

Gatwick DCO – GACC answer to EA question NV.1.10

Question

“Recognising that concerns have been expressed by some IPs about noise envelopes, what would other IPs propose for the initial (2029) areas of the 51 dB LAeq, 16hr contour and the 45 dB LAeq, 8hr contour and any other noise envelopes, including the use of other metrics?”

What is the basis for the proposed values with reference to policy and guidance?”

Answer

This answer addresses Gatwick’s proposed noise envelope. It does not address ground noise or Gatwick’s noise insulation proposals.

Withholding of essential information; need for further managed engagement

1. GACC has previously explained to the EA that Gatwick’s consultation and engagement on its noise envelope proposals failed to meet the tests set out in the ANPS and the CAA’s guidance on noise envelopes, CAP 1129.
2. GACC has also explained that during the noise envelope consultation and engagement Gatwick refused to provide additional data and analysis that was essential to effective noise envelope engagement and which only the airport was able to provide. GACC made clear at the time, and subsequently to the EA, that the lack of additional data and analysis precluded informed engagement on noise envelope metrics and limits and meant that Gatwick’s process would not be able to generate demonstrably policy-compliant outputs.
3. Although this response makes alternative proposals for a noise envelope should the DCO be granted, we do not possess the information required to develop fully assessed proposals, because this has been withheld by Gatwick.
4. GACC’s view continues to be that, for these reasons, Gatwick should now be required to engage properly, under independent chairmanship, to develop new noise envelope proposals. If necessary, the DCO process should be paused to allow that to happen. GACC notes that the UK Health Security Agency also encourages GAL to continue engaging with local stakeholders to define a noise envelope that best meets their needs.

Policy tests

5. The Aviation Policy Framework (APF) states that, *“As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows.”*
6. In our view these principles were not removed or replaced by the 2023 Overarching Aviation Noise Policy. The new Overarching Policy clearly replaces the overall objective on noise set out in the APF. However, it does not replace the policy principles set out above. In the APF the government’s noise objective and the policy principles are stated separately. The latter can best be seen as providing

guidance on the meaning and practical application of the former. GACC believes the same applies now, that is the APF principles quoted above continue to provide guidance on the application of the new overarching policy. GACC notes that the Government has not suggested removal of the policy principles in any consultation and that the announcement of the new Overarching Policy did not state or imply that the principles had been removed.

7. In addition, the ANPS says that noise envelopes must “... *achieve a balance between growth and noise reduction*” and states that “*The Airports NPS must be used as the primary policy on noise when considering the Heathrow Northwest Runway scheme, and has primacy over other wider noise policy sources*”.
8. GAL’s noise envelope proposals do not achieve the APF policy principles or achieve a balance between growth and noise reduction as required by the ANPS.
9. In the first noise envelope period the benefits of growth would accrue almost entirely to the industry, which would benefit from very substantial increases in passenger and ATM capacity while communities would suffer substantial increases in noise.
10. In the second noise envelope period the noise impacts on communities would continue to be substantially greater than in 2019 once account was taken of the frequency of aircraft, a key measure of community annoyance.
11. After the second noise envelope period, the proposed review process would potentially allow noise to increase above the 2019 base year level on any measure.
12. Rather than the airport reducing noise as capacity grows, as required by policy, noise would increase very substantially and potentially indefinitely. And rather than the benefits of growth being shared, benefits would flow almost entirely to the industry.
13. The APF also requires noise envelopes to give communities certainty about future levels of noise. Gatwick’s proposals do not do so. There are no restrictions on noise outside the 92 day core summer period and future noise envelope reviews could increase noise without limit.
14. Policy additionally requires noise envelopes to incentivise airlines to introduce the quietest suitable aircraft as quickly as reasonably practicable. Gatwick has assumed a slow fleet transition to less noisy aircraft in its noise envelope proposals. This would remove any incentive for airlines to introduce quieter aircraft at Gatwick, and might motivate them to do so at other airports first.

Metrics

15. Gatwick’s proposed noise envelope uses a single, average noise, metric, Leq. It is widely accepted that Leq does not portray aircraft noise as experienced by communities, and all relevant policy and guidance advises against its use as a sole metric.

16. The APF says “... we recommend that average noise contours should not be the only measure used when airports seek to explain how locations under flight paths are affected by aircraft noise. Instead the Government encourages airport operators to use alternative measures, which better reflect how aircraft noise is experienced in different localities, developing these measures in consultation with their consultative committee and local communities. The objective should be to ensure a better understanding of noise impacts and to inform the development of targeted noise mitigation measures”.
17. The CAA’s noise envelope guidance, CAP 1129, recommends using a “combination of parameters” and states that “where unilateral agreement cannot be achieved using standard metrics, consideration should be given to designing envelopes using other metrics provided that they are scientifically valid and robust”.
18. The ANPS requires noise envelopes to be tailored to local priorities and to be defined in consultation with local communities.
19. GAL’s proposed noise envelope does not meet any of these tests.
20. GACC notes GAL’s assertion that use of Leq is supported by SONA 2014 but do not believe the evidence supports that claim. ICCAN stated that SoNA was not designed to consider the change in noise attitudes caused by an airport undergoing a period of volatility in its operation, such as expansion. ICAO is clear that exposure-response relationships are not applicable to assess the effects of a change in the noise climate, for instance where a new runway is opened and that common noise exposure variables (such as Leq) only account for about one third of community impacts. In GACC’s view SoNA provides no evidence that Leq is a reliable indicator of community impact over a period in which an airport is growing in the way the Applicant proposes.
21. Gatwick’s proposal to report secondary metrics is irrelevant and should not be taken into account by the EA because no limits would be set for those metrics and they would impose no obligations or noise limits on the airport.

Noise envelope parameters

22. To comply with policy and guidance, if development consent is granted, the noise envelope should:
 - a. ensure that noise reduces as capacity grows, at a pace that achieves a genuine sharing of the benefits of growth between industry and communities;
 - b. cover all periods of the year to provide the certainty policy requires;
 - c. incentivise noise reduction;
 - d. be based on a suite of metrics and limits to be agreed with all stakeholders, not a single average noise metric; and
 - e. contain review, compliance and breach arrangements that reflect these principles.

GACC analysis and proposals

23. Gatwick’s Central Case baseline forecast is that the 2029 Leq 16 hour Day 51 dB contour will cover 120.1 km². In 2019 that contour covered 136 km². As discussed above, policy requires that the

benefits of growth should be shared, that noise should reduce as capacity grows and that there should be a balance between growth and noise reduction. It follows that the noise envelope should require noise to reduce at a pace and to an extent that achieves the required balance.

24. If the project is approved, Gatwick is projecting growth of 34% in commercial ATMs by 2032 and 35% by 2038 from 2019. In each case approximately two thirds of ATM growth is related to use of the northern runway and one third to more intensive use of the existing main runway. In GACC's view a proper interpretation of policy would be that the noise envelope should require noise, measured using a suite of metrics, to also reduce by 35% by 2038 as a condition of that growth thereby achieving the sharing of benefits required by policy. On that basis the noise envelope should specify that the 2038 Leq 16 hour Day 51 dB contour should cover no more than 88.4 km². Contours based on other metrics, and at other times of day and in other periods of the year should reduce by equivalent amounts to achieve policy compliance.
25. GACC also recognises, however, that noise reduction on that scale would be difficult for Gatwick to achieve given current trends in aircraft noise. Specifically, we note that Gatwick's baseline contour for 2038, without the project, is 96.6 km², i.e. more than the theoretical policy compliant level proposed above.
26. GACC therefore proposes that, if the DCO is granted, policy compliance should be achieved by deploying a combination of measures for the period 2029 to 2038. These should include:
 - a. A somewhat higher summer season day noise envelope than the policy compliant level suggested above. For the period to 2038 we propose a 20% reduction from the 2019 level to 108.8 km²; and
 - b. A ban on night flights between 11pm and 7am as required by the Airports National Policy Statement; and
 - c. A noise envelope limit for the remainder of the summer day period (i.e for the British Summer Time period outside the 92-day summer season for which Gatwick has proposed the noise envelope should apply) that requires noise to reduce materially in that period; and
 - d. A noise envelope limit for the winter day period that require noise to reduce materially in that period; and
 - e. Limits on aircraft movements between 10.00 pm to 11.00 pm, a period of high community impact and sensitivity, to no more than operated in 2019; and
 - f. Limits on the noisiness of individual aircraft.
27. If a ban on night flights (point b above) is not agreed, there should be noise envelope and ATM limits for the 8-hour night period in both full summer and winter periods that require noise to reduce materially in those periods.
28. We note that if points c and d above were not adopted there would be no noise limit for summer periods outside the 92-day summer season Gatwick has proposed, or in the winter. These "void" periods include extremely busy times such as Easter, Christmas and the Autumn holidays. We have

not been able to propose limits for these periods because Gatwick has not provided the baseline and with-project data needed to do so.

Noise envelope reviews

29. GAL has proposed noise envelope review, compliance and breach arrangements that are wholly one sided and do not comply with policy. New review, compliance and breach arrangements should be developed and agreed.