

Thames estuary airport: AEF position paper

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Summary

The London Mayor has suggested that the development of an estuary airport may provide an alternative to Heathrow expansion and commissioned Doug Oakervee, the engineer who masterminded Hong Kong's island airport, to conduct a feasibility study.

This briefing takes a historical look at estuary airport proposals and the issues that have arisen, assesses the recent report from Douglas Oakervee, and sets out AEF's view on the proposal to construct a new airport in the Thames Estuary.

AEF considers that all UK aviation expansion plans should be put on hold pending a review of the fundamental evidence underpinning Government policy on airports. We are concerned about the environmental impacts of a new airport in the Thames Estuary in terms of biodiversity loss and likely increases in greenhouse gas emissions as a result of increased aviation activity. Purported environmental benefits of in terms of noise, air pollution and risk, meanwhile, remain uncertain.

We are therefore opposed to the building of a new airport in the Thames Estuary, and consider that rather than investing further public money into consideration of new airports, investment should instead focus on provision and promotion of low-carbon alternatives to aviation.

Why estuary airport proposals have never got off the ground: some historical examples

Maplin Sands

A proposal to build a new airport at Maplin Sands was considered as part of the Airports inquiries 1981-83. TCPA – the Town and Country Planning Association – supported it on the grounds that, in terms of both agricultural and noise impacts, it was preferable to the expansion of Stansted.

Similar proposals had been considered, yet rejected, many times previously. As far back as 1974, for example, the government decided to abandon plans for a new airport at Maplin on the basis that technological improvements would bring aircraft noise at onshore airports under control, while an airport at Maplin offered an expensive alternative with potentially adverse physiographic, botanical and ornithological impacts.

The Airports Inquiries rejected the renewed call for a Maplin airport on grounds that:

- The cost and timescale for construction made the proposal unattractive
- The MoD, which owned the surrounding land and used it for various research and testing activities, would need to be relocated and no suitable alternative sites were available; there were dangers of building on land where rounds of white phosphorus were likely to remain
- Loss of wetlands at Maplin represented a more significant ecological impact than Stansted expansion would have

- No local authorities supported the plan
- While the predicted noise impact appeared to be very low in terms of an NNI 35 contour, if a Leq 55 contour was drawn up the noise would in fact be considerable, due to various impacts on the local environment such as ground transportation and changes to sea breezes

The report concluded:

The aspiration of TCPA that its stance would provide a focus or catalyst for continuing and widespread support for Maplin was never realised. In my judgment the Maplin project should, for the overwhelming reasons I have rehearsed above, stay well and truly buried.

Marinair

In 1992 the Government set up a working group to consider advice from the CAA that another runway's worth of capacity would be needed to serve the South East by 2005. The *Runway Capacity to Serve the South East* (RUCATSE) group considered a range of options, including a proposal for Marinair – an artificial island airport in the Thames estuary. The group considered that an airport in the estuary would have the advantage of allowing for longer-term expansion than at any inland site, would minimise the exposure of communities to aircraft noise, and would accord with the Government's regional planning guidance for the South East.

They considered, however, that

- Marinair may struggle to attract business away from existing airports
- Reliance on a high speed train link to the island would leave virtually all passengers affected by breakdowns
- The level of urbanisation would exceed that allowed by local authorities for the region
- The link to the terminal would have an adverse visual impact (be ugly!)
- The project would affect directly or indirectly five separate conservation sites
- The promoters had been unable to supply detailed noise contours so the noise impact remained uncertain

RUCATSE concluded that only the four existing major South East airports – Heathrow, Gatwick, Stansted and Luton – offered worthwhile prospects of responding to forecast levels of demand without serious inconvenience and excessive fragmentation of the network.

Goodwin Sands, Sheppey and Thames Reach

The Department for Transport's 2002 work on *The future development of air transport in the UK*, which preceded the 2003 white paper, considered a number of estuary airport options:

- Goodwin Sands - a new island airport east of Deal in Kent comprising two sites, each with two runways, with a total capacity of 120mppa
- Marinair - a new four-runway island airport (with terminal on-shore) in the Thames Estuary, north east of the Isle of Sheppey
- Sheppey - a new two-runway airport on the Isle of Sheppey in Kent with a capacity of 75mppa and the potential to grow to four runways beyond 2030
- Thames Reach - a new four-runway airport on the Hoo Peninsula in Kent (close to the Cliffe option), with a potential capacity of 120mppa

In addition, the Department considered the two estuarine sites for large new airports – Cliffe and The Cant – that had been addressed by SERAS (the South East and East of England Regional Air Service Study, commissioned by the government in 1999 to set out options for development of airports and air services over the next 30 years.)

Dft identified a number of issues of concern common to all proposals for offshore or coastal airports, including the following:

- Construction costs, which would be incurred largely in the early phases of development before any revenues are generated, would be significantly higher than for onshore sites and less certain
- Costs of related transport infrastructure could be very high.
- Some impacts (such as noise), would be reduced but damage to sensitive habitats might be more likely, and some new environmental impacts would need to be considered, such as marine ecology, and effects on tidal flow. Land-take at the site would be less than for onshore locations, though land might be still required for associated facilities and for new road and rail links. Risks posed by bird strike would be expected to be greater at estuarine sites, especially those on or close to the shoreline.
- The financial viability of a new estuarine airport would be likely to depend on government intervention to try to ensure early take up of new capacity by passengers and airlines. Although offshore airports had been built elsewhere in other parts of the world, none of them was part of a multi-airport system as would be the case in the South East. The level of intervention required to ensure success would almost certainly entail significant costs to the public sector.

Each of the options considered was rejected. Cliffe was found to generate adverse impacts in relation to the South Thames Estuary and Marshes Site of Special Scientific Interest (SSSI), the Thames Estuary and Marshes Special Protection Area (SPA) and the Ramsar Site (indicating a wetland of international importance). Goodwin Sands was considered to deliver poor economic benefits. Marinair was deemed prohibitively expensive. Sheppey was thought likely to generate significantly lower net economic benefits than a combination of one new runway at each of Stansted and Heathrow, and to rely on excessively optimistic assumptions about high speed rail access. And the Thames Reach site was considered to share the disadvantages of Cliffe in that a substantial part of the airport site would impact on areas of very high ecological value protected under the EC Habitats Directive, while the risk of bird strike was a significant concern.

The Government's conclusion was to support making best use of existing runways, and to provide two new runways in the South East – at Heathrow and at Stansted - in the thirty year period to 2030.

Douglas Oakervee report: the latest feasibility study

In October 2009 the report commissioned by London Mayor Boris Johnson to consider the feasibility of a new airport in the Thames Estuary was finally published (available at <http://www.testrad.co.uk/pdf/TEAFRreport.pdf>) . The study seeks to avoid recommending a particular geographical location or detailed specifications for such an airport, but concludes that:

The area of the Thames Estuary does not present any insoluble issues regarding weather, geology, hydrography, shipping lanes, fishing activities, leisure services or other physical obstructions.

A cost of £40 billion including transport links is estimated, based on the opinion of ‘most experts’.

The view of the report author differs in one crucial respect, however, from that of Boris Johnson. The Mayor is opposed to the building of a third runway at Heathrow and has suggested that an island airport could provide an *alternative* to the Government’s Heathrow expansion plan. Douglas Oakervee, on the other hand, sees a Thames estuary airport as *additional to* expansion not just at Heathrow, but also at Stansted and Gatwick. Conservative party policy makes no mention of an estuary airport and opposes expansion at Heathrow, Gatwick or Stansted.

Approach and content of the Thames Estuary Airport Feasibility review

Oakervee’s report argues in the context of noise impacts on West Londoners that there is a need to decrease, not increase the environmental impact of Heathrow, saying:

Hopefully with the introduction of high speed rail and HS2 in particular being given priority the ambitions to build a third runway in the short term at Heathrow will disappear.

Nevertheless, it goes on to consider the Department for Transport’s projections for passenger demand growth and reaches the following conclusion on these figures:

Together they show the relationship between supply of runway capacity at those dates both without and with new runways at Heathrow circa 2020, Stansted 2020 and Gatwick 2025. This shows that even with three new runways in theory there is a short fall of some 540,000 slots by 2035. That is about the capacity of two runways which is notionally equivalent to 70 million passengers per annum.

As we know from Heathrow 70mppa means that the runways are operating at about 99% efficiency and at near capacity requiring another runway. From this it certainly would appear that a further airport is required by or before 2030.

AEF has historically argued that a ‘predict and provide’ model for airport expansion – forecasting future demand then ensuring extra capacity is provided to meet this demand – fails to take environmental impacts into account in decision-making and that the Government should instead commit to managing demand as necessary to keep aviation within sustainable environmental limits.

Oakervee’s report fails to explain how, with new runways at Heathrow, Stansted and Gatwick in addition to an airport in the Thames estuary with at least new runways, environmental targets could be met – a fact he acknowledges:

A fundamental change in air travel behaviour and technology will become a necessity if climate protection measures such as halving global emissions by 2050 are to be achieved. Unless industry can come up with a solution in time the use and need for airports as we know them today may change and influence the timing for a new airport.

Regardless of this failure to reconcile airport expansion plans with environmental limits, however, he concludes the report by arguing that a Thames Estuary Working Group be established to consider how a new estuary airport should be accommodated into wider planning issues, saying, “it is clear that there are no overwhelming constraints to building an airport in the Estuary.”

NGO and local authority opposition

Both Kent County Council and Medway Council oppose the scheme, and have already set up a website, together with RSPB called 'Stop the Estuary Airport'

<http://sites.medway.gov.uk/airport/>

The organisations cite a range of reasons for their opposition including the following. (It should be noted that Kent County Council supports expansion at Manston airport as an alternative to construction of a new airport in the estuary. Comment from Medway Council is at

<http://www.medway.gov.uk/index/council/committees/commdoc/commlist/viewagenda/viewrecord.htm?id=683>)

Impacts on local communities:

“Huge unsightly highways to be built linking the airport to the motorway network, turning parts of Medway and Kent into a concrete jungle”

“The noise, light and air pollution would be intolerable”

“The airport would lead to blight in the surrounding area including falling property prices and uncertainty for many years about inward investment into Medway”

“Unloading London’s problems on Medway’s residents”

Financial and practical concerns:

“A poor use of money”

“The airport would be disproportionately affected by fog and high winds”

Biodiversity:

“The airport would damage or destroy huge areas of legally protected habitat”

“There could be a significant risk of bird-strike, as the Thames Estuary is a hub for hundreds of thousands of migrant 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.”

Climate change:

“A new airport would exacerbate climate change, which remains the greatest threat to biodiversity.”

AEF position on a Thames Estuary airport

AEF is concerned about the provision of any new airport capacity at a time when the environmental impacts of aviation are not appropriately regulated. We are mindful, for example, of the statement made by former aviation minister Chris Mullin of his time in office: “I learnt two things. First, that the demands of the aviation industry are insatiable. Second, that

successive governments have usually given way to them. Although nowadays the industry pays lip-service to the notion of sustainability, its demands are essentially unchanged. It wants more of everything – airports, runways, terminals” (Garman, J. (2006) *Greenwash Exposed* – BAA. 6/10/06 on turnuptheheat.org).

AEF rejects Doug Oakervee’s approach, as would conflict with existing AEF policy to oppose expansion at Heathrow Airport. Further, we do not support the building of a Thames estuary airport even as an alternative to Heathrow expansion, as if Heathrow continued to operate at current levels a new airport with several runways would result in a net increase in environmental damage.

A third possibility, advanced by some organisations, would be that Heathrow airport would close altogether and be replaced by a Thames Estuary airport, allowing for possible improvements in relation to the numbers of people affected by noise disturbance, air pollution and third party risk while stabilising greenhouse gas emissions. Yet the likelihood of this option being advanced seems extremely slim.

In May 2008 the Sustainable Development Commission, together with the Institute for Public Policy Research, published a report entitled *Breaking the holding pattern*, which highlighted widespread controversy over the basic economic, environmental and technological data on air travel and argued that airport expansion decisions be put on hold pending public debate around these issues.

AEF Director Tim Johnson said at the time:

Today’s recommendations from IPPR/SDC highlight the need for Government to put its aviation expansion plans on hold while fundamental evidence underpinning its policies is both reviewed, discussed with stakeholders, and agreed.

Currently, however, emissions from UK aviation are set to grow, noise annoyance from aircraft is predicted to increase across Europe, and public safety around airports is inadequately addressed by Government policy. Meanwhile, RSPB remains unconvinced that an airport could be built anywhere in the Thames Estuary without causing unacceptable damage to habitats.

Conclusion

AEF is concerned about the environmental impacts of a new airport in the Thames Estuary in terms of biodiversity loss, the environmental damage from new surface access provision to and from central London and likely increases in greenhouse gas emissions as a result of increased aviation activity. Purported environmental benefits of in terms of noise, air pollution and risk, meanwhile, remain uncertain.

We are therefore opposed to the building of a new airport in the Thames Estuary, and consider that rather than investing further public money into consideration of new airports, investment should instead focus on provision and promotion of low-carbon alternatives to aviation.