



Advice on the calculation of long run incremental costs

Specification Terms of Reference

Objectives

- A. To review the various approaches taken to the calculation of Long Run Incremental Cost (LRIC)¹ in the aviation sector and other regulated sectors. This should include a detailed analysis of existing LRIC calculations for Gatwick airport.
- B. To estimate LRIC for Gatwick and Stansted.
- C. To identify the advantages and disadvantages of using an LRIC based approach to inform estimates of the competitive price for Gatwick and Stansted, in particular if used as a transition to greater competition in the aviation sector.
- D. To identify the advantages and disadvantages of using an LRIC based approach to set price caps, in particular if used as a transition to greater competition in the aviation sector.

Background

1. The price cap for Q5 for Stansted airport was based on a dual rationale, in that it was based on both the 'building block' analysis that had been carried out by the Competition Commission (CC) and the Civil Aviation Authority's (CAA) assessment that the resulting price control profile was consistent with the development of more effective competition between airports over time². The CAA's thinking in this area was informed by calculations of the long run average

¹ Where LRIC is used in this document it refers to the range of methods used to calculate long run incremental costs including long run average incremental cost, replacement cost and perturbation methods

² Paragraph 19, Economic Regulation of Stansted Airport 2009-2014, CAA Decision, March 2009. This document can be accessed at: <http://www.caa.co.uk/docs/5/ergdocs/20090313StanstedPriceControl.pdf>

incremental costs and the replacement costs of the airport³ that it had undertaken. To inform its thinking in this area the CAA had commissioned work by consultants Europe Economics⁴. The CC had however expressed concerns over the appropriateness of any LRAIC calculations for the purpose of setting the Stansted price control⁵.

2. The CAA is now undertaking two parallel streams of work:
 - a. market power assessments of Heathrow, Gatwick and Stansted, and
 - b. the consideration of alternative forms of regulation to inform the Q6 price control.

3. The guidelines for the market power assessments state in paragraph 3.17⁶:

“When assessing the competitive price level, the CAA considers it important to take account of the effects of the capital-intensive nature of airports and of the lumpiness’ of capacity increments in prices. In principle, short-run prices in a well-functioning airport market would be expected to fluctuate around a long-term average level, which reflects the efficient cost expansion and/or entry in the market. This potential for prices to vary of time may limit the ability to determine the competitive price level with a significant degree of accuracy. However, the CAA expects to analyse this long-term average price level using measures of long-run, forward-looking, cost such as depreciated replacement or incremental cost. These costs measures may differ significantly from the level of average cost implied by statutory or regulatory accounts.”

4. The parallel work on alternative forms of regulation (including stakeholder’s responses to the CAA’s May 2012 Q6 Policy Update) has however, identified a number of concerns with using LRAIC based approaches as a basis for future regulation⁷. In particular, the CAA’s May 2012 Q6 Policy Update stated that:

³ See for example chapter 5, Stansted Airport: CAA price control proposals, December 2008. This document can be accessed at: <http://www.caa.co.uk/docs/5/ergdocs/081209StanstedProposals.pdf>

⁴ Advice to the CAA on the Calculation of Incremental Costs, Europe Economics. This document can be accessed at: http://www.caa.co.uk/docs/5/ergdocs/sp4_europe_economics_lric.pdf

⁵ See chapter 4 of Stansted airport limited: Q5 price control review, Competition Commission, October 2008. This document can be accessed at: http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2008/fulltext/539.pdf

⁶ See also paragraphs 3.18 and 3.19 of <http://www.caa.co.uk/docs/5/Final%20Competition%20Assessment%20Guidelines%20-%20FINAL.pdf>

⁷ See paragraph 5.18 and 5.19 of Q6 policy update, CAA, May 2012. This document can be accessed at: <http://www.caa.co.uk/docs/5/Q6PolicyUpdate.pdf>

“As LRAIC is a long-term forward-looking measure there is a risk of over and under recovery in a particular period. This means LRAIC may not be well-suited as a benchmark to indicate whether a particular price is proximate to the “competitive” price at any given time. Charging a flat LRAIC price over time also raises similar issues as any other “smoothing” effect, which is that existing passengers may resist being asked to pay for future improvements where they may not benefit. A LRAIC approach is also data intensive (like a RAB approach) and requires regulatory judgement to define the increment (although this might be less for a replacement cost approach). This can lead to significant uncertainty over future price profiles and it may be possible to generate large price increases or decreases depending on the assumptions used, limiting the protection to users and introducing variability owing to regulatory judgements. It has also been argued that it is not an effective proxy for competitive airport prices where investments are very ‘lumpy’ for example it may not reflect the capacity cycle which, in a competitive market, could produce significant price volatility.”

5. The CAA concluded in the Q6 policy update that an LRIC approach had significant practical difficulties in application to the airports to be relied on as the sole method to calculate robust levels for price caps. However the CAA recognised that, in principle, it could offer a step towards lighter-touch regulation for some airports, such as Gatwick and Stansted, but concerns still remained.
6. As part of its evidence on the market power assessment, Gatwick Airport commissioned consultants FTI to carry out LRAIC calculations under three scenarios for Gatwick Airport⁸. Stansted airport has not provided calculations of LRAIC as part of its evidence on the market power assessments.

Detailed scope

7. Review experience of LRIC calculations in the aviation sector and other regulated sectors

This work should include the following:

- A review of the latest thinking on the calculation of LRIC in other regulated sectors. This should cover telecommunications and the gas and electricity market and should cover the types of approaches used, key factors in the calculations such as duration and the size of the increment, and the advantages and disadvantages of the approaches used.
- A detailed analysis of the LRAIC calculations carried out by FTI for Gatwick airport, including underlying assumptions and theoretical underpinning.

⁸ LRAIC for Gatwick Airport: Presentation to CAA workshop, FTI consulting, December 2011. This document can be accessed at: <http://www.caa.co.uk/docs/5/LRAIC%20for%20Gatwick%20-%20response%207%20Dec%202011.pdf>

- A review of the work undertaken by the CAA/CC at the time of the last periodic review for Stansted.
- In both reviews the contractor should assess the sensitivity of the calculations to changes in key assumptions.
- The output of this work should be a critique of previous attempts to calculate LRIC.

8. Estimate LRIC for Gatwick and Stansted airports.

- Based on the review carried out above and using the approach deemed most appropriate the contractor should calculate LRIC for Gatwick and Stansted airports. More than one approach can be used to calculate LRIC where the contractor deems this appropriate.
- An assessment of the sensitivity of the LRIC estimates to changes in key assumptions.

9. To identify the advantages and disadvantages of using an LRIC based approach to inform estimates of the competitive price for Gatwick and Stansted, and to set price caps, in particular if used as a transition to greater competition in the aviation sector.

Based on the work undertaken above and expert knowledge of the advantages and disadvantages of alternative approaches, the contractor should:

- Identify the advantages and disadvantages of using an LRIC based approach to assess the competitive price level at Gatwick and Stansted airports.
- Identify the advantages and disadvantages of using an LRIC based approach to set price caps, in particular as a transition to a more competitive airports sector.
- Provide conclusions on both the above points.