


Interim Response to CAA Consultation on Minimum Standards for Noise Modelling

CAP 1875a



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Executive Summary

1. On 8 January 2020, the CAA published CAP 1875, a Consultation on CAA Minimum Requirements for Noise Modelling. The consultation closed on 4 March 2020 and we had expected to respond and publish our policy by Easter 2020. However, with the onset of the COVID-19 pandemic (preceded by the demise of FlyBe), we decided to defer any response for at least six months. This document sets out our decisions after taking into account the consultation responses.
2. We have decided to implement our proposal that there are minimum requirements for noise modelling when providing noise calculation to the CAA in order that we carry out our functions – see CAP 2091 published on the date of this document.
3. We have decided to implement our proposal that there are five categories of requirements (A-E) and we have decided to implement our proposed criteria for the threshold to which airports those different categories apply as requirements and to which they apply as recommendations
4. We have decided to implement our proposed requirements for Categories A, B, C and E
5. We have decided to refine our proposed requirements for Category D (and will consult on those revised proposals before finalising and deciding on Category D requirements – see CAP 1875b published on the date of this document).
6. We have decided to apply Category E requirements to Category D airports whilst we consult on revised draft requirements for Category D airports, review that consultation response and decide on Category D requirements.
7. We have decided to implement these new requirements from 8 February 2021.
8. We have decided these new requirements will apply to any airspace change proposal that has not yet progressed through Gateway 2 or to any planned and permanent redistribution of traffic that has not yet progressed through the Assess and Consult Gateway in the CAP 1616 processes by 8 February 2021. For those airspace change proposals which are being undertaken under the CAP 725 process, these minimum requirements shall apply only to those in respect of which a public consultation is published after 8 February 2021.
9. We have decided to extend the transition period for any airport required, as a result of these new requirements, to install a track-keeping system, install new noise monitors, or collect and process ADS-B or radar data.

10. We have decided to implement our proposals around our interpretation of the Secretary of State's Call In Criteria for Airspace Change Proposals – see CAP 2092 published on the date of this document.
11. We will be publishing a full consultation response document after we have completed the consultation on the requirements for Category D.

Chapter 1

Introduction

Background

- 1.1 On 8 January 2020, the CAA published CAP 1875, a Consultation on CAA Minimum Requirements for Noise Modelling. The consultation closed on 4 March 2020 and we had expected to respond and publish our policy by Easter 2020. However, with the onset of the COVID-19 pandemic (preceded by the demise of FlyBe), we decided to defer any response for at least six months. Having taken account of the consultation responses, we have published four documents:
- CAP 1875a, an interim assessment of the consultation responses to CAP 1875 (this document)
 - CAP 2091, our Policy on Minimum Noise Modelling Requirements
 - CAP 1875b, a consultation on the definition of Category D for our Minimum Noise Modelling Requirements
 - CAP 2092, our Policy on the Secretary of State's Call In Process
- 1.2 In this document, we describe the amendments we have made to our minimum noise modelling requirements as a result of reviewing the consultation responses. This includes our decision to undertake a further consultation on the definition of Category D.
- 1.3 The CAA reviewed all the responses to CAP 1875 before deciding on the policies and consultation mentioned above. However, we will not be responding here to each issue which was raised in the consultation responses. In due course, we will publish a summary of responses to CAP 1875 and our reasons for changing or not changing our policy proposal in the light of those responses.

Why we are implementing this policy and why now

- 1.4 All noise modelling is based on data about the noise emitted by flights into and out of an airport. At its most basic, these inputs can be taken from data published by ICAO and other bodies. However, the data can also be adjusted to reflect actual local experiences by the use of various techniques. Implementation of the techniques to achieve this extra sophistication for noise modelling range in cost and resources required.

- 1.5 We proposed this policy in order to provide clarity to sponsors of changes which may affect the noise at airports, and stakeholders impacted by them, about the methodology sponsors should use to collect the data to undertake noise modelling. Our aim is that the methodology used is relative to and therefore proportionate to the number of people impacted by noise at that airport. We aim therefore to reduce ambiguity and to provide consistency across different groups of airports.
- 1.6 Although the COVID-19 pandemic is not over and air traffic is still at a much lower level than before, we are proceeding with this policy now in order that it can come into effect in time to influence the majority of airspace changes which will form part of the Airspace Modernisation Strategy Masterplan¹. In recognition of the impact of COVID-19, we are increasing the length of some of the transition arrangements proposed in our original consultation for airports which are required to implement the more costly measures which this policy requires.

What we were not consulting on in CAP 1875

- 1.7 In CAP 1875, we described those of our regulatory duties for which we require stakeholders to submit noise analysis to us. Many of the responses to CAP 1875 indicated that some stakeholders thought we were consulting on the content or application of these regulatory duties and proposed changes to them and justifications for those changes (for example, the criteria for the Secretary of State to call in an Airspace Change Proposal decision, or the definition of the Government's Lowest Observable Adverse Effect Level for aircraft noise).
- 1.8 To be clear, CAP 1875 was mainly concerned with the sophistication of the computer modelling processes and data used by airports (or their consultants) to produce noise contours and other metrics when they engage with us and their local communities. It was not about deciding whether the current noise produced by aviation is acceptable, nor about whether changes to aircraft flight paths or volumes should be approved, or the means by which such decisions are made.
- 1.9 CAP 1875 was only intended to clarify a specific aspect of the way airports model noise when applying for permissions from us, such as those to change airspace design. Other policy decisions by Government or the CAA (for example, those the government makes on the night flight regime at Heathrow, Gatwick and Stansted airports) will only be changed by Government or the CAA following consultation on those specific regulatory duties or means by which we implement them.

¹ [Airspace Modernisation Update | UK Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/air-traffic/air-traffic-operations/air-traffic-operations-updates/air-traffic-operations-updates-2020/air-traffic-operations-updates-2020-10)

Structure of this document

- 1.10 This document should be read alongside CAP 1875, our consultation on minimum noise modelling requirements. We will not repeat our proposals from that consultation in this document.
- 1.11 The remainder of the document consists of the following chapters:
- Chapter 2 describes the responses received on our proposed minimum noise requirements, and our assessment of those.
 - Chapter 3 describes the responses received on our proposals for interpreting the Secretary of State's call in criteria, and our assessment of those.

Chapter 2

The minimum requirements for noise modelling

- 2.1 The Consultation on CAA Minimum Requirements for Noise Modelling (CAP 1875) closed on 4 March 2020, by which time we had received 37 responses. Of these responses, five were from airports or airport groups, two from noise consultants, five from local government, 11 from community organisations, one each from NATS and ICCAN² and 12 from individuals.
- 2.2 The responses to the consultation made a variety of points, some of which were on topics which we were not consulting upon in CAP 1875 (such as the Government's definition of Lowest Observable Adverse Effect Level, or its rules on call-in criteria for Airspace Change Proposal). We have reviewed all the comments made in response to our consultation and will respond to them in a subsequent document alongside our response to submissions following CAP 2092, the consultation on new proposals for Category D. Here, we simply state the most common relevant issues raised and what changes we have made to our proposal as a result of reviewing the responses.

Summary of main consultation topics raised

- 2.3 The most common topics raised in consultation responses were:

From the aviation industry, residents and community groups

- A general acceptance that our proposal to set minimum requirements for noise modelling was a positive move, and that the principle of proportionality was fair.

Principally from the aviation industry

- It is not clear what happens to Airspace Change Proposals (ACPs) which are in progress when the policy comes into force – there is a concern that delays and extra costs are incurred, particularly if consultations need to be re-run with new noise modelling
- There was concern expressed about the additional expense which airports and other stakeholders could incur as a result of the proposals
- There was concern about aspects of using 'similar airports' to model noise (Category D). In particular, how these data are made available, whether there would be a cost to accessing them and how a 'similar airport' is to be defined.

² The Independent Commission on Civil Aviation Noise.

- There were queries about various technical details, such as the definition of ‘sufficient noise monitors’ and what further guidance the CAA will provide.

Principally from residents and community groups

- It was felt that much of the detail was too complex to understand and therefore could not be responded to by those not expert in the subject matter
- It was felt that expense to airports should not be a consideration when determining sophistication of noise modelling
- It was felt by some respondents that all airports should be held to higher (or the highest) standards of noise modelling
- There were objections to aspects of noise policy not being consulted upon in CAP 1875 (for example, the use of average contours in measuring noise, or the definition of the Lowest Observable Adverse Exposure Level of noise).

2.4 We are also aware that the worldwide impact of the current COVID-19 outbreak has seen the aviation industry hard hit in terms of finances and passenger numbers. We took account of this impact also when considering changes to our policy and put in place some mitigation for the most significant expenses which may fall on airports in the short term as a result of it.

Assessment of the main issues raised

2.5 In this section we briefly outline our assessment of the main issues raised from the previous section. A fuller assessment will be published at a later date, alongside our response to submissions following CAP 2092.

- We do not intend our proposals to add extra costs to ACPs already in progress, particularly where the noise modelling has already been undertaken and consultations carried out. We will therefore be clear as to which ACPs are in and out of scope when our requirements come into force.
- We believe the concerns around access to data from ‘similar airports’ is valid. After further investigation we also now believe that the most effective definition of a similar airport is one with a similar runway length and range of aircraft types, and that it may prove difficult to identify similar airports with available noise data for many airports. We will undertake a further short consultation on alternative requirements for Category D airports.
- We accept that some technical details require more explanation and we will provide definitions and guidance accordingly.
- We accept that we could have explained our consultation better, and in particular been clearer about what was and wasn’t in scope for it. However, noise modelling is a complex, technical subject and some level of detail was required.

- We understand both that some in the aviation industry may be concerned about any additional expense and that communities would like their local airports to use the highest standards. However, we consider that, as we proposed, cost should be a factor to consider, but that our requirements should be proportionate to the number of people affected

Revised minimum noise modelling requirements

- 2.6 We have assessed the points made in the consultation responses and made amendments to our proposed requirements where we considered it was justified. We have decided to implement our proposal that there are minimum requirements for noise modelling, that there will be five categories of requirements (A-E) and that our proposed criteria for the thresholds to which airport those different categories apply as requirements and to which they apply as recommendations will be used. We have decided to implement our proposed requirements for Categories A, B, C and E.
- 2.7 We have decided to implement these new requirements from 8 February 2021.
- 2.8 The changes we have made to the proposals on which we consulted in CAP 1875 are:
- We have decided to refine our proposed requirements for Category D. We are consulting on these new requirements for Category D (see CAP 1875b), which will not be based on 'similar airports'. In the consultation, we propose to model actual aircraft movements using radar data or a commercially available track-keeping alternative³ rather than data from 'similar airports'.
 - We have decided to apply Category E requirements to Category D airports whilst we consult on revised draft requirements for Category D airports, review that consultation response and decide on Category D requirements.
 - We have removed reference to the use of 'similar airports' from the definition of Category C.
 - We have better defined certain terms in the policy and will publish more guidance on how we expect aspects to be implemented.

³ We propose that aircraft position data may be obtained from aircraft Automatic Dependent Surveillance-Broadcast (ADS-B), or equivalent flight-identifiable time-stamped positional, data, either locally recorded or obtained from a third party, e.g. commercial provider. Alternatively, aircraft position data may be obtained from radar data from an airport or its ANSP.

- Only those ACPs which have not yet passed Gateway 2 and PPRs which have not yet passed the Assess and Consult Gateway (within the CAP 1616 Airspace Change Process⁴) on the date this policy is implemented (8 February 2021) will be required to demonstrate that their noise modelling meets the appropriate Category. ACPs and PPRs which have passed these gateways on this date will not be required to revisit their noise modelling. For ACPs that remain on the older CAP 725 process, only those in respect of which a public consultation is published after 8 February 2021 will also be required to demonstrate that their noise modelling meets the appropriate Category.
- There will be a one-off transition period for airports as follows. The maximum transition period for those airports which must install a track-keeping system will be three years. The transition period for those airports that are required to install one or more noise monitors or to collect and process ADS-B or radar data will be two years⁵. The transition period for those airports that are required to reprocess ADS-B or radar data already held will be 6 months. Outside of this introductory allowance, further transition periods will only be allowed by exception. This recognises that, in the current circumstances, requiring significant expenditure is not justified until the projected rate of industry recovery becomes clear.

2.9 Our Policy on Minimum Noise Modelling Requirements has been published in CAP 2091. As part of the next update of CAP 1616a, we will include a reference to this policy, but in the meantime, the provisions in CAP 2091 will still apply.

2.10 We have revised our proposed requirements for Category D airports. Since these revised requirements are different from our original proposals, we have opened a short consultation on these proposed Category D requirements and, subject to the outcome of that consultation, we will amend our policy at a later date. The consultation material is contained in CAP 1875b, which was published on 8 February 2021. For the avoidance of doubt, we are not consulting on whether to have requirements for Category D, only on what those requirements are.

⁴ See www.caa.co.uk/cap1616

⁵ This transition period is based on the assumption that data collected in summer 2022 will be sufficient to model normal operations in the future. If this proves not to be the case, then we will decide on a case-by-case basis whether to allow a longer transition period or require 2019 data to be sourced from a third party.

Chapter 3

Interpreting the Secretary of State's call in criteria

3.1 In CAP 1875, the CAA also consulted upon some guidance concerning our assessment of the Secretary of State's Call In criteria, as described in paragraphs 3.19 to 3.27 of CAP 1875. It pertained to our interpretation of a criterion in The Civil Aviation Authority (Air Navigation) Directions 2017⁶, namely whether the proposed change:

could both lead to a change in noise distribution resulting in a 10,000 net increase in the number of people subjected to a noise level of at least 54 dB LAeq,16h and have an identified adverse impact on health and quality of life.

3.2 In general, there was support for our proposals, but some issues were raised, many of which were the same as those raised concerning our minimum noise modelling requirements:

- There was concern about what happens to ACPs already in progress when the proposals come into force
- There was concern about any extra expense which airports would need to incur as a result of the proposals
- It was felt that much of the detail was too complex to understand and therefore could not be responded to by those not expert in the subject matter
- It was felt that expense to airports should not be a consideration when determining sophistication of noise modelling
- There were objections to aspects of noise policy not being consulted upon in CAP 1875 (in this case, the definition of the noise criterion which the CAA assessed for the Secretary of State's call in)
- There was a request for clarification about whether the 10,000 resident threshold was judged on the sum of affected residents across the 10 year forecast horizon or from the largest number of affected residents in any one year

3.3 Our assessment of these issues for the most part mirrors that taken for our minimum noise modelling requirements above.

⁶ As amended by The Civil Aviation Authority (Air Navigation) (Amendment) Directions 2018 and The Civil Aviation Authority (Air Navigation) (Amendment) Directions 2019.

- The changes to our guidance on the Secretary of State's call in criteria will apply to all those ACPs whose call in request submission period ends after 8 February 2021. Any associated noise modelling will need to comply with the requirements and implementation dates of our minimum requirements published in CAP 2091. That is, the minimum noise modelling requirements will only apply to those ACPs which have not passed Gateway 2 on 8 February 2021. For ACPs undertaken under CAP 725, the minimum noise modelling requirements will only apply to those which have not completed all their public consultations on 8 February 2021.
- There should be little extra expense incurred due to the guidance for the Secretary of State's call in process and so we consider that it is proportionate.
- We accept that we could have explained our consultation better, and in particular been clearer about what was and wasn't in scope for it. We were only consulting on specific points about how we interpret the criterion given to us in the Civil Aviation Authority (Air Navigation) Directions. These Directions are provided by the Secretary of State and so we are not able, and were not consulting on, whether or how they should be changed.
- We believe our proposals were clear about how the 10,000 resident threshold should be interpreted. We proposed that we would consider
the largest such increase expected in the 10 years following the introduction of the proposed airspace change
and this clearly indicates that it is the largest number of residents affected in any one year which will be considered.

3.4 In the light of this assessment of the consultation responses, we have decided to implement these proposals as given in CAP 1875 and have produced a separate policy document (CAP 2092) which was published on our website on 8 February 2021.