start of Q6. However, as the Q5 price control lapses at the end of March 2014, the triggers will also lapse. These projects are:

- T3IB system. This project was originally scheduled for completion in March 2012. Its triggered scope is expected to be completed in the first year of Q6;
- Terminal 3 – Terminal 1 Baggage Transfer Tunnel. This project was originally included in the Q5 CIP. However, after consultation with the airlines, HAL removed this project from the CIP. The project has not yet started and is not expected to start during Q6. Accordingly, the CAA does not expect to attach a trigger to this project during Q6;
- Eastern Maintenance Bay Redevelopment (Completion of East Church Road diversion); and
- Completion of Midfield Pier Centre.

CAA's proposed licence

D18 In its final proposals, the CAA considered that it was appropriate to attach triggers to projects triggered in Q5 which were not complete by 1 April 2014, but which were still part of the Q6 plan. The arguments which obtained in applying triggers to those projects in Q5 would remain valid at the start of Q6.

D19 The CAA considered that triggers should be attached to those projects set out above, with the exception of the Eastern Maintenance Base project. As the Heathrow Airline Community stated, this should be triggered through HAL's Gateway process once Terminal 2 Satellite C proceeds.

Representations received

D20 The CAA received one representation on Q5 triggers. The Heathrow Airline Community noted that progress was being made in the definition of triggers for Q6 with the objective of meeting the CAA's timeline for completion by 31 March 2014. Some alignment of trigger dates from the Q6 capital programme with enabling work by NATS, in the context of the CAA's Future Airspace Strategy, would need to be defined and agreed if operational resilience at Heathrow Airport was to be enhanced in a timely manner as recommended by the Airports Commission.

CAA's response

D21 The CAA's decision remains as stated in its proposed licence and summarised above, namely that triggers should be attached to those projects specified in the final proposals, with the exception of the Eastern Maintenance Base project. As the Heathrow Airline Community stated, this should be triggered through HAL's Gateway process once Terminal 2 Satellite C proceeds. The CAA has published trigger definition sheets, agreed by HAL and the airlines, for those projects on its website.

Q6 triggers

Issue

D22 HAL and the airlines agreed that triggers should once again be placed around 'Key Projects'. Triggers would initially be set for core capex, but would subsequently be applied to other projects that move during the period from development to core. It was agreed that there were detailed lessons to take from disputes around triggers during Q5, especially in relation to the definition of milestones.

D23 The CAA set out its criteria for determining whether to set triggers on individual projects in its Q5 decision.[102]

- Triggers should be based on the performance of events with demonstrable benefit to users.

[102] CAA, *Economic Regulation of Heathrow and Gatwick Airports 2008-2013 – CAA decision*, available at www.caa.co.uk

- The airport operator should have management control or substantial influence over the determining elements of the success of the projects.
- Performance should be objectively measured with an unequivocal test of success.
- The optimum capital programme (in terms of content, order and phasing) should be reasonably predictable for a sufficient period.
- The existence of an incentive mechanism should not itself distort delivery of the programme away from the best that can be achieved based on all emerging information.
- The additional risk implied by basing reward more on delivery and less on capital spend should be the best use of an airport operator’s capacity to bear risk.

D24 In addition, the CAA believes that a further criterion is appropriate. It believes that triggers should not generally be attached to very small projects, unless these are disproportionately important to users. Q5 triggers applied to 63% of HAL's forecast capex. The airlines proposed that the CAA’s Q5 policy of setting trigger dates at a three-month lag to the dates in HAL's project plans should not continue in Q6.

CAA's proposed licence

D25 In its final proposals, the CAA considered that, given the widespread support for triggers, it should include them in HAL's price control for Q6 some capex projects. However, the CAA proposed a more flexible approach to capital investment over Q6. Therefore, it was not appropriate for the CAA to commit to developing triggers for each project before the start of the quinquennium. This was different from the approach the CAA adopted in the Q5 review, during which the CAA indicated which projects would be triggered in its decision. It also meant that the CAA could not calculate the proportion of capex which triggers will cover.

D26 HAL and the airlines would develop triggers for individual projects during Gateways 1 and 2. The triggers would be attached formally to the projects once they reach Gateway 3. The triggers would not cover a pre-determined proportion of HAL's capex programme, and will not include a three-month delay. Having reviewed the criteria for imposing triggers set out in the Q5 decision (reproduced above), the CAA considered that these conditions continued to be appropriate for Q6.

D27 Given the advantages of triggers in ensuring that HAL delivers projects which benefit stakeholders in a timely manner, and the widespread support from stakeholders, the CAA included provision for triggers in HAL's Q6 price control. While the level of a materiality threshold is a matter for judgement, the CAA agrees with stakeholders that a £20 million level for triggers during Q6 is more appropriate than a lower level.

Representations received

D28 The CAA received two responses containing comments on triggers.

- HAL confirmed that it had agreed a £20 million threshold for triggers with the airlines.
- The Heathrow Airline Community noted that progress was being made in the definition of triggers for Q6 with the objective of meeting the CAA’s timeline for completion by 31 March 2014. Some alignment of trigger dates from the Q6 capital programme with enabling work by NATS, in the context of the CAA’s Future Airspace Strategy, would need to be defined and agreed if operational resilience at Heathrow Airport was to be enhanced in a timely manner as recommended by the Airports Commission.

CAA's response

D29 The CAA has noted HAL's confirmation concerning trigger thresholds. It is also aware of the need for consistency between HAL and NATS triggers. The CAA's decision remains as stated in its proposed licence and summarised above. Q6 triggers will be set as proposed previously once projects reach Gateway 3, with a £20 million threshold.

Intertemporal indifference

Issue

D30 The Heathrow Airline Community noted that, where capex is not subject to triggers, HAL can make additional profit by delaying actual capex beyond the timescales that the CAA assumes when setting capex allowances. To address this, the Heathrow Airline Community proposed that HAL should not be allowed to make cash flow gains by delaying projects. In other words, HAL should be "intertemporally indifferent" as to when it carries out its capex.

CAA's proposed licence

D31 In its initial proposals, the CAA agreed that making HAL intertemporally indifferent to the timing of capex would be a desirable refinement to the regulatory framework. The CAA's preferred approach was to amend the calculation of net overspend or underspend within a control period so that the relevant amount includes any financing costs (i.e. the cost of capital) that the airport operator saves by delaying investment. If the CAA were to adjust the RAB so that the NPV of the underspending over five years comes off the RAB at the start of Q7, the CAA would effectively eliminate the financial benefit of delay.

D32 In its final proposals, the CAA stated that, because HAL recovered forecast, rather than actual, depreciation in its price control, intertemporal indifference remained an issue. HAL could still make a cash flow gain by delaying or cancelling projects for which expenditure had been allowed at the price review, since by doing so, HAL could accumulate forecast depreciation on those projects and over-recover significantly during Q6. The difference between the depreciation over Q6 in the £2 billion RBP and the £3 billion ABP was £54 million.

D33 The CAA identified two options for addressing this issue:

- it could adopt a mechanism to adjust depreciation year by year during Q6; or
- it could commit to reconciling forecast depreciation with actual depreciation at the Q7 review.

D34 The CAA considered that the first option was likely to involve the adoption of a complex mechanism which could have unintended effects. In addition, if the cash flow gain was relatively small over Q6, it could be disproportionate to the magnitude of the problem. Accordingly, for its final proposals the CAA favoured a commitment to assessing the level of over-recovery of depreciation at the Q7 review. If this were to be significant, the CAA would reduce HAL's revenues during Q7 to bring forward the unwinding of any early depreciation.

D35 The CAA did not accept HAL's statement in response to its final proposals that the recovery of depreciation was a matter of timing only. While this may be true for the airport operator, it was not true for individual passengers or airlines, who often have shorter time horizons than the airport operator. Intertemporal indifference would encourage timely capex without delays, which promotes efficiency and is in the interests of all passengers. Accordingly, the CAA believed that intertemporal indifference in depreciation remained an issue. The CAA's proposed licence stated that the CAA should review depreciation at the next review, to ensure that HAL has not over-recovered significantly.

Representations received

D36 The CAA received no responses specifically addressing this issue.

CAA's response

D37 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that it will review depreciation at the Q7 review, to ensure that HAL has not over-recovered significantly.

Independent Fund Surveyor

Issue

D38 HAL and the Heathrow Airline Community agreed to create the role of an IFS – effectively a framework panel of independent experts – to provide an ongoing assessment of the reasonableness of all major decisions made on key projects and to give a real-time opinion that capital is being used effectively to deliver the outcomes of the project’s business case. A jointly agreed draft overview of services was produced, subject to the successful finalisation of IFS terms and conditions, evaluation criteria, selection process and engagement before the end of December 2012.

CAA's proposed licence

D39 The CAA's final proposals, confirmed in its proposed licence, was that the IFS should be established as agreed by the airlines and HAL. The CAA noted HAL's concern that the CAA and the IFS should not review HAL's capital plans during the quinquennium. The CAA confirmed that it does not envisage undertaking a global review of the capital plans during the quinquennium, as opposed to a study of individual projects as this becomes necessary.

Representations received

D40 The CAA received no representations on the establishment of an IFS at Heathrow.

CAA's response

D41 The CAA notes that since December 2013, consultants have been appointed to the IFS and a provisional budget agreed. The consultants have also commenced work. For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that an IFS should be established as agreed between HAL and the Heathrow Airline Community.

CAA's decision

D42 On the six issues mentioned above, the CAA's decision is as follows.

- The proposed split between core and development capex will be adopted.
- HAL will be required to attempt to obtain airline sign-off for investment programmes. Disagreements which cannot be resolved will be referred to the CAA, which will act as an arbiter. The governance mechanisms for capex will be developed before the start of Q6.
- Triggers for Q5 triggered projects incomplete at the end of Q5 will be drafted by the start of Q6. These triggers will be in force during Q6.
- Triggers similar to those in place during Q5 will be attached to some capex programmes once those programmes pass Gateway 3.
- The CAA will ensure that HAL is intertemporally indifferent to the timing of capex programmes not covered by triggers by adjusting HAL's RAB at the start of Q7.
- The CAA will include the provision for an IFS in HAL's price control.

APPENDIX E

Operating Expenditure

E1 This chapter considers the appropriate opex allowance for HAL over Q6. It contains the following sections:

- a summary of the CAA's opex process to date;
- a summary of the main issues of disagreement between HAL and the airlines; and
- a summary of the CAA's decision on the Q6 opex allowance for HAL.

Opex process to date

E2 To date, the Q6 opex process has consisted of the following stages.

- HAL published its IBP in July 2012 with its initial opex forecast of £5,304 million over Q6.
- Between July and December 2012, HAL and the airlines engaged in a process of CE over the forecasts in the IBP, providing a joint report to the CAA highlighting areas of agreement and disagreement.
- Opex forecasts were updated in HAL's FBP in January 2013 to £5,234 million, a 1.3% reduction in total opex compared to the IBP. These forecasts were summarised in chapter 5 of the CAA's initial proposals.
- The CAA commissioned several consultancy studies to test the forecasts contained in the IBP and FBP, to provide analysis of historical trends, the underlying assumptions in the business plans, and the potential scope for further efficiency. The CAA used this evidence to develop the opex allowance of £5,017 million described in the initial proposals.

- HAL again updated its opex forecast in its June 2013 RBP and July 2013 ABP. The ABP resulted in a further £114 million reduction in opex to £5,120 million over Q6, a 2.2% reduction relative to the FBP.
- The CAA commissioned updates to the consultancy work to respond to stakeholder evidence and update the opex forecasts in its final proposals. The final proposals contained a reduced opex allowance of £4,944 million.
- Stakeholders provided responses to the CAA's final proposals in November 2013.
- Taking account of those responses, the CAA published its proposed licence on 14 January 2014. Responses were provided by 24 January.

HAL's business plans

E3 In June 2013, HAL published its RBP, an update to its January 2013 FBP. The RBP contained new opex projections over Q6, taking into account new information and the planned reduction in the capex programme from £3 billion to £2 billion.

E4 The RBP reduced forecast opex by £112 million over Q6 relative to the FBP. The main changes were:

- £90 million reduction in facilities management opex, based on retendering the outsourced terminal baggage operations and maintenance contract;
- £16 million reduction in other costs, including ground transportation and PRM costs;
- £9 million reduction in rent and rates costs based on the vacation of Heathrow Point West;
- £3 million reduction in utility costs; and
- £6 million increase in opex related to commercial operations.

E5 In July 2013, HAL published its ABP, an addendum to its RBP which set out an alternative opex forecast for Q6 based on a £3 billion investment programme. The only change in the opex projection was a

£2.7 million reduction in facilities costs reflecting an increase in asset replacement capex from £575 million to £600 million.

E6 Figure E.1 below shows the differences between the total opex forecasts for Q6 contained in the IBP, FBP, RBP and the ABP. It also shows the opex allowance in the CAA's initial and final proposals and proposed licence for comparison.

Figure E.1: HAL and CAA projections for operating expenditure over Q6

£ millions	2014/15	2015/16	2016/17	2017/18	2018/19	Total
IBP	1,103	1,099	1,040	1,036	1,026	5,304
FBP	1,082	1,050	1,034	1,030	1,038	5,234
CAA - IPs	1,066	1,030	994	970	957	5,017
RBP	1,072	1,030	1,010	1,000	1,010	5,122
ABP	1,072	1,029	1,010	1,000	1,010	5,120
CAA - FPs	1,057	1,006	980	953	947	4,944
CAA - PL	1,058	1,012	985	957	950	4,962

Sources: HAL and CAA

Issues

E7 HAL and the airlines do not agree on the appropriate opex allowance for Q6. There is strong disagreement over the scope for operational efficiencies. The main areas of contention between HAL and the airlines have been:

- the analysis and conclusions of the top-down benchmarking;
- the scope for further efficiency in employee pay and pensions;
- the scope for further efficiency in 'other' opex, maintenance and central support costs;
- the scope for further security process efficiency, including flow rates, roster efficiency and the potential for outsourcing;
- the scope for greater on-going efficiency savings or frontier shift; and
- the overall opex allowance over Q6.

Top-down benchmarking

Issue

E8 The CAA is keen to understand how it should use external comparators to inform its judgement about the appropriate level of ambition to apply to HAL's business plan.

CAA's proposed licence

E9 The CAA noted HAL's comments in response to its final proposals about the comparability of the benchmarking evidence and Heathrow's above average service quality in terms of airport service quality (ASQ) scores, passenger profile and high levels of commercial revenue per passenger. The CAA sought to account for these issues by adjusting the benchmarking data to account for retail costs and by incorporating a range of airports with comparable levels of service quality and airline and passenger types.

E10 The CAA compared Heathrow to airports including Amsterdam Schiphol, Gatwick, Hong Kong, and Munich. The CAA considered that these airports are appropriate comparators. Amsterdam Schiphol in particular was similar in terms of its business model, overall size, number of passengers and ATMs. It scored highly on measures of service quality, has high commercial revenues and also has six runways compared to two at Heathrow, although it only operates a single terminal compared with four at Heathrow. Amsterdam was also used in HAL's own benchmarking study as a comparator.

E11 The CAA considered that it has drawn reasonable conclusions from the benchmarking analysis, consistent with the wider benchmarking evidence and taking account of the risks and uncertainties associated with such evidence. This included examining a variety of benchmarking evidence which tended to support the CAA's conclusions. In summary, the CAA's proposed licence stated that:

- opex per passenger at Heathrow is higher than some comparable airports;
- over Q5, opex per passenger at Heathrow has fallen at a slower rate than across a sample of comparable airports; and

- these factors, comparisons with similar airports and the wider benchmarking evidence tend to suggest that HAL is likely to have scope for catch-up efficiency over Q6.

Employee pay

Issue

E12 The CAA will not dictate HAL's policy on staff pay and reward, but must assess the scope for efficiency at the airport based on appropriate benchmarks and an assessment of reasonable measures that could be implemented to reduce costs. The IDS Thomson Reuters (IDS) employee reward benchmarking study identified that:

- HAL's total staff reward[103] was between 10% and 21% higher than benchmarks based on comparisons with general market and aviation industry benchmarks;
- rates of wage growth have been higher than the economy wide average in every year between 2005 and 2012 (excluding a pay freeze in 2009 and 2010 when the increase was the same as the average);
- there was evidence of grade drift in security and fire service functions with the 'virtual depopulation of the lower grades';
- there could be improvements to rostering efficiency based on the implementation of a more flexible roster system; and
- there was evidence of high reliance on staff working overtime with 93% of staff below senior management level regularly working 5.8 hours of overtime per week.

E13 The CAA stated that, based on data published in HAL's regulatory accounts in 2011/12, staff costs were £270 million.[104] Based on the mid-point of the benchmark analysis, the CAA estimated that HAL could reduce costs by 15.5%, equivalent to £144 million over Q6 taking account of proposed reductions in staff headcount and accounting for the RPI-0.5% wage efficiency included in the ABP.

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103 Total reward includes basic salary, bonus and shift payments, holidays (based on basic salary) and employer pension contributions.

104 In the initial proposal the CAA mistakenly referred to HAL's £262 million staff cost regulatory allowance.

The CAA applied a glide path to this saving, reducing the net efficiency to £84 million over Q6.

CAA's proposed licence

E14 The CAA has considered HAL's criticisms of the IDS report but considers that the analysis contained in that report is robust. Comparisons between HAL's mean average salaries and the market benchmark median average are appropriate. This is because market benchmark data is drawn from a variety of sources and the median average is less sensitive to outliers. The mean average is a more appropriate measure for HAL as it better represents average rates of pay within the company, and there is less need to account for outliers within HAL's staff cost data.

E15 The IDS study has applied a process of evaluating jobs into appropriate HAY point ranges, which enable comparisons between different jobs. This includes adjustments for regional variations in pay and time adjustments for the use of different data sets.

E16 IDS made several adjustments to the analysis to account for the balance of staff on pre and post-97 contracts. IDS concluded that the 'all staff' benchmark analysis (including pre and post-97 contracts) was the most representative sample of actual employment costs at HAL.

E17 IDS considered HAL's point that the uniqueness of the security function at Heathrow meant that comparisons with other 'security guard' roles were not appropriate. IDS stated that whilst Heathrow's functions are relatively unique, around 72% of security guards came from a retail background suggesting that HAL's security roles do not require highly specific skills. The IDS study also benchmarked costs against airline Lead Passenger Service Agents and airport Security Guard roles, which are very similar roles. Furthermore the airlines have provided benchmarking evidence which shows that airport security outsourcing companies pay much lower salaries than HAL for the same roles. On this basis, the CAA considers that benchmarking analysis with general security roles is appropriate.

E18 HAL's benchmarking analysis is based on Tower Watson and EEF Salary Survey benchmarks, which does not include benchmarks from the general economy. The analysis shows that median salaries (excluding bonus, shift and other payments) for ✂✂✂✂✂✂✂ at

HAL are ✂✂% higher than benchmarks, compared to a 20-29% gap in the IDS report.

E19 The CAA also reviewed other benchmark analysis provided by HAL. ✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂ ✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂✂ ✂✂✂✂✂✂✂✂. The CAA noted that there are uncertainties with benchmarking analysis, and that reasonable differences in assumptions and data can result in different results. The CAA considers that the IDS analysis is robust and is strongly supported by other evidence. The CAA considers that HAL's overall staff costs are between 10% and 21% higher than benchmarks (with a mid-point of 15.5%).

E20 The Unions stated that unfair comparisons had been made in the benchmarking, for example the comparison of fire officer grades, which did not take into account the Fire Service Review agreements which replaced overtime payments with an uplifted basic salary as part of a move to annualised working hours.

E21 Fire-fighters account for a small proportion of total headcount at HAL (around 2%) and therefore any change to contracts is unlikely to have a significant effect on the overall comparison of total staff costs against benchmarks. In addition, the IDS report showed that HAL's total reward for fire-fighters is similar to benchmarks.

E22 In the final proposals, the CAA stated that the recent improvement in the economic outlook could mean that wages in the general economy could rise faster than inflation, reducing the scope for efficiency savings. On this basis the CAA reduced the proposed efficiency from 15.5% to 14.5% of staff costs.

E23 OBR forecasts published in December 2013 indicate that average earnings growth is likely to remain below inflation over Q6 on a cumulative basis. This is based on lower outturn wage growth and low productivity growth.[105] Figure E.2 shows that on a cumulative basis average earnings are expected to be around 2% lower in real terms by the end of Q6 compared with a 2012 base.

[105] OBR, Economic Outlook, December 2013.

Figure E.2: OBR real average earnings growth assumptions

Year	March forecast		December forecast	
	Average Earnings	2012=100	Average Earnings	2012=100
2012	-1.1%	100	-1.2%	100
2013	-1.8%	98.2	-1.6%	98.4
2014	-0.1%	98.1	-0.3%	98.1
2015	0.4%	98.5	0.0%	98.1
2016	0.4%	98.9	-0.1%	98.0
2017	0.1%	99.0	0.0%	98.0
2018	0.1%	99.1	-0.2%	97.8

Source: OBR March and December 2013 Economic Forecasts

Real average earnings calculated by subtracting RPI from nominal average earnings

E24 This suggests that HAL is likely to have greater scope for reducing staff costs than assumed in the initial and final proposals. For its proposed licence, the CAA increased the wage cost reduction from 15.5% to 17.5%. This increased the potential staff cost efficiency to £97.1 million over Q6. The CAA considered that its proposed staff wage cost efficiency for HAL could be exceeded through a nominal wage freeze over Q6 and notes that similar measures are being implemented throughout the public sector and in other sectors of the economy. The CAA did not assume that other measures such as reducing overtime, absenteeism or restructuring were required to achieve the proposed efficiency. It noted that these options could provide an alternative method to achieve the proposed savings.

E25 The CAA considered that its proposals could be achieved through moderate wage restraint. The CAA applied a glide path to the proposed staff cost efficiency to give HAL time to implement changes efficiently. The proposed efficiency would bring HAL's staff costs into line with benchmarks by the end of Q6. The CAA noted that HAL had several options for reducing staff costs including reducing levels of overtime, increasing the proportion of staff on new lower rates of pay and seeking to reduce and reverse the grade drift identified in the IDS study.

E26 The CAA noted the statement from the Unions regarding the potential for industrial action as a result of the proposed reductions in staff costs and the negative impact that this could have on airport operations. However, the CAA could not ignore the evidence of high staff costs at HAL. Furthermore the CAA did not consider that moderate real terms reductions in staff costs, following generous increases over Q5, would inevitably lead to industrial action. Average earnings were forecast to decline in real terms over Q6 and HAL should not be insulated from this trend at the expense of passengers

Pensions – future costs

Issue

E27 In the Q5 November 2007 proposals for Heathrow and Gatwick, the CAA stated that BAA's pension costs should be capped "on the basis of cash contributions to the pension fund each year" and that these should be capped at an appropriate level, to ensure airport users are not disadvantaged by the relative generosity of the scheme. The CAA decided to allow a cap of 25% of pensionable pay in cash contributions on average.

E28 A study conducted by independent consultants IDS estimated that pension costs will be equivalent to 33% of pensionable pay in 2013 on average (40% for the defined benefit (DB) and 10% for the defined contribution (DC) scheme). This is significantly higher than the 25% cap and comparative benchmarks of 20% and 7%.

CAA's proposed licence

E29 The CAA commissioned the Government Actuary Department (GAD) to update the pension benchmarking work to take account of stakeholders' comments. GAD concluded that the benchmarks used in the CAA's analysis of DB scheme costs may not fully reflect differences in scheme valuation assumptions, recent changes to market conditions and returns on pension assets.

E30 GAD analysed the potential for pension cost savings based on two changes to the pension scheme: increasing the retirement age from 60 to 65 and reducing the accrual rate from 1/54ths to 1/60ths. These changes were based on analysis of typical scheme benefits and were the same as those considered by the CC in the Q5 review.

E31 Based on these changes, GAD concluded that an appropriate contribution rate for HAL would be 23-24% of pay. GAD also concluded that this was in line with the efficiency savings proposed in HAL's ABP which assumes a contribution rate of 24%. GAD considered that there could be scope for further stretch savings based on further efficiencies being made in other schemes.

E32 Based on the responses to the CAA's initial proposals, HAL's ABP update and further work conducted since April by GAD, the CAA concluded that the previous benchmarking analysis may have overestimated the potential for efficiency in HAL's pension costs. The CAA accepted GAD's conclusion that HAL's ABP contribution rates will be comparable to benchmarks by the end of Q6.

E33 However, HAL's RBP assumes that contribution rates would remain at ✂% in the first year of Q6. Given the clear expectation that pension costs should have been reduced in Q5, the CAA considered that this allowance should be reduced to 23- 24% of pay from the start of Q6. This resulted in an efficiency of £3.0 million relative to HAL's ABP.

E34 HAL assumed DC contribution rates of 9%, compared to benchmarks of around 7%. The CAA considered that DC contribution rates were not sufficiently out of line with comparative benchmarks to require further efficiencies.

E35 The cost saving options proposed by the airlines included the introduction of a salary sacrifice scheme (also referred to as SMART pensions). The CAA concluded that such options are likely to be required to achieve HAL’s planned pension efficiency savings and should not be considered as an additional saving.

E36 The CAA stated that the airlines are likely to have overestimated the potential saving from the introduction of a salary sacrifice scheme. A saving of £25 million over Q6 would require HAL to reduce its national insurance contributions by around 25% per year. This would require employees to 'sacrifice' at least 25% of their wages, which is unlikely to be achievable.

E37 The CAA agreed with HAL that there was an interaction between wages, pensions and social security costs and that separate wage and pension efficiency proposals could double-count the potential saving. However, pension costs are directly proportional to wages, and a reduction in wages will therefore lead to a proportional reduction in pension costs. The projected pension efficiency saving has been reduced from £10 million to £3 million and the CAA considered that the impact of any interaction between the wage and pension cost efficiency was unlikely to be significant.

E38 The CAA based its pension cost allowance on GAD's conclusion that HAL's pension cost assumptions represent a reasonable level of cost by the end of Q6 based on comparisons of the benefits provided by typical DB pension schemes. The CAA noted that the GAD study did indicate that there could be scope for further efficiency based on further reforms being implemented by other schemes. Such scenarios were examined as part of the IDS study, which indicated that a combination of measures could reduce DB pension costs from 40% to 15% of pay.[106]

E39 GAD also stated that it is difficult to find robust benchmarks of the most recent changes to typical schemes (and how widespread or typical such changes are). The CAA did not consider that it had sufficient evidence to support further efficiencies to DB pension costs.

Pensions – deficit contribution

Issue

E40 In 2010, HAL's actuaries estimated that the BAA pension scheme was in deficit by £378 million. HAL's 'regulatory fraction' of this deficit is estimated to be £275 million. It has since made annual contributions of £24 million to reduce this deficit. HAL's ABP includes pension deficit costs of £129 million over Q6 based on a 10-year recovery plan beginning in 2013.

CAA's proposed licence

E41 The CAA commissioned GAD to provide advice on the treatment of the pension deficit. GAD considered that the economic regulation of pensions is typically based on one of two alternative principles:

- users meet the expected cost of benefit accruals, but the management of the scheme's liabilities is a matter for the company; or

106 These scenarios included increasing the normal retirement age to 65, linking payments to career average salary, changing accrual rates from 54th to 80ths and the combination of all three measures.

- users meet total pension costs including deficit contributions and therefore also benefit from any surplus (subject to those costs being efficiently incurred).

E42 Based on the historic treatment of BAA's pension deficit costs including the reduction of the RAB in Q5 associated with the Q3 pension contribution 'holiday' (to recover a large surplus in the fund), and the absence of any signal of a change in policy by the CAA, GAD concluded that the second principle has been and should be applied to HAL. This means that efficient deficit recovery costs should be included in the opex allowance. Based on a high level review, GAD stated that it had no significant concerns with the estimation of the pension deficit recovery costs.

E43 HAL's pension contributions were higher than the 25% limit set in Q5, though the impact of this on the scheme deficit is likely to be small. The deficit is caused by a shortfall on assets accrued over many years. It is very difficult to attribute a portion of the deficit to liabilities incurred in specific years above a given threshold.

E44 GAD raised the issue of the commutation payments associated with the sale of Edinburgh and Stansted airports. Each of these airports are expected to make a payment to the BAA pension scheme to absolve liabilities associated with former employees (deferred and pensioner members). In total the commutation payments are expected to equal £48.3 million. GAD estimated that the payments would exceed the deficit attributable to Edinburgh and Stansted and effectively reduce HAL's deficit. GAD concluded that HAL's deficit costs should be adjusted to account for these payments.

E45 Based on approximate calculations GAD estimated that the payments would reduce HAL's deficit by around £16 million. Based on the 10-year deficit recovery payments beginning in 2015/16, this implies that HAL's deficit contributions should be reduced by £6.4 million over Q6 relative to HAL's ABP.

E46 The CAA accepted GAD's conclusion that, based on the historic treatment of HAL's pension surplus and lack of a signal of policy change, customers should pay for (and benefit from) pension deficits (or surpluses). GAD also recommended adjusting the deficit cost allowance to account for the commutation payments associated with Edinburgh and Stansted. In estimating the effect of the commutation payments on HAL's deficit GAD took account of KPMG's point that HAL's regulatory fraction would increase.

E47 Whilst HAL's regulatory fraction will increase, GAD estimated that the commutation payments would be greater than the deficit attributable to Edinburgh and Stansted, and would therefore reduce the residual scheme deficit attributable to HAL. GAD also noted that active members at Stansted and Edinburgh have the option to transfer their pension rights from the BAA scheme to their new pension scheme. The assets transferred from the BAA scheme to the new schemes are expected to be less than the value of the equivalent liabilities using the BAA scheme funding basis. This could further reduce the BAA scheme deficit.

E48 GAD stated that the CAA should consider setting out its policy for the future treatment of pension costs at the next price control highlighting two issues; potential changes in the estimate of the scheme deficit during Q6 and the future treatment of deficit costs. The CAA considered that there was merit in signalling the possibility of change to the future treatment of pension costs, including the introduction of a 'true up' mechanism to account for changes in the scheme valuation and changes to the treatment of future deficits.

E49 With regard to the treatment of any deficit recovery costs at the next price control, the CAA considered that there were three main policy options:

- a continuation of the current policy, whereby passengers pay for deficits, and benefit from surpluses;
- a policy whereby shareholders pay for deficits, and benefit from surpluses; or
- a hybrid approach whereby deficit and surplus payments are shared between passengers and shareholders.

E50 An example of the latter approach is the ‘incremental deficit’ method developed by Ofgem whereby the pension liabilities are split between those accrued before and after a cut off point. Any scheme deficit is then split between these portions with customers paying for the former, and the company for the latter.[107] The CAA stated that it

[107] Ofgem, 2013, Energy Network Operators' Price Control Pension Costs - Regulatory

intended to consult stakeholders on potential changes to the treatment of HAL's deficit at the next price control review based on the issues described above. Stakeholders should not assume that this will result in any changes to the CAA's existing policy.

Other opex

Issues

E51 The CAA commissioned SDG to examine other opex at Heathrow. This included costs relating to rent and rates, utilities, police, cleaning, Air Navigation Service (ANS), PRM charges and other items. The study identified the potential for efficiency of between £87 million and £97 million over Q6 relative to the FBP.

CAA's proposed licence

E52 The CAA commissioned SDG to update its projections to take account of new information and stakeholders' responses to the initial proposals. In most areas SDG re-iterated its original conclusions. The CAA has taken account of airlines' submissions and evidence through their responses to the initial and final proposals. SDG took account of HAL's response by updating its benchmarking analysis based on HAL's data and acknowledged that total cleaning costs per square metre (total terminal area) will decline at a rate of 0.5% over Q6. SDG also stated that cleaning costs are primarily driven by 'front of house' passenger areas, which require more frequent cleaning. On this basis, SDG found that HAL's cleaning costs were forecast to rise by 1.6% per annum and proposed that HAL should aim to maintain costs constant resulting in an efficiency of £7.5 million over Q6. SDG also proposed a stretch efficiency of £8.6 million based on bringing costs down to the average benchmark.

E53 The CAA considered it reasonable for HAL to maintain cleaning costs per square metre constant in real terms, based on its passenger terminal areas and has adopted SDG's core efficiency proposal. This should be achievable without any deterioration in service quality. Accordingly, for its proposed licence, the CAA retained the level of efficiency in its final proposals in this area.

Instructions and Guidance: Triennial Pension Reporting Pack supplement including pension deficit allocation methodology.

E54 The CAA adopted SDG's core opex efficiency proposals relating to cleaning and rates costs. Overall these two proposals result in total savings of £38.7 million over Q6 relative to the ABP. The CAA considered that neither efficiency proposal requires a glide path as the savings are based on a reduction in cost forecasts or maintaining current performance.

Maintenance costs

Issue

E55 The CAA commissioned SDG to assess HAL's Q6 maintenance cost forecasts. SDG examined the maintenance costs in the FBP, including benchmarking costs against seven other airports and examining HAL's procurement strategy. The study found that maintenance costs were 64% higher than benchmarks in terms of cost per square metre.

E56 The study also found that HAL has a very complex array of contractual relationships, which was likely to increase management costs and cause inefficiency in some functions. SDG outlined a range of changes that could improve efficiency including undertaking more outsourcing of mid-tier complexity and reactive maintenance activities. SDG noted HAL had been able to achieve a saving of 16% through new outsourced contracts.

E57 SDG concluded that some efficiency gains were likely to be possible through improvements to HAL's procurement strategy and a reduction in maintenance costs in line with more efficient benchmarks. Overall, the study concluded that HAL’s FBP opex projections could be reduced by between £32 million and £90 million over Q6. The upper range was based on HAL meeting more challenging external benchmarks in maintenance cost per terminal area (reducing the gap to 50% of the average of the benchmarks).

E58 The study also included an alternative core efficiency target of £51.3 million. This was based on a 10% reduction in third party engineering costs, which could be achieved through improvements to HAL's procurement strategy.

CAA's proposed licence

E59 SDG's updated efficiency proposal was not based on benchmarking evidence. The benchmarking evidence described in SDG's original report was updated in the stage three report to account for new data provided by HAL. This indicated that costs per square metre were not expected to rise over Q6. This in combination with the lower maintenance cost projections in the ABP led SDG to the conclusion that the efficiency proposal based on benchmarking evidence was no longer appropriate.

E60 SDG's updated efficiency proposal was based on HAL achieving a 12.5% reduction in its non-baggage outsource maintenance costs. SDG observed a number of areas where HAL could improve its maintenance efficiency, including through its approach to outsourcing and tendering. SDG noted that HAL had achieved a 25% reduction in outsourced baggage maintenance costs through changes to its procurement process and argued that this provided strong evidence that HAL was likely to be able to achieve savings in other areas. SDG proposed savings of £33.6 million over Q6.

E61 The CAA considered that HAL had been able to reduce its costs significantly through changes to its procurement strategy. HAL would introduce a new procurement framework from the start of Q6 and this was likely to provide an opportunity to review and improve the efficiency of existing contracts. The CAA adopted SDG's efficiency proposal.

E62 HAL's maintenance costs forecasts included around £186 million of staff costs. The CAA's wage cost proposal reduced maintenance costs by around £17.2 million (accounting for the increase to the wage efficiency described above). The CAA considers that it is appropriate to take account of this interaction by netting this efficiency off the SDG maintenance efficiency proposal. This reduced the efficiency from £33.6 million to £16.4 million.

Central support costs

Issue

E63 The CAA commissioned Helios to examine HAL's central support costs. The Helios study examined HAL's historic and forecast central support costs and collected a range of benchmark data based on airports, airlines and bespoke Hackett and Gartner data tailored to companies with similar characteristics to HAL. HAL's costs were compared against these benchmarks to estimate the potential for greater efficiency in the business plan.

E64 Based on comparisons with benchmarks, the study concluded that HAL could reduce central support costs in several areas including Finance, HR and IT. Overall the study estimated that HAL could reduce central support costs by between £11 million and £77 million over Q6. The lower 'core' target was based on HAL maintaining current levels of cost over Q6 and removing unjustified increases in the business plan. The higher 'stretch' target was based on bringing costs into line with more ambitious external benchmarks at the performance frontier.

CAA's proposed licence

E65 The Helios study found that central support staff costs were generally higher than benchmarks, and did provide some evidence that central support functions had high levels of senior staff. These findings formed the basis of some of the efficiency proposals made in the study.

E66 However the total cost benchmarking indicated that HAL's overall central support costs were comparable to peer group benchmarks in most areas. This suggests that overall central support costs could already be efficient. The benchmarking also indicated that there was a wide range of efficient spending on central support activities and it was difficult to assess costs based only on comparative benchmarks without supporting evidence and explanation for how the proposed savings could be achieved.

E67 Over Q6, HAL's business plan included a ✂% reduction in total central support headcount, which is likely to address the balance between junior and senior staff. In addition, the CAA's wage cost efficiency would reduce costs by a further £19.1 million over Q6 (accounting for the changes described above). Taking account of this, HAL's central support costs would fall by 25% by the end of Q6. Given the finding that HAL's central support costs are already in line with average benchmarks in most functions, this suggests that the scope for additional process efficiencies may be limited. The CAA considered that the level of efficiency assumed in its final proposals remained appropriate, and no further efficiency assumption was required.

Efficiency frontier

Issue

E68 In calculating the level of efficient operating costs over Q6, the CAA has to make an assumption as to how the 'efficiency frontier' (the level of costs that a hypothetically efficient operator might incur) might move over time. The CAA commissioned independent consultants Cambridge Economic Policy Associates (CEPA) to examine this question.

E69 CEPA estimated that, based on the historic adjusted Total Factor Productivity (TFP) range for comparator businesses, an efficient organisation with a cost structure similar to HAL should expect to see net frontier efficiency shift of between 0.9% and 1.0% per year.

CAA's proposed licence

E70 The CAA commissioned CEPA to update its work in response to stakeholders' comments on the initial proposals. CEPA confirmed that a frontier shift target of between 0.9% and 1% was an appropriate target for HAL.

E71 The CAA considered that stretch savings are possible in relation to unidentified efficiencies. This was clear from the inclusion of such a target in HAL's business plan. It is true that such efficiencies must eventually be identified, planned and developed by a business. However, it was likely that, over the course of Q6, opportunities for cost savings would arise that were not anticipated in the ABP, for example as a result of new technology. The CEPA evidence suggested that such savings were likely to be around 1% per year on average, which was higher than the target implied by the savings in the ABP (which are equivalent to 0.87% per year).

E72 The CAA considered that frontier shift efficiency should be applied in addition to all catch-up efficiency savings. This requires the CAA to make a judgement over the scope for catch-up efficiency at HAL, applying frontier shift in addition to those savings. The CAA considered that most of its efficiency proposals are based on catch-up efficiency (in staff costs, pensions, and maintenance) and more conservative forecasts (cleaning and rates costs). These savings will bring HAL into line with comparative benchmarks and correct for overly pessimistic assumptions about future costs.

E73 HAL's business plan also included efficiency relating to security processes, reductions in headcount and a workforce strategy which will address issues including absenteeism, overtime payments and roster efficiency. The CAA assessed each of these areas and considered that, in combination; the efficiency savings would largely address existing inefficiencies at HAL bringing it to the cost frontier.

E74 In addition to these savings, HAL has included a stretch target of £138.6 million over Q6 (equivalent to 0.87% per year) in its RBP. The CAA did not consider that HAL had well defined plans for achieving these efficiency savings. The CAA considered this efficiency proposal as 'frontier shift' and that the saving should be increased to reflect a net target of 1%. In its proposed licence, the CAA therefore applied a further £20.4 million efficiency based on the 1% target.

Security – flow rates

Issue

E75 Peak hour security processing flow rates at Heathrow are typically between 120 and 160 passengers per lane per hour depending on the terminal and time of year. These are below the rates achieved at other airports, which can reach up to 250.[108] HAL has stated that the differences between flow rates at Heathrow and other airports is explained by several factors including:

- Heathrow's largest airline, BA, has a more generous hand baggage allowance than other airlines such as easyJet and Ryanair (which account for the majority of flights from Gatwick and Stansted). This increases the number of bags per passenger taken through security relative to other airports;
- Heathrow has a high proportion of long haul and premium passengers who are likely to carry more electronic items through security; and
- Heathrow has a high proportion of long haul passengers who tend to be less familiar with security processes at Heathrow due to language differences and/or expectations based on different security arrangements in other countries.

108 Figures are based on confidential airport benchmarking evidence from Copenhagen Airport (and supplied by GAL).

E76 Flow rates have also declined over recent years. This has increased the number of security staff required to deal with peak period passenger flows, resulting in an increase in security costs per passenger at Heathrow. HAL has stated that the decrease in flow rates is attributable to an increase in security requirements and an increase in the proportion of passengers carrying electronic items such as laptops and tablets. The CAA has been provided with some flow rate analysis evidence from HAL which tends to suggest that this is an important explanatory factor. However, the CAA understands that other airports such as Gatwick have been able to maintain higher flow rates despite the same changes in passenger behaviour. This suggests that other airports have been able to manage the impact of this factor more effectively than HAL.

CAA's proposed licence

E77 The CAA noted the airlines' comments in response to the final proposals that HAL should be able to achieve higher rates of security process efficiency due to its new terminal facilities. HAL was forecasting security flow rates of 140-160 passengers per hour per lane across its terminals against a current performance of around 125. Current flow rates may be lower than benchmarks. However, as with other forms of benchmarking, comparisons need to consider wider factors and the inherent uncertainties associated with the evidence. In addition, by the end of Q6 Heathrow will have improved its performance to 24,000 passengers per security FTE, exceeding GAL's current performance and matching Stansted Airport Limited's (STAL's). On this basis, the CAA did not propose further efficiency savings related to flow rates.

Security – rostering

Issue

E78 The IDS study undertook some analysis of security staff rostering efficiency and determined that there may be some inefficiency related to:

- overlapping rosters;
- excess staff capacity at some points of the day and high rates of overtime payments; and

- a fixed roster system which limits the ability of HAL to change staff supply in response to changes in demand leading to higher overtime payments.

E79 The study concluded that there may be scope for some cost savings from the introduction of more flexible rosters, although this conclusion required further validation as the analysis was based on a limited sample of rostering data.

E80 In the final proposals the CAA noted that HAL's workforce strategy included savings of £51 million over Q6, related to improved rostering, reductions in absenteeism, paid breaks and other areas of staff organisation. The airlines made similar proposals, but with higher estimates of the potential efficiency. Overall, the CAA considered that the savings included in HAL's ABP workforce strategy provided a reasonable estimate of the potential for efficiency savings to rosters and other areas. Bearing in mind the proposed efficiency to staff wages, reductions in headcount and the overall reduction in security cost described above, the CAA did not propose further efficiencies in this area.

CAA's proposed licence

E81 HAL's ABP forecast that total security staff costs in Q6 will be £683 million. The CAA's wage efficiency proposals would reduce this cost by around £38 million to £645 million. Only around 30% of this cost is sensitive to passenger demand. The remainder is largely fixed, based on fixed security posts, and airside and landside security patrols. This suggested that rostering and overtime efficiencies are only applicable to around £193 million of HAL's security costs.

E82 Improving roster efficiency by 10% could reduce costs by around £20 million and reductions in absenteeism could reduce costs by around £4 million. IDS estimated that the average overtime figures for security staff is between 7% and 9%. Assuming that this could be reduced to around 4%, based on HAL's security cost forecast, the CAA estimated that HAL could reduce costs by around £25 million over Q6.

E83 Overall, the CAA estimated that these three measures could reduce costs by around £49 million over Q6, assuming that changes were achieved in full from the first year. On this basis, the savings in HAL's workforce strategy appear to be a reasonable estimate of the scope for further workforce efficiency over Q6.

Impact of 2017 rates revaluation

Issue

E84 A national revaluation of commercial property for the purpose of calculating business rates is expected in 2017. HAL's January 2013 FBP assumed that the revaluation would increase national business rates by £35 million (equivalent to a 26% increase).[109] The CAA's consultants, SDG, commented in its report on other opex that this was likely to be an overestimate and considered that a 7% increase was more likely. This resulted in a reduction in forecast opex of £38.9 million over Q6 relative to HAL's FBP.

CAA's proposed licence

E85 For its final proposals, the CAA adopted HAL's suggestion of a passthrough term for the variance of the impact of the 2017 rates revaluation on its costs from the forecast impact, recognising that the effect of the revaluation on rates costs is uncertain and largely uncontrollable. The impact of the rates revaluation depends upon the relative changes to gross national rateable value between 2008 and 2015[110] and the specific factors that determine HAL's rateable value, which include construction costs, the choice of the depreciation rate set by central government and negotiations between HAL and the Valuation Office Agency. Any estimate of rates costs beyond 2017 is therefore uncertain. However HAL's forecast of the impact of the revaluation was significantly higher than that forecast by other airport operators, and was also much higher than the relative effect of the previous 2010 revaluation.

E86 For the purposes of setting the Q6 price control the CAA has to set a forecast level of costs. HAL's forecast was based on an assumption that construction costs would increase by 30% between 2008 and 2015. SDG found that construction costs have only increased by 4.6% between 2008 Q1 and 2013 Q3, meaning that a 30% increase

109 SDG, Review of other operating expenditure at Heathrow Airport, page 12, 2012, available at www.caa.co.uk

110 2008 and 2015 are the valuation dates used for the rate revaluations occurring in 2010 and 2017.

by 2015 is very unlikely. SDG estimated that the impact is more likely to be around 14% based on the historic relationship between construction prices and GDP growth.

E87 SDG considered the impact of the rates revaluation on HAL's forecast costs in the light of HAL's comments on the initial proposals. Its revised opinion was that the rates revaluation would result in a 9% increase in rates costs compared to HAL's assumption of 26%. This resulted in an efficiency of £31.2 million over the course of Q6 compared to HAL's ABP. If this assumption turns out to be too high or too low, 80% of the difference will be passed through to passengers through the passthrough mechanism. The CAA decided to adopt SDG's cost forecast in its final proposals. BA's proposal that there could be savings from the delay to the rates revaluation has been included in HAL's business plan.

E88 The CAA accepted some of HAL's amendments to the rates cost mechanism and confirmed that the intended purpose of the mechanism is to passthrough higher or lower rates cost to passengers following the rates cost revaluation in 2017. For clarity, the mechanism was not intended to passthrough any changes to HAL's overall rates cost associated with changes to terminal space or other factors. The intention was to passthrough changes in rates costs associated only with the relative impact of the revaluation in 2017 on HAL's pre-existing rateable assets above or below a 9% increase. This was reflected in the wording of the price control condition in the draft licence.

Other Issues

E89 Several other issues were raised in stakeholders' responses. The CAA's final proposals and proposed licence for these issues and its decision are summarised below.

GAL's pension commutation payments

Issue

E90 Responses to the CAA's initial proposals for Gatwick raised the issue of the commutation payment made by GAL to the BAA pension scheme upon the sale of the airport. This payment removed GAL's pension liabilities associated with former employees in the BAA group pension scheme. GAL stated that this payment should be included in its RAB as it had reduced its exposure to pension deficit costs in the BAA scheme. Similar payments are expected to be made in relation to the sale of Edinburgh and Stansted airports.

CAA's proposed licence

E91 The CAA commissioned GAD to provide advice on the treatment of the commutation payments. GAD concluded that the commutation payment reduced GAL's pension costs and therefore should be taken into account in the regulatory settlement for GAL. This conclusion had no direct impact on HAL as the GAL commutation payment has been factored into HAL's pension cost forecasts. However, the commutation payments for Stansted and Edinburgh will have an impact on HAL's deficit costs. This issue was discussed above in the pension deficit section.

Closure of Terminal 1/opening of Terminal 2

Issue

E92 The Heathrow Airline Community's response to the final proposals stated that early closure of Terminal 1 in June 2015 could save £50 million. It was disappointed that the CAA's final proposals had not recognised this saving. BA endorsed the Heathrow Airline Community's position. It expected that the timescales for closure could be significantly accelerated by HAL.

CAA's proposed licence

E93 In its final proposals, the CAA considered that there was some uncertainty over the earliest achievable date of closure for Terminal 1. The IBP assumed a closure date in late 2016. In January 2014, the latest business case for the closure of Terminal 1 assumed a date of December 2016 which is consistent with the ABP.

E94 The terminal closure is a complex process which requires the movement of several airlines from Terminal 1 into Terminal 2 and other terminals. The last airline moves from Terminal 1 are planned to occur in March 2016. This is subject to ongoing negotiation with several airlines. Airline moves are in turn dependent upon the completion of supporting work such as the T3IB project and 'cut in work'. This work is expected to be completed in December 2015. This means that HAL has assumed that Terminal 1 will be open for around nine months following the completion of the airline moves, before the terminal is fully closed.

E95 The CAA considered that assuming an earlier date without evidence would place risks on HAL and could have operational impacts on the relocation of airlines. HAL has also considered and consulted on alternative options for terminal closure, including achieving an earlier closure date. HAL has made a decision to seek to minimise the operational impacts of the terminal closure and this requires a longer time frame for airline moves. The CAA has no evidence to support the assumption of an earlier closure date.

Terminal 2 Operational Readiness

Issue

E96 The airlines stated that HAL was given an £10 million allowance for Terminal 2 Operational Readiness costs in Q5. Because Terminal 2 will not open until Q6, the airlines considered that additional operational readiness costs should not be included in Q6. The CAA has investigated in some detail whether allowing an operational readiness budget of £10 million does involve double-counting. After careful consideration, the CAA has come to the conclusion that it does, and has reduced HAL's opex forecast accordingly.

E97 HAL has made the following points to the CAA.

- At this late stage in the process, HAL was surprised that the CAA was considering adopting a fundamentally different approach to assessing unforeseen events in Q5.
- If the CAA was minded to change its position, it should also consider all the unforeseen costs that HAL had incurred that were not part of the Q5 operating cost allowance, including the materially lower passenger numbers.
- Furthermore, HAL had made considerable trigger payments to airlines for Terminal 2.

CAA's proposed licence

E98 The CAA did not accept any of these points. It did not consider that it is adopting a fundamentally different approach to assessing unforeseen events in Q5. It wished to avoid making allowances for the same cost item in two consecutive price control periods. It did not consider, therefore, that HAL's second point, that other cost items should be reconsidered, is correct. No parties had argued that such items as the lower passenger forecast have been allowed twice in consecutive price control periods. Finally, HAL may have made considerable trigger payments to the airlines for the delay in the opening of Terminal 2. However, these relate to capex, while the operational readiness costs are opex.

E99 Accordingly, in its proposed licence, the CAA reduced HAL's opex allowance by £10 million in the first year of Q6.

Passenger Rapid Transit

Issue

E100 The CAA has excluded the PRT (CTA and Terminal 5) from the RAB therefore the costs of operating this project should not be included in the opex allowance. HAL has provided the CAA with estimates of the opex costs of this project, which amount to £10.3 million over Q6.[111]

CAA's proposed licence

E101 The CAA removed £10.3 million from the opex allowance. In response to the final proposals, BA and the Heathrow Airline Community agreed with the CAA's decision to remove the PRT from the RAB.

Passenger Forecasts

Issue

E102 The CAA has assumed higher passenger numbers than forecast in HAL's ABP. This is based on several factors including improving economic forecasts and higher outturn passenger numbers in the base year. These factors are described in more detail in Appendix B. Overall the CAA has assumed that passenger numbers will be 347.7 million over the four years and nine months of Q6, 2.0% higher than assumed in HAL's ABP. This will have an impact on HAL's opex in some areas including increasing the need for security staff, utility costs and commercial services for example.

[111] The figure of £9.6 million is net of the estimated costs of a bus operation to replace the PRT at £0.7 million per annum. The gross opex savings of removing the PRT are around £13 million over Q6.

CAA's proposed licence

E103 The CAA estimated that the elasticity between opex and passenger numbers is between 0.3 and 0.5.[112] For consistency with previous regulatory decisions, including the final proposals for GAL, the CAA increased the opex allowance based on an elasticity of 0.3. This increased the opex allowance by £31.1 million over Q6.

CAA Security Charge

Issue

E104 In its response to the final proposals, HAL raised the issue of the CAA's charges for aviation security. The CAA consulted on its proposed mechanisms for recovering the costs of discharging its new Aviation Security function from April 2014. The CAA published a consultation document stating that the security charge would be around 4.9 pence per departing passenger, levied on airports with over 100,000 passengers.[113]

CAA's proposed licence

E105 Based on the CAA's passenger forecast, the inclusion of the charge in regulated revenues meant that HAL is likely to incur charges of around £8.9 million over Q6. This amount was included in the opex allowance.

Changes to Security SQR Standards

Issue

E106 The CAA proposed changes to the measurement of the SQR across fixed control posts. This involved assessing performance across separate groups of control posts, rather than as a group average. This would increase the probability of failure and penalty costs. HAL estimated that it would require an additional 40 security officers at four control posts to implement the new standards. HAL estimated that this would increase opex costs by £8 million over Q6.

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[112] Steer Davies Gleave, 2012, Review of operating expenditure and investment consultation (Annex D), Stansted Mid Term Q5 Final Report.

[113] Available at www.caa.co.uk

CAA's proposed licence

E107 The CAA analysed the effect of the change in policy based on HAL's historic performance over 2013/14. This showed that HAL would have regularly failed the standard in three of its five control post areas, (including the Southside) and suggests that HAL will require some additional resources to adjust to the higher standard.

E108 However, based on this analysis the CTA control posts passed the standard in every month of 2013 but one (being only marginally below in October) and HAL is therefore unlikely to require significant additional staff at this post. This suggested that HAL may have overestimated its need for additional staff.

E109 HAL had also assumed that each security officer would cost around £40,000 per year. Based on the findings in the IDS study described above, the CAA considered that this cost should be reduced by 17% to around £33,000 to account for HAL's high staff costs. Overall the CAA increased the opex allowance by £5 million over Q6 to account for the change in HAL's SQR standard.

Overall level of opex over Q6

Issue

E110 The CAA's statutory duties require it to further users' interests and also to have regard to the need to promote HAL's (and other licence holders') efficiency. As there is some uncertainty over the scope for efficiency savings and factors that will affect costs over Q6, judgement is required. This judgement has been informed by extensive consultation with stakeholders, independent expert advice and the CAA's own analysis as described above. The CAA's role is not to direct specific changes to practises and measures but to forecast a reasonable opex allowance for HAL over Q6.

CAA's proposed licence

E111 The CAA analysed HAL's opex using both top-down benchmarking, and bottom-up studies across different areas of HAL's business plan. The CAA considered each of the consultants' evidence and efficiency proposals on a case by case basis and adopted proposals where the evidence for efficiency was convincing.

E112 A breakdown of the efficiency savings associated with each piece of evidence described above is shown in figure E.3 below. The figure also shows the CAA's projections of the likely increase in opex caused by the increase in traffic forecasts and 'other changes' including the CAA security charge, removal of Terminal 2 operational readiness costs and change to fixed post SQR measurement described above.

Figure E.3: Breakdown of CAA's proposed licence opex projections

£m	Q6					Q6 Total
	2014/15	2015/16	2016/17	2017/18	2018/19	
ABP	1,072	1,029	1,010	1,000	1,010	5,120
Other Opex	-1	-1	-2	-13	-22	-39
Maintenance	0	-4	-4	-4	-4	-16
Central Services	-	-	-	-	-	0
Wage efficiency	-7	-14	-20	-25	-31	-97
Pensions	-3	-2	-2	-2	-2	-9
Frontier shift	-1	-3	-4	-5	-7	-20
PRT	-2	-2	-2	-2	-2	-10
Change in traffic	8	6	6	6	6	31
Other changes	-7	3	3	3	3	4
Total	-14	-17	-25	-42	-59	-157
CAA proposed licence	1,058	1,012	985	957	950	4,962

Sources: HAL and CAA

E113 Based on the CAA's decisions in this Appendix, its projections for HAL's efficient opex over Q6 are set out in figure E.4 below. Overall, the CAA proposed that HAL should reduce its opex allowance by £157 million (3.1%) relative to the ABP. This would reduce opex by 2% per year over Q6 (equivalent to a 1.5% reduction from 2012/13). This compares to an equivalent per year reduction of 2.0% in the final proposals. The total opex allowance over Q6 is £4,962 million.

Figure E.4: CAA's decision on opex - 5 years basis

£ millions	2014/15	2015/16	2016/17	2017/18	2018/19	Total
ABP	1,072	1,029	1,010	1,000	1,010	5,120
CAA FPs	1,057	1,006	980	953	947	4,944
CAA proposed licence	1,058	1,012	985	957	950	4,962
CAA decision	1,058	1,012	985	957	950	4,962

Sources: HAL and CAA

E114 Adjusting the CAA's proposed licence forecast to reflect the four years and nine months duration of the control period reduces the CAA's opex forecast to £4,731 million (see figure E.5 below).

Figure E.5: Forecast opex in Q6 - 4 years 9 months basis

£ millions	9 mo. 2014	2015	2016	2017	2018	Total
CAA proposed licence	805	1,029	993	955	948	4,731
CAA decision	805	1,029	993	955	948	4,731

Source: CAA

Representations received

E115 The CAA received three responses commenting on the overall level of opex. BA, the Heathrow Airline Community and Virgin continued to maintain that the targets set by the CAA were not stretching enough and continued to support the figures as set out in previous submissions.

CAA's decision

E116 The CAA does not accept that the overall level of opex forecast in its proposed licence is insufficiently stretching. Its allowance contains an assumption that HAL can reduce its real operating costs by approximately 2% per year for five years. While HAL starts from a position of some inefficiency in many areas, such cost reductions are challenging for any business. In addition, the CAA notes that a price control is designed to incentivise companies to over-achieve against efficiency targets, thereby generating cost savings whose ongoing component can be returned to customers at the next review.

E117 For the reasons set out above the CAA continues to consider that its analysis of opex issues is robust and consistent with the available evidence. The CAA considers that the opex allowance set out in the proposed licence and described above is appropriate.

APPENDIX F

Commercial Revenues

Commercial revenues

F1 The forecasts for HAL's commercial revenues are an important element of the price control. Under the single till approach, they are deducted from its forecast costs to arrive at the regulated revenue requirement.

F2 Projections for HAL's commercial revenues have been the subject of extensive consultation between HAL and the airlines. The CAA's initial forecasts of £2,912 million were revised in the CAA's final proposals to £2,880 million and later in the CAA's proposed licence to £2,917 million on a five year basis as set out in figure F.1 below.

Figure F.1: HAL and CAA projections for commercial revenues over Q6

£ million	2014/15	2015/16	2016/17	2017/18	2018/19	Total
CAA IPs	549	567	586	596	613	2,912
CAA FPs	530	564	586	596	604	2,880
CAA proposed licence	538	573	593	602	611	2,917

Source: HAL and CAA

F3 Adjusting the CAA's proposed licence forecast to reflect the four years and nine months duration of the control period means that the CAA's commercial revenues forecast was reduced to £2,790 million (see figure F.2 below).

Figure F.2: Forecast commercial revenue in Q6 - 4 years 9 months basis

£ million	9 mo. 2014	2015	2016	2017	2018	Total
Commercial revenues	413.3	573.9	591.2	601.2	610.7	2,790.2

Source: CAA

F4 The CAA's proposals (initial, final and the proposed licence) were based on a report from the CAA's consultants, SDG.[114] The proposals

114 Steer Davies Gleave, Assessment of Commercial Revenues - Heathrow Airport (Stage 3)

used SDG's per passenger forecasts together with the CAA's traffic projections.

F5 Before forecasting total commercial revenues throughout Q6, the CAA adjusted SDG's forecasts to remove £15 million of revenues attributable to the T5 and CTA PRT, consistent with its policy of removing PRT-related costs and revenues from regulated charges.

CAA's proposed licence

Retail

Tobacco sales

F6 The main issue concerning the projections for HAL's duty free sales was the impact of the Tobacco Display Act (TDA). SDG agreed with HAL and the airlines that a decline in tobacco duty free sales was likely to occur as a result of the TDA. However, SDG's discussions with another UK airport operator that undertook trials suggested that the impact was likely to be lower than that envisaged by HAL. This view was reinforced by analysis of published results from the Dublin trial. HAL forecast a 40% impact (and assumed a tobacco ban in 2018/19) while BA suggested an impact of 8%. SDG presented two impacts of 12% and 20% using the 12% impact for their total revenues forecasts. The CAA agreed with SDG. It also did not believe that there was proof that a tobacco ban will be implemented in Q6.

F7 In its proposed licence the CAA maintained its view on assuming a 12% impact of the TDA. The CAA also maintained its view that a complete tobacco ban was unlikely to occur during the control period.[115]

F8 The CAA pointed out that SDG reviewed the case made by HAL that a ban on duty free sales of tobacco will come into effect in 2018/19. SDG's view was that whilst such a ban was likely (as it is a probable

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Report, August 2013, available from: http://www.caa.co.uk/docs/78/SDG%20%20LHR%20Commercial%20Revenues%20REDACTED.pdf

[115] The CAA considers the lack of a tobacco ban assumption is further justified now that the control period for HAL ends in 2018.

outcome of a World Health Organisation (WHO)-led study that is due to commence at some point in the next few years), the timing of the study and any subsequent ban were uncertain. SDG also pointed out that given the fact that the study had not yet begun, a ban through a full legislative process was unlikely to occur in Q6. The CAA accepted SDG's reasoning and hence did not include a reduction of commercial revenues due to a ban on duty free tobacco sales in the final forecasts.

F9 The CAA's proposed licence was based on SDG's projections for the impact of the TDA because:

- World Duty Free (WDF) has not been able to justify each of its arguments with data;
- SDG's projections have taken detailed account of projections at other airports; and
- the airlines agreed with SDG's forecasts.

Advertising

F10 The SDG report commented, in agreement with the airlines' view, that there might be an opportunity for further growth in revenue from advertising although they acknowledged that HAL's ABP included an additional £5 million in advertising revenues compared to the FBP. SDG identified potential stretch to HAL's FBP forecasts in this category. SDG identified opportunities for further income from sponsorship.

F11 The CAA's proposed licence was based on SDG's forecasts, which favoured HAL's approach of emphasising quality of advertising over quantity. The CAA noted that although SDG's and Nyras' projections for advertising are almost identical, Nyras considered several factors which provided an upside to its forecast.[116] Once the projections for advertising revenues were uplifted with the CAA's revised traffic forecasts, they amounted to £✂ million over Q6.

Other retail issues

F12 In relation to other retail revenues, concerns were raised about the economic assumptions for HAL's commercial revenues.

[116] Paragraph 7.23 of the CAA's final proposals.

F13 The CAA's final proposals and licence proposal were based on SDG's forecasts. The CAA noted the potential upsides in the macroeconomic environment. However, it considered that the impact this would have on retail revenues is hard to quantify. There seemed to be little correlation between various macroeconomic factors such as GDP or real household consumption and past retail revenues per passenger. The CAA also noted that the airlines did not appear to have a methodology to quantify this relationship. Recent findings pointing towards strengthening economy as GDP forecasts increase were already accounted for in the CAA's traffic forecasts which directly affected the value of commercial revenues. The CAA also noted that a rise in real earnings in the UK would not necessarily lead to higher spend at Heathrow, where, according to HAL, only about 38% of passengers are British.

Car parking

F14 The SDG report commented that there could be an opportunity for further growth in HAL's car parking revenues. It also identified potential stretch to HAL's FBP forecasts in this category. SDG pointed out that some additional opportunities may arise from a combination of restructuring of short stay parking tariffs along with growth from pre-book parking categories.

F15 The CAA based its proposed licence on SDG's forecasts. The airlines generally supported SDG's car parking revenues forecasts. These forecasts were adjusted by the CAA by removing £7.8 million of revenues attributable to the T5 PRT and £7.3 million of revenues attributable to the CTA PRT.

F16 The CAA maintained its view that in order to be consistent with the decision to not include the PRT in its capex and opex forecasts it is necessary to remove the impact of the PRT on commercial revenues. The CAA understood that the commercial revenues included advertising/sponsorship opportunities within the PRT, and consequently were relatively easy to hypothecate.

Property

F17 SDG assumed an additional £11.5 million for HAL's property revenues during Q6 based on a combination of:

- further income from re-letting of office voids;

- recalculation of guide prices to reflect most property price indices; and
- stretch to the revenues deliverable from the enhanced terminal facilities project (included in HAL's FBP).

F18 The CAA based its proposed licence on SDG's property revenues forecasts. Given the lack of additional information to justify HAL's disagreement with forecasts to re-let 1,700 square feet of currently void space in the next 12 months the CAA maintained that SDG's forecasts adopted by the CAA were reasonable and achievable.

Overall projections

F19 The CAA considered that the SDG study provided a balanced argument on the key issues concerning HAL's commercial revenues forecasts. After making some adjustments to SDG's updated revenue forecasts per passenger (for the removal of the PRT-related revenue), the CAA decided to maintain the methodology of calculating total revenue by uplifting SDG's per passenger forecasts as adjusted with its own passenger traffic forecasts.

F20 The CAA acknowledged that the link between property revenues and traffic forecasts is not as direct as that between traffic and retail and car parking revenues. However, the CAA noted that property revenues consist of elements which are linked to passenger numbers. For example, the CAA considered it reasonable to assume that, as passenger numbers at the airport increase, there will be room to increase hotel revenues and, less visibly, contractors' accommodation revenues as increases in passenger numbers will require increases in contractor numbers.

F21 HAL particularly disagreed with uplifting property revenues with passenger numbers stating that other factors drive revenue. The CAA pointed out that SDG undertook a thorough analysis of these factors and incorporated them in its per passenger forecasts, i.e. the base number for property revenues. The potential increase in the per passenger forecasts identified by SDG was based on a combination of further income from re-letting of office voids, recalculation of guide prices to reflect most property price indices and stretch to the revenues deliverable from the enhanced terminal facilities project. The CAA pointed out that its methodology of uplifting commercial revenues forecasts per passenger with traffic forecasts was consistent with that used previously by the CC in its price control review for Gatwick and Heathrow[117] as well as Stansted[118] in 2007 and the CAA in its Q5 decision.

Representations received

F22 The CAA received three responses which referred to the overall level of commercial revenues. BA, the Heathrow Airline Community and Virgin continued to maintain that the targets set by the CAA were not stretching enough and continued to support the figures as set out in previous submissions. The CAA received no representations in response to its proposed licence commenting specifically on retail, car parking or property revenues forecasts.

CAA's decision

F23 To set the Q6 price control, the CAA must project HAL's commercial revenues over Q6. Since, under the single-till system, HAL's revenues are deducted from its total costs, higher projected commercial revenues are associated with lower airport charges.

F24 The CAA notes the comments raised by airlines in their representations. However, these were very general and did not elaborate on which targets were considered not stretching enough. The CAA maintains its view that SDG took a balanced view between the evidence provided by stakeholders, which included the airlines' submissions, as well as its own expert analysis. The CAA also notes that the airlines' previous submissions have been addressed in the appropriate sections of the CAA's final proposals and proposed licence.

117 CC, Heathrow Airport Ltd and Gatwick Airport Ltd Q5 price control review, 2007, available from: http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/heathrow-and-gatwick-quinquennial-review/final-report-and-appendices-glossary

118 CC, Stansted Airport Ltd Q5 price control review, 2007, available from: http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2008/fulltext/539.pdf

F25 To derive the commercial revenues forecasts, the CAA:

- based the forecast commercial revenues forecasts on SDG per passenger figures for all retail categories and property;
- used SDG's figures for car parking revenues and adjusted them to remove PRT revenue. Apart from the PRT adjustment, all the CAA's forecasts were based on projections by its consultants; and
- uplifted the per passenger forecasts with its own traffic forecast to arrive at the total commercial revenues forecast of £2,917 million over a 5 year control period or £2,790 million over a 4 year 9 months control period.

F26 Given the fact that respondents raised no new issues in their representations, the CAA considers that its forecast of commercial revenues as discussed in the proposed licence and summarised above remains appropriate. Figure F.3 below presents an overall breakdown of the CAA's decision on HAL's commercial revenues.

Figure F.3: CAA's projections for commercial revenues

	2014/15	2015/16	2016/17	2017/18	2018/19
£ per passenger					
Retail	5.15	5.52	5.72	5.74	5.77
Car parking	0.89	0.96	0.98	1.00	1.03
Property	1.44	1.47	1.45	1.44	1.42
Total	7.48	7.95	8.15	8.18	8.22
CAA passenger forecasts (million)	71.9	72.1	72.8	73.6	74.3
£ million					
Retail	370.3	398.0	416.4	422.5	428.7
Car parking	63.9	69.2	71.1	73.5	76.5
Property	103.5	106.0	105.6	106.0	105.5
Total	537.8	573.1	593.1	602.0	610.7

Source: SDG and CAA

F27 The CAA's decision on efficient level of HAL's commercial revenues is presented in figure F.4 below.

Figure F.4: CAA's decision on commercial revenues

£ million	2014/15	2015/16	2016/17	2017/18	2018/19	Total
Commercial revenues	537.8	573.1	593.1	602.0	610.7	2,916.7

Source: CAA

F28 Adjusting the CAA's decision to reflect the four years and nine months duration of the control period means that the CAA's commercial revenues forecast is reduced to £2,790 million (see figure F.5 below).

Figure F.5: Forecast commercial revenue in Q6 - 4 years 9 months basis

£ million	9 mo. 2014	2015	2016	2017	2018	Total
Commercial revenues	413.3	573.9	591.2	601.2	610.7	2,790.2

Source: CAA

APPENDIX G

Other Revenues and Charges

G1 Forecasts for other revenues (ORs) and other regulated charges (ORCs) are an important part of the calculation of the price cap as the forecast contribution made by other revenues is a component of the single-till approach to price regulation.

Other revenues and charges process to date

G2 ORs includes the following activities:

- rail income;
- inter-company income; and
- other commercial income.

G3 ORCs were agreed by CE to include the following activities:

- airside licences;
- check-in desks;
- baggage systems;
- staff car parking;
- services for PRMs;
- electricity;
- fixed electrical ground power (FEGP);
- pre-conditioned air (PCA);
- gas;
- heating;
- water and sewerage;
- waste, recycling and refuse collection;

- staff ID cards;
- taxi feeder park;
- bus and coach facilities;
- apron passes and driver training;
- common IT infrastructure; and
- HAL's contribution to the funding of the Heathrow Airline Operators Committee (AOC).

G4 Previously, other charges (the Specified Activities) have been referred to as non-regulated (aeronautical) charges. For these activities, HAL has provided information under a transparency condition for each year since it was imposed in 1991. In Q5, HAL’s forecasts for these charges were generated according to the following principles:

- full cost recovery for each of the non-regulated charges to airlines during Q5;
- no offsetting or subsidising of such charges from one source with income from non-regulated charges from another source;
- under-recovery of non-regulated charges revenue against prior projections limited to recovery during the respective year or first subsequent year;
- in recognition of the fact that a number of the services provided, being based upon costs of services provided by outside suppliers to HAL, may inevitably change during the course of Q5, HAL would reflect such changes in its charges to airlines; and
- HAL would provide an annual update of estimates for the costs associated with non-regulated charges to the airlines for the Q5 price review period, at least three months prior to the commencement of any revised charges.

G5 Other charges were considered by a CE sub-group, which agreed:

- that the transparency arrangements should continue through Q6;
- that the principles on the basis on which the charges are calculated as set out in Q5 should continue for Q6; and
- the apportionment mechanism for allocated costs.

G6 However, the sub-group did not produce agreed forecasts for revenue from the other charges in Q6. The CAA adopted HAL's forecasts for revenues from ORs and ORCs of £1,926.2 million for its calculation of HAL's allowed revenues in its initial proposals. It revised its forecasts for its final proposals and draft notice to take account of its own opex projections and for some changes in HAL's forecasts since the ABP. In its proposed licence the CAA also proposed to include the Transparency Condition in HAL's licence, with two changes:[119]

- to amend the list of activities to correspond with the list included as ORCs in CE; and
- to remove the requirement to reconcile any differences with the Profit Centre Reports (PCRs) supplied to the CAA as this creates an unnecessary additional burden.

CAA's proposed licence

G7 Based on the forecasts in the ABP and its opex efficiency assumptions, the CAA's proposed licence on the level of ORCs during Q6 is set out as in figure G.1 below.

Figure G.1: Forecast revenue from ORCs in Q6

£000's	2014/15	2015/16	2016/17	2017/18	2018/19
Check-in desks	4,964	5,097	5,073	4,758	4,602
Baggage systems	122,286	110,261	104,990	107,447	108,533
Services for PRMs	17,117	17,228	16,615	14,866	14,704
Staff car parking	14,056	14,306	14,133	13,801	13,607
Staff ID cards	1,131	1,126	1,116	1,103	1,091
FEGP	10,192	9,942	9,450	9,053	8,903
PCA	5,558	5,457	5,256	5,155	4,950
Airside licences	927	921	921	920	919
Waste, recycling and refuse collection	2,793	2,981	2,824	2,832	2,852
Taxi feeder park	1,927	1,906	1,908	1,868	1,866

119 The Transparency Condition is Condition C.2.

£000's	2014/15	2015/16	2016/17	2017/18	2018/19
Heating	969	969	969	969	969
Electricity	36,754	36,416	36,010	35,266	34,367
Gas	151	154	151	152	150
Water and sewerage	4,920	4,596	4,461	4,332	4,192
Facilities for bus and coach operators	2,181	2,189	2,166	2,117	2,049
Common IT infrastructure	363	353	342	331	319
HAL contribution to the funding of the AOC	404	403	402	401	401

Source: HAL ABP adjusted to reflect the CAA's opex efficiency and traffic assumptions.

G8 The total level of ORCs and ORs on a five-year basis is set out in figure G.2 below.

Figure G.2: Forecast revenue from ORCs and ORs in Q6 - 5 year basis

£ millions	2014/15	2015/16	2016/17	2017/18	2018/19	Total
ORCs	227	214	207	205	204	1,058
ORs	140	139	141	144	144	708
Total	367	353	348	349	348	1,766

Source: CAA

G9 Consistent with the decision to change to a duration of four years and nine months, the CAA recalculated the ORCs and ORs forecasts for Q6. These numbers are set out in figure G.3 and figure G.4 below.

Figure G.3: Forecast revenue from ORCs and ORs in Q6 - 4 years 9 months basis

£ millions	9 mo. 2014	2015	2016	2017	2018	Total
ORCs	174	215	206	205	204	1,004
ORs	108	139	141	144	144	675
Total	282	354	346	348	348	1,679

Source: CAA

Figure G.4: Forecast revenue from ORCs in Q6 - 4 years 9 months basis

£000's	9 mo. 2014	2015	2016	2017	2018
Check-in desks	3,815	5,103	5,056	4,752	4,602
Baggage systems	93,974	110,403	104,652	107,308	108,532
Services for PRMs	13,154	17,250	16,561	14,846	14,704
Staff car parking	10,802	14,325	14,088	13,783	13,607
Staff ID cards	869	1,128	1,112	1,102	1,091
FEGP	7,832	9,955	9,420	9,041	8,903
PCA	4,271	5,464	5,238	5,148	4,950
Airside licences	712	923	918	918	919
Waste, recycling and refuse collection	2,146	2,984	2,814	2,828	2,852
Taxi feeder park	1,481	1,909	1,902	1,865	1,865
Heating	745	970	966	968	969
Electricity	28,245	36,463	35,894	35,220	34,366
Gas	116	154	151	151	150
Water and sewerage	3,781	4,602	4,447	4,327	4,192
Facilities for bus and coach operators	1,676	2,191	2,159	2,115	2,049
Common IT infrastructure	279	353	340	331	319
HAL contribution to the funding of the AOC	310	404	402	401	401

Source: HAL ABP adjusted to reflect the CAA's opex efficiency and traffic assumptions

Issues

Scope of ORCs

Issue

G10 Should check-in desks, baggage facilities and PRM charges be retained as ORCs or included in airport charges?

CAA's proposed licence

G11 The CAA noted that all respondents agreed with the importance of retaining separate transparent charges that are compliant with the European legislation on groundhandling and PRMs.[120] The CAA also noted airline satisfaction with the current ORC process by which HAL and airlines work together to reduce direct costs and to encourage the right behaviour in order to minimise charges to airlines. In its response to the CAA's initial proposals, the Heathrow Airline Community mentioned "many success stories that really highlight the benefits of collaboratively working in an open and transparent manner". The CAA wished to maintain that collaborative working which, in its view, did not appear to apply to the price capped charges. The CAA's proposed licence, therefore, was not to move check-in, baggage and PRM charges into the definition of price controlled airport charges.

G12 However, the CAA recognised concerns from the Heathrow Airline Community that whilst the ORC processes have worked well in Q5 they are not as legally binding as the price control. The CAA, therefore, stressed that it would retain the requirement that, where actual revenue diverges from forecast revenue for any of the activities covered by the Transparency Condition, HAL must provide the CAA and the airlines with a detailed explanation for the differences. If the CAA considers that the explanation provided by HAL is not reasonable, it said it might consider taking action under the licence to regulate the charge in question more directly.

Representations received

G13 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

G14 The CAA's decision remains as stated in its proposed licence and summarised above, namely not to move check-in, baggage and PRM charges into the definition of price controlled airport charges. However, where actual revenue diverges from forecast revenue for

[120] Council directive 96/67/EC of 15 October 1996 on access to the groundhandling market at community airports and Regulation 1107/2006 of the European Parliament and Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air.

any of the activities covered by the Transparency Condition, HAL must provide the CAA and the airlines with a detailed explanation for the differences[121]. If the CAA considers that the explanation provided by HAL is not reasonable, it might consider taking action under the licence to regulate the charge in question more directly.

The activities included in the Transparency Condition

Issue

G15 Which activities should be included in the Transparency Condition?

CAA's proposed licence

G16 In the absence of any suggestions to amend the list of activities covered by the Transparency Condition, in its initial and final proposals the CAA did not propose any changes beyond removing check-in desks, baggage systems and hydrant refuelling as these are covered by the European groundhandling directive. However, the CAA noted that the list of activities covered by the Condition had remained unaltered since it was first established in 1991, despite changes in the infrastructure and activities provided by the airport since then. In its proposed licence the CAA saw logic in updating the Condition so that it matched the activities in the Transparency Condition with those covered by the ORC processes. While the CAA agreed that HAL's costs should be transparent, it did not consider that including security and maintenance in the Condition (as suggested by the Heathrow Airline Community) would be the most appropriate way to achieve this as the Condition was designed to explain how specific charges are calculated and these items are remunerated through airport charges rather than through a separate charge.

G17 The CAA had previously proposed that check-in desks, baggage systems and PRM services should not be included in the Transparency Condition, as transparency for them was covered by other legislation. However, given support by both HAL and Heathrow Airline Community for their inclusion, the CAA considered that including them in the Condition would be a way of ensuring that sufficient transparency is given without imposing an additional burden on the airport operator. The CAA, therefore, included these activities in the draft Condition.

121 Condition C2.5.

G18 Taking the views of HAL and the Heathrow Airline Community into account, the CAA decided to amend the Condition so that the activities in the Transparency Condition matched those covered by the ORC processes. A list of the activities in the draft Transparency Condition, plus those in the Condition in Q5 and in the final proposals is given in figure G.5 below.

Figure G.5: Activities to be included in the Transparency Condition

Transparency Condition in Q5	Transparency Condition in final proposals	Transparency Condition in draft Licence (additions to the Q5 Condition in bold)
Check in desks		Check in desks
Baggage systems		Baggage systems
		Services for PRMs
Other desk licences	Other desk licences	
Staff car parking	Staff car parking	Staff car parking
Staff ID cards	Staff ID cards	Staff ID cards
FEGP	FEGP	FEGP
		PCA
Hydrant refuelling		
		Waste, recycling and refuse collection
Airside parking	Airside parking	
		Taxi feeder park
Airside licences	Airside licences	Airside licences
Cable routing	Cable routing	
Maintenance	Maintenance	
Heating and utility services	Heating and utility services	Heating and utility services (including electricity, gas and water and sewerage)
Facilities for bus and coach operators	Facilities for bus and coach operators	Facilities for bus and coach operators
		Common IT infrastructure
		HAL contribution to the funding of the AOC

Representations received

G19 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

G20 The CAA's decision remains as stated in its proposed licence and summarised above, namely to include check-in desks, baggage systems and PRM services in the Transparency Condition.

G21 Taking the views of HAL and the Heathrow Airline Community into account supporting their inclusion, the CAA has decided to amend the Condition so that the activities in the Transparency Condition match those covered by the ORC processes. A list of the activities in the draft Transparency Condition, plus those in the Condition in Q5 and in the final proposals is given in figure G.5 above.

Reconciliation with Profit Centre Reports

Issue

G22 The reconciliation of differences with the PCRs could create an unnecessary regulatory burden.

CAA's proposed licence

G23 The CAA did not include a requirement for the reconciliation of differences with the PCRs. The CAA noted the Heathrow Airline Community's disappointment at this decision. However, it considered that airlines derived sufficient protection from other requirements in the Condition, such as the requirement that HAL "provide a statement of the pricing principles for each item" and "relevant cost information adequate to verify that the charges derive from the application of the principles", as well as the statement that the CAA might take licensing action if it considered that HAL has not provided a reasonable explanation for differences in revenue. To clarify, the CAA was not saying that HAL should not reconcile differences with PCRs, but that the Licence should not mandate the use by HAL of a particular way of accounting for its cost allocation.

Representations received

G24 The CAA received no representations on this issue in response to its proposed licence.

CAA's response

G25 The CAA's decision remains as stated in its proposed licence and summarised above, namely that HAL's licence will not mandate the use of a particular way of accounting for its cost allocation.

Q6 forecasts of ORCs and ORs

Issue

G26 The CAA needs to decide what the forecasts for ORCs and ORs should be in the calculation of the Q6 price control.

CAA's proposed licence

G27 In its final proposals, the CAA accepted HAL's clarifications in response to specific points raised by BA and the Heathrow Airline Community about staff car parking and baggage projects. Consequently, the CAA included HAL's ABP forecasts for ORs and ORCs in its final proposals, with one adjustment. As ORC revenue largely involved cost recovery, the CAA adjusted HAL's ORC revenue forecasts downwards to take account of its proposed opex efficiencies. As the opex forecasts varied according to traffic and the ORCs are largely based on cost recovery, this adjustment also took into account the effects of the CAA's amended traffic forecasts.

G28 The CAA noted the size of changes in forecast ORCs between the FBP and the ABP. Most of these parallel forecast opex efficiencies that had been identified by the CAA and its consultants. The CAA noted that, given there would be a reconciliation between actual and forecast ORCs at the end of a quinquennium, the overall impact on passengers and other users of any forecast error in this area is likely to be small.

G29 Following the publication of the final proposals, the CAA updated its forecasts for HAL's efficient opex. Given that the projections for opex influence the projections for ORCs, the CAA also updated its projections for ORCs for these changes and some other small changes to HAL's forecasts for bus and coach and baggage systems. The overall figures were very similar to those in the final proposals, with forecast ORC revenue falling slightly over five years from £1,062 million over Q6 to £1,058 million.

G30 The CAA noted that airlines were concerned about HAL's staff car parking forecasts and did not understand how HAL had derived its baggage systems forecasts. In monitoring ORC revenue during Q6, the CAA said it would pay particular attention to these two items to ensure that where actual revenue exceeds forecast revenue HAL provides a detailed reasonable explanation for the difference.

Representations received

G31 The CAA received two responses addressing this issue. BA and the Heathrow Airline Community were pleased that the CAA recognised £38 million of efficiencies are attainable within ORCs in Q6. However, BA and the Heathrow Airline Community were concerned with how the CAA would ensure that these targets will have focus from HAL and how these target savings 'included' in the settlement will ultimately see reduced charges for passengers. In an area where there is a protocol that says that all efficient and justified costs follow a pass-through mechanism, the airlines had no assurance that these targets, which were now included in the settlement, would be delivered. The parties could only presume that the CAA intended to fix this target into ORCs throughout Q6. Confirmation of this would be appreciated together with a reference to the appropriate governance structure.

CAA's response

G32 The CAA recognises concerns from the Heathrow airline community that there is no guarantee that the CAA's forecast cost efficiencies will be realised in Q6. However, the CAA is not persuaded that this risk would justify price capping ORCs in Q6. To do so would effectively negate the joint work by HAL and airlines that has led to cost reductions in Q5. The CAA notes that the costs of providing the activities included in ORCs are related to HAL's costs for its other activities, so that the incentives under the price control on airport charges for HAL to reduce its opex are also relevant to opex related to the ORCs (for example wage restraint, changes to its procurement strategy and reductions in central support costs). As stated previously, the CAA will require HAL to justify revenues that are above its forecasts. In doing so, the CAA will not automatically accept that cost levels that are higher than the CAA's forecasts are reasonable.

G33 The CAA's forecast for the level of ORCs and ORs over Q6 remains as stated in its proposed licence and summarised above.

CAA's decision

G34 The CAA's decision on ORC and OR forecasts is set out in figure G.6 below. The breakdown of the ORC forecasts by activity is the same as in figure G.4.

Figure G.6: Forecast revenue from ORCs and ORs in Q6 - 4 years 9 months basis

£ millions	9 mo. 2014	2015	2016	2017	2018	Total
ORCs	174	215	206	205	204	1,004
ORs	108	139	141	144	144	675
Total	282	354	346	348	348	1,679

Source: CAA

APPENDIX H

Q6 Regulatory Asset Base

H1 This appendix:

- summarises the CAA's analysis and its proposed licence with respect to HAL's RAB, and
- concludes with the CAA's final decision for the RAB, which is then incorporated in the CAA's financial modelling to derive its final decision for the price cap.

Deriving the opening RAB for Q6

Q5 capex efficiency

Issue

H2 HAL's capex during Q5 totalled around £5 billion. The CAA must determine the extent to which that expenditure was efficiently incurred in setting the opening Q6 RAB. The CAA's consultants, ASA, conducted a review of HAL's capex during Q5.

CAA's draft notice

H3 The CAA disallowed £30 million from the RAB due to capital inefficiency. The test it used was whether the expenditure would have been incurred by an efficient operator, and for the reasons stated in the ASA report, the CAA considers that this expenditure was inefficiently incurred. The CAA also disallowed £35 million of expenditure on T3IB during Q6 (see Appendix C).

H4 The CAA disagreed with HAL's point that invoking triggers means that HAL has been penalised twice for inefficient expenditure on T3IB. Triggers are designed to encourage HAL to deliver benefits from the capex programme to airlines at the time assumed in the settlement and thereby not to delay capex. However, once the expenditure is incurred, it is included in the RAB. Accordingly, disallowing expenditure from the RAB was logically distinct from invoking capex trigger payments. The CAA did not accept that there was any double-counting involved.

Rolling forward the RAB for Q6

CAA's proposed licence

H5 The CAA's projections from the proposed licence for the Q6 RAB are set out in figure H.1 below.

Figure H.1: CAA’s proposed licence projections for HAL’s RAB for Q6

£ millions	9 mo. 2014	2015	2016	2017	2018	Total
Opening RAB	13,816	13,788	13,812	13,805	13,661	13,816
Net capex	439	669	646	529	534	2,816
Depreciation	(467)	(645)	(653)	(672)	(676)	(3,113)
Closing RAB	13,788	13,812	13,805	13,661	13,519	13,519
Average RAB	13,802	13,800	13,808	13,733	13,590	n/a

Source: CAA

Note: The RAB forecast is based on a calendar year estimate, i.e. a total regulatory period of 4 years and 9 months.

Representations received

H6 The CAA received no representations on this issue in response to its proposed licence.

CAA's decision

H7 The CAA's decision on the level of HAL's RAB over Q6 remains as stated in its proposed licence and summarised in figure H.1 above.

APPENDIX I

WACC, Calculation of a Price Cap and Financeability

I1 This appendix sets out:

- the CAA's decision on HAL's WACC;
- the CAA's analysis and its final decision on HAL's price cap;
- the responses which the CAA received to its proposed licence;
- maximum limits on airport charges for HAL in Q6, derived using the building blocks forecast in the preceding appendices; and
- the extent to which the price cap would enable HAL to finance its projected investment in Q6.

I2 In January 2014, the CAA published a Technical Appendix setting out its analysis of HAL's WACC.[122] The detail is not reproduced in this appendix.

WACC

CAA's proposed licence

I3 Based on the analysis contained in the CAA's Technical Appendix on WACC, the CAA's proposed licence for HAL's WACC was 5.35% on a pre-tax real basis. This equated to a vanilla WACC of 4.66%. The main reason for the change from the final proposals was a reduction in the cost of equity from lower assumed total market returns. This took into account the additional new evidence set out in the CC's provisional findings on Northern Ireland Electricity (NIE). Combined with the forecast RAB derived in Appendix H of this document, the forecast WACC charge for HAL over Q6 is shown in Figure I.1 below.

[122] Estimating the cost of capital: a technical appendix for the economic regulation of Heathrow and Gatwick from April 2014: notices of the proposed licences, available at: http://www.caa.co.uk/docs/33/CAP%201140.pdf

Figure I.1: Allowed return included within the proposed licence for HAL's Q6 price cap

£ million	9 mo. 2014	2015	2016	2017	2018	Total
Mid-year RAB	13,802	13,800	13,808	13,733	13,590	n/a
Allowed return	550	738	739	735	727	3,489

Source: CAA

Representations received

I4 The CAA received four representations on the overall level of HAL's WACC. More detailed responses are considered in the Technical Annex which accompanies this document.

- BA and Virgin responded that the CAA had made a number of errors in its calculation of HAL's WACC and that as a result had significantly overstated the WACC for HAL.
- HAL considered that the CAA's proposed WACC of 5.35% was flawed and did not accurately represent HAL's risk profile.
- The Heathrow Airline Community welcomed the CAA's consideration of the CC's NIE investigation and its subsequent downward revision of the total market returns. However, the Heathrow Airline Community still believed, as it had highlighted in previous submissions, that the CAA had made a number of errors in its calculation of the WACC which had resulted in the CAA setting a WACC that was higher than it should be.

CAA's decision

I5 Based on the analysis contained in the accompanying Technical Annex, the CAA considers that a WACC of 5.35% remains appropriate for HAL during Q6. It has set HAL's price control for Q6 accordingly.

Level of the price cap

CAA's proposed licence

I6 The CAA carefully considered both HAL's view that the final proposals were too tight, and the airlines' view that the final proposals were too loose. The CAA accepted neither criticism, for the following reasons.

- The final proposals would have enabled HAL to cover its efficient costs and earn a reasonable rate of return on its capex over Q6, consistent with UK regulatory practice. The CAA also conducted analysis to make sure that HAL remained financeable over Q6.
- While the CAA had some sympathy for the argument that HAL's prices are significantly higher than most comparable hubs, this reflected to some extent the costs of providing new terminal infrastructure. The lower level of investment during Q6, would, if maintained, eventually lead to lower regulated charges.
- While the CAA acknowledged HAL's WtP analysis had provided useful insights into passengers' preferences, price controls for companies with SMP were based on efficient costs rather than WtP. An unregulated company with SMP would wish to base its prices on passengers' WtP. However, price regulation as developed in the UK had ensured that customers pay no more than the efficient costs of the service provided. The CAA's building block calculation had followed this approach.

I7 The CAA also took account of the Heathrow Unions' view that the settlement would not allow for adequate investment. The level of prices contained in the CAA's final proposals was not designed to allow for increased investment. The capex programme proposed in Q5 was approximately £5 billion, while that in Q6 is around £3 billion. As a result, HAL's RAB had been projected to decline from £13.8 billion in the first year of Q6 to £13.4 billion in the final year.

I8 The CAA did not accept HAL's view that it had not "evidenced" how a real terms price freeze was in passengers' interests. The Executive Summary of the final proposals reconciled the final proposals with the CAA's statutory duties, and in particular its duty to further passengers' interests.

I9 On the basis of the revised building blocks forecast in the preceding appendices, the CAA has derived the yield per passenger for HAL over Q6 as set out in figure I.2 below.

Figure I.2: HAL's Q6 price control in CAA's proposed licence

£ million	**2013/14**	**9 mo. 2014**	**2015**	**2016**	**2017**	**2018**	**Total**
Operating costs		805	1,029	993	955	948	4,731
Depreciation		467	645	653	672	676	3,113
Cost of capital		550	738	739	735	727	3,489
Total revenue requirement		1,822	2,412	2,385	2,362	2,352	11,333
Commercial revenues		(413)	(574)	(591)	(601)	(611)	(2,790)
Other regulated charges (ORCs)		(174)	(215)	(206)	(205)	(204)	(1,004)
Other revenues		(108)	(139)	(141)	(144)	(144)	(675)
Net revenue requirement		**1,127**	**1,485**	**1,447**	**1,412**	**1,393**	**6,863**
Passengers (in millions)		55.4	72.0	72.7	73.4	74.2	347.7
Unprofiled yield per pax (£)	**20.60**	**20.34**	**20.63**	**19.91**	**19.22**	**18.78**	**n/a**
Year-on-year change		-1.3%	1.4%	-3.5%	-3.5%	-2.3%	n/a
Profiled yield per pax (£)	**20.60**	**20.40**	**20.13**	**19.86**	**19.46**	**19.10**	**n/a**
Year-on-year change		-1.0%	-1.3%	-1.4%	-2.0%	-1.8%	n/a

Source: CAA

Note: The CAA's proposed licence was based on calendar year estimates, i.e., a price control period of 4 years 9 months.

I10 In order to convert these real numbers into nominal terms, the CAA had to make a decision on which inflation forecasts to use. Virgin commented on the appropriate inflation index for use in the Q6 regulatory determination. It noted that the Office of National Statistics (ONS)[123] had found that:

- RPI overstates actual inflation; and
- the use of the RPI index inflates the airport charges.

I11 The CAA examined the ONS findings in detail. The ONS concluded that the RPI did not meet international standards, and recommended that a new index be published. This could support the case for making an allowance to reflect an overstatement of the rate of

[123] http://www.ons.gov.uk/ons/rel/mro/news-release/rpirecommendations/rpinewsrelease.html

inflation. However, the CAA noted that the ONS also commented that there is significant value to users in maintaining the continuity of the existing RPI's long time series without major change. Based on the ONS's recommendation and the CAA's own assessment, the CAA decided to continue the use of RPI-based index, and not to adjust the treatment of inflation, for two reasons:

- the CAA sees considerable merit in regulatory consistency. This provides certainty for investors, management, and customers; and
- many of HAL's cost items, such as wages, are calculated using RPI as it is currently comprised.

I12 Accordingly, the CAA's final proposals did not contain an adjustment for any overstatement of RPI. On the CAA's RPI indices in its Q6 final proposals, HAL considered that more accurate inflation forecasts could be obtained by using the actual indices for 2012/13 and the latest forecasts by Oxford Economics Forecasting (OEF). The CAA adopted the following in its RPI series:

- the actual RPI indices (CHAW series) up to October 2013 published by the Office of National Statistics (ONS);
- monthly RPI indices obtained by interpolating the quarterly RPI forecasts from OEF for the period November 2013 to December 2017; and
- annual RPI forecasts from Consensus Forecasts for 2018 (3.8%) and 2019 (3.2%).

I13 Adopting this RPI series resulted in a decrease in maximum allowable yield for the year 2013/14 to £20.60. The CAA profiled the resulting yield per passenger in figure I.2 across the Q6 period. It equated to a price change of RPI-1.5% per year based on calendar year estimates. This outcome compares to HAL's ABP proposal of RPI+4.2% (calendar year estimates) and BA's proposed RPI-9.8% (financial year estimates). The change in the maximum allowable yield in the year 2013/14 to £20.60 led to a change in the value of X (from 4.2% to 4.1%) and profiled yields (from £25.33 to £25.29 in 2018/19) in HAL's proposed ABP and BA's position. The comparison is illustrated in figure I.4. The change in the yield in 2013/14 did not change HAL's proposed revenue in each year of the Q6 regulatory period. The CAA considered this judgement was best calculated to further its general duty.

I14 Under the CAA's final decision of RPI-1.5%, prices were expected to be £19.10 in 2018/19, which was 24.6% lower than HAL's FBP and 53.1% higher than BA's position paper. Furthermore, the price by the end of Q6 would be £1.50 lower than the price in Q5+1.

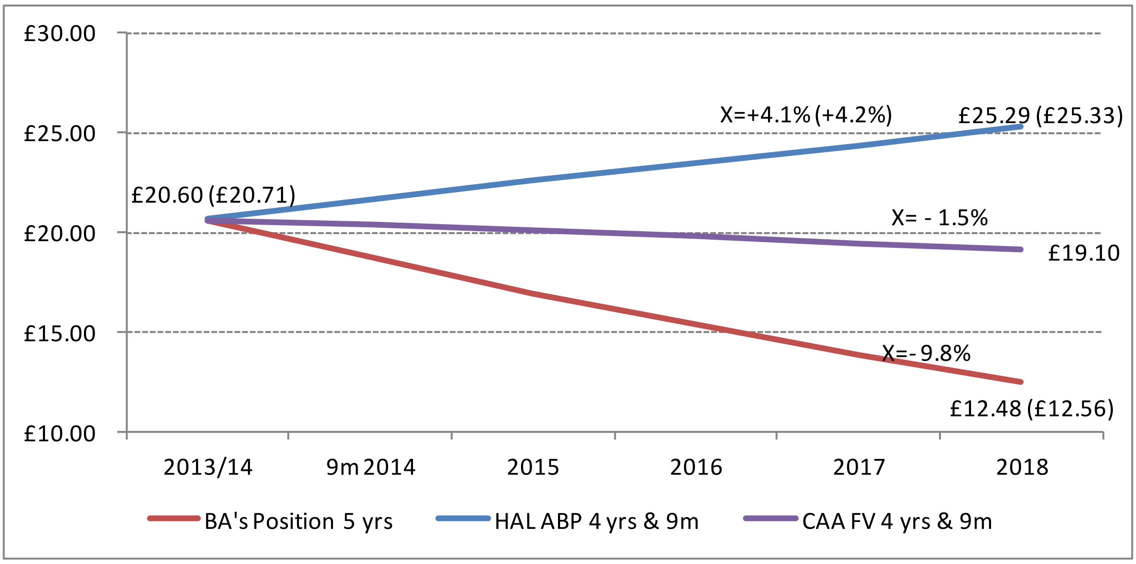
I15 The X in the formula RPI±X was not the same as the year-on-year change in the real price cap for two reasons.

- In simple terms the price cap formulae in previous years had been P2 = P1.(ΔRPI+X+1), where P1 is the price in year 1, P2 is the price in year 2, ΔRPI is the change in the value of the retail prices index and X captures the 'change'. However, this formula, where X was a constant does not give a smooth year-on-year change in real prices. A constant change in real prices was P2 = P1.(1+ΔRPI).(1+Y), where Y is the constant change. It could be seen that, for the same change in prices X and Y are related but not equal.[124] This meant that if the formula P2 = P1.(ΔRPI+X+1) was used and X is to be the same in each year of the quinquennium then the annual year-on-year change in real prices will not necessary equal X and furthermore will be different in each year. However, the average year-on-year change (Y) would approximate to X.
- The RPI used in the price cap formula is the index as at 31 August each year, while the CAA's modelling uses average index for the year ending/ended 31 March each year. So, if forecast inflation based on these slightly different time periods was different, then even using P2 = P1.(1+ΔRPIAUG).(1+Y) would give a price change in real prices (year ending/ended 31 March) which is not equal to Y.

I16 In this document, where an X has been quoted it is the X to be used in a RPI+X formula, and is a constant value over the quinquennium. The profiles (in this case no profiling and a constant X) give the same expected net present value of the revenue requirement (at the regulatory WACC), and the airport operator is not expected to gain or lose from the CAA's choice of profile.

[124] X=Y where ΔRPI = 0, ΔRPI = ∞, or $P_2 = P_1.(\Delta RPI+1)$

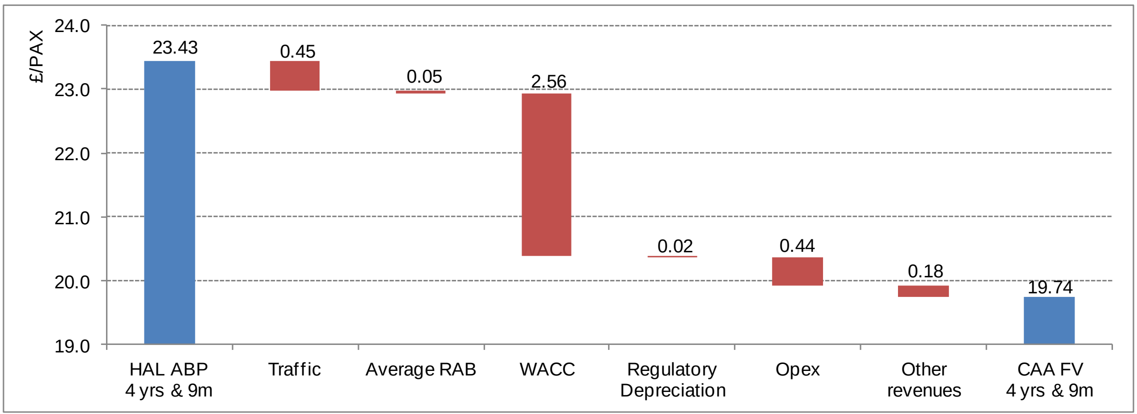
Figure I.3: Smoothed yield per passenger



Source: CAA

I17 Figure I.4 shows how the CAA's proposed licence compares to HAL's ABP by comparing a simple average of the yield in each of the five years.

Figure I.4: Average yield per passenger – HAL compared to CAA



Source: CAA

N.B. The "Other revenues" category in the table above includes commercial revenues, ORCs and other income

I18 Figure I.4 shows that the main differences in the resulting price profiles arise from different assumptions for the WACC and traffic.

Representations received

I19 The CAA received three representations on this issue:

- BA welcomed the CAA's decision to set a per passenger yield of RPI-1.5% compared to the CAA's final proposal of RPI-0%. However, it considered that the CAA had not gone far enough. Given the compelling evidence set before it, the CAA should have set a lower price.
- HAL responded that the CAA’s approach did not reflect the evidence presented and, in aggregate, is not consistent with furthering passengers’ interests.
- Virgin responded that it was helpful that the CAA had reduced the level of HAL's price control over Q6 between the final proposals and the proposed licence.

CAA's response

I20 The CAA's decision remains as stated in its proposed licence and summarised above.

Financeability

Issue

I21 In addition to proposing maximum levels of airport charges, the CAA assessed the financeability of its Q6 proposed licence. The CAA must have regard to the need to secure that licence holders, such as HAL, can finance their provision of airport operation services when it comes to the exercise of the CAA’s functions such as setting price caps. This cannot override the CAA’s primary duty. However, the CAA considered that setting a price control condition that was aligned with an efficient operator being able to finance its business was consistent with, and was not in conflict with, present and future passengers' interests or with the need to promote efficiency and economy.

I22 The CAA therefore considered it appropriate to establish whether the Q6 proposed licence would enable an efficient HAL to finance its operations, including its capex programme, in Q6 on reasonable terms in the banking and capital markets through some combination of debt and equity.

Stakeholders' views

I23 The CAA's financeability analysis in the final proposals suggests that HAL should be able to finance the final proposals and retain a solid investment grade credit rating. HAL commented that the CAA's analysis shows that HAL will have no flexibility to absorb downside shocks due to the level of the post maintenance interest cover ratio (PMICR)[125]. HAL also quoted Fitch's report in June 2013 'should the final determination be even lower [than the Initial Proposals], a downgrade could be justified', and emphasised that the CAA needs to take it into account when assessing the cost of debt.

I24 After the CAA published its final proposals, Standard & Poor's Ratings Services (S&P) released two credit rating reports[126] in October 2013 and affirmed the credit ratings as unchanged, which are A- on the class A notes and BBB on the class B notes. S&P continued to view HAL's business risk profile as 'excellent' and indicated that HAL will perform robustly over the next two years in terms of passenger numbers, regulatory performance, and profitability.

Maintaining a solid investment grade credit rating

I25 A key assumption in determining the appropriate level of gearing in the CAA’s estimation of the WACC is that HAL should be able to obtain and maintain the requirements of a solid (sometimes known as ‘comfortable’) investment grade rating at an assumed gearing level of 60%. A solid investment grade rating is interpreted as in the region of BBB/BBB+ (using S&P’s and Fitch’s terminology) and Baa2/Baa1 (using Moody’s terminology). This is a couple of ‘notches’ above the bottom of investment grade of BBB- or Baa3. The aim of the financeability assessment is for HAL to be in a position to absorb reasonable unanticipated downside risk and still retain an investment grade credit rating.

I26 The CAA has gathered evidence directly from three credit rating agencies: Fitch, Moody's and S&P. In determining a credit rating, an agency typically considers both qualitative evidence (e.g. business risk and corporate governance) and quantitative evidence (e.g. financial risk and credit ratios). In forming a view on the business risk of an airport operator, an agency will consider, among other things:

125 Post-maintenance interest cover ratio (PMICR) = (EBITDA – corporation tax paid – regulatory depreciation)/interest paid.

126 Standard & Poor's Rating Services, *'A-(sf)' rating assigned to Heathrow Funding's £750 million class A-23 fixed rate notes due 2048*, 31 October 2013.

Standard & Poor's Rating Services, *Ratings on all notes in Heathrow Funding deal affirmed; Outlook stable*, 25 October 2013.

a) the competitive position of the airport compared with airports owned by competitors, which in turn may include:

   i) location (catchment area, local transport links); and

   ii) customer airlines and the passenger mix, (hub airlines, alliances, destinations of those airlines);

b) the regulatory regime, and in particular the rigour and predictability of the regime;

c) the diversity of the airports owned or operated by the company;[127] and

d) charges (for example landing, passenger and security charges).

I27 Compared to other airports, Heathrow would appear to have a very strong position from a credit perspective. Heathrow is the world's busiest airport and one of Europe's main hubs for full service airlines. It has a very strong market position owing to excess demand and has a favourable location near London, good transport links, and an attractive catchment area. Heathrow is the hub airport for BA, which is a member of oneworld, one of the world's three global airline alliances. Heathrow has also proven more resilient to economic slowdowns than other major UK airports.

I28 Before 28 February 2013, BAA SP Limited was the holding company that owned Heathrow and Stansted. Heathrow accounted for 92% of BAA SP's earnings before interest, tax, depreciation and amortisation (EBITDA) and Stansted accounted for 8%. BAA had been required to sell Stansted following a ruling originally made by the CC in March 2009. Manchester Airports Group bought Stansted from BAA and the sale was completed on 28 February 2013. Based on discussions with the credit rating agencies, the CAA does not expect the sale of Stansted to have an adverse effect on HAL's credit profile.

I29 The CAA's proposed licence did not propose fundamental changes to the form of regulation for HAL and hence is not expected to weaken HAL's credit strength. However, the ability of a licensing regime to

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127 The CAA considers the airports on a standalone basis, so while this factor might be important for the credit rating agencies, the CAA's analysis ignores other airports in the same corporate group of companies.

revisit the price control if key assumptions, such as traffic, are significantly worse than the forecast, could be a credit strength. One of the key assumptions of the CAA's financeability assessment is that the CAA's price review will not affect HAL's business risk; therefore, the CAA assumes that the regulatory risk of HAL is unchanged from credit rating agencies' current views. However, the CAA recognises that the proposed building blocks of the price cap could affect HAL's financial risk.

I30 In forming a view on the financial risk of a business it is rating, an agency may consider matters such as:

e) historical and forecast financial performance, including:

   i) cashflow and profitability;

   ii) revenue diversity and stability;

   iii) liquidity and financial flexibility;

   iv) capital structure of the company (including gearing);

   v) covenants and security including securitisation; and

f) financial policy and strategy of management, including merger & acquisition activity, dividend policy, etc.

I31 The rating agencies place different emphasis on the various ratios. Some of the agencies also differ in their benchmarks (e.g. the value the ratio needs to be for a certain credit rating).

CAA analysis of credit ratios

I32 The CAA has considered whether the forecast performance of HAL under the CAA's Q6 proposed licence is consistent with a solid investment grade based on assumed gearing of 60% and has considered six ratios used by the various agencies:[128]

- interest cover;[129]
- funds from operations (FFO[130]) interest cover;[131]

128 These ratios and some of the terms used in them do not have agreed definitions.

129 ICR = (EBITDA – tax paid – 2% of total RAB)/interest paid. NB: the rating agencies using this metric assume that 2% of total RAB is required to maintain the regulatory assets.

130 FFO= Net income from continuing operations adding back depreciation, amortisation,

- PMICR;[132]
- adjusted interest cover (adjusted ICR);[133]
- FFO to debt;[134] and
- regulatory asset ratio (RAR[135] or gearing).

I33 The CAA has used a separate section in HAL's financial model, which was created to provide illustrative calculations of the above financial ratios. These are set out in nominal terms[136] as this tends to be the basis used by rating agencies. The CAA has undertaken the analysis on the basis of the notional capital structure consistent with the CAA's cost of capital decisions. This assumes:

- a constant gearing level of 60%, with the level of dividends being the balancing item used to keep gearing at this level;[137]
- a nominal cost of debt of 5.95%;
- index-linked debt making up 35%[138] of the total debt balance; and
- a cost of index-linked debt of 3.05%.[139]

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deferred income taxes and other non-cash items, less any changes to operating components of working capital.

131 FFO/interest expense = FFO (as above) + gross interest paid on debt/gross interest expense on debt.

132 PMICR = (EBITDA – corporation tax paid – regulatory depreciation)/interest paid.

133 Adjusted ICR is FFO + interest expense – regulatory depreciation + profiling adjustment divided by interest expense.

134 FFO/net debt, where FFO is as defined above and net debt = closing RAB x gearing ratio.

135 RAR = debt less cash and authorised Investments/total RAB.

136 In contrast, the rest of the HAL model used for the price control was specified in real terms.

137 The CAA relaxed this assumption and after allowing for a modest dividend yield, gearing was in the range of 56% to 60%.

138 Ofgem assumes 25% of each network company's debt is index-linked. Fitch considers that by the end of 2011 about 65% of BAA (SP)'s net debt exposure was in the form of index-linked debt or hedged using index-linked swaps. In the Q5 price control review, the CAA assumed that the proportion of index-linked debt was 25%. Taking in to account all the available evidence, the CAA takes the conservative point of 35% in the range of 25% to 65%.

Fitch Ratings, '*BAA (SH) plc and BAA Funding Limited – Full ratings report*', 23 August 2012, p. 7.

I34 The CAA has had to make some additional assumptions and adjustments in order to derive the financial ratios in figure I.5. Based on these results, the CAA considers that a notionally financed and efficient HAL would be likely to achieve and maintain a solid investment grade credit rating.

Figure I.5: CAA financial ratios for HAL in Q6

Key financial ratios: benchmarks and calculations	Benchmark			CAA (Q6)		
Key financial ratios	**Moody's (Baa2)**	**Fitch (BBB)**	**Fitch (A-)**	**Average**	**Min**	**Max**
PMICR		1.2x – 1.3x	1.5x – 1.6x	1.5x	1.4x	1.5x
Net debt/EBITDA	n/a	10.0x	7.0x	6.1x	5.8x	6.4x
ICR	1.4x - 1.6x	n/a	n/a	2.4x	2.2x	2.5x
RAR - Net debt/RAB	68% – 75%	n/a	n/a	60%	60%	60%
Other financial ratios						
FFO interest coverage	2.25x – 3.0x	n/a	n/a	2.5x	2.4x	2.6x
FFO to net debt	6-10%	n/a	n/a	15%	14%	16%

Source: CAA analysis

Note: Fitch's rating thresholds can be found on its credit report: 'Fitch affirms Heathrow Funding's bonds & Heathrow Finance's high-yield bonds, 26 June 2013'.

The first year of Q6 has a 9-month-period from 1 April 2014 to 31 December 2014. For the purpose of ratio analysis, the financial ratios should be calculated on an annual basis; therefore, the ratios of the first year of Q6 are calculated based on an extended period from 1 April 2014 to 31 March 2015.

I35 Since the publication of the final proposals, the CAA has held teleconferences with the credit rating agencies. The CAA notes that the final proposals omitted Fitch's net debt to EBITDA ratio. This has been included in the analysis of the CAA's proposed licence. The CAA has evaluated a broad range of credit ratios, in particular the

[139] The cost of index-linked debt of 3.05% is consistent with the top of the range of PwC's recommendation (excluding fees). The nominal cost of debt includes inflation of 2.90%, which is a weighted average of forward-looking inflation assumption and historical actual inflation.

PMICR and Net debt to EBITDA. The net debt to EBITDA ratios are all below 7.0, indicating that HAL is able to generate sufficient earnings to finance its debt. The PMICR ratios are all above Fitch's BBB rating threshold; the average PMICR has reached the benchmark of 'A-', suggesting that the notionally financed airport operator would meet the requirements of a solid investment grade credit rating.

I36 In the case of the price determination for NIE, the Utility Regulator focused on the PMICR with a threshold value of 1.4. The UR's assessment of NIE's PMICR indicated a weak interest cover: just above 1.4 at the beginning of the period and just below 1.4 at the end of the period. CC recognised that NIE's PMICR is a potential source of concern. CC had regard to target values for a broader range of credit ratios and concluded that the CC's determination is consistent with NIE maintaining an investment grade credit rating.

I37 The CAA used HAL’s financial model to calculate the price cap for the Q6 decisions and analyse price cap profiling and financeability. HAL’s model for the Q5 price review, including assumptions, logic, internal consistency and formulae had been externally audited. Since the Q5 price review, HAL has made a number of changes in the functionalities of the model. The purpose of those changes was to make the model more user-friendly and transparent. HAL indicated that the core functionality of the model remains unchanged. The CAA has internally checked the core functionality of the model for the Q6 price review and verified the price cap calculations by using alternative models.

CAA's decision

I38 The CAA's decision is to set a price cap equivalent to a maximum increase in average airport charges of RPI-1.5% per year for a four years and nine months duration, compared to RPI-0.2% in the final proposals for a control of the same duration. This is the same level as contained in its proposed licence. The CAA considers that, given efficiency and economy on its part, HAL should be able to finance its business and retain a solid investment grade credit rating.

APPENDIX J

Service Quality

J1 This appendix sets out the CAA's decisions on the SQRB[140] scheme for HAL for Q6. It details the process to date, the issues that have been raised by stakeholders and the CAA's decision on the licence condition of the SQRB scheme. The licence condition proposed consists of two parts:

- the main text of the licence condition; and
- the Statement of Standards, Rebates and Bonuses (the Statement), which is included as Schedule 1 to the licence.

J2 The licence, including the Statement, is set out in Chapter 3 of this document.

Service quality process to date

J3 The SQR scheme was introduced by the CAA in Q4 to identify the service standards that airlines could expect from HAL in return for the regulated charges they paid. In Q5, the SQR scheme captures five areas of HAL's service quality:

- passenger satisfaction – with metrics taken from HAL's QSM survey and covering flight information, cleanliness, way-finding, and departure lounge seating availability;
- security queue times – with metrics based on queue times for central search, transfer search, staff search and control posts;
- passenger operational elements – with metrics based on the availability of passenger-sensitive equipment (PSE), track transit system, and arrivals reclaim (baggage carousels);

[140] 'Service quality rebate' (SQR) in Q5 is changed to 'service quality rebate and bonuses' (SQRB) in Q6 to reflect the nature of the scheme better.

- airline operational elements – with metrics covering pier service, stands, jetties, FEGP, PCA, and stand entry guidance. Metrics are generally based on the availability of these elements; and
- an ACT.

J4 For each of these elements, the CAA sets a standard for HAL to meet. Many of the standards are subject to financial incentives – rebates for failing to achieve standards and bonuses where certain elements outperform the CAA's targets. For Q5, the total amount of HAL's airport charges at risk per year is around 7% and the total bonus potential is 2.24% of airport charges. Figure J.1 shows the total rebates paid out by HAL and bonuses received by HAL during Q5 as at December 2013.

Figure J.1 Rebates paid and bonuses earned by HAL in Q5

Regulatory year	Total airport charges £m	Rebates		Bonuses	
		£m	% of airport charges	£m	% of airport charges
2008/09	866.16	7.67	0.89%	0.80	0.09%
2009/10	868.84	4.24	0.49%	2.34	0.27%
2010/11	975.29	3.80	0.39%	4.61	0.47%
2011/12	1,098.23	3.92	0.36%	5.72	0.52%
2012/13	1,236.12	12.40	1.00%	8.85	0.72%
Apr – Dec 2013*	1,413.63	9.47	0.67%	8.60	0.61%

* Provisional figures for Apr – Dec 2013
Source: HAL

Discussion of the issues

J5 The CAA considers that the issues concerning service quality regulation for Q6 that it needs to resolve are shown in figure J.2 below.

Figure J.2 Service quality issues discussed in this Appendix

Nature of issue	Issue
Licence condition and the Statement	The licence condition including a self-modification mechanism
	Comments on the Statement
General issues on the SQRB scheme	Rebates
	Bonuses
	Publication of results and record keeping
	Definitions
	Averaging and precision of measurements
	Subjective and objective measures
	Terminal 1
Specific elements in the SQRB scheme	Passenger satisfaction – removal/retention of standards
	Passenger satisfaction – service standards and bonus payment
	Passenger satisfaction – Wi-fi
	Central and transfer search – design of metrics and progress of automation and harmonisation
	Central and transfer search – service standards
	Central and transfer search – definition of queues
	Central and transfer search – fast track lanes
	Central and transfer search – assistance lanes
	Central and transfer search – redirection of passengers
	Staff search
	Control posts
	Passenger operational elements
	Airline operational elements – pier service
	Airline operational elements – others
	Aerodrome congestion term
Issues outside of the SQRB scheme	Performance of third parties
	HAL service charter
	Commercial contracts between HAL and the airlines

Source: CAA

The licence condition including a self-modification mechanism

Issue

J6 The SQRB scheme consists of elements, metrics, service standards, levels of rebates and levels of bonuses. The service quality condition set out in the initial proposals consists of the condition itself which would give effect to a schedule containing the Statement.

J7 The CAA included the self-modification provisions for agreed changes to the SQRB scheme, given its general support. The CAA also revised its proposal to introduce a three-month cycle of self-modification.

CAA's proposed licence

J8 In the proposed licence, the CAA noted BA's comments that the AOC did not always have the mandate of all airlines in all its decisions, but was not convinced that the Service Quality Consultation Forum suggested by BA as an alternative to the AOC for agreeing changes to the SQRB under the self-modification provisions was necessarily the right option. The AOC had the processes and agreements in place to provide a fair representation of the airlines at Heathrow.

J9 The self-modification provision included a safeguard for those airlines that did not agree with the AOC's position in that the CAA must also agree to the change before it issues the notice making the modification. In making decisions, the CAA would take into account any written objections to the proposals from individual airlines. This safeguard should be a sufficient incentive for the AOC to be sure of its mandate before seeking a change under self-modification.

J10 The CAA remained open to the AOC or HAL requesting that the CAA make a change under section 22 of the Act where they could not reach an agreement. In some cases, for example, where the CAA considered the change was in the interests of users but was opposed by HAL and some airlines, the CAA may decide to make a decision under section 22 of the Act instead of the self-modification provisions.

Representations received

J11 The CAA received one representation on this issue. HAL responded that in most instances it will continue to consult and engage with the Terminal AOCA rather than the AOC. Where some form of agreement is required, this would be taken forward locally as per HAL's practice throughout Q5. HAL might be required to engage and consult directly with individual airlines, users and other stakeholders.

CAA’s response

J12 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. If in future HAL or the Heathrow Airline Community considers it necessary to change the Statement, they may come to an agreement and seek a self-modification under Condition D1.6, or request a change under section 22 of the Act.

Comments on the Statement

Issue

J13 This part contains comments raised by stakeholders on the licence condition and the Statement.

CAA's proposed licence

J14 The CAA considered it important to have clearly defined deadband periods in the processing of exclusions. This was to safeguard passengers' interests by ensuring a reasonable level of asset availability during the busier months. In addition, the CAA made the following comments and changes to Schedule 1:

- in paragraphs 2.4(e) and (f), the range of possible locations for QSM surveys were expanded;
- paragraph 2.6 remains the same. The Q6 standards were set based on past performance, therefore there should be no benefits to correct for any possible bias by changing the order of the ratings;
- in paragraph 2.9(c), the question was applicable to arriving passengers;
- in the definition of exclusions and indeed throughout Schedule 1, 'Regulatory Period' and 'Regulatory Year' were clearly defined in Part A of the draft licence;
- paragraph 2.24(c) was amended so that exclusions apply only to the specified terminal(s) or control post(s) at which any evacuation had to occur;

- paragraph 2.35 was amended so that evidence of the contributory causes should be provided;
- in paragraph 3.4(a), the additional payments should be made as soon as practicable and no more than three calendar months after the publication of the Licensee's audited accounts; and
- paragraph 3.4(b) remained the same. The Licensee was not obliged to recover rebate credits and could forgo rebate credits should it choose to.

Representations received

J15 The CAA received one representation on this issue. HAL commented that the absence of a clause to allow alternative deadband periods put the established way of asset maintenance in jeopardy. In Q5, HAL and the airlines had agreed an approach to ensure that the maintenance schedule was well communicated and planned and to avoid maintenance being carried out in peak weeks, e.g. February half-term.

CAA's response

J16 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. It notes that HAL's position is different from that of the Heathrow Airline Community, who welcomed the clarity on the definition of deadbands. It considers that, on balance, having clearly defined deadband periods is in passengers' interests. The CAA considers that, with 3.5 to 4 months falling into the deadband period every year, HAL and the airlines should be able to plan ahead and agree on maintenance works within that period. The CAA takes the view that this increased certainty in the availability of assets is in passengers' interests.

Rebates

Issue

J17 For Q5, HAL was required to pay rebates to the airlines for performance lower than certain SQR standards. The proportion of airport charges payable to the airlines as rebates was around 7% per year in total. HAL and the airlines agreed that this was broadly the right level. However, the airlines' view was based on the removal of bonuses payable to HAL when it attained a certain level of service.

J18 The Q5 rebates are 'knife-edge' rather than 'sliding scale'. To support a focus by HAL on continuous improvement, the CAA sees merit in a sliding scale approach, especially if per passenger metrics are adopted for security queues. However, amongst other factors, this must be balanced with the added complexity this would introduce.

CAA's proposed licence

J19 The proportion of airport charges at risk was kept at 7% for Q6. Rebates would apply to the first six months of service failure in any element in a regulatory year. The amount of rebate for each service failure was thus one-sixth of the maximum annual rebate. On the sliding scale arrangement, the CAA had to balance the benefit of encouraging early remedy to service failures in the latter part of a month and its limited size to offer meaningful incentives. It proposed to maintain the Q5 arrangement on rebate calculation. HAL should focus on delivering quality service at all times to the benefit of passengers.

J20 The CAA considered that, for the SQRB to be effective, the amount of rebates payable should be comparable regardless of the length of the regulatory period. In light of the change of regulatory period to four years and nine months, the CAA amended Schedule 1 to the licence to reflect the changes to the calculation of rebates.

Representations received

J21 The CAA received one representation on this issue. HAL pointed out that no methodology had been included in the proposed licence as to how the rebates should be applied in the first nine months of the regulatory period. It considered that the most appropriate methodology was to apply full rebates in the first four months and 50% in month 5.

CAA’s response

J22 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. In addition, the CAA has clarified the size of rebates payable for service failures in the Statement. During the nine-month regulatory period (April to December 2014), HAL is liable to pay a rebate of two-ninths (2/9) of the maximum percentage for the first four service failures, and a rebate of one-ninth (1/9) of the annual maximum percentage for the fifth service failure. This adjustment is in line with the rebate arrangement in place for Q5.

Bonuses

Issue

J23 Bonuses, in the form of increased airport charges on a sliding scale up to a limit, were introduced by the CAA in Q5 to incentivise ongoing service improvements. Bonuses cannot be earned if one or more terminals do not meet the standard, and are aimed at encouraging a common minimum baseline standard across all terminals. Figure J.3 shows the bonus elements and their respective bonus limits.

Figure J.3 SQR bonus elements in Q5

Bonus element		% of airport charges
Passenger satisfaction elements (QSM)	Departure lounge seating availability	0.36%
	Cleanliness	0.36%
	Way-finding	0.36%
	Flight information	0.36%
Passenger operational elements	PSE (general)	0.40%
	Arrivals reclaim (baggage carousels)	0.40%
Total		2.24%

Source: CAA

CAA's proposed licence

J24 The CAA considered that when performance is exempted from rebates for a period, it should also be discounted from bonus calculations. Recognising the effect of bonuses to the price control equation, the CAA prefers to use a licence modification under section 22 of the Act, to process changes to bonuses. This was stated clearly in Condition D1.6 to D1.9. For Q6, a bonus of 0.36% should be allocated to each QSM element, keeping the maximum bonus at 1.44%. For direct and transfer security, the CAA did not consider it necessary to allocate bonuses to incentivise performance over and above the standard.

Representations received

J25 The CAA has not received any representations on this issue.

CAA's response

J26 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that, for Q6, a bonus of 0.36% will be allocated to each QSM element, keeping the maximum bonus at 1.44%.

Publication of results and record keeping

Issue

J27 The CAA considers that transparency of information provides an important non-financial incentive in the area of airport service quality. For Q5, HAL is required to publish monthly, from April 2008, via a readily accessible part of its website, its performance against the specified service standards and details of the specified rebates paid and payable in respect of each terminal and for each category of service.

CAA's proposed licence

J28 The CAA believed that the enhanced reporting requirement would act as an effective non-financial incentive to deliver quality services. A more concise monthly report with passenger-focused elements in terminals should give passengers a clearer idea of the services they can expect. Accordingly, the CAA considered that the measures set out in the initial proposals and restated in the final proposals remained appropriate. These measures were:

- HAL should publish within the terminal building and on its SQRB page of its website a QSM measure on Wi-fi provision (see the section on 'Passenger satisfaction – Wifi').
- HAL should maintain records of the actual quality of service, rebates and bonuses in such form and detail that the performance can be independently audited against the standards set out in the Statement.
- HAL should report audited rebates paid and audited bonuses earned annually in the regulatory accounts.
- Detailed publication requirements as set out in Section 5 and Table 10a to Table 10e of the Statement.

Representations received

J29 The CAA has not received any representations on this issue.

CAA's response

J30 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that the enhanced publication requirements should contribute to more effective performance monitoring.

Definitions

Issue

J31 There was a specific disagreement on interpretation of the phrase 'time available', which was used in Q5 for a number of asset measures (figure J.4).

Figure J.4 Views on definitions

	HAL	Airlines
Serviceable	Serviceable and available for use, independent of any other element	Working as required in order to be used for the purpose intended
Available	Serviceable and available for use, independent of any other element	Available for use as intended and at the time required
Useable	Serviceable and available for use, independent of any other element	Able to be used for the purpose intended

Source: CAA

J32 The airlines consider that 'time available' should mean that an element is 'available for use as intended and at the time required'. This gives rise to two issues. First, an asset may be available (e.g. a passenger lift), but not useable (e.g. due to building works). During Q5, this has been dealt with under the Exclusions Policy[141] in the SQR. Second, the airlines' interpretation potentially links a number of SQR elements together (e.g. a jetty may be operational, but if the stand is out of use, the jetty is no longer 'available for use' by the airline).

J33 In order to avoid being penalised twice for the failure of a single SQR element, HAL argued that each asset must be considered independently of the others. The elements to which this relates are: PSE, arrivals baggage carousels, stands, jetties, FEGP, stand entry guidance and PCA. The CAA considered that for practical reasons

[141] Paragraph H.14 of Annex H to Economic Regulation of Heathrow and Gatwick Airports 2008-2013, CAA Decision.

the elements of the SQR must be treated separately. Otherwise, the interdependencies will affect the levels of risk attached to failure adding impractical complexity to setting service standards.

CAA's proposed licence

J34 The CAA retained the definition of 'availability' contained in the final proposals, which is 'serviceable and available for use, independent of any other element'. It also retained its proposals for the separate consideration of each asset.

Representations received

J35 The CAA has not received any representations on this issue.

CAA’s response

J36 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. The definition of 'availability' would be 'serviceable and available for use, independent of any other element'. Availability should be considered separately for each asset.

Averaging and precision of measurements

Issue

J37 In Q5, performance metrics used for the QSM and pier service elements of the SQR were based on moving annual averages. The airlines would prefer to move to monthly measures, on the basis that they would be more reflective of the actual service quality experienced by passengers, and that good performance (over and above an acceptable baseline) in one month should not compensate for poor performance (below the baseline) in another.

J38 HAL considered that a change to monthly measures would lead to a change in the variability of the reported measures, and thus would affect the probability of failing to meet targets and associated risk of HAL paying rebates. A move to a monthly measure would affect the sampling error of the estimate due to the reduced sample size. This in turn would make the measure more volatile and would increase the chances of generating rebates or bonuses. Further, the use of a moving annual average removes the impact of seasonality from the measures.

J39 A further measurement issue related to the number of decimal places reported for rebate calculations for QSM elements. The airlines proposed two decimal places; HAL argued for retention of one decimal place.

J40 The precision of the QSM measures for rebates and bonuses needs to be rationalised to address an asymmetry evident in Q5 which arose from rebates being based on measures calculated to one decimal place, but bonuses to two decimal places. This had the effect of creating an effective reduction in the targets set. For example, if the target was 4.0, 3.95 would not generate a rebate, but 4.01 would generate a bonus.

CAA's proposed licence

J41 Changing the annual average measure to two decimal places should apply to the QSM and pier-served stand usage elements of the SQRB. It is unlikely to affect the penalties faced by HAL significantly. Accordingly, the CAA maintains its view as in its final proposals:

- Retaining the moving annual average measure for the QSM and pier service elements of the SQRB.
- the QSM measures were to be reported to two decimal places (both on the website and in the terminal), and also for the purposes of rebate and bonus calculation.

Representations received

J42 The CAA has not received any representations on this issue.

CAA’s response

J43 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. This policy area has been incorporated in the licence.

Subjective and objective measures

Issue

J44 The Q5 SQR scheme comprises subjective and objective measures. QSM scores subjectively measure passengers' perception of seating availability, cleanliness, way-finding and flight information. Other elements include objective measures of availability of assets and security queue times.

J45 On security queue processing, HAL was keen to blend objective and subjective measures in the standard, whereas the airlines were concerned that the subjective measures could be influenced by many things unrelated to HAL's actual performance. The CAA agreed that for security queue rebate purposes, an objective measure is preferable when it is available. At the same time, the CAA acknowledged the importance of passenger satisfaction with security screening.

CAA's proposed licence

J46 In its proposed licence, the CAA retained the Q5 mix of subjective and objective measures in the SQRB for Q6. In addition, the airport operator should publish, on its website and at the terminal, passenger satisfaction with security and Wi-fi provision from the QSM survey, together with other QSM elements. This QSM measure on security would not be subject to financial incentives. The CAA agreed that objective measures in the standard are important in central and transfer search.

Representations received

J47 The CAA has not received any representations on this issue.

CAA’s response

J48 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. This policy area has been incorporated in the licence.

Terminal 1

Issue

J49 This issue was not raised in the CAA's final proposals. HAL proposed that flexibility be applied regarding service quality performance and on applications for exclusions, especially for asset availability elements, where it may not be in the interests of passengers to invest in replacement equipment shortly before closure. HAL requested the CAA to take note of this matter, and supported the development of a process for review.

CAA's proposed licence

J50 The CAA recognised that investments at Heathrow should be cost-effective, and agrees that some flexibility in applying the SQRB standards to Terminal 1 may be required in the few months before its closure. Nevertheless, the CAA also recognised the importance of agreements between various stakeholders on this, especially the time periods and proposed levels of service. It urged HAL to engage with stakeholders by submitting its proposals to the SQWG as soon as practicable, so as to allow ample time for discussion and agreement.

Representations received

J51 The CAA received one representation on this issue. HAL commented that as automated security queue measurement would not be introduced in Terminal 1, Table 1b in the Statement should be modified accordingly.

CAA's response

J52 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position. When there is more certainty about the exceptions to the service quality standards in Terminal 1, HAL is required to allow ample time to agree with the airlines. Any proposed changes to the service quality standards should be processed through the self-modification mechanism or section 22 of the Act. In addition, the CAA has modified the Statement regarding the application of interim security standards in Terminal 1. The CAA has also clarified in the Statement the calculation of QSM scores in Terminal 1 within 12 months of its closure.

Passenger satisfaction – removal/retention of standards

Issue

J53 HAL proposed the removal of two of the four Q5 QSM standards from the SQR – departure lounge seating availability and flight information. The airlines argued for retention of all four of the current standards. Given that during Q5 significant rebates have been paid out due to underperformance of the departure lounge seating availability measure in Terminal 3, and over time performance has not consistently reached the target set across all terminals, the CAA did not consider it to be in passengers' interests to remove this measure from the SQR.

J54 The flight information standard is based on passenger satisfaction levels with the flight information displays within the airport. This measure has performed consistently above the CAA's standard for some time. The CAA considered the views of the CAA's Consumer Panel and the indications from passenger research regarding the importance of information to passengers (especially during times of disruption).[142]

CAA's proposed licence

J55 The CAA considered that the four Q5 QSM standards should be retained in the SQRB for Q6.

Representations received

J56 The CAA has not received any representations on this issue.

CAA's response

J57 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that the four Q5 QSM standards will be retained in the SQRB for Q6.

Passenger satisfaction – service standards and bonus payment

Issue

J58 In Q5, passenger satisfaction has been captured by QSM scores in the SQR. HAL's performance on the QSM elements has improved during Q5. At the start of Q5 it was paying rebates on all four standards (for two months), but earned bonuses in all four areas since January 2013.

CAA's proposed licence

J59 The CAA considered that its proposed bonus limits were set at appropriate levels. The CAA expected to work with HAL and the airlines on re-calibration of the QSM scores should there be changes introduced in the questionnaires. Accordingly, the CAA retained the levels for bonus payments set out in figure J.5.

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[142] SHM, Issues facing passengers during the snow disruption, final report, April 2011, at: http://www.caa.co.uk/docs/5/CAA%20Issues%20facing%20passengers%20during%20the%20snow%20disruption%20FINAL.pdf

Figure J.5: Q5 standards and proposed Q6 standards and bonus limits

QSM Element	Standards		Q6 Rebate	Q6 Bonus		
	Q5	Q6	Annual max	Lower limit	Upper limit	Annual max
Departure lounge seating availability	3.8	3.80	0.36%	4.10	4.50	0.36%
Cleanliness	3.9	4.00	0.36%	4.20	4.50	0.36%
Way-finding	4.0	4.10	0.36%	4.20	4.50	0.36%
Flight information	4.2	4.30	0.36%	4.40	4.70	0.36%

Source: CAA

Representations received

J60 The CAA has not received any representations on this issue.

CAA’s response

J61 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that, for Q6, the SQRB scheme will have standard and bonus levels for the bonus elements as set out in figure J.5.

Passenger satisfaction – Wi-fi

Issue

J62 Following the publication of the initial proposals, the CAA requested views on this issue in its letter to stakeholders dated 31 May 2013. Recognising the importance of Wi-fi to provide information to passengers, the CAA considered ways to incentivise Wi-fi provision at the airport, possibly through a published monthly measure. It invited stakeholders' views on this area after publication of the initial proposals.

CAA's proposed licence

J63 The CAA considered that it was in passengers' interests to include a Wi-fi performance report in the SQRB, and to retain essential passenger service elements such as flight information and departure lounge seating availability in the scheme. The CAA also believed that the QSM question as specified in paragraph 2.12 of the Statement was straightforward and should have limited scope to be influenced.

Representations received

J64 The CAA has not received any representations on this issue.

CAA's response

J65 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that, for Q6, the Wi-fi performance will be included in the SQRB reports as specified in the Statement.

Central and transfer search – design of metrics and progress of automation and harmonisation

Issue

J66 For Q5, the standards for central security and transfer search were based on queue time measurements taken manually once every 15 minutes. Both HAL and the airlines preferred measurement at a per passenger level rather than using a single queue time sample from each 15-minute time period. The CAA supported this approach on the basis that it represented a more consistent commitment to all passengers, whilst simplifying the current standards.

J67 Whilst both parties agreed that ultimately a move towards a fully automated per passenger measure was desirable, such a metric would require an automated measurement system in each terminal. At present, the technology to allow for this has not been installed, nor have costs been included in HAL's FBP for such automation. The CAA recognised that, even using an automated system, measurements made would likely be on a sampled basis rather than for 100% of passengers, albeit a greater sample than one passenger every 15 minutes.

J68 The CAA proposed that an interim metric might be based on queuing times measured once every 15 minutes with results weighted differently by peak and off-peak hours, in order to obtain a sample of passengers more representative of the population by time of day. However, it did not feel that a modification of the current metric would benefit passengers overall because:

- variation in passenger throughput both between terminals and over time across the day, by day and by season means it is not possible to identify consistent peak periods in a simplistic fashion;

- the forthcoming opening of Terminal 2 will alter any patterns in throughput again; and
- the weighting of different quarter hours could generate unintended consequences (whereby peak hour measurements are considered 'more important' than others) and is not a sufficient substitute for the maintenance of a consistent sampling proportion.

CAA's proposed licence

Design of the interim and automated measurement metrics

J69 The CAA maintained the same view as in its final proposals:

- retaining the current Q5 metric is less suitable than an automated system which would allow for per passenger measures to be made robustly and a consistent sampling proportion to be maintained. The CAA encouraged HAL to minimise the period for which reliance will be placed on this interim metric;
- the formula of the automated measurement metric allows the performance in the month to be subdivided into smaller periods and performance weighted by passenger throughput in those periods. A rebate would be triggered when a weighted average of 1% of passengers or more queued for 10 minutes or more. The introduction of an automated queue measurement system was intended to provide a step-change in the level of data available The system implemented should allow for full time-stamping of data. It could help identify any patterns in performance over time and also help review performance at a detailed and granular level.

J70 The CAA noted BA's proposed formulation of the automated measurement metric. It encouraged HAL and the airlines to work together to develop this metric.

Progress of automation and harmonisation

J71 The CAA considered HAL's proposed additional penalty, which is payable if per passenger queue measurement is not implemented in line with the CAA's proposed timetable (i.e. by 1 April 2015), an effective way to incentivise provision of automation of queue time measurement. On top of the additional penalty, the CAA proposed that HAL should publish quarterly progress reports if automation is not implemented after the proposed target months.

J72 The move to the harmonised per passenger standard in Terminal 3 and Terminal 5 will take place after additional search capacity is delivered. The expected time of automation is April 2015 for Terminals 2 and 4, mid-2016 for Terminal 3 and April 2016 for Terminal 5. The amount of this additional penalty would be 1% and 0.5% of airport charges for central and transfer search respectively. This is on the basis that the existing Q5 security wait time standards continue to apply during the interim period.

J73 The CAA noted that barcode and facial recognition are two possible solutions for automation. The licence condition did not specify a particular technology to use. Regardless of the technology, the CAA must be satisfied that the automated measurement metric is a true representation of passengers' experiences. The CAA expected to work together with HAL and the airlines to make sure that the automated solution would be fit for purpose.

Representations received

Design of the interim and automated measurement metrics

J74 The CAA has not received any representations on this issue.

Progress of automation and harmonisation

J75 The CAA received three representations on this issue:

- BA made the following points:
  - It was surprised by HAL's proposal which apparently changed the dates for automation in Terminals 3 and 5 from April 2015 to April 2016/mid-2016 and linking this to capacity projects. This proposal had not been discussed with the airlines in either the facial recognition working queue measurement steering group or the service quality working group. BA did not recognise the proposed dates as being correct and agreed with the Heathrow Airline Community;

  - BA noted the apparent change in proposed programme for automation and harmonisation, particularly that HAL had proposed automation/harmonisation was now to be implemented in 2016. It urged the CAA to reinstate the requirement for fast track lanes to be included in the measurement of the baseline standard in the SQR. Given the CAA's stated intent to move towards commercially negotiated terms for Q7, the second best solution was for the CAA to give confidence to the airlines by encouraging HAL to demonstrate its ability to participate in a fair and commercial manner and offering regulatory oversight to commercial deals when requested, to ensure that HAL acted properly; and
  - Given HAL's repeated objection to the CAA proceeding using new evidence of which HAL claim not to have been unaware, it would seem unfair and contradictory for HAL to have acted in this manner.
- HAL reiterated that its additional penalty proposal made clear that the move to the harmonised per passenger standard in Terminals 3 and 5 was linked to delivery of additional capacity, and urged the CAA to make this explicit in the licence. It also considered that the quarterly progress reports for implementation of per passenger queue measurement should be from 1 April 2015 rather than 30 June 2014.
- The Heathrow Airline Community was surprised to read HAL's proposed timetable for harmonised security search standard. The timetable seemed to have been accepted by the CAA without consultation with the airlines whose passengers would be impacted. It would need to consider this issue and might wish to address as Q5 transitions into Q6. It welcomed the CAA's commitment to work with all stakeholders in the development of a security queue metric and standard.

Further stakeholder meeting and proposal

Progress of automation and harmonisation

J76 The CAA, recognising the implications of HAL's proposed timing of automated queue time measurements and harmonisation of central and transfer search standards, arranged a meeting with stakeholders on 4 February 2014 with a view to obtaining a broad understanding on

HAL's proposal. During the meeting, stakeholders reiterated their respective positions and no agreement was reached. Nevertheless, HAL indicated that the proposed dates for harmonisation are based on the best available information at this stage, and it is committed to an earlier date of harmonisation of standards should capacity be delivered earlier than the current schedule.

J77 Following the meeting, the Heathrow Airline Community put forward its views as follows:

- from the Q6 CE process and all CAA documentation, the airlines had understood that automation and harmonisation were due to be delivered to the CAA deadline of April 2015, and there had not been any indication of (1) a de-linking of automation and harmonisation, (2) HAL’s proposed additional rebate and (3) the link to capital project delivery;
- HAL had not provided any evidence to support its assertion that the 2016 dates were the correct dates for moving to a harmonised standard, or even to apply to the correct aspects of the programmes;
- flow rates, rather than capacity infrastructure limitations, continued to be the key issue preventing HAL from meeting the agreed service levels at the start of Q6;
- the opex and capex allowances for security have been based on delivery of the new enhanced harmonised measure from April 2015, which was agreed by the airline community. HAL would be receiving funds to provide a level of security they have proposed to postpone should harmonisation of standards is delayed;
- the additional capacity that HAL requires to achieve the harmonised standard are a temporary connections facility at Terminal 3 and expansion of the CSA at Terminal 5, and both projects are expected to be completed in December 2014; and
- it would be unfair to reject the airlines’ proposal as coming too late in the process to be carried forward when HAL introduced its own proposal unilaterally at a late stage.

J78 The Heathrow Airline Community proposed to modify HAL’s proposal on additional rebates to incentivise HAL to provide both automation and harmonisation across all terminals in April 2015. For Terminals 2 and 4, HAL’s proposed rebates on automation should be maintained; for Terminal 3 and 5, split HAL’s proposed rebates by half on automation and harmonisation. These rebates are payable every month from April 2015 until the month in which automated security queue measurement or harmonisation of standards is introduced in the relevant terminals. The proposal is outlined in figure J.6.

Figure J.6: The airlines’ proposed timetable for automation of measurements and harmonisation of standards

		1 April 2014	1 April 2015	Annual maximum rebate
Measure-ment	T1	Manual		N/A
	T2, 4	Manual	Automated per passenger measurement	1.00% (C), 0.50% (T)
	T3, 5			0.50% (C), 0.25% (T)
Standard	T1	Q5 standards (until its closure)		N/A
	T2, 4	Q5 standards	Harmonisation	0.00% (C), 0.00% (T)
	T3, 5			0.50% (C), 0.25% (T)

C stand for central search, T stands for transfer search, the annual maximum rebate is expressed as a % of airport charges

Source: Heathrow Airline Community

J79 In addition, the Heathrow Airline Community stated that it does not aim to hold HAL to unreasonable dates. It proposed that the IFS should examine the projects. This should offer benefits to the projects in their own right, but also gives both HAL and airlines the assurance that changes to project delivery dates are necessary and realistic. This would help develop a request for a licence modification to change the dates.

CAA's response

Design of the interim and automated measurement metrics

J80 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that Q5 metrics will be adopted prior to automated per passenger measurement. It encourages HAL and the airlines to work together to develop the automated measurement metric in passengers' interests.

Progress of automation and harmonisation

J81 The CAA notes stakeholders' representations and the airlines' proposal. The airlines' proposal, while having certain desirable aspects, came in too late in the process to be given due consideration by all stakeholders, for the purposes of the licence. Accordingly, the CAA will adopt HAL's proposal as outlined in figure J.7, and has clarified this in the Statement.

Figure J.7: Timetable for automation of measurements and harmonisation of standards

<table>
<tr><th></th><th></th><th>1 April 2014</th><th>1 April 2015</th><th>No later than 1 April 2016</th><th>No later than 1 June 2016</th><th>Annual maximum rebate</th></tr>
<tr><td rowspan="2">Measurement</td><td>T1</td><td colspan="4">Manual</td><td>N/A</td></tr>
<tr><td>T2, 3, 4, 5</td><td>Manual</td><td colspan="3">Automated per passenger measurement</td><td>1.00% (C), 0.50% (T)</td></tr>
<tr><td rowspan="4">Standard</td><td>T1</td><td colspan="4">Q5 standards (until its closure)</td><td>N/A</td></tr>
<tr><td>T2, 4</td><td>Q5 standards</td><td colspan="3">Harmonisation</td><td rowspan="3">0.00% (C), 0.00% (T)</td></tr>
<tr><td>T3</td><td colspan="3">Q5 standards</td><td>Harmonisation</td></tr>
<tr><td>T5</td><td colspan="2">Q5 standards</td><td colspan="2">Harmonisation</td></tr>
</table>

C stand for central search, T stands for transfer search, the annual maximum rebate is expressed as a % of airport charges
Harmonisation of standards in T3 and T5 is subject to delivery of additional search capacity
Source: HAL

J82 HAL should pay additional monthly rebates if automated security queue measurement is not introduced at Terminals 2, 3, 4 and 5 by 1 April 2015. The maximum amount of this additional rebate would be 1.00% and 0.50% of airport charges per year for central and transfer search respectively, and the monthly rebate is one-twelfth (1/12) of the annual maximum. The rebate is payable every month from April 2015 until the month in which automated security queue measurement is introduced in the relevant terminals.

J83 The harmonised standard is 99% of passengers queuing less than 10 minutes. This standard will be introduced in April 2015 for Terminals 2 and 4, June 2016 for Terminal 3 and April 2016 for Terminal 5. For Terminals 3 and 5, the move to the new harmonised standard is subject to the delivery of additional search capacity.

J84 Despite adopting HAL's proposal, the CAA considers that the airlines' proposal has its merits. For example, expert input from IFS should provide valuable information on the details and target delivery dates of capital projects on central and transfer search. The CAA also takes the view that any further delay in implementing the harmonised standard will not be in passengers' interests. It notes HAL's comments about the possibility of expediting harmonisation of central and transfer search standards during the meeting on 4 February 2014.

J85 Therefore, the CAA is open to having the Statement changed through self-modification or under section 22 of the Act to incorporate desirable features in the airlines' proposal into the licence. The CAA urges HAL to provide to the Heathrow Airline Community and the CAA further details on the progress of the delivery of additional search capacity when they become available.

Central and transfer search – service standards

Issue

J86 The Q5 standards for central search and transfer search are set out in figure J.8.

Figure J.8: Central search and transfer search standards for Q5

Element	Standard
Central search	95% of 15-minute queue time measurements less than 5 minutes
	99% of 15-minute queue time measurements less than or equal to 10 minutes
Transfer search	95% of 15-minute queue time measurements less than 10 minutes

Source: CAA

J87 For Q6, the airlines proposed harmonised, but materially higher, standards for central and transfer search than in Q5; moving from a measure of 95% of 15-minute measurements within 5 minutes' queue time, to 95% of passengers within 5 minutes. HAL proposed a harmonised standard of 99% of 15-minute measurements within 10 minutes' queue time, as it considered a queue up to 10 minutes to be satisfactory to the majority of passengers. HAL indicated in its FBP that the proposal was broadly equivalent to 99% of passengers passing through security within 10 minutes, and considered this proposal was opex and capex neutral, as compared with Q5.

J88 The per passenger automated queue measurement metric, whilst moving away from a 5-minute queue time target for central search, increased the Q5 standard in two ways – first by moving to a per passenger measure rather than a 'time slice' measure, and second, by increasing the proportion of transfer passengers targeted from 95% to 99%. It therefore helps focus on the 'tail' of the distribution, increasing the proportion of passengers covered by the metric.

CAA's proposed licence

Standards of the interim metric

J89 The CAA's proposed licence retained the Q5 standards prior to automation of queue time measurement. While this was a lower standard than in the final proposals for transfer passengers (which was raising the transfer search standard to the same level as the Q5 standards of central search), the CAA considered that given HAL's clear commitment to introduce automation (see previous section), this should be beneficial to passengers in the long term.

Standards of the automated measurement metric

J90 The CAA committed to monitoring closely the queuing time performance under the new metrics. It did not rule out the possibility of introducing a 5-minute standard if it discovers that the standard of 99% of passengers queuing for less than 10 minutes is insufficient to safeguard passengers' interests (for example, if passenger satisfaction levels deteriorate or the average queuing time materially lengthens within the 10-minute range).

Representations received

J91 The CAA received two representations on this issue.

- BA made the following comments:
  - it welcomed the CAA's statement of intent that should a fundamental shift towards the 10 minute threshold be observed, that an additional 5 minute metric might still be introduced;
  - it highlighted the importance of a clear statement of intent as to the allocation of breach allowances where multiple direct search or transfer search facilities exist. The current Q5 regime had allowed HAL to make their own determination, which it did not perceive to be fair or in the passenger interest; and

  - this element of the metric was central to the accuracy and intent of actual target set by the CAA works in practice, and therefore requested the CAA to clarify their intent behind the metric.

- The Heathrow Airline Community welcomed the CAA's indication that it will monitor closely the performance of security queues under the new standards and metrics and does not rule out improving the standard if queues lengthen under the new proposed standards.

CAA’s response

J92 The CAA acknowledges stakeholders’ representations. It reiterates its intention to monitor queuing time performance closely upon the implementation of automated queue measurement, and to work with stakeholders on the detailed design of the automated measurement metric, including the allocation of breach allowances. The CAA will look into whether a 5-minute standard should be introduced. In meeting these standards, HAL must not risk meeting its other legal commitments, especially in relation to safety and security.

Central and transfer search – definition of queues

Issue

J93 In Q5, queue length was defined as ‘the time taken for a passenger to move from the back of the security queue to the start of the roller bed at the front of the X-ray machine.’ Stakeholders expressed views on the definition of queues.

CAA's proposed licence

J94 After considering the responses, the CAA believed that its final proposals, stated below, remained appropriate.

- performance standard should apply on security queuing times and not security processes, therefore the finish point of security queues should be set at the start of the roller bed where the security process starts is appropriate. A standard on queuing times without restrictions on the length of the security maze should be sufficient to ensure good passenger experience;

- the Q5 definition of security queues should be retained for Q6 until the introduction of the automated queue measurement technology. Upon introduction of the technology, the definition is to be agreed between HAL, the airlines and the CAA; and
- the unimpeded walk times was an area for further consideration for Q6, and encouraged HAL and the airlines to come to an agreement prior to the start of Q6.

J95 This area would be part of the joint work between the CAA, HAL and the airlines on automated queue measurement. The CAA would want to be satisfied that the current definition of queue is not open to abuse by, for example, extending the roller beds.

Representations received

J96 The CAA has not received any representations on this issue.

CAA's response

J97 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that it expects to work with stakeholders on the definition of queues during Q6.

Central and transfer search – fast track lanes

Issue

J98 At Heathrow, certain fast track security lanes paid for separately by the airlines. Performance of such lanes is covered by commercial agreements and is not subject to service quality regulation.

CAA's proposed licence

J99 The CAA welcomed stakeholders' work to develop commercially-based solutions in delivering services. It recognised the importance of fast track lanes for Heathrow to compete with other hubs. As fast track lanes were aimed at providing enhanced service to premium passengers, their quality of service should be maintained at a high level by the contractual parties. It seemed preferable to let various parties enter into commercial negotiations and agreement for services over and above the baseline standard covered in SQRB, and for them to seek commercially-based solutions to resolve disputes.

J100 The CAA agreed that fast track lanes, if paid for separately by the airlines, should never be used to supplement any capacity shortfall in the general lanes. HAL should make sure that there is sufficient capacity to meet the central and transfer search standards in the SQRB without having to rely on fast track lanes that are covered by separate commercial agreements.

J101 The CAA noted that the proof of concept of the facial recognition queue measurement technology has been completed using data from fast track lanes. There was a potential to implement this technology in fast track lanes, subject to agreement between HAL and the airlines that pay for these lanes.

Representations received

J102 The CAA received two representations on this issue.

- BA welcomed the CAA's view on fast track, but remained extremely concerned that the CAA had accepted that up to 40% of their passengers should no longer fall under the protection of service quality regulation by removing the SQR requirement to fast track lanes. The CAA had offered no recourse should HAL fail to engage in negotiations or to commit to the type of terms found in genuine commercial agreements. It urged the CAA to reinstate the requirement for fast track lanes to be included in the SQR. The second best solution was to encourage HAL to demonstrate their ability to participate in a fair and commercial manner and to offer regulatory oversight to commercial deals.
- HAL considered the statement ‘fast track lanes, if paid for separately by the airlines, should never be used to supplement any capacity shortfall in the general lanes’ showed the CAA's misunderstanding of passenger flows and imposed inappropriate constraint on operational flexibility.

CAA’s response

J103 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that as fast track lanes are covered by commercial agreements outside of SQRB, performance of these lanes should be monitored by contractual parties.

J104 The CAA continues to consider that fast track lanes, if paid for separately by the airlines, should never be used to supplement any capacity shortfall in the general lanes. HAL should make sure that there is sufficient capacity to meet the central and transfer search standards in the SQRB without having to rely on fast track lanes that are covered by separate commercial agreements. Over Q6, it would welcome further information from stakeholders on actual security operations, including passenger flows.

Central and transfer search – assistance lanes

Issue

J105 At Heathrow, there are assistance lanes dedicated to family and passengers with reduced mobility. Performance of such lanes is subject to service quality regulation.

CAA's proposed licence

J106 The CAA considered that the performance of family and assistance lanes should not be excluded in the overall performance measurement. The CAA's previous policy statement had been made in a different context with the agreement by the airport operator concerned and the airlines operating at that airport. This was clearly a different situation from Heathrow, where no such agreement had been envisaged.

Representations received

J107 The CAA received one representation on this issue. HAL considered it extraordinary that at Gatwick the CAA had accepted excluding family lanes from service quality regulation as being in the passengers' interests, but had rejected the same approach at Heathrow on the basis that airline agreement was not envisaged. HAL considered that there is no legal or rational basis for differential treatment, and asked the CAA to address this imbalance.

CAA's response

J108 The CAA acknowledges that the processing time for different groups of passengers can be different, and considers that all passengers should be treated fairly. Therefore, no exclusion should be applied to family or assistance lanes at Heathrow. HAL is required to make sure that these lanes are clearly signposted, and passengers who do not need special assistance will not be diverted to these lanes.

J109 The CAA perceives no inconsistency in its approach on service quality regulation. For Q6, Gatwick Airport follows a commitments-based regulatory framework, which is different from the situation at Heathrow. Also, there is broad-based agreement between the airport operator and the airlines operating at Gatwick on working together in passengers' interests. The CAA considers its approach flexible, targeted and tailored to various circumstances.

Central and transfer search – redirection of passengers

Issue

J110 The CAA encouraged HAL and the airlines to work collaboratively on enhancing the passenger experience, and in particular to agree when redirection of passengers should take place.

CAA's proposed licence

J111 The CAA considered that redirection should happen in exceptional circumstances only, and that detailed regulation in this area could be disproportionate, given the relative rarity of such incidents and the amount of regulation and monitoring which would be required. However, it expected HAL and the airlines to work together during Q6 to minimise the number of redirections, and to minimise the inconvenience to passengers when these were unavoidable.

Representations received

J112 The CAA received one representation on this issue. BA strongly refuted the CAA's claim about the ‘rarity’ of redirection. It pointed out that HAL made logs of all occurrences, which were regularly shared with BA. A recent weekly log showed 60 occasions where redirection from North to South was in place, with redirections regularly lasting 60 to 280 minutes or more. Redirection and holding passengers downstairs occurred even during quiet times. BA believed that it is insufficient for the CAA to decline to take action when evidence showed that these cases were not rare. BA would welcome the CAA to visit Terminal 5 to observe its operational performance.

CAA’s response

J113 After considering the representations, the CAA acknowledges that redirection is undesirable to the passenger experience, and considers that this is an area that requires further work between HAL, BA and the CAA during Q6 in passengers' interests.

Staff search

Issue

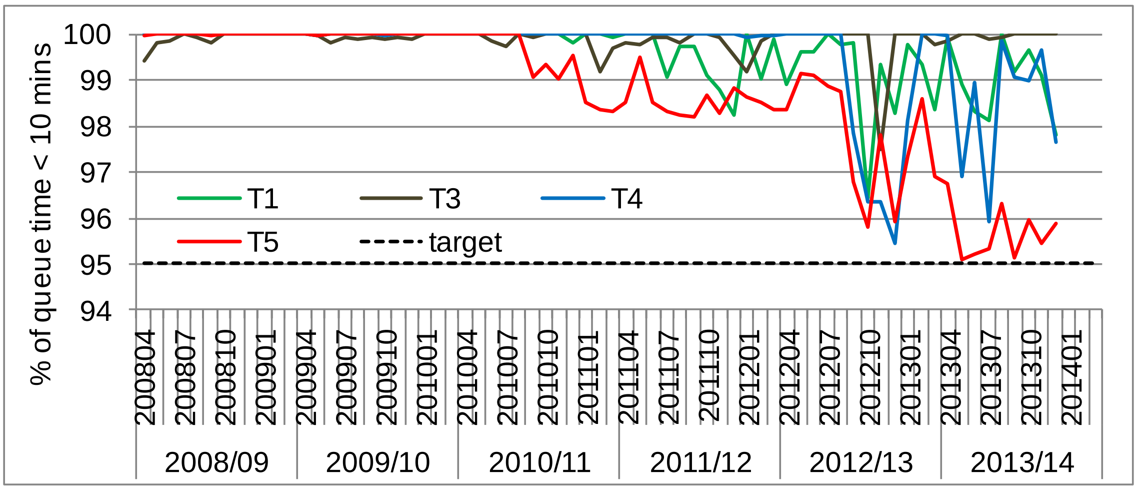
J114 Whilst under the definitions in the Act, staff search might not necessarily fall under 'airport operation services', the CAA considered this process to be essential to on-time performance of airline services, and hence it was in passengers' interests to continue to incentivise the service quality of this element. The airlines proposed an improvement over the Q5 standard, moving from 95% of 15-minute measurements within 10 minutes to 95% of 15-minute measurements within 5 minutes. The airlines considered there should be a restriction that staff search could not be closed during operational hours.

J115 HAL proposed that standards should be maintained as in Q5, but with a bonus for performance over 97% of 15-minute measurements within 10 minutes. The CAA had not seen evidence that there would be an increase in passenger benefit commensurate with the cost of providing a higher level of service in staff search, and thus did not propose to increase the standard or to introduce a bonus in this area. Thus, the CAA proposed to keep the standard as it was in Q5 (with 95% of 15 minute measurements within 10 minutes).

CAA's proposed licence

J116 HAL's staff search performance is shown in figure J.9. It was evident that the percentage of queue time less than 10 minutes had started to drop in 2011/12, in particular in Terminals 4 and 5.

Figure J.9: HAL's staff search performance, April 2008 to December 2013



Source: HAL

J117 While maintaining the Q5 service standard for Q6, the CAA would continue to monitor performance to passengers' benefit. It did not rule out tighter controls if there was evidence that the current standard was not sufficient to ensure smooth airline operation. Staff search performance must never be compromised in favour of central search.

Representations received

J118 The CAA received one representation on this issue. HAL considered the statement ‘staff search performance must never be compromised in favour of central search’ showed the CAA's misunderstanding of passenger flows and imposed inappropriate constraint on operational flexibility.

CAA’s response

J119 After considering stakeholders' representations, the CAA maintains its views as in the proposed licence. Staff search is a crucial service at the airport, and it is in passengers’ interests for HAL to ensure a reasonable staff search performance at all times to passengers' benefit. Over Q6, the CAA would welcome further information from stakeholders on actual security operations, including staff and passenger flows.

Control posts

Issue

J120 The CAA considered control posts to be essential to on-time performance of airline services, and hence it was in passengers' interests to continue to incentivise the service quality of this element. The airlines proposed an improvement in the standard from 95% of vehicles within 15 minutes to 95% of vehicles within 10 minutes. The airlines also felt that the performance of the control posts should be disaggregated to ensure consistent performance.

J121 HAL proposed that the standard remain at that agreed for Q5 of 95% of vehicles within 15 minutes, with the performance averaged across all the control posts. The CAA has not seen evidence that there would be an increase in passenger benefit commensurate with the cost of providing a higher level of service at the control posts, and proposes to keep the standard at 95% of vehicles within 15 minutes.

CAA's proposed licence

J122 The CAA noted that, while some control posts are used as alternatives for each other, some were not substitutable when they were designed for different types of traffic or are far apart from each other, or both. Averaging the performance of non-substitutable control posts potentially masked the actual performance for specific types of traffic and at different locations. The CAA therefore proposed to apply the Q5 standard of 95% of vehicles waiting less than 15 minutes to control post groups individually as in figure J.10. In meeting this target, HAL must not risk meeting its other legal commitments especially in relation to safety and security.

Figure J.10: Proposed control post groups

Group	Control posts
CTA	CP5, CP8
Cargo	CP10, CP10A, CP25A
Eastside	CP14, CP16
Terminal 5	CP18, CP19, CP20
Southside	CP24

Source: CAA

J123 The CAA scrutinised carefully the disadvantages which HAL has advanced for the new control post measures. It considered that it was unlikely that the costs of implementation will be as high as HAL projects. Much of the monitoring could be done by existing staff, and it seemed unlikely that 40 new staff were required solely to attain this metric. However, some additional opex had been allowed for HAL to meet the standard.

J124 The CAA noted the Heathrow Airline Community's point that the control posts are essential to airline performance. However, it considered that individual monitoring of each control post would be unduly burdensome. Accordingly, the CAA considered that its final proposals for grouping the control posts should better reflect users' experience, and the Q6 SQRB would be constituted on this basis.

Representations received

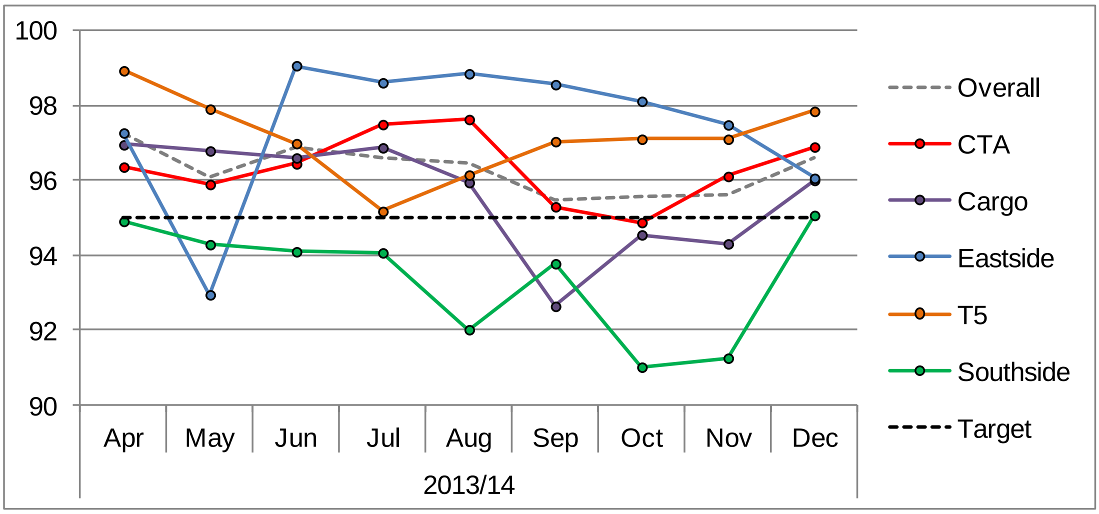
J125 The CAA received two representations on this issue.

- HAL commented that the CAA had not indicated how the rebate was allocated between the various control post groupings, and that the most appropriate, equitable and reasonable approach was to allocate 20% of the potential rebate to each of the five control post groupings, with the rebate made to the entire airline community. They considered that the proposed licence should be amended to reflect this.
- The Heathrow Airlines Community welcomed the improvement of the control post metric through aggregation of the control posts into groups as set out by the CAA. It assumed that the CAA's position is that each control post grouping would have to pass the standard for the overall standard to be met, and urged the CAA to make its policy intention more explicit in the licence.

CAA's response

J126 The CAA, in its assessment of the effect of the proposed grouping, studied control post performance since April 2013 when the standard was raised from 20 minutes to 15 minutes (figure J.11). In December 2013, all the five groups would have met the standard had the grouping been in place at that time.

Figure J.11: Control post performance, April – December 2013



Source: HAL

J127 The CAA considers that with the allowance of additional opex, HAL should be able to meet the standard over Q6 without applying restrictions on the use of control posts. Accordingly, the CAA maintains its view as in its proposed licence, which is to apply the Q5 standard of 95% of vehicles waiting less than 15 minutes to control post groups individually as in figure J.9. In meeting this target, HAL must not risk meeting its other legal commitments especially in relation to safety and security. The CAA has clarified its policy in the Statement accordingly.

J128 The CAA considered carefully HAL's proposal of allocating 20% of the maximum rebate to each of the control post groups, and is sympathetic to HAL's views. As control posts are not linked to particular terminals, the potential rebate would be applying a percentage to airport-wide airport charges, rather than to airport charges of particular terminals. On the amount of rebates payable, the CAA is open to stakeholders seeking a self-modification under Condition D1.6, or a change under section 22 of the Act.

Passenger operational elements

Issue

J129 Passenger operational elements are those which cover HAL's performance on the provision of passenger-facing equipment. They consisted of PSE (general), PSE (priority), arrivals reclaim (baggage carousels) and the track transit system.

CAA's proposed licence

J130 The CAA considered that the new standard on transfer/departure baggage proposed by BA could be in passengers' interests. However, the CAA did not propose to include this standard in the Q6 SQRB at this stage. It believed that further discussion and agreement in the SQWG is required before such a metric can be introduced.

Representations received

J131 The CAA has not received any representation on this issue.

CAA’s response

J132 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that the Q6 SQRB will cover PSE (general), PSE (priority), arrivals reclaim (baggage carousels) and the track transit system.

Airline operational elements – pier service

Issue

J133 HAL proposed that this element should be removed from the SQR and replaced with amended measures for jetty availability and stand availability for pier-served stands only. At the time of the CE report, the airlines were still considering this proposal. The CAA considers that the purpose of the SQRB is to incentivise the provision of essential services across the airport. Thus it does not consider it appropriate to remove the measure of pier-served stand availability from the SQR.

CAA's proposed licence

J134 The CAA considered that the party who had operational control of stand allocation should be responsible for meeting the service quality standard. Therefore, the CAA proposed that the standard for pier service at Terminal 5 be removed for Q6 if an airline or a group of airlines (BA in this case) performs stand allocation at Terminal 5. This standard would remain in place at the other terminals.

J135 The CAA proposed that the rebates attached to this element at Terminal 5 should be reweighted across other airline operational elements, so as to maintain the same overall rebate level and the same proportion of rebates among the passenger satisfaction elements, security, passenger operational elements and airline operational elements across the terminals.

J136 The CAA agreed that HAL should provide sufficient infrastructure at Heathrow to allow for an appropriate level of pier-served stand usage. However, the CAA considered that the service quality standards have a limited effect on incentivising the significant, long-term investments required to increase pier-served stand usage. Delivery of such projects should be discussed in the capital investment workstream.

J137 The CAA proposed to implement HAL's proposed exceptions as shown in figure J.12 and urged HAL to be specific about the period of exception when information becomes available. It encouraged HAL to reach agreement with the airlines that would be affected by its proposals as soon as possible.

Figure J.12: HAL proposed exceptions to the standards for pier-served stand usage over Q6

Terminal	Proposal	Periods of exceptions	Remarks
1 and 2	Combined target, no exceptions (95%)	N/A	Significant changes to Eastern Campus operations
3	83% or no exceptions (95%) (excluding Delta Airlines and BA off-pier short-haul services)	April to June 2014 [until Air Canada relocate from Terminal 3 to Terminal 2]	Consistent with CAA 2013 and 2010 decisions
3	93%	October 2015 to June 2016 [current forecast dates]	Completion of transfer search project and return of stand 323 to operational use

Source: HAL

Representations received

J138 The CAA received two representations on this issue.

- BA reiterated its position that it is highly disappointed and concerned that the CAA had ruled that over 40% of the airport customers are now without any form of metric that incentivises HAL to invest in pier served infrastructure. This would leave these passengers at high risk of a continuous reduction in their experience and puts Terminal 5 at a competitive equivalence disadvantage. It strongly disagreed with the CAA's view that per service numbers were not a factor in HAL and the Heathrow community's investment decisions.
- HAL pointed out that the proposed exceptions to the standard had been discussed with the airline community at the Planning and Regulation Board on 2 December 2013 and no objection had been raised, and that CAA's stated policy was not reflected in the proposed licence.

CAA's response

J139 The CAA maintains the same view as in the proposed licence. Over Q6, the standard will apply in Terminals 1, 2, 3 and 4, with the exceptions to the standards and the time in which these exceptions apply. The CAA has amended the Statement accordingly.

Airline operational elements – others

Issue

J140 Apart from pier-served stand usage, there are a number of other airline operational elements, including stands, jetties, FEGP, PCA and stand entry guidance. During Q5, the performance of PCA was monitored and reported, but it had no financial incentives attached to it. HAL and the airlines agreed that PCA, where it was available should have an SQR attached. There was disagreement over the standard and the metric, as well as whether it should sit within the SQR or as part of a voluntary service charter.

CAA's proposed licence

J141 PCA is only available on the pier-served stands at Terminal 5, and pier 6 at Terminal 3. It is an important service where it is provided. Given this, and after considering the response received, the CAA proposed the inclusion of PCA and the retention of other airline operational elements in the SQRB. The CAA proposed to reconsider the allocation of rebates slightly to reflect the (new) financial incentivisation of PCA in the relevant terminals and maintain the same overall rebate across the terminals.

Representations received

J142 The CAA has not received any representations on this issue.

CAA’s response

J143 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that PCA is to be included in the SQRB, and the rebates have been reweighted accordingly in the Statement.

Aerodrome congestion term

Issue

J144 HAL and the airlines agreed that the ACT was an area for further discussion. The Q5 rebate was a maximum of £100,000 (in 2007/08 prices) per 'event', up to a maximum of 1% of airport charges per year. During Q5, rebates had been generated in only a few months, and the level of rebate was below the 1% cap, as shown in figure J.13.

Figure J.13: ACT rebates in Q5

£	2008/09	2009/10	2010/11	2011/12	2012/13	Apr – Dec 2013
Rebates paid	0	0	194,980	54,435	130,376	0

Source: HAL

CAA's proposed licence

J145 The CAA did not accept the Heathrow Airline Community's views that the level of the rebate for this term was too low. It noted the Heathrow Airline Community's point that lost movements could have a direct and detrimental impact on passengers. Allocating the level of rebates involved the exercise of regulatory judgement. However, the relative rarity of 'events' which trigger the term would seem to indicate that an additional incentive was not required. In addition, the 1% level of the ACT rebate was, for example, almost equal to the combined level of way-finding, cleanliness and flight information rebates combined. This did not seem inappropriately low.

J146 Accordingly, the CAA retained the ACT term in the Q6 SQRB. The CAA would work with HAL and the airlines on escalation and consultation should further clarification be necessary.

Representations received

J147 The CAA received one representation on this issue. HAL commented that the proposed licence would appear to impact, and in some cases override, existing commercial agreements. Inconsistencies between commercial contracts and SQRB include a cap to the rebates in the contracts and the different rebate calculations, which would also give rise to important questions of accountability, as well as the potential for disagreement between stakeholders.

CAA's response

J148 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that the ACT term should be retained in the Q6 SQRB. The CAA would work with HAL and the airlines on escalation and consultation should further clarification be necessary. Over Q6, the CAA would welcome further information on the possible inconsistencies raised by HAL.

Performance of third parties

Issue

J149 HAL's FBP suggested reporting performance (with no targets or financial incentives) of the following:

- UKBF;
- companies providing baggage services; and
- airline punctuality.

J150 The airlines disagreed that HAL should report third party performance and that the SQR should only relate to HAL as the regulated company.

J151 The CAA saw merit, outside of the SQR, in HAL aiding transparency for passengers and other stakeholders by publishing information related to third parties operating at Heathrow. The CAA welcomed this initiative, especially if HAL and relevant third parties can develop it voluntarily in passengers' interests.

CAA's proposed licence

J152 The CAA is keen to encourage a collaborative working environment at Heathrow whereby airlines and other third parties recognise the benefits to passengers of transparent performance information, and work together on delivering them. However, the licence could not lawfully be used to impose obligations on third parties. Therefore, where the provision of information about services provided by third parties is concerned, the CAA considered that this should be addressed through its information duty under section 83 of the Act.

J153 The CAA published its final policy statement on Better Information on 17 January 2014[143]. Alongside this, next steps for further engagement and the development of proposals for specific information areas would be set out.

Representations received

J154 The CAA has not received any representations on this issue.

143 http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=6006

CAA's response

J155 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that it would welcome further collaboration among stakeholders in this area.

HAL service charter

Issue

J156 HAL proposed that only those elements of the SQR related to the passenger perception (i.e. QSM) measures, central and transfer security should remain in the SQR scheme for Q6, with the other elements transferred to a separate, commercially negotiated service charter. The airlines did not believe that HAL's proposal is either viable or appropriate.

CAA's proposed licence

J157 The CAA noted HAL's point that it was likely to be in passengers' interests that more commercial practices be facilitated. However, given HAL's current market power and the prospective strength of its market position over Q6, the CAA believed that minimum service standards were likely to be necessary during Q6. Nevertheless, the CAA encouraged HAL and the airlines to work together in the interests of passengers to consider all aspects of the passenger experience, not merely those identified and regulated within the confines of the SQRB scheme. Where commercial arrangements could help to deliver these benefits, the CAA supported such initiatives.

Representations received

J158 The CAA has not received any representations on this issue.

CAA's response

J159 For the reasons stated in the proposed licence and summarised above, the CAA maintains its position, namely that, for Q6, the proposed SQRB is in the best interests of passengers.

Commercial contracts between HAL and the airlines

Issue

J160 There are services provided at Heathrow which are not part of the service quality regulation. Some airlines have separate agreements with HAL on the provision of certain services, such as fast track security lanes. In general, the airlines did not consider themselves holding sufficient negotiating power to effect acceptable agreement with HAL, and therefore commercial arrangements between the airlines and HAL required significant regulatory oversight through the licence. HAL considered that this would have a material impact on its business.

CAA's proposed licence

J161 The CAA noted stakeholders' views. The CAA encouraged more commercially-oriented solutions to service quality, and considers that HAL and individual airlines should be free to negotiate levels of service outside of the SQRB. Where such agreements were put in place, the contractual parties should be responsible for monitoring the delivery of service. The CAA considered that the proposals on taking over service provision were likely to be disproportionate and administratively burdensome, and were not sufficiently targeted at the specific problems. Accordingly, the CAA would not undertake detailed oversight of individual contracts between HAL and the airlines during Q6.

Representations received

J162 The CAA received one representation on this issue. BA pointed out that the CAA has highlighted the potential for HAL to abuse its SMP when making decision to retain the service quality scheme in Q6, and has acknowledged their ability to use their concurrent powers under the Competition Act 1998 should HAL exert its SMP. It asked the CAA to confirm that it would remedy failure by HAL to engage in, or fulfil commercial agreements either through subsequent additions to the licence or through use of their Competition Powers.

CAA's response

J163 The CAA maintains its views as in the proposed licence. The proposals on taking over service provision were likely to be disproportionate and administratively burdensome, and were not sufficiently targeted at the specific problems. Accordingly, the CAA would not undertake detailed oversight of individual contracts between HAL and the airlines during Q6.

CAA's decision

J164 The CAA's decisions for the SQRB scheme, set out in this chapter, are incorporated in Condition D.1 (and the associated Statement to Condition D.1) in the licence, which is set out in Chapter 3 of this document. The Q6 scheme in the CAA's decision is broadly based on the Q5 scheme, with the following improvements:

- the inclusion of a self-modification provision allowing the airport operator and airlines to make immediate changes to the scheme where both sides agree;
- the removal of bonuses in areas which HAL has consistently outperformed;
- a proposed timeline on automated queue measurement for central and transfer search;
- additional reporting requirements, in particular on passenger satisfaction with Wi-fi and security queuing;
- an improved metric for control post search; and
- a rationalised metric of pier-served stand usage.

APPENDIX K

Rolling forward the Regulatory Asset Base

Purpose and basis of the calculation

K1 This Appendix specifies the detail of the formulae that the CAA intends to use for tracking the regulatory asset base. The purpose of this Appendix is to describe how to calculate the regulatory asset bases (RAB) for Heathrow airport respectively.

K2 The equations set out below are based on the projections made by the CAA in reaching its final decision on the charge conditions for the control period 1 April 2014 to 31 December 2018.

Inflation indices

K3 Each year, each RAB is expressed in actual end year price levels. The modelling used fixed 2011/12 price levels and the figures below must be uplifted to current price terms each year.

Retail Price Index ("RPI") Growth t from 2011/12	=	The RPI (as defined in the Condition) as at 31 December of financial year t divided by the average of the relevant monthly RPI figures for the financial year 2011/12,which (based on the All Items index[144] and based on 13 January 1987 = 100) equals 237.3
Annual RPI Growth t	=	The RPI as at 31 December of financial year t divided by The RPI as at 31 December of financial year t-1
Within Year RPI Growth t	=	The RPI as at 31 December of financial year t divided by

144 All Items (CHAW) index, source: ONS.

the average of the monthly RPI figures for the relevant number of preceding months (nine for the first Regulatory Period, 12 for all subsequent Regulatory Years)

Heathrow Airport RAB

K4 This section describes how the RAB at Heathrow Airport will be rolled forward from one Regulatory Period or year to another.

RAB t	=		(Basic RAB) t
		+	(Cumulative Profiling Adjustment)t

K5 Both the Basic RAB and the Cumulative Profiling Adjustment are to be separately identified. This is to allow full visibility to interested parties.

Closing (Basic RAB) t	=		Opening RAB t
		+	(Total Actual Capex t x Within Year RPI Growth t)[145]
		-	(Proceeds from Disposals t)
		-	(CAA's Assumed Ordinary Depreciation t x RPI Growth from 2011/12)
Opening (Basic RAB) t	=		For the first Regulatory Period (1 April to 31 December 2014, where t=1), this figure will be set according to the following formula: £ 13,815.828 million x RPI Growth from 2011/12
		+	Actual Capex 2013/14 x RPI Growth from 2013/14
		-	£ 1,292.874 million x RPI Growth from 2011/12
		-	(Actual proceeds from Disposals 2013/14) x RPI Growth from 2013/14)
	=		For the remaining Regulatory Years, this figure will be set according to the following formula: Closing RAB t-1 x Annual RPI Growth t
Assumed Ordinary Depreciation t in	=		For each financial year this figure will be fixed at the following values: Regulatory Period 1 (1 April to 31 December 2014): £ 467.255 million

145 Accrued capex with no adjustment for movements in working capital.

2011/12 prices	Regulatory Year 2 (calendar year 2015):	£ 644.921 million
	Regulatory Year 3 (calendar year 2016):	£ 652.732 million
	Regulatory Year 4 (calendar year 2017):	£ 672.132 million
	Regulatory Year 5 (calendar year 2018):	£ 676.246 million

APPENDIX L

List of Abbreviations

Abbreviation	
AA86	Airports Act 1986
ABP	Alternative Business Plan
ACR	Airport Charges Regulations
ACT	Aerodrome congestion term
Adjusted ICR	Adjusted Interest Cover
ANS	Air Navigation Service
AOC	Airline Operators Committee
ASA	Alan Stratford Associates
ASQ	Airport Service Quality
ATMs	Air Transport Movements
BA	British Airways
BCIS	Building Cost Information Service
CAGR	Compound Annual Growth Rate
capex	Capital Expenditure
CAT	Competition Appeals Tribunal
CC	Competition Commission
CE	Constructive Engagement
CEPA	Cambridge Economic Policy Associates
CIP	Capital Investment Plan
CMA	Competition and Markets Authority
COPI	Construction Price Inflation
CSP	Continuity of Service Plan
CTA	Central Terminal Area
DB	Defined Benefit
DC	Defined Contribution
DfT	Department for Transport

Abbreviation	
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
FBP	Full Business Plan
FEGP	Fixed Electrical Ground Power
FFO	Funds From Operations
GAD	Government Actuary Department
GAL	Gatwick Airport Limited
GDP	Gross Domestic Product
GHRs	Groundhandling Regulations
HAFCO	Heathrow Airport Fuel Company
HAL	Heathrow Airport Limited
Heathrow	London Heathrow Airport
HADACAB	Heathrow ATM Demand and Capacity Balancing group
HHOPCO	Heathrow Hydrant Operating Company
IAPA	Independent Airport Parking Association
IATA	International Air Transport Association
IBP	Initial Business Plan
ICR	Interest Cover Ratio
IDS	IDS Thomson Reuters
IFS	Independent Fund Surveyor
LACC	London Airline Consultative Committee
LHR	London Heathrow Airport
MPT	Market Power Test
MPD	Market Power Determination
NATS	NATS Holdings
NERL	NATS (En Route) plc
NPV	Net Present Value
OBR	Office of Budget Responsibility
OEF	Oxford Economic Forecasting
OFT	Office of Fair Trading
ONS	Office for National Statistics
opex	Operating Expenditure

Abbreviation	
ORCs	Other Regulated Charges
ORR	Office of Rail Regulation
ORs	Other Revenues
pax	Passengers
PCA	Pre-Conditioned Air
PCRs	Profit Centre Reports
PMICR	Post-Maintenance Interest Cover Ratio
PRMs	Passengers with Reduced Mobility
PRT	Personal Rapid Transit
PSE	passenger-sensitive equipment
Q5/Q5+1	the fifth Quinquennium
Q6	the sixth Quinquennium
QSM	Quality of Service Monitor
RAB	Regulatory Asset Base
RAR	Regulatory Asset Ratio
RBP	Revised Business Plan
RPI	Retail Price Index
SDG	Steer Davis Gleave
SMP	Substantial Market Power
SQ	Service Quality
SQR	Service Quality Rebate
SQRB	Service Quality Rebate and Bonuses
STAL	Stansted Airport Limited
T3IB	Terminal 3 Integrated Baggage
TDA	Tobacco Display Act
TFP	Total Factor Productivity
the 1982 Act	Civil Aviation Act 1982
the Act	Civil Aviation Act 2012
the airlines	the airlines operating at Heathrow
the Statement	the Statement of Standards, Rebates and Bonuses
TPI	Tender Price Index

Abbreviation	
UKBF	UK Border Force
Virgin	Virgin Atlantic Airways
WACC	Weighted Average Cost of Capital
WDF	World Duty Free
WHO	World Health Organization
WtP	Willingness-to-Pay