

## SOUTH EAST ENGLAND DEVELOPMENT AGENCY

### BOARD MEETING ON 26 MARCH 2009

#### ITEM 7

#### Airport Policy

#### Recommendation

The Board is invited to **AGREE** to continue to support the expansion of Heathrow Airport as the only effective way to deliver additional capacity for global travel to support the sustainable economic development of the South East, and to note:

- a) The additional work to be carried out to improve our evidence base on the value of Heathrow to businesses and on its regional carbon impact.
- b) The significant work SEEDA is already carrying out, and will undertake in the future, to help overcome barriers to the delivery of the expansion of Heathrow and maximise its effectiveness as an economic development driver:
  - Improving surface access
  - Supporting innovation in the aerospace sector
  - Heathrow 360° – maximising the economic development benefits of Heathrow.

#### Background

1. The Government has now indicated its support for Heathrow 3<sup>rd</sup> runway. This brings to a conclusion a consultation which started with the *Future of Air Transport* White Paper in 2003, and which has throughout advocated the construction of the 3<sup>rd</sup> runway. SEEDA has publicly supported this decision. SEEDA's support is based on evidence of the benefits to business and the economy, on the Government's commitment to ensuring environmental standards are met and that surface access, particularly by public transport, is improved.
2. These were the key issues for the Board at the Heathrow rummage held at the June 2008 meeting. At the rummage the Board agreed that SEEDA's role in decision making and securing the necessary involvement for the future needed to be clear since Heathrow's role as a global hub was crucial to the economy of the South East and the UK. Since then a cross-SEEDA group has come together to address the different aspects of this issue comprehensively.
3. The third runway is a very controversial project with a range of difficult challenges and a strongly contested evidence base. The Conservative Party and many regional stakeholders are strongly opposed to expansion.

As the planning decision on the third runway will almost certainly be taken after the next general election this is a very significant issue.

4. This report updates the Board about the evidence base on the key issues affecting the further expansion of Heathrow. It recommends that SEEDA should continue to strongly support further expansion at Heathrow, while also carrying out further work to improve the quality of our evidence. It also identifies a range of actions which SEEDA should take to deliver improvements to surface access, environmental performance and the economic development impact of Heathrow. These actions are all highly desirable whether or not Heathrow expands further. As a result there is the opportunity to achieve a broad consensus in the region for these actions.
5. The report summarises the key issues. More detail on the case for the third runway and recommended areas for SEEDA action is contained in two appendices.

### **The case for the Third Runway**

6. This section of the report describes the case for supporting the 3<sup>rd</sup> runway, and sets out the evidence which SEEDA has on the main issues. It recommends a programme of additional evidence gathering to improve SEEDA's knowledge.

#### **a) Benefits to business**

7. The benefit of Heathrow to businesses and to the economy of the South East is the key basis for SEEDA's support for its expansion. Overall around 16 million passengers each year at Heathrow are on business. This is around two-thirds of all business flights taken from Greater South East airports. This reflects the fact that Heathrow, as a major hub airport, has flights to a wide range of destinations favoured by business.
8. Expansion will enable a wider range of destinations to be served, enabling access to new and expanding markets while maintaining existing routes. This is a key benefit for businesses in a global trading environment. The other three European hub airports are currently expanding to a capacity well above that of Heathrow. The concern is that without expansion of Heathrow the SE of England will lose its competitive advantage.
9. This argument is persuasive but is mainly based on secondary evidence at present. We need an understanding of the extent to which businesses in the area, particularly those which operate internationally, will need to fly more to grow their business, and the extent to which proximity to an airport with the widest possible range of destinations will be key to their being able to do this efficiently.
10. As a result it is proposed to carry out a statistically valid sample survey of at least 500 businesses, focussing on those who operate internationally, to try to better understand the likely demand from growing SE businesses for additional business flights.

**b) Meeting Environmental Standards**

11. In 2003, in the *Future of Air Transport* White Paper, the Government set out three environmental conditions for the future expansion of Heathrow, covering noise, air quality and public transport.
12. The Government has concluded that these conditions can be met by 2020, the date the new runway could be completed. The original environmental conditions did not cover CO<sub>2</sub> emissions and their impact on climate change. The Government has announced significant measures to drive technological innovation, with a target that emissions from aircraft in the UK in 2050 should be below 2005 levels.
13. The proposals to meet the environmental conditions and to address CO<sub>2</sub> emissions are significant, but have been greeted with considerable scepticism by a range of commentators. There are two particular concerns. The first is that technological innovation will not be able to deliver quieter more fuel efficient aircraft in time for the runway to open in 2020. The second is that CO<sub>2</sub> emissions will only be brought back to 2005 levels in 2050, which implies significantly higher levels in the intervening period.
14. SEEDA is directly addressing the key environmental issues. We are heavily involved in developing plans for improved public transport access. We are also supporting innovation in the aviation sector (to the level of £10m over the current corporate plan) in areas that will have a direct environmental benefit. In addition we intend to commission a focussed study of the regional carbon impact of Heathrow. This will enable an action plan to be drawn up to address significant issues.

**c) Are there any viable alternative locations for additional capacity?**

15. The Government has concluded that Heathrow 3<sup>rd</sup> runway is the most appropriate way to meet forecast demand. The Government's policy is that new runways should be built at Heathrow and Stansted, and that smaller scale increases in capacity should be permitted at other airports in the greater south east to meet local demand. Heathrow expansion could provide for an additional 45 million passenger movements per year.
16. The Government rejected the proposal for a new airport at Cliffe in north Kent, and other proposals in the Thames Estuary, mainly on grounds of cost of construction of the airport and associated transport infrastructure to serve it, and impact on nature conservation designations. It also rejected the idea of a third runway at Stansted, finding that this had very low economic benefit, and agreed to stick to the existing legal agreement which prevents construction of a second runway at Gatwick before 2019. Further alternatives proposed by other commentators are assessed below.

*Thames Estuary Airport*

17. The Mayor of London, Boris Johnson has commissioned further work into the feasibility of a Thames Estuary airport, which is expected by the end of

March. A Thames Estuary airport could potentially provide a major hub airport for the Greater South East. It would be likely to have a major impact on the relative attractiveness of different parts of the region to global businesses, but over the very long term this could arguably be managed. However the project does not at present have the support of the Conservative front bench team at Westminster, whose policy position is to retain Heathrow as an operational airport but not to expand it. While SEEDA will keep a watching brief on the proposal, it must at present be regarded as a very long shot indeed as a viable development project.

#### *The role of smaller airports*

18. Another suggested alternative is to accommodate significant further capacity at smaller airports in the Greater South East. Expansion of smaller airports in accordance with current plans is something which SEEDA should support as local airports are a valuable driver of local economic growth. However this approach is not able to accommodate the additional demand which Heathrow 3<sup>rd</sup> runway would accommodate. It would also not enhance the hub capability in the region.

#### *Replacement of flights with High Speed Rail*

19. The policy of the Conservative party is to replace existing short haul flights with high speed rail services. They argue that this will be sufficient to prevent the need to build the 3<sup>rd</sup> runway. The Government has set up a company, HS2, to investigate the potential for high speed rail to the north, serving Heathrow, but sees this as in addition to 3<sup>rd</sup> runway.
20. The principle of High Speed rail links to Heathrow is one which SEEDA can strongly support, as it would bring Heathrow into line with other hub airports in Western Europe which already have or are planning comprehensive high speed rail links. However evidence suggests that even comprehensive coverage of High Speed Rail links from Heathrow to all short haul destinations would provide for less than half of projected additional passenger demand at Heathrow. In addition such a comprehensive network is an unproven financial prospect, and like the Thames Estuary Airport must be regarded as a very long shot as a potential solution.

#### **SEEDA recommended position**

21. The business case for expansion at Heathrow is strong, albeit it is only one of a number of factors which form the South East USP, and there is a need to improve evidence. While they are challenging and contentious, there is the potential to achieve the environmental targets and that there is no realistic alternative to Heathrow expansion at present in providing for the forecast demand for additional flights centred on a hub airport.
22. On this basis it is recommended that SEEDA should continue to support the proposed 3<sup>rd</sup> runway and should work to maximise its benefits and address barriers to its delivery.

## **Recommended areas for SEEDA action**

23. This section advises the Board of three areas of action which SEEDA is taking to address barriers to delivery of the third runway and to maximise the economic benefits to the region. These are valuable whether or not expansion at Heathrow goes ahead. As a result there is the opportunity to unite stakeholders behind them whatever their views on the 3<sup>rd</sup> runway.

### **a) Improving Surface Access – “Western Access to Heathrow”**

24. The Regional Economic Strategy for the South East highlights the importance of Heathrow as an international gateway. It focuses its policy priorities on ensuring that the airport continues to provide efficient access to those markets and is effectively connected to the region and its businesses. Improved public transport access to Heathrow will not only address air quality considerations, but will also assist in mitigating climate change impacts. It will have clear economic benefits in improving connectivity to the airport.

25. Since 2007, SEEDA has actively engaged with partners on issues relating to “Western Access to Heathrow”. SEEDA’s aim is to move away from the current ‘shopping-list’ of potential schemes to a unified approach. We have commissioned Deloitte to undertake some substantial work on this. We expect to have a final version of their study findings available by late March / early April 2009. The findings will then be reported back to the Berkshire Strategic Transport Forum and the Department for Transport. They will be reported to the Regional Transport Board in April.

26. In addition SEEDA will work closely with the new High Speed 2 company set up by Government to investigate the feasibility of a High Speed Rail link from London to Scotland via Heathrow. SEEDA has been invited to be represented on the SE working group for HS2. We will also work through Greengauge 21, an RDA funded project which is working on developing the business case for High Speed Rail between London and the regions.

### **b) Supporting Innovation in the Aviation Sector**

27. SEEDA is currently funding five collaborative R&D programmes under the National Aerospace Technology Strategy (NATS). NATS itself represents collaboration between the aerospace industry and the public sector (Regions, BERR and TSB) aimed at identifying and developing the necessary advancements in aircraft technologies for the next generation of short range commercial passenger aircraft. Such aircraft will be required to demonstrate significant reductions in emissions if UK industry are to meet the Advisory Council for Aeronautics Research in Europe (ACARE) goals (accepted by the UK Government) to reduce environmental emissions from aviation by 2020.

28. Further projects are in the pipeline which could have a value of a further £10 million. Taken together these projects, if successfully brought into production, will make a significant contribution to delivering the improved environmental performance sought by the Government as part of its

support for Heathrow 3<sup>rd</sup> runway. SEEDA can use our commitment and investment to work with the sector, in particular through the Farnborough Aerospace Consortium, to promote the value of the research being done, and to encourage leading businesses to invest further in this kind of research and innovation.

**c) Heathrow 360° – maximising the local economic development benefits**

29. To ensure good communications with stakeholders in the sub region adjacent to Heathrow as well as West London it is proposed to develop a 360 degrees approach to the sustainable development and growth of Heathrow. This will involve setting up a senior level public private sector 'Heathrow 360 Forum' led by SEEDA and inviting participation and joint ownership from London and East of England partners and BAA Heathrow of the core work agenda of SEEDA. It will provide for a regular debate of the key issues of managing the economic and environmental impacts (positive and negative) that a major international airport has on its hinterland and to help the area protect the global competitiveness of the airport and the local economy within its immediate influence.
30. We will invite a select group of people to form a senior level 'think tank' that would be serviced by SEEDA and key people from participating partners. The Forum would receive regular briefings on the core work programme areas, debate them and share information The Forum should not be seen as just a lobby group supporting the decision of the Government and the wishes of BAA. It should act as a critical friend to both the government and BAA Heathrow while getting on with the job of managing the impact of the Airport now and maximising its benefits.

**Communications Implications**

31. Communicating SEEDA's position on Heathrow expansion effectively to partners and stakeholders is a key action for us to take forward. Following the Board decision we will draw up a communications plan which covers the main work areas included in this report.

## **Appendix A: The case for the Third Runway**

1. This section of the report describes the Government's case for supporting the 3<sup>rd</sup> runway, and sets out the evidence which SEEDA has on the main issues. It recommends a programme of additional evidence gathering to improve SEEDA's knowledge.

### **a) Benefits to business**

2. The benefit of Heathrow to businesses and to the economy of the South East is the key basis for SEEDA's support for its expansion. It is also a key basis for the Government's support. The paper accompanying the Government's decision notes that Heathrow employs around 100,000 people directly and indirectly. It further notes that as the UK's major hub airport Heathrow should be able to support a wider range of direct flight destinations and frequencies than would be possible without transfer passengers, and states that this brings benefits for both business and leisure passengers.
3. Evidence commissioned by SEEDA from consultancies Deloitte and York Aviation shows that the SE economy has an above average proportion of air-intensive sectors, that is those which spend a high proportion of their travel budget on air travel. Overall around 16 million passengers each year at Heathrow are on business, of which the vast majority originate from the Greater South East. This is around two-thirds of all business flights taken from Greater South East airports each year. This reflects the fact that Heathrow, as a major hub airport has flights to a wide range of destinations favoured by business.
4. It is York Aviation's firm advice that the hub status of Heathrow is what makes it so attractive to business. A hub airport is one where long haul flights are concentrated, and from where passengers can if necessary transfer to their final destination via a short haul connection. It can provide a wider range of destinations because it is not solely reliant on local demand. This enables businesses to access the widest possible range of customers and markets, and makes a location close to the hub airport very attractive for businesses which trade globally. Expansion of the hub airport will enable a wider range of destinations to be served, enabling access to new and expanding markets while maintaining existing routes. This is a key benefit for businesses in a global trading environment.
5. Heathrow competes directly with Amsterdam (Schipol), Paris (Charles de Gaulle) and Frankfurt airports as one of Europe's major hub airports. Heathrow currently has by a small margin the largest number of flights overall, although its range of destinations has reduced in recent years because of capacity constraints, which have meant airlines have focussed on the most profitable routes. In addition the other three European hub airports are currently expanding to a capacity well above that of Heathrow. The concern is that without expansion Heathrow will lose out as a hub, and as a result will be less attractive to business travellers. This will result in the SE of England losing its competitive advantage as a business location.

This is a particularly significant issue given that the Thames Valley and Surrey area has over 40 European HQs of major multi-nationals.

6. This argument is persuasive but is mainly based on secondary evidence at present. To improve our understanding of the extent to which Heathrow gives the Thames Valley in particular a competitive advantage SEEDA has commissioned a small survey of businesses in that area. Preliminary findings, perhaps not surprisingly, show that at present problems recruiting skilled labour, property and labour costs, and surface transport delays are the most pressing barriers to business growth, not the availability of flights from Heathrow.
7. However this only gives us a snapshot picture. We need an understanding of the extent to which businesses in the area, particularly those which operate internationally, will need to fly more to grow their business, and the extent to which proximity to an airport with the widest possible range of destinations will be key to their being able to do this efficiently.
8. As a result it is proposed to carry out a statistically valid sample survey of at least 500 businesses, focussing on those who operate internationally, to try to better understand the likely demand from growing SE businesses for additional business flights.

#### **d) Meeting Environmental Standards**

9. In 2003, in the *Future of Air Transport* White Paper, the Government set out three environmental conditions for the future expansion of Heathrow. These were:
  - Not to increase the area significantly affected by noise as measured by the 57 decibel contour
  - Confidence that the UK's European obligations with respect to air quality can be met
  - Public transport link to the airport are improved.
10. In supporting the 3<sup>rd</sup> runway, the Government has concluded that these conditions can be met by 2020, the date the new runway could be completed. Air quality around Heathrow currently breaches EU limits, mainly because of emissions from road vehicles. Tighter emission standards for road vehicles are steadily improving this position and even with the third runway the Government's evidence is that by 2020 this standard would not be breached. It should be noted that air pollution from the flights themselves is not the main source of the problem.
11. To meet the noise limits the Government has concluded that older noisier aircraft will not be allowed to use the third runway. This limits its initial capacity, but over time will allow its full use as newer aircraft are introduced. This is a key reason why initially the Government has set an initial limit of 605,000 air traffic movements per year from the three runways, which could eventually rise to 700,000.

12. On public transport the Government has concluded that improvements to the Piccadilly Line by 2014, opening of Crossrail by 2017 and construction of Airtrack to link the south and west to Heathrow will ensure that adequate public transport capacity will exist to serve the airport. Further improvements to surface access, in particular additional High Speed Rail lines are also included in the Government announcement. From a South East regional perspective these improvements, though welcome, are mostly London focussed and insufficient to adequately improve access from our region. SEEDA's ongoing work to improve western access to Heathrow is set out in Appendix B of this report.
13. The environmental conditions do not cover what is probably now seen as the most pressing issue of all, that is CO<sub>2</sub> emissions and their impact on climate change. The Government has announced a range of approaches to address this. These are:
  - £250 million investment to commercialise ultra low emission road vehicles
  - Pressing hard to include international aviation in the global deal on climate change to be considered in Copenhagen later this year
  - Seeking an escalator of ever stricter CO<sub>2</sub> limits for aircraft within the EU
  - Only allowing the cleanest aircraft to use the 3<sup>rd</sup> runway
  - Setting a target that by 2050 emissions from aircraft in the UK are below 2005 levels.
14. This range of proposals to meet the environmental conditions from 2003 and to address CO<sub>2</sub> emissions is significant, but has been greeted with considerable scepticism by a range of commentators.
15. There are two particular concerns. The first is that technological innovation will not be able to deliver quieter more fuel efficient aircraft in time. The second is that CO<sub>2</sub> emissions will only be brought back to 2005 levels in 2050, which implies significantly higher levels in the intervening period. Emissions from aviation are currently around 5% of all carbon emissions. By 2050, given the target of an overall 80% reduction, the Government's target means they will be 25% of all emissions. This shows that failing to hit the target for aviation will have a significant impact on overall emissions.
16. The Government's main weapon to achieve success will be the EU (and future global) emissions trading scheme. Aviation will be added to the scheme from 1 January 2012, and the Government has sought to ensure its effectiveness by tasking the Environment Agency with ensuring operators comply both in the run-up to and after this commencement date. However the existing EU emissions trading scheme has not got off to a good start, with the price of permits currently very low, and there is significant scepticism that it will work effectively in the future.
17. Taken as a whole this is a significant body of opinion which doubts that the environmental conditions can be met. Given that only the air pollution and noise requirements are pre-requisites the view of sceptics is that the runway will be built and fully operational before the CO<sub>2</sub> requirement kicks in, by which time it will be too late to reverse the decision.

18. SEEDA's support for the 3<sup>rd</sup> runway is based on the environmental conditions being met, which must include addressing climate change impacts. As a result SEEDA needs to take the scepticism of informed commentators seriously. So what is SEEDA's role in addressing these issues? Two work areas are relevant. Firstly SEEDA is supporting innovation in the aviation sector (to the level of £10m over the current corporate plan) in areas that will have a direct environmental benefit. SEEDA should actively promote these projects as good news stories on future aircraft efficiency, as a counter to much of the press coverage. This work area is set out in more detail in Part B below.
19. Secondly SEEDA should look at the regional carbon impact of Heathrow. What is envisaged here is a focussed piece of work commissioned from a reputable consultancy to look at the carbon impact of Heathrow, now and with the addition of the 3<sup>rd</sup> runway. This will enable an action plan to be drawn up to address significant issues.

**e) Are there any viable alternative locations for additional capacity?**

20. The third major consideration behind the Government's support for expansion is its conclusion that there are no viable alternative locations to Heathrow for future major expansion, and no alternative to flying to meet the particular travel needs.
21. The Government's policy, as set out in the *Future of Air Transport* white paper, and now confirmed by the announcement in January, is that new runways should be built at Heathrow and Stansted, and that smaller scale increases in capacity should be permitted at other airports in the greater south east to meet local demand. Within the SEEDA area these include Southampton, Manson and Lydd for general aviation, and Farnborough, Blackbushe and Fairoaks for business aviation. The Government rejected the proposal for a wholly new airport at Cliffe in north Kent, and a range of other proposals in the Thames Estuary, mainly on grounds of cost of construction of both the airport itself and associated transport infrastructure to serve it, and impact on nature conservation designations. It also rejected the idea of a third runway at Stansted, finding that this had very low economic benefit. It has also agreed to stick to the existing legal agreement which prevents construction of a second runway at Gatwick before 2019.
22. The alternatives proposed by other commentators are discussed below. The key economic development tests to consider are:
- Will the alternative proposal enhance the hub capability, allowing access to a wider range of destinations including new and expanding markets?
  - Will it be sufficient to accommodate the extra 45 million passenger movements per year which Heathrow 3<sup>rd</sup> runway would do?
  - Is it likely to be deliverable on cost and impact grounds?

### *Thames Estuary Airport*

23. As the Board will be aware, the mayor of London, Boris Johnson has commissioned further work into the feasibility of a Thames Estuary airport, a project which has been nicknamed “Boris Island” as a result. The study is being led by Douglas Oakervee, the engineer behind Hong Kong’s Chek Lap Kok airport and currently the Executive Chairman of Crossrail. The feasibility study is expected to be published this month, and press reports have suggested that it will conclude that the project would cost £40bn including associated transport links.
24. This compares with the Department for Transport’s estimate of the equivalent cost of Heathrow 3<sup>rd</sup> runway at £7.8 bn, and Stansted second runway at £4.8 bn. This clearly shows that it will be a far more expensive way of delivering the additional capacity required. Methods of funding are likely to be included in the feasibility study and could include the suggestion that the costs could be recouped by subsequently selling the Heathrow site for redevelopment. Under that scenario a key argument for the project will be that it creates a major environmental benefit by removing Heathrow entirely, and replacing it with a much less intrusive airport, and that this justifies the additional cost. Until the feasibility study is published it cannot be known what the evidence will be on this point.
25. “Boris Island” could potentially provide a major hub airport for the Greater South East. It would be likely to have a major impact on the relative attractiveness of different parts of the region to global businesses, but over the very long term this could arguably be managed. However the project does not at present have the support of the Conservative front bench team at Westminster, whose policy position is to retain Heathrow as an operational airport but not to expand it. While SEEDA will keep a watching brief on the “Boris Island” proposal, it must at present be regarded as a very long shot indeed as a viable development project.

### *The role of smaller airports*

26. Another suggested alternative to expansion of Heathrow is to accommodate significant further capacity at smaller airports in the Greater South East. This has been proposed by Paul Carter, leader of Kent County Council and Chairman of the Regional Assembly. He has tasked Assembly officers to assess the planned capacity increases at smaller airports and cost the provision of infrastructure necessary to bring the plans forward. In the SE region this would include plans to increase capacity at both Southampton and Manston to 6 million passengers per annum, with a smaller expansion to around 2 million passengers per annum at Lydd. There could be similar expansion at smaller airports in the East of England such as Southend.
27. Expansion of smaller airports in accordance with current plans is something which SEEDA should support as local airports are a valuable driver of local economic growth. Southampton is a good example of this. However it can be difficult to generate demand, as the experience at Manston has shown, and infrastructure provision can be expensive relative to the likely benefits.

In addition any proposal would need to go through a proper economic appraisal and benefit / cost analysis.

28. Most significantly however this approach is self-evidently not able to accommodate the additional demand which Heathrow 3<sup>rd</sup> runway would accommodate. It would also not enhance the hub capability in the region. This would do nothing to make flights to new and emerging markets economically viable, and as a result would probably not enhance the route network served from the greater south east.

#### *Replacement of flights with High Speed Rail*

29. The policy of the Conservative party is to seek to replace existing short haul flights with high speed rail services. They argue that this will be sufficient to prevent the need to build the 3<sup>rd</sup> runway.
30. There are two separate issues here. The first is the principle of High Speed rail links to Heathrow. This is one which SEEDA can strongly support, and our proposed approach is set out in more detail in Part B below on surface access. A High Speed Rail link would bring Heathrow into line with other hub airports in Western Europe which already have or are planning comprehensive high speed rail links. High speed rail links can also reduce the growth in air travel which means that it will take longer to use up additional capacity at Heathrow. This is a positive operational as well as environmental benefit. At present Heathrow works at 99% capacity. This means that any operational problem leads to delays, on the ground or in the air, with resulting problems for travellers and the environmental performance of the airport.
31. However, the more pertinent issue for consideration is whether High Speed Rail could replace up to 45 million air journeys from Heathrow and so prevent the need for the 3<sup>rd</sup> runway. A publication by HACAN, the anti Heathrow expansion lobby group, formed the basis for the Conservative Party proposal. This states that there are around 100,000 flights each year from Heathrow serving Edinburgh, Glasgow, Leeds, Newcastle, Manchester, Brussels, Paris, Amsterdam, Rotterdam and Durham Tees Valley. This is likely to translate into around 10 million passengers per year. By 2030 the growth assumption applied by DfT would suggest demand for close to 20 million journeys to these locations. However it should be noted that some of these destinations are around 400 miles from London, which is well beyond the range which studies have shown are attractive for air travellers to divert to rail
32. It looks likely to be the case that even comprehensive coverage of High Speed Rail links from Heathrow to all short haul destinations, including some at distances beyond their likely attractiveness to air passengers, would fall well short of projected additional demand for flights from Heathrow. In addition such a comprehensive network is an unproven financial prospect, and like the Thames Estuary Airport must be regarded as a very long shot as a potential solution.

*Making Heathrow focus solely on the business traveller*

33. Given SEEDA's focus on the needs of business, the suggestion has been made that a solution would be to focus Heathrow solely on the business traveller, freeing up seats taken by leisure passengers and avoiding the need for expansion.
34. Currently over 50% of Heathrow passengers are leisure passengers, and the forecasts are for this to continue. Given that Heathrow does not have any significant charter business, and is not used by any significant budget carriers, it can be seen that most flights from Heathrow will have a mixture of business and leisure passengers, paying similar fares.
35. Any airline prepared to pay the landing fees at Heathrow (which are double those of Gatwick and several times those at most other UK airports) can apply to use the airport. Slots are then allocated by Airport Co-ordination Ltd, a regulated airline owned company that ensures slots are allocated fairly and efficiently. The airline can then use its slots to fly to wherever it chooses and charge whatever price it chooses. This system provides no scope to restrict Heathrow flights to business priority ones.
36. Heathrow could of course become an even more premium airport by increasing landing fees further, subject to the approval of the CAA, but this would increase business costs and would not necessarily create a greater deterrent to leisure as opposed to business passengers.
37. In addition, there is the issue that leisure flight demand would have to be accommodated somewhere else. As shown above there is no readily available alternative location to achieve this. As a result this is not a worthwhile option to pursue.

*Not seeking to meet demand for flights within the Greater South East*

38. The final suggested alternative to expansion is simply not to accommodate all the forecast increase in demand within the Greater South East. A point frequently made in support of this argument is that around one third of Heathrow passengers are transfer passengers which bring no benefit to the region at all. If Heathrow did not expand then increasing numbers of transfer passengers would use Schipol or Charles de Gaulle and, so the argument runs, the problem would be solved.
39. This is very uncertain territory, as such an approach has not been tried before, but two alternative scenarios can be identified.
  - Heathrow could remain as a hub airport, albeit one which did not increase in capacity. This would mean that it would still accommodate transfer passengers, but would have a more limited range of destinations than other European hub airports. This would be likely to have a significant long-term detrimental impact on the locational advantage of the SE and particularly the Thames Valley, but it is hard to quantify how severe this would be.

- Heathrow could over time cease to be a hub airport and become increasingly a point to point airport, with relatively few transfer passengers. This is probably less likely, as the operator is likely to find continued operation as a hub airport a more profitable option. However if it did happen the effect would be to reduce significantly the range of destinations which airlines would find it economically viable to fly to, as they would be reliant entirely on local demand. This would be likely to have an even more significant impact on the advantages of the SE as a business location.
40. The results of the business survey proposed in Appendix A above will help to quantify some of these impacts. However existing evidence strongly suggests that there will be a significant adverse impact on the economy of the region under either scenario.

### **SEEDA recommended position**

41. The preceding sections have shown that the business case for expansion at Heathrow is a strong one, albeit it is only one of a number of factors which form the South East USP, and there is a need to improve evidence. It further shows that while challenging and contentious, there is the potential to achieve the environmental targets and that there is no realistic alternative to Heathrow expansion at present in providing for the forecast demand for additional flights.
42. On this basis it is recommended that SEEDA should continue to support the proposed 3<sup>rd</sup> runway and should work to maximise its benefits and address barriers to its delivery. Proposals for how to do this are set out in the following section.

## **Appendix B: Recommended areas for SEEDA action**

1. This section advises the Board of three areas of action which SEEDA is taking to address barriers to delivery of the third runway and to maximise the economic benefits to the region. These are valuable whether or not expansion at Heathrow goes ahead. As a result there is the opportunity to unite stakeholders behind them whatever their views on the 3<sup>rd</sup> runway.

### **a) Improving Surface Access – “Western Access to Heathrow”**

2. The Regional Economic Strategy for the South East highlights the importance of Heathrow as an international gateway and focuses its policy priorities on ensuring that the airport continues to provide efficient access to those markets and is effectively connected to the region and its businesses. SEEDA’s Transport team made a substantial resource commitment in its budget allocations for the current Corporate Plan period to provide strategic leadership to deliver these RES objectives.
3. Improved public transport access to Heathrow will not only address air quality considerations, but will also assist in mitigating climate change impacts. It will have clear economic benefits in improving connectivity to the airport. The benefits from such improvements would be felt by all users of the internationally important transport corridors around Heathrow, not just Heathrow related travellers. As a result it is SEEDA’s view that such improvements should be a matter of national public priority, to be brought forward as soon as possible, not merely left to the operator to bring forward, as part of further growth proposals.
4. Irrespective of any runway scenario, Heathrow puts particular pressure on regional infrastructure west of the airport, which is already strained in terms of road stress and rail access, and where the proportion of passengers using public transport to access Heathrow is 40% lower than from the East.
5. Since 2007, SEEDA has actively engaged with the Berkshire Strategic Transport Forum, the Thames Valley Economic Partnership (TVEP), the AirTrack Forum, the Highways Agency, Network Rail and the Department for Transport (DfT) on issues relating to “Western Access to Heathrow”. SEEDA’s aim is to move away from the ‘shopping-list’ approach of potential schemes that each claim to be a solution to solve the current problems. What is needed is a unified approach – we need to speak with one voice, especially when it comes to applying for Government funding.
6. Indeed, in close collaboration with above partners, we now have achieved a cross party and cross Unitary Authority “coalition” in the Thames Valley which allows us to set up a comprehensive “**Assessment and Delivery Framework**”, that will measure each scheme against effectiveness, deliverability, fundability and the transport issues addressed by it. Deloitte, in close alignment with DfT, is currently undertaking some substantial work on this. We expect to have a final version of their study findings available by late March / early April 2009. The findings will then be reported back into

the Berkshire Strategic Transport Forum and the Department for Transport. They will be reported to the Regional Transport Board in April.

7. The spread sheet and graphics below give an overview of the major schemes that are currently under discussion. The first six schemes of the spread sheet will be part of the “Assessment and Delivery Framework”.
8. In addition SEEDA will work closely with the new High Speed 2 company set up by Government to investigate the feasibility of a High Speed Rail link from London to Scotland via Heathrow. SEEDA has been invited to be represented on the SE working group for HS2. We will also work through Greengauge 21, an RDA funded project which is working on developing the business case for High Speed Rail between London and the regions.

## WESTERN ACCESS TO HEATHROW

February 2009

### SEEDA ASSESSMENT FRAMEWORK

The first 6 of the following (potential) future schemes are currently being put into a clear Assessment and Delivery Framework (in co-operation with DfT & Deloitte).

|   | Scheme                                    | Description   | Road | Rail | Approx. costs | Development timeline                 | Comments  | SEEDA's involvement  |
|---|---|---|------|------|---------------|--------------------------------------|---|--|
| 1 | Crossrail                                 | New railway line across London running from west to east.   |      | x    | £16bn         | 2015 - 2017                          | In late 2008 the Crossrail Sponsors' Agreement was signed by Transport for London and the Department for Transport. 2009 will see the start of some preparatory work.   | Strategic Influencing; Responses to Gov. consultations and Parliamentary Act procedure; Lobbying for line reservation for extension from Maidenhead to Reading & Ebbwfleet   |
| 2 | Airtrack                                  | Direct connection of Heathrow to the South West Trains rail network (to Guildford, Reading and Waterloo)  |      | x    | £400m - 710m  | 2013 / 2014                          | Together with Crossrail the most advanced scheme. The usual procedure for obtaining the necessary powers for the construction of a new railway is via the promotion of an Order under the Transport and Works Act 1992. TWA Application to be submitted by BAA in April 2009. Public Enquiry expected by September 2009 | Strategic Influencing; Member of the Airtrack Forum; Co-financing of studies; Responses to consultations and TWA procedure; Expenditure so far: approx. £80,000  |
| 3 | M4 Capacity Enhancement                   | This comprises different measures, such as Ramp Metering, Hard-shoulder Running, Dedicated Bus Lanes, Variable Speed Limits etc. Focus on phased development. | x    |      | not known     | Can be introduced relatively quickly | This is a substantial part of SEEDA's current <b>Assessment Framework</b> work (together with Deloitte, DfT and local partners).<br><br>Planned schemes as per this spreadsheet will be evaluated against effectiveness, deliverability, fundability and transport issues addressed by it                               | SEEDA's work influenced DfT's Highways Agency's priorities to put M4 into the top three national schemes; Expenditure so far: approx. £200,000   |
| 4 | Heathrow Hub                              | High Speed Rail link to LHR   |      | x    | £4.5bn        | 2019                                 | Involves building a 24 kilometre tunnel under London. Questionable whether High Speed Rail replaces the need to airport expansion: It will predominately replace short haul and free slots would be absorbed by long haul connections and help Heathrow to keep up with main competitors on the continent.              | Not directly, but through joint RDA co-funding of similar proposition by Greengauge 21. Need to bring SEEDA's HST capability from ERDF-project into debate. We established contact with the CEO of SNCF and are trying to arrange a meeting with RailTeam, which is an alliance of seven European high-speed rail operators. |
| 5 | Colnbrook Line                            | Western rail access from the Great Western Main Line into LHR via disused Colnbrook Line  |      | x    | not known     | not known                            | Very early stage of consideration. Some new tracks are needed to connect into the existing station at T5. Constraint to running a direct rail link from the GWML is the need to run electric trains only into LHR (GWML only partly electrified).   | BSTF scoping study underway. Strategic Influencing, partner on the Steering Group.   |
| 6 | Inter-Urban Coach Network                 | Fast inter-urban services between the sub-regional hubs and Heathrow  | x    |      | £65m          | 2012 - 2014                          | Inter-urban Thames Valley Express bus/coach network, filling gaps in the existing rail network. Would help to reduce overall congestion in the TV   | Led by SEERA. Provision of funding recommended in the draft Regional Funding Advice (12.9)   |
| 7 | High-Wycombe - Maidenhead Light Rail Link | Potential re-introduction of light rail services on partly disused and build-over railway line  |      | x    | not known     | not known                            | Parts of the route closed in the 1970ies & a number of buildings been built over the old railway path. Chiltern Railways seems not to be interested in the route. Re-instatement could be very cost-intensive. Scheme would not have a great impact on overall accessibility improvements.                              | Idea relatively new. No SEEDA involvement.   |

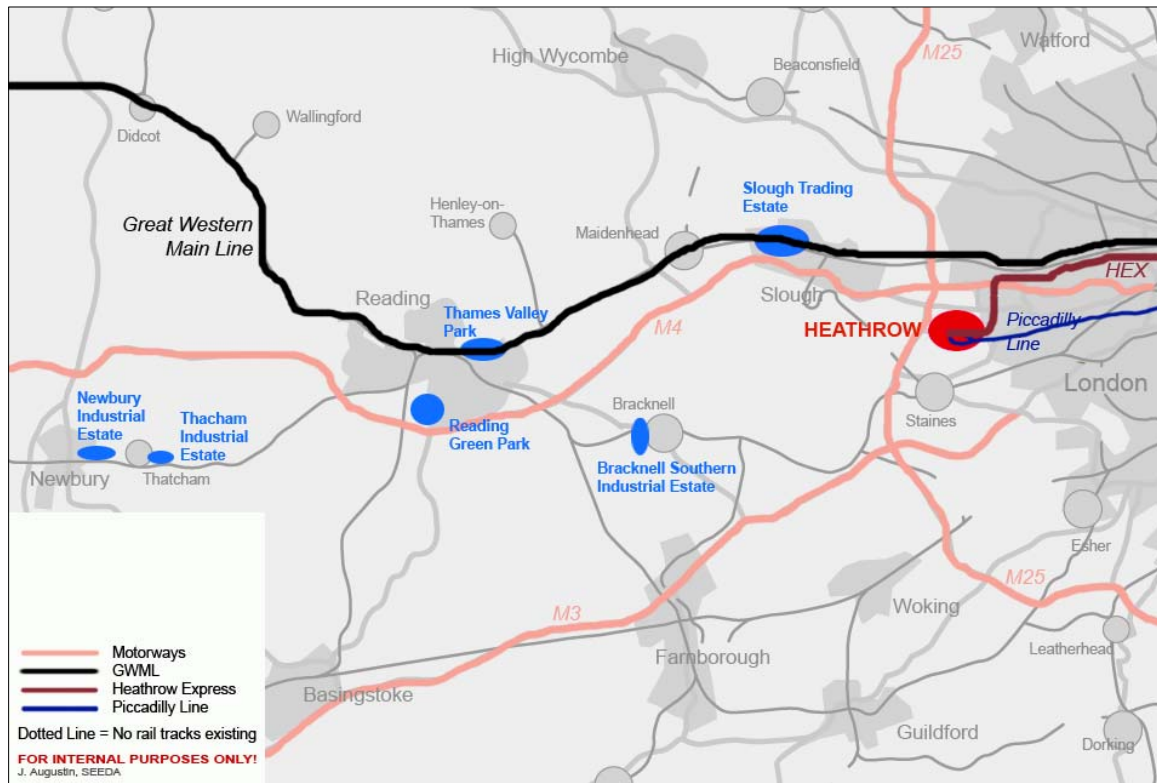
\* List not exhaustive. Only shows mayor proposals.

Existing Public Transport Services:

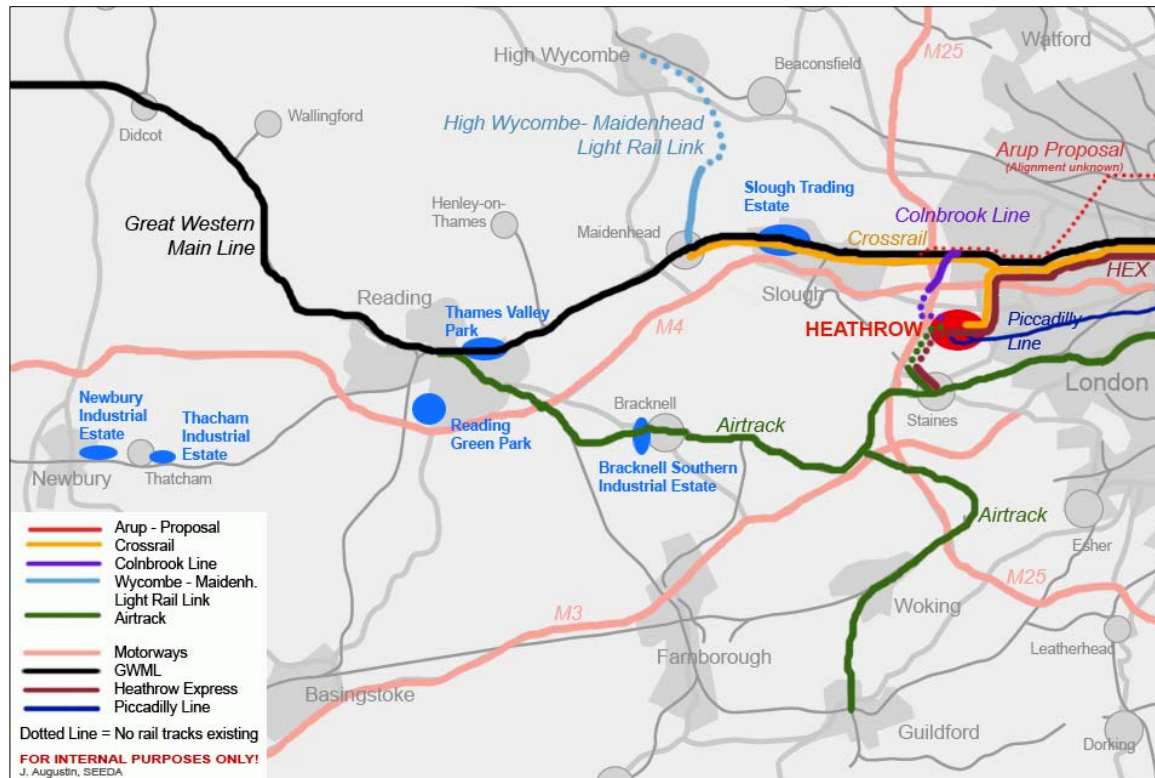
|   |                         |  |   |   |       |          |     |     |
|---|-------------------------|--|---|---|-------|----------|-----|-----|
| 1 | <b>Heathrow Express</b> | Direct rail access to T1,2,3 and 5 from London-Paddington                            |   | x | £750m | existing | n/a | n/a |
| 2 | <b>Heathrow Connect</b> | Stopping service T1,2,3 and 4 from London-Paddington                                 |   | x | n/a   | existing | n/a | n/a |
| 3 | <b>Piccadilly Line</b>  | Underground Service from Central London into T1,2,3 and 4                            |   | x | n/a   | existing | n/a | n/a |
| 4 | <b>RailAir Coach</b>    | Coach Services from all Terminals into the national Rail Network at Reading & Woking | x |   | n/a   | existing | n/a | n/a |

\* List not exhaustive. Only shows mayor links.

List for internal purposes only!



Western Access to Heathrow – Current surface access situation (major transport links – graphic not exhaustive)



Western Access to Heathrow - Proposed new transport links (major transport links – graphic not exhaustive)

**b) Supporting Innovation in the Aviation Sector**

9. SEEDA is currently funding five collaborative R&D programmes under the National Aerospace Technology Strategy (NATS). NATS itself represents collaboration between the aerospace industry and the public sector (Regions, BERR and TSB) aimed at identifying and developing the necessary advancements in aircraft technologies for the next generation of short range commercial passenger aircraft. Such aircraft will be required to demonstrate significant reductions in emissions if UK industry are to meet the Advisory Council for Aeronautics Research in Europe (ACARE) goals (accepted by the UK Government) to reduce environmental emissions from aviation by 2020.

10. The NATS programmes being supported by SEEDA that will have the most direct environmental benefits are:

| Project                               | Value   | Duration            | Core Objective   |
|---------------------------------------|---------|---------------------|--|
| Next Generation Composite Wing (NGCW) | £2,590k | April 08 – March 11 | To meet both market and environmental demands, future single aisle aircraft (or New Short Range, NSR, aircraft) are likely to be made from an unprecedented amount of carbon fibre composites (more than 50%). The UK Aerospace Industry has performed a number of research projects over the last decade aimed at making wings from composites. This has seen fruition in the Airbus A400M wings now being delivered, and the Airbus A350 XWB wing that is currently being designed, both utilising an unprecedented level of |

|   |         |                       |   |
|---|---------|-----------------------|---|
|   |         |                       | composites. However, these products will be produced in much lower numbers than required for the target future NSR aircraft. NSR aircraft will require Airbus and other UK aerospace manufacturers to begin manufacture of carbon fibre composite wings, at an even higher rate than today's aluminium alloy wings, within a short period of time. The target is to be manufacturing carbon fibre composite aircraft at a rate of 40 per month, within two years of first delivery. This represents a considerable change in design and manufacture of composite wings and a huge challenge to Airbus and its supply chain.   |
| HealthMaP (Health Management and Prognostics)           | £3,000k | July 06 – November 09 | HealthMaP is a programme designed to develop the capability to predict and diagnose failure in aircraft equipment and systems, by intelligently interpreting sensor data. The ability to detect faults and the causes of faults, such as wear and damage, means that Health Management and Prognostics Systems can replace human inspection and allow faults to be diagnosed automatically during flight, or whilst the aircraft is stationary on the ground. In addition to increased safety and reliability, application of well developed Health Management and Prognostics Systems within aircraft will result in the reduction of redundant systems, which leads to lighter aircraft, lower fuel usage and a significant reduction in emissions as well as the ability to introduce advanced technology such as more electric actuation of for example flight controls, aircraft landing gear deployment, climate control and braking. Without technologies being developed under HealthMaP, new lighter materials for future aircraft components may not be certified for use and potential environmental benefits would be lost. |
| Multilateral Aircraft Positioning at Southampton (MAPS) | £356k   | July 07 – July 09     | SEEDA funding is enabling Roke Manor Research in Romsey to integrate their multilateration system within a live regional airport under partnership with BAA. This will provide a showcase for their technology which is aimed at providing accurate real time airplane positioning and flight path information to air traffic controllers - a technology that is typically only used by larger airports due to its cost. This will improve the efficiency of flights into Southampton Airport (shortening aircraft separation and flight holding times thus reducing fuel burn) and support the airports drive to cope with projected increases in demands for flights.   |

11. Further projects are in the pipeline which could have a value of a further £10 million. Taken together these projects, if successfully brought into production, will make a significant contribution to delivering the improved environmental performance sought by the Government as part of its support for Heathrow 3<sup>rd</sup> runway. SEEDA can use our commitment and investment to work with the sector, in particular through the Farnborough

Aerospace Consortium, to promote the value of the research being done, and to encourage leading businesses to invest further in this kind of research and innovation.

### **c) Heathrow 360° – maximising the local economic development benefits**

12. To ensure good communications with stakeholders in the sub region adjacent to Heathrow as well as West London it is proposed to develop a 360 degrees approach to the sustainable development and growth of Heathrow. The origins of this proposal lie in the Inner SE section of the RES which outlines the importance of Heathrow to the economy of the SE and the need to engage with partners all around Heathrow to ensure that the airport is managed as it is now with in existing limits let alone those now being set for the future. Some progress has been made through joint discussions and research undertaken including Thames Valley EP, West London Business, Surrey EP and SEEDA. The findings have been circulated widely but as yet there has been no call to action.
13. The purpose of this work will be to effectively and efficiently manage the externalisation of the core work of the Swarm as the work is something that can only be achieved through partnership. Notably this will be:
  - Working in partnership to achieve surface access objectives and outcomes, building on the arrangements already in place
  - Sharing understanding of the carbon impacts,
  - Promoting and facilitating use of technology to reduce environmental impact of aviation,
  - Maintaining the evidence of the value of Heathrow to business and co-ordinating inward investment campaigns and responding to skill needs
  - Sharing our views with others about the proposed alternatives to Heathrow expansion
14. A senior level public private sector 'Heathrow 360 Forum' will be set up, led by SEEDA and with participation and joint ownership from London and East of England partners and BAA Heathrow. The Forum should focus on the core work agenda of SEEDA, together with any additional elements considered particularly important by partners. It will provide for a regular debate of the key issues of managing the economic and environmental impacts (positive and negative) that a major international airport has on its hinterland and to help the area protect the global competitiveness of the airport and the local economy with in its immediate influence.
15. We will invite a select group of people to form a senior level 'think tank' that would be serviced by a joint secretariat including swarm members in SEEDA and key people from participating partners. The joint secretariat would produce regular (to be determined) briefings on the core work programme areas and the Forum would debate them and share information:
  - agree key public statements

- endorse strategic activity of the individual partners or groups of partners aimed at achieving the Forums objectives e.g. activity on surface access.
- direct strategic action to be taken collectively by partners to persuade, influence, catalyse action, raise awareness etc
- as a last resort undertake a small number of direct actions though it is not envisaged that this body will have budgetary responsibility other than partner commitments to commissioning research and other activity of the secretariat that will service the Forum

*The Heathrow think tank*

16. We will need to identify a high profile chair ideally from the business community but some one who can focus on the impacts of the airports wider economic area of influence and the need to address the core sustainability issues. This Think Tank and the Chair should not be seen as just a lobby group just supporting the decision of the Government and the wishes of BAA It should act as a critical friend to both the government and BAA Heathrow while getting on with the job of managing the impact of the Airport now.