

GATWICK AIRPORT NORTHERN RUNWAY PROJECT

Planning Inspectorate's Reference: TR020005

Legal Partnership Authorities

Issue Specific Hearing 7: Other Environmental Matters

Post-Hearing Submission

DEADLINE 4: 15 MAY 2024

Crawley Borough Council (GATW-AFP107) Horsham District Council (20044739) Mid Sussex District Council (20044737) West Sussex County Council (20044715) Reigate and Banstead Borough Council (20044474) Surrey County Council (20044665) East Sussex County Council (20044514) Tandridge District Council (GATW-S57419)

Issue Specific Hearing 7 ("ISH7") on Other Environmental Matters | Wednesday 01 May 2024

Post Hearing Submissions including written summary of the Legal Partnership Authorities' Oral Case

Note: The Legal Partnership Authorities are comprised of the following host and neighbouring Authorities who are jointly represented by Michael Bedford KC and Sharpe Pritchard LLP for the purposes of the Examination:

- Crawley Borough Council
- Horsham District Council
- Mid Sussex District Council
- West Sussex County Council
- Reigate and Banstead Borough Council
- Surrey County Council
- East Sussex County Council; and
- Tandridge District Council.

In these submissions, the Legal Partnership Authorities may be referred to as the "Legal Partnership Authorities", the "Authorities", the "Joint Local Authorities" ("JLAs") or the "Councils". Please note that Mole Valley District Council are also part of the Legal Partnership Authorities for some parts of the Examination (namely, those aspects relating to legal agreements entered into between the Applicant and any of the Legal Partnership Authorities).

Purpose of this Submission

The purpose of these post-hearing submissions is to provide a written summary of the Legal Partnership Authorities positions' on the Agenda Items discussed at the hearing. This includes both a summary of the Legal Partnership Authorities oral representations and, in some cases, further comments on the oral representations made by the Applicant at the hearing. Whilst the structure of these submissions follows the order of the Agenda Items, they do not include all of the Legal Partnership Authorities' concerns in relation to each Agenda Item as not all of these positions were rehearsed orally at the ISH due to the need to keep oral representations succinct. The Legal Partnership Authorities would also be happy to provide answers in writing to any specific further questions which the Examining Authority ("ExA") may have.

Attendance: ISH7 was attended by Michael Bedford KC for the Legal Partnership Authorities, instructed by Emily Knowles of Sharpe Pritchard LLP. Leon Hibbs, Environmental Health Officer for Reigate and Banstead Borough Council and David Deakin, Technical Director for AECOM, also oral representations on behalf of the Legal Partnership Authorities on the subject of Air Quality. Louise Congdon, Managing Director of York Aviation, also made oral representations on the future baseline case.

The hearing was attended by various other representatives from the Legal Partnership Authorities who did not make oral representations.

No.	ExA's question / Agenda Item	Response / Officer Comments
3.1	Following on from responses at previous hearings and written questions (ExQ1) the Applicant and other IPs will be asked general questions relating to the coverage of the future baseline case.	

 As such, the position the Legal Partnership Authorities have taken on the baseline is that the effect of those delays, prima facie, is part of a deterrent to airlines increasing their use of the Airport above current levels. The Legal Partnership Authorities acknowledge that the recent opening of a rapid exit taxiway from the existing runway has ameliorated arrival delays to some extent; however, the extent of this reduction in delay cannot yet be confirmed in practice.
 As such, the Legal Partnership Authorities' view is that airfield capacity has reached a level where it represents the maximum that the Applicant can attain. At paragraph 6.1.32 of [REP3-079], the Applicant explains itself why it will be very difficult to attract airlines to operate new services; without peak period slots it is very unlikely that airlines will operate new services as it is during peak periods that they make the most profit.
 The Legal Partnership Authorities would draw the ExA's attention to the Markets and Pipelines report (Appendix 6 to the Forecast Data Book appended to the ES [APP-075]), in which the Applicant sets out its ambitions to attract 47 additional services year-round (page 6), including peak operations, and the Applicant's demand forecasts for the Baseline rely on the achievability of these additional services. Given paragraph 6.1.32 of [REP3-079], the Legal Partnership Authorities consider it unrealistic for the Applicant to say they it realistically attract or accommodate 47 new services given – as acknowledged by the Applicant – it would not be able to offer the peak slots when it can make most money. The Legal Partnership Authorities' concerns therefore relate to how the Applicant converts the capacity available with a single runway to an achievable passenger throughput as an appropriate baseline.
 Although the Legal Partnership Authorities do not have all the information available as regards the operation of the Airport to enable a detailed analysis of the baseline throughput, the Legal Partnership Authorities have formed an initial view that it was more likely to be in the range 50-55 million passengers a year (mppa). Having regard to more recent information regarding the fleet transition, the Legal Partnership Authorities revised this assessment to 55-60 mppa in REP3-123.
 However, when looking at the information provided in the round, there remain concerns regarding how the Applicant could achieve the degree of peak-spreading and off-season growth, given the lack of availability of slots so as to make it attractive for airlines to start new services, making the attainment of 67 mppa from a single runway highly unlikely.

 If the only way that growth could be attained was in off-peak periods, over which the Legal Partnership Authorities have doubts as outlined above, this also raises related concerns regarding the scope for load factor and aircraft size growth given that airlines would be required to operate at periods where demand is inherently lower. As such the Legal Partnership Authorities would advise the Applicant takes a more cautious view of the throughput attainable in the baseline case.
 The Legal Partnership Authorities also take the view that the Applicant should be more prudent in relation to long haul aircraft growth because – in practice – the phasing out of some of some of the larger long-haul aircraft (i.e. A380) will reduce the number of passengers per movement. There is therefore less evidence that the long-haul passengers per movement will grow, even if long haul services do.
 Responding to points made by the Applicant, the Legal Partnership Authorities noted that several new long-haul routes had commenced at Gatwick recently and that some of these had transferred from Heathrow. However, the Legal Partnership Authorities notes that the Airport had been operating with spare capacity, as it was lagging behind the other main London airports in recovering from the effects of the pandemic. This had enabled new services to be accommodated. The Legal Partnership Authorities also noted that some of the services that had moved from Heathrow, were responding to the leisure market in the vicinity of Gatwick, such as the year-round Air Mauritius service.
 The Legal Partnership Authorities also noted that, whilst it was true that before the pandemic airlines had been willing to pay for slots at Gatwick to commence new services, any trading activity would not increase throughput in the baseline case, other than if a larger aircraft replaced a smaller one.
Wider Significance of Future Baseline
• The Legal Partnership Authorities note that concerns as to the future baseline were raised early on in this process by the Legal Partnership Authorities, prior to the examination. The Applicant's approach to forecast passenger demand, in the absence of the project, is embedded into the Needs Case and into the assessment of numerous ES chapters which are reflective of, or informed by, aviation and surface access activity. For example, in the Applicant's assessment of air quality, noise and greenhouse gasses. As such, the Legal Partnership Authorities consider that there is a threat as to how the Examination can test matters sufficiently if the Applicant's approach to this issue is not sufficiently robust.

• The Legal Partnership Authorities understand that the Applicant considers its modelling and forecasting to be robust, but the Legal Partnership Authorities consider the passenger demand forecasts for air travel, especially when predominantly leisure-focused and so a more discretionary activity, to be inherently more subjective than other areas of modelling, such as traffic modelling. Furthermore, passenger demand modelling is clearly far more sensitive to wider macro-economic conditions. Gatwick Airport does not exist in isolation, but in a competitive market, with other airports seeking to serve the same demands. As such, the likely evolution of the baseline environment for passenger growth is influenced not only by the Applicant's actions but also by other airport operators and the wider economic environment.
 In this context, the Legal Partnership Authorities are concerned that what the Applicant has presented in terms of the future baseline is based on what is possible, or capable, of being provided, rather than on what is actually likely to be provided.
• The Applicant's language in various documents illustrates this. For example, in paragraph 8.2.1 of the Forecast Data Book [APP-075], the Applicant talks about what the airport " <i>will be able to handle</i> " in the future baseline scenario. Similarly, in response to Action Point 1 of ISH4, the Applicant's response in paragraph 2.2.7.2 of [REP1-065] described what it was " <i>able to achieve</i> " rather than an assessment of what is likely to be achieved.
• There is therefore significant outstanding disagreement between the Legal Partnership Authorities and the Applicant on this important issue and whilst the Legal Partnership Authorities continue to participate in dialogue with the Applicant, the matter is far from resolved.
• Given the importance of this issue, the Legal Partnership Authorities encourage the ExA to ask that the Applicant provides some preliminary sensitivity testing using a lower level of future baseline demand to see what effect this is likely to have on the key environmental topics at issue in the examination, namely:
 Noise; Traffic; and Socio-economic effects.
 In the Legal Partnership Authorities' view, by conducting this piece of work – without prejudice to its case – the Applicant would enable the Examination to move beyond the current impasse and allow the ExA to reach a conclusion on this

		 contentious issue which has significant consequences for various other issues being discussed in the Examination. The Legal Partnership Authorities would welcome the opportunity to engage further with any such information if it were to be provided by the Applicant. In response to the Applicant's suggestion that the ExA does not need to consider the future baseline, the Legal Partnership Authorities have concerns that the ExA is being invited to adopt an approach which would not be EIA compliant. The Applicant's mitigation strategy is premised on its own assessment, namely the change between the future baseline with and without the Project. The Applicant is clear that it is its assessment of passenger demand which feeds into the future scenario in relation impact. In this regard see Traffic Chapter 12, paragraph 12.6.52 of the Environmental Statement. [REP3-017]. This is
		 In this regard see Tranic Chapter 12, paragraph 12.6.52 of the Environmental Statement. [REP3-017]. This is subsequently repeated throughout the Chapter: please see paragraph 12.6.60 in respect of 2029, paragraph 12.6.63 in respect of 2032, and 12.6.65 in respect of 2047. The same approach also features in the Transport Assessment [REP3-058] at paragraph 8.1.9. The Legal Partnership Authorities contend that it is unacceptable to only consider the proposed mitigation associated with the with-project scenario when, if the future baseline were to be lower than currently identified, the assessment to which that mitigation relates may be altered. Additionally, Environmental Statement matters, such as the assessment of severance, are assessed based on percentage changes in traffic flow between the future baseline and with project scheme. Therefore, a lower baseline may result in a different assessment of the traffic and transport implications in the Environmental Statement.
4.1	 The ExA would like to fully understand the outstanding concerns relating to: Flood modelling; Wastewater treatment; and Water supply 	 Outstanding Concerns of Local Lead Flood Authorities West Sussex County Council, as local lead flood authority, has several outstanding concerns in relation to surface water flooding. Many of those echo the points made by the Environment Agency in relation to fluvial flooding, particularly in terms of climate change allowances, lifetime for the project, and the extent of modelling. Firstly, on the issue of lifetime, the Applicant has chosen to assume some aspects of the Project will have a lifetime of 40 years as opposed to a more extensive lifetime of 100 years. This decision has an impact on the climate change allowance

applied, and specifically whether that allowance should be 25% or 40%. The Legal Partnership Authorities have not been persuaded that the Applicant's rationale for using only a 40-year lifetime is robust.
 When considering existing airport infrastructure, which is either 40 years or older and still in use, the Legal Partnership Authorities consider it unreasonable for the Applicant to assume that infrastructure provided will only have a 40-year lifetime. As such, the Legal Partnership Authorities consider that there is a need to review that assumption, which will have an implication for the climate change allowance.
 During ISH 7, the Applicant acknowledged that some individual elements within the airfield works may have a lifetime longer than 40 years, therefore the Legal Partnership Authorities consider that a more extensive lifetime is used in the assessment. Additionally, the fluvial mitigation strategy has been designed for both the airfield works and surface access works, with a lifetime of 100 years. Therefore, the Legal Partnership Authorities consider that a similar approach should be used for surface water mitigation.
 Although the Applicant has provided a sensitivity test, including using a general allowance of 40%, the Legal Partnership Authorities are not persuaded that this completely addresses the modelling concerns. This is because the exact locations of flooding cannot be verified as the finished ground levels are due to be resolved at detailed design, as per the Flood Risk Assessment paragraph 7.3.14 [APP-147]. Until the ground levels are provided, the Legal Partnership Authorities cannot be satisfied that flood risk will not increase elsewhere and that using a climate change allowance of 20% will not underestimate flood risk.
• The Legal Partnership Authorities also have concerns regarding the appropriate input data in terms of rainfall that should be used for the modelling exercise. The Legal Partnership Authorities note that the Applicant has used rainfall data from a 2009 dataset, which has been superseded twice. The most recent rainfall data in the Flood Estimation Handbook relates to 2022. The Legal Partnership Authorities consider it inappropriate to continue using the 2009 dataset, particularly considering differences between levels of rainfall between the two datasets in specific locations and their impact.
 There are also issues in relation to the treatment of the model. The hydraulic model for surface water considers the increase in impermeable areas across the Order Land as a whole, rather than breaking it into individual surface water catchments. In the Legal Partnership Authorities' view, considering the catchments rather than the red line could give

	different implications as to whether there would be an increase in flood risk elsewhere. As such, the Legal Partnership Authorities consider that this should be explored further by the Applicant.
	• During the Hearing, the Applicant stated that the impermeable areas for each catchment and the discharge points are included in an annex of the Flood Risk Assessment [APP-147]. However, the Legal Partnership Authorities do not consider that enough information has been provided to determine the impermeable area for each catchment, the volume of runoff for each catchment and the discharge locations for each catchment.
	• The Legal Partnership Authorities also have a concern about post-development run-off rates, which have been inadequately limited to the QBAR greenfield for all parts of the Order limits (QBAR is the peak rate of flow from a catchment for the mean annual flood, a return period of approximately 1:2.3 years).
	• A further issue relates to the justification for the pumping station which the Applicant has put forward. The Legal Partnership Authorities' preference is to avoid the provision of physical infrastructure to cater for surface water flooding. The Legal Partnership Authorities are not satisfied that the Applicant is adequately justified in its choice to do so. If the Applicant were to justify its choice to use a pumping station, there are then related issues relating to failure and emergency procedures that would need to be put in place for that pumping station.
	• The Legal Partnership Authorities' preference to avoid the provision of physical infrastructure is because, in the event of a flood, the pumping station may lose power and fail, resulting in flooding of the DCO Order Limits or elsewhere. Subsequently, to ensure the residual risk of flooding is appropriately managed in accordance with the National Planning Policy Framework (NPPF) and Planning Practice Guide (PPG), it must be demonstrated that a failure of 24 hours does not increase flood risk within the DCO Order Limits or elsewhere. The water must not leave the DCO Order Limits uncontrolled and unrestricted during the design storm and the site within the DCO Order Limits must still be safe and suitably mitigated.
<u>w</u>	astewater Treatment
	• The Legal Partnership Authorities have concerns regarding the Crawley Wastewater Treatment Works. Whilst this is not directly a local authority responsibility, from a wider planning perspective, the treatment works cater for both existing and planned development. The Legal Partnership Authorities would therefore be very concerned if, due to inadequacies in the

wastewater treatment works, there was a knock-on effect on the planned growth for the Crawley area, particularly through the Crawley Local Plan.

- The Legal Partnership Authorities understand there is on-going dialogue between the Applicant and Thames Water and agree with concerns that this matter ought to be resolved during the Examination, particularly given the knock-on planning consequences of any failure to deliver an appropriate solution.
- At ISH 7, Thames Water stated that there was capacity at Horley Sewerage Treatment Works. The ExA was made aware that the site has a long history of unplanned discharges, with a footpath regularly suffering sewerage discharges from tanks overtopping so far 8 times in winter 2023-2024. This causes significant consternation among local residents and harms the local environment. There continue to be non-compliant discharges of raw effluent into the River Mole which are being investigated by the Environment Agency. Temporary emergency pumps and measures have had to be deployed on the site, but the storage tanks are old and leak. Horley Water Treatment Works is spatially confined and has had to accommodate significant increases in housing delivery in recent years, including at The Acres and Westvale Park, north of Horley. As part of the emerging Mole Valley Local Plan, the recent Main Modifications consultation undertaken in 2024 included MM63 text change to criterion 12 of the proposed site allocation Policy DES41 Land at Reigate Road, Hookwood. MM64 states that; "The scale of development/s is likely to require upgrades to the wastewater network. It is recommended that the Developer and the Local Planning Authority liaise with Thames Water at the earliest opportunity to agree a housing and infrastructure phasing plan." Hookwood relies on the Horley Sewerage Treatment Works.
- <u>Thames Water Investment Plan for Storm Discharge</u> Sites includes works at Horley (Surrey) Sewerage Treatment Works starting in 2025. Should these improvements commence at some point in 2025, the realisation of the benefits associated with the capital investment will not be fully realised until 2030. Other works are proposed further downstream on the River Mole, at Thames Water Sewerage Treatment Works at Dorking and Leatherhead, where there are similar capacity and discharge issues. The Legal Partnership Authorities' concern is that the Horley site is clearly functioning beyond its current capacity, and it is surprising that Thames Water in its statement continue to assert that they had a legal responsibility and that there is capacity to accommodate further growth from Gatwick Airport.
- This all needs to be seen in the context of the Government preparing emergency plans to bring Thames Water back into
 public ownership due to the scale of debt the company currently carries. In addition, Kemble Water Group (the owner of
 Thames Water Utilities Ltd) defaulted on its debt on 5 April 2024, and there has been very poor performance by Thames

		 Water in terms of unplanned sewerage discharges into river systems. A government takeover of Thames Water Utilities Ltd would, the Legal Partnership Authorities content, create challenges and delays in meeting current capital investment programmes. The capacity of the local sewerage treatment works has been raised with the Applicant many times by the host authorities and the Legal Partnership Authorities welcome in principle the notification from the Applicant on 8 May 2024 that they are proposing a Change to the DCO to accommodate additional wastewater treatment works on the airport. The Legal Partnership Authorities will review the information to be provided by the Applicant with regard to the impact of these Works.
		 Mater Supply As set out in the West Sussex Local Impact Report [REP1-068] at paragraphs 16.66 and 24.83, the Airport lies within an area of serious water stress, designated by the Environment Agency. For clarity, this is separate to the Sussex North Water Supply Zone where water neutrality is required but is still a significant concern related to available water supply. The Legal Partnership Authorities have concerns regarding water stress and compliance with local plan policies (ENV6 and ENV9 of the CBC Local Plan) which are carried forward into SDC1 and SDC3 of the emerging CBC Local Plan. These policies require all non-domestic buildings to meet the minimum standards for BREEAM excellent within the water category.
		• The Legal Partnership Authorities do not consider that the Applicant has committed sufficiently to meet these targets and adequately mitigate water usage in an area of water stress. The Applicant's Design Principle BF2 in its Design and Access Statement Volume 5 [APP-257] states that detailed design " <i>will also consider measures to reduce water use and increase re-use across new buildings</i> ". In order to achieve compliance with local planning policies and properly address the water supply challenges in the area, this should instead be an enforceable commitment within the DCO to minimise the water demand of the Project.
5.1	 The Applicant will be asked questions relating to air quality, including the following areas: Construction phase including dust, odour, and Non-Road Mobile Machinery (NRMM); and 	Query regarding APP-166 In response to the ExA's query regarding the interrelationship between the air quality results, tables and figures in the Environmental Statement - Appendix 13.9.1 Air Quality Results Tables and Figures - Part 5 [APP-166], David Deakin for the Legal Partnership Authorities made the following points, augmented by further commentary from the local authorities:

 Operation phase including modelling and assessment out to 2047, Ultrafine particles (UFP), odour, and Air Quality Action Plans. 	 The Legal Partnership Authorities understand the relationship between individual receptor points and contour plots associated with interpolation and are comfortable with the general principles. However, the Legal Partnership Authorities have not delved into the specifics of the variance between the two receptor points and will be looking again to understand that variance. However, the Legal Partnership Authorities would point out that even where a point has been specifically modelled, there can be a significant discrepancy between the modelled value and the true value as measured on the ground. For example, at the RB 149 monitoring site in Horley on the A23 Brighton Road the Applicant's modelled nitrogen dioxide concentration at the RB 149 site (GAL ref M_421) for 2018 was 31.8 µg m⁻³ whereas the actual measured value in 2018 was 43.4 µg m⁻³. (Note the point referred to here was explicitly modelled and is not an interpolation from the contour plots). While this large difference does not necessarily represent an error with the road traffic model, it does demonstrate that road traffic modelling can miss localised hot spots and demonstrates the need for on-going monitoring (to when the airport is at full capacity) allied to local knowledge to ensure that the air quality standards are met in practice even if they appear to be met based on modelling.
	 The Legal Partnership Authorities are keen to easily be able to navigate between results within appendices, figures, and chapters, as well as with the affected road networks. Ensuring clear linkage between these elements and fully disaggregating all scenarios and study areas is something the Applicant is discussing with the Applicant to gain further information for better follow-through to be able to fully understand the air quality assessment presented in the ES.
	Construction Phase
	Non Road Mobile Machinery Stage V
	• The Legal Partnership Authorities are concerned by the way in which the Applicant's commitment to Stage V has been expressed and the caveat for this commitment being met "where applicable". It is understood that the air quality modelling in the ES (Chapter 13 para 13.6.4) [APP-038] assumes that all plant is compliant with Stage V.
	• The Legal Partnership Authorities would welcome clarity as to whether this is indeed a commitment or whether the inherent flexibility and looseness of the wording means there is in fact a carve out. The Legal Partnership Authorities do not see a

justification for a carve-out on this issue. We propose that the existing text in the Applicant's statement in the Code of
Construction Practice (March 2024) [REP1-021]) p.15 which states:
Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London Non-Road Mobile Machinery standards, where applicable.
Will need to be changed to:
Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone, and the London Non-Road Mobile Machinery standards. NRMM equipment as a minimum must meet stage V of the London Non-Road Mobile Machinery standards.
This change is proposed as no exclusions are required. The Greater London Guidance Non-Road Mobile Machinery (NRMM) Practical Guide V.5 (April, 2022) already includes exclusions as needed.
Dust Management Plan
 A full review of the draft Gatwick Airport Northern Runway Project Draft Construction Dust Management Plan (CDMP) (Dated 25/03/24) has been carried out and this has been provided to the Applicant and submitted as an appendix to the Legal Partnership Authorities' response to the Applicant's ExQ1 Response on Air Quality [REP3-083].
Construction Odour
 In relation to construction odour the Legal Partnership Authorities would like to clarify what was said on this topic during ISH 7. The ExA did not raise an action point regarding construction odour, as it was indicated that the Legal Partnership Authorities had not identified this as a significant issue.
• The Legal Partnership Authorities would, however, welcome a more proactive approach to odour management in the form of a draft Odour Management Plan within the Code of Construction Practice.

	 The Applicant lists areas of potential contamination – see for example paragraph 10.13.4 of the ES Chapter 10 Geology and Ground Conditions [APP-035] and paragraph 5.1.1 of the ES Appendix 10.9.1 Preliminary Risk Assessment [APP- 138] – which have the potential to produce odours during construction, but states that no significant odour effects are expected. No Odour Management Plan has been provided in the Code of the Construction Practice, although the Applicant states that it would develop one, where needed, to provide mitigation if required.
	• The Legal Partnership Authorities have concerns about the lack of a firm commitment on this matter and consider that this should be addressed through the DCO, to provide additional confidence that odour will be effectively managed during the construction phase. This is particularly important given the defence of statutory authority against nuisance claims (ANPS 5.231)
	 A draft or outline OMP should be made available as part of the examination and should outline proposed odour mitigation measures, procedures for monitoring, complaints and resolution process, and communications with local authorities. A further site-specific OMP should be required in accordance with the draft to be provided to specific odour incidents encountered during construction.
Obl	igation to avoid breaching All Relevant Air Quality Standards
	 Given the long-term nature of the Project, the Legal Partnership Authorities wish to see the Applicant commit – in an area of evolving standards – to measures which ensure mitigations stay fit for purpose for the operational life of the development against the backdrop of potentially changing standards.
	 The 25-year-old UK standard for nitrogen dioxide mirrored the WHO standard at the time and subsequent EU standard for this pollutant of 40 µgm-3. The science since then has moved on considerably, with the WHO limit now set at 10 µgm-3 and the EU limit vale set at 20 µgm-3 to apply from 2035. The UK standard has not changed.
	 While the Legal Partnership Authorities are not suggesting that the Project should be assessed against these standards, the direction of travel for policy in this area is clear and, given the 25-year life span of the Project, it is entirely conceivable that lower air quality standards (i.e. tighter than those currently in use) will come into operation during the lifetime of the Project. It is noted that the London Luton Airport Expansion, Volume 7 Other Documents, 7.07 Green Controlled Growth

(GCG) Explanatory Note dated February 2024 (Application Ref: TR020001/APP/7.07) includes a mechanism for new air quality thresholds to be latterly incorporated into the air quality-controlled growth approach.
• The existing section 106 agreement (dated 2022) includes a planning obligation to avoid breaching the EU Limit for NO ₂ and to ensure that all other relevant air quality standards continue to be met. During negotiations for the draft dDCO S106 agreement, the Applicant has not been willing to replicate or expand upon this obligation and this is a cause of concern to the Legal Partnership Authorities. In light of this, the Legal Partnership Authorities request the following requirement:
The Company will participate actively with the Authorities: 3.2.1 to avoid breaching the UK Limit value for NO2. 3.2.2 to ensure that all other relevant air quality standards continue to be met.
This requirement is especially important given:
 by 2038 the Airport will be responsible for over 50 % of the NOx pollution exposure at some sites on the Horley Gardens Estate, and this is likely to be higher still in practice given the model does not reflect the falling levels of pollution from background sources.
 the airport is currently refusing to model up to 2047 when the airport is likely to be responsible for an even higher proportion of residents' pollution exposure.
Modelling to 2047
• The Legal Partnership Authorities consider it essential that air quality is modelled appropriately to 2047 (or, if later, 389,000 movements) as, from the Applicant's existing material, it appears there will be an increase in emissions between 2038 and 2047. The Legal Partnership Authorities have particular concerns in relation to the Horley Gardens Estate where such impacts are likely to be most felt.
• The Legal Partnership Authorities would refer the ExA to paragraph 5.33 of the Airports NPS which (in the context of applications for the Northwest Runway at Heathrow Airport) references that the environmental statement should assess forecasts of levels for all relevant air quality pollutants at the time of opening, assuming the scheme is not built for the future baseline, and take into account the impact of the scheme including when at full capacity.

The Applicant considers that Gatwick Airport will be at full capacity (389,000 movements) in 2047, based on its submissions.
• The policy here refers to levels i.e. the concentrations of the pollutant not the emissions of the pollutant which the applicant has calculated in the emissions inventory.
• It is important to note that not all emissions of NOx are 'equal' in terms of their impact. For example, an increase of 1 tonne of NOx from APU emissions will have a far larger impact on the local community than 1 tonne of NOx from an aircraft in the climb phase. Thus, the emissions inventory fails to assess the impact (contrary to the Applicant's comment at 32:40 ISH7 part 3) on the local community at full capacity.
• The 2047 emissions inventory shows an increase in emissions of 4.3 % between 2038 and 2047 with a 5.3 % increase in aviation emissions (the dominant pollution source of the airport component) over this period i.e. pollution levels are likely to increase.
 However, without modelling this increase in emissions it is impossible to determine the impact this will have on the local community (see the comment on APU vs climb emissions) – especially on the Horley Gardens Estate which is heavily impacted by aircraft emissions.
 In 2038, over 50 % of the NOx pollution exposure at some sites on the Horley Gardens Estate will be due to the airport, and in practice this is likely to be higher still given the model does not reflect the falling levels of pollution from background sources. Therefore, it is reasonable to assume that the airport will be the dominant significant local source of NOx pollution exposure in 2038.
• Given the airport is both the dominant local source of pollution and emissions will increase between 2038 and 2047 (or to full capacity if later), the Legal Partnership Authorities consider that this needs to be modelled to understand the impact of the rising airport emissions on the local community.
• In the 'without development' scenario, residents around RG1 site would be exposed to 7.5 % less airport pollution in 2038 than in 2018, whereas with the northern runway their exposure to airport related pollution will be 15 % higher than it would

have otherwise been in 2038 i.e. not only is there no improvement in airport related emissions in 20 years at this site but forecast levels have actually risen.
 In view of the headline pollutant level masking the underlying growth of the airport's impact, it is essential that the 2047 scenario is modelled.
Therefore, in the Legal Partnership Authorities' view the Applicant should:
 Model the 2047 'with' and 'without' scenario for the 10x11km modelling area, producing source apportionment data for the modelled data points within this area - as a minimum for the receptor points including EHO model points on the Horley Gardens Estate / Horley AQMA, RG3 to the south of the airport, and receptors along Povey Cross Road / Charlwood Road / Horley Road.
 Ensure the Applicant funds pollution monitoring out to 2047 or 389,000 movements whichever occurs later (i.e. full capacity) not to 2038 as currently proposed.
 As such, the Legal Partnership Authorities consider that there is an adequate policy and technical basis for modelling to include up to 2047 and, from the data available, it is likely that there is a particularly sensitive receptor in the form of Horley Gardens Estate. Consequently, the Legal Partnership Authorities would contend that there is justification at the local level for applying this policy and requiring the assessment.
Air Quality Action Plan
• The Air Quality Action Plan is intended to be secured via the section 106 Agreement for the DCO. At this time, the Legal Partnership Authorities are not persuaded that this represents the appropriate control mechanism and consider that it would be more appropriate for the Air Quality Action Plan to be a control document within the DCO.
 In terms of an update on progress on the content of the action plan the Legal Partnership Authorities' view is that there is still some way to go on the content of the action plan, and the ExA may wish to note the following in relation to the submitted draft air quality action plan (Annex 5 in the draft s106 submitted at Deadline 2) [REP2-004].

 The document in essence simply provides a long list of measures that the Applicant says it may implement, not what it will implement.
 It fails to set out which of the measures in the plan are the 'embedded mitigation' i.e. measures the airport has already assumed in place in the DCO air quality assessment so that it is possible to assess if these measures are on track, given the air quality assessment in the DCO application is dependent on all of these measures being implemented successfully.
 It fails to set out the additional measures intended to mitigate the increased airport related pollution, as reflected by the difference in the emissions inventories for the 'with' and 'without' project scenarios.
 It is unclear why the airport is only going to produce an air quality action plan 5 years after the commencement of the project (para 1.3.1 [REP2-004]) rather than one which applies from the outset (commencement) given that, by 2029, under the 'with' project scenario the airport will be handling 330,000 movements vs 313,000 without the development, and 61.3 mppa with the development vs 57.3 without the development.
 It fails to present costings, performance indicators, delivery timescales, or the level of pollution reduction the measure is likely to deliver (either as a concentration reduction on the Horley Gardens Estate or tonnage released to atmosphere)
 To assist Applicant to design its air quality action plan template the Legal Partnership Authorities would suggest the following columns are included in the action plan, which are taken from the DEFRA air quality action plan template:
 Measure No.
 Measure
 Estimated Year Measure to be Introduced
 Estimated / Actual Completion Year
Estimated Cost of Measure
Measure Status Terret Deduction in Dellutent / Emission from Measure
 Target Reduction in Pollutant / Emission from Measure Key Performance Indicator
 Rey Performance indicator Progress to Date

Comments / Potential Barriers to Implementation
 The Legal Partnership Authorities would also draw the ExA's attention to the concern raised in the Surrey County Council LIR at paragraph 11.68 [REP1-097] that the Applicant appears to consider that burning Hydrogen or SAF will lead to a reduction in NOx emissions, as the current measures proposed in the draft action plan (Annex 5 [REP2-004]) fail to address these concerns. For example, para 3.3.2 of the draft action plan claims that SAF will lead to a reduction in NOx emissions, but no evidence is supplied to support this despite the Legal Partnership Authorities making the evidenced point that (in relation to SAF) 'there are no measurable impacts seen to date on NOx emissions'.
 Equally, draft action plan measure FL13 simply says 'supporting hydrogen fuelled aircraft' with no supporting evidence that this will in fact reduce NOx emissions in practice. A hydrogen powered combustion-based jet engine enables the use of higher-pressure ratios in the engine which, all else being equal, will lead to higher NOx emissions that a kerosine engine.
• The last point above demonstrates the importance of the action plan specifying the level of pollution reduction that the measure is intended to achieve.
 A full review of the draft Air Quality Action Plan (AQAP) dated March 2024 has been undertaken and this has been submitted at Deadline 4 as part of the appendices to the Legal Partnership Authorities' response to <i>The Applicant's</i> Response to the ExA's Written Questions (ExQ1) - Air Quality [REP3-083].
Ultrafine Particles
Leon Hibbs, for the Legal Partnership Authorities, sets out the following concerns regarding the issue of ultrafine particles:
• The Applicant has been aware for c.12 years that ultrafine concentrations around the airport are elevated compared to elsewhere and, for the past 5 years, that residents' exposure on the Horley Gardens Estate, has been comparable to, or greater than, that measured at a kerbside site next to a 6-lane road in central London.

 Since June 2022, the Applicant has been aware that, out of the 205 days of sampling in 2019, on 110 days there was at least 1 hour per day where hourly ultrafine concentrations were classed as 'high' based on WHO guidelines i.e. on over 50 % of the days monitored.
• The assessment methodology for ultrafine particles in the DCO is wrong, and thus the Applicant has not assessed the impact of the change in ultrafine concentrations associated with the proposed development. This is explained further in Chapter 11 (paragraph 11.104) of the Surrey LIR [REP1-097].
• During Issue Specific Hearing 7, the Applicant made the statement (ISH 7 Part 3 from 52:10) that there is 'no established methodology for monitoring'.
• The Legal Partnership Authorities would point out that there is an established methodology for the equipment to be used - CEN/TS 17434:2020 - and that such equipment is readily available from a number of suppliers. In addition to setting out the performance characteristics and minimum requirements of the instruments and equipment to be used, the standard also describes sampling, operation, data processing and QA/QC procedures, including calibration.
• Given this standard has been around for around 4 years the Legal Partnership Authorities are surprised at the Applicant's comment in this regard.
• The Applicant also mentioned during the hearing (ISH 7 Part 3 from 52:28) that under the proposed s106 it intends to pay Reigate and Banstead Borough Council up to £30,000 as a contribution towards for ultrafine projects, should standards come into force. In the Applicant's view this is an appropriate contribution.
• To put this statement into context for the benefit of the ExA, the 2002 s106 agreement has a similar proviso which takes effect when and if UK standards come into effect, but under the current provisions the Applicant will pay up to 50 % of the cost of any project (not limited to £3,000).
 Given a scanning mobility particle sizer costs in the region of £100,000 to purchase, the proposals in the DCO draft s106 are considered by the Authorities to be inferior to the current agreement in that such a contribution would fail to cover even 50% of the initial cost of putting in place a UPF project, and would not cover operating costs.

• The Applicant also made statements (ISH 7 Part 3 from 53:43) in relation to the health assessment. However, it is unclear, given the inputs to this assessment are incorrect, as to how any meaningful health assessment has been made at this stage.
On the basis that:
o the Applicant has not managed to assess the change in ultrafines' exposure with the proposed development,
o the Applicant has also failed to assess the health implications of the development in terms of ultrafine particles
 residents' exposure on the Horley Gardens Estate is already 'high' both in terms of the WHO definition, and by comparison to a heavily polluted roadside site in London, and
 both the number and size of the aircraft is forecast to increase with the development
the Legal Partnership Authorities' view is that the Applicant, via the s106 agreement, should fund in full and from the commencement of the Project, ultrafine particle monitoring (number and size distribution) at a site chosen by RBBC for the duration of the Project i.e. until the airport is at full capacity.
 In the absence of monitoring, it is impossible to carry out the science to inform the policy that ultimately sets the standards. Given the Applicant operates the second largest airport in the UK, and is looking expand considerably, it is disappointing to see the lack of leadership in this area to help the UK/EU develop ultrafines policy or any desire to monitor the impact of its expanded operations on the local community.
 If the ExA is unable to support such an approach, then the Legal Partnership Authorities would suggest that, if UK standards are introduced for ultrafines, the airport funds in full (100%) of the costs of monitoring this pollutant and that the cost is not capped at £30,000 as currently proposed.
Operational Odour – aviation fuel
While this was not discussed during ISH 7, the Legal Partnership Authorities' view remains unchanged from the LIR submissions – see for example the Surrey LIR [REP1-097] from paragraph 11.120. The key points here are:

 the Applicant has failed to produce a quantified odour impact assessment for aviation fuel as part of the DCO. The Applicant undertook such an assessment in 2019, the results of which suggested an area of the Horley Gardens Estate that warranted further investigation. Fuel odour is an on-going issue for local residents; and
 given (in the absence of any other information) any aviation fuel odour impact is likely to be proportional to the change in aircraft movements, it is likely that the odour impact on the local community will increase because of the Project.
• The Legal Partnership Authorities have asked the Applicant to commit to undertake the measures (listed below), in order to investigate odour around the airport, as part of the DCO section 106 agreement in light of the ongoing issues with odour, the failure to assess the issue despite the 2019 work identifying areas where odour might already be an issue, and the likely increase in the problem. However, the Applicant has refused to do so.
• In view of this if the ExA is minded to recommend that the DCO is made, the Authorities would wish to see:
- article 49 (Defence to proceedings in respect of statutory nuisance) of the draft DCO [REP3-006] struck out, so that residents retain the legal right to take action in nuisance.
- The following measures included in the DCO section 106 agreement in the air quality section:
Prior to the construction of the northern runway, a commitment to a two-stage odour study to: a) determine the ambient concentration of aviation fuel at which odours are perceived on the Horley Gardens Estate, using a tracer for aviation fuel such as 1,3,5 trimethlybenzene; and b) subject to the concentrations determined in a) being sufficiently high that a field based detection system can be used, to install a monitor at the RG1 site (or other appropriate location) for a 1 year period to examine the distribution of odour events to understand the meteorological and operational practices that give rise to the odour issues for local residents.
Odour – Reed Bed

		 Project Change 3 [AS-139] proposes an alteration to the treatment works for de-icer pollution and surface water runoff from the Airport. A constructed wetland (reed bed) solution is now proposed at the site adjacent to Crawley Sewage Treatment Works. Although odour is a known risk for this type of facility, the Applicant states there will be no significant odour effects and therefore no further mitigation for odour is proposed. No evidence is provided to support this conclusion, other than the implementation of best practice. The Legal Partnership Authorities remain concerned about odour impacts from the reed beds due to the potential for anaerobic decomposition, and the proximity of residential properties (within 55m) to the works boundary. Where controls are imposed via environmental permits, the local planning authority would want to see a detailed assessment of the odour impacts including the risk under both normal and abnormal operating conditions, and whether the management and control measures proposed are appropriate for mitigating the risks.
6.1	The Applicant will be asked to introduce the draft s106 agreement and to explain the reasoning and rationale behind the obligations and the financial contributions within the draft agreement	 Context to the draft dDCO S.106 Agreement and Progress In response to the Applicant's introduction of the draft s.106 agreement at ISH 7, the Legal Partnership Authorities acknowledge the Applicant's description of the draft s.106 agreement being based on the 2022 agreement. However, in the Legal Partnership Authorities' view, given the significant development and escalation in the airport's growth proposed, there needs to be a comprehensive review of all mitigation methods, and it may not be reasonable or appropriate to continue to rely on existing arrangements. Furthermore, as the 2022 agreement (and its predecessors) was entered into on a voluntary basis by the Applicant (not connected to the grant of any permission), the Legal Partnership Authorities did not have a great deal of influence over this process or the obligations in the 2022 agreement. During ISH 7, the Applicant described the process by which the current Agreement was updated in 2019 and 2022. The Applicant stated that the general rule was to try to keep changes to a minimum, but also suggested that the entirety of the legal agreement was up for discussion and that the negotiation process had considered each schedule and obligation in detail. In the West Sussex LIR [REP1-068] paragraphs 4.9 - 4.13, the Legal Partnership Authorities have explained the reasons (accepted by all parties) as to why the 2022 s106 agreement has not been comprehensively reviewed since 2008, and why there has been very little scope for the Legal Partnership Authorities to seek substantial changes to the obligations secured.

The Legal Partnership Authorities are continuing to progress negotiations with the Applicant across numerous topic areas
and understand the need for flexibility during the Project's lifetime. However, it is imperative to ensure that the approach
is justified and necessary for mitigating or offsetting the impacts of the proposed development.
There are some specific areas which are currently omitted from the mitigation package proposed and which the Legal
Partnership Authorities consider need to be secured to mitigate the development. These include:
 addressing housing pressures (affordable and temporary) through the establishment of a housing fund;
 an ecology enhancement fund along with appointing a project officer to manage the same;
 a contribution to fund replacement trees in line with a CBC local policy;
 conducting air quality monitoring;
o developing a noise action plan (or property securing the mitigation contained within the noise action plan and relied
upon by the Applicant);
 odour studies; and
 performing noise surveys to examine community annoyance.
There are also general concerns, on which the Authorities and the Applicant are engaged in dialogue, regarding the
agreed processes for the role of the local authorities in relation to enforcement.
The Legal Partnership Authorities welcome the Applicant's suggestion that an explanatory memorandum to the draft
dDCO Section 106 Agreement will be provided to the ExA at a later stage in the examination and liaise with the Applicant
at the appropriate time on how the Authorities may input into this memorandum's production.
The Legal Partnership Authorities also welcome the Applicants confirmation of the agreed principles in relation to which
of the Legal Partnership Authorities would be signatories to the final version of the draft dDCO Section 106 Agreement.

		 We note that the Applicant confirmed, at ISH7, that: <i>"the list of authorities who are going to be signatories is based on those who are going to be receiving money directly or who have direct obligations under the agreement"</i>. As negotiations in respect of the agreements' content continue, the Legal Partnership Authorities would expect that further signatories may be added to the agreement as and when obligations or contributions owed to those authorities are agreed. In particular, Surrey County Council has identified a need to be a party to the section 106 agreement as it requires payment of a contribution in respect of parking enforcement. The Legal Partnership Authorities note that various matters were picked up by the ExA on the front end of the draft section 106 agreement, in particular the address for Surrey County Council, and this will of course be addressed in the next version of the draft.
6.2	The Applicant will be asked to provide justification or reasoning for why the provisions within the draft agreement are not suitable or appropriate to be controlled by Requirements in the Development Consent Order.	Requirements vs Obligations The Legal Partnership Authorities consider that some of the obligations proposed in the draft dDCO s.106 Agreement would be more suitably or appropriately controlled via requirements and/or control documents in the DCO. By way of example, the following obligations currently included in the Surface Access / Transport schedule to the draft dDCO S.106 Agreement would, in the Legal Partnership Authorities' view, be more appropriately secured by way of inclusion in the Surface Access Commitments [APP-090] (the "SACs"): • Paragraph 4 – which would oblige GAL to make funding available "to provide funding for initiatives aimed at increasing the use of sustainable transport modes and in support of delivering the commitments in the Surface Access Commitments; and • Paragraph 5 – which would oblige GAL to invest £10 million to support the introduction or operation or use of bus and coach services. The Legal Partnership Authorities and the Applicant are currently engaged in dialogue regarding how these obligations may be moved from the draft dDCO s.106 Agreement to the SACs. As set out above under agenda item 5.1, there are also other mitigations pertaining to air quality which the Authorities consider would be most appropriately secured via the DCO, including: • The inclusion of a draft or outline Odour Management Plan within the Code of Construction Practice; and

		 A commitment to participate actively with the relevant local authorities to avoid breaching the UK Limit value for No2 and to ensure that all other relevant air quality standards continue to be met. The latter of these items was previously included as a section 106 obligation in the current section 106 Agreement completed in 2022; however, the Legal Partnership Authorities consider that it would be more appropriately secured through the DCO.
7	Action points	
8	AOB	