CAA Strategy and Policy



7 August 2024 Registration identification number: 20044664

Application by London Gatwick Airport Limited for an Order granting Development Consent to support dual runway operations

Dear Sir or Madam,

On 1 August 2024, the Examining Authority (ExA) published a set of actions arising from Issue Specific Hearing 9 concerning Noise. For those Actions which were directed at the Civil Aviation Authority, either solely or along with other interested parties, the table below provides the answers from the Civil Aviation Authority.

9 (for the Applicant)	To provide a note that explains how the noise information in the Aviation Policy Framework 2013 'Aviation key facts' and in the Applicant's Supporting Noise and Vibration Technical Notes to the Statements of Common Ground - Tracked Version June 2024 [REP6-066] Appendix E paragraph 2.2.2, regarding reductions in aircraft and engine noise respectively, would be likely to affect the air noise prediction values at the time dual runway operations commence compared with the air noise prediction values for 2019, assuming the same air traffic movements. The response may be expressed as the area of air noise contours at appropriate noise levels or an air noise change for day and night during the conventional periods.
10 (for IPs, including	Other IPs, including the JLAs, the CAA, CAGNE and GACC are invited to offer their response to Action Point 9.
the CAA)	CAA answer
	The CAA considers that it is not practicable to assess how the references quoted would change noise at Gatwick across a near 10-year period on the basis of 'all other things equal' (ie using 2019 numbers of air traffic movements and, presumably, patterns of flight) in the time available. This is mainly due to the likely complexity of the calculation and the need to clarify some of the assumptions which would need to be used. Instead, we have made some comments on the evidence presented, which we hope the ExA will find helpful.
	The requirements quoted in the APF are now commonly known as 'chapter 14'. Many aircraft still in use today will have been type certified before the implementation date of 2017 and so would not have been directly compelled by chapter 14 to meet these noise criteria. However, many of these aircraft type certified prior to this date and operating today will meet the noise

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	 threshold that is being imposed, either in their original configuration or through subsequent modifications to reduce their noise. This is illustrated by the ERCD report 2002 into noise contours at the airport in 2019¹ at paragraphs 2.25 and 2.33: '[]it is estimated that around 62% of the aircraft movements during the 2019 summer day met the latest ICAO Chapter 14 noise standard.' '[] It is also estimated that approximately 65% of the aircraft movements at night met the ICAO Chapter 14 noise standard.' Therefore, it is difficult to know without detailed analysis what effect on noise this requirement would have at Gatwick between 2019 and, say, 2029, all other things being equal.
	For the Appendix on ground noise [REP6-066], it is important to note that there will be differences between ground noise and air noise – for example, the former arises predominantly from engine noise, whereas the latter (particularly for arrivals) arises also from the airframe and the way the aircraft is operated (eg 'continuous' descent procedures tend to produce less noise than 'staged' descent). Also, that ground noise (which includes taxiing and EGRs) is not included in air noise calculations, and is assessed differently to air noise contours. Further, from the CAA's reading of paragraph 2.2.2 of REP6-066, the 7-9dB difference seems to be between the 'worst case' (1998 Boeing 777) aircraft which is used for the analysis and the Category C aircraft which are the most common operating at Gatwick. This is therefore not an 'improvement' in noise which would be experienced by the community around Gatwick airport over time, but rather the difference between what is already experienced and the worst case assumptions the Applicant has used for this analysis. The reference to a 5dB improvement between old and new generation Category E aircraft is one which (all other things being equal) would be experienced by the community, but only to the extent that it applies to Category E aircraft and with the caveats above about the difference between air and ground noise and the proportion of the 2019 fleet which already met these new standards.

If the ExA has further questions on these or any other topic, we will be happy to provide whatever assistance we can.

Yours sincerely,

Graham French



Head of Network Resilience Policy