

Airports Commission **Inner Thames Estuary: Feasibility Studies**

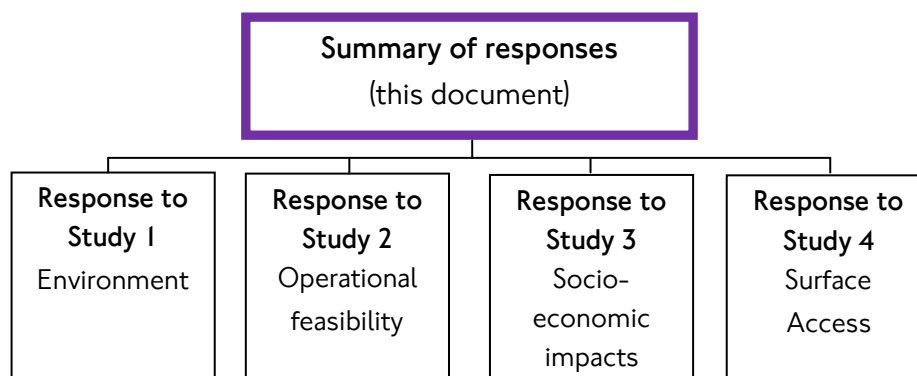
Summary of responses

The Mayor of London's response

August 2014

1. Purpose of Paper

- 1.1. In July 2014, the Airports Commission published four feasibility studies, related to building a new hub airport in the Inner Thames Estuary.
- 1.2. The Airports Commission have invited responses, and they have asked that respondents focus on i) the factual accuracy of the Commission's work, and ii) if there is any new evidence and information that the Commission should consider
- 1.3. This paper comprises the Mayor's overarching response encompassing all four feasibility studies. A detailed, standalone response to each has also been prepared. The Mayor welcomes the opportunity to comment on this feasibility work undertaken on behalf of the Commission in relation to the credibility and deliverability of an Inner Thames Estuary Option.
- 1.4.



2. Summary of the Mayor's response

- 2.1. The Mayor believes that the evidence presented on behalf of the Commission, in the four study reports provide a series of arguments which together, make a clear and compelling case that a new hub airport in the Inner Thames Estuary is both credible and deliverable, and should be added to the Commission's shortlist.
- 2.2. In light of the additional evidence presented in the four documents which was not available at the time of the Commission's Interim Report and initial shortlisting

exercise, there are a number of strong reasons for the option to be added to the shortlist.

- 2.3. The Commission have asked two questions: 'are there any factual inaccuracies', and 'is there any new evidence or information they should consider'.. It is the interpretation of some of the facts that is especially important. For example, in identifying a cost for compensation of environmental habitat; Study 1 identifies the highest potential re-provision area multiple from a range which is not based on accurate data, and then multiplies that figure by the highest potential cost per unit area figure. This has the effect of potentially significantly overstating the likely total cost.
- 2.4. The four documents that accompany this paper identify:
- key issues on which we agree with the Commission;
 - where the Commission's work has reached an incorrect conclusion;
 - where the Commission's future work should be focused.

The evidence presented on behalf of the Commission in the four studies provides a series of arguments which together, make a clear and compelling case that a new hub airport in the Inner Thames Estuary is both credible and deliverable. The option should therefore be added to the Commission's shortlist to permit a like-for-like comparison to be undertaken alongside the shortlisted options.

3. Key observations

Study 1 – Environment

- 3.1. We do not agree with a number of the facts and figures quoted in the Jacobs report, especially those regarding the area likely to be required for estuarine habitat compensation and the associated cost.
- 3.2. The figures for habitat loss quoted in the Study 1 report (Table 4.12) attributed to TfL do not accurately represent TfL's view.
- The figure quoted for direct loss of habitat from Special Protected Areas (SPAs) of 2,360 hectares (ha) is an over-estimate for the TfL scheme which is based on the TfL July 2013 submission. The actual figure is approximately 1,609ha.
 - There is a substantial over-estimate of the likely habitat loss as a result of morphological/ hydrological changes - the Study 1 report states 2,500ha of habitat will be lost. Studies undertaken as part of the Mayor's submission show the loss is more likely to be in the region of 100ha

- The Study 1 report states that an additional 900ha of compensation habitat will be required associated with impacts on TE2100 compensation sites. The potential compensation sites associated with TE2100 have not yet been constructed or even consented, and therefore cannot be treated as habitat to be lost. Furthermore, parts of the TE2100 site lie within the footprint of the airport and would be double counted if considered as additional land to be found.
 - The errors of fact and interpretation in the above two points alone have resulted in an additional habitat loss of 3,400ha being incorrectly identified in Study 1. This has then significantly skewed the subsequent calculation of compensation habitat required at ratios of 1:1, 2:1 and 3:1.
- 3.3. Based on the Mayor's submission, the maximum area of compensation required would be 6,500ha not 20,400ha. The cost of habitat compensation will therefore be in the region of £500 million, not the significant over-estimate stated in the Study 1 report of up to £2.04 billion. The over-estimate of costs in the Study 1 report is compounded by applying a higher cost multiplier of £100,000 per hectare rather than the more commonly agreed £70,000 – 75,000 / ha.
- 3.4. We have illustrated, by means of a number of case studies, that estuarine habitat creation at the required scale is feasible and has been demonstrated in the United States. Our preliminary review of potentially-suitable sites for habitat creation in the south-east of England identified far in excess of the required area of suitable land within 100km of the ITE airport location.
- 3.5. We have taken legal advice which demonstrates that there is the potential to meet all the appropriate tests that would need to be passed under the Habitats Directive and that there are no overriding habitat reasons for not investigating the Inner Thames Estuary option further, appreciating further more detailed studies would be required.

Study 2 – Operational feasibility and transition

- 3.6. ***The study recognises that a range of issues that have been raised are negligible or surmountable - and so do not pose an obstacle to delivery of a new hub airport in the Thames Estuary. This is welcome, although a number of concerns continue to be overstated.***
- 3.7. These issues include those associated with flood risk management, fog events, strong winds and crosswinds, bird strike risk, the SS Montgomery, airspace, and power generating infrastructure. Though the Commission does cite concerns about relocating the LNG facility at Grain, this too, would appear to be capable of being addressed. In any case, a further, detailed piece of work is required to fully understand the implications.
- 3.8. With regards to transition, the study recognises that undertaking the physical move is feasible. It does raise a number of concerns, notably around the workforce, slot

allocation and air services agreements. However the evidence presented by the Commission, and the work that TfL have done on the issues do not bear this out. Indeed, for the latter two, the concerns are wholly misplaced. Regarding slots, an absence of rules on slot transfers does not mean that an arrangement for transferring those who have slots at Heathrow, as well as allocating the new slots that will become available, cannot be found. With regards to air service agreements, the study focuses on the risk of renegotiations due to Heathrow's closure, but neglects the significant improvements in bilateral aviation relations that unimpeded access to the UK's hub could offer.

Study 3 – Socio-economic impacts

- 3.9. *The study does little to further the understanding of socio economic impacts, despite identifying a number of gaps within the evidence submitted to the Commission. It also makes a series of erroneous assumptions. For example, the study does not recognise the unique nature and importance of hub airport connectivity. It has ignored much of the evidence provided by TfL and others which is clear that the provision of new capacity will have different effects, depending on where it is located.***
- 3.10. Study 3 makes some important observations, including that TfL's approach and assumptions used to calculate the required increase in aeronautical charges are reasonable, implying an increase of 1.4x Heathrow's Q6 charges if other assumptions (including cost and risk) are held constant. The study states that TfL's approach to calculating the social and economic impacts of a new ITE airport is 'reasonable'.
- 3.11. There are problems with a number of elements of the feasibility study in terms of the assumptions used and evidence cited. For example, the study appears to question the direction of causality between international trade and international air connectivity, even though this is well documented. It also fails to recognise the critical role that an ITE airport could have in meeting London and the South East's wider development needs, particularly within the context of significant housing demand and economic growth.

Study 4 – Surface access

- 3.12. *The study recognises that a new hub airport in the Inner Thames Estuary can be accessible from a wide catchment area, and its new transport links could deliver high levels of surface access connectivity, with attractive journey times and levels of service. The study is also clear that an ITE airport could achieve a higher sustainable mode share than that currently achieved by Heathrow and Gatwick.***

The study's reduction in surface access capital costs of around 30% (from the interim report) is noted, but the potential cost of the surface access required is still overstated.

- 3.13. The Commission's cost estimates published in the December 2013 Sift 3 reports which accompanied the Interim Report, are much higher than those published in this study. However, the study provides a figure of £37.1 – 44.2bn for a very similar network to that which TfL has costed at £19.1 bn. TfL considers that the Commission's new estimates remain too high.
- 3.14. The study's assumption of a public transport mode share of 52% for an ITE airport is considered by TfL to be lower than would be achieved in practice. A new hub airport would be planned to achieve world leading levels of public transport mode share and mode shares of around 65% (passengers) and 75% (staff) are considered to be achievable and supported by international benchmarking.
- 3.15. The study also specifically excludes an HS2-HS1 link; this is despite the Commission having previously assumed a HS2 link to Heathrow (predicated on a particular Commission outcome). This has the result of plying down the accessibility of a new airport to the east of London and undermines any attempt at comparability between options.
- 3.16. While the study emphasises the capital costs of the new surface access infrastructure, there is no mention of the obvious benefits that the implementation of the proposed infrastructure will deliver for both airport and non-airport users. These benefits will be very large, and their wide-ranging effects will include: journey time savings, congestion/crowding relief, unlocking development land, regeneration and agglomeration benefits.

4. How an Inner Thames Estuary Option compares against the currently shortlisted options

- 4.1. The evidence that the Commission have published demonstrates that an Inner Thames Estuary airport merits shortlisting. While the size and scale of some of the challenges it faces are greater than adding a single new runway at Heathrow or Gatwick, the Commission must also acknowledge that the benefits that a new hub airport offers are of a much greater scale. A new airport would for example offer much more capacity, which could be used more flexibly, than a single new runway at Heathrow or Gatwick.

Table 1: How ITE option compares to Commission's shortlisted schemes

| | A new four runway Inner Thames Estuary (ITE) hub airport | A three runway Heathrow | A two runway Gatwick |
|---|--|-------------------------|----------------------|
| Total capacity, mppa | 150 | 110 | 70 |
| Capacity increment (million passengers per annum, mppa) | 80 ³ | 40 ³ | 35 |
| Airport capital cost ¹ | £20-35bn | £17bn | £10bn |
| Surface access capital cost ² | £20bn | £17bn | £14bn |
| Annual contribution of air service connectivity at the airport to national GDP in 2050. (Airport in its entirety, £bn 2013 prices) ⁴ | £92.1 bn | £59.1 bn | £22.6bn |
| Total jobs supported nationally by the airport in 2050 (000 jobs) ⁴ | 336.4 | 269.2 | 61.7 |
| <i>Can the challenges which are the scope of these four studies be overcome at each location?</i> | | | |
| Environmental (Habitats) | Yes | Yes | Yes |
| Operational | Yes | Yes | Yes |
| Socio-economic | Yes | Yes | Yes |
| Surface access | Yes | Yes | Yes |

¹ Airport capital cost estimates based on TfL figures for an ITE airport. £20bn represents opening day size of 90mppa (runway capacity for 180mppa, terminal capacity for 120mppa and satellite capacity for 90mppa). £35bn represents future year size of 150mppa. Heathrow and Gatwick costs are TfL derived, based on Airports Commission estimates.

² Surface access capital costs based on TfL figures for 'optimal' infrastructure provision, as per the assessment submitted to the Airports Commission May 23rd, 2014.

³ The potential additional capacity increment of an ITE airport and a new runway at Heathrow is based on the current throughput of Heathrow at 70mppa today. Note that TfL's previous July 2013 figures were based on an ITE airport size of 180million passengers per annum. Current figures are based on an ITE airport size of 150million passengers per annum¹, in accordance with the Airports Commission's most recent demand forecasts.

⁴ Oxford Economics, Summer 2014 analysis. The methodology, approach and assumptions are described in TfL's response to Study 3.

5. The Commission's next steps

- 5.1. The Commission must consider the Inner Thames Estuary airport evidence in the context of the options it has already shortlisted. Its analysis must not only recognise that a new ITE airport is wholly credible, deliverable and affordable, but it must also recognise the additional benefits of a new ITE airport compared to the other options. They are of a scale that no other option can deliver, and they would more than offset the marginal additional costs or challenges in delivering it.
- 5.2. There is no reason from the work undertaken to date why the Commission should not add the Inner Thames Estuary airport option to its shortlist. It should use the time in which it plans to further assess and consult upon the shortlisted options, to develop a consistent evidence base, and conduct a like-for-like assessment between all options. Where further work has been identified, TfL is willing to work with the Commission.