

CAA response to the Airports Commission consultation: Increasing the UK's long-term capacity

CAP 1263



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Executive summary

Introduction

1. The CAA welcomes the opportunity to comment on the Airports Commission's consultation paper concerning its appraisal of the three schemes shortlisted in its Interim Report.
2. The CAA has argued for some time that, without building another runway in the south east of England, consumers will suffer from higher prices, reduced choice and lower service quality. We therefore agree with the Airports Commission's view that there is a clear case for one additional runway to be developed in the South East of England before 2030.
3. However, building a new runway to benefit consumers cannot be achieved regardless of the effect on those on the ground. If it is to expand, aviation must manage its impact on the environment and take account of the interests of those affected by noise.
4. In the response below, the CAA has adopted a focus that considers consumers' best interests and our statutory duties (principally relating to economic, safety and airspace regulation in this context); and has examined pragmatic measures to minimise aircraft noise and engage local communities, as we consider these will be central to successfully building new runway capacity. We believe this approach will help to ensure the Commission's final recommendation is adopted by government and delivered by the successful operator within a reasonable timeframe and cost.
5. We have summarised the key points from our response in the following paragraphs, with fuller answers to the consultation questions contained within the relevant chapters of this response.
6. The CAA's previous contributions to the Airports Commission and other work on aviation capacity policy can be found on our website at: [Aviation Policy: Contributing to the work of the Airports Commission](#)

Need for new capacity

7. There have been many attempts to increase runway capacity in the south east of England in the past 60 years, and many have stated that without a new runway, there would be dire consequences for consumers, for the UK aviation industry and for the economy more generally. While these consequences have not been as obvious or stark as some predicted, consumers are feeling the effects of failure to develop new capacity today, and postponing a decision to build a new runway would have serious impacts.
8. Looking to the future, the CAA's assessment, reinforced by the latest demand modelling from the Commission, is that there is a strong case for new capacity in the next 15 years. Consumers are already suffering from increased prices, poor punctuality and weak resilience at some of London's airports as a result of capacity constraints. Limited capacity has also begun to manifest itself in reduced route choice. These impacts will worsen, and begin to affect the whole London airport system and beyond, if we do not act now to develop a new runway to be in operation by the mid 2020s.
9. Based on our review of the Commission's published assessments, the CAA believes that building any of the three shortlisted proposals is highly likely to be better for consumers than building nothing. In addition, the differences in estimated consumer benefit between the three schemes are of a much lesser scale than the costs of doing nothing. Given this, we expect the Commission's final decision to rest on weighing up other factors and that is rightly their role, not ours. Therefore, we express no preference for any one of the schemes over the others, and do not intend to offer any comments on which scheme best fits either our own expressed criteria (detailed in Chapter 3) or those proposed by the Airports Commission.

Challenges to delivery

10. We recognise the challenges to financing the schemes set out in the Commission's Cost and Commercial Viability analysis: all three shortlisted schemes represent unprecedented investment for the airport concerned. On that basis, in spite of the apparent benefits to consumers from expanding capacity, the CAA believes costs must be carefully managed, minimised and efficiently incurred, with a clear cut case that they are in the consumer interest.

11. The CAA is currently considering responses to its own recent consultation on a [proposed approach to the economic regulation of new capacity](#)¹. In that document, we set out some key principles, in particular risk allocation, encouraging commercial negotiations and paying for capacity before and after opening. These principles will guide our regulation, and we intend to publish an updated policy statement containing our latest thinking in spring 2015.
12. In calling for new runway capacity in the highly populated south east of England, we are mindful of the detrimental impacts such development may have on some of those who live near to the airport selected. We will continue to call for a scale of ambition from all parties to tackle noise and engage communities reflecting the importance of taking the opportunity to expand capacity.
13. In May 2014, the CAA published [Managing Aviation Noise](#)², setting out a series of measures for the aviation industry and policy makers to adopt to minimise noise and appropriately compensate those impacted negatively. We believe a strong package of measures to incentivise airlines to use the quietest aircraft, in the quietest fashion; to mitigate remaining noise; and to properly compensate local residents will increase the likelihood of a scheme being successful.
14. In our response, we call for the creation of a community engagement forum to bring all parties together to agree an approach to compensation and mitigation with national and community interests at its heart. We also update some of the measures we raised in [Managing Aviation Noise](#), and call on the Commission to ensure that a full and frank conversation happens between all parties about the value of respite from noise, the choice between dispersing and concentrating noise and the impact of night noise on local communities.

1 CAP 1221, Economic regulation of new runway capacity – a draft policy: www.caa.co.uk/cap1221

2 Cap 1165, Managing Aviation Noise: <http://www.caa.co.uk/CAP1165>

15. Greater clarity for local people on the impacts of the proposed runway is a vital element to delivering effective community engagement. Parity of information is an important driver of effective dialogue and debate between communities and industry. Clear, transparent and tailored information about noise, air quality and local impacts of the new runway should be made available to people in a timely fashion to facilitate these conversations.

Airspace

16. We appreciate those who may be affected wish to know in as much detail as possible what the potential airspace and flight path implications of a new runway may be. At present, it is too early in the process to be able to say that with any certainty. Therefore, we support making information about potential noise impacts in different scenarios as accessible as possible in the interim. Although this has the potential to increase blight prior to a final decision being taking, those who may be affected have clearly expressed desire for better information.
17. As the UK's statutory airspace management authority, the CAA oversees airspace in accordance with directions from the Secretary of State for Transport. We run the Airspace Change Process, whereby a body (for example, an airport or NATS) applies to the CAA for permission to change the structure of airspace. Changes to airspace structure are important in utilising a new runway, and achieving such changes is challenging. This links directly to our focus on tackling noise, but the need for sustained political and industry will to explain, engage, and compensate those affected in order to deliver change should not be underestimated.
18. Airspace in the south east of England is currently being reviewed as part of the London Airspace Management Programme (LAMP). While this programme is required to help to manage our increasingly congested airspace with or without a new runway, it is also likely to be a prerequisite to fully utilise any new runway capacity. As such, all parties must ensure that community engagement around both runway development and airspace modernisation are clear on the impacts and benefits of changes, and on whether they are required for the management of our current airspace or are linked only to developing a new runway.

CHAPTER 1

Response to question one

What conclusions, if any, do you draw in respect of the three short-listed options?

- 1.1 The CAA places the interests of consumers and the public at the heart of all that we do. Our responsibilities include the:
- Safety and management of UK airspace
 - Economic regulation of Heathrow and Gatwick airports
 - Enforcement of consumer protection rules around issues like cancelled flights
 - Enforcement of regulations and requirements relating to transporting dangerous goods by air
 - Management of the ATOL financial protection scheme for holidaymakers, which repatriates and refunds them if their travel firm fails.
- 1.2 Today, the CAA's focus is increasingly on identifying the key risks facing consumers and the wider public, then acting alongside industry to minimise the threat of harm. We combine rule-making, enforcement action and influencing into a flexible and pro-active approach to ensure that industry is focused on addressing these risks.
- 1.3 Regarding the three short-listed options, the CAA notes the Airports Commission's assessment of passenger and delay benefits as shown in the table below.

Option	Passenger benefits (£bn 2014) ³	Delay benefits (£bn 2014) ⁴
LGW	31-128	0.7-1.6
LHR ENR	36-118	0.6-1.5
LHR NW	41-129	0.8-2.2

³ Table 2.3 from each scheme's Business Case and Sustainability Assessment

⁴ Table 2.5 from each scheme's Business Case and Sustainability Assessment

- 1.4 This analysis reinforces the CAA's previously stated view that, without building another runway in the South East of England, consumers will suffer from higher prices, reduced choice and lower service quality. The CAA therefore agrees with the Airports Commission's view that there is a clear case for one additional runway to be developed in the South East of England before 2030⁵.
- 1.5 The CAA agrees with the Airports Commission's view that at this stage in their development, all three schemes appear to offer credible opportunities to build one additional runway considered across the assessment criteria, and the Commission's own assessment above suggests that the differences in the benefits for the consumer between the schemes are small compared to the benefit of any one of the schemes is implemented.
- 1.6 The CAA acknowledges that a decision to provide new runway capacity needs to balance factors other than the benefits to consumers, and therefore feels that it is for the Commission to weigh up the different costs and benefits offered by each scheme and decide on their preference in line with their Terms of Reference and Assessment Scheme.
- 1.7 However, from the CAA's consumer-focussed perspective - as we have described in previous submissions to the Commission⁶ - we believe the final recommendation ought to be the scheme that best meets these four criteria:
- Driven by consumer-demand
 - Financeable
 - Safe
 - Sustainable
- 1.8 We expand upon our high level assessment of the Commission's work in relation to our own proposed criteria in Chapter 4 below.

5 We expand on our view of future capacity requirements in our response to the Airports Commission's discussion paper on aviation connectivity:
http://www.caa.co.uk/docs/33/CAP1023_Response_to_the_Airports_Commission_Paper_on_Aviation_Connectivity.pdf

6 CAP 1013, CAA Submission to the Airports Commission: Sifting Criteria for Additional Capacity
<http://www.caa.co.uk/docs/33/CAP%201013%20AirportCommissionSiftingCriteria.pdf>

CHAPTER 2

Response to question two

Do you have any suggestions for how the short-listed options could be improved?

- 2.1 The CAA has no scheme-specific suggestions, but acknowledges that schemes will evolve as the process continues – we would encourage all parties to ensure this evolution prioritises the following areas.

Safety

- 2.2 Safety is of paramount importance for aviation and we look forward to continuing to work with the Commission, scheme promoters and government to ensure that the final decision and implementation secures and enhances UK aviation's excellent safety record.
- 2.3 The CAA's preliminary safety analysis for the Airports Commission examined the schemes as presented to the Commission in April 2014 in order to be consistent with the other assessments modules. However, in subsequent discussions, the scheme promoters have suggested to the CAA a number of potential safety mitigations. Whilst none of these amendments, if taken up, would change the overall safety assessment which the CAA submitted to the Commission (that all schemes had safety cases appropriate for this stage in the development process but each still contained certain safety risks to be resolved), we describe the key changes below.

Gatwick R2

- 2.4 Gatwick Airport Limited (GAL) has held a consultation of its own regarding its proposed expansion scheme. In its report on the consultation⁷, GAL states that it will "continue to safeguard" for End Around Taxiways (EATs). As stated in the CAA's preliminary safety assessment for the Airports Commission, where they are possible, EATs are preferred by the CAA as they provide safe movements with the potential to operate compass arrivals and departures (less crossing of aircraft in the air), whilst avoiding runway crossings on the ground, reducing complexity whilst maximising runway capacity. However, If EATs are not provided, the CAA would expect the airport's concept of operations to

⁷ Gatwick Runway Options Consultation, Report of Consultation Page 47:

http://www.gatwickairport.com/PublicationFiles/business_and_community/all_public_publications/Second_runway/Gatwick_Consultation_Report_July_2014.pdf

incorporate features and / or equipment to mitigate any increased risk posed by a commensurate increase in runway crossings.

Heathrow NW

- 2.5 Within the [Airspace Efficiency report](#)⁸, we note the statement that: ‘both the Heathrow and Northolt operation could co-exist provided that more stringent and de-conflicted arrival and departure routes could be operated at both airports.’
- 2.6 The CAA is aware that Heathrow Airport Limited has begun discussions with Northolt about its potential future operations and that initial feedback from that discussion appears to support this conclusion. We would urge the parties to continue dialogue to ensure joint operability is safely possible while maintaining capacity at each airport.

Heathrow ENR

- 2.7 The CAA has had a number of meetings with the scheme promoter to discuss safety aspects of the Extended Northern Runway, a concept for which there are no direct comparators in operation today. During the course of these meetings, the promoter indicated that it may amend its initial design to take account of:
- adding in Instrument Landing Systems (ILS) between the runways, rather than relying on Microwave Landing Systems (MLS);
 - the risk of jet blast affecting the ILS;
 - obstacles penetrating the take off climb surface (reservoir at western end); and
 - take off distances required to limit taxi-ing to the southern runway.
- 2.8 The main consequences of these amendments appear to be increasing the distance between the two northern runways and an extension of the airport boundary to the west of approximately 200m compared to the promoter's initial submission.

Airspace

- 2.9 Much of the debate about a shortage in capacity for aviation in the UK centres on runway infrastructure. However, airspace is also a major factor because of its effect on the overall efficiency of the aviation sector and the environment.

8 NATS Support to the Airports Commission. Appraisal Module 14: Operational Efficiency: Airspace Efficiency Report: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/371854/14-operational-efficiency--airspace.pdf

- 2.10 Changing airspace is a complex, lengthy and often very controversial exercise. The CAA is generally the decision making body in relation to Airspace Change proposals (with those causing significant effects requiring approval from the Secretary of State for Transport). As such, and given we are at a relatively early stage in the process, we will not draw any specific conclusions about the three schemes' airspace implications. However, changes to airspace structure are important in developing a new runway, and achieving such changes is challenging. This links directly to our focus on tackling noise: the need for sustained industry and political will to explain, engage, and compensate those affected in order to deliver change should not be underestimated.
- 2.11 Given the concentration of UK aviation in the south-east, airspace there is a scarce resource. Our airspace structure was designed over 40 years ago. It has not been comprehensively updated since and retains a design that was relevant to decades old aircraft and navigational aid technology.
- 2.12 This situation is being tackled with the development of the terminal airspace redesign programme known as LAMP (London Airspace Management Programme). The LAMP initiative involves airspace change on an unprecedented scale for the UK; such a fundamental and significant change to airspace has never been undertaken in one programme before. While this work is necessary to modernise London's airspace even in the absence of new runway capacity, it is likely to be a prerequisite (alongside further airspace changes) for being able to effectively utilise additional capacity brought about by a new runway.
- 2.13 As such, the CAA's view is that successful delivery and utilisation of new runway capacity is reliant on delivery of many of the airspace changes and revised methods of operation proposed as part of the LAMP process. We would urge scheme promoters, the Airports Commission and government to recognise this and reflect the importance of LAMP in their work.
- 2.14 Whenever airspace is changed there are significant challenges to overcome; changed flight paths are likely to affect new areas, with the disbenefits that implies, and understandably newly affected people are likely to very clearly set out their views about the proposals.
- 2.15 In Chapter 2 we set out the central importance we place on reducing and mitigating the impact of noise on local residents, and our view that this, and properly engaging and compensating local people will be key to developing a scheme that is deliverable.
- 2.16 Alongside scheme specific issues around noise management, the CAA would also like to raise several broader considerations in relation to noise policy that we believe the Commission can recommend in its final report.

- 2.17 In developing future aviation policy, the CAA considers there should be a more robust, two-way and transparent conversation on several key issues relating to aviation's impact on local communities. These include:
- Modern navigation technology and operational procedures allow for aircraft adhering far more precisely to agreed flight paths, with attendant efficiency gains. However, this means that noise would be concentrated over a far smaller area. Current government policy supports concentrating noise on the fewest possible people, but we believe this should be considered in light of improved accuracy, and the tradeoffs between efficiency and noise impact and between concentration and dispersal. While the final decision is rightly for government to make, the CAA believes the Commission is in a position to facilitate and support serious discussion about the merits and issues of each approach.
 - A linked issue relates to respite from noise - a policy to spread noise across a broader group by developing a timetable of planned noise respite routes. A form of this operates today at Heathrow with the policy of switching runways at 1500 every day (known as runway alternation). Additional capacity at either Heathrow or Gatwick offers the potential for adopting a greater degree of respite. However, developing such a policy should be based on a better understanding of the value communities place on respite and what they actually consider to be respite (for instance what distance between two flight paths is great enough to afford real noise respite for somebody living immediately under one). Modern operational procedures give greater (but not unlimited) potential for respite options than has existed previously, but before promoting such approaches, the CAA and industry need a clear steer from government on its view, which should be informed by research and frank engagement with the affected communities about both the costs and benefits of planned respite.
 - As we discuss in Chapter 3, night noise is also a key concern for many communities at both Heathrow and Gatwick (and several other UK airports). As such, fuller study of the economic value and community impact of night flights would help to inform any policy considerations around these issues as well as considering potential scheme-specific impacts.
- 2.18 These issues are important for aviation policy in the UK generally, but there is clearly the potential for them to have significant impact, if not on where the next runway developed in the south east is sited, then on how it is operated. Given that a statement of government policy will not occur prior to the Commission's final report, and any legislative vehicle to enact policy changes is unlikely to pass through parliament prior to 2016, we believe that the Commission could helpfully play a role in facilitating robust conversations on these issues, and could set its view out in its final report.

- 2.19 All parties need to be clear when discussing LAMP and its associated airspace changes, and the new runway and its associated changes, how the two interrelate and what impact they will have.
- 2.20 Consultation and engagement surrounding the new runway must do as much as possible to be transparent and clear about the implications for local people so they can fully understand their position and engage from a position of knowledge about any proposed changes. This must also reflect the fact that we should not and must not assume expert knowledge of airspace and noise when consulting local residents - information should be clear, simple and easy to understand to ensure people have a fair chance to respond.
- 2.21 It is important that consultation with the public around the implications of airspace changes associated with new runway capacity does not lag behind the wider planning process, to avoid a situation whereby such airspace changes risk delaying potential runway development or utilisation.

Community engagement

- 2.22 In May 2014, the CAA published [Managing Aviation Noise](#)⁹, a document setting out a series of measures for the aviation industry and policy makers to adopt to minimise noise and appropriately compensate those living close to expanding airports for the negative impacts they experience. As well as covering a series of measures aimed to reduce noise under the headings Manufacture, Operate and Mitigate, the document also made recommendations around the most effective ways to engage those negatively impacted by a new runway.

Airport community engagement forum

- 2.23 In [Managing Aviation Noise](#), the potential for a forum devoted specifically to securing community acceptance was explored, based on the experiences at Schiphol and Frankfurt airports in their expansions and the community fora they created.
- 2.24 Following the government response to the Commission's final report, we recommended the swift creation of an airport community engagement forum, charged with ensuring clear, effective links and dialogue between local communities, the aviation industry, policy-makers and planners. The forum's core aim would focus on how new capacity is developed and utilised, rather than whether such capacity should be created.

9 Cap 1165, [Managing Aviation Noise](http://www.caa.co.uk/CAP1165): <http://www.caa.co.uk/CAP1165>

- 2.25 While Airport Consultative Committees are generally well-respected and valued, they provide a forum for information sharing, rather than acting as a body with the power (or objective) to take decisions on compensation, mitigation and operation on the basis of consensus. The creation of such a body at the site proposed for expansion would offer a new start for airport / community relationships and create an incentive for all participants to engage openly and collaboratively.
- 2.26 We are aware of the Commission's proposed Independent Aviation Noise Authority - while IANA and a community engagement forum could work together were they both created, they appear as presently scoped to have distinct functions. The proposed forum would be in place solely to focus on community engagement at the site of proposed expansion, and would have a remit to reach consensus on key compensation, mitigation and operational matters.
- 2.27 For such a forum to be effective, it must have respected, independent and objective governance to give weight to its recommendations around noise management strategies, community engagement and compensation measures. It is vital that this forum has the trust of all stakeholders, has real oversight powers and is an authoritative voice for it to achieve its aim of securing community trust in the process of expanding capacity.
- 2.28 Since Managing Aviation Noise was published, we have discussed this proposal with stakeholders across all areas. We remain of the view that creating an effective, well scoped community engagement forum could allow communities to shape runway development to an extent that gives them confidence that the benefits of expansion to them will outweigh the costs. We believe the Commission should recommend government create such a body if it chooses to develop a new runway.
- 2.29 In the period since we published Managing Aviation Noise, with its recommendation that the Commission consider the benefit of a community engagement forum, we note the Department for Transport has created a High Speed Two Residents' Commissioner¹⁰ to hold the company to account and proposed HS2 Ltd develop a residents' charter, designed to help residents know their rights. The charter and commissioner are proposed in order to provide residents with a voice and representation, which appears similar in scope to our proposal.

¹⁰ <https://www.gov.uk/government/news/new-help-for-property-owners-affected-by-hs2>

Compensation and mitigation

- 2.30 One key decision made by such a body would be how to spend money earmarked for mitigation and compensation. The forum would be operating within a spending envelope set by the scheme promoter (with potential roles for government and the regulator) as it would not be able to set a spending limit itself, so deciding how best to serve the interests of local people within a limited budget would be important.
- 2.31 There is no suggestion of writing a blank cheque to fund mitigation and compensation, and it must be borne in mind that scheme promoters will have statutory obligations¹¹ to compensate those most heavily affected by new developments. Nevertheless, the scale of potential detriment from not building capacity, and the scale of potential detriment to those affected by new capacity, lead the CAA to consider that spending must be significantly higher than the norm in the UK.
- 2.32 In *Managing Aviation Noise*, we highlighted UK airports' generally lower level of spending on compensation and mitigation when compared to major airports in Europe and the United States.
- 2.33 It is clear that controversial, nationally significant infrastructure projects require a more ambitious approach to compensating those most affected by both development and operation of the scheme than smaller projects that cause limited local impact. In the UK this has been highlighted by the compensation package offered to those impacted by construction of the High Speed Two rail line (HS2).
- 2.34 There are several schemes available for home owners whose properties are impacted by HS2 (or are likely to be), with a core offer that those closest to the line can apply to sell their property to government for its unblighted market value plus a 10% premium, or have the option to accept a cash payment of 10% of their property's market value¹².
- 2.35 Airports however, have a different impact on communities to railway lines (where noise and visual intrusion impacts tend to be geographically far closer to source, but the line stretches across a far larger area). The impact of airports extends further beyond its boundaries, so a direct match with the offer from HS2 is clearly not appropriate.

11 As detailed within Part III the Planning and Compensation Act 1991:

<http://www.legislation.gov.uk/ukpga/1991/34/contents>

12 More details about the HS2 compensation package for residents can be found here:

<https://www.gov.uk/government/news/further-financial-help-given-to-property-owners-affected-by-hs2>

- 2.36 We believe it is for the scheme promoters and the Commission to explore types and levels of compensation appropriate for those most affected by the construction and operation of a new runway, and for the proposed community engagement forum to decide how such compensation is applied.

Funding

- 2.37 As part of its work on Cost and Commercial Viability, the Airports Commission appointed PWC to consider the financing implications of new capacity. In [its report](#)¹³, PWC highlights the funding challenges faced by all three shortlisted schemes. Given the CAA's focus on the consumer interest, it is clear that whilst we propose additional spending on mitigation and compensation, this must be within a reasonable envelope.
- 2.38 Given that expansion has wider benefits than those that accrue to consumers, one potential revenue stream which would allow increased spending on local communities, while not harming consumers unduly, would be to utilise some of the additional Air Passenger Duty revenues resulting from expansion. In *Managing Aviation Noise* the CAA estimated that one additional runway, when fully utilised, would produce APD revenues of around £500m each year. Assigning some or all of this to community compensation would reflect the wider economic benefits of expansion and avoid consumers funding all the mitigation costs relating to local disbenefits.
- 2.39 The Commission should consider in its final report recommending government investigate the most appropriate way to fund a 'game changing' compensation package for those most impacted by the new runway.

Night noise

- 2.40 Night noise is a particular concern for many who live close to airports - whether in the UK or abroad. The CAA is aware that night flights have been reduced or banned at several European airports to offer greater relief to local people, whether those decisions arose in relation to capacity expansion or as standalone operational decisions.
- 2.41 When considering night flights, it is important to be clear on the period to which the term refers. The CAA considers the night period to stretch from 2300 to 0600.
- 2.42 It is not easy to compare the impact of night flight restrictions at, for instance, Frankfurt (where the night period is 2300-0500) and Zurich (2330-0600) with what may happen at Heathrow or Gatwick if similar limitations were imposed.

13 Cost and Commercial Viability: Funding and Financing:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/372807/funding-and-financing.pdf

European airports are in a different time zone (affecting optimum arrival times from long haul origins); there are differences in flight times; their airline customers may have different business models; and they may experience different traffic mixes.

- 2.43 Night flights offer many benefits to consumers, and are often cited as vital by the aviation industry. This importance should be weighed against the clear benefits of additional capacity for the remaining 17 hours of the day, and a better understanding of how much value communities would place on greater restrictions during the night period, and the monetized impact of such restrictions. The CAA would be happy to help the Airports Commission in improving its understanding of these issues as it develops its final report.

Providing certainty

- 2.44 Given community concerns about the reliability of promises made during the planning process, the CAA believes that it is important to have a legal mechanism to ensure that agreements reached in the planning stage and by the airport community engagement forum will hold. This must also reflect the possibility that, with hindsight, obligations imposed do not address the right issues or lead to ineffective outcomes - certainty of outcome for communities in particular must be balanced against a degree of flexibility in how those outcomes are achieved.
- 2.45 One mechanism to achieve this is a noise envelope, which can be used to provide certainty around levels of noise that communities will experience. The CAA believes that a noise envelope underpinned by law should be introduced to afford communities confidence that airport expansion can be managed sustainably.
- 2.46 The CAA published [guidance on best practice principles for noise envelopes](#)¹⁴ in December 2013, and recommends these principles are applied in developing an envelope for the successful scheme.
- 2.47 A noise envelope would ensure that, if commitments to reduce noise are not met, then new capacity is not able to be (fully) utilised. In the design of such a mechanism, consumers should be protected from bearing increased costs if commitments made by the aviation industry are not met.
- 2.48 In addition, operational commitments (for instance around hours of operation of both new and existing runways, and respite) which may have an impact on noise contours, but also have their own value to communities, should be built into a legally-binding agreement, alongside the outcomes of discussions at the

14 CAP 119 Noise Envelopes, December 2013:

<https://www.caa.co.uk/docs/33/CAP%201129%20Noise%20Envelopes.pdf>

community engagement forum on compensation and mitigation. A Section 106 agreement could form the basis for this legal underpinning, or elements of legislation developed by government surrounding the national policy in relation to new capacity could lock commitments by law. However, caution should be exercised so that unintended consequences do not result from targets being poorly designed. A focus on outcomes that allows flexibility on how industry achieves the outcome may help mitigate this risk.

Consumer interest

Resilience

- 2.49 Aside from the consumer benefits which the Commission has identified from each of the schemes (reproduced in Chapter 1 above), CAA research suggests that consumers place a high value on punctuality and resilience¹⁵. Heathrow is currently the busiest two runway airport in the world and Gatwick the busiest one runway airport, and this has consequences for the resilience to disruption experienced at both airports.
- 2.50 Therefore, whichever scheme is recommended by the Commission, the CAA believes that it must have built into it greater resilience than currently seen at Heathrow or Gatwick. Best practice at other congested airports should be considered, but this could effectively be managed by ensuring that slots made available do not allow the level of runway utilisation experienced today¹⁶.
- 2.51 The current system of allowing an airport to declare its own capacity (within any limitations set as part of its planning process) incentivises utilisation of available capacity to a point where resilience may be reduced. As such, greater public intervention may be necessary to ensure the consumer interest is protected. While this may have financing implications, which the Commission should factor in to its analysis, if the new and existing runways are scheduled as intensively as they are today, then consumer, noise and CO² benefits may all potentially be eroded through lack of resilience.

Cost efficiency

- 2.52 The Civil Aviation Act 2012 (the Act) defines the conditions under which the CAA licences airport operators for economic regulation. The Act states that the CAA must carry out its economic regulation functions 'in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services', where

15 Consumer Research Final Report: <http://www.caa.co.uk/docs/2107/2131ConsumerResearch06122011.pdf> and The Through Airport Passenger Experience: http://www.caa.co.uk/docs/33/Passenger_experience.pdf

16 Previous analysis undertaken for the CAA has estimated the costs and benefits of scheduling to high levels of runway utilisation. See page 21, Runway Resilience Study, Helios, XPX and SH&E: https://www.caa.co.uk/docs/589/ICF_runway_resilience_final_report_16Feb09.pdf

'users' are defined as passengers or owners of property carried on the service. In doing so, the Act also requires the CAA to have regard to, amongst other things, 'the need to secure that each [airport operator] is able to finance its provision of airport operation services' and 'the need to promote economy and efficiency on the part of each [airport operator] in its provision of airport operation services'.

- 2.53 The CAA is currently consulting on its regulatory policy on capacity expansion at Heathrow or Gatwick¹⁷, with the intention of producing an updated policy statement in spring 2015. If the successful airport were judged to have substantial market power and regulation was in end users' interest, it would be subject to the CAA's economic regulation. From their submissions to the Airports Commission, most promoters seem to feel that this is likely. However, whether or not CAA is economically regulating either airport, we would not expect to see consumers burdened with costs that are inefficient or uneconomic.

17 CAP 1221, Economic regulation of new runway capacity – a draft policy: www.caa.co.uk/cap1221

CHAPTER 3

Response to questions three and four

Do you have any comments on how the Commission has carried out its appraisal?

- 3.1 We believe that the Airports Commission has effectively developed its work programme to ensure that it meets the Terms of Reference set out for it by government, which was 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 it will identify and evaluate how any need for additional capacity should be met in the short, medium and long term.¹⁸
- 3.2 As the UK's independent, expert aviation regulator, the CAA has a slightly different focus to that of the Commission, and different statutory duties to meet. As we have made clear, in our role as the protector of consumer interests in aviation, the CAA has its own priorities for additional capacity. We feel that if the Commission gives due weight to the following elements in its ongoing appraisal of the three options, its final recommendation will be the scheme that is best for consumers and is most likely to be successfully delivered within a reasonable timescale.
- **Driven by consumer-demand:** to ensure that any capacity solution is consistent with trends in demand and geared to deliver connectivity, choice and value for consumers. We are pleased to note that the Commission has not adopted a 'predict and provide' approach to consumer demand, and welcome its 'scenario' based approach. This approach should result in a final recommendation which is most resilient to a variety of possible outcomes given the inherent uncertainty in predicting the future of the aviation industry.
 - **Financeable:** to ensure that any solution can be funded on the basis of airport charges at a level consistent with ensuring value for consumers. This is an area of key focus for the CAA, and we expand on our ongoing work on economic regulation and wider consideration of the financing issues and risks for any attempt to expand capacity in Chapter 5.

¹⁸ <https://www.gov.uk/government/organisations/airports-commission/about/terms-of-reference>

- **Safe:** to ensure that any solution is designed to maintain and where possible further improve the safety of the UK aviation system and is consistent with effective airspace management. We welcome the Commission's engagement with the CAA's Safety and Airspace Regulation Group to begin the lengthy process of considering the safety assessment of additional capacity. As the CAA drafted the technical report on safety assessment, we have no detailed comments on this area - but look forward to continued engagement with promoters and Commission as the final report is developed to ensure that safety is prioritised in the recommended scheme. Potential additional safety-related analysis is explored in Chapter 2.
- **Sustainable:** to ensure that any growth in capacity is consistent with environmental objectives, including balancing the needs of consumers with those of local communities. This area is vital when we turn our focus to delivering the Commission's recommendation, and we support the Commission both in the thorough assessment of environmental and community impact that has occurred so far, and in their emerging work on delivering their recommendations ([The CAA's response to the Commission's discussion paper on delivery](#) can be found on our website¹⁹).

3.3 We set out in [our response to the Airports Commission's consultation on its appraisal framework](#)²⁰ that our view is that each of these elements is already covered by the Commission's framework, and we support the work the Commission and its consultants have produced thus far to assess schemes against the framework.

3.4 Detailed points based on our review of the technical reports which have underpinned the Commission's analysis can be found in Chapter 4 of this response.

19 CAP 1219, CAA Response to the Airports Commission Delivery Discussion Paper
<http://www.caa.co.uk/CAP1219>

20 CAP 1172, CAA response to the airports commission consultation on assessment framework:
<http://www.caa.co.uk/docs/589/CAP%201172.pdf>

Are there any relevant factors that have not been fully addressed by the Commission to date?

Developing the shortlisted schemes

- 3.5 In reviewing the business cases of each scheme, our consideration has been based on our expectation that all scheme promoters are likely to look for modifications and improvements in the light of the Commission's consultation and will submit an updated version of their plans to the Commission either as part of the consultation process or subsequently at the Commission's request.
- 3.6 Specifically, given the CAA's role as the Commission's consultant in developing its appraisal of the shortlisted scheme's noise impacts, and producing safety assessments of the three schemes, we expect to engage further on these topics in the coming months at the Commission's request.
- 3.7 Beyond those expectations and what we would expect to be the natural evolution of each of the shortlisted schemes as the Commission's work continues, we believe the appraisal framework has provided a thorough and useful analysis of the relevant factors for each of the schemes.

Safety

- 3.8 In Heathrow and Gatwick airports' submissions, they have commissioned NATS to produce the expected Public Safety Zone²¹ areas for their proposed new capacity. Also in its reports on Place²², and Operational Efficiency: Ground Infrastructure²³, the Airports Commission's consultants have suggested likely Public Safety Zones for the three proposals in order to estimate their impact on land take.
- 3.9 In previous Public Inquiries concerning airport expansion, the topic of third party risk in general and Public Safety Zones in particular have been the focus of considerable attention. While oversight and policy considerations around third party risk from aviation are not part of the CAA's remit, we believe it has the potential to develop as an issue that impacts on delivery of a scheme.

21 Public Safety Zones are areas of land at the end of runways established at the busiest airports in the UK, within which certain planning restrictions apply:

<http://www.caa.co.uk/default.aspx?catid=375&pagetype=90&pageid=11175>

22 Place analysis of the Airports Commission's shortlisted options for additional airport capacity:

<https://www.gov.uk/government/publications/additional-airport-capacity-place-analysis>

23 Additional airport capacity: operational efficiency analysis:

<https://www.gov.uk/government/publications/additional-airport-capacity-operational-efficiency-analysis>

- 3.10 In addition, stakeholders have publically suggested that the effect of expansion on the risk borne by third parties ought to be a consideration when choosing between schemes.
- 3.11 The CAA's work on safety regulation has not considered these issues and therefore we recommend the Airports Commission consider whether this topic should form part of its assessment criteria, or should be left to be reviewed by Government or a planning inspector once a recommendation has been made and taken forward.

CHAPTER 4**Response to questions five, six and seven**

Do you have any comments on how the Commission has carried out its appraisal of specific topics (as defined by the Commission's 16 appraisal modules), including methodology and results?

Do you have any comments on the Commission's sustainability assessments, including methodology and results?

Do you have any comments on the Commission's business cases, including methodology and results?

- 4.1 The CAA does not have significant issues, concerns or comments relating to any of the Commission's series of published documents beyond the high level points raised in the remainder of this document. For simplicity, we have therefore unified our response to consultation questions 5, 6, and 7 into this chapter.
- 4.2 In reviewing the full appraisal framework outputs, we identified a small number of elements where slight changes could enhance the Commission's understanding of key issues and improve the final report.

Strategic fit

- 4.3 We support the Commission's updates to the DfT's passenger demand model, and the Commission's approach of developing a range of scenarios. Predicting an accurate single central case for future passenger demand is challenging and this approach helps to address that concern.

- 4.4 Within the Strategic Fit module [Forecasts paper](#)²⁴, there is a change in short term demand at Gatwick when compared to the forecasts set out in the Commission's interim report. While we understand that the demand model is not intended to predict short term changes, clarifying this and explaining the driver(s) of this change (which appears to be down to revised economic forecasts) would provide useful context. In addition, a view from the Airports Commission as to whether this change impacts on its prediction of when new capacity is required would be helpful.

Impacts of expanding airport capacity on competition and connectivity

- 4.5 In [the connectivity work](#) prepared for the Commission by the International Transport Forum²⁵, there is an assumption that increases in airport charges will not result in higher passenger air fares, since they will be smaller than the 'scarcity rent' which will otherwise accrue to the airlines. This may be true for the year 2030 which was considered in the study, but the Commission should verify that it also holds for the period up to 2030. If it does not hold, this may have an effect on the business case for the airport expansion (there is a risk that either the expected charges per passenger or the passenger volumes will not be realised).
- 4.6 The study also implicitly uses the assumption that all 'scarcity rent' is experienced in terms of higher air fares. However, it may be the case that some is experienced (for example) as poor reliability or resilience at the airport. In which case, this element of the cost cannot be used to 'absorb' higher airport charges, at least if charges are increased in the period before the new capacity opens, when the reliability and resilience costs will still be incurred by passengers.

Cost and commercial viability

- 4.7 The Cost and Commercial Viability studies for each airport are necessarily based on a series of assumptions. The CAA believes it may be useful to have a greater understanding of what underpins these assumptions when the Commission publishes its final report. For instance, the studies do not seem to contain information on how sensitive the analysis is to a change in assumptions. The provision of this type of information would be useful to better judge this analysis.

24 Strategic Fit: Forecasts: www.gov.uk/government/uploads/system/uploads/attachment_data/file/374660/AC05-forecasts.pdf

25 Impacts of Expanding Airport Capacity on Competition and Connectivity. The case of Gatwick and Heathrow:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388848/impacts.pdf

- 4.8 In some instances where the authors' judgment is applied, it would also be helpful to readers if the reasoning behind that judgement were expanded upon (perhaps in an annex).

Biodiversity assessment

- 4.9 As the UK's aviation safety regulator, oversight of 'Aerodrome Safeguarding' is one element of the CAA's remit²⁶. A part of this includes the risk of birdstrike. As such, we have a number of technical points to raise in relation to the Biodiversity Assessment, which we will forward separately to the Commission for the sake of simplicity. However, these comments should not change the Commission's assessment of this aspect of the schemes.

26 Further information on aerodrome safeguarding is available at:

<https://www.gov.uk/government/publications/safeguarding-aerodromes-technical-sites-and-military-explosives-storage-areas>

CHAPTER 5

Response to question eight

Do you have any other comments?

The CAA's information duties

- 5.1 In December 2012, the CAA was given a duty to publish or arrange for the publication of environmental information on the effects of aviation on the environment.
- 5.2 Elements of our information work programme play into the possible roles the Commission scoped for a new Independent Aviation Noise Authority in [its interim report](#)²⁷. The CAA agrees that there is likely to be benefit in ensuring communities have transparent access to information they can trust about aviation's impact, and that improvements in the process for altering flight paths could help in delivering new capacity. Since the interim report's publication, the CAA has expanded its work engaging communities around airports, which, coupled with releasing additional noise information, we hope has helped to enhance community information and trust before the Commission's final report is published. We believe that there is a need for clarity on the proposed objectives, scope and funding of any new body - each of which are likely to play into whether or not it can successfully garner and retain community trust. In the meantime, we are happy to continue to engage all stakeholders to discuss the most effective way to ensure communities have access to the environmental information they require.
- 5.3 Another aspect of environmental performance the [Commission have consulted on is carbon](#)²⁸. The impact new capacity has on carbon emissions and on the UK's 2050 carbon reduction target is a crucial consideration. Provision to consumers of comparable information on carbon performance of airports and airlines could help to drive efficiencies from all parties - we would welcome the Commission's view on using our duties to provide more information on carbon performance.

27 Airports Commission: Interim Report:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/271231/airports-commission-interim-report.pdf

28 Carbon: Assessment:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/372450/8-carbon--assessment.pdf

Financeability / fundability / our regulatory duties

- 5.4 In October 2014, the CAA launched a consultation on its proposed policy for economic regulation of new runway capacity. The CAA intends to finalise this policy in the first quarter of 2015.
- 5.5 The Civil Aviation Act 2012 sets out the CAA's duties in relation to economic regulation, including any required for new runway capacity. Our primary duty is to ensure that decisions are taken in the best interest of users (passengers and cargo carriers). In carrying out these duties, we are required to act in a reasonable and proportionate manner.
- 5.6 On the recovery of the main construction and implementation costs of runway expansion, we outlined that we can best meet our duties at this time by setting out a broad framework of applicable regulatory principles rather than by specifying a detailed regulatory regime. We therefore proposed the following principles underpin our future regulatory decisions in relation to new runway capacity:
- Risk should be allocated to those parties who can best manage it. This approach is most likely to protect users' interests (that is, the interests of passengers and those with a beneficial interest in freight), by producing the lowest expected out-turn cost (as incentives to manage the cost are maintained) and by revealing information about parties' valuation of risk.
 - Commercial negotiations should be encouraged. If a commercial agreement to underpin expansion is possible, it could incentivise efficiency, ensure that risks are borne by those best able to manage them, reveal information about parties' valuation of risk, and avoid any unnecessary regulatory intervention.
 - Capacity can be paid for both before and after it opens. Whether pre-funding arises through the natural operation of a market or through regulatory intervention, some measure of pre-funding may be in users' interests.
- 5.7 We also proposed to scrutinise the efficiency of any capacity expansion capital expenditure. This scrutiny will take place in two phases:
- After the Government decides where expansion can proceed, but before the planning application is lodged with the Planning Inspectorate (or before a hybrid bill process is completed). At this stage, we will review the efficiency of the proposed design of the capacity expansion proposal.
 - Where cost-recovery through regulation is allowed, an ex post scrutiny of the efficiency of the build (e.g. procurement, benchmarking of costs) will be undertaken.

- 5.8 The CAA has scrutinised the proposals as having been put forward by sponsors in good faith. We nevertheless recognise that incentives in demand forecasting may change between the Commission process and our own economic regulation process, and it is therefore possible that such forecasts will be adjusted. Our work will reflect the latest forecasts and assessment.