REF: TR020005

Gatwick Northern Runway Development Consent Order Application

CLARIFICATION QUESTIONS

Reigate & Banstead Borough Council

26th October 2023

TR020005	Air Quality Clarifications/ Data Requests	Clarification Questions Reigate & Banstead Borough Council	Version: V.1	26th October 2023
AQA1	Monitoring (Conventional)	Confirmation of which council run sites Reigate and Banstead / Crawley BC will be funded, Confirmation that the Horley diffusion tube network will continue to be funded as per current s106.	Clarification required	
AQA2	Monitoring (GAL monitoring)	Confirmation that any monitoring data GAL place on a public website that is collected using instruments not type approved for compliance monitoring on the UK national network is marked / flagged as indicative, given the wide 'error bars' associated with such equipment.	Confirmation required	
AQA3	Modelling	Can GAL clarify what if any difference there is between the 2029 construction DM scenario and also the 2029 operational DM.	Depends on clarification response.	
AQA4	Modelling	Can the assumptions around modal share for the air quality modelling be provided for each of the modelled assessment scenarios, and for the 2047 emissions inventories?	Provision of modal splits for the various assessment years.	
AQA5	Modelling	Has carpark Y been left off Figure 4.1.6 in appendix 13.4.1: Air Quality Figures Part 2?	Response to question.	

AQA6	Modelling	What assumptions have been made in the modelling around landings on the northern runway? (Figure 4.1.15 Appendix 13.4.1 Air Quality Figures Part 2: Modelled LTO sources approach and landing).	Response to question.	
AQA7	Modelling	Appendix 13.6.1: Air Quality Data and Model verification is missing details on how model verification factors for the selected zones were established. Details are required of the initial verification including Monitored Road NOx Contribution versus Unverified Modelled Road NOx, which monitoring sites were used, and which were removed from the verification process.	Provision of information.	
AQA8	Modelling	Paragraph 13.7.15 describes that the background maps from Defra have been used in the air quality assessment, as well as the Defra Emissions Factors Toolkit, as described in paragraph 13.7.16 for scenarios after 2030. This provides a conservative assumption as the last available years for these scenarios is 2030 within these tools. However, there is no discussion on whether this is conservative for the 2024 and 2029 scenarios. The concern is that more recent years of assessment are not worst case.	View on if background values are conservative for 2024 and 2029.	

AQA9	Modelling	There is no clear figure provided of the Affected Road Network ARN for the different assessment years. Air Quality Figures – Part 4: These do not include any receptor identification numbers. There is no figure to show where the different model verification zones have been applied.	Figures showing ARNs for each scenario are required. Receptor figures require an update to present receptor IDs. Figure showing verification zones and receptors is required.	
AQA10	Modelling	Code of construction practice Paragraph 1.3.3 identifies a list of construction activities, including concrete and asphalt batching. Concrete batching is identified in the air quality chapter of the ES and has been quantitatively modelled. This appears not to be the case for the asphalt batching plant.	Clarification on whether an asphalt plant is included in construction plans and if it has been modelled.	
AQA11	Method statements	Code of construction practice Paragraph 2.1.2 sets out that contractors will be required to provide the applicant with construction method statements to demonstrate compliance with the CoCP.	Agreement that method statement information will be available to local authorities.	

		This information should also be available to local authorities.		
AQA12	Communications and Engagement Management Plan	Code of construction practice Paragraph 4.12.1 identifies that a Communications and Engagement Management Plan will be prepared and that this will be an internal GAL document. This document should be shared with the local authorities. The need to have this type of plan is also identified as a general control measure for dust in paragraph 5.8.2, reinforcing this cannot just be a GAL internal document.	Agreement that the Communications and Engagement Management Plan should also be available to local authorities.	
AQA13	Public Complaints Procedure	Code of construction practice Paragraph 4.12.7 identifies that a complaints procedure will be established but does not reference the sharing of complaints and their resolution with local authorities. This measure is also identified within the site management air quality section as something that will be made available to local authorities. It is however noted that local authorities are to be provided the compliant information when asked.	This text should be amended such that complaints information is provided to local authorities when complaints are received.	
AQA14	Traffic modelling	Paragraph 15.4.2 of the Transport Assessment identifies a different definition of HGVs and LGVs to that typically utilised in air quality assessments, as noted in the CTMP.	Clarification is required as potential under estimation of HGV emissions.	

		Air Quality Appendix 13.4.1 Air Quality Assessment Methodology Paragraph 3.10.4 describes that traffic data comprised a fleet mix of cars, LGVs and HGVs, for both Airport and Non-Airport vehicles. With Airport vehicles also including buses, coaches and staff cars. Clarification is sought that the HGV and LGV split of data provided for the air quality assessment does not consider HGVs to be just vehicles over 7.5t and that HGVs have been considered for vehicles greater than 3.5t. Environmental Statement Appendix 5.3.2 Code of Construction Practice, Annex 3 Outline Construction Traffic Management Plan and Appendix 5.3.1: Buildability Report – Part B – Part 1 Paragraph 2.1.5 of the CTMP describes heavy goods vehicles as being over 7.5 tons (t) and light goods vehicles as being between 3.5t and 7.5t. Confirmation is required to check that this definition has not been used within other aspects of the ES, specifically within the air quality assessment.		
AQA15	CARE modelling	Paragraph 13.5.33 (Air Quality) describes an approach to determining whether short term standards may be exceeded or not based on Defra guidance LAQM.TG(22). Has this approach been adopted for the	Clarification required on short term standards and CARE facility.	

		CARE facility or has modelling been undertaken for the relevant short-term criteria?		
AQA16	Emissions	Clarification is needed on some counterintuitive changes predicted in the emissions ceilings calculations. Such as why in the 2024 construction scenario, when TM is in place to maintain traffic flows that roads emissions both Airport and Non-Airport reduce? (See Table 13.10.1). The same query for 2029 construction and separate operation Non-Airport Emissions (See Tables 13.10.2 and 13.10.5), the same query for 2032 (See Table 13.10.6) and 2038 (See Table 13.10.7), the same query also for 2047 (See Table 13.10.8). Clarification is also requested on why changes in CARE emissions even with the capacity of the facility doubling do not change? (See Table 13.10.6, 13.10.7 and 13.10.8). Heating plant emissions improvements are also typically predicted overall. Clarification on why this is and what future assumptions concerning any additional hanger and hotel heating emissions have been made.	Clarification is needed on some counterintuitive changes predicted in the emissions ceilings calculations.	
	NOISE			
NS1	Air Noise	Aircraft fleets are not provided for the 92-day summer period. It is difficult to understand what has been modelled and how fleet transition would occur without provision of aircraft fleets. Aircraft fleets	Provision of data in first instance.	

		used in noise models should be provided along with how the fleet is split between the two runways.		
NS2	Air Noise	No details of the noise modelling or validation process are provided. It is difficult to have any confidence in the noise model without any provision of the assumptions and limitation that have been applied in the validation of the noise model and production of noise contours.	Provision of data in first instance.	
NS3	Air Noise	No Single Event Level or LASmax noise data for individual aircraft as measured by Gatwick's Noise and Track Keeping system are provided. Baseline data that feeds into the assessment should be provided, which includes data measured by Gatwick's Noise and Track Keeping system that was used to validate the air noise model.	Provide measured noise data from the Noise and Track Keeping system that was used to validate the air noise model. Provide Single Event Level and LASmax noise data for individual aircraft variants.	
NS4	Air Noise	Provision of monthly movement data for the various scenarios as well as hourly movement data for summer and annual by departure and arrival. At present there is	Information provision.	

		not enough relevant information provided to enable understanding of the impact.		
NS5	Air Noise	The assessment switches between discussing properties and population depending on whether noise is between LOAEL and SOAEL (population) or above SOAEL (properties) The assessment should cover both properties and population and be consistent when identifying significant effects to aid their understanding.	Provide an assessment of likely significant air noise effects covering both properties and population.	
NS6	Air Noise	Details of property numbers within each noise contour band should be provided. This information would help understand how many properties would qualify for noise insulation.	Provide information on properties within each contour band	
NS7	Traffic Noise	14.9.4 Road Traffic Noise Modelling. What monitoring has been undertaken to validate the road traffic noise model in terms of measured values.	Explanation of the steps taken to independently validate the road traffic noise calculations.	
NS8	Construction Noise	Table 14.9.1. 2024 has only one set of results.	Is this ‘T’ or ‘B’?	

NS9	Construction Noise	Table 14.9.1. For the years with highway works (2028 to 2031) it is not clear what the suffix number denotes.	Is this the month e.g. 06 is June? Please clarify	
NS10	Construction Noise	Tables provided for daytime and night-time construction noise predictions. Are there any evening works?	Are there any evening works?	
NS11	Construction Noise	How will the daytime qualifying levels be adjusted to take into account the daytime period of 10 hours compared with the predicted 12 hour periods in the assessment?	Provide clarification.	
NS12	Construction Noise	The construction vibration assessment only considers effects from sheet piling and does not consider vibration effects from vibratory rollers used in highway construction.	Have vibration effects from vibratory compactors and rollers used in highway works been assessed?	
NS13	Construction Noise	Code of construction practice: There appear to be no details on construction vibration limits.	Provision of construction vibration limits for human disturbance and cosmetic building damage.	
NS14	Construction Noise	Appendix 14.9.1: Construction Noise Modelling.	Provide details of what construction	

		It is unclear what activities (in Table 2.2.1) relate to the assessment scenarios in section 3.	activities occur during each assessment scenario along with a figure showing the location of each activity.	
NS15	Ground Noise	It is not clear if engine ground running, auxiliary power unit and engine around taxi noise is included in LAeq,T ground noise predictions.	Confirmation of what is included	
NS16	Ground Noise	It is not clear why 2032 is considered worst-case for ground noise. Whilst 2032 provides the highest absolute noise levels, there appears to be larger increases in noise at some receptors during other assessment years.	Likely significant effects for all assessment years should be identified in the ground noise assessment.	
NS17	Ground Noise	It is not clear what the change in noise level is at receptors exposed to changes noise above SOAEL and between LOAEL and SOAEL in Table 14.9.14.	It would be helpful to provide tables identifying the change in ground noise at receptors experiencing absolute noise levels between LOAEL and SOAEL and at	

			receptors experiencing absolute ground noise levels exceeding SOAEL.	
	CLIMATE CHANGE			
	Environmental Statement Chapter 15 Climate Change			
	Legislation, policy and guidance			
CC1	Outdated UK CCRA used to inform the assessment.	The UK CCRA used to inform this assessment (paragraph 15.4.2) is from 2017, however, the UK CCRA published in January 2022 should have been used to inform the assessment. The ANPS states that '*Any adaptation measures should be based on…the most recent UK Climate Change Risk Assessment'*.	The latest UK CCRA from 2022 needs to be considered in the risk assessment. In particular, risks I1, I2, I5, I12, B6, would be relevant to the airport, amongst others.	
	Assessment of significant effects			

CC2	ICCI impacts not included in main body of the report.	Whilst Appendix 15.9.1 includes all details on the ICCI assessment, it is suggested that the Applicant includes a summary table of impacts in the main report, which will also help contextualise the mitigation measures discussed in the report.	The Applicant should include a summary table of ICCI impacts in the main Climate Chapter.	
	Mitigation, enhancement and monitoring			
CC3	**Details of mitigation to be included in the body of the main report.**	Table 15.8.4 and Table 15.9.1 list 'documents' that include mitigation measures rather than the mitigation measures themselves. Embedded mitigation could be detailed further, e.g. exact design decisions and operational procedures that mitigate risk or increase resilience. Whilst it is understood that the embedded mitigation is described in Appendix 15.8.1, this should be included in the main chapter.	The Applicant should include details of the mitigation measures in the main report. Specifically, including examples from the column 'Existing or embedded mitigation measures' in Appendix 15.8.1 would be beneficial. Further, Appendix 5.2.3 Mitigation Route Map, should be referenced in	

			this section of the report, and it should be clearly articulated what measures went in that report and why.	
	5.3 Environmental Statement - Appendix 15.5.2 Urban Heat Island Assessment			
	Assessment of significant effects			
CC4	What is the definition of ‘low’ for this assessment and what is the broader assessment criteria?	It is understood that the assessment notes the UHI effect as ‘low’, however, no criteria or definition has been provided for this. What does ‘low’ mean in this instance.	Provide assessment criteria for UHI effect including the definition of low.	
	5.3 Environmental Statement - Appendix 15.8.1 Climate Change			

	Resilience Assessment			
	Assessment of significant effects			
CC5	Include risk framework in this appendix.	The Applicant should include the risk framework used for the risk assessment including the definitions and risk matrix in this appendix to aid in usability.	The Applicant should include the risk framework in this appendix.	
	ES Appendix 5.2.3 Mitigation Route Map			
	Mitigation, enhancement and monitoring			
CC6	The link between the mitigation measures in this report and the Climate Change Chapter could be clearer.	There is a disconnect between this document and the Climate Change Chapter. The Climate Change Chapter states 'No further mitigation is required' – what measures have been brought across to this report and why?	Link between the two documents to be more clearly articulated. Specifically, what measures went into the Mitigation Route Map and why. It would be helpful to have these same measures	

			clearly articulated in the Climate Chapter in a table – ideally next to the risks they mitigate.	