

## **COUNCIL**

**14 JANUARY 2010**

### **THAMES ESTUARY AIRPORT – FEASIBILITY REVIEW**

Portfolio Holders: Councillor Rodney Chambers, Leader  
Councillor Phil Filmer, Front Line Services

Report from: Robin Cooper, Director of Regeneration and Development

Author: Steve Hewlett, Head of Integrated Transport

#### **Summary**

This report advises Members of the Thames Estuary Airport – Feasibility Review, published in October 2009.

#### **1. Budget and Policy Framework**

- 1.1 The issue is whether to review Medway Council's opposition to the plans to construct a new Thames Estuary Airport.
- 1.2 This is a matter for Council because of the potential for decisions which may seek to amend the existing policy framework and budget.

#### **2. Background**

- 2.1 Following a report to Cabinet on 17 February 2009, on 5 March 2009 Full Council considered proposals from the Mayor of London, Boris Johnson for a new Thames Estuary Airport. Full Council agreed the following:

The Council object to the Mayor of London's proposal to construct a Thames Estuary Airport on the following grounds:

- (i) It is unnecessary and not wanted
- (ii) The cost of an airport would be prohibitive
- (iii) The current infrastructure would not cope with huge increases in traffic
- (iv) The environmental damage would be catastrophic
- (v) The noise, light and air pollution would be intolerable
- (vi) The risk of air strike from migrating and nesting wildfowl would be

high especially as this is an internationally important site for wildlife

- (vii) The airport would be disproportionately affected by fog and high winds
- (viii) The airport would lead to blight in the surrounding area including falling property prices and uncertainty for many years about inward investment into Medway
- (ix) Kent County Council is promoting Manston as an airport destination and this provides a viable alternative

- 2.2 The Mayor for London has employed Douglas Oakervee OBE to advise him on the feasibility of an estuary airport. In October 2009 the Feasibility Review was published, which provides more information than was available when Members considered the proposal earlier in the year. However, the details are still not subject to any formal consultation as they are not a proposal from government.
- 2.3 This report is intended to enable Members to consider whether they wish to review their previous decision taking into account the more detailed information that is now available.

### **3. Summary of the Thames Estuary Airport - Feasibility Review**

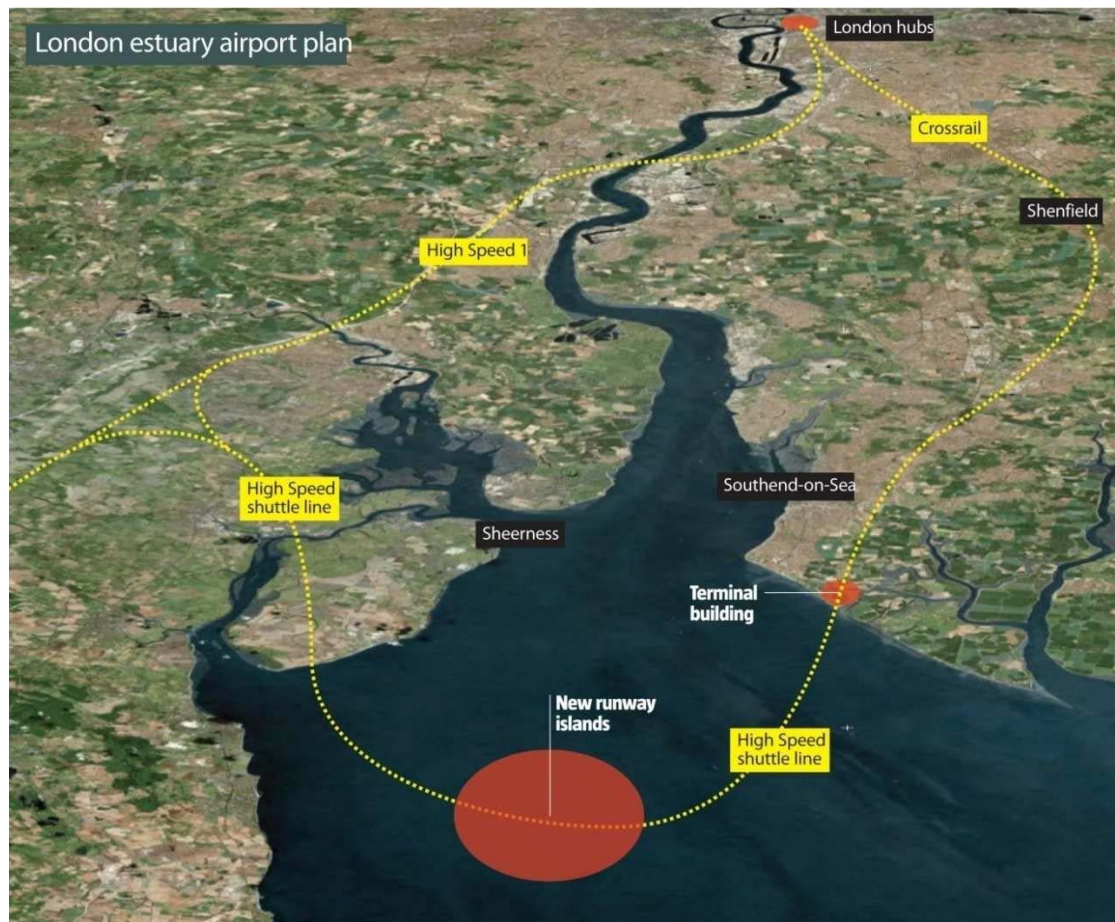
- 3.1 The study states that a new major airport serving London and the South East will be needed by 2030, stating that the Department for Transport's "overwhelming" evidence showed a capacity shortfall of "about 70m passengers per annum by 2030, even when all other potential expansion is put in place". The study notes that Heathrow has been functioning at 99% operational efficiency, with approximately 477,000 Air Traffic Movements in 2008, and the prospect of this increasing to 605,000 by 2020.
- 3.2 The review has identified a number of alternative Thames Estuary Airport schemes that it alleges are being promoted by various organisations. Several of these schemes have a direct, physical impact on Medway, including schemes promoted by:
  - Thames Reach Airport Limited and Metrotidal Limited
  - Sir Terry Farrell & Scott Wilson
- 3.3 The study identifies the predicted level of growth in North Kent and considers that the full potential of the regeneration goals will not be reached without a catalyst, such as improved infrastructure and transport links.
- 3.4 The report considers the main advantages and disadvantages of an estuary airport and these details are reproduced in table 3.1 in this report.

<p style="text-align: center;"><b>Table 3.1</b>  <b>Impact of an offshore airport</b>  (Taken from Thames Estuary Airport - Feasibility Review, prepared by D. Oakervee OBE)</p>	
<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>• 24 hour operation</li> <li>• Minimal pollution</li> <li>• Approach not over central London</li> <li>• Reduced risk for residents</li> <li>• Incremental expansion without disruption</li> <li>• A green airport</li> <li>• The catalyst for regeneration and wealth creation</li> <li>• No CPO of land</li> </ul>	<ul style="list-style-type: none"> <li>• Distance from Central London and transport links</li> <li>• Reluctance of Airlines to move and perceived loss of premium revenue</li> <li>• Air movement complicated over SE England</li> <li>• Possible loss of interline traffic</li> <li>• Move in the centre of gravity for business</li> <li>• Capital costs will be high. How will it be paid for?</li> </ul>

- 3.5 Whilst the report considers that the project is technically viable, it does recognise that the “delicate ecology of the area” and “very large bird populations” must be central to any decision. Whilst the report does not favour a specific location, it considers the most likely site would be in the outer estuary some 4½ to 6 miles north east of Whitstable in the direction of Shivering Sands Fort and the Kentish Flats Wind Farm.
- 3.6 The report considers that economies of scale could be achieved by considering how the scheme could be integrated with the demands of other government departments, such as adding in estuary crossings and renewable energy farms. Furthermore, the study refers to the final draft Thames Estuary 2100 report (TE2100), which details future problems as a result of rising sea levels and extremes in weather conditions largely brought about by climate change. TE2100 suggests a multifunctional barrier with both transport links and tidal energy generation would provide a more cost effective and sustainable solution. The airport study considers that this proposition would be further improved if provision for an estuary airport was made.
- 3.7 The report acknowledges that the Thames Estuary is one of the most important ecological sites in Europe and forms a key part of the huge ecosystem surrounding the North Sea. It recognises that not only are birds protected by stringent EU and UK legislation, but so too are certain species of fish, molluscs and crustaceans, to ensure safe and secure breeding grounds.
- 3.8 The report considers that whilst the present investment will provide new transport links such as Crossrail, Thameslink and HS2, further improvements in the Thames estuary “will be necessary to support the existing housing programmes let alone the expansion, development and regeneration that would result should the major infrastructure being proposed by this review be constructed”.

- 3.9 The review makes reference to the findings of the *Dartford River Crossing Study – A Lower Thames Crossing*. The route options for a crossing were shown diagrammatically in the Lower Thames Crossing study and have been reproduced at Appendix A. The study discarded options D1, D2 and E. The study was considered by Cabinet on 2 June 2009, when Members supported recommending to government that options A, B & C be taken forward for further consideration. However, the airport review considers that options D & E are worthy of further consideration because:
- Option D is the alignment on which Metrotidal's scheme is based
  - Option E alignment would be close to where access is likely to be needed for an estuary airport and outer barrier.
- 3.10 The option D, Metrotidal scheme is situated near the Cliffe Airport proposal, which was rejected by the Government's White Paper on Aviation. The scheme proposes an additional road and rail crossing of the Thames and incorporates both tidal lagoons for power generation and a Thames Barrier as well as an airport. The scheme conflicts with major conservation areas and the risk of bird strike is likely to be high. Option D directly affects Medway.
- 3.11 It is unclear whether option E directly affects Medway, due to inconsistencies in the Dartford River Crossing study – these errors have been reported to government, but no response has been received.
- 3.12 Officers are aware that the brief for the detailed Lower Thames Crossing study is being prepared by DfT. Working with our local authority partners in north Kent through a Multi Area Agreement, we have requested participation in the preparation of the brief, but this has been declined by the DfT. It is therefore unclear at this stage whether options D and E have been included in the Lower Thames Crossing study.
- 3.13 The review suggests that a new airport located in the Thames Estuary is likely to be approximately 60 miles from the centre of London at Charing Cross, compared to 17 miles from Heathrow, 29 miles from Gatwick and 43 miles from Stansted.

The proposed location of the airport is shown in the figure below, (extracted from the review document prepared by Douglas E Oakervee OBE FRENG.)



- 3.14 It is clear that if an airport were to be built in the estuary, the whole pattern of traffic would change dramatically, at a national, regional and local level. An airport of this size will demand high capacity, high quality transport links, particularly to central London but also to regional and local destinations. The report places great reliance on rail links and the need to discourage the use of car trips to the site. The review recognises that if the airport were to be built, there would need to be a significant rethink regarding rail connectivity, and especially High Speed Rail from the network to the airport if a maximum journey time of 40 minutes from Central London to an estuary airport is to be achieved. The report details potential links to High Speed 1 and the proposed High Speed 2. However, the report also recognises the importance of motorway connections and proposes the following new motorway infrastructure:
- connection to the south to be built across the Isle of Grain<sup>1</sup> to link both the M2 and M20 to the airport crossing;
  - Estuary crossing to a rebuilt A13 in Essex and then link the improved A130/A120 to Stansted Airport and the M11.

<sup>1</sup> This may be an error, as figure 16 shows **rail** across the Isle of Sheppey. This point was raised by Medway Council with the DfT on the Lower Thames Crossing study.

- 3.15 The review comments on the importance of trade and leisure activities that the river supports and states that “no activity must undermine the performance of the Port of London”. The review also acknowledges the significant contribution that Thamesport, Chatham Docks and the Port of Sheerness make to the UK’s economy.

#### **4. Advice and analysis**

- 4.1 Recent revisions to government policy regarding climate change and the requirement for an 80% reduction in carbon emissions by 2050 must be a central consideration to national air travel strategy. The review recognises that future studies should be holistic, with climate change as the main driver. Furthermore, the report acknowledges that in the past the effects of climate change “have frequently been underestimated and even now the seriousness of the problem is still being realised”. The report notes that aviation currently contributes at least 5% of the world’s total carbon emissions, plus the contribution from the activities of airports and acknowledges that a “fundamental change in air travel behaviour and technology will become a necessary if climate protection measures...are to be achieved”.
- 4.2 The report acknowledges that any scheme that did not undertake “appropriate amelioration measures then the impact on the precious ecological reserve could be disastrous”. However, given the scale of the likely impact, it is unclear how an acceptable level of mitigation could be achieved. Furthermore, in responding to the likely impact on the ecology, the report suggests that this must be balanced against the “many and complex issues surrounding climate change, as well as the needs and demands of a growing population”.
- 4.3 Regarding the potential location for an airport, the identification in the report of Upper Heyford as the “centroid for overall passenger demand for the whole of the UK” argues in favour of an airport facility to the west of London rather than the east.
- 4.4 There is no doubt that high speed rail would be essential to serve the airport. The Southeastern High Speed services (rather than Eurostar as mentioned in the report) demonstrate that it is feasible to offer services for journeys such as London to Ebbsfleet with high speed trains. However, this is not to say that there is sufficient capacity available in the current high speed network to accommodate the dramatic increase in service which would be needed to serve the airport. One particular constraint on capacity is the terminal at St Pancras station where there is little scope for additional international or domestic services to or from the high speed line.
- 4.5 The written description of the proposed high speed rail link and the arrangements illustrated in Figure 16 of the Oakervee review differ dramatically. The written description talks about a branch from HS1 via Southend and the Airport to Ashford. This would be at least 48 miles of brand new high speed line and would make little use of HS1 except in

the capacity constrained London approaches. It would not offer links for airport workers or users from North Kent to the airport except by way of Stratford or Ashford, which would be very indirect routes and lose any benefits of high speed travel. However, the illustration at Figure 16 shows a line branching off HS1 south of Sittingbourne to the Airport. In practice, HS1 is south of the North Downs in this area so the branch would need to climb the scarp of the Downs. This service would leave HS1 between Ebbsfleet and Ashford stations. Medway passengers, therefore could only access the airport with this route by “backtracking” to Ebbsfleet. Neither option would overcome the terminal and line capacity constraints at the London end of the HS1.

- 4.6 The report highlights the opportunities offered by HS2 – the proposed high speed line from London northwards. This line is by no means committed, with the route and the London terminal being a long way from being resolved. One benefit of the airport proposal is that it would strengthen the case for the London terminal for HS1 and HS2 being linked, which would improve cross –London travel opportunities.
- 4.7 The report states that “...by 2030 it is inconceivable that the lines serving both north Kent and south Essex will not have been upgraded sufficiently to enable a high speed Javelin service to the airport from the suburbs of London”. However, it is entirely conceivable that this will not happen.
- 4.8 Whilst the report places great emphasis on serving the site by rail, as demonstrated this is not without significant problems particularly for local accessibility. Local employment opportunities are significant, but possible problems with local access by rail services could result in a high level of unsustainable trips by car.
- 4.9 There is little detail of the new road links in the report. However, the written description of the links would appear inconsistent with the diagram at Figure 16 of the Oakervee review. Page 50 of the review describes the connection to the south as being “built across the Isle of Grain to link both the M2 and M20 to the airport crossing”. Figure 16 shows the rail connection to the Isle of Sheppey and it is assumed for economic purposes that the road connection would follow the same route as the rail connection. Clearly from Medway’s point of view this inconsistency is highly significant, as one option would have a direct, major impact on the area. Furthermore, the report takes no consideration of the capacity of the M2, M20 and the strategic road network further afield, which are all likely to require significant upgrading.
- 4.10 The impact of both the road and rail links to the proposed airport on the environment could be catastrophic and this issue has not been considered by the review.
- 4.11 The South East England Partnership Board is commissioning a transport study on the transport corridor between London and Dover Docks on behalf of government. This study will incorporate the M2 and

M20 corridors and it is understood that the study will not take into account the proposals in the Thames Estuary Airport Feasibility Review.

- 4.12 The report acknowledges that “bird strikes are a real issue” but considers “there are ways to overcome the problem without being aggressive towards birds” although it is unclear how this would be achieved. It also suggests that the RSPB should be used to resolve the issue of birds at an estuary airport. This is naïve when the RSPB have already put themselves forward as a main objector to the scheme.
- 4.13 The report considers that the estuary presents an opportunity for tidal energy to make a “meaningful” contribution to the overall needs of the region. But, the estuary was not identified by Government as one of the preferred locations in the UK for this purpose. Furthermore, the adverse impact of tidal energy generation on the rich inter-tidal mud flats in the estuary on which vast numbers of migratory birds feed has not been determined. In addition, the increased risk of flooding as a result of the impact of the airport on a surge tide has not been determined.
- 4.14 Finally, the review has not considered the risks associated with operating an airport in close proximity to the existing import facility for LNG (Liquefied Natural Gas) at Thamesport and the proposed London Array wind farm. The wind farm is a joint venture being developed by three international companies with renewable energy interests. The wind farm would be located more than 12 miles from the Kent and Essex coast in the outer Thames Estuary. This is one of three strategic areas in the UK that has been identified by government for offshore wind farm development.

## **5. Benefits and disbenefits to Medway**

- 5.1 It is likely that an airport would bring significant benefits to the local economy and the regeneration of the area, by creating a significant amount of direct and indirect employment and business opportunities. However, the airport could bring major, unacceptable disbenefits, including:
  - Direct environmental destruction by causing harm to Sites of Special Scientific Interest and internationally important areas where hundreds of thousands of birds migrate to annually. The airport would destroy huge areas of legally protected habitat.
  - Encouraging more air travel which is likely to exacerbate climate change. Assuming the airport would create new capacity, it is likely that the proposal is contrary to the national statutory target to reduce carbon emissions by 80% by 2050. Furthermore, increased emissions from aircraft and associated passenger and freight vehicles accessing the airport could significantly add to existing local areas of known poor air quality.



- Significant risk of bird strike as the Thames Estuary is a hub for hundreds of thousands of birds. Even with an aggressive bird hazard management programme, such as shooting or scaring birds away, the bird strike hazard would be up to 12 times higher than at any other major UK airport (source: RSPB).
- Harm to areas of landscape importance by the construction of major road and rail infrastructure links from the airport to the strategic road and rail networks.
- Increased pressure for additional major development due the increased attractiveness of the area. This could result in areas of high landscape importance being lost to development, thereby being detrimental to the local environment.
- Kent International Airport at Manston has one of the longest runways in Europe that could be connected to HS1 at far less cost.

5.2 Therefore, whilst there could be economic benefits from an airport, these would be hugely outweighed by the environmental damage and other detriment to the area such an airport would bring. It is therefore considered that the additional information contained within the Feasibility Report does not alter the view taken by Cabinet on 17 February 2009 and Full Council on 5 March 2009. It is considered that only by carrying out a much more detailed wider London and the south east connectivity and accessibility study would any justification for the location of a new airport in the south east be determined.

## **6. Consultation**

- 6.1 Working in partnership with Kent County Council and the RSPB, Medway Council has taken the lead on a “Stop the Estuary Airport” campaign, with high profile media campaigns and a dedicated campaign website. In summary, the campaign considers the project to be undeliverable, unaffordable and unnecessary, and has raised the following grounds for objection:
- Immense damage it would cause to the area’s internationally important wildlife and the wider environment
  - Exacerbate climate change
  - High cost of construction
  - Significant risk of bird strike
  - It would require huge unsightly highways to be built linking the airport to the motorway network
- 6.2 At the time of writing support, the campaign had been supported by 1,342 people on the website.
- 6.3 Given the concerns regarding the significant impact on the environment and the high risk of bird strikes, it is considered that meaningful proposals for environmental mitigation in line with the requirements of

the EU Birds Directive and the EU Habitats Directive are developed prior to the principle of the scheme being considered further.

## **7. Cabinet**

- 7.1 The Cabinet considered this report on 5 January 2010 and its recommendations are set out in paragraph 10 below (decision no. 2/2010).

## **8. Risk Management**

- 8.1 Risks associated with the development of a Thames Estuary Airport are detailed in the table below.

<b>Risk</b>	<b>Description</b>	<b>Action to avoid or mitigate risk</b>
Development of Thames Estuary airport.	Proposal to develop an estuary report obtains stronger policy weight.	High profile campaign to raise awareness of the devastating impacts of the proposal. Respond to all published proposals.

## **9 Financial and legal implications**

- 9.1 At present costs can be contained within existing budgets. However if the proposal is taken to formal consultation by the government the need to employ aviation and other experts so as to be able to consider any planning issues properly and to be represented at planning inquiries will led to significant costs to the Council.

## **10. Recommendation**

- 10.1 That Council reaffirms its opposition to the plans to construct a new Thames Estuary Airport and that Douglas Oakervee (the author of the report) be contacted to:
- advise that any justification for the location of a new airport in the south east could only be considered once detailed London and the south east connectivity and accessibility studies had been undertaken;
  - seek to clarify the route of the road and rail links, as detailed in the report;
  - draw to his attention the risks associated with the close proximity of the existing LNG import facility at Thamesport and the proposed London Array wind farm; and

- seek early meaningful proposals for environmental mitigation in line with the requirements of the EU Birds Directive and the EU Habitats Directive.

### **Lead officer contact**

Steve Hewlett  
Head of Integrated Transport  
Ext: 1103  
Email: [steve.hewlett@medway.gov.uk](mailto:steve.hewlett@medway.gov.uk)

### **Background papers**

- Reports to Cabinet dated 17 February 2009 and Full Council dated 5 March 2009
- Thames Estuary Airport Feasibility Review (prepared by Douglas Oakwevee MBE, dated October 2009)
- Related web sites:
  - Campaign website: [www.stopestuaryairport.co.uk](http://www.stopestuaryairport.co.uk)
  - Thames Estuary Airport – Feasibility Review: <http://www.testrad.co.uk>

## Appendix A - Major Option Assessment routes for Lower Thames Crossing

