

CAA response to Heathrow Airport Limited's June 2019 Airport Expansion Consultation



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Introduction

1. The Civil Aviation Authority (CAA) welcomes the opportunity to respond to Heathrow Airport Limited's (HAL) statutory consultation on airport expansion in its capacity as a statutory consultee under planning law.
2. The CAA has consistently stated that additional runway capacity in the south east of England will benefit air passengers and cargo owners. The timely delivery of more aviation capacity is required to prevent future consumers experiencing higher airfares, reduced choice and lower service quality.
3. The CAA has a number of statutory functions which impact on the success of any scheme proposed to meet or deliver the objectives of the designated Airports National Policy Statement (ANPS).
4. We are using our response to this statutory consultation on HAL's preferred masterplan to provide clarity and transparency on the roles and responsibilities we are performing and will continue to perform with respect to HAL's expansion scheme.
5. A number of HAL's proposals for expansion will be subject to CAA regulatory processes and approval. Some of these regulatory processes are already under way and our regulatory processes will continue throughout and beyond the DCO process (including after DCO consent, if granted, and during the construction phase).
6. We have engaged and will continue to engage with HAL over the coming months to understand its proposals for expansion insofar as they relate to our relevant regulatory roles and statutory functions and thus in our capacity as a statutory consultee.
7. This response is based on the available information in HAL's statutory consultation as at 13 September 2019 (the closing date of HAL's statutory consultation) and the current status of our relevant policies at this date. As our work on our regulatory processes will continue after this date, this response should be considered as a "snapshot" of our position on the issues discussed as at that date and remains subject to further development in those processes.

The CAA's regulatory roles and statutory functions

8. The CAA is the UK's specialist aviation regulator. We work so that:
- the aviation industry meets the highest safety standards. We regulate the safety of airport design against UK, European and international safety criteria.
 - consumers have choice, value for money, are protected and treated fairly when they fly. We regulate the cost of operating Heathrow airport and will regulate the costs of expanding the airport.
 - airspace is well managed. We make decisions on proposals to change airspace design, which we do against the background of our duties under the Transport Act 2000, Directions and environmental guidance from the Secretary of State. and
 - the aviation industry manages security risks effectively.

We also provide the government, and third parties on a commercial basis, with environmental advice as requested, including information about the noise effects of aviation operations. In general, it is for government to determine environmental policy and for the CAA, where required, to implement such policy as it relates to our functions.

The CAA's role as a statutory consultee under planning law

9. The CAA is prescribed as a statutory consultee in relation to applications for development consent made under the Planning Act 2008 and must be consulted on all such applications relating to an airport or which are likely to affect an airport or its current or future operation. We therefore respond to consultations and information from an applicant insofar as their application is relevant to our regulatory roles and statutory functions and we have comment to make.
10. As a statutory consultee, we are expected to provide advice and assistance to the Planning Inspectorate and Secretary of State on whether we see any impediments to HAL's proposed development proceeding insofar as they relate to our regulatory roles and statutory functions, and, if so, whether we consider those impediments are capable of being properly managed¹. We make that assessment at the time of HAL's DCO submission. In making that assessment, we will need to decide whether there are any unmanageable impediments. Our assessment will be based on the evidence then available. The assessment we carry out and the advice and assistance we provide do not in any way fetter the

¹ This is likely to be in the form of a 'no impediments' and/or 'statement of common ground' document.

CAA's decision-making discretion in relation to regulatory decisions at a later stage; all regulatory decisions will be taken based on the information available and relevant considerations at the time.

11. The Airports National Policy Statement states HAL, as the promoter, must:

“provide the CAA with the information it needs to enable it to assist the Examining Authority in considering whether any impediments to the applicant’s development proposals, insofar as they relate to the CAA’s economic regulatory and other functions, are capable of being properly managed.”

We note the importance of HAL engaging with us and providing the information we need to fulfil our statutory consultee role.

Structure of this response

12. We welcome the opportunity to respond to HAL’s Statutory Airport Expansion Consultation. Each chapter of this response deals with a different topic for which we have a regulatory role and indicates at the start the particular consultation documents on which we are providing comments.
13. There is evidently a very large volume of consultation material, much of which does not appear to be directly relevant to the CAA’s regulatory roles and statutory functions. We have not reviewed all of the consultation documents published by HAL as part of this consultation. We have focussed our attention on those areas which are within or are closely related to the CAA’s areas of regulatory responsibility. Also, we have only included reference to documents where we have a comment to make.
14. Given the CAA’s diverse range of regulatory functions, the format and layout of this response differs significantly across our different functions ranging from specific technical points to more general commentary. We have not applied a uniform format to our responses as we do not consider this would assist the applicant any further.

Chapter 1

Aerodrome Safety

Consultation documents commented upon in this chapter

Preferred Masterplan
PEIR chapter 16 – Major Accidents and Disasters
Updated Scheme Development Report – Document 2 of 5
Construction Proposals

Aerodrome Safety

- 1.1 The CAA is the UK regulator of aviation safety. UK Aerodromes that fall within the scope of EASA are currently subject to regulations set by EU/EASA. The CAA's role is to ensure that all the relevant aerodrome regulations (the EASA Basic Regulation, Implementing Rules, Acceptable Means of Compliance and Certification Specifications) are complied with by UK aerodromes in scope.
- 1.2 In Table 1.1, we set out the CAA's comments on the above documents together with some general comments.

Table 1.1: CAA comments concerning Aerodrome Safety

General		
HAL should ensure it has considered the ICAO manual on simultaneous OPS on parallel or near-parallel instrument runways (SOIR), since that has material on runways spacings and independent parallel approach requirements. An update to that manual is shortly to come into effect.		
Preferred Master Plan Document		
Page	Para	Comment
69	Fig 6.2.3	A cargo transshipment area has been proposed directly in line with runway 27C (existing 27R). HAL should consider if this conflict or is likely to conflict, with public safety zone requirements.
72	Fig 6.3.3	CAA supports the end around and western bypass taxiways, and their location to minimise the impact on runway 09C/27C. This design is also in accordance with the European Action Plan for the Prevention of Runway Incursions (EAPPRI) recommendations and

		mitigates the risk of runway incursions.
81	6.5.2	The desire for displaced thresholds to alleviate noise overhead communities on approach is noted, but sufficient landing distance is required to minimise the use of reverse thrust which generates additional noise on the aerodrome. Additionally, the location of the rapid exit taxiways should be used to reduce the use of reverse thrust – to reduce noise and the maintenance burden of aircraft engines. This is not mentioned in the masterplan or updates scheme development documents reviewed.
	6.5.2	There are presently warnings published in the AIP for both 27L and 27R regarding building induced turbulence/windshear during strong southerly/southwesterly winds or strong northerly winds. HAL should consider if displacing the landing thresholds could impact this.
83	Fig 6.5.4	There is a risk that displacing the landing thresholds on runway 27C by such a large distance could lead to confusion for aircrews as the touch down zone markings for both ends of the runway could overlap. HAL should consider designing the distance between the thresholds to avoid this.
89	6.7	Some aircraft have significant towing distances between the MRO east facility and T5 which can add to the workload of ATC ground and which can also add to the congestion around the 27L and 27R holding areas when in use as departure runways. Rationalising and adding more MRO facilities in this area may increase this congestion so HAL should consider this as they develop their proposals.
102	Fig 6.10.3	A cargo truck park area has been proposed directly in line with runway 27L. HAL should consider whether this conflicts with public safety zone requirements.
165	Fig 7.10.2	A blast wall has been proposed in line with and to the west of the end of both existing runways. The height of this should be such that it does not interfere or infringe the obstacle limitation surfaces or the instrument flight procedures protection surfaces. This also applies to any noise attenuation, blast protection or visual mitigation structures (as identified on page 164).
160	7.9	The section on Landscape and Biodiversity needs to account for and propose species and habitats that do not attract wildlife that could increase the wildlife or bird strike risk. Guidance is provided in CAP 772.

Updated Scheme Development Report – Document 2 of 5		
7	1.2.6	This section states that the existing runways are dependent owing to their distance apart. The masterplan document at para 5.2.2 states that the new runway will operate independently of the existing runways, notably what will become 09C/27C. However, the distance between these runways is less than between the existing runways. HAL will need to propose suitable mitigations with appropriate safety cases in order to operate the runways independently with the proposed runway spacings. The intention to have operational independence for all the runways is again highlighted at 1.3.4.
	1.2.6 Fig 1.4	Present operation is preferred westerly operations up to a tailwind of 5kts. This is not mentioned in the report, so if this preference was removed HAL should consider how much impact it would have on percentage use between easterly and westerly operations. HAL should also consider whether landing with a 5kt tailwind on a shortened LDA of 2800m might present an issue.
9	1.3.2	Sub para 1 states that the runway will be designed to recognised international standards set down by EASA and ICAO and quotes “EASA Certification Specifications and Guidance Material for Aerodromes Design CS-ADR-DSN Issue 4”. This should be modified to include “or as amended”. This will ensure that the published set of certification specifications at the time of design are used.
67	2.3.6	The benefits of around the end taxiways (ATETs) are stated in capacity terms when it is a significant safety design feature to remove the runway incursion risk and follows EAPPRI recommendations which is not mentioned; these other justifications should be stated. However, the operation of the ATETs needs to be reviewed in detail to ensure the mobile obstacles are not affecting the operation of the runway.
79	2.4.2	The design of any new Rapid Exit Taxiways (RETs) or Rapid Access Taxiways (RATs) should take into account the runway incursion risk and should follow recommendations in the EAPPRI document.

317	6.5.18	Adding to the existing BA and VAA MRO on the east side may impact the already known building induced turbulence experienced during strong wind conditions when landing on 27R and 27L. HAL should consider this as it develops the infrastructure design.
253	5.4.132	The location of the Cargo Transshipment Building under Option 10 has been assessed against a number of parameters, but safety is not stated as being one of these parameters; we believe this may have a safety impact and this needs to be considered. The location, in the approach to Runway 09C, could, whilst fully compliant with runway protection surface, present a hazard.
49	1.5.54	The extending of the displacement thresholds on the existing runways should be managed to ensure a suitable gap is maintained between the markings to avoid confusing flight crew. The risk of bird attraction should be a consideration for HAL and mentioned in this document if it is not contained elsewhere.
Construction		
		For a number of years, Heathrow has been developing its airport infrastructure, with many major projects carried out and completed successfully whilst the airfield continued to operate safely and to capacity. A significant proportion of the proposed works required for the new runway are outside the existing airfield operation so will have little or no impact on the operation. However, there are a number of areas that should be managed in such a way so as not to be a potential safety hazard to aircraft including: earthworks and wildlife attractant, crane operations, FOD affecting the operational part of the airfield particularly in strong winds, lights on the construction site distracting or confusing pilots and also ATC sight lines from the tower.
		Effective change management when new operational areas are introduced into service should be a primary consideration for HAL.
		Once the new runway construction progresses and becomes more visible from the air as a runway then it may introduce a risk in that the existing runways will have the designations 09R/27L and 09L/27R with the new runway being on the northside and pilots mis-identifying it as 09L or 27R. HAL should consider how to mitigate this risk.

PEIR volume 1, chapter 16		
		It is stated that Heathrow has an emergency plan for aircraft accidents/incidents which is regularly tested and exercised in practice. Our oversight has shown this to be well managed and we are confident that this would continue to be the case for R3 when it would be reviewed and developed to remain effective and appropriate to the scale of the operation.
	16.10.60-63 and 16.10.125	The occurrence of air accidents due to the increase in ATMs seems to be considered only in terms of Public Safety Zones. These capture the likelihood for an individual to be affected by an air accident, but do not consider (or mitigate) any increase in the likelihood for there to be an air accident affecting the population as a whole. This topic was addressed in the HSL report referred to in 16.4.12 and undertaken for the Airports Commission.

Chapter 2

Economic Regulation**Consultation documents commented upon in this chapter**

Airport Expansion Consultation Document
Proposals for Mitigations and Compensation
Noise Insulation Policy
Property and land acquisition and compensation policy – interim residential property
Early Growth
Surface Access Proposals

Introduction

- 2.1 This chapter summarises the CAA's views on HAL's statutory consultation on airport expansion from the perspective of our duties under the Civil Aviation Act 2012 (CAA12).
- 2.2 In our response to HAL's first public DCO consultation (March 2018), we set out how we regulate HAL under the economic regulatory licensing framework which we do not repeat here. Since March 2018, we have issued a series of consultations on the core elements of the regulatory framework to support capacity expansion at Heathrow airport which we summarise below in paragraphs 2.9 – 2.12 and Appendix 1.
- 2.3 We are using this response to clarify the remit of our economic regulatory role in response to the proposals set out in HAL's statutory consultation and in the context of the planning process. In particular, we consider it is important to clarify our broad approach to cost assessment in response to specific comments HAL has made in its statutory consultation regarding our role in 'approving the costs' of expansion.
- 2.4 We set out below:
- our strategic priorities for Heathrow expansion through the lens of our economic regulatory functions;
 - a summary of our latest policy, based on recent consultations and working papers;

- our views on the CAA's economic regulatory role and its interactions with HAL's development of a DCO through the planning process; and
- specific comments on HAL's proposals in its statutory consultation that warrant the clarification of our current policy.

2.5 Our response to HAL's statutory consultation is based on our latest policy as at 13 September 2019 (the closing date of HAL's statutory consultation). Nonetheless, our policy will continue to evolve in the future and we presently envisage setting HAL's next main price control in 2021.² This means that our submission to PINS³ will be based on the latest available information at the time that HAL submits its DCO application (currently estimated by HAL as being June 2020), and that our submission is likely to change according to further developments in the H7 price control process.

Strategic priorities for Heathrow expansion – economic regulation

- 2.6 The CAA has consistently stated that additional runway capacity in the south east of England will benefit air passengers and cargo owners. The timely delivery of more aviation capacity is required to prevent future consumers experiencing higher airfares, reduced choice and lower service quality. In the light of these considerations, our work on supporting capacity expansion at Heathrow airport is central to our primary duty under the CAA12 to further the interests of present and future consumers, as well as our other duties.
- 2.7 We developed a set of strategic priorities in 2017⁴ to shape our work on developing the regulatory framework for HAL:
- Priority 1 - HAL must develop a scheme design to further the interests of consumers by engaging in a transparent and effective way with airlines and other stakeholders on the potential options, costs and value for money.
 - Priority 2 - HAL must develop robust cost estimates and we need to develop regulatory arrangements to incentivise HAL to deliver the project in a timely and efficient way.

² The CAA's process for developing the economic regulatory framework to regulate capacity expansion is informed by a process of iterative consultation and stakeholder engagement.

³ Likely to be through a 'no impediments' and/or 'statement of common ground' document.

⁴ CAP 1510 <http://publicapps.caa.co.uk/docs/33/CAP%201510%20JAN17.pdf>

- Priority 3 - HAL must develop proposals for efficient financing and we need to develop the regulatory framework in a way consistent with efficient financing, affordability and financeability.
- Priority 4 - HAL must develop coordinated proposals for existing operations (i.e. for the H7 price control) alongside its proposals for the new runway and capacity expansion, so that its overall business plan is affordable and financeable.

2.8 We will keep progress on these strategic priorities under review as HAL's expansion scheme matures. We also note that there are other important priorities alongside our economic regulation remit, including airspace modernisation, which we refer to elsewhere in this response.

Summary list of CAA consultation material

- 2.9 Since 2017, we have published a number of consultations to inform our emerging policy for the H7 price control review consistent with these strategic priorities.
- 2.10 A summary list of our key consultations can be found in Appendix 1. A full list of our consultations and responses to our consultations as well as other technical reports can be found [here](#).
- 2.11 In parallel to our work to develop the regulatory framework, we also report to the Department for Transport on how well HAL is engaging with the airline community on its expansion plans and whether this engagement is appropriately reflecting consumers' interests (the Enhanced Engagement process). Our Enhanced Engagement reports can be found [here](#).
- 2.12 Our next regulatory consultation is expected in October 2019. HAL is due to produce its Initial Business Plan in December 2019 which we will assess.

CAA's economic regulatory role and interactions with the planning process

- 2.13 The ANPS recognises that the CAA's economic regulatory role is separate to the planning process.⁵ Nonetheless, we consider it is important to clarify potential areas of interaction between our economic regulatory role and ANPS

⁵ Paragraphs 4.36-4.40 differentiate between the CAA's economic licensing of HAL under CAA12 and the separate requirement for the scheme promoter to comply with Compulsory Purchase guidance under the Planning Act 2008

requirements that the scheme promoter has to demonstrate in its DCO application in relation to:

- i) environmental and community obligations; and
- ii) cost-efficiency.⁶

2.14 Cost-efficiency forms a core part of our economic regulatory role. We recognise that, as scheme promoter, HAL needs to incur costs in relation to the environment and local community to meet planning requirements. We also have a range of regulatory tools that can be used to incentivise cost efficiency but note that environmental and community obligations may pose particular challenges if they are difficult to benchmark or information from market testing is not readily available. Nonetheless, as part of our price control review process, we would seek to create incentives for HAL to discharge its obligations and provide services in a way that is efficient. Further information on our economic regulatory tools is set out below in Appendix 2. We will continue to work constructively with PINS as a statutory consultee in explaining the approach we have taken to consider cost efficiency more generally, and particularly in relation to community and environmental mitigations and costs. This includes the important role that airlines can play in considering proposals by HAL particularly for expenditure, and its efficiency

2.15 Nonetheless, there remains a possibility that expenditure could be identified through the planning process which could put pressure on airport charges and/or make airport charges less affordable, without a commensurate consumer benefit. In our engagement with PINS, we will seek to highlight that any such expenditure should be evidence based and proportionate, and have considered the interests of aviation consumers. While we cannot rule out additional costs that might be incurred as part of the planning process, we will seek to ensure PINS understands the advantages of keeping airport charges at affordable levels in the interests of consumers, and more generally the importance of taking account of the interests of consumers in reaching decisions.

⁶ See Paragraphs 4.36-4.40 Airports National Policy Statement. In particular, paragraph 4.39 of the ANPS notes that: “the applicant should demonstrate in its application for development consent that its scheme is cost-efficient and sustainable, and seeks to minimise costs to airlines, passengers and freight owners over its lifetime.”

Specific comments on HAL’s statutory consultation – economic regulation

2.16 The comments below have been written from the perspective of our statutory duty to further the interests of consumers under CAA12, our strategic priorities noted above and the latest policy developments set out in Appendix 1.

Costs associated with environmental and community requirements

2.17 HAL’s statutory consultation makes several references in the documents noted above on the need to secure “CAA approval” regarding the costs and funding of expansion, particularly in respect of noise insulation and the community compensation fund.

2.18 Regarding noise insulation, HAL’s proposal states that stage 1 of the noise insulation scheme is “subject to CAA approval” (see HAL’s noise insulation policy, table 5.1)

Table 5.1 – The Staged Roll-out of Noise Insulation Schemes.

Stage	Period	Homes for Noise Insulation	Scheme
Stage 1	From late 2019 (subject to CAA approval) until DCO application is granted	Homes that are exposed to the highest noise with existing operations, in line with latest Government policy, and this includes homes that would also be exposed to the highest noise with the Project. Also homes potentially exposed to early construction noise as well as existing high aircraft noise. Homes will also be selected in this stage to develop and test our systems and suppliers. (Figure 5.1)	Scheme 1
Stage 2	Between DCO	Homes identified as potentially impacted by	Scheme 2

2.19 Regarding the community compensation fund, HAL’s main airport consultation document, mitigations and compensation policy as well as its community fund webpage⁷ proposes a fund “to help address the positive and negative effects” of expansion and to “improve the quality of life in the area around the airport.” Under the ANPS, HAL is required to consult on the source of revenue, size and duration of fund, eligibility, and delivery. Regarding source of funding, HAL notes that: “The fund...will require Civil Aviation Authority approval.” HAL notes it is considering a range of potential funding sources including through regulated airport charges⁸ or a separate passenger levy.⁹

2.20 We are concerned that the expression “subject to” or “requiring CAA approval” might be misinterpreted in the context of our role as economic regulator of HAL.

⁷ See <https://aec.heathrowconsultation.com/topics/community-fund/>

⁸ that could also be used for mitigation and compensation measures which enhance quality of life or have a clear community benefit;

⁹ similar to the noise levy concept recommended by the Airports Commission, ensuring that travellers who benefit from an expanded airport contribute directly to measures that address and compensate for the negative effects

Our approach to the economic regulation of HAL involves setting price controls on the level of airport charges HAL can recover from airlines. We recognise that HAL as scheme promoter needs to incur costs in relation to the environment and local community to meet planning requirements under the ANPS. We do, however, not “**approve**” whether HAL can incur such costs: rather our role is to scrutinise whether such costs are necessary in the light of the obligations that the planning process will impose on HAL, and make allowances for efficient levels of spending and develop incentives to encourage efficiency.

- 2.21 If HAL wants us to take account of particular costs in the way we set price controls then it will need to be prepared to provide evidence that the expenditure is necessary and reflects efficient cost. This also applies to any proposals it makes for spending on the Community Compensation Fund and it will be important that HAL makes proposals for these matters that take account of value for money, while addressing key detriments to local communities from capacity expansion. Spending should be efficient and very clearly justified and warranted.

Early growth

- 2.22 HAL’s early growth document sets out its plans for “increasing flights on existing runways” pursuant to its 2016 announcement “to bring forward proposals for the introduction of up to 25,000 additional ATMs a year to respond to the urgent need for additional airport capacity.” HAL makes a number of comments relating to our economic regulatory oversight of HAL’s resilience and the Service Quality Rebates and Bonuses scheme under HAL’s economic licence that we consider appropriate to comment on.

- 2.23 While the CAA does not make the decision about whether to allow extra movements, we have consistently stated that there are potential consumer benefits from expansion at Heathrow in terms of increased competition, choice, and value for money for consumers. Notwithstanding that point, we also consider resilience is an important consumer outcome which we incentivise under HAL’s economic regulatory licensing regime. We expect HAL to:

- continue to comply with its licence obligation¹⁰ in respect of any early ATM growth that takes place as part of its two runway operation;
- comply with the updated Business Plan guidance we recently issued in [CAP 1819](#) in designing its plans to ensure that there are no unacceptable impacts on resilience, service quality or delay for consumers in the transition to a three runway operation;

¹⁰ “to secure the availability and continuity of airport operation services at the airport, particularly in times of disruption, to further the interests of users of air transport services in accordance with best practice and in a timely, efficient and economical manner.”

- update the operational resilience plan required under its licence and provide assurance that the existing contingency arrangements contained within the plan, are sufficient to deal with effects of early growth in an already capacity constrained environment, and mitigate the impact of disruption on consumers.

2.24 We note HAL's comment that early ATM growth will help meet the Secretary of State's ambition for airport charges to remain close to current levels, and note the important role the 25,000 ATMs assumption plays in its Westerly Option Dashboard Case estimated cost of around £14bn (in 2014 prices) to runway opening in 2026. Notwithstanding the wider benefits of capacity expansion noted in paragraph 2.23 above, HAL will also need to demonstrate that it has struck an appropriate balance between affordability and resilience that reflects consumers' interests, and is consistent with our strategic priorities for capacity expansion noted above.

2.25 In addition to the CAA's resilience role under the CAA12 economic regulatory framework, the CAA also has a wider role relating to network resilience across the UK aviation system. See paragraphs 5.1 and 5.2 below for further information.

Surface access proposals

2.26 HAL's statutory consultation makes several references to the need for 'agreement with our regulator' regarding the costs and funding of various surface access projects (including the proposed Western Rail Link and Southern Rail Link and bus and coach initiatives). We would like to clarify our economic regulatory role with regards to these costs and funding.

2.27 We will shortly be consulting on our surface access policy but, as the policy presently stands, whether surface access costs can be included in HAL's Regulatory Asset Base depends on whether HAL can demonstrate surface access schemes are:

- needed for the efficient operation of the airport or to meet planning requirements required to enable expansion, where the benefits outweigh the costs to airport consumers;
- not over-costed and are efficiently incurred;
- funded as far as possible from charges on, or fares paid by, direct users of the scheme; and
- have arrangements for sharing residual costs equitably between airport users and non-airport users based on the benefits each group receives from the scheme.

- 2.28 In assessing HAL’s surface access strategy (SAS) we will assess the costs and benefits of each project on its own merits as well as considering its contribution to the whole strategy. However, the CAA will not decide whether the SAS will meet the ANPS targets as we consider this is a matter for PINS. Our role is to assess whether the strategy proposed, and the individual projects within it, provide the best value for money that would justify the relevant costs being borne by airport consumers in accordance with our surface access policy. To that end, we will look for evidence to demonstrate that HAL has identified the most efficient option and that its costs of delivering such options are efficient.
- 2.29 We note HAL’s suggestion¹¹ that revenues from a vehicle access charge could be used to offset the costs of public transport projects within the wider surface access strategy. Our surface access policy does allow for such revenues to be used to subsidise public transport initiatives, but this should be decided on a case by case basis, taking into account the views of consumers and other stakeholders.
- 2.30 We note HAL’s statement in para 4.2.4 of the PTIR¹² Vol 1 that the Secretary of State will consider whether Heathrow has taken “all reasonable steps” to mitigate the impacts on the existing and surrounding transport infrastructure and will impose requirements and/or planning obligations where the proposed funding and mitigation measures are not considered sufficient. Our surface access policy highlights the need for HAL to work closely with other stakeholders to minimise the risk of additional measures or constraints being imposed through the planning process.
- 2.31 We would expect to apply our surface access policy to any additional surface access requirements following the review of the DCO, and only allow HAL to recover from aviation consumers the share of such costs consistent with our policy.

¹¹ SAP – for example at 3.5.53, 3.5.54 and Table 2.1

¹² Preliminary Transport Information Report

Appendix 1 – economic regulation consultation material

A summary list of the key consultations and working papers we have published in developing the regulatory framework for H7 (the period covering capacity expansion) is set out below

- Consultation on CAA priorities and timetable ([CAP 1510](#)) – January 2017
- HAL business plan guidance ([CAP1540](#)) – April 2017
- Consultation on the core elements of the regulatory framework ([CAP 1541](#)) – June 2017
- Policy update and consultation on the economic regulation of capacity expansion at Heathrow airport ([CAP 1619](#)) – December 2017
- Recovery of costs associated with obtaining planning permission ([CAP1651](#), [CAP 1513](#)) – April 2018
- Policy update and consultation on the economic regulation of capacity expansion at Heathrow airport ([CAP 1658](#)) – April 2018
- Working paper on the cost of capital and incentives ([CAP 1674](#)) – May 2018
- Policy update and consultation on the economic regulation of capacity expansion at Heathrow airport ([CAP 1722](#)) – October 2018
- Category B costs for 2016 and 2017: Independent Planning Cost Review and CAA consultation ([CAP 1750](#) and [CAP 1751](#)) - January 2019
- Working paper on the cost of capital ([CAP 1762](#)) – February 2019
- Policy update and consultation on the economic regulation of capacity expansion at Heathrow airport ([CAP 1782](#)) - March 2019
- Arcadis [report](#) on HAL’s reflection of consumer interests in developing its expansion masterplan and [CAA observations](#) - March 2019
- Working paper Heathrow expansion – affordability and financeability update ([CAP 1782](#)) – June 2019
- Consultation on early costs and regulatory timetable ([CAP 1819](#)) - July 2019
- Working paper on financial resilience and ring fencing ([CAP 1832](#)) – August 2019

A full list of our consultations can be found in this [link](#).

Appendix 2 – economic regulatory tools to incentivise cost efficiency

A third runway at Heathrow Airport will be one of the largest privately-financed infrastructure projects in the world. To reflect this, we are continuing to develop our regulatory framework, including the incentives for the airport operator to spend costs efficiently. We have a number of tools which work together to incentivise cost efficiency. These tools include:

1. **Through the price control:** the CAA sets a cap on the yield per passenger from airport charges HAL can recover from airlines. The cap normally lasts for five years and is based on an assessment of a number of regulatory building blocks, such as forecast costs and traffic volumes. Under the existing price control arrangements, if operating costs or passenger traffic turn out better than the forecasts used in setting the cap on landing charges, HAL's shareholders make a gain during the five-year period. But the converse is also true: HAL's shareholders lose out if costs/traffic turn out worse than our forecasts over the five-year period. These arrangements are designed to incentivise HAL to seek out efficiencies which can then be shared with consumers at the next price control review.
2. **Sharper incentives for efficiency in the regulatory regime:** as part of our work to develop the regulatory framework for capacity expansion we are seeking to strengthen the incentives on HAL for efficiency. For capacity expansion, we have established that there are different categories of costs, which require different approaches to scrutinise and incentivise. For example, we are currently consulting on a recovery cap for HAL's costs related to the planning process and made specific allowances for associated financing costs. For costs related to construction in advance of planning permission, we have required HAL to prepare a more thorough business case to set out the cost scenarios and implications for the delivery of runway capacity, to ensure all stakeholders have sufficient information to make decisions.

We are also considering stronger incentives for capital expenditure, including incentives that penalise HAL for spending above agreed budgets (unless such increases are justified by changes in programme scope). Nonetheless, we will also need to be mindful of the need not to create undue risks that could jeopardise the financeability of the capacity expansion programme.

It is worth noting that where our powers directly or indirectly rely on licence modifications to HAL's economic licence, such modifications can be appealed to the Competition and Markets Authority by either by HAL or airlines who are materially affected by our decision.

3. **Economy and efficiency licence condition:** We have developed a licence condition to reflect consumers' expectations by requiring HAL to conduct its business so as to secure the economical and efficient (a) operation and maintenance; and (b) timely and appropriate enhancement and development of the airport. We expect this licence condition, if inserted in HAL's licence following the outcome of the current statutory licence modification consultation, will enable the CAA to intervene earlier in the regulatory process if there are concerns that costs are being inefficiently spent.

4. **Airline scrutiny:** the airlines have an essential role to play as customers of the airport, as they are very familiar with the detailed operations and the future investment requirement. As noted above, airlines work closely with HAL to shape the investment plans and to reach appropriate forecasts before the regulatory period begins.
5. **Business planning process:** the CAA has set expectations for what HAL needs to include to ensure it has developed a high-quality, robust business plan. Through the CAA's scrutiny of this business plan, and the airlines deep involvement with it via the Enhanced Engagement and Constructive Engagement processes, there will be extensive review and challenge to HAL's costs.
6. **Scrutiny by expert advisers:** the CAA also relies on a wide range of external advisers to support us in scrutinising HAL's cost and efficiency. These include:
 - a. IFS - the Independent Fund Surveyor has a central, ongoing role advising HAL and the airlines (and the CAA if required) on whether expenditure is being incurred efficiently.
 - b. IPCR - Independent Planning Cost Reviewer is advising the CAA on planning cost efficiency. The IPCR complements the input of airlines and the IFS.
 - c. Property adviser – we are in the process of appointing an advisor with expertise in both commercial and residential property to advise on the efficiency of HAL's property costs.
 - d. Arcadis – are the CAA's technical consultants on expansion and have been and will continue to carry out a number of review of HAL's plans on issues including cost projections.

In addition to our regulatory tools, we also monitor and report to DfT on the quality of HAL's engagement with the airline community on its expansion plans under the Enhanced Engagement process.¹³

¹³ <https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/H7/Enhanced-Engagement-Section-16/>

Chapter 3

Noise

Consultation documents considered in this chapter

Airport Expansion Consultation Document
Proposals for Mitigation and Compensation
Noise Insulation Policy
Preferred Masterplan
Updated Scheme Development Report - document 5 of 5
Future Runway Operations
Early Growth
Environmentally Managed Growth
PEIR Volume 1-Chapter 17 Noise and vibration

Aircraft noise

- 3.1 The CAA has three key roles in relation to aviation noise:
- Deciding whether or not the design of airspace can be changed in accordance with government, law and noise policy. Detailed information is available on our airspace change pages.
 - Monitoring noise around UK airports and publishing information about noise levels and impact. We do this for a range of customers including the UK Government, airport operators, airspace change proposers and local authorities.
 - Collaborating on and reviewing research into the effects of noise and how they can be reduced, and offering advice to Government on these effects.
- 3.2 The CAA does not make decisions about the amount of noise that is considered damaging or annoying for people, nor does it make decisions about particular plans for airports, such as expansions. Further, CAP 1616 and the Air Navigation Guidance 2017 do not place any requirement on the CAA in terms of regulating noise on the ground at airports.
- 3.3 In Table 3.1, we set out the CAA's comments on the above documents together with some general comments.

Table 3.1: CAA comments concerning Noise

Document	Para	Comment
Airport Expansion Consultation Document		<p>We welcome proposals for time limited recovery periods for late running flights, 2300-2330 for arrivals and 2300-0000 for departures and the proposal that only flights that meet government dispensation rules may operate outside the recovery periods.</p> <p>Surface access (pages 63-69): Surface access has targets for improvement in the percentage of modal shift from cars to public transport. Final analysis will need to quantify whether the targets will prevent environmental impacts increasing due to the overall growth in passengers travelling to/from the airport.</p> <p>On noise insulation, we note that the criteria are more generous than set out in the ANPS. Any cost consequences arising out this would be considered by the CAA as part of its functions under CAA12 (see comments in Chapter 2). We welcome that HAL will send insulation letters to owners of rental properties, but are concerned that rental owners may not make the effort to engage with the scheme, and rental tenants, often the most vulnerable, could miss out on insulation. There is ad hoc evidence that this has occurred with insulation schemes in the past.</p> <p>Noting there is limited detail presented at this stage, we welcome the proposal for a daytime noise envelope and if we understand it correctly (Section 5, page 50), proposals for a night quota period with noise quota and movement limits (2300-000 and 0515-0600) and a separate noise quota to cover the period 0600-0700.</p>
Proposals for Mitigation and Compensation		<p>As noted already, the proposed scheme is more generous than the ANPS requires and brings the noise insulation criteria on a par with that of major European airports. Notwithstanding HAL's commitment to engage with property owners where accommodation is rented, and noting that the proportion of rental housing tends to increase with increasing noise level, concern that tenants may miss out on insulation needs a strong commitment that HAL will work with landlords to ensure rented accommodation is appropriately insulated.</p>
Noise Insulation Policy		<p>There is a statutory requirement to provide updated contours in the DCO ES based on the final DCO proposal. Since these will still reflect an indicative airspace design, HAL proposes to update</p>

		<p>the noise contours based on the Airspace Change Proposal (ACP) process in 2022 and 2023. This is all as required by the DCO and CAP1616 processes.</p> <p>HAL should consider whether revised noise forecasts every five years for insulation eligibility is sufficiently frequent to capture the peak year of noise between 2030 and 2040.</p>
Preferred Masterplan		<p>Para 5.3.7 (taxiways and respite): the ATETs are required to facilitate traffic moving from/to the NW runway and the central area without crossing the central runway, and are essential if traffic is to respect runway alternation patterns and provide predictable respite from noise.</p> <p>Para 6.5.2 adjustments to centre runway – we note and support the proposed 1,100m displaced thresholds in terms of reducing noise impacts.</p>
Updated Scheme Development Report - document 5 of 5		<p>We welcome the introduction of 1,100m displaced runway thresholds for the centre runway in terms of reducing noise impacts. We note that the runway 27L displacement will be much less, 550m, but that is dictated by mixed-mode use of the southern and new NW runways and as stated in the Scheme Development report to be due to wake vortex interaction modelling undertaken by NATS. Displacements on the new NW runway are also 550m (para 7.1.3) for the same wake vortex interaction reasons.</p>
Future Runway Operations		<p>We welcome proposals for restricted recovery periods at night-time and the proposals for associated movement and Quota Count noise limits.</p> <p>We note that some of the proposals have been assessed with regards to noise and show changes in noise contour area and populations exposed. Noting the change in government noise policy to focus on health, wellbeing and quality of life as assessed by DfT's WebTAG, we expect to see a clearer evaluation of the benefits of the operational measures through the application of WebTAG.</p> <p>As part of its DCO noise assessment, HAL is required by the ANPS to compare against a 2013 baseline assessed at the 54dB LAeq 16 hr noise contour. This is consistent with CAP 1616's use of LAeq contours as a noise metric. It also compares against a future 'do nothing scenario' as required by planning and environmental impact assessment regulations. CAP 1616</p>

		requires production of contours where airspace changes affect operations at and below 4000ft. All level 1 ACPs affecting traffic at and below 4,000ft, and any relevant ones which affect traffic at or below 7,000ft, are required to produce LAeq contours from 51dB LAeq.
Early Growth		We note HAL's proposal to seek approval to alter the T5 planning condition limiting flights to 480,000 ATMs. We also note that the early growth of 25,000 ATMs in a two runway environment is predicated on specific airspace changes (such as Independent Parallel Approaches) that result in a small number of flights overflying new areas. Whilst a high-level overview of the results is provided, we would expect to see a full assessment of the health, wellbeing and quality of life effects of early growth.
Environmentally Managed Growth		<p>We welcome the concept of an Independent Scrutiny Panel (ISP). The ISP would be given binding powers of enforcement through the terms of HAL's DCO approval. This would appear to be consistent with the make-up of Consultative Committee Meeting panels established under Section 35 of the Civil Aviation Act 1982. This is also similar to the establishment of Focus groups under stage 1 "define" of the CAP1616 process.</p> <p>We support the principle of night time Quota Count limits, aligned to the recovery, early morning start-up period and 0600-0700 period, and day and night time noise contour area limits. For consistency, it would seem appropriate to use the DfT's policy LOAEL levels of 51dB LAeq16h and 45 dBA LAeq8h, as opposed to 54dB LAeq16h and 48dB LAeq8h respectively. We do not see value in using more than one level for day and night respectively since the areas would be so highly correlated a second contour area limit would offer little or no added value.</p>
PEIR Volume 1-Chapter 17 Noise and vibration		<p>We note HAL's proposal to seek approval to alter the T5 planning condition limiting flights to 480,000 ATMs. We also note that the early growth of 25,000 ATMs in a two runway environment is predicated on specific airspace changes such as Independent Parallel Approaches that result in a small number of flights overflying new areas. Whilst a high-level overview of the results is provided, we would expect to see a full analysis of health, wellbeing and quality of life effects as presented for the 2035 with DCO project scenario.</p> <p>Table 17.9: We believe sleep disturbance at certain sensitive receptors, e.g. hospitals, is also relevant.</p>

Chapter 4

Airspace

Consultation documents considered in this chapter

Preliminary environmental information report: Chapter 17: Noise and vibration

Airspace Change

- 4.1 The CAA has set out its role in the airspace change process in its response HAL's first public DCO consultation dated March 2018 (see paragraphs 21-25 of the Annex to 'The Civil Aviation Authority's response to Heathrow Airport Limited's public consultation on airport expansion', 29 March 2018) and that is not repeated here.
- 4.2 In Paragraph 17.3.24 of PEIR Chapter 17 volume 1, we note the reference to a meeting with the Civil Aviation Authority in March 2019. By way of clarification, the CAA's approach to its role as a statutory consultee is to comment on information and materials provided by HAL through the lens of the CAA's regulatory responsibilities. The CAA has not provided a view on the requirements of the environmental impact assessment nor what is adequate in that regard; that is a matter for the applicant and the examining authority.
- 4.3 In Paragraph 17.5.21, we note the proposed use of noise envelopes in the DCO process which will, we understand, establish the maximum parameters within which the eventual flight path options will have to be delivered as part of the CAP 1616 process. HAL should ensure that the noise envelopes proposed as part of the DCO process enable HAL to comply with the requirements of the CAP 1616 process and do not unduly restrict the scope for the development of options as part of HAL's airspace change proposals.
- 4.4 In preparing the noise envelopes for the DCO process, HAL should also consider the requirements of the CAA's wider airspace modernisation strategy (AMS) and programme. Any noise envelopes proposed as part of the DCO process should not unduly restrict HAL's ability to coordinate with other airspace change sponsors as part of the UK's airspace modernisation programme. Accordingly, any noise envelopes should also take account of the AMS and associated work programme.

Chapter 5

Other aspects

Consultation documents considered in this chapter

Early Growth
PEIR chapter 10 – climate change
Equality Impact Assessment: Initial Findings

Resilience

5.1 The CAA has a general duty under the Civil Aviation Act 1982 when carrying out its functions to further the reasonable interests of users of air transport services. As part of this duty, we are interested in minimising delays and cancellations to flights arising from a variety of causes¹⁴. One such cause identified by the CAA is the resilience of the day to day operation of the aviation industry in the face of growing volumes of air traffic and capacity limitations at airports and in airspace. We highlighted this issue in our July 2017 report, “Operating Resilience of the UK’s aviation infrastructure and the consumer interest” (CAP 1515). Although the implementation of the Airspace Modernisation Strategy will go some way to improve this type of industry resilience, we have also encouraged the industry to set up a voluntary group to share best practice and consider what modifications to processes can be taken to improve resilience, or the recovery from disruption.

Early Growth

5.2 In general, the phasing of growth following the completion of a third runway is likely to be something that is good for the overall resilience of the operation of the airport and airspace in the South of England. The early growth of traffic proposed at the airport before the opening of the third runway should be undertaken such that it strikes an appropriate balance between affordability and resilience that reflects consumers’ interests, and therefore its introduction may be best to be phased in, as proposed by HAL. However, it is not clear to us how HAL will ensure that resilience is kept at acceptable levels. Appendix C (evaluation results) of the Early Growth consultation document simply says that,

¹⁴ This interest is in addition to the resilience conditions which we put into the economic licences of those entities (including HAL) which are subject to our economic regulation regime.

“The results indicated that it will be possible to facilitate early ATM growth whilst retaining acceptable levels of performance” whereas it would be more informative to understand what effects on delays were produced by the different scenarios under evaluation. Further, in paragraphs 3.2.12 – 3.2.14 it is suggested that HAL will retain the practice of scheduling the airfield in such a way that, on average and absent any other disruptions, all arrivals and departures will experience 10 minutes of delay. In CAP 1515, the CAA noted that the ‘10 minutes delay criteria’ was first adopted in the early 1990s and the modelling which currently underlies capacity declaration takes no account of factors such as: likely external disruption or delay, whether airlines schedules are achievable or whether ground handling resources are available to meet the schedule. This seems to call into question whether such modelling is suitable for this assessment and whether the 10 minute delay criteria is appropriate for planning future operations.

PEIR chapter 10 – climate change

- 5.3 When this document considered the effect on the runways, taxiways and aprons from a variety of events, such as increased frequency of wind, rain, snow and lightning, it did not seem to consider what the (negative) effect might be on the throughput of traffic either at the airport or in the surrounding airspace. Such reductions, if they became more frequent, could affect the airport’s ability to meet its proposed schedule and resilience aspirations.

Accessibility

- 5.4 There is very little on the topic of accessibility in the consultation material. In the Equality Impact Assessment: Initial Findings, Table A.6 covers the strategies of a couple of disability charities, specifically Mencap, Mind and Age UK. This does not appear to be very deep/broad coverage and does not include a number of charities that, as we understand it, HAL engages with on a regular basis. We also do not see any reference to the Heathrow Access Advisory Group which we would expect to be involved closely with this project from an accessibility perspective.
- 5.5 Subsequent engagement between the CAA and HAL has indicated that HAL is intending to engage more with disability groups than this consultation material suggests. This is a course of action which we would strongly welcome.