

Working paper on the cost of capital: the implications of the RP3 draft performance plan for Heathrow Airport Limited (HAL)

CAP 1762



Published by the Civil Aviation Authority, 2019

Civil Aviation Authority
Aviation House
Gatwick Airport South
West Sussex
RH6 0YR

You can copy and use this text but please ensure you always use the most up to date version and use it in context so as not to be misleading, and credit the CAA.

First published 2019

Enquiries regarding the content of this publication should be addressed to: stewart.carter@caa.co.uk

The latest version of this document is available in electronic format at: www.caa.co.uk

Contents

Contents	3
Chapter 1 :	4
Introduction	4
Chapter 2	6
Implications of our work on RP3 for HAL's H7 price control	6
Chapter 3	8
Work programme for 2019	8
Changes in PwC's updated report	11

CHAPTER 1: Introduction

- 1.1 We have published our consultation on the draft performance plan for Reference Period 3 (RP3)¹, which includes performance targets and incentives for NATS (En Route) Plc – referred to as NERL – and will form the basis of the price controls for NERL’s monopoly air traffic service activities. We will issue our final proposals in relation to these matters later in 2019. This is consistent with our Transport Act 2000 duties to regulate NERL as the UK en route air navigation service provider and our wider duties under the European Union (EU) Single European Sky (SES) performance scheme.
- 1.2 As part of our draft proposals, we have estimated the required cost of capital for NERL based on a weighted average cost of capital (WACC), drawing on a broad range of evidence. Our estimate of NERL’s WACC takes account of both market wide parameters (that have general application) and parameters specific to NERL and its circumstances.
- 1.3 While focused primarily on NERL, this approach builds on the initial work on the cost of capital for Heathrow Airport Limited (HAL) that we published in December 2017, which was supported by a PwC report (completed in November 2017²) that provided initial estimates of the WACC for HAL.
- 1.4 Given the links between these workstreams this working paper sets out the implications for HAL of our work on RP3. In this context we have asked PwC to update its report on HAL’s business as usual or ‘as is’ cost of capital, which excludes the important considerations associated with capacity expansion (as these are dominated by HAL specific factors rather than market wide parameters). We have published the latest report from PwC³ alongside this working paper.
- 1.5 In formulating our draft RP3 performance plan we took into account advice from PwC, whose latest report uses estimates for the market wide elements of our cost of capital calculations that are broadly consistent with our draft performance plan. In updating its earlier November 2017 report, PwC has also responded to a range of issues raised by stakeholders and updated its analysis where it considered it appropriate to do so. Where PwC considers company specific

¹ CAA, Draft UK Reference Period 3 Performance Plan proposals, CAP 1758, February 2019

² PwC, Estimating the cost of capital for H7, November 2017

³ PwC, Estimating the cost of capital for H7 – Response to stakeholder views, February 2019

factors relating to HAL, it is doing so on an 'as is' basis, and not specifically considering the context of expansion.

- 1.6 Chapter 2 of this document explains the implications for the estimates of HAL's 'as is' required cost of capital of changes in the market wide parameters between PwC's 2017 and 2019 reports and our views summarised in our draft RP3 performance plan proposals. Other company specific changes to PwC's estimates of HAL's 'as is' cost of capital from its November 2017 report are summarised in Appendix A to this document.
- 1.7 Chapter 3 provides a summary of our work plans for the remainder of 2019 on developing our approach to estimating HAL's cost of capital to support the next main price control review (H7) of HAL's activities and capacity expansion at Heathrow airport. The work by PwC for us is only one of a number of inputs to the consideration of HAL's cost of capital for the next price control period. We will be commissioning further consultancy work to inform that estimate, and undertaking further work internally. We do not envisage finalising our estimate of HAL's WACC until we complete its next main price control review in 2021.

Responding to this document

- 1.8 We would welcome views from stakeholders on any of the matters raised in this consultation or in the accompanying PwC report.
- 1.9 Please e-mail responses to economicregulation@caa.co.uk by no later than 12th April 2019. We cannot commit to take into account representations received after this date.
- 1.10 We expect to publish the responses we receive on our website as soon as practicable after the period for representations expires. Any material that is regarded as confidential should be clearly marked as such and included in a separate annex. Please note that we have powers and duties with respect to information under section 59 of the Civil Aviation Act 2012, the Transport Act 2000 and the Freedom of Information Act 2000 and it may be necessary to disclose information consistent with these requirements.
- 1.11 If you would like to discuss any aspect of this document, please contact Stewart Carter at stewart.carter@caa.co.uk.

CHAPTER 2**Implications of our work on RP3 for HAL's H7 price control**

- 2.1 Our draft proposals for RP3 include a significant reduction in the allowed WACC between RP2 (the review period covering 2015-2019) and our estimate of the WACC for RP3 (covering 2020-2024). At RP2, we set an allowed pre-tax WACC of 5.86% (in RPI-deflated terms) for NERL. For RP3, our draft proposals include an estimate of a pre-tax WACC of 2.84%.
- 2.2 This reduction in the pre-tax WACC includes reductions in the cost of debt, cost of equity and the uplift for corporation tax. Our estimates for the WACC draw on a range of information including recent and forecast market trends, evidence from advisors and stakeholders, academic research and regulatory precedent.
- 2.3 The WACC takes account of market wide parameters that should be common across different companies and sectors, such as the total market return and risk-free rate. In terms of the key market wide parameters the changes between the estimates set of in the November 2017 PwC report and the draft performance plan are relatively modest. For instance:
- the estimate of the total market return in the November 2017 PwC report was a range of 5.1% to 5.6% and PwC has retained this range in its latest report. In our draft RP3 proposals we have used a somewhat wider range of 5% to 6.25%, but with our mid-point estimate of 5.4% that is towards the middle of the PwC ranges; and
 - the estimate of the risk-free rate in the November 2017 PwC report was -1.4% to -1% with PwC updating this range to -1.5% to -1% in its latest report. This is almost identical to our draft RP3 proposals that use a range of -1.5% to -0.9%.
- 2.4 Where these market wide parameters are concerned we will need to consider further evidence that emerges before taking a final view of HAL's cost of capital for the period starting in 2022. This will include information in response to our consultations on the draft performance plan and this working paper, information received in response to further consultations on the regulatory arrangements for HAL, and wider information including further evidence on market trends and developments that will happen in the coming years.
- 2.5 Other elements of the WACC are company-specific. These include:
- beta values (which measure risks relative to the market);
 - gearing (the relative proportion of debt finance);

- the cost of embedded and new debt (which will depend on the company's credit rating and efficiency against relevant benchmarks); and
- the calculation of the allowance for taxation (which depends on the position of the company).

2.6 PwC has also updated its views on the company specific factors for its estimates of HAL's 'as is' WACC. While this work does not take account of the impact of capacity expansion there are two company specific parameters that it has updated that have a significant impact on its estimate of HAL's business as usual or 'as is' WACC. These are:

- HAL's debt beta; and
- its estimates of the appropriate allowances for HAL's embedded debt.

2.7 These are discussed further in Appendix A and the updated PwC report.

2.8 Nonetheless, looking forward to HAL's next main price control review, all the company specific elements of the cost of capital for HAL will depend heavily on the regulatory framework for capacity expansion. Bearing this in mind, an important focus for work programmes in 2019 will be to carry out further analysis and assessment of the WACC, including how best to establish the appropriate level of returns for HAL in the circumstances of capacity expansion. These work programmes are discussed further in the next chapter.

CHAPTER 3

Work programme for 2019

- 3.1 We expect to carry out a substantial programme of work during 2019 on WACC and related issues such as incentives, risks, and financeability to support the regulatory framework for HAL's H7 price control review and capacity expansion. Our initial plans for this work are summarised in the figure below.

Figure 3.1: Work programme for 2019 on cost of capital

Workstreams in 2019		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
RP3	Consultation on RP3 draft proposals, including allowed cost of capital												
	EU target proposals published for RP3												
	Final proposed Performance Plan submitted to EC												
H7+	Update from PwC on its initial estimate for HAL's 'as is' WACC												
	Working paper on financial resilience												
	Consultation on H7+ regulatory framework, including financeability and incentives												
	Initial work on developing the regulatory framework for assessing incentives, risks and financeability for capacity expansion												
	Work on HAL specific parameters of the WACC, including asset, debt and equity betas for H7+, incorporating findings from risk framework												
	Consultation on H7+ regulatory framework, including update on HAL's H7 WACC, incentives and financeability												
	Publish working paper on debt indexation												
	Expected date of submission of HAL's H7 business plan												

Source: CAA

- 3.2 Towards the end of March 2019, we will consult on the regulatory framework for capacity expansion and HAL's H7 price control. This consultation will update our views on a range of issues including our approach to financeability and how this relates to the work we are undertaking on incentives and the cost of capital.
- 3.3 From April to September 2019, the focus of our work on WACC for HAL's H7 price control and capacity expansion will be on the following three main areas:
- a) The framework to assess the WACC and related factors in the context of capacity expansion:
 - whether additional risks from capacity expansion are best dealt with by a WACC premium, adjustments to beta values or in calibrating the risk and reward package associated with incentives (or some combination of these approaches);
 - what approach we should take to estimating the impact of the regulatory framework and incentive arrangements on any WACC premium/beta values/risk reward package; and
 - the timing of different risks and how these should be reflected in the H7 price control and future regulatory settlements. For example, how we should reflect risks that are likely to be most pronounced after the construction period, such as passenger traffic volume risks.
 - b) How best to estimate HAL's asset, equity and debt betas:
 - what are the appropriate comparators for HAL and how do these account for the impact of the regulatory framework and incentive arrangements. This work will draw on a balance of qualitative and quantitative evidence, having regard to the impact of HAL's regulatory risk, cost incentives, construction and passenger demand;
 - what implications are there for HAL's asset and equity betas based on recent academic and empirical evidence (including from the UKRN and the decisions of Ofgem and other UK regulators); and
 - the appropriate debt beta for HAL based on a review of evidence on HAL's debt beta and the reliability of different sources of evidence.
 - c) Developing proposals for how best to implement debt indexation.
- 3.4 We intend to commission specific research on a number of these issues during 2019 and work with other regulators and stakeholders as appropriate.
- 3.5 In October 2019, we plan to publish an update to our view of the regulatory framework for H7 price control and capacity expansion. This will include an

update on our approach to financeability, incentives and estimating HAL's WACC.

APPENDIX A**Changes in PwC's updated report**

- 3.6 The November 2017 PwC report included a range for HAL's 'vanilla' WACC of 3.0% to 3.9% (in RPI-deflated terms) for its 'as is' scenario, (i.e. before accounting for the impact of capacity expansion).
- 3.7 We received a number of detailed responses from stakeholders on PwC's initial estimates of HAL's cost of capital. In the light of these responses and our work on the RP3 review we asked PwC to update its report and where appropriate take account of the views of respondents. The latest February 2019 PwC report sets out PwC's responses to many of the methodological and technical issues raised around gearing, cost of equity, cost of debt and taxation. Other issues and comments that focus on capacity expansion will be dealt with as part of the work programmes described in chapter 3.
- 3.8 In its February 2019 report, PwC has updated its initial estimate of the 'as is' WACC range for H7 based on recent market developments and changes to its method in response to issues raised by stakeholders. PwC's updated initial range is for a vanilla WACC of 2.5% to 3.4% (in RPI-deflated terms), a reduction of 0.5 percentage points compared with the range in its November 2017 report.
- 3.9 The main changes to PwC's initial range for the 'as is' WACC are summarised below:
- a reduction in embedded debt costs from 1.8% to 1.2% (in RPI-deflated terms), based on an update for more recent market information and a change in method to use a rolling average approach based on stakeholder comments. This reduces PwC's initial WACC range by around 0.3 percentage points;
 - an increase in the debt beta from 0.05 to 0.10, based on a review of current market information on iBoxx indices and HAL's bonds, as well as recent regulatory precedent. This reduces PwC's initial WACC range by around 0.2 percentage points;
 - a reduction in the low-case risk-free rate from -1.4% to -1.5% (in RPI-deflated terms), based on an update for more recent market information and an update to the timing of H7 (now expected to start in 2022). This has only a marginal impact on PwC's WACC range; and
 - an increase in the RPI forecast from 2.8% p.a. to 3.0% p.a. for H7, based on more recent external forecasts. This informs analysis of historical total market returns but does not have an additional impact on PwC's WACC range.