



Department  
for Transport

# Review of the Airports Commission's Final Report

9<sup>th</sup> December 2015

# Introduction

1. In September 2012 the Coalition Government set up the Airports Commission to examine the scale and timing of any requirement for additional capacity to maintain the UK's position as Europe's most important aviation hub, and identify and evaluate how any need for additional capacity should be met in the short, medium and long term.
2. Sir Howard Davies was appointed to chair the Commission, which was required to produce:
  - an Interim Report by the end of 2013, assessing the evidence on the nature, scale, and timing of steps needed to maintain the UK's status as an international hub for aviation; and to make recommendations for the better use of current runway capacity consistent with credible long term options; and
  - a Final Report by summer 2015, giving its assessment of the options for meeting the UK's international connectivity needs, including their economic, social and environmental impact; its recommendations for the optimum approach to meeting any needs; and its recommendations for ensuring that the need is met as expeditiously as practicable within the required timescale.
3. The Commission's Final Report was published in July 2015. It was a substantial piece of work that took nearly three years to complete. Given the scale of the exercise undertaken by the Commission, the body of evidence and analysis produced is an important contribution to the Government's considerations in respect of future airport capacity in the UK. However it is necessary for the Department to review the appropriateness of the Airports Commission's evidence base and of its assessment of that evidence base to inform any Government decision on how to proceed, and to identify whether any areas of that work may need to be assessed by the Government in further detail.
4. This document explains the review undertaken by the Department for Transport of the work of the Commission and sets out the Department's findings to the extent that they might affect the fitness of that work to inform a relevant Government decision on airport capacity expansion.

## Objectives and scope of the review

5. The objectives of the review were to:
  - analyse the relevant Airports Commission Reports and their supporting evidence and analysis;
  - raise points of clarification with the Commission where appropriate;
  - clearly understand the basis on which the Commission reached its conclusions; and
  - inform a Senior Review Panel of its findings.

6. In order to meet its objectives, the review focussed on developing an assessment of the Commission's key findings. The following standard of review was adopted:
- assess the degree to which the Airports Commission's work aligns with the Terms of Reference specified by the Government;
  - consider and identify whether there are any apparent or potential gaps in the evidence developed and considered by the Commission;
  - highlight any areas in which a recommendation of the Commission potentially deviates from current Government policy; and
  - document where the implementation of the Commission's recommendations requires implementing action by Government or others.
7. The review was limited to the information contained within the published work of the Airports Commission. It did not consider evidence, representations or views made by others about future airport capacity needs except to the extent that they are reflected in the Commission's Reports.
8. The scope of the review also did not include drawing any conclusion about the weight to be given to the Commission's recommendations in any future Government consideration of airport capacity or about the relative weight which the Commission gave to different pieces of the evidence it considered or to the assessment modules making up its appraisal framework. It was not intended to reassess or repeat the work of the Commission.
9. To fully understand the Commission's conclusions, the review included both the Final Report and the relevant sections of the Interim Report, which were those that fed directly into the Airports Commission's long-term capacity recommendations. Assessments of material in the Interim Report are integrated below under the relevant chapter headings from the Final Report.
10. The Interim Report includes recommendations for making best use of existing airport capacity in the short and medium term. In particular it makes a set of recommendations on improving surface access to airports with spare capacity to make these airports more attractive to airlines and passengers. These recommendations are outside the scope of the review as they were designed to stand alone from any future decision on airport capacity expansion.
11. Subsequent to the Interim Report, the Airports Commission conducted further analysis on the proposal for an Inner Thames Estuary Airport and published their conclusions in September 2014<sup>1</sup>. This work has been reviewed for consistency with the Airports Commission's Terms of Reference and their own shortlisting procedure. This review is set out at Annex A.

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<sup>1</sup> Available at <https://www.gov.uk/government/publications?departments%5B%5D=airports-commission>

## The review process

12. A detailed explanation of the review process, including preliminary work, clarification procedure, governance and assurance, and the steps taken to ensure propriety and transparency, is set out at Annex B.

## How this Report is set out

13. This Report is intended primarily to identify issues which might affect the fitness of the Airports Commission's Report to inform relevant Government decisions on airport capacity expansion. Accordingly, it considers whether the Commission's findings were reasonable or appropriate to the current stage of policy development.

14. In the sections which follow the Summary of Findings below, each Chapter of the Airports Commission's Final Report is described briefly, along with a description of any part of the Interim Report relevant to the same subject matter. These descriptions are followed with the review assessment. The same approach is taken in Annex A to the Commission's analysis of the Inner Thames Estuary proposal.

15. The Chapters are grouped as follows:

- Chapters 1-3, which establish the context and consider the case for change;
- Chapters 4 and 5, which set the scene for the Commission's appraisal of short-listed proposals, explain the establishment of its appraisal framework and summarise the schemes undergoing appraisal;
- Chapters 6-12, which consider the shortlisted proposals against the appraisal framework;
- Chapter 13, which sets out the Commission's recommended option for expansion and a package of measures to address its impact on the local environment and communities;
- Chapters 14-16, which explain its recommended package of measures and offer advice to the Government arising from the Commission's work and conclusions.

16. It is assumed in this Report that the reader has read the Commission's Interim and Final Reports<sup>2</sup>. References to "the Department" are references to the Department for Transport and references to "WebTAG" are references to the Department's Transport Appraisal Guidance<sup>3</sup>. References to the ITF are to the International Transport Forum.

## Summary of findings

17. The review's key findings were as follows:

- the Department is satisfied that the Airports Commission complied with its Terms of Reference.

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<sup>2</sup> Available at <https://www.gov.uk/government/publications?departments%5B%5D=airports-commission>

<sup>3</sup> Available at <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

- the Department is satisfied that the evidence examined by the Commission was appropriate and sufficient to allow it to reach its conclusion and make its recommendations. Some issues with evidence relied on by the Commission were identified and these are discussed in the text. The Department is satisfied that these points do not affect the validity of the Commission's conclusions or recommendations, for reasons which are explained below, and that the Commission's evidence base is therefore robust.
- the Department is satisfied that the Commission has interpreted its evidence in an appropriate manner and that its conclusions and recommendations are therefore sound. Some limited issues with the Commission's use of evidence have been identified. The Department is satisfied that these do not affect the validity of the Commission's conclusions or recommendations, for reasons which are explained below, and that the Commission's use of evidence is therefore robust.
- the Department also notes that if the Government decided to follow the Commission's recommendations, many areas of policy require further development, including the collection and analysis of further evidence and the consideration of a number of issues of law. This is recognised by the Commission and the Department is satisfied that the Commission has considered these issues to an appropriate level of detail for the purposes of its Terms of Reference and to enable it to reach its conclusions and make its recommendations.

18. The Department is therefore satisfied that the Airports Commission's Final Report is a sound and robust piece of evidence on which the Government can base decisions as to whether further airport capacity is required and as to where that capacity would best be located.

19. The Department notes however that the Commission's conclusions and recommendations reflect its views of the relative weighting to be given to different pieces of evidence and to the different assessment modules making up its appraisal framework. There is a range of reasonable views which might be taken on these matters.

# 1. Review of Chapters 1 to 3 of the Airports Commission's Final Report

20. Chapters 1 to 3 of the Airports Commission's Final Report establishes the context for its work and considers the case for change. The review below explains the content of each chapter in turn before giving the Department's assessment.

## Chapter 1 (Introduction)

21. Chapter 1 sets out the historical context and the Terms of Reference that the Airports Commission were given by the Government<sup>4</sup>. It describes the creation of the Commission and the way in which its work is intended to help the Government plan future airport capacity. It summarises the way in which the Commission carried out its analysis, the factors it considered, and the range of evidence it received and considered.

22. The chapter also describes the steps taken by the Commission to make the process as fair and as transparent as possible such as publishing information on its website, and consulting and inviting responses from the public and interested parties. It includes a summary of the Interim Report's recommendations<sup>5</sup>.

## Chapter 2 (The global and national context for the Commission's work)

23. Chapter 2 provides an overview of the Commission's analysis of recent developments in the global aviation sector. This is used as the starting point for the assessment of the UK's future aviation capacity needs.

24. The chapter looks at the way in which the aviation sector has evolved on a global scale since the last major review of UK airport policy, including the strengths and weaknesses of UK airports and the connectivity they support. It describes two trends, the first for consolidation, partnership and network integration and the second for new entrants, enhanced competition and point to point travel. It notes that some of the industry growth areas were not predicted, and that there are uncertainties and disagreement about the way in which the aviation sector might develop in the future.

## Chapter 3 (The case for change)

25. Chapter 3 presents the Airports Commission's analysis of the importance of aviation capacity to the UK economy and of the costs of the current capacity constraints to the

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<sup>4</sup> The Commission's Terms of Reference are set out at paragraph 1.5 of the Final Report.

<sup>5</sup> Final Report pages 40-41.

UK's residents and businesses. It provides an overview of the Commission's assessment in its Interim Report that the only way effectively to tackle these challenges is through building one net additional runway in the South East by 2030.

26. The Chapter also sets out the process by which the shortlist of three proposals for expansion was reached (a new Northwest Runway at Heathrow, an Extended Northern Runway at Heathrow and a Second Runway at Gatwick). The Commission notes that at the time of its Interim Report, it did not have sufficient evidence on which to base a decision as to whether the proposal for a new Inner Thames Estuary Airport was credible and it therefore carried out further studies and consultation before concluding that the option should not be added to the shortlist<sup>6</sup>.

## Assessment of Chapters 1 to 3

27. The work presented by the Airports Commission is consistent with its Terms of Reference.

28. The Commission presents a significant amount of factual information and in the Department's view, the evidence is thorough and robust and the arguments are logical. The explanation of the short-listing process and subsequent decisions are clear, well-argued and evidenced, and consistent with the published sift criteria. The Department has found no gaps or inconsistencies in the explanations provided and the analysis is fair and thorough.

29. The explanations for rejection of schemes are consistent with the Commission's remit as per its Terms of Reference to identify the credible long-term options which merit further detailed development.

30. The evidence in the Case for Change is based on empirical analysis of connectivity trends over the past 15 years. The Aviation model, originally Department for Transport owned but further developed by the Commission, was used to compare an unconstrained demand scenario to the "do minimum" to estimate the direct passenger impacts of restricted capacity in the future. The approach on direct passenger benefits is robust. For the wider impacts the Airports Commission used two different Spatial, General Equilibrium economic models (S-CGE) to reflect the difficulty and uncertainty of estimating these impacts. These estimate economic impacts of additional or constrained capacity across the whole economy, taking into account interactions across sectors over time. There are reservations about the use of the S-CGE model, which are recognised by the Commission<sup>7</sup>. The Department is satisfied that the approach taken of using different methodologies and tools is appropriate.

31. The Interim Report used five assessment scenarios<sup>8</sup>. The Airports Commission presents a report by the International Transport Forum (ITF) to justify its use of one of these, Assessment of Need, as the core scenario used for assessment, although

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<sup>6</sup> Final Report, paragraph 70. The Commission summarises its further consideration of the Inner Thames Estuary proposal at pages 87-88. See also Annex A to this review.

<sup>7</sup> Final Report, paragraphs 6.31-6.32

<sup>8</sup> The scenarios are summarised in Chapter 6 of the Final Report at, page 107.

conclusions are tested against the other scenarios given future uncertainty. The Department is satisfied that this approach was appropriate. The scenarios were tested under two sets of demand forecasts derived from approaches to methods of managing CO2 emissions: carbon-traded and carbon-capped, the latter in line with the Commission on Climate Change's planning assumption of restricting aviation emissions in 2050. Assessing the case for expansion using both sets of forecasts was a robust approach and demonstrated that aviation demand would still outstrip available capacity even in the lower demand, carbon-capped scenario.

## 2. Review of Chapters 4 and 5 of the Airports Commission's Final Report

32. Chapters 4 and 5 of the Airports Commission's Final Report set the scene for the Commission's appraisal of short-listed proposals, explain the establishment of its appraisal framework and summarise the schemes undergoing appraisal.

### Chapter 4 (The Commission's appraisal and consultation process)

33. Chapter 4 describes the development of the Airports Commission's appraisal framework and the criteria that it used for evaluating scheme proposals. It also explains that the Commission consulted on the development of the framework and further mentions their use of a Sustainability Reference Group. The Commission's final appraisal framework was published in April 2014 with an explanation of the changes it had made following the consultation<sup>9</sup>.

34. The chapter also outlines the way the Airports Commission engaged with and consulted stakeholders in its process. It describes the development of some of its discussion papers and the formal public consultation processes that it carried out, including the questions it asked in the consultation on the three shortlisted schemes. It further discusses some of the specific engagement it carried out and how it analysed consultation responses. It discusses briefly its consultation on air quality issues and how the Commission's work has been informed by the Strategic Environment Assessment Directive.

### Chapter 5 (The short-listed schemes)

35. Chapter 5 outlines the three schemes on the Airports Commission's shortlist. It mostly describes the features of the schemes as put forward by the promoters, but for Gatwick highlights a change to phasing that was put forward by the airport after the Airports Commission flagged up a concern in its consultation. The Commission assessed its view of the schemes' designs, informed by the promoters' submissions and often adopting the same approach as the relevant promoter but in some areas adapting their designs.

### Assessment of Chapters 4 and 5

36. The appraisal framework developed by the Airports Commission to assess and shortlist schemes is consistent with its Terms of Reference.

37. The Terms of Reference specified that the Commission should take into account a number of criteria in the assessment to develop a broad evidence base of the impacts of each scheme and should engage widely to gather views from interested and

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<sup>9</sup> The appraisal framework objectives are set out at pages 91-92 of the Final Report. The Commission's publications can be found at <https://www.gov.uk/government/publications?departments%5B%5D=airports-commission>

affected parties. The appraisal framework developed, and consulted on, clearly captures a wide range of impacts with which to assess schemes, and the Commission has fulfilled its remit to consult widely throughout the process.

38. The Commission's explanation of the short-listing process and its subsequent decisions is clear, well-argued and evidenced, and consistent with the published sift criteria. The Department has found no gaps or inconsistencies in the explanations provided and the analysis is fair and thorough. The explanations for rejection of schemes is consistent with the Commission's remit in its Terms of Reference to identify the credible long-term options which merit further detailed development.

39. It is noted that the short-listed schemes proposed by the promoters vary in some respects from the schemes considered by the Commission. These areas have been separately identified as part of the Department's engagement with the short-listed promoters following publication of the Final Report. The Department is satisfied that the differences identified do not affect the validity of the Commission's shortlist.

### 3. Review of Chapters 6 to 12 of the Airport's Commission's Final Report

40. Chapters 6-12 of the Airports Commission's Final Report appraise the short-listed schemes against the Commission's appraisal framework<sup>10</sup>. Each Chapter deals with one appraisal criterion and the associated appraisal objectives, other than Chapter 11 which covers two criteria. The criteria are: strategic fit; economy; surface access; environment; people; cost; delivery; and operational viability.

#### Content of Chapter 6 (Strategic Fit)

41. Chapter 6 assesses how each of the short-listed schemes performs against the appraisal objectives relating to strategic fit. These were:

- to provide additional capacity that facilitates connectivity in line with the assessment of need;
- to improve the experience of passengers and other users of aviation;
- to maximise the benefits of competition to aviation users and the broader economy; and,
- to maximise benefits in line with relevant long-term strategies for economic and spatial development.

42. The Commission's terms of reference required it to carry out "a review of the evidence in relation to the current position in the UK with regard to aviation demand and connectivity, forecasts for how likely these are to develop, and the expected future pattern of the UK's requirements for international and domestic connectivity." The findings of that review formed the assessment of need set out in the Interim Report.

43. The conclusion of the Interim Report was that capacity equal to one net additional runway would be needed in south east England by 2030, and that the optimal solution would be to continue to invest in an airport system which can cater for a range of airline business models, enabling it to adapt to the future needs of residents and businesses in the UK and not be predicated on a single view of the industry.

44. In the Commission's view, the additional capacity provided would ensure that the UK continued to benefit from strong international connectivity; in particular through routes to emerging markets, which are likely to be increasingly important for the country's economic prosperity. This connectivity should also be produced in an airport system that supports a competitive market and effectively meets the needs of passengers and other users of aviation.

45. The Commission's strategic fit appraisal module is intended to assess how effectively the short-listed options deliver against those goals. It also considers the benefits of each option for the air freight sector, which in the Commission's view plays an important role in the UK economy and can also be the deciding factor that makes a

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<sup>10</sup> The appraisal framework is set out at pages 91-92 of the Final Report.

new long-haul route viable. The Commission considers it important that any new capacity caters effectively for growth in this market.

46. The impacts of expansion would not only be felt by the aviation industry and its customers. In the Commission's view, decisions on where to build new airport capacity are among the most important strategic choices a country can make, with extensive consequences for the economic, environmental and social development of cities and regions. So, the strategic fit module considers how each of the short-listed schemes can support wider spatial and socio-economic development strategies.
47. The Commission considers that new aviation capacity and the enhanced connectivity that it facilitates can have a significant impact on the overall economy, enhancing trade and productivity and supporting growth across a broad range of sectors from tourism to manufacturing. Previous to the Final Report, the Commission presented its analysis of these impacts as part of the economic case but, in the light of consultation responses and advice from its Expert Advisory Panel, reached the view that it more appropriately forms part of its strategic analysis.

## Assessment of Chapter 6

48. In summary, the Department has not identified any significant evidence gaps. Further sensitivity analysis could be undertaken to provide further assurance on the forecasts, but the Department's judgement is that the forecasts are sufficiently robust without such further assurance. In the Department's view, the Commission has applied the evidence in a clear and fair manner to reach a justified conclusion.
49. Future connectivity depends on how airlines choose to use additional capacity and the report commissioned by the Airports Commission on the response of airlines is helpful to identify plausible responses. Of course any forecasting is associated with uncertainty but overall there is a reasonable evidence base to support the Airports Commission's view that expanding Heathrow should deliver greater connectivity benefits in a shorter period given its hub status and better location.
50. The strategic case is based on forecasts from the Aviation model, originally Department for Transport owned but further developed by the Airports Commission<sup>11</sup>. The model has been thoroughly reviewed by independent peer reviewers at the ITF, and the Airports Commission's expert panel, which also looked at the criticisms of the model arising from the consultation. In the view of the panel and the peer review, the forecasts produced by the aviation model were fit for purpose, and criticisms of the model – which mainly revolved around forecasting demand at Gatwick - do not undermine the value of the forecasts to inform the Airports Commission's recommendation. While further model development could be undertaken, given the extent of the peer review, the judgement of the Department's analysts is that this is not necessary at this stage.

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<sup>11</sup> See paragraphs 6.8-6.17 of the Final Report for the Commission's discussion of demand forecasting, including the use of scenarios.

51. The Interim Report presented forecasts based on five scenarios, reflecting a range of alternative aviation futures. The Final Report presents an assessment by the ITF that identifies the Assessment of Need scenario as best representing a more traditional "central" scenario. The Final Report uses this scenario to present results for each scheme (with carbon-traded and carbon-capped variants). While Assessment of Need is the most plausible scenario, the other scenarios provide a useful reminder of the considerable uncertainty over future developments.

52. There are a number of areas raised in or by the Final Report which impact on the forecasts, but which in the view of the Department were either sufficiently considered or do not affect the Commission's overall conclusions in Chapter 6:

- the Final Report assumes that after expansion passenger growth rises rapidly but in practice it could be more phased. The Commission carried out a sensitivity test on this, which found that with a phased approach, there was not a significant impact on the net benefits of the Heathrow Northwest scheme.
- the capacity of the expected new terminal at Heathrow in the Northwest scheme and included in the assessment of costs is inconsistent with the additional passenger capacity used in the forecasts (125m vs. 140m ppa). Further work on scheme design if the scheme was preferred would need to ensure that the new terminal could handle the actual increase in passengers, and a bigger terminal would add to the costs. However, any such increase in costs is not likely to be significant given the scale of the project and therefore does not affect the validity of the Commission's conclusions.
- aero-charges – the approach taken by the Airports Commission is that aero-charges would be absorbed by airlines and not passed on as higher fares. This relies on airlines earning scarcity rents to absorb any cost increases. This is supported by a study by the ITF/SEO, commissioned by the Airports Commission, although the report highlights that scarcity rents are likely to vary across airlines, routes and over time (however modelling such complexity is not feasible given the tools available). The study cites academic literature to support this view, but also consultation responses that contested this assumption. It notes that in a world where aero-charges are passed on then this could affect demand and lower benefits (particularly at Heathrow under either short-listed scheme); if the airlines do absorb these costs it could affect connectivity as they may choose to prioritise thicker, more profitable routes over developing or maintaining a denser network. Neither impact is looked at in the modelling. The recommendation of the study is to note that the passenger benefits could be an upper limit. The Department's view is that the Commission's assumption was a reasonable approach, that it used the study appropriately and that this issue does not therefore affect the validity of the Commission's conclusions.
- the Final Report recommends allowing capacity to be increased at other airports (such as Stansted), although the impact of this has not been looked at in the forecasts. Given the uncertainty of future development at other airports and the need for a clear baseline for analysis, the Department

considers this to be a reasonable approach and this issue does not therefore affect the validity of the Commission's conclusions.

53. The Department notes that all the analysis is based on the assumption that no further intervention on capacity has taken place. The Commission recommends however that the issue of a second additional runway is looked at again by a future UK government, not least because of the considerable uncertainty about the future world in the 2040s and beyond. Given that uncertainty and the need for a clear baseline for analysis, the Department considers this to be a reasonable approach and this issue does not therefore affect the validity of the Commission's conclusions.

## Content of Chapter 7 (Economic Impacts Assessment)

54. Chapter 7 assesses how each of the short-listed schemes performs against the appraisal objectives relating to the local and national economy:

- maximising economic benefits and supporting the competitiveness of the UK economy
- promoting employment and economic growth in the local area and surrounding region; and
- producing positive outcomes for local communities and the local economy from any surface access schemes required to support the proposal

55. The Chapter also assesses performance against a further objective which is intended to pull together the full range of the Commission's economic assessments:

- making efficient use of public funds, where they are required, and ensuring that the benefits clearly outweigh the costs, taking account of social, environmental and economic costs and benefits

56. The Commission considers that continuing growth in demand for aviation will see the existing constraints in the UK's air transport system, and particularly in the London airport sector, exacerbated.

57. As a consequence both business and leisure passengers will, over time, pay increased fares, and experience reduced availability of flights and falling connectivity, meaning passengers have to either travel further to second or third choice airports in order to fly where they need to or not travel at all. Once at the airport, passengers can expect to experience longer ground holding, a worsening passenger experience and more delays and cancellations, as the ability of the system to cope with disruption reduces. Businesses looking to expand by trading with other nations will find new opportunities harder to connect with as connectivity falls and costs rise, and the clusters of businesses that have been established around the UK's major airports will weaken, as these locations become less attractive to high performing firms.

58. The Commission considers that there is a clear benefit to the UK economy from tackling these issues, which would deliver a better-functioning international air

transport network and eliminate or reduce the problems associated with the congested system in the South East.

## Assessment of Chapter 7

59. The Airports Commission uses standard techniques to develop its estimates of passenger benefits and producer costs (excluding delays). Overall, the Department does not have any significant concerns over the evidence presented in the economic case.

### *Wider Economic Impacts*

60. The Airports Commission employed two methodologies to estimate the wider economic impacts that could arise with airport expansion. One is presented in the strategic case and is estimated using PwC's S-CGE model. The other is presented in the economic case, and uses an approach more consistent with the approach suggested in the Department's WebTAG. In the strategic case, the Commission sets out the rationale for wider economic impacts; the ways in which, in its view, airport expansion will lead to wider economic benefits. This rationale is plausible and consistent with the Department's assessment of the economic benefits delivered by transport infrastructure.

61. Because of the innovative methodological approach taken by PwC, using the S-CGE modelling, the recommendation of the Commission's Expert Panel was that it should be treated with caution and should not be used in the economic case. The Department has also identified a number of concerns, which cast further doubt on these estimates. On this basis the Department does not recommend using these figures to inform a decision on preferred location. This does not undermine the Commission's conclusion that the Heathrow Northwest scheme delivers the greatest wider economic benefits, as this is supported by other evidence, in particular the assessment of wider economic benefits using an approach more consistent with WebTAG, as discussed below.

62. The second estimate of wider economic impacts, presented in the economic case, is reasonable. Relative to the estimates of direct passenger benefits, which use an established methodology, these estimates of wider economic impacts are of lower analytical assurance, because they use a less well established methodology for some impacts and rely on a set of more uncertain assumptions. This reflects the early stage of development of estimating these wider impacts within transport appraisal. Given this early stage, estimates are naturally of lower assurance but are still reasonable, considering the approaches available, and it is therefore satisfactory that they form part of the economic assessment.

## ***Local Economy Impacts***

63. Estimating the additional number of local jobs is very difficult. There is currently no methodology approved within WebTAG to estimate them. Notwithstanding, there are a number of other concerns over the estimates for jobs created by the schemes in their local economic area presented in the Final Report. The methodology chosen by the Airports Commission to use the promoters' job multipliers is inherently subjective (since it relies on the promoters' own assessments); and this has not been applied consistently across the schemes. The estimates should be treated with caution and carry very low analytical assurance. Importantly, the job estimates do not form part of the economic analysis of each scheme; they are included in a qualitative assessment which is presented in terms of scale but they are not included in the assessment of net benefits. The Department is satisfied that this is appropriate and the point therefore does not affect the validity of the Commission's conclusions.

## ***Presentation of Results***

64. The economic case presents results for each scheme using the carbon-capped scenario. There is considerable uncertainty over how any future carbon-cap, if it was in place, would be met. The scenario presented reduces future aviation demand to reach the cap, creating a larger penalty for long-haul, higher CO<sub>2</sub> flights, which has an adverse effect on the case for the Heathrow schemes. On this basis, the Gatwick scheme would deliver the greatest economic benefits. Alternatively, a cap could be met through technological measures, and the Commission looked at this in a sensitivity analysis. On this basis, the Heathrow Northwest scheme would deliver the greatest benefits. The Department is therefore satisfied that the Commission's conclusions on the economic case sufficiently took into account uncertainty over whether a cap on UK aviation emissions in 2050 would be introduced, if so how it would be implemented, and its range of potential effects.

65. A considerable proportion of the stated benefits in the Final Report, particularly for Heathrow, accrue to foreign residents, and to International-to-International (I-to-I) passenger transfers. WebTAG suggests that benefits accruing to UK and foreign passengers should be included, and that I-to-I should be excluded. There are reasons however why including I-to-I makes sense, particularly because there is no robust way to separate out completely all impacts – costs and benefits – for each group, including passengers. Whereas it may be possible to do so in relation to benefits, it would be very difficult to do so for costs. This would lead to an unbalanced representation of the costs and benefits which would be misleading. In the Department's view therefore, the Commission's approach to I-to-I transfers is appropriate.

## Content of Chapter 8 (Surface access assessment)

66. Chapter 8 assesses how each of the short-listed schemes performs against the appraisal objectives relating to surface access:

- maximising the number of passengers and workforce accessing the airport via sustainable modes of transport;
- accommodating the needs of other users of transport networks, such as commuters, intercity travellers and freight;
- enabling access to the airport from a wide catchment area.

67. The Airports Commission expressed its intention as being to determine whether the schemes could balance the requirements of minimising their adverse environmental impacts, co-existing with wider demands on the national and local transport networks and acting as an accessible national amenity.

## Assessment of Chapter 8

68. The Commission's approach to the development and assessment of surface access requirements for airport expansion is a reasonable one, developing and establishing through consultation, clear and transparent objectives for the assessment of surface access proposals that are consistent and aligned with both Government's airport surface access policy and the Commission's own Terms of Reference.

69. Given the relative long-term planning horizons in comparison to Government's transport investment planning cycles, the Commission developed a 'core' and 'extended' investment baseline as do minimum position. The Commission assessed the potential surface access impacts and potential cost to 2030, which aligns with the timing of the provision of additional capacity and explained their reasoning for doing so through their consultation process. The Commission's approach is reasonable in the circumstances, given the timescale for the provision of additional capacity and the level of uncertainty, and is consistent with transport planning considerations.

70. The Commission documented a number of assumptions and uncertainties in terms of future transport investment to address background transport demand, and highlighted the reliance on the delivery of both the 'core' and 'extended' baselines of transport investment by Government and other public sector bodies. Variations in such assumptions on investment commitments and actual delivery would have impacts on the Commission's assessment of the surface access proposals specifically required for expansion.

71. The Commission's assessment and its supporting technical analysis provides a sound evidence base and no significant gaps in the evidence base have been identified. The Commission's work has provided detailed assessments across a range of surface access impacts, with technical analysis provided in response to issues raised in relation to potential freight impacts and impacts on local roads. The technical analysis also

underpins the Commission's assessment of sustainable travel and the airport catchment areas.

72. The Commission has clearly identified the degree to which the basis of their analysis and their conclusions rely on actions from Government, particularly the need for continuing investment in the transport network and the continuing commitment and successful delivery of a number of specific transport projects that would support airport expansion.

73. Chapter 8 does not provide details of the respective costs or the surface access project-specific costs but these can be located within other sections of the report and the supporting technical analysis. The Commission has been clear that Government will need to agree the nature and scale of the surface access transport improvements necessary for expansion<sup>12</sup>. The approach is reasonable given both the long-term planning horizons, but also that much of the detailed development of the surface access schemes and the assessment of specific details would be rightly considered and determined as part of the statutory planning processes for a preferred scheme.

## Content of Chapter 9 (Environment Assessment)

74. Chapter 9 assesses how each of the short-listed schemes performs against the appraisal objectives relating to environmental impacts:

- minimising and where possible reducing noise impacts;
- improving air quality consistent with EU standards and local planning policy requirements;
- protecting and maintaining natural habitats and biodiversity;
- minimising carbon emissions in airport construction and operation;
- protecting the quality of surface and ground waters, using water resources efficiently and minimising flood risk;
- minimising impacts on existing landscape character and heritage assets.

75. The performance of the short-listed schemes against each of these objectives was assessed through a separate appraisal module covering noise, air quality, biodiversity, carbon, water and flood risk and place. Chapter 9 considers each of these in turn.

76. The Airports Commission emphasised that in their visits to local communities close to the short-listed airports, as well as in meetings and discussions with community members and their representatives, the members of the Commission were repeatedly reminded of the significant importance attached to these factors, and the very real concerns in relation to both the current impacts of the airports and the potential changes that might occur as a result of expansion. These concerns were also strongly voiced in the public discussion sessions and were a theme of many consultation responses. Ensuring that a detailed and rigorous analysis of these

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<sup>12</sup> Final Report paragraph 16.33.

impacts was undertaken was therefore expressed as a critical priority of the Commission throughout the process.

## Assessment of Chapter 9

### Noise

77. No substantial gaps in the evidence base have been identified. The Commission used a “noise scorecard” to assess the noise impacts of the schemes, which comprised a wide range of metrics. These metrics were subject to prior consultation and included standard metrics used by Government and metrics required for noise mapping under European law, as well as more innovative metrics to measure frequency of noise impacts. The Commission’s work was based on “indicative” flight path designs which is a reasonable approach in the circumstances. These were assumptions and should not be taken as showing where future flight paths would in practice be located. Further modelling would be required when there is greater clarity on flightpaths and mitigation and this work would be subject to consultation.
78. The Airports Commission’s findings and recommendations are broadly in line with the Government’s policy on aviation noise as set out in the Aviation Policy Framework. The Commission also proposed a number of noise mitigation measures, including measures specific to the Heathrow Northwest scheme and national measures which would apply irrespective of expansion or location. These were considered in Chapters 13 and 14 of the Final Report.

### Air Quality

79. Although the Airports Commission used best evidence available at the time, and no substantial gaps in the evidence base have been identified, its modelling was overtaken by new NO<sub>2</sub> projections published by Defra in September 2015, as part of a consultation on air quality. That consultation also suggests that the date for compliance with air quality requirements may not be the date used by the Commission.
80. The Commission recognises the particular significance of legal requirements in relation to air quality to the Heathrow schemes. If the Heathrow North West scheme was to be preferred, as recommended by the Commission, that approval would have to be contingent on the air quality requirements being met.
81. Detailed consideration of how those requirements would be met would follow during the planning consenting process: if the route followed was under the Planning Act 2008, the issue would be examined in the preparation of the National Policy Statement, and more particularly in consideration of the developer’s Development Consent Order application. The interaction between Heathrow expansion and air quality plans would be examined at the National Policy Statement stage, through the Appraisal of Sustainability which will be compliant with the legal requirements for Strategic Environmental Assessment, and at the Development Consent stage,

through Environmental Impact Assessment. The Commission considered mitigation of air quality impacts, and possible further mitigation such that emissions for an expanded Heathrow would meet air quality requirements. In practice any mitigating measures would be examined during the consenting process and required as a result of it.

82. The Department therefore considers that present uncertainties over how a Heathrow scheme would meet air quality requirements do not affect the validity of the Commission's conclusions. It notes however that meeting air quality requirements is considerably more challenging for the Heathrow schemes than for the Gatwick scheme and recognises that if the Government prefers a Heathrow scheme, that preference will be subject in particular to compliance with the legal requirements relating to air quality.

### **Carbon**

83. No substantial gaps in the evidence base have been identified. The forecasts are generated to reflect the uncertainty over future carbon policy, with the Commission generating carbon-traded and carbon-capped forecasts based on advice from the Committee on Climate Change. The Department is satisfied that the Commission's scenarios are an appropriate approach to reflect this uncertainty and its impact on the case for capacity expansion.

### **Other Environment**

84. No substantial gaps in the evidence base have been identified. There are several areas where the Airports Commission acknowledge that their assessment is not complete but that this further work should be done as part of the detailed planning stage – for example on place, biodiversity, water and flood risk. For some areas it is not clear what the Airports Commission are suggesting would fall to Government and what to the promoter, but this will be determined as part of the implementation programme following any preference for a particular scheme. The Department is satisfied that the Commission's analysis is at an appropriate level of detail and that this point therefore does not affect the validity of its conclusions.

85. The Airports Commission did not compile a final business case or sustainability assessment for all three options but business cases and sustainability assessments were produced in November 2014 for the consultation stage. When this point was raised through a clarification question the Commission explained that the overarching business case focuses on the evidence base for their preferred option but includes comparative analysis for the other short-listed schemes. This could be seen as inconsistent with the Terms of Reference which stated that the Final Report should have a detailed business case and environmental assessments for each option, but the information to develop these appears to be available within the Commission's published work. The Department does not therefore consider this point to be significant.

86. The Environment Agency identified a possible missing cost from the Commission's Ecosystems Services Assessment which may mean the monetary valuations of the impact of schemes on ecosystems is undervalued. The Department is satisfied that it is appropriate to consider the relevance and impact of this issue further during policy development once the Government has expressed a preference for a particular scheme and that the limited impact of the issue on the Commission's evidence base does not affect the validity of their conclusions.
87. Natural England consider that the Airports Commission's assessment in its Final Report has been sufficient to identify the key impacts relating to biodiversity and landscape for each of the proposals and agrees with the sustainability assessment scores attributed to the impacts on landscape and biodiversity for each option. Natural England notes however that there remain uncertainties as to the impacts on biodiversity and landscape for all schemes, and these would impact on the sustainability analysis. Natural England also does not agree with the Commission's view that the Heathrow Northwest scheme's impact could 'move towards neutral' with adjustments to scheme design, as they do not expect the proposed mitigation to achieve this. The Department does not consider these points to affect the validity of the Commission's conclusion. Biodiversity and landscape impacts of a preferred scheme and the necessary mitigation measures will be considered as part of the planning process for a preferred scheme.

## Content of Chapter 10 (People assessment)

88. Chapter 10 assesses airport expansion against the appraisal objectives relating to people. The Commission states that it considered a wide range of issues that have impacts on people, but the two key appraisal modules that consider impacts on people specifically were:
- maintaining and where possible improving the quality of life for local residents and the wider population;
  - managing and reducing the effects of housing loss on local communities;
  - reducing or avoiding disproportionate impacts on any social group.
89. The materials published by the Commission as part of its national consultation exercise included a review of the community impacts of each scheme, in terms of their consequences for the loss of housing and community facilities. The review also included an equalities screening exercise, which examined the potential for disproportionate or differential impacts on groups with protected characteristics related to age, gender, religion or belief, disability, ethnicity, sexual orientation, gender reassignment, and pregnancy and maternity.
90. The Commission states that its Quality of Life assessment is the first time an integrated Quality of Life analysis has been undertaken with respect to airport development. The Commission initially reviewed the available literature on the impacts of airports on quality of life then conducted a statistical review of two relevant data sets and compared people's self-reported quality of life with how near to an

airport people lived or worked or whether they were within an airport's noise contour to see if a statistical relationship could be found. The results of the analysis were not scheme specific and were based on a selection of indicators to describe the relationships between people's quality of life and wellbeing in relation to any airport. The Commission considers therefore that this qualitative assessment should be seen as enhancing understanding of the relevant impacts set out elsewhere in the Final Report and in the Commission's Business Case and Sustainability Assessment, rather than contributing to a specific assessment of an individual scheme.

## Assessment of Chapter 10

91. In the Department's view, the Commission's approach to its people assessment is reasonable. The evidence it considers and the use of that evidence is appropriate to assessing the objectives.
92. The Department notes that the Commission did not identify different performance levels between the schemes for the Quality of Life assessment because the relative performance of schemes in relation to the principal impacts (on place, community and air quality) are assessed elsewhere in the Final Report and there would otherwise have been a risk of double counting.
93. The Department notes that this means that a full Quality of Life assessment has not been applied to each scheme, although key elements are taken into account in the Commission's overall assessment. In the Department's view the application of Quality of Life indicators is likely to help justify the relative performance of the schemes but is unlikely to change overall impact assessment scores. The Department does not therefore consider this issue to affect the validity of the Commission's conclusions.

## Content of Chapter 11 (Commercial Viability and Delivery Assessment)

94. Chapter 11 assesses how each of the short-listed schemes performs against the appraisal objectives relating to commercial and technical viability.
95. The Commission's assessment of commercial viability drew together work on the costs, affordability and financing risks associated with each scheme, to consider their performance against the following objective:
  - to be affordable and financeable, including any public expenditure that may be required, and taking into account the needs of airport users.
96. The Commission states that its work on technical viability was conducted as part of its delivery appraisal module and identified and reviewed any significant risks associated with each of the short-listed schemes and the extent to which those risks might be mitigated. It drew on the findings of the other modules within the appraisal framework

to consider factors such as construction risk, housing loss and surface access requirements and qualitatively assess performance against the following objectives:

- to have the equivalent overall capacity of one new runway operational by 2030;
- to actively encourage local groups in scheme progression, design and management.

## Assessment of Chapter 11

97. The review has not identified any significant gaps. However commercial viability is an area where the Department and HM Treasury have sought further external advice and assurance from Rothschild.

98. Rothschild was requested to provide advice as to the financeability of the short-listed schemes and of the promoters' own schemes. The scope of their work, which is ongoing, has been to:

- review and assess the Commission's published material and provide a view on the financeability of each option;
- consider modifications that may be required to each scheme to make them bankable;
- evaluate the impact of changes to capital costs on financeability;
- summarise their understanding of the information and analysis of key difference in analysis of key differences in assumptions between the Commission's and the promoters' own schemes;
- consider the lessons learned from the financing of other UK infrastructure assets.

99. The output has been two reports. A preliminary report prior to the publication of the Commission's Final Report and a revised report after the Commission publication. In addition Rothschild provided an addendum to the revised report which reflects financial information that was received as part of the Department's engagement process with promoters.

100. In summary, all reports concluded that, on the assumption that the Civil Aviation Authority agree an appropriate regulatory settlement, the schemes appear, in principle, to be financeable by the existing shareholders within the debt capital markets and without recourse to Government support in all but the most severe of demand downside scenarios. The financeability and delivery of any of the schemes will however be heavily dependent on the details of the eventual regulatory settlement. The limited financial information published by the Commission has made it difficult to draw conclusions about the financeability of the schemes as assessed by the Commission. However, in all cases, the schemes as assessed by the Commission anticipate a materially larger financing task than the promoters' own proposals. The Department concludes therefore that the Commission's assessment that all the schemes are financially viable is reasonable.

101. The Department's review noted the following potential gaps in the assessment, but does not consider them to be significant:

- the Commission suggest there should be a link between air quality achievements and the use of additional capacity, which does not appear to have been tested as part of the commercial viability assessment. If the Government prefers a Heathrow scheme, the Commission's relevant recommendation will be the subject of further policy development and consultation, which would test its commercial viability. The Department is satisfied that the Commission's approach was appropriate and that this issue does not affect the validity of its conclusions.
- some elements of the analysis were not undertaken on a scheme specific basis. In particular, a quantified risk assessment, which would identify a register of key risks specific to each scheme, was not undertaken. The Commission instead applied a 20% cost increase to all schemes based upon Jacobs' judgment. The Department is satisfied that it was appropriate for the Commission to rely on Jacobs' advice in view of the stage of development of the schemes and that this issue does not affect the validity of its conclusions.
- as the Commission highlighted that the short-listed schemes may need to issue bonds in a number of different currencies, the availability of cross currency swaps should be considered. The Commission noted in their clarification response that the capacity of cross currency swaps was raised as part of its market sounding exercise but this was not considered a constraint by participants. As such cross currency swap market capacity was not developed further by the Airports Commission as part of its evidence base. The Department is satisfied that this is not significant on the basis of Rothschild's assessment.
- the Commission noted that the delivery risks of Heathrow Northwest Runway and Extended Northern Runway schemes are not substantially different. This was based on a qualitative assessment and a quantitative analysis was not developed further by the Airports Commission as part of its evidence base. The Department considers that the delivery challenges facing the Heathrow schemes are sufficiently similar that this was a reasonable approach, while noting that each scheme faces its own particular challenges. The Department therefore considers that this issue does not affect the validity of the Commission's conclusions.
- the Airports Commission notes that delivery will be challenging for each of the schemes but also notes that there is no reason to doubt that they could be delivered on time. They did not specifically address the potential issue of supply chain capability and capacity in this section. In the Department's view, this was a reasonable approach given the uncertainties inherent in considering the supply chain and the promoters' relationships with it at a range of at least five years. The Department therefore considers that this issue does not affect the validity of the Commission's conclusions.

## Content of Chapter 12 (Operational viability assessment)

102. Chapter 12 assesses how each of the short-listed schemes performs against the appraisal objectives relating to operational viability. The Commission states that this assessment enables it to have confidence in the level of additional capacity that schemes will provide, once their impacts on the wider airport system have been taken into account. It allows for an understanding of the quality and type of passenger experience that would be provided by each proposed scheme and how that would align with various future business models and development scenarios. It also allows for the testing of the implications of schemes for delay and resilience, both at the expanded airport and across the wider airport and airspace systems; minimising delays has direct benefits for passengers, airlines and the economy as less time and fuel are wasted. These issues were assessed through modules on Operational Efficiency and Operational Risk.

103. The Operational Efficiency assessment was against the following objectives:

- ensuring individual airport and airports system efficiency;
- building flexibility into scheme designs;
- meeting present industry safety and security standards;
- maintaining and where possible enhancing current safety performance with a view to future changes and potential improvements in standards.

104. The Operational Risk assessment was against the following single objective:

- Enhancing individual airport and airports system resilience.

## Assessment of Chapter 12

105. No substantial gaps in the evidence base have been identified.

106. However the Final Report acknowledges that the capacity assessment is dependent on the resilience and respite assumptions used and the quality of the passenger experience will be dependent on the detailed terminal design, therefore both assessments are indicative. In the Department's view this is an appropriate approach.

107. On safety, the Commission reported that the CAA's preliminary safety review on all three schemes found a number of issues for more detailed investigation and resolution. More work on all three schemes is required to resolve issues around missed approach procedures and obstacle limitation surfaces, which define the generally permitted height for structures in the vicinity of the runway, but this is not unusual for schemes at the assessed level of development. The Department is satisfied that this is the case and that this point therefore does not affect the validity of the Commission's conclusion.

108. On the Commission's discussion of resilience and respite, the Department found no issues which would affect the validity of its conclusion.

## 4. Review of Chapter 13 of the Airports Commission's Final Report

### Content of Chapter 13 (Recommended options for expansion)

109. Chapter 13 explains the conclusions the Commission reached on the basis of the assessment of each scheme against its appraisal criteria, set out in previous chapters.
110. Each of the three schemes shortlisted for detailed consideration was considered by the Commission to be a credible option for expansion, capable of delivering valuable enhancements to the UK's aviation capacity and connectivity. The Commission considered that they would also each have negative environmental effects, which would need to be carefully managed, though in all three cases the schemes' developers had sought to limit those where possible through careful design.
111. Nonetheless, the Commission "unanimously concluded that the proposal for a new Northwest Runway at Heathrow Airport, in combination with the significant package of measures to address its environmental and community impacts described [in the Final Report] presents the strongest case." The Commission considered that it delivers more substantial economic and strategic benefits than any other shortlisted option, strengthening connectivity for passengers and freight users and boosting the productivity of the UK economy, and strikes a fair balance between national and local priorities.

### Assessment of Chapter 13

112. Chapter 13 uses data and evidence detailed elsewhere in the Final Report to support the Airports Commission's reasoning in coming to a conclusion. The reasoning is robust and is clearly set out. There is no new data or evidence presented in this chapter. In the Department's assessments of Chapters 6-12, it identified several issues with the evidence used. As set out in those Chapters, the Department does not consider that those issues affect the validity of the Commission's conclusion and it therefore considers the evidence base and conclusion as well as the reasoning to be robust.
113. The Commission also recommends a range of measures intended to address the impacts on the local environment and communities of the Heathrow Northwest Runway scheme (referred to below as "mitigation measures").
114. The Commission did not include an assessment of the mitigation measures proposed within the economic analysis. Some of the mitigation measures could be expected to generate costs, for example through setting up schemes to ensure air quality compliance, but would also deliver benefits, for example through reduced night noise. A full assessment of the costs and benefits of the mitigation measures when added to the existing economic analysis would necessarily change the estimate of the

net benefits of the scheme. It is uncertain however whether it would affect the ranking of the schemes on net benefit terms because a fair comparison would require mitigation measures to be applied to all schemes and this would change the net benefits of those other schemes. Even if this narrow ranking was affected, the assessment of quantifiable net benefits is one part of the economic case, which in turn is only one of the five cases which inform the conclusion. All of the evidence gathered for each scheme under all of the cases would need to be taken into consideration. The Department concludes therefore that this issue does not alter its level of confidence in the Commission's recommendation of the Heathrow Northwest Runway scheme.

115. If the Commission's recommendation is followed, the Department will consider the implementation of the mitigation measures further, and will consult and assess their costs and benefits as appropriate. The Commission explains its reasoning in relation to the mitigation measures and their implementation in more detail in Chapters 14 and 15 of the Final Report and the Department's view of this is set out below.

## 5. Review of Chapters 14 to 16 of the Airports Commission's Final Report

116. Chapters 14-16 are advisory in nature and assume that the Commission's recommendation in Chapter 13 is followed.

### Chapter 14 (Respecting the needs of local communities)

117. The Airports Commission recommend that expansion at Heathrow Airport should be taken forward as part of a broader package that addresses the environmental, social and economic impacts in a way that both supports the national interest and recognises the needs of local people.

118. Chapter 14 sets out the Commission's recommendations which address the needs and concerns of the communities close to the airport chosen for expansion and explains its reasoning. The recommendations are addressed under a number of headings, namely: "limiting the impacts of noise", "improving compensation", "helping local communities to thrive", "listening to local people" (which includes recommendations on an Independent Aviation Noise Authority) and "providing legal reassurance".

### Chapter 15 (Supporting growth and connectivity across the UK)

119. Chapter 15 sets out the Airports Commission's recommendations to enhance internal connectivity within the UK and explain its reasoning.

### Chapter 16 (Next steps)

120. Chapter 16 sets out the Commission's view of the next steps to ensure the timely delivery of new capacity under the Heathrow Northwest Runway scheme. As well as location specific points, it identifies some key issues which are independent of choice of location (such as the appropriate planning process and the need for change to airspace structures) and the parties who need to act.

### Assessment of Chapters 14-16

121. The content of Chapters 14-16 is consistent with the Commission's Terms of Reference.

122. The Department notes that the Commission's recommendations and next steps assume that the Government accepts its recommendation of the Heathrow North West scheme as the preferred scheme for capacity expansion.

123. The Department is satisfied that the reasoning set out by the Commission in Chapters 14-16 is sound given the evidence base and the Commission presents a credible and ambitious package of measures appropriate to address the impacts of its recommended scheme.
124. Further consideration of the impacts of the Commission's recommendations by the Government is necessary, including consultation and decisions on the appropriate delivery methods where appropriate. The Department is satisfied that the Commission has considered the recommended package of measures and delivery issues to the appropriate degree of detail given its Terms of Reference.

# ANNEX A: The proposed Inner Thames Estuary Airport

125. The Airports Commission commissioned a number of studies over 18 months to assess the feasibility, impact and risks of the Inner Thames Estuary (ITE) option. Based on its findings, the Commission decided that the obstacles to delivery, the high costs, and the uncertain benefits meant that the option should be rejected and not explored in further detail. This decision was published in September 2014<sup>13</sup>.
126. In the Commission's view there are questions around whether strategically a very large airport in the Thames Estuary is the right answer to London's and the UK's connectivity needs, as well as the high costs for the necessary surface access. The Commission considered that the delivery risks, including its surface access links, would be great and the economic disruption would be costly. In its view, the environmental costs could also prove impossible, or very time-consuming, to overcome.
127. The Commission considered that there is no precedent in another country for moving the operations of an airport on the same scale as Heathrow, or as far as implied in the Thames Estuary proposal. It thought that the implications for passengers would be unfavourable in terms of longer rail journeys. Overall, in the Commission's view the proposed ITE airport seems a more risky project, where delays and overruns are highly likely.

## **Strategic Fit**

128. The Airports Commission does not see a binary choice between providing additional hub capacity or additional point-to-point capacity. The Airports Commission sees the optimal strategic approach to be continuing to invest in an airport system that caters for a range of airline business models.
129. Two assumptions were made by the Airports Commission in considering the ITE option. These were i) the necessary redevelopment of the Heathrow site, and ii) that the ITE airport would have three/four runways.
130. Although the Airports Commission is satisfied that an ITE airport could meet the Airports Commission's assessment of need, this would arguably be offset by reductions in Heathrow, London City and Southend.

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<sup>13</sup> Available at <https://www.gov.uk/government/publications?departments%5B%5D=airports-commission>

## **Economy**

131. The Airports Commission undertook a detailed study of the ITE airport's potential uplifts in local economic activity, and possible net economic gains for the country.
132. The Airports Commission argues that there are reasons to be cautious about the scale of potential economic benefits and whether they could be realised. The Airports Commission presents the case for uncertainty around i) passenger forecasts advanced by scheme promoters, ii) pace of wider development, iii) redevelopment of Heathrow site, and iv) net national benefit.

## **Surface Access**

133. The Airports Commission's assessment of the surface access required for an ITE airport is a significant package of multi-modal investment which included £26.9bn investment in rail and a £10 to £17bn investment in road.
134. The Commission highlights a number of delivery challenges for the rail elements of the potential surface access arrangements. The Commission also state that planning, funding and implementing a programme of this scale, in parallel with other transport investments of national significance, and in time for the opening of an ITE airport in 2030, would comprise a significant delivery challenge. The Airports Commission's views on the challenges around funding an ITE airport at the same time as other major infrastructure does rely in part on the continuing prioritisation by Government of its current infrastructure investment programmes.
135. The final decision is underpinned by specific further detailed surface access study work and analysis (Inner Thames Estuary Airport Phase 1B – Surface Access Study (Study 4) – July 2014).

## **Environment**

136. The Commission concluded that there would be positive noise impacts from an ITE airport but negative impacts on habitats. The overall noise benefits from closing Heathrow and operating an airport at ITE (particularly on the Isle of Grain) would be substantial according to the Commission. However, in the Commission's view, an ITE airport's impacts on protected habitats would present a high legal hurdle to be overcome under EU law. The scale of provision of new habitat required to compensate for the ITE airport's impacts on protected sites would be unprecedented and very difficult.

## **People**

137. In the Commission's view, an ITE airport would deliver a substantial change for local communities. New jobs and improved surface access links could be to the benefit of local people. However, in its view the pace of new development and the resulting local economic benefits is uncertain.

## **Cost**

138. In the Commission's view, the total cost of an ITE airport as well as the delivery and escalation risks mean that significant public funding and Government underwriting would likely be required. The Commission considers that competing demands for public funds, the number of years required to deliver an ITE airport and ongoing scrutiny of public spending could mean that delivery is delayed, or even halted.

## **Operational Viability and Delivery**

139. The Airports Commission stated that “there is no single factor that considered in isolation would necessarily make an ITE airport impossible to deliver or operate”. Yet there are a number of factors that could cause substantial delays or escalating costs and for which sufficient mitigation has not been identified. These include concerns around environmental compensation, level of public expenditure, surface access, and transition difficulties.

## **Assessment**

140. The Airports Commission’s approach to analysing the ITE proposal is consistent with the approach used in their Interim Report for other options. We consider that the Airports Commission looked at the correct issues. The issues considered and the way they considered them is consistent with their review of other proposals.

141. The Commission made a considered assessment based on the evidence available to them. The obstacles to delivery, high cost and uncertain benefits are the main reasons why the proposal was not shortlisted. In the Department’s view, these conclusions are sensible and have been backed up sufficiently with evidence in the report.

142. The Commission did not undertake their own forecasting work and relied on the work of the scheme promoters. It is not possible to comment on these numbers without carrying out extensive analysis, but even if the costs are conservative they are still significant even at the lower part of the range. The Department does not therefore consider the lack of independent forecasting to be significant in this context.

143. The surface access section appears to contain a level of transport modelling appropriate for proposals at this stage of development.

144. The level of accuracy is appropriate for this stage of development and includes ranges of costs for the potential surface access proposals.

## ANNEX B: The Review Process

145. This Annex explains the process of review of the Airports Commission's Final Report undertaken by the Department for Transport.

### Review governance and assurance

146. The review process was overseen by a Senior Review Panel (SRP), chaired by the Aviation Capacity Programme Director, who was accountable overall for the successful completion of the review process.

147. The Senior Review Panel's Terms of Reference stated that it would assure:

- the quality of their review documentation and processes;
- the conduct and behaviour of those undertaking the review, including taking corrective action where this was necessary.

148. To fulfil this role the Senior Review Panel would:

- receive the review findings and decide on any appropriate action to address any questions, clarifications and issues raised;
- consider any issues raised by the review process in relation to responses received from the Airports Commission;
- provide direction on how review findings should be presented to the Secretary of State;
- take the necessary decisions on any issues raised about the quality or conduct of the review process; and,
- determine the scope and content of the review process Final Report.

149. The Senior Review Panel could seek recommendations from those undertaking the review process and those co-ordinating the review in order to make informed decisions on the above.

150. All reviewers participating in the review process undertook training to underpin the review process. The training provided covered the aims, stages, standard of review and the required outputs from the review process, as well as providing clarity on the individual responsibilities of reviewers. The guidance provided to those undertaking the review also included details of the Civil Service Values and the importance of considering and declaring any conflicts of interest (actual or perceived).

151. Training sessions for those involved in the review process was organised by the Department's external Legal Advisors (DLA Piper) and further follow-up sessions were held for any reviewers unable to attend the training session, to ensure that the review was only conducted by those trained to do so.

## Propriety and transparency

152. To ensure that the review process was transparent and in particular to avoid potential conflicts of interest or the appearance of bias, reviewers and their supporting technical and analytical advisers were only selected from Department for Transport staff who had not been seconded to the Airports Commission, and reviewers worked independently on their specific review topic.

## Preparing for the review process

153. In advance of the publication of the Commission's Final Report and its supporting evidence and analysis, specific reviewers were assigned to the expected topic areas. The assignment of reviewers was based on their respective policy responsibilities. To assist in the review process, each review topic area was supported by analytical or technical expertise to ensure that the Commission's detailed technical evidence and analytical work was considered and reviewed. The initial review allocations were re-considered and confirmed following publication of the Final Report, to ensure complete alignment and coverage of the review process.

## Report Review Outputs

154. Each reviewer was asked to review their allocated topic areas, and consider evidence from the Airports Commission's Final Report and the associated supporting evidence and analysis. In undertaking the review, each reviewer considered the information and evidence against the objectives and points of focus for the standard of review, namely:

- assess the degree to which the Airports Commission's work aligns with the Terms of Reference specified by the Government;
- consider and identify whether there are any apparent or potential gaps in the evidence developed and considered by the Commission which might affect the fitness of the Final Report to inform a relevant Government decision on airport capacity expansion;
- highlight any areas in which a recommendation of the Airports Commission potentially deviates from current Government policy; and,
- document where the implementation of the Commission's recommendations requires action by Government or others.

155. Each reviewer captured the review assessment in a specifically developed Review Output Sheet. The Review Output Sheet also captured the views and assessment, where appropriate, of the review undertaken by the technical analytical reviewer for the topic area concerned.

## Clarification Questions

156. To assist reviewers in the review process, and to aid the overall process itself, arrangements were put in place for reviewers to raise questions of clarification with

the Airports Commission's Secretariat. The purpose of the clarification process was to facilitate an efficient review, and to ensure that any uncertainty around the understanding of the Commission's work was properly explored and documented.

157. The clarification question process was established to allow reviewers to raise two types of question:

- first, administrative questions, which addressed for example the location of information within the Airports Commission's report and supporting analysis, or perceived minor or typographical errors; and
- secondly, questions related to the substance of the Airports Commission's Report, for example questions as to the definitions and assumptions used within the Airports Commission's work.

158. To efficiently manage the clarification process a Clarification Group was established to consider the questions being raised by reviewers to ensure there was no duplication of questions; that questions were within the scope of the review process; and to document the questions and the responses provided by the Airports Commission Secretariat. Proposed clarification questions were also considered and agreed by the Senior Review Panel before the submission to the Airports Commission Secretariat.

159. As part of the review process, some 80 Clarification Questions were raised by reviewers and submitted to the Airports Commission Secretariat. Of those questions, 12 were administrative in nature while the remaining 68 clarification questions were substantive in nature. The Airports Commission Secretariat provided responses to all of the clarification questions submitted as part of the review process.

## Conclusion of Reviewers' initial review

160. Following receipt of the answers to any Clarification Questions, reviewers finalised the Review Output Sheets for the topic areas in question, before submitting them for consideration and compilation.

## Summary of findings for Senior Review Panel

161. Following receipt of the Review Output Sheets, the Review Team summarised the findings for each review topic area, in order for the review outputs to be considered and agreed by the Senior Review Panel.

## Senior Review Panel's consideration of the Review findings

162. The Senior Review Panel were presented with the findings from the Review process. They were asked to consider whether any further work should be undertaken to feed in to the advice to be presented to the Secretary of State.

