

CAA comments on the CC's LRAIC working paper and suggested way forward

1. Introduction

- 1.1 Regulators in the UK and internationally have been adopting measures of forward-looking cost, as a way of establishing regulatory controls on prices that minimise adverse effects on competition and that provide improved investment incentives.
- 1.2 The CAA considers that the circumstances at Stansted are such that consideration of forward-looking measures of cost – such as LRAIC – should form part of the setting of price caps. There are, however, arguments that suggest that this might take the form of transitional arrangements. Such an approach, would address the concerns raised by the CC in respect of the required accuracy of any forward-looking measure of cost and the timescales required to reach an appropriate estimate.
- 1.3 This paper is structured in two further sections: the first provides comments on the arguments presented in the CC's paper; and the second discusses how forward-looking cost measures could form part of a pragmatic price control approach.

2. Comments on the CC's paper

- 2.1 The CC states its agreement with a number of the CAA's previous arguments, not least that:

“Setting a price cap which is unrelated to actual investment undertaken and/or proposed by the airport operator and instead attempts to mimic prices that would prevail in a competitive market, may help to align investment incentives.”

“Correctly applied, LRAIC-based models would be expected to result in prices closer to the long-run competitive level...”

- 2.2 Further, the CAA observes that an eminent aviation economist has proposed that LRAIC is a practical benchmark for airport pricing:

“... partly because of the infeasibility of permitting prices to fluctuate widely along the SRMC function ... **the practically achievable benchmark for efficient pricing is more likely to be a type of average long-run incremental cost**, computed for a large, expected incremental block of sales, instead of SRMC, estimated for a single additional sale. This long-run incremental cost ... would be based on (1) the average incremental variable costs of those added sales and (2) estimated additional capital costs per unit, for the additional capacity that will have to be constructed if sales at that price are expected to continue over time or to grow. Both of these components would be estimated as averages over some period of years extending into the future.”¹

¹ Kahn, 1998

- 2.3 It is also notable that Kahn casts doubt on the suitability of a model of pricing based on estimated short-run costs when assessing airport pricing.
- 2.4 It appears, therefore, that the CC's current view that price caps should not be set at, or using estimates of, LRAIC is entirely based on practical considerations.
- 2.5 This, in itself, suggests that whatever the price control recommendations the CC comes to should still be consistent with the principles of long-run incremental cost pricing. In practice, this suggests that the CC should:
- consider whether there can be transitional arrangements – much as Ofcom applied to BT's monopoly businesses – to move the price cap, over time, from historical/RAB-based price caps towards forward-looking, long-run costs;
 - place *some* weight on the existing (and any emerging) evidence on long-run incremental costs when forming its price control recommendations, and not to base the price cap completely on an assessment of the RAB-based, building-block price cap calculation (which includes certain backward-looking costs, which are affected by historical accounting and regulatory policies).
- 2.6 The CC cites six practical reasons why LRAIC-based options for the price cap should not be pursued. These are discussed in turn below.

Competitive constraints

- 2.7 The CAA has provided separate comments on the CC's competition analysis, that it considers should prompt a significant re-evaluation of the CC's current position. These comments are not repeated or summarised here.
- 2.8 In the LRAIC paper, the CC argues that prices are unlikely to "fluctuate below the price cap". This appears to be based on the CC's view on market power and its assessment that average willingness-to-pay is above the current price level. However, the CAA's current understanding is that the CC's estimates of willingness-to-pay are somewhat below the estimates of LRAIC. On the basis of these numbers, prices would, indeed, fluctuate below LRAIC. It is also worth noting that the airport has a long history of charging below the cap and is currently offering a range of discounts to airlines for certain services.
- 2.9 Further, the CC uses average willingness-to-pay as a proxy for marginal willingness-to-pay. Given that the former will be a systematic over-estimate of the latter, this implies that prices would actually fluctuate some way below LRAIC
- 2.10 The CC also considers that it would be inappropriate to set the price cap as LRAIC plus a mark-up for measurement errors, due to the lack of competitive constraint. Based on the CC's view of competition, the use of a mark-up might be viewed as inappropriate. As previously noted, the CAA does not agree with the conclusions set out in the CC's competition paper, but also notes that the lack of competitive constraints do not, in principle, provide a rationale for abandoning the principle of long-run incremental costs when determining the level of the price cap.

- 2.11 Indeed, the implication of the CC's view that "LRAIC-based models would be expected to result in prices closer to the long-run competitive level" is that there is an argument for setting a price cap – even for a textbook monopolist – to reflect LRAIC, as to do otherwise risks artificially keeping prices below the competitive level over the long-term.
- 2.12 In this respect the regulatory approach adopted by Ofcom provides a useful example. The principle of LRAIC-based charging is used to set the price cap for BT's monopoly networks and not just for currently competitive parts of the industry.
- 2.13 Indeed, the CC appears to have misunderstood Ofcom's approach to price cap regulation and its use of LRAIC. In particular, the CC wrongly summarises the use of LRAIC by Ofcom when it states that:
- “... in contrast to telecoms, where LRAIC-based prices only apply to mobile termination charges...” [*emphasis added*]
- 2.14 This is not an accurate summary of Ofcom's approach. Ofcom uses Current Cost Accounting (CCA) as a proxy for LRAIC-based prices and applies this approach across the regulated parts of the telecommunications industry. In fact, Ofcom regulates BT's monopoly local-loop business (arguably the least competitive part of that industry) in a way that leads to a transition to a LRAIC-based price cap (as proxied by CCA).
- 2.15 The CAA urges the CC to check its understanding with Ofcom as a matter of urgency.
- 2.16 The use of LRAIC-based pricing in telecommunications is discussed in more detail in Supporting Paper IV to the CAA's reference to the CC.
- 2.17 Further, whilst in genuine natural-monopoly industries the adverse consequences (on competition, new entry and investment) of setting price caps below long-run incremental costs are likely to be limited, the potential adverse consequences in airports markets include the introduction of a systematic distortion to investment and the prevention of efficient new entry and expansion over the long-term.

Establishing an efficient benchmark

- 2.18 The CC wrongly concludes that an estimate of LRAIC for the purposes of setting a price cap needs to “establish the efficient benchmark for the required capacity expansion at Stansted” and that this must be done with a high degree of accuracy.
- 2.19 Rather, a suitable estimate of LRAIC could be based on expert consultancy advice – which would draw upon relevant evidence from airports in the UK and overseas – thereby providing a sufficiently robust estimate of the incremental costs at Stansted. This estimate could then be used – either individually or as part of a wider evidence base – to establish an appropriate price cap.

- 2.20 In light of the ability of the airport operator and airlines to negotiate discounts or additional ancillary agreements to the price cap the need for precision is, in practice, significantly reduced. In this manner, a LRAIC estimate could be established that would provide a suitable basis upon which to set a price cap approach that aligned investment incentives and that prevented adverse effects on Stansted's competitors.
- 2.21 These issues are discussed in more detail in Supporting Paper IV to the CAA's reference to the CC.

Data requirements

- 2.22 The CC argues that it would be required to estimate LRAIC to a high degree of precision, due to the lack of competitive constraints. The CAA has provided comments on the CC's competition paper and recommended that the CC explicitly recognise that market power is a matter of degree. Against this observation, the CAA does not consider that Stansted could reasonably be described as enjoying levels of market power that approach monopoly (and its view is that the airport enjoys market power a considerable degree below this level).
- 2.23 An implication of this is that the price cap does not need to establish LRAIC to a very great degree of precision (reflecting the *degree* of market power held by the airport). After all, even a building-block price cap involves a series of estimations that result in a considerable degree of uncertainty, against which the CC and CAA must take views about the appropriate level for the price cap.
- 2.24 The CC goes on to argue that LRAIC requires a series of longer-term forecasts, which contrasts with RAB-based approaches. This fails to recognise that in order to approve – or delay – capital investment projects under the RAB-based approach the CC and CAA must take a view on long-term forecasts. The data requirements of the RAB-based and LRAIC-based approaches are, therefore, similar. But they are not precisely the same, as LRAIC-based (and forward-looking) approaches do not require analysis of historical costs, nor do they involve collecting evidence to assess the airport's detailed business plans.
- 2.25 Further, the nature of a LRAIC calculation means that estimation errors that impact upon long-term values have much less impact on the LRAIC estimate than errors in the near-term values.

Timescales

- 2.26 The CC argues that it is not practical to conduct the modelling and consultation exercises that would be necessary to calculate the LRAIC estimate, particularly in light of the limited up-front preparatory work.
- 2.27 The CAA considers that LRAIC estimates can be established during the process leading up to setting the price cap for Stansted, and provided the CC with a supporting paper that discussed many of the key methodological issues.

Regulatory commitment

- 2.28 The CC correctly highlights that the CC and CAA cannot give a legally binding commitment as to how price caps will be set in future. This is, of course, a problem from which a RAB-based approach also suffers, albeit that the RAB has 'established' credibility due to the tendency for regulators to honour the implicit commitment to future revenue that it represents.
- 2.29 While, a LRAIC-based approach might lack as much regulatory commitment as the RAB, the strong economic rationale for the pricing approach (as noted by the CC) suggests that it represents a credible approach over the longer-term. In addition, forward-looking approaches – based on the principle of long-run incremental cost pricing – are applied by a number of UK regulators.
- 2.30 Further, Ofcom introduced a transition to LRAIC-based pricing (as proxied by CCA) in its regulation of BT's local loop networks, illustrating that such considerations do not prevent LRAIC-based approaches from being adopted.

Consistency of approach

- 2.31 The CC argues that adopting a LRAIC-based approach at Stansted will distort investment incentives at Heathrow and Gatwick as these operate under a different price control methodology.
- 2.32 This argument appears to suggest that it is better to distort investment (through the familiar RAB-based incentives) at the three designated airports, rather than seek to improve the balance of investment incentives at Stansted. Such an argument relies on the interactions between investment at Stansted and BAA's other airports being more significant (or the consequences more important) than the interactions between Stansted and other airports, notably Luton. In the CAA's view that is unlikely to be the case.
- 2.33 It is also unclear why BAA would "increase investment above efficient levels at [Heathrow and Gatwick] ..." instead of investing at Stansted. The RAB-based approach – and any incentives it may entail – will apply at Heathrow and Gatwick irrespective of the price control approach adopted at Stansted. So it is unclear why the price control approach at Stansted would have a significant impact on the balance of incentives or on outcomes at Heathrow or Gatwick.

3. A practical way of implementing LRAIC principles

- 3.1 The CC's paper confirms that LRAIC-based pricing has strong economic arguments. Further, the CAA has argued above (citing examples from Ofcom's regulation of BT's local loop) that LRAIC-based pricing has a rationale both when regulating companies facing a degree of competitive constraint and when regulating monopolies. However, the CC has stated that it considers that LRAIC-based price caps cannot be implemented in practice, due to time constraints.

- 3.2 It is useful to consider when LRAIC-based pricing is likely to have the most impact on investment incentives (both at Stansted and at other airports). It appears to the CAA that investment outcomes will, in particular, be driven by airport operators' expectations of future prices, rather than current prices.
- 3.3 This implies that:
- a credible signal that the price cap will reflect LRAIC should be established by the time that large investment decisions are made; and
 - LRAIC-based pricing should apply from the point at which large investments would be remunerated.
- 3.4 Further, the principal link between current and future price caps is that the former provide a signal as to the credibility of the latter. This was, for example, one of the reasons why some remuneration of Terminal Five investment was advanced.
- 3.5 To improve investment decisions (at Stansted and other airports) it would, therefore, be best for:
- future price caps to reflect LRAIC; and for
 - current (or near-term) price caps to support the credibility of such future price caps.
- 3.6 This suggests to the CAA that there could be a strong argument for a form of price control that progressively moves away from strict cost-based / RAB-based price caps towards an approach placing greater reliance on estimates of LRAIC.
- 3.7 This would, of course, also reduce the importance of the degree of accuracy achieved in the LRAIC estimate, as it would represent the price level that the price cap was moving towards, rather than the level of the current cap.
- 3.8 Such a pragmatic approach would appear to meet a number of concerns expressed by stakeholders and/or held by the CAA, namely that:
- a mechanistic link between capex incurred and the price cap distorts airport and airline incentives in respect of expansion;
 - a strict cost-based cap could distort competition and discourage other airports, notably Luton, from expanding over the longer-term; and
 - a move to LRAIC-based price caps in the near term would represent a significant policy change, and one that airline customers would not have prepared for in advance.
- 3.9 This commitment to a transition would also enable a full and detailed consultation during Q5 over the methodology to be applied to the longer-term LRAIC estimate that would then be used as an important element of the Q6 price control. The consultation and investment made in this estimation would, in itself, provide a

credible commitment as to the importance of this estimate for future price control reviews.

Way forward

- 3.10 In a market that is increasingly capacity constrained and where there are competitive interactions between price controlled and unregulated airports, it is important that the price cap allows prices to move on a path that reflects the changing balance between supply and demand. This will increase the likelihood that the price control will result in appropriate incentives for investment not only at the regulated airport but also elsewhere. Otherwise, overall investment may be constrained and/or take place in the wrong place or at the wrong time.
- 3.11 In the current context it appears that the signals emanating from price caps² based on forward-looking costs are more likely to generate appropriate outcomes than those based on historical and/or accounting costs.
- 3.12 The CAA recognised, however, in its reference to the CC, that it could be appropriate for a number of reasons to transition over Q5 to new arrangements. The reference document contemplated a number of alternative propositions, but these were not exhaustive. In principle, the signalling effect and incentive properties could be achieved by adding an explicit adjustment to a RAB-based calculation to reflect the desire to transition towards forward-looking measures of cost, that would then be continued and, presumably, completed during Q6. One way of achieving this would be, for instance, to make the Q5 price cap more dependent upon traffic growth, relating the price cap to the airport's expansion of capacity. Such an approach would use information – including that already assembled – to reach a balanced assessment on the relationship between an efficient investment programme and traffic.
- 3.13 This would have the effect of significantly changing the incentives faced by the airport operator and airlines, encouraging debate between the parties as to how best to deliver growth at prices that sustain and support that growth over time.
- 3.14 Finally, as the transition could span both Q5 and Q6 it would deal with the CC's concerns expressed in the LRAIC working paper, by placing less weight on the ultimate LRAIC estimate – as this end point would lie somewhere in Q6 – but, rather, it would be used to establish the overall direction in which the price cap should move.

² This would not, of course, mean that prices followed the same path as the price cap, as they would be determined by airport-airline negotiation.