

Airports Commission **Response**

The Airports Commission's Appraisal Framework Consultation

The Mayor of London's response

February 2014

1. Purpose of paper

- 1.1. This document comprises the Mayor of London's response to the Airports Commission's January 2014 Appraisal Framework consultation. In this document, the Mayor responds to the questions posed by the Commission.
- 1.2. The proposed Appraisal Framework and the consultation questions have three elements. This document has been structured accordingly. We make comment upon the Commission's:
 - i. 25 proposed **objectives**, against which the merits of different options are planned to be assessed (consultation questions 1 and 2),
 - ii. 16 proposed **appraisal modules**, which set out the proposed method of assessing options against the objectives (consultation questions 3 and 4),
 - iii. 5 proposed **components of scheme design**, which have the aim of ensuring that options are developed to a broadly equivalent level (consultation questions 5 and 6).
- 1.3. This document should be read alongside the Mayor's response to the Commission's scoping document for an Inner Thames Estuary Feasibility study which has been published at www.newairportforlondon.com. That document sets out why and how the Commission should quickly develop a well thought out Inner Thames Estuary solution. It also identifies a number of key impacts which must be properly and comprehensively understood, before being assessed against the Commission's criteria.
- 1.4. The development and assessment of an Inner Thames Estuary option must occur in parallel, and to the same timescales as the further development and assessment of the currently shortlisted options.

2. Summary of the Mayor's response

- 2.1. While the Commission's draft appraisal framework is generally comprehensive, we make a number of observations. The Commission must consider a number of issues, which are summarised below:

In finalising their Appraisal Framework, the Commission must consider a number of issues:

The Commission's general appraisal approach is comprehensive, but

1. must adopt a wider and longer-term planning and socio-economic perspective
2. must define appropriate base cases which represent 'doing-nothing'
3. is weakened by the absence of specific need requirements and impact thresholds
4. must allow for an Inner Thames Estuary option to be assessed alongside those currently shortlisted
5. needs to be clear on how the Commission intend to engage with interested parties

The Commission's proposed objectives represent a wide range of key issues, but

6. omit a number of highly relevant objectives, for example ones relating to our long-term needs and policy objectives, public health, and safety risks
7. must acknowledge opportunities to reduce those adverse impacts which are already felt

The Commission's proposed appraisal modules are in line with a suitably detailed assessment, but

8. must provide clear guidance on long-term capacity and connectivity needs beyond 2030
9. must not adopt a do-minimum approach to scheme surface access provision
10. must revisit its approach to assessing surface access network performance
11. must consider exploring new monetary values for aviation noise exposure
12. must consider the impacts of schemes over their whole lifetime

The Commission's proposed components of scheme design

13. must offer respondents clearer guidance on which areas to prioritise and focus on
14. must offer respondents clearer guidance on the approach that should be followed for design, engineering and costing of schemes

3. General comments regarding the Commission's proposed approach

The Commission must adopt a wider and longer-term planning and socio-economic perspective

- 3.1. The scale of airport capacity expansion being considered makes the question in hand more than just where to locate a new piece of transport infrastructure. The potential of an intervention of this scale should be fully grasped, as it will unavoidably contribute to the reshaping of London, the southeast and indeed the country as a whole. Both the interaction with the planning and spatial context and the socio-economic benefits and impacts must be integral to the appraisal of the different options.
- 3.2. It is also important to fully appreciate what the timescales for delivery mean for the planning horizon. A third runway at Heathrow would be delivered in the late 2020s, but the Commission's own analysis suggests that a 3-runway Heathrow would be 80-90% full by 2030 – a level of utilisation which erodes resilience and increases delays. This would mean there would be a need for a new runway very shortly after a third runway opened – and given the timescales, such capacity must already be planned for.

The Commission must define appropriate base cases which represent 'doing-nothing'

- 3.3. Many future year outcomes are uncertain, for example,
 - The extent to which previous rates of progress in making aircraft engines quieter will be maintained.
 - Population and employment distribution. Some areas of London and the South East are changing and growing more quickly than others.
 - Some natural habitats and areas subject to environmental designation are changing as a result of natural processes.
- 3.4. Realistic base case assumptions must be identified, justified, presented, and applied by both promoters, and the Commission.

The appraisal is weakened by the absence of specific need requirements and impact thresholds

- 3.5. The Commission has given little indication of acceptable targets. For instance,

- What does its work on assessment of need mean in terms of capacity and airport facility requirements in the long-term. How might new capacity be best configured to maximise economic effects?
- Does the Commission have any targets for protecting human health and the environment? What might the Commission deem to be an acceptable number of people to be exposed to potentially harmful levels of aircraft noise or poor air quality?

The timescales of the Commission's assessment must be carefully considered

- 3.6. If the Commission were to conclude that an Inner Thames Estuary option is worthy of being shortlisted, it is essential that the Commission can assess and consult on an option of the same standard and at the same time as those options already on the shortlist.
- 3.7. The results of any national consultation on the three currently shortlisted options might be invalidated if a separate consultation was conducted on an Inner Estuary airport option at a later date.

It is not clear how the Commission intend to engage with interested parties to conduct a number of essential pieces of work

- 3.8. The role of Mayor of London involves the fulfilment of a number of statutory responsibilities. These include strategic responsibility for spatial planning in the capital, promoting economic development, and setting out strategies for ambient noise, air quality, and transport at a detailed and strategic level. These responsibilities lie behind the Mayor's direct involvement in the aviation debate and why the Mayor wishes to remain directly engaged in the Airports Commission process.
- 3.9. Transport for London, as London's statutory transport authority, expects to be fully involved with the design and appraisal of appropriate surface access measures. We would look to work alongside Network Rail, the Highways Agency and other bodies in this work. Any new airport infrastructure at Heathrow, Gatwick or at an Inner Thames Estuary location will have a significant impact on transport infrastructure and services within the Greater London Authority (GLA) area.
- 3.10. TfL and the GLA both have substantial spatial planning expertise and assessment tools which the Commission should look to draw upon in understanding the local economic and spatial impacts, both inside and outside London.
- 3.11. A wide range of interested parties will also have a clear view on the proposals and mitigation work which will be put forward by scheme promoters and the Commission. The process by which this work might be inspected and commented upon is not clear.

The Mayor's response to the Commission's Consultation questions

4. The Commission's Objectives

COMMISSION QUESTION 1: Are the objectives stated in Table 3.1 suitable for assessing the shortlisted options?

COMMISSION QUESTION 2: Are there any other objectives that the Commission should consider, and if so, what are they?

- 4.1 The Commission's objectives are the overarching principles against which each option will be assessed. The Commission proposes 25 objectives. They fit inside the 8 sift criteria categories adopted by the Commission last year and with which we broadly agree. These were the focus of the outline option submissions made to the Commission by the Mayor and many other parties in July 2013.
- 4.2 The Mayor conducted a public consultation on a proposed set of assessment criteria early in 2013. More than 160 responses were received, from key industry, business, environment, and local authority stakeholders, as well as individuals. The results of this consultation are available online at <http://www.newairportforlondon.com>. This consultation was used to inform the development of a set of assessment criteria which was used both to shortlist the best performing options, from a long list of potential sites for new airport capacity; as well as to conduct a detailed assessment of the best performing sites. We expect the Commission to use its appraisal framework for a very similar purpose.
- 4.3 While the sift criteria categories chosen cover the obvious positive and negative impacts of new airport schemes, the proposed objectives offer some cause for concern. Some essential objectives are missing. The Commission should also be mindful of ensuring that objectives do not have the effect of unduly favouring particular options.
- 4.4 Our comments on Table 3.1, and potential revisions to the Commission's proposed objectives, in line with the questions posed in the consultation are provided below:

Comments on the Commission's objectives (Table 3.1 in the Consultation document):

Phase 1 sift criteria categories	Phase 2 objective - TfL Proposed	Phase 2 appraisal module	Comments
Strategic Fit	To provide additional capacity and connectivity in line with the assessment of need.	Strategic Fit	<ul style="list-style-type: none"> - The configuration of additional capacity is important. - Extra value must be assigned to hub capacity because of the unique connectivity that it can sustain. - What type of additional connectivity is sought and why? There is a benefit in explicitly distinguishing between international and domestic connections.
	To improve the experience of passengers and , other users of aviation, and those affected by it.		<ul style="list-style-type: none"> - There are a great many people who could not be termed "users of aviation" but who are directly affected by the industry.
	NEW OBJECTIVE PROPOSED: To maximise benefits in line with long-term and local and national policy objectives.		<ul style="list-style-type: none"> - The strategic view that has been adopted in the formation of these objectives is too narrowly focussed on the aviation industry. Aviation's wider impacts, for instance on long-term spatial planning issues such as UK industrial policy must also be considered. It is important that benefits are understood over the full time period in which they will be realised.
Economy	To maximise wider economic benefits and support the competitiveness of the UK economy	Economy Impacts	<ul style="list-style-type: none"> - There are two objectives here: <ol style="list-style-type: none"> a. ensuring maximum impact from airport expansion which could be absolute (e.g. total jobs) but also multiplier / value (e.g. additional jobs per £ spent). b. permanently expanding the UK's economy (e.g. removing constraints that may limit growth in the future).
	To promote employment and economic growth in the local area and surrounding region	Local Economy Impacts	<ul style="list-style-type: none"> - It is important that the local area has the available resource capacity to support the employment and economic growth in question.
Surface Access	To maximise the number of travellers arriving at the airport on public transport and promote green modes of transport	Surface Access	<ul style="list-style-type: none"> - Agree that public transport mode share should be maximised. However, the Commission should consider the specification of targets or thresholds. A new airport could put public transport and green access modes first. - High public transport mode shares are most commonly realised when public transport journey quality, capacity, and connectivity are all first-rate. When they are compromised, public transport mode shares reduce.

	To accommodate the capacity, connectivity and journey quality needs of other users of transport networks, such as commuters, intercity travellers, local workforce travel and freight		<ul style="list-style-type: none"> - The priorities of different users must be balanced, recognising each has different needs. - All current and future network users, including the local workforce must be considered. At many locations and on many links, new surface access capacity is required to avoid negative impacts or unacceptable levels of congestion.
	To enable access to the airport from a wide catchment area		<ul style="list-style-type: none"> - The catchment area in question must include relevant population centres and other key locations. Size of catchment area must not be the only factor. Relevant travel times by rail and road and opportunities for integrated activities (e.g. manufacturing and supply chain logistics) should be taken into account – as should future population distribution and the potential to capture traffic from continental Europe (HS1, ports) and other European airports.
Environment	To minimise and where possible reduce noise impacts	Noise	<ul style="list-style-type: none"> - There is still a great deal of uncertainty about the nature of aviation noise and how it impacts on human health and communities. The Commission needs to do further work in this regard. - The Government's Aviation Policy Framework's stated policy is to 'minimise and where possible reduce aviation noise'. - It is not possible to consider noise impacts in isolation from likely future population trends. The population around Heathrow, for instance, has grown considerably over recent years and is predicted to increase further in the future in line with the further growth of London. Noise impacts assessment must take this into account.
	To protect local minimise the number of people affected by poor air quality	Air Quality	<ul style="list-style-type: none"> - Where there are opportunities to improve environments with poor air quality, particularly those which are in areas that are densely populated, these should be taken
	To protect address impacts on natural habitats and maintain biodiversity	Biodiversity	<ul style="list-style-type: none"> - Natural habitats and biodiversity can be reprovided.
	To minimise ensure that carbon emissions in airport construction and operation are compatible with the Government's climate change commitments	Carbon	<ul style="list-style-type: none"> - Minimising emissions to what end? An approach which ensured maximally efficient airport operations in the long term, and compliance with Government's climate change and emissions commitments would be more helpful.
	To protect the quality of surface and ground waters, use water resources efficiently and ensure minimise flood risk remains at acceptable levels	Water and Flood Risk	<ul style="list-style-type: none"> - Government Policy focuses on risk management and mitigation, rather than minimisation. The Commission should look to ensure acceptable levels of risk (e.g. 1 in 100 year / 1,000 year events), and its variance by location.

	To minimise address impacts on existing landscape character and heritage assets	Place	- This objective as currently written is weighted against change, regardless of its merits, and the potential to mitigate impacts.
	To identify and mitigate any other significant environmental impacts	To be defined	- No comment
People	To maintain and where possible improve the quality of life for local residents and the wider population	Quality of Life	- In particular the need for minimising the number of people exposed to excessive noise from aviation
	NEW OBJECTIVE PROPOSED: To reduce the adverse impacts of aviation on public health		- It is essential that the potentially substantial, and specific adverse health impacts that aviation can impose on local residents and the wider population are accounted for.
	To manage and reduce the effects of housing loss on local communities	Community	- Support the delivery of new housing to offset any housing loss.
	To reduce or avoid disproportionate impacts on any social group		- No comment
Cost	NEW OBJECTIVE PROPOSED: To make efficient use of public funds, where they are required	To be assessed in the business case	- The proposed single cost objective has been split out into two. - A pure Cost-Benefit Analysis must not be used to represent the whole story. It can be difficult to fairly monetise all benefits, which may be long-term and wide-ranging. - The Commission must differentiate between public and private costs. The Commission should be primarily concerned with ensuring the public benefits outweigh the public costs, not necessarily the private ones. Private sector benefit-cost ratio is an issue for private financiers. - It is important that all schemes are considered on a level playing field. A fair assessment of costs and their impacts must be conducted. This must include the true and proportionate costs of accommodating an increase in airport-related trips on surface access infrastructure. - A reasonable treatment of risk and optimism bias must be made, taking into account existing guidance and applied consistently across the options.
	To ensure that the benefits to the public benefits of schemes clearly outweigh the costs to the public, taking account of social, environmental and economic costs and benefits		
Delivery	To be affordable and financeable, including any public expenditure that may be required and taking account of the needs of airport users	Cost and Commercial Viability	- It is key that a sensible approach to the funding is made, based on standard best practice. For example, the Commission's describe the 20-year debt repayment period they use as 'arbitrary' – a 40-year period is much more realistic.

			<ul style="list-style-type: none"> - Similarly, it is likely that the Government will need to be involved in funding all schemes. Airport charging scenarios should take this into account. Surface access in particular lends itself to public funding, particularly if the case can be made for wider benefits.
	<p>To best meet long-term aviation demand needs have the equivalent overall capacity of one new runway operational by 2030.</p>	Delivery	<ul style="list-style-type: none"> - It is not appropriate to call for new capacity in terms of a single new runway. Different runways can cater for a different number of and type of passenger depending on their associated airport, terminal and surface access infrastructure. Capacity needs could be better expressed in terms of air traffic movements, million passengers per annum (mppa) or other airport operating characteristics. - The Airports Commission's own forecasts show that a number of major airports in the southeast will be functionally full by 2030 (Heathrow, Gatwick, London City and Luton). Options must be considered with regard to their ability to meet unconstrained carbon-capped demand upon opening and into the future. We would suggest to 2050 at least. It is no good building a single new runway only for it to be full soon after upon opening in 2030 and unable to grow further. - We must support regional reconnections / increased frequencies, and recapture those currently displaced to European hubs. UK flights to AMS are not the answer and could be at risk in the long term.
	To actively engage local groups in scheme progression, design and management		<ul style="list-style-type: none"> - It is not clear how the Commission is planning to do this.
	<p>NEW OBJECTIVE PROPOSED: To meet operational and safety-related airspace requirements</p>		<ul style="list-style-type: none"> - The effect of new infrastructure on airspace management, including the impacts on the operations at other airports, must be properly modelled and understood. Current advice received by the Commission from National Air Traffic Services (NATS) regarding the impacts an Inner Thames Estuary airport option would have on Southend, and London City differs from the advice that TfL have received from the same organisation.
Operational Viability	To enhance individual airport and airports system resilience, such that every airport operates with at least 10-20% spare capacity for resilience purposes	Operational Risk	<ul style="list-style-type: none"> - This objective should be measurable. - The Commission must specify what is meant by 'airports system resilience'. We would be cautious about the use of this objective to penalise single hub airport sites.
	To ensure individual airport and airports system efficiency	Operational Efficiency	<ul style="list-style-type: none"> - No comment

	To build flexibility into scheme designs		<ul style="list-style-type: none"> - Agree. It is important that airport infrastructure creates the open space for airlines to experiment both with business models and route options. - Additionally, schemes should include a strategic, long-term approach, providing the possibility of future expansion at the same location, in accordance with current demand forecasts.
	To meet industry safety and security standards		<ul style="list-style-type: none"> - No comment
	<p>NEW OBJECTIVE PROPOSED: Minimise the risk of local factors affecting safe and planned airport operations.</p>		<ul style="list-style-type: none"> - Such an objective would incorporate a number of site-specific issues which could limit and restrict operations. - It would be mindful of the potential severity of impact of relevant risks.

5. The Commission's Appraisal modules

COMMISSION QUESTION 3: Will the appraisal modules described in Appendix A be sufficient to analyse the shortlisted options against the stated objectives?

COMMISSION QUESTION 4: Will the appraisal modules described in Appendix A be sufficient to construct business cases and sustainability assessments to enable the Commission to make recommendations, and the Government to act on these?

- 5.1 The appraisal modules are comprehensive. Comments upon each are made below.
- 5.2 There are a number of detailed issues that the Commission must take a view on. Some decisions should be taken in advance of promoters refreshing their scheme designs, so that the Commission's subsequent assessment is appropriately informed.
- 5.3 As issues are understood and assessed, the Commission must adopt a clear and transparent approach to assigning any 'weighting' or 'priority' to their importance. In this way, the grounds on which any final recommendations have been reached will be apparent.

1) Strategic fit

- The Commission must provide clear guidance on long-term capacity and connectivity needs beyond 2030 - to 2050 at least. This should include the identification of key global destinations, and the frequencies at which they might be served. This should also incorporate a view on air freight capacity needs. Promoters should be asked to set out the extent to which their proposition could meet these needs.
- Given the high levels of uncertainty associated with future year forecasting, the Commission should score those options which can meet a range of long-term outcomes especially highly.
- The DfT's demand model is potentially a valuable tool in decision making but its outputs should be critically appraised and considered alongside wider evidence on expected airline behaviours.
- The Commission proposes a scenario based approach, they appear to have no tools to validate those scenarios or how they would actually play out in a competitive environment. This runs the risk of a decision being taken on the assumption that the industry may behave in a particular fashion. If this proves not to be realistic, capacity in the wrong place or in the wrong manner could be favoured.
- It is essential that scheme fit with local, regional and national policies be fully appraised. For London, these policies include the London Plan and the ambient noise and air quality strategies. The particular challenge of accommodating forecast housing demand in London and the southeast should be considered; by

2031, London is set to grow by the size of Birmingham and Glasgow combined. How new airport development fits into this context, including the potential for a scheme to facilitate meeting these challenges must be understood.

2) Economy impacts

- The impacts of options are potentially wide-ranging spatially, and will cover a number of economic sectors. We would ask the Commission to remember that these schemes will have impacts far beyond the scope of traditional public sector value for money assessments.
- The Commission's proposed approach to assessing the more traditional effects of transport schemes such as Transport Economic Efficiency, delay, the aviation market, and freight activity appear sound.
- An accurate assessment of the wider impacts of new airport capacity is extremely important. This is where most of the benefits of new airport capacity – particularly economic impacts which are relatively footloose and international in nature. They will be a very important part of any case made, alongside the benefits of associated investment in new surface access infrastructure. Concerns about the use of the DfT demand model and its 'coarseness' in assessing potential international connections in the future may warrant the use of alternative tools.
- The basis on which wider economic impacts will be assessed remains uncertain. The use of tools such as wider Cost Benefit Analysis and Computerised Generalised Equilibrium (CGE) models can be opaque to scheme promoters. Promoters need as much clarity and support from the Commission as possible, to enable them to effectively work up their business cases in this area.

3) Local economy impacts

- London's major airports can have a very wide sphere of influence. The assessment of impacts on businesses and services, labour and housing demand, and land requirements could encompass the whole of London and the south east.
- New infrastructure in new locations could stimulate major changes to the current distribution of workforce and skills. This includes both relocation and 'up-skilling' effects. Planning and policy mechanisms can also further encourage change. The Commission's viability assessment must take this into account.

4) Surface access

- The Commission is seeking schemes which ‘demonstrate that they have the ability and incentives for passengers to use public transport’. This indicates a requirement for schemes to provide appropriate levels of capacity, connectivity and journey experience. There should be explicit recognition of this, and the Commission must look to assess how well schemes perform in this regard.
- The Commission states that it will seek to establish the ‘nature of the most credible surface access proposition’. What this means is not clear. However, in light of the Commission’s objective of encouraging public transport trips, and the fact that airport-related demand can comprise a very significant number of trips on key, congested rail and road links when they are busiest - a minimal approach must not be adopted. Capacity, connectivity and journey experience compromises must be avoided where possible.
- Airport-related demand accounts for a significant proportion of trips on the network at key times. Passengers can be particularly demanding (expecting luggage space, reliable journey times, direct services, and a seat). In the 2013 Winter Season, 50 aircraft arrived each day at Gatwick at the beginning of the peak period. Many of these passengers travel onwards to Central London and beyond. There is a spike in passenger exits from the Piccadilly line at Heathrow stations, at the end of the afternoon/evening peak period.
- Different scales of investment will have different costs, benefits and impacts. It is essential that the Commission is consistent in its approach across options.
- We are alarmed at the Commission’s current approach to accommodating airport-related demand on congested links. For example:
 - The Commission’s Interim Report assumes that the M25 will be over capacity in the future regardless of airport expansion. It absolves Heathrow and Gatwick airports and the Government of any obligation to ensure that the M25 can continue to function – in the event of a new runway adding thousands of extra peak hour vehicle trips.
 - Minimal new public transport investment is proposed at Heathrow and Gatwick. The Great Western Main Line is nearing capacity and Heathrow Connect is overcrowded. There is already pressure to better use Heathrow train paths for commuter services. Projects such as Crossrail 1 and the Piccadilly line upgrade are designed to meet the needs of future non-airport users, not the airport-related trip growth that would arise from a new runway. Gatwick have described their rail services today as “veering towards third world”, and Network Rail anticipate that the Brighton Main Line serving Gatwick will be at 105% capacity in 2030 with planned and committed improvements, and in the absence of any new runway at Gatwick.
- The Commission suggests the (door to airport front door) airport journey time catchments they will measure will be ‘less than 30minutes’, 1hr, and 2hr. This is the first time a <30min catchment has been introduced into the airports debate, and we would question its inclusion, especially in favour of a 45min catchment, which we would suggest better reflects passenger expectations and international

best-practice. We would the Commission to justify any journey time catchment thresholds that they choose to assess. We would also suggest that catchment time assessment should include potential 'door to gate' travel times that recognise the potential variation in cross-airport travel times,

5) Noise

- The Commission's decision to seek the assessment of a number of different metrics and intensity levels is very welcome. This will assist with efforts to look across a range of noise indicators to understand how far and wide impacts might be felt.
- The Commission emphasises an interest in the *change* to noise environments. This suggests that the current situation is acceptable. For hundreds of thousands of people exposed to potentially harmful levels it isn't. Outputs need to reflect both relative and absolute numbers affected by the wide range of proposed metrics and intensity levels, so as not to paint a false picture.
- The accurate monetisation of noise impacts would be helpful to enable environmental impacts to be considered effectively alongside other costs and benefits.
- We do however have grave concerns that the current values assigned to aviation noise exposure are significantly undervalued. We ask that the Commission does not simply accept current webTAG values (which are derived from 'willingness to pay' surveys, and road and rail noise exposure, instead of aviation noise). We would like to see the Commission consider adopting alternative and potentially complementary approaches to valuing noise exposure. For instance a method deriving from the financial cost of mitigation measures capable of designing out noise; or one which captured the costs to individuals and the taxpayer of exposure to potentially harmful noise levels (for example through, loss of earnings, loss of productivity, treatment costs).

6) Air quality

- It is essential that any increases in aviation capacity can be achieved without breaching EU limits for NO_x and particulate matter.
- The Commission's current emphasis is on protecting a worsening of the existing situation. Opportunities for decisions to influence and improve existing levels should be recognised and valued.
- The Commission acknowledges the difficulties in accurately forecasting future year Air Quality levels, and the range of factors that influence them. We would ask promoters and the Commission to be clear and transparent in its assumptions.

7) Biodiversity

- The Commission need to take particular care in defining the base case, and opportunities to enhance biodiversity as well as avoiding harm should be acknowledged.
- The assessment methodology could usefully also refer to compensatory measures (where applicable) and the potential for biodiversity offsetting.
- The distinction between the two levels of assessment proposed is not clear.
- National Character Areas cover more than biodiversity. It is not clear how these publications and this work will interface with the Commission's proposed appraisal module 10 (Place).

8) Carbon

- The Commission's proposed methodology seems to downplay the carbon benefits of reducing aircraft congestion on the ground and in the air – which efficient airport operations with spare capacity could bring.
- In terms of maximising emissions efficiency and supporting growth to key global markets, the adoption of a carbon per passenger kilometre metric might prove useful.

9) Water and flood risk

- The assessment of options should include the potential for schemes to be integrated with and a driver for long-term flood defence planning.
- We note that a 60 year appraisal period for these impacts is proposed.

10) Place

- The emphasis given to issues such as loss of agricultural land is surprising. Encroachment into existing urban areas is potentially far more contentious (and costly).

11) Quality of Life

- This is a sensible indicator, but should also specifically reference and assess public health impacts. We would support the Commission conducting a health impact assessment for each option.
- We would ask the Commission to assess the total number of people whose quality of life would be positively and negatively impacted, as well as the net change. A net effects assessment should also take into account the beneficial effects of any reductions in airport operations.

12) Community

- The level of public opinion and community support for schemes is not considered. This would seem a sensible criterion for assessment. It would also

be helpful to separate this out into different categories, for example local people, local authorities and wider public.

- Wider benefits to the community should be considered. These could include wider environmental and quality of life benefits arising from a reduction in airport operations, as well as the wider benefits brought about by new airport and transport infrastructure.
- Positive and negative impacts on community amenities and facilities should be identified, leisure facilities for instance.

13) Cost and Commercial viability

- For all of the shortlisted schemes, it is likely that the Government would be required to provide financial support in a number of areas.
- We would look to see new airport capacity represent an attractive proposition to potential private sector investment, and value for money to the public sector, rather than for specific elements to be required to meet arbitrary viability tests.
- Capital costs are a critical driver of aeronautical charges, and we would seek that the Commission adopt a more robust and accepted understanding of cost than is has to date. We would look in particular for the Commission to revisit its assumptions on issues such as:
 - The treatment of risk and optimism bias. The Commission's current approach, 'layering' optimism bias over risk, appears excessively cautious. Furthermore, in several important regards, constructing a new airport on a greenfield site is less risky than extending an operating airport.
 - The period over which any construction debts should be repaid. The Commission's current approach is to assume that the debt (used to fund the airport and surface access construction) has to be repaid in full by 2050. Given the lifetime of brand new airport and surface access infrastructure, this is not an appropriate assumption.
 - The impact of airport-related demand on the existing, planned, and new surface access network

14) Operational efficiency

- We ask that promoters and the Commission clearly set out all of the operating conditions that they assume each scheme will deliver. This includes assumptions around runway and terminal utilisation over time, and the characteristics of the airport-related rail and road trips that schemes will place on the surrounding networks.
- It is important the different schemes can be easily compared on a like-for-like basis.

15) Operational risk

- The risks and the scale of potential impacts which are associated with the regular overflying of major population centres on arrival and departure routes must be considered.
- The ease and flexibility of fuel delivery should be considered.
- The potential occurrence of and resilience to extreme weather events must be understood.

16) Delivery

- Schemes must be able to secure planning and consents approvals within appropriate timescales. Ensuring capacity and demand keep pace with one-another may not be possible, but recognition that a failure to meet demand will come at a cost is necessary.
- An assessment of potential disruption to local communities is critical.
- An assessment of likely strength of opposition and the associated risks would be useful.

6. The Commission's components of scheme design

COMMISSION QUESTION 5: Are the five components of the updated scheme design set out in Appendix B suitable for understanding schemes' potential performance against the stated objectives?

COMMISSION QUESTION 6: Is the level of detail in the components for the updated scheme design set out in Appendix B appropriate given the likelihood that some schemes may not progress to full stages of development?

6.1 The Commission proposes that shortlisted schemes are developed and presented with a focus on five different elements. We welcome the Commission's attempts to set out what they are looking for promoters submissions to cover. The proposed approach appears sensible, and is generally of an appropriate level of detail. However:

- The level of detail being asked of promoters - without any certainty that their scheme will be pursued further - is in places onerous. A distinction should perhaps be made between those tasks whose lead time is such that they could jeopardise the project timescales in the event the option is taken forward - and those tasks that could reasonably be delayed until a firmer decision might be taken.
- We are keenly aware that the (significant) level of detail proposed increases the ground that will have to be made up by an Inner Thames Estuary option should it be added to the Commission's shortlist in September 2014.

1) Strategic argument

- *Supporting connectivity (6.)* – Additional capacity must permit the UK to meet its global connectivity needs. We would ask promoters and the Commission to provide the range of destinations, as well as an indication of potential route frequency that they would expect schemes to support, in particular long-haul, high-value routes, as well as the UK regional routes from London that could be sustained.
- *Scalability and adaptability (7.)* – These are key considerations. It is vital that the long-term needs of the UK are acknowledged, alongside the long timescales in bringing forward separate and independent proposals for new runway capacity. We would like to see promoters provide details of land availability for further expansion, to 2050, and the headline impacts (positive and negative) of this expansion. We would also ask promoters to provide headline details and potential costs of providing the necessary surface access infrastructure to meet the needs of future demand.

2) Airport Masterplan

- *Modes of operation (16.)* - We would wish to see likely operating modes identified by promoters and the Commission. We would like realistic 'worst-case' operational scenarios to be identified. Schemes which allow for flexibility of operation and extensive respite periods should be welcomed.
- *Viability, risks and benefits (17.)* – Mention is made of the airport's 'lifetime'. We would like all scheme promoters and the Commission to be clear about the period of time that this is likely to constitute, and that the Commission ensure that impacts are assessed over the duration of this period.
- *Noise and environmental impacts (17.)* – Each masterplan should include a robust approach to monitoring noise data. We would expect this to include the production of plans which show where noise monitoring equipment might be located to comprehensively monitor areas which will be exposed to noise.
- *Also to consider (18.)* – The ease of access for passengers, staff, and other airport-related trips must be considered in the context of non-airport related users of the national road and rail networks. New airport capacity will impose proportional impacts on surface access links and services.

3) Engineering plans

- *Construction impacts (21.)* – A clear understanding and mitigation of construction implications on local populations, and the costs associated with them must be included. Construction in more constrained and densely-developed areas may cause substantial disruptive impacts, for example.
- *Cost plans (22.)* – Cost plans must comprise a more detailed and robust breakdown of capital costs than those which have been presented to date, as well as a bespoke approach to risk and optimism bias.

4) Mitigation strategies

- *Surface access (35.)* - The need for surface access improvements appears underplayed here. It is not subject to a standalone category – and should be. It will be one of the principal components of mitigation.

5) Development strategies

- *Timescales (54.)* – More detail of planned delivery routes, and promoters' expected timeframes for the planning process should also be included.