



Inner Thames Estuary Feasibility Study

Response to Airports Commission Call for Evidence

The Mayor of London's Submission: Supporting technical documents

23 May 2014

Title: Performance of Options against Commission's Assessment Framework Objectives

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Purpose of paper: To demonstrate the comparable benefits of a new hub airport in the Inner Thames Estuary compared to the shortlisted options when considered in the context of the objectives set out in the Airports Commission's Assessment Framework.

Key messages:

- The Inner Thames Estuary Option performs strongly (and in some instances potentially much better) than the other shortlisted options in relation to a number of the Airports Commission objectives. This confirms the Inner Thames Estuary hub airport's suitability for inclusion as a shortlisted option.
- An Inner Thames Estuary Option has particular strengths when compared to the other options, in relation to potential economic and social benefits that could be realised from the airport's construction and operation and the delivery of wider surface access improvements.
- The assessment highlights a number of potential inconsistencies or gaps in available evidence, or differences in the way in which the evidence has been provided, which need to be addressed as part of the detailed assessment process.

Assessment of options against the Airports Commission's Appraisal Framework objectives

May 2014

1. Introduction

- 1.1. A high level assessment of how an Inner Thames Estuary option and each of the Airports Commission's shortlisted schemes perform against the Airports Commission's Appraisal Framework objectives has been carried out.
- 1.2. The assessment is qualitative, and the assignment of scores subjective. Nevertheless, the rationale scores assigned are provided, and the purpose of this exercise is to provide an indication of how a new Inner Thames Estuary Airport might perform if it were shortlisted.

1. Key finding: The assessment conducted here supports the case for an Inner Thames Estuary option to be added to the Airports Commission's shortlist in view of its potential to meet the Commission's objectives.

2. How the assessment has been carried out

- 2.1. The performance of each scheme against the identified objectives has been scored from 1 to 5.

1	Detrimental to Objective
2	Makes a Limited Contribution to meeting Objective
3	Meets Objective in Part
4	Fully Meets Objective
5	Exceeds Objective

- 2.2. In accordance with the approach set out in the published Assessment Framework, no weighting has been applied to the different objectives or the individual modules.
- 2.3. The scores have been assigned in accordance with information currently available and published on the Airports Commission of scheme promoter's website.

Assessment Matrix of Inner Thames Estuary and other shortlisted options

		Shortlisted Options			Inner Thames Estuary hub airport	Comments explaining scoring
		Heathrow NW runway	Heathrow Hub	Gatwick second runway		
Strategic Fit	To provide additional capacity, facilitating connectivity in line with need	4	4	2	5	<ul style="list-style-type: none"> Heathrow options could improve connectivity to all types of destinations - including long-haul, although not as much as a four runway hub airport would provide in the Inner Thames Estuary. Gatwick second runway would facilitate substantial additional short haul connections, but very few longhaul connections.
	Improve experience of passengers and other users of aviation	3	3	3	4	<ul style="list-style-type: none"> All options would support improvements in passenger efficiency and destination choice. As a new airport, the Inner Thames Estuary would have greater opportunities to integrate modern, efficient systems and could maximise benefits for passenger experience, including their end to end journey.
	Maximise benefits of competition to aviation users and the broader economy	2	2	2	4	<ul style="list-style-type: none"> Heathrow options will be full soon after opening, stifling competition. Gatwick would only be able to compete marginally with Heathrow. A new hub airport could have spare capacity fostering new, and active competition amongst airlines.
	Maximise benefits in line with long-term strategies for economic and spatial development	3	3	2	4	<ul style="list-style-type: none"> Heathrow options will support status quo in terms of employment and supporting development in West London and M4 Corridor. Would do little to help realise wider growth strategies elsewhere in London which are focused in Central London and to the East. Capacity for development in south London not as high as East London. ITE is geographically located to maximise wider objectives such as regeneration.
Economy Impacts	To maximise economic benefits and support the competitiveness of the UK economy	3	3	2	4	<ul style="list-style-type: none"> All options are expected to make a significant contribution to UK economy in terms of additional GVA and jobs. ITE could have a greater capacity and be a more efficient airport than each of the other options.
Local Economy Impacts	To promote employment and economic growth in the local area and surrounding region	4	4	3	4	<ul style="list-style-type: none"> All options would deliver additional direct, indirect, induced and catalytic jobs across a wide range of higher and lower value employment sectors - although scale of impact varies between options.
	To produce positive outcomes for local communities and the local economy from any surface access that may be required to support the proposal	2	3	2	4	<ul style="list-style-type: none"> Heathrow NW Runway and Gatwick propositions rely largely on existing, planned or committed infrastructure. Higher quality surface access solutions increase capacity on existing corridors. Heathrow hub and ITE options both deliver significant transport improvements which could be of benefit to the wider population, including opening up new journey opportunities and links. Proposed ITE Surface Access package would deliver wide range of brand new connections.
Surface Access	To maximise the number of passengers and workforce accessing the airport via sustainable modes of transport	4	4	4	4	<ul style="list-style-type: none"> All options should be scored the same, as long as the costs for each option, and the quality of surface access provision is comparable. For example 'optimal' surface access packages would all help maximise public transport mode share and would be likely to substantially increase current mode shares.
	To accommodate the needs of other users of transport networks, such as commuters inter-city travellers and freight	3	3	3	4	<ul style="list-style-type: none"> Proposed surface access package for all options will contribute towards meeting wider background demand as well as support enhanced or improved transport links in key locations. ITE is likely to have a much greater benefit than other options by making best use of where existing spare capacity is, and providing new public transport connectivity across the Thames Gateway area and wider sub-region.
	To enable access to the airport from a wide catchment area	4	4	3	3	<ul style="list-style-type: none"> All options would have a similar population within a 1 hour catchment. Both Heathrow options are better located to more sizeable regional non-London populations. Gatwick and ITE have marginally poorer connectivity, although brand new high speed rail links could enable excellent catchment areas. ITE catchment is potentially more limited due to location but would be able to capitalise on existing / new regional and international transport links (e.g. HS1 - HS2 link / DP World Port).
Noise	To minimise and where possible reduce noise	1	1	2	4	<ul style="list-style-type: none"> Heathrow options will worsen noise exposure – both the numbers exposed, and the extent to which they are exposed, with a reduction in respite periods occurring for both Heathrow and HH options. Gatwick options will leave Heathrow's impact relatively unchecked. ITE will have a positive contribution in reducing noise impacts. An airport twice the size of Heathrow today could reduce the number of people exposed to noise by 95%.
Air Quality	To improve air quality consistent with EU Standards and local planning policy requirements	2	2	3	3	<ul style="list-style-type: none"> Both Heathrow options would have potential for ongoing air quality impacts (including limit value breaches – which are in part due to the airport and airport-related surface access trips) in densely populated areas. Gatwick would still have potential for ongoing air quality issues but operate within current standards. ITE could operate within air quality limits but potent for some significant impacts from new transport infrastructure in some areas.
Biodiversity	To protect and maintain natural habitats and biodiversity	3	3	3	1	<ul style="list-style-type: none"> Both Heathrow Options and Gatwick are not expected to impact on internationally or designated sites. There will be some local impacts but likely to be less with NW runway and Gatwick which both have detailed mitigation proposals. ITE would result in significant impact on internationally designated sites. However, proposals can meet the tests required to compensate for any loss which could be accommodated within appropriate areas.
Carbon	To minimise carbon emissions in airport construction and operation	3	3	3	3	<ul style="list-style-type: none"> All options would result in an increase in emissions due to construction The new infrastructure will utilise the latest energy efficiency technologies to deliver significantly reduced emissions from operations. All options identify management processes to help minimise carbon emissions through both construction and operation.

		Shortlisted Options			Inner Thames Estuary hub airport
		Heathrow NW runway	Heathrow Hub	Gatwick second runway	
Water and Flood Risk	To protect the quality of surface and ground waters, use water resources efficiently and minimise flood risk	4	3	4	3
Place	To minimise impacts on existing landscape character and heritage assets	2	2	3	2
Quality of Life	To maintain and where possible improve the quality of life for local residents and the wider population	2	1	3	3
Community	To manage and reduce the effects of housing loss on local communities	3	2	3	2
	To reduce or avoid disproportionate impacts on any social group	3	2	3	3
Cost and Commercial Viability	To be affordable and financeable, including any public expenditure that may be required and taking account of the needs of airport users	4	4	4	4
Operational Efficiency	To ensure individual airport and airports system efficiency	4	4	4	4
	To build flexibility into scheme designs	2	2	2	4
	To meet present industry safety and security standards	4	4	4	4
	To maintain and where possible enhance current safety performance with a view to future changes and potential improvements in standards	4	4	4	4
Operational Risk	To enhance individual airports and airports system resilience	4	4	4	4
Delivery	To have equivalent overall capacity of one new runway operational by 2030	4	4	4	5
	To actively engage local groups in scheme progression, design and management	3	2	3	2
TOTAL		84	80	82	95

Comments explaining scoring
<ul style="list-style-type: none"> All options are expected to have some element of flood risk and water quality issue. Issues are potentially more significant for Heathrow (i.e. proximity to reservoir and aquifer) and ITE (as a result of coastal flood risk). All issues at all locations are expected to be capable of being mitigated.
<ul style="list-style-type: none"> All options are expected to impact on Historic Environment, though impact likely to be greatest with both Heathrow options. ITE would have potentially more significant impact on landscape from airport development and associated infrastructure.
<ul style="list-style-type: none"> Both Heathrow options have limited opportunities to address existing quality of life issues - though NW option set to provide wider community benefits in terms of new Colne Valley Park and noise mitigation. Gatwick and ITE would have potential impacts on quality of life for existing communities. ITE has potential to significantly improve quality of life for those residents currently affected by air traffic in London.
<ul style="list-style-type: none"> All airport options would result in the loss of a similar number of residential dwellings. Heathrow NW option and Gatwick have clearly defined compensation / mitigation measures to compensate against loss.
<ul style="list-style-type: none"> Disproportionate impacts will be minimised. While ITE could have a pronounced impact for lower skilled and other minority groups as a result of closing Heathrow, the wider jobs market in West London and the Thames Valley is expected to be strong and minimise any impacts. Conversely, ITE would have a positive impact for lower skilled and currently deprived areas across the Thames Gateway.
<ul style="list-style-type: none"> All schemes are likely to be privately financeable but would need additional government support in relation to the funding and deliverability of additional surface access improvements. All options would see an increase in aeronautical charges on today.
<ul style="list-style-type: none"> All airports could operate with limited impact on the operation of other airports (except ITE which would accommodate the relocation of Heathrow).
<ul style="list-style-type: none"> Heathrow Hub and ITE have capability to provide up to four runways which are capable of affording greater resilience in the event of an airport incident or inclement weather. It also provides flexibility in the capacity to meet future aviation requirements. Heathrow NW runway and Gatwick by providing the equivalent of only a single additional runway, would have less flexibility to deal with airport incidents or inclement weather or to meet future aviation demands.
<ul style="list-style-type: none"> It is assumed that all options will be able to meet present industry and security standards.
<ul style="list-style-type: none"> All options can be assumed to meet all current and future safety and security related rules and regulations.
<ul style="list-style-type: none"> All options can be assumed to enable a resilient London airports system. The resilience of individual airports depends on a number of characteristics including airport and surface access infrastructure. With comparable levels of utilisation and surface access infrastructure provision, all options could score the same. Argument that ITE could score better due to lower levels of runway utilisation. Counter argument that ITE could score worse due to being single airport in single location.
<ul style="list-style-type: none"> All options are expected to be deliverable and operational by 2030. ITE exceeds objective. Could deliver two new runways by 2030.
<ul style="list-style-type: none"> Heathrow NW and Gatwick have been subject to ongoing public engagement and consultation as part of scheme progression and design. More limited public engagement has been undertaken in relation to the other two options to date – but could of course be advanced to a comparable level.