Gatwick Airport Northern Runway Project

Examination Ref: TR020005

Joint Local Authorities Response to the Applicants Deadline 4 Submissions and response to the Applicants Written summary of oral submissions ISH6. ISH7 and CAH1

Deadline 5: 6 June 2024

Crawley Borough Council (GATW-AFP107)
Mid Sussex District Council (20044737)
Reigate and Banstead Borough Council (20044474)
East Sussex County Council (20044514)
Mole Valley District Council (20044578)
Horsham District Council (20044739)
West Sussex County Council (20044715)
Surrey County Council (20044665)
Tandridge District Council (GATW-S57419
Kent County Council (20044780)

This document provides a response at Deadline 5 (6 June2024) from the Joint Local Authorities as listed above, to the Applicants Deadline 4 Submissions:

- [REP4-004] 5.1 ES addendum – Updated Central Case Aircraft Fleet Report
- [REP4-005] ES Chapter 16 Greenhouse Gases
- [REP4-017] ES Appendix 14.9.10: Noise Insulation Scheme
- [REP4-020] 10.22 Supporting Greenhouse Gas Technical Notes
- [REP4-022] 10.24 Appendix A: Response to York Aviation – Forecasts
- [REP4-023] 10.24 Appendix B: Response to York Aviation – Capacity and Operations
- [REP4-025] 10.24 Response to Heathrow's Deadline 3 Submission
- [REP4-031] - 10.24 Response to Deadline 3 Submissions
- [REP4-039] 10.28 Supporting Climate Change Technical Notes to statements of Common Ground

And responses to the Applicants written summary of oral submissions and response to actions regarding the Issue Specific Hearings (ISH) 6 and 7 and Compulsory Acquisition Hearing (CAH) 1:

- [REP4-032] 10.25.1 Written Summary of Oral submissions ISH6: Climate Change (including Greenhouse Gases) -
- [REP4-033] 10.25.2 Written Summary of Oral Submissions ISH7: Other Environmental Matters
- [REP4-034] 10.25.3 Written Summary of Oral Submissions CAH1: Compulsory Acquisition
- [REP4-036] 10.26.2 The Applicant's Response to Actions ISH6: Climate Change (including Greenhouse Gases) -
- [REP4-037] 10.26.3 The Applicant's Response to Actions ISH7: Other Environmental Matters

Responses to the Applicants Deadline 4 Submissions

1. [REP4-004] 5.1 ES addendum – Updated Central Case Aircraft Fleet Report

1.1 Please refer to Appendix I - Review of Updated Fleet Mix Assumptions – York Aviation Report.

2. [REP4-005] ES Chapter 16 Greenhouse Gases

2.1 This is an updated document to correct an errata at table 16.9.11. The increase is not over the 5% IEMA threshold and is still controlled by the existing aviation emission mechanisms. No further comment.

3. [REP4-017] ES Appendix 14.9.10: Noise Insulation Scheme

3.1 The revised noise insulation scheme has made little progress in addressing the JLAs concerns as outlined in the local impacts reports as outlined in the Table 14.1 and substantively in paras 14.244 – 14.260 of the West Sussex joint LIR [REP1-068] and the table commencing page 232 and substantively paras 12.166 to 12.174 Surrey joint LIR refers to this [REP1-097].

3.2 For residential premises the Applicant:

- Places limits on the monies available for works that are below other peer benchmarked schemes including Luton and Heathrow.
- Places qualifying criteria on works for the outer zone that will exclude many people.
- Constrains what the grant may be used for.
- Limits the noise levels and metrics that qualify for grant, for example the one additional noise induced awakening is omitted as a qualifying criteria and ought to be included.
- There is no tapering of grant below the 55 dB LAeq8h (night) in the same way as exists for the LAeq16h (day).
- Sets a decision making protocol based on standard mode runway usage rather than single mode contours (which reflect people's lived experience).
- Fails to take a holistic approach by considering the interplay of noise, ventilation and overheating in properties receiving insulation works.

3.3 These factors will limit the uptake of the grant and will be less efficient at reducing noise exposure as a result. Furthermore, the installation of noise insulation may result in health impacts as a result of inadequate ventilation and overheating. Financially, it is possible recipients may be disadvantaged as a result of increased maintenance, running and replacement costs.

3.4 Noise insulation is based on the 92-day summer period when aircraft activity is most intense. Insulation allows occupants of properties to keep their windows closed during these periods of intense activity; however, keeping windows closed results in uncomfortably high temperatures inside. An increase in temperature and humidity can result in additional awakenings that would not otherwise occur and impaired sleep thereby replacing one cause with another. Acoustic ventilators are not sufficient to address overheating risks. The JLAs feel strongly that a means of providing suitable ventilation and mitigating the effects of overheating should be on offer as part of the noise insulation scheme.

3.5 The JLAs would expect to see a mechanism in place that would only allow release of airport capacity based on progress with the delivery of the noise insulation scheme. This release may be in addition to any brakes that are set in place as a result of the noise envelope. To that end, implementation should commence as soon as the period of appeal has elapsed, and no appeal been lodged, following determination by the SoS; or on final determination of any appeals where the final outcome is that the development can proceed.

3.6 The Applicant also needs to make provision for and ongoing scheme to determine the effectiveness, durability and satisfaction with noise insulation, ventilation and where necessary cooling scheme. This is to identify continuous improvement and ensure that all adverse health effects are being avoided. This should be part of the noise insulation scheme improvement feedback loop.

3.7 The Applicant needs to be responsible for all installation, maintenance, operational and replacement costs. If this were mitigation at source or by insertion of barrier these costs would fall upon either the airline or the airport operator. It is due to the Applicant's activities that the mitigation measures become necessary and thus it seems reasonable for all ongoing costs to be borne by the Applicant as in effect the controls have migrated from site.

3.8 The financial amounts are awarded to the works contractor. It is not clear if these are exclusive of VAT. The amounts need to be annually increased to take account of inflation (based on an appropriate range of goods and services related to the provision of specialist acoustic mitigation).

3.9 The JLAs believe that the scheme should be based on the single mode contours. The designation of the extent of the inner and outer zones should be by agreement with the Local Planning Authority. Rather than rely on the precise extent of a polygon on a geographic information system produced by a model, the extent of the insulation zone should be adjusted to take into account the extent of any built up areas and the zone extended accordingly. This adjustment existed under the previous scheme but it appears to have been mostly dropped under the current proposal.

3.10 In addition to the general points above the JLAs make comment about specific paragraphs below.

- Eligibility for ground noise insulation should be included in the Outer Zone. Ground noise eligibility should be based on ground noise predictions so insulation can be provided before significant effects occur.

- What noise contours will eligibility for the noise insulation scheme be based on?
- Paragraph 4.1.4. The JLAs consider that as an average 8 hour night value, when taken over the 92 day summer period, the one additional noise induced awakening due to aircraft noise must also be set as the extent of the inner zone for noise insulation purposes.
- Paragraph 4.2.1 and Paragraph 4.2.3 - Can the Applicant be clear about the operational range of the proposed ventilators as well as provide information about the sound levels and characteristics at different operational loadings including full load.
- Paragraph 4.2.4 – external fixed shading should be offered as an alternative to blinds.
- Paragraph 4.2.5 – How would the Applicant judge whether external doors provide at least 5dB(A) less sound attenuation than acoustic windows? Why is 5dB(A) or less chosen as a trigger level?
- Paragraph 4.2.6 – How would the Applicant judge whether ceilings of bedrooms provide at least 5dB(A) less sound attenuation than acoustic windows? Why is 5dB(A) or less chosen as a trigger level? Why is the resistance to the passage of sound not at least as good as that offered by the façade and given the nature of aviation noise why is it not better?
- Paragraph 4.2.9 The term "qualifying properties" should be clearly defined because it could be interpreted as relating to only those properties with single glazing or all properties within the outer zone.
- Paragraph 4.3.2 – Can the Applicant provide details regarding how contact would be made with owners of properties that qualify for noise insulation ?
- Paragraph 4.3.2 – How will the Applicant determine that they need to make further contact? Will there be reliance on a property owner making contact with the Applicant or would there be a follow up if no response was received? If someone fails to follow up within a given period can they still apply subsequently ?
- Paragraph 4.3.7 – How long would it take the Applicant to confirm eligibility after receipt of an application? How long would for insulation to be installed after eligibility is confirmed?
- Paragraph 4.3.8 states that the limit may be reviewed in individual cases. The principles need to be stated as to when this may apply and any associated conditions.
- Paragraph 4.3.11. Where a noise sensitive room may be used for sleeping and it connects directly or indirectly with a non noise sensitive room, the Applicant must provide appropriate works to that room as well.

- Paragraph 4.3.11. The Applicant must also confirm how the it will be determined if the performance of previously installed insulation has significantly reduced? What is considered to be a significant reduction in performance?
- Paragraph 4.3.16. The wording requires clarification so that the categories in the list are included and any others as may be specified by the "relevant local authority" which must also be defined.
- Paragraph 5.1.2 – The Applicant states that schools would only be eligible if they are in the 2032 51dB LAeq,16h contour and where noise levels are "forecast to increase". Can the Applicant confirm how they derived this qualifying criteria of 51 LAeq16 and how this may relate to schools that are outside the 51 LAeq 16h contour but may experience exceedances of the BB93 criteria? With the Applicant's proposal what level of increase is required for eligibility?
- Paragraph 5.1.3 – As noise in schools can affect the cognitive ability of pupils, the JLAs believe that the Applicant should be more pro-active to ensure that schools are adequately insulated. The Applicant should identify a schools eligibility through noise predictions so insulation can be provided before there is a risk to the cognitive ability of pupils. The Applicant should contact schools to notify them of eligibility.
- Paragraph 6.1.6 – Whereas the noise insulation scheme will be based on noise contours modelled from future forecasts of Air Traffic Movements in the ES, the Home Relocation Assistance Scheme will be based on standard mode noise contours reported in the Noise Envelope Annual Noise Monitoring and Forecasting Report reported each year. Why are different noise contours used for the Home Relocation Assistance Scheme? Why is there not consistency with the noise insulation scheme?

3.11 The Applicant should also address the comments made by the Legal Partnership Authorities at Deadline 4 in response to ExQ1 HE1.7 [REP4-065] in relation to historic buildings.

4. [REP4-020] 10.22 Supporting Greenhouse Gas Technical Note

4.1 In Deadline 4, the Applicant has provided WTT estimates for construction, ABAGO, surface access, and aviation. These updates increase the total emissions from the project between 2018 and 2050 by 3,978,000 tCO2e, representing a 19.83% increase.

4.2 To contextualise these emissions against the carbon budget, the Applicant references DUKES 2023 Chapter 3: Oil and Oil Products, estimating that around 36% of WTT aviation emissions occur within the UK boundary. Using this justification, the Applicant compares only this portion of aviation WTT emissions to the carbon budget, along

with the WTT emissions from construction, ABAGO, and surface access.

4.3 The Applicant then presents only the net impact, stating it accounts for 0.649% of the UK's 6th carbon budget, without displaying the total future impact of the airport as done in the ES.

4.4 The Applicant should further forecast the percentage impact on future estimated carbon budgets using the CCC projections to estimate the project's impact on future carbon budgets to understand if it is decarbonising in line with the estimated net zero trajectory.

5. [REP4-022] 10.24 Appendix A: Response to York Aviation – Forecasts

5.1 Please refer to Appendices II – Response to Additional Documents submitted at Deadline 4 - Needs Case – Paragraph 5

6. [REP4-023] 10.24 Appendix B: Response to York Aviation – Capacity and Operations

6.1 Please refer to Appendices II – Response to Additional Documents submitted at Deadline 4 - Needs Case – Paragraph 2

7. [REP4-025] 10.24 Response to Heathrow's Deadline 3 Submission

7.1 Please refer to Appendices II – Response to Additional Documents submitted at Deadline 4 - Needs Case – Paragraph 17

8. [REP4-031] - 10.24 Response to Deadline 3 Submissions

8.1 The JLAs and Applicant continue to discuss the application of sections 104-5 to the instant project and the JLAs are hopeful that an agreed statement can be submitted to the ExA in due course. In any event, the JLAs are submitting at Deadline 5 a document headed "JLA updated position on s.104 and s.105 Planning Act 2008" – See Appendix II.

Air Quality

8.2 The joint local authorities notes from paragraph 3.7.7 that the air quality matters submitted by the Joint Local Authorities at Deadline 3 (Appendix A) [REP3-117] will be responded to by Deadline 5. This Appendix of air quality queries prepared by AECOM included a wide range of technical matters. We look forward to seeing this response. However, since the air quality queries were produced the applicant has provided clarification on one technical point concerning their 2029 air quality assessment in the CBC SoCG (Row 2.2.4.3) which causes

concern that the 2029 Construction scenario is inadequate. The text from the row that concerns the Joint Local Authorities is reproduced below:
Gatwick Airport Limited (GAL) sets out in paragraph 3.7.7 of their Response to Deadline 3 Submissions [REP4-031] that the air quality matters submitted by the Joint Local Authorities at Deadline 3 (Appendix A) [REP3-117] will be responded to by Deadline 5. This Appendix of air quality queries prepared by AECOM included a wide range of technical matters, including CTMP. Without a response from GAL further progress cannot be made. It is anticipated that further progress can be made before the next Examination Deadline.

8.3 In relation to airport growth we have reviewed the clarification paragraphs within Transport Assessment Report [APP-258] and in particular paragraph 152 which sets out:

> *'The construction arrangements at that time have* ***therefore been overlaid on the strategic model for the 2029 with Project scenario, as at this time the northern runway is assumed to have opened*** *[emphasis added] and additional demand would be present on the highway network.'*

8.4 In this paragraph GAL appear to be stating that the operation of the northern runway forms part of the future baseline upon which Highways construction works have then been assessed. If this correct the applicant have treated part of the Project for which DCO is being sought as committed development, where permission has already been obtained.

8.5 This is inappropriate and the Applicant should consider the effects on the road network and air quality from the Project as a whole from the **combination** of operational and construction activities. Specifically, comparing a future baseline without the operation of the northern runway against a situation where the northern runway is in operation and the Highways works are underway (i.e. the Project). This would show the change in traffic and air quality associated with the combined operational and construction effects associated with the Project that the DCO is being sought.

8.6 Without this scenario the air quality effects of the Project in 2029 cannot be assessed and the significance of air quality effects determined. This is because the study area for the Projects combined operational and construction effects is unknow, nor have the receptors that would be affected been identified (human health or designated habitats) nor is the level of traffic change and the associated change in air quality known.

8.7 A traffic dataset and air quality assessment update is required to appropriately consider the combined effects of the Project in 2029.

Noise

8.8 The Applicant has chosen to respond to a select number of JLA comments and the majority have not been addressed. It would be helpful if the Applicant can address all points raised by the JLAs as the document is incomplete in its current form.

Noise Envelope

8.9 The Applicant has disputed the JLA comments about the design process and this is a point of disagreement between the two parties. The Applicant criticises the JLAs for not debating alternative views in the forum they provided. However, the Applicant had assured the JLAs that it would provide a separate working groups for the JLAs to discuss their views and as such the JLAs attendance at the community and joint forum was to better understand the views of all parties involved to inform their views.

8.10 The JLAs expectation was for additional topic working groups. However, as the Applicant drew the noise envelope development process to a close the JLAs drew attention to the fact that the proposed separate topic working groups had been overlooked. The Applicant then made arrangements for JLA specific groups.

8.11 Despite there not being separate meetings during the course of the Noise Envelope Development process the JLAs offered comments at the meetings. These concerned a full range of matters including on operational measures, noise metrics (including awakenings) and processes. Suggestions, including the use of quota count (QC) for detailed fleet analysis as occurs at Heathrow airport, were dismissed. The JLAs also sought information that would assist the JLAs and, eventually, the Examining Authority in forming a view on the noise envelope but a number of requests, including supply of data by the Applicant were declined. A request to attend the aviation group to understand the operational concerns was also declined.

8.12 At commencement of the noise envelope design process a fully developed proposal was placed before all parties which practically changed very little by the end of the process.

8.13 The Applicant makes remarks about the proposal for an inner noise contour. Clearly the JLAs do not consider that safety should be compromised. The JLA proposal reflects noise policy and we do not consider that the setting of an inner limit is inconsistent with safe operations. Had there been an opportunity to discuss this with the aviation group then it would have been possible to explain this. There are existing contours for what is proposed as the inner contour so it would be possible to derive an appropriate limit based on these and the demand, fleet mix and capacity discussions which would not compromise safety but which would provide certainty and balance the needs of the local community with the aspirations of the Applicant.

Noise Contour Thresholds

8.14 There is no misunderstanding regarding the forward-looking approach. The JLAs do not have confidence that forecasting would be accurate enough to prevent a breach and the Applicant has produced no evidence to dispel this doubt. The Applicant has introduced an idea that it will be possible to correlate the forecast noise levels with the actual noise levels to confirm the accuracy of the forecast, but this process is not covered in any submitted documents. The JLAs request that this process is covered in detail in the Noise Envelope. Regardless, the JLAs have submitted at Deadline 5 details on how they view a robust Noise Envelope based on Luton Airport's Green Controlled Growth framework.

Annual Noise Controls

8.15 Current DfT night-time controls apply to Gatwick for the summer and winter seasonal periods. The DCO should, by Requirement, ensure that these controls are retained and maintained regardless of any future changes that may occur as a result of consultation relating DfT night flight restrictions. Night-time QC and movement limits for both summer and winter periods should be reported. It is noted that the Applicant exceeded their summer period night-time movement limit in 2023 so this information is relevant and important to the Noise Envelope.

8.16 The JLAs consider that with regard to intensification of the use of the morning shoulder period and expanding operations by peak spreading that it is appropriate to place control over the annual period. The Applicant's response states that the greatest impact will be in the summer months but the permission relates to an airport. A new operator or market changes could result in changes to operations not otherwise foreseen at this time, therefore it is essential to have annual controls.

Awakenings

8.17 The Applicant does not address the use of an awakenings metric based on work by Basner et al. The use of one additional awakening is supported by research in ERCD's CAP 2251, which indicates that awakenings contours can extend further than the LAeq,8h contours. There is no suggestion to move away from the summer LAeq, but the JLAs are of the opinion that awakenings would supplement the use of this metric. Awakenings should be used to cumulatively assess the impact of both air noise and ground noise.

WIZAD Departure Route Controls

8.18 Figures 8.6.3 to 8.6.7 of the ES Landscape, Townscape and Visual Resources Figures [REP2-007] are not of sufficient resolution to

provide any meaningful information. Overflight contours should be presented for aircraft movements up to an altitude of 4,000 feet (in addition to 7,000 feet) as aircraft below 4,000 feet contribute to noise contours and noise management is the priority. This information is directly relevant to the noise assessment and has not been provided to date.

8.19 The Applicant comments that it has explained that the Project will not increase significantly the use of the WIZAD route. The JLAs are of the view that the Applicant has not yet demonstrated that the use of Wizad will not need to increase as a consequence of the NRP. The Applicant has by no means demonstrated that the use of Wizad as they propose in the baseline is consistent with the intention of the use Route 9 (WIZAD) or the extent to which its use is connected with the proposal for the expansion of the airport.

8.20 We note that, in response to ExQ1 NV1.10, GAL states that the imposition of a limit on the number of aircraft movements that could use the WIZAD route would "act to unnecessarily limit the operations of the airport and the wider benefits that it will provide".

8.21 Contrary to previous statements by the Applicant, this appears to confirm what the JLAs have always believed, namely that greater planned use of the WIZAD route will be required in order to ensure that the NRP is capable of delivering the full uplift in runway movements claimed. This is contrary to the Applicant's previous claims that its use will remain purely as a tactical offload route [REP3-038, 14.1AF page 192]. In REP4-023, at point 57, the Applicant goes further and makes clear that it is not out of the question that it might need to bring forward an airspace change at a later date to make greater use of the WIZAD route should it prove necessary to redistribute traffic between departure routes at some later date as a consequence of dual runway operations.

8.22 The JLAs propose that to ensure the route continues to be used in a manner consistent with the intention of Route 9, ie a tactical offload route, the Applicant starts by providing the following information for the last 15 years:

a) the actual number of Wizad movements per year.
b) the total ATMs per year.
c) Wizad movements as a percentage of total ATMs
d) The reasons why Wizad was used and whether it was necessary.
e) The date and time that the route was used.

8.23 The data can be used to establish a regression line and thereby project the anticipated movements that would occur all else being equal. If this value is likely to be exceeded for future years then it can only be used pending full ACP or restricting capacity to reduce congestion. The data can be used to understand what appropriate controls can be placed in the DCO for this route.

8.24 In addition to preventing the use between 23:00 and 07:00 then appropriate controls also need to be set in the DCO at other times of the day.

8.25 The Applicant refers to Figures 8.6.3 to 8.6.7 of the ES Landscape, Townscape and Visual Resources Figures [REP2-007]. These are not of sufficient resolution to provide any meaningful information. Overflight contours should be presented for aircraft movements up to an altitude of 4,000 feet (in addition to 7,000 feet) as aircraft below 4,000 feet contribute to noise contours and noise management is the priority. This information is directly relevant to the noise assessment and has not been provided to date.

8.26 The Applicant comments about the Noise Assessment across the WIZAD route. The JLAs do not consider that the assessment across this route is adequate and the Applicant has not provided all the secondary metrics for the assessment years.

8.27 The Applicant comments on airspace change not being part of the project. Whilst airspace change is not part of the project, the expansion of airport infrastructure is inextricably linked to airspace usage. The consequence of airport expansion could well be to require change to airspace to accommodate projected ATMs as noted at point 57 of REP4-023. Given the linkage it is considered that it is appropriate to condition the use of airspace, especially the use of WIZAD which the Applicant is seeking to exploit beyond what the JLAs consider was the intention of the use of the route.

9. [REP4-039] 10.28 Supporting Climate Change Technical Notes to statements of Common Ground

9.1 The JLA requested the Applicant provided additional information on the impacts of wildfires and fog as a result of climate change impacts. The Applicant submitted Supporting Climate Change Technical Notes providing additional information that was not available at the time of the initial assessment. The provision of this data does not change the outcome of the climate risk assessment. The JLA are satisfied that this document closes out previous concerns raised on these matters.

10. Responses to the Applicants written summary of oral submissions and response to actions regarding the Issue Specific Hearings (ISH) 6 and 7:

10.1 [REP4-032] 10.25.1 Written Summary of Oral submissions ISH6: Climate Change (including Greenhouse Gases)

10.1.1 Under Section 3.1.1 [REP4-032], it is noted that the Applicant has assessed the emissions from the Project in the context of the UK's

existing carbon budgets (4th, 5th, and 6th), suggesting that there is sufficient "headroom" to accommodate aviation emissions.

10.1.2 To evaluate the Project's impact on future carbon budgets and the UK's net zero trajectory beyond the 2037 6th carbon budget, it is recommended that the Applicant uses the Climate Change Committee's (CCC) net zero pathway. This will help determine if there is adequate "headroom" for the Project's emissions in future carbon budgets up until 2050. This recommendation is in line with the 2024 National Networks National Policy Statement, which states under Section 5.39 "*Where it provides useful context, applicants may wish to compare their scheme emissions against carbon budgets, net zero and the UK Nationally Determined Contribution*".

10.1.3 Additionally, the ES notes that the Applicant uses the Jet Zero Residual Emissions Trajectory to contextualise aviation emissions up to 2050. However, the Applicant does not proportionally show the impact of the Project on the Jet Zero Trajectory in the context of all UK airport expansions. Therefore, it is recommended that the Applicant estimates how the Project proportionally fits into the Jet Zero Residual Emissions Trajectory to determine if it exceeds the trajectory or not.

10.1.4 In accordance with Section 6 and the IEMA GHG Assessment guidance referenced in the Environmental Statement (ES), the Applicant must contextualise the Project's emissions against relevant carbon budgets. Currently, the Applicant has only used the UK's carbon budgets up to the 6th budget, which ends in 2037. This does not demonstrate the impact of the Project on the UK's net zero trajectory up to 2050. Therefore, the Applicant is required to use the CCC net zero pathway beyond 2037 to assess if the Project aligns with the UK's net zero trajectory.

10.2 [REP4-033] 10.25.2 Written Summary of Oral Submissions ISH7: Other Environmental Matters

10.2.1 Within ISH7 discussion was held on Non Road Mobile Machinery where the Applicant confirmed that Stage V NRMM plant would be utilised. See Transcript of Recording of Issue Specific Hearing 7 (ISH7) - Part 3 - 1 May2024) [EV13-007] at 00:25:37:10 - 00:25:55:10. Latterly the applicant has changed their position to allow for the use of more polluting plant before 2030. Further information is now required from the Applicant to understand why the hearing was informed Stage V NRMM would be used and if an update to the air quality assessment will be undertaken, which was completed incorrectly assuming that only less polluting Stage V plant was to be used for NRMM, to understand how this affects the predictions presented within the ES [APP-038].

10.2.2 Within ISH7 discussion was held on dust management plans. The Joint Local Authorities have submitted a detailed review of the GAL

Dust Management Plan [No Examination Ref]. Please see REP4-053 for this detailed review.

10.3 [REP4-036] 10.26.2 The Applicant's Response to Actions ISH6: Climate Change (including Greenhouse Gases)

10.3.1 The joint authorities have no comments to make on this document.

10.4 [REP4-037] 10.26.3 The Applicant's Response to Actions ISH7: Other Environmental Matters

Action Point 12 - Robotic Parking

10.4.1 **Action point 12** required the Applicant to consider how the 2,500 robotic parking spaces would come forward were permitted development rights at the airport removed. The Applicant has stated that whilst the spaces would be delivered via a phased approach, that it is anticipated that the deemed planning permission authorising the robotic parking spaces would be implemented prior to the DCO being made and therefore any limitation to the Applicants permitted development rights imposed within the DCO would not impact on their ability to deliver these spaces via permitted development rights.

10.4.2 The Applicant goes on to state that they would resist the basis for such a restriction in the strongest possible terms. The Applicant refers to paragraph 54 of the National Planning Policy Framework (NPPF) that states conditions should not be used to restrict national permitted development rights unless there is clear justification to do so. They also state that an additional control by removal of permitted development rights is not required as the Draft DCO [REP3-008] includes binding mode share commitments and therefore they consider the object of the control is already achieved.

10.4.3 The Local Authorities acknowledge the comments made by the Applicant but remain of the view that the removal of permitted development rights is the only way to ensure the Local Planning Authority can effectively control the provision of future airport parking and ensure that Gatwick provides sufficient but no more parking than is required to support its sustainable strategy for airport access. The current S106 agreement, under obligation 5.6, provides a degree of control in that there is a clear commitment to provide sufficient but no more on-Airport public car parking spaces than necessary to achieve sustainable transport modal splits, the present draft of the S106 agreement, associated with the DCO, does not provide such a commitment. The Surface Access Commitments [REP3-028] include commitments relating to modal splits and the draft DCO secures commitment to deliver these. However the Local Authorities have concerns that there is not sufficient controls within the SACs [REP3-028] should the modal split commitments not be met. Therefore, the

Local Authorities cannot agree with the Applicant's view that the SACs [REP3-028] provides sufficient assurance and control without changes to the PDR.

10.4.4 It could be that parking levels are increased, in line with the Applicant's phased approach and via PDR, which do result in excessive amounts of car parking being provided. Then in subsequent years the SACs [REP3-028] are not met. The SACs then require the Applicant to produce an Action Plan setting out how the failure to meet the SACs is to be met. Rather than seeking to retrospectively address the potential impacts of an over provision of car parking, should that occur, it is the view of the Local Authorities that the preferred approach would be for there to be suitable controls of parking, which ensure that the Applicant demonstrates and provides suitable evidence that sufficient but no more than is necessary parking is provided, in the first place. This would provide effective control and help avoid the scenario of excessive parking being provided which may contribute to the SACs not being met. This control could be provided via the draft DCO (REP3-008] with a suitably worded requirement removing the Applicant's permitted development rights related to car parking

Action Point 16 – Air Quality (2047 Assessment)

10.4.5 The airport has produced an emissions inventory for 2047 which 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. However, without modelling this increase in emissions it is difficult to determine the impact this will have on the local community – especially the Horley Gardens Estate which is heavily impacted by aircraft emissions.

10.4.6 Therefore the 2047 base and with development scenario needs to be modelled in full to examine the impact of the airport on the Horley Gardens estate residents when the airport is **at full capacity** in line with the airports national policy statement (para 5.33) which says:

> *'5.33 paragraph 2 - The environmental statement should assess: Forecasts of* ***levels*** [Emphasis added] *for all relevant air quality pollutants at the time of opening, (a) assuming that the scheme is not built (the 'future baseline'), and (b) taking account of the impact of the scheme, including when at full capacity;'*

10.4.7 Where policy 5.33 above refers to 'levels' this indicates that the policy expects concentrations to be predicted. This is clearly the case as 5.33 paragraph 3 refers to the determination of significance of effects, which for air quality is based on pollutant concentrations and changes in concentrations:

> *5.33 paragraph 3 - Any likely significant air quality effects of the scheme, their mitigation and any residual likely significant effects,*

distinguishing between those applicable to the construction and operation of the scheme including any interaction between construction and operational changes and taking account of the impact that the scheme is likely to cause on air quality arising from road and other surface access traffic.

Action Point 17 – Air Quality (Ultrafines)

10.4.8 The applicant in its discussion of ultrafines para 17.2.9 (ISH 7 Deadline 4 Submission - 10.26.3 The Applicant's Response to Actions ISH7: Other Environmental Matters [REP4-037]) again refers to $PM_{2.5}$ levels as a way of assessing ultrafine particle emissions from aviation.

10.4.9 However, for the health assessment the relevant relationship is that both UFP and $PM_{2.5}$ of aviation origin independently correlate with aircraft movements (being the common source).

10.4.10 The JSCs would also point out that aviation NOx emissions also independently correlate with aircraft movements (being the common source) as do aviation carbon dioxide emissions.

10.4.11 The key point here is that the applicant has failed to make any meaningful assessment of the likely change in ultrafine exposure as a result to the development, and as a consequence is unable to undertake any meaningful health assessment.

10.4.12 Given the JSCs have demonstrated in previous submissions (para 11.109 Joint Surrey Councils Local Impact Report [REP1-097]) that:

- residents' ultrafines exposure on the Horley Gardens Estate is already classed as 'High' on 50 % of the sampling days using the WHO guideline approach, and

- that the number of hours when ultrafine concentrations were classed as 'High' was double that of a central London Roadside site considered one of the most polluted sites in the UK.

10.4.13 It is clear that there is a high ultrafines exposure on the Horley Gardens Estate that is problematic (i.e. there is already an issue with ultrafine particle exposure) and that this is likely to get worse with the applicant's planned development by 2032.

10.4.14 In view of this and as pointed out in our deadline 4 submission on ISH 7 (Joint Legal Partnership Issue Specific Hearing 7 Post-Hearing submission [REP4-058]) the applicant via the s106 needs to fund in full 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.

10.4.15 If the inspector is unable to support such an approach then we would suggest that in the event that UK standards are introduced for ultrafines that the airport funds in full (100%) of the costs of

monitoring this pollutant and that the cost is not capped at £30K as currently proposed.

APPENDIX I

Gatwick North Runway Project

Review of Updated Fleet Mix Assumptions

1. York Aviation (YAL) has been appointed by the Host and Neighbouring Authorities, collectively known as the Joint Local Authorities (JLAs), to provide advice in relation to aviation capacity, need and forecasting, and aspects of the socio-economic case for Gatwick Airport Ltd's (GAL's) North Runway Project (NRP). This submission is prepared primarily to address the updated fleet mix assumptions put forward by the Applicant at D4 in Environmental Statement Addendum - Updated Central Case Aircraft Fleet Report **[REP4-004]**.

2. It had been understood that the original Central and Slow Transition fleet mixes used for assessment purposes in the DCO Application remain unchanged from those presented in the PEIR in 2021 (see paragraphs 61-63 of **[REP4-052]**, which it is reasonable to assume were prepared earlier in that year, to allow time for the environmental assessments, based on the expectations in 2020. However, we have noted some unexplained anomalies in terms of the assumed mix between new generation B737MAX and Airbus A320 family neo aircraft between the original Central Case Fleet Mix and the Slower Transition Fleet mix as presented in Appendix F to **REP3-071**. These might reflect that the fleet mixes were produced at different times as the same pattern, in terms of a shift assumed in the share of these aircraft families, is also evident in the Applicant's proposed revisions to the Central Case fleet mix, which we discuss in the remainder of this paper. At the very least, these anomalies need explaining as, for the reasons set out below, the JLAs remain of the view that the original Central Case fleet mix assumptions in overall terms (the balance between new/next generation aircraft and older generation aircraft) remain robust.

3. In terms of the proposed updated Central Case fleet mix, whilst is accepted that there have been challenges to aircraft delivery and fleet modernisation during the pandemic, there is now also greater clarity in terms of airline fleet orders and fleet replacement plans. For example, easyJet, which accounts for around 47% of commercial aircraft movements at Gatwick[1] today, has placed orders for 216 new generation aircraft. Of these, 157 were ordered in December 2023[2]. Although it is clear that not all of these aircraft will be delivered by 2029, 129 of the total orders are expected to have been delivered by the middle of 2029. We recognise that there is some slow down in expected

[1] Online Airline Guide (OAG) data for 2024 as at 30 May 2024.
[2] Source: ch aviation.

deliveries in the short term (2025)[3]. However, easyJet also states that it expects to receive 84 of the new aircraft by 2027. Taking into account that approximately 24.5% of its fleet is already comprised of new ('next') generation aircraft and allowing for the airline's intention to grow its fleet from 343 to 384 aircraft (base fleet plan), this would mean it reaching approximately 43% transition to new generation aircraft by 2027. This is consistent with our discussions with the airline in connection with the Luton Airport DCO.

4. Although, there are well documented problems with some Pratt and Whitney aircraft engines, these primarily impact the short term and, whilst the problems have impacted airlines, such as Wizz Air, that accounts for 6% of movements at Gatwick, along with delays to Boeing B737-Max deliveries impacting airlines such as Ryanair (16% of Gatwick's current movements).

5. From our analysis of OAG data for Gatwick for the calendar year 2024, we estimate around 28% of the movements at Gatwick is expected to be by new generation aircraft[4]. However, there is significant variation between the short haul and long haul fleets, recognising that the former make up the significantly greater proportion of overall aircraft movements. We estimate that 25% of short haul movements in 2024 will be by new generation aircraft compared to an estimated 46% of long haul movements.

6. On the assumption that easyJet deploys neo aircraft at Gatwick in line with its overall fleet transition, recognising that this is likely to be a conservative assumption given that the airline has told us that it will tend to prioritise the deployment of new generation aircraft at Gatwick and other larger airports, and making reasoned adjustments for other airlines[5], along with assuming that new airlines adopt new generation aircraft in pro rata to the current airlines, this would indicate an attainable proportion of new generation aircraft in 2047 of c.43%.

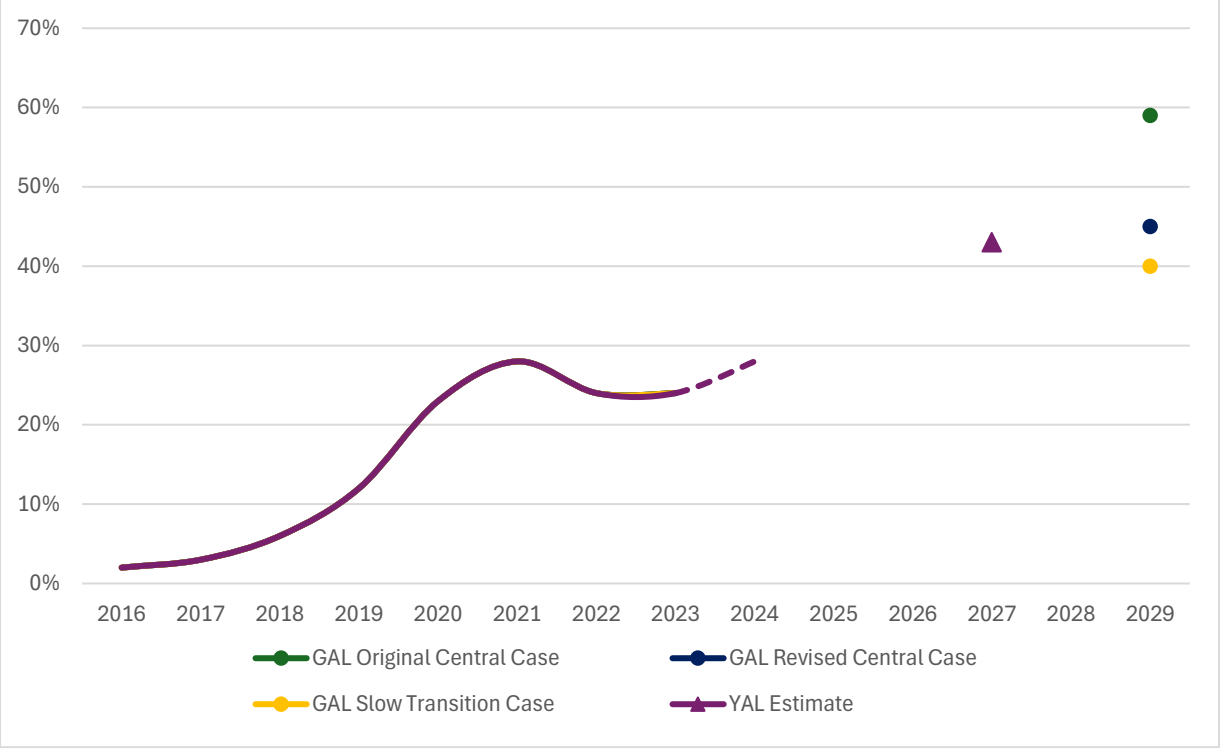
Figure 1 below shows how this fleet transition would sit with the Applicant's original and updated fleet transition assumptions, using the historic data set out in Diagram 2.3 of **REP4-004**.

[3] easyJet H1 2024 Presentation, May 2024.

[4] Unlike other airlines, easyJet does not identify which of its movements are using neo aircraft so we have assumed that the proportion of Gatwick movements using neos is the same as its fleet overall. This is likely to be conservative as easyJet has previously told us that it prioritises the use of its neo fleet to larger airports, like Gatwick and Manchester, as it can achieve better returns from deploying the new aircraft in larger markets.

[5] Those airlines with high percentage new generation use in 2024 are assumed to reach 100% by 2027; those at around 50% to reach 75%; those at lower percentages to roughly double new generation usage, with an assumption of 10% fleet transition on average over the remainder of the fleet.

Figure 1: Proportion of Gatwick Aircraft Movements by New Generation Aircraft



7. There are a number of reasons why a transition to 43% of movements being by new generation aircraft in 2027 could be considered conservative:

easyJet may deploy a greater proportion of its new aircraft at Gatwick;

the rate of fleet transition by other airlines could accelerate;

GAL could adopt pricing strategies, as adopted at other airports, to incentivise the use of new generation aircraft;

the use of forward looking quota count budgets could be used to incentivise airlines to transition to new generation aircraft more quickly;

new slots could be reserved for new generation aircraft only, as proposed in the London City Airport Planning Application currently under consideration.

8. Although, in line with easyJet's reporting, there are short term delivery issues which may act to slow the fleet transition in 2025, we would expect the pace of deliveries to accelerate again to match pre-pandemic rates thereafter. Taking into account the factors outlined above, the Applicant's original Central Case fleet transition of 59% new generation aircraft by 2029 looks eminently attainable.

9. The revised Central Case set out in **REP4-004**, suggests that the slow down in deliveries will continue to 2029 and accelerate thereafter, which does not appear to accord with airlines' expectations. The fleet transition indicated for 2029 in the revised case looks virtually identical to that we estimate as attainable in 2027 and, hence, would be considered a conservative slow transition case. Our updated analysis also confirms our view that the current Slow Transition Case is overly conservative, with a predicted fleet transition in 2029 lower than we have estimated for 2027 based on recent fleet orders and general market intelligence. Whilst this does mean that the assessment of noise, and other topics that relate to the fleet assumptions used, will be a worst case, this does

confirm that setting limits by reference to this case will mean that controls will be too lax - see the JLAs paper on Environmentally Managed Growth submitted at D5.

10. We would also note that the fleet transition assumptions being made by the Applicant are substantially more conservative than those made in connection with the London Luton DCO, where the core case fleet transition (short haul) by 2027 was assumed at 69%. Whilst the initial assumption for a slower fleet transition was 60% by 2027, this was revised during the Examination to 67% transition by 2027[6] in the light of airline fleet announcements and the pricing strategies adopted by the airport operator to incentivise the transition to new generation aircraft.

11. Whilst it is accepted that Gatwick has a broader carrier mix than Luton and that this is likely to result in a slower transition of the fleet overall, the assumptions being put forward by the Applicant in this case must be considered as overly conservative and not appropriate as a basis for controlling and mitigating the impacts of the proposed development. Our analysis confirms our provisional view that the Applicant's revised Central Case should rather be considered as a revised Slower Transition Case, with the most likely case being represented by the original Central Case.

12. We have focussed in this note on the short term transition to 2029 as this is the period used by GAL to justify its proposed change to the overall rate of fleet transition over the period to 2047. There are two key points to make regarding the longer term fleet transition:

- To the extent that the fleet transition in the short term is faster than the Applicant now claims, it follows that the proportion of the fleet made up of new generation aircraft will be greater in later years; and

- In any event, given the age of many of the older generation aircraft operating, it would be expected that these would be transitioning to new generation aircraft over the 2030s in any event such that 100% transition to new generation aircraft by 2040 would seem an appropriate assumption regardless of any short term trends.

13. A further factor not overtly considered by the Applicant is likelihood that there will be a further next generation of aircraft likely to start to enter the airline fleets during the 2030, which may offer the scope for further environmental improvements.

YAL/31.5.24

[6] London Luton Airport DCO Examination Library, REP9-055, paragraph 3.1.6.

APPENDIX II

JLA UPDATED POSITION ON S.104 AND s.105 PLANNING ACT 2008

1. The JLA position on the proper interpretation of s.104 and s.105 PA 2008 is set out in its response to ExQ1_CS.1.27 in REP3-135.

2. It is apparent from the Applicant's response to REP3-135 (at pp.31-39 of REP4-031) that the Applicant does not agree with the JLA position.

3. It is understood to be common ground that the decision of the High Court in the EFW Group case is not a binding authority on the question of interpretation because of the factual differences between what the High Court was being asked to consider in that case and the present case. The Applicant argues that the reasoning in the EFW Group case should be regarded as persuasive in order to avoid what it considers is the *"artificiality"* of the JLA position.

4. The JLA does not consider that its position involves *"artificiality".* It requires following the statutory language that Parliament has approved and, if that approach leads to a conclusion that Parliament may not have expressly envisaged, it is not for individual decision makers when making DCO decisions to 'adapt' or to 'supplement' that language to avoid that conclusion.

5. However, for the reasons set out below, the JLA does not consider that it is necessary for either the ExA or the Secretary of State to resolve this

disagreement between the parties on the question of statutory interpretation in order to make a lawful decision on the application. This is because, essentially, whichever interpretation is adopted would not materially affect the outcome of the decision on the application.

6. Before considering how s.104(3) PA 2008 applies to the decision to be made, it should be noted that s.104(2) PA 2008 sets out matters to which the Secretary of State *"must have regard".* These include both the NNNPS (2015), by virtue of s.104(2)(a) PA 2008, and the ANPS (2018), by virtue of s.104(2)(d) PA 2008. Whilst the application of s.104(2)(d) PA 2008 so as to embrace the ANPS involves the exercise of a discretionary judgment by the Secretary of State as to what is *"both important and relevant"* to the decision to be made, there is no sensible basis on which the Secretary of State could conclude that the ANPS is not both important and relevant in the context of the decision to be made on the application. Regard must also be had to any submitted Local Impact Report, as required by s.104(2)(b) PA 2008.

7. S.104(2) PA 2008 does not circumscribe how the matters to which the Secretary of State must have regard should inform the decision to be made.

8. If the application is determined under s.104 PA 2008, as the JLA considers is required, s.104(3) PA 2008 requires that the Secretary of State *"must decide the application in accordance with"* the NNNPS (which is the only National Policy Statement that *"has effect in relation to development of the description to which the application relates"*) except to the extent that one or more of the exceptions in s.104(4) to s.104(8) PA 2008 applies.

9. For present purposes only (and without prejudice to the position that may be adopted by the JLA at the end of the Examination), the JLA is prepared to assume that none of the above exceptions applies. On a similar basis (and with the same provisos), the JLA is prepared to assume that the highways-related development within the application is either in accordance with the policies of the NNNPS or could be made to be in accordance by the measures included in the DCO requirements and/or related control documents.

10. Nonetheless, even on the above assumptions, the application, taken as a whole, is not *"in accordance with"* the NNNPS because the application includes so much non-highway related development which is not development addressed by the policies in the NNNPS. That non-highways development is not in accordance with the NNNPS.

11. Para 1.1 of the NNNPS is clear that the NNNPS *"provides planning guidance for promoters of nationally significant infrastructure projects on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State."* Para 1.2 of the NNNPS states that *"The Secretary of State will use this NPS as the primary basis for making decisions on development consent applications for national networks nationally significant infrastructure projects in England".* Chapter 4 of the NNNPS states (in para 1.4) that *"This part of the NPS sets out general policies in accordance with which applications relating to national networks infrastructure are to be decided."*

12. Paras 5.46 to 5.66 of the NNNPS provide guidance on how national networks infrastructure may impact on civil and military aviation interests, but there is no guidance in the NNNPS on the assessment of aviation related or airport related development.

13. It is, therefore, not possible, having regard to the terms of the NNNPS, to decide that the application (taken as integrated and indivisible whole) is in accordance with the NNNPS.

14. However, nor is there any statement in the NNNPS which sets out that development which is not in accordance with the NNNPS must be inevitably or automatically refused development consent for that reason. Even if such a proposition could be implied for national networks development which is not in accordance with the NNNPS (albeit para 4.3 of the NNNPS suggests a more nuanced or balanced approach in such a case), there is nothing in the

NNNPS which says that development which its policies simply do not address should be rejected.

15. Thus, the duty in s.104(3) PA 2008 to decide the application in accordance with the NNNPS is not determinative of whether a DCO should be made or not made in relation to the application. The decision as to whether a DCO should be made (or not) should be reached after having regard to the matters set out in s.104(2) PA 2008.

16. Turning to the Applicant's position that the highways related development should be determined under s.104 PA 2008 and the airports related development should be determined under s.105 PA 2008, this would not, in substance, amount to any different approach. The NNNPS would be applied to the highways related development, by virtue of s.104(2)(a) and s.104(3) PA 2008 and the ANPS would be applied to the airports related development, by virtue of s.105(2)(c) PA 2008. Regard must also be had to any submitted Local Impact Report, as set out in s.105(2)(a) PA 2008. The decision as to whether a DCO should be made (or not) would turn on the same matters as set out in para 15 above.

17. For these reasons, the JLA does not consider that the disagreement on the interpretation of the statutory provisions needs to be resolved.

18. As an illustration of a NSIP case where both the Examining Authority and the Secretary of State adopted an approach of considering both that the whole of the application should be considered under s.104 PA 2008 and, in the alternative, that some parts of the application should be considered under s.105 PA 2008, but that whichever route was followed made no difference to the substantive decision, the JLP would refer to the ExA's Report and the Secretary of State's decision in the Net Zero Teesside Order 2024 (see in particular section 3.2 of the ExA's Report dated 10 February 2023 and paras 4.1 to 4.4 and 7.1 to 7.9 of the Secretary of State's decision letter dated 16 February 2024).

APPENDIX III

Gatwick North Runway Project

Response to Additional Documents submitted at Deadline 4

Needs Case

1. York Aviation (YAL) has been appointed by the Host and Neighbouring Authorities, collectively known as the Joint Local Authorities (JLAs), to provide advice in relation to aviation capacity, need and forecasting, and aspects of the socio-economic case for Gatwick Airport Ltd's (GAL's) Northern Runway Project (NRP). This submission is prepared in response to documents submitted at Deadline 4 relevant to the Needs Case and associated matters. In particular, it addresses the two documents submitted by the Applicant [**REP4-022** and **REP4-023**] produced in response to the paper **[REP3-123/Appendix to REP3-117]** submitted by the JLAs responding to the Applicant's Need Case related documents submitted at Deadline 1. This submission will refer as necessary to points already addressed in submissions at Deadline 4 [**REP4-049** and **REP4-052**] and also to other documents submitted that make relevant points.

Capacity [REP4-023]

2. This paper principally addresses points relating to the hourly declarable capacity of the Airport with and without the NRP. As with the Applicant's response, these points are addressed in tabular form. However, addressing these points in a piecemeal fashion risks missing the key linkage between the declarable capacity, the level of service provided and the willingness of airlines to take up available slots in order to meet the underlying demand for air travel.

Ref.	Applicant's Comments	Response
Current Conditions - Baseline		
49.	As per **The Applicant's Response to the Local Impact Reports - Appendix A - Note on the Principle of Development** [REP3-079], GAL has acknowledged that performance has been impacted in recent years by COVID, including ATC resourcing challenges, and that these issues have been resolved for Summer 2024. GAL also acknowledged that there	The Applicant's response still does not address the key issue, which is the extent to which it is reasonable to assume that 67.2 mppa can be delivered with the current declared runway capacity and the implications of the concerns expressed by the airlines

	is benefit in work to improve resilience hence the new rapid exit taxiway and planned delivery of reduced departure separation project, optimised sequencing and time- based separation. The representation referenced has also been responded to directly in **Relevant Representations Report** [REP1-048] and **The Applicant's Response to Written Representations** [REP3-072]. Evidence has been provided on the reliability of 55 being achieved prior to COVID in the **Capacity and Operations Summary Paper** [REP1-053] section 3.1. In addition, the Applicant has explained the work being undertaken to consistently enhance the resilience of the 55 movements per hour in section 3.3. **55 movements per hour have been consistently achieved at Gatwick for several years. 55 is confirmed through the slot allocation process, demanded by airlines, scheduled and demonstrably delivered.** Demand at busy times continues to exceed capacity. Whilst the JLAs express concern, the "issue" has no substance when it comes to either achievable capacity or demand.	about the resilience and reliability of current operations at Gatwick. We accept that currently airline requests for slots in the crucial busy hours exceed the declared capacity available and that airlines have still been willing to seek slots at those times, notwithstanding the levels of delay that may be expected at busy times. We also acknowledge that the new rapid exit taxiway is likely to have mitigated those delays to some degree. However, this does not necessarily mean that airlines will be willing to take available slots at other times of the day sufficient to deliver the growth in the Baseline claimed by the Applicant. We still consider the airlines' expressed concerns as material to understanding the likelihood of baseline growth being delivered. The JLA's position in relation to the Baseline Case is set out in **REP4-049**.
50.	GAL agrees with the rationale for the focus on the runway 26 direction as the prevailing direction of operation. **First wave slots at London Gatwick are in high demand as their demand significantly outweighs capacity, hence even with full knowledge of the expected departure holding time, first wave slots remain oversubscribed**. The 2018 peak total departure holding, referenced by York Aviation, is between 0700 & 0759 UTC which is a high demand hour for airlines. In Summer 2024 this hour is declared at 52 movements, in the live schedule (as of 03/05/2024). 0700 UTC on the busy day is fully utilised along with every other Friday between start of June and end of September, demonstrating the popularity	The reason that the first wave of departure slots is so important to the airlines is because of the high dependence of Gatwick on operations by based aircraft (paragraph 16 of **REP1-099**). Airlines are only likely to base aircraft at the Airport if they can obtain departure slots in the first couple of hours in the morning, enabling them to operate 2 or 3 rotations (round trips - dependent on the destination) during the day to optimise aircraft utilisation. Whilst the level of delay in this early morning period has not, so far, been a deterrent to airlines seeking slots within the declared capacity, any increase in declared capacity for departures during

	of this hour despite higher holding time than other hours. The holding times airlines should expect throughout the day are fully detailed as part of the declaration process hence **this is not considered 'delay' but rather 'holding' which should be accounted for in block times.** Block times are the time between scheduled departure from stand at the origin airport and scheduled arrival on stand at the destination airport. As well as the flight time the block time should include taxi time and expected holding time for both departure and arrival. As per note 49 above, GAL still seeks to improve holding times and has initiated a number of performance improvement initiatives to support reduction in holding times and improved resilience. However, due to the inherent lack of capacity, these projects won't deliver the same level of improvements that will be possible through NRP. In the baseline case, the addition of the new RET (which is fully in place) reduces peak total departure holding time to 13.6 minutes at 0700 UTC, and 12.1 minutes at 0600. All other hours remain below 10 minutes. **Given that in the baseline the peak total departure holding reduces compared to 2018**, the levels of holding are not expected to hinder London Gatwick's ability to fill the baseline schedule. In addition, London Gatwick's low cost to operate for airlines, compared to other nearby airports, and high passenger demand, especially in a constrained scenario where increased capacity is not delivered through the proposed development, means that the baseline capacity is expected to be filled.	this period with the current single runway would be expected to lead to delays increasing exponentially. We note the Applicant's unusual view that holding delays prior to departure should not be considered as delays as the airlines are aware of the likelihood of such levels of delay when the capacity is declared and slots applied for. Although it is true that the airlines may allow for the likelihood of being materially delayed in their block times for operations from Gatwick, the effect of this is to extend the length of each flight so impacting on the utilisation that airlines can make of their aircraft and the viability of operations as it results in less revenue earning flying hours available each day. We note that the Applicant accepts that there is an inherent lack of capacity to increase operations in the Baseline, notwithstanding its suggested operational improvements to reduce holding times. Hence, the inability to increase based operations with the existing single runway has a substantial dampening effect on the ability to deliver growth at Gatwick in the Baseline as growth necessarily has to come from non-based operations that are willing to operate at the limited times available currently on peak days (see Figure 3 of **REP4-049**) or operate only in off-peak periods, so damaging the viability of starting new routes and services. The Applicant states that the modelling shows that the recent addition of the rapid exit taxiway (RET) is expected to reduce holding delays compared to the 2018 actual peak delays. We have requested, but not received, further information regarding the validation of this modelling as it shows significant reductions in delay in the NRP case, which cannot be accounted for by the rapid exit taxiway as this cannot be

		used during dual runway operations. In our dialogue with the Applicant and at paragraph 68 of **REP3-123**, we have requested information regarding the extent to which the model has been validated as capable of replicating actual delays in 2018 in order to provide assurance that the model results for future scenarios can be relied on, given that the results now show significantly lower delays despite assuming a greater average separation between departing aircraft. Our view on the actual hourly capacity increase deliverable by the NRP is dependent on receiving that assurance that the model has been validated and does not systematically understate delays.
51.	GAL has assumed the availability of the new rapid exit taxiway (RET) in all scenarios due to it already being in operation and delivering benefits to the operation. The initial performance of the new RET is in line with the benefits assumed in the modelling for the baseline case, improving reliability of performance and giving the equivalent benefit of +1 ATM/H. GAL has also accounted for well-developed future initiatives such as reduced departure separation (RDS) and optimised sequencing that will primarily improve resilience against sub-optimal fleet mix and SID allocation. GAL has refrained from making assumptions regarding any future initiatives in their infancy, such as time-based separation. RDS technical implementation is completed and the process of embedding the new process into the operation will take place over the remainder of 2024, resulting in improvements materialising in 2025. Optimised sequencing is planned for delivery in 2025. Given the mature stages of implementation of RDS and optimised sequencing the future scenarios should factor in the impact of these projects. However, for transparency, the **Capacity and Operations Summary Paper Appendix: Airfield Capacity Study** [REP1-	In **REP3-123** (paragraph 67), we stated that we did not consider that it was prudent to rely on untested operational tools, such as RDS, as the basis for assessing the capacity of the runway in either the Baseline Case or the NRP Case. We note that GAL now states that the benefits of RDS *"will primarily improve resilience against sub-optimal fleet mix and SID allocation."* To a large degree, this reinforces our concern expressed in **REP3-123** given that the Applicant itself has acknowledged (paragraph 4.4.9 of **REP1-054**) that the impact of such tools may be limited in normal operating conditions. It is our understanding from **REP1-054** and from our discussions with the Applicant that a largely judgemental approach has been adopted for the estimation of the extent to which the use of such tools would reduce levels of delay in presenting results for the 'Future Performance' in both the Baseline and NRP Cases. We do not consider it wholly robust to rely on such adjustments being attainable, at least until there is real evidence of lower levels of delay being experienced through the introduction of such tools.

	054] section 5, 6 & 7 present the simulation results **based both on current performance and with the phased introduction of reduced departure separation and optimised sequencing** (for NRP only), so the impact of the future initiatives can be clearly seen. As per the results, RDS provides limited benefit in the baseline case as the single runway capacity limits departure rates. RDS provides improved average departure taxi time by 1.4 minutes across the day. Optimised sequencing has limited impact on average holding, however it supports by reducing the outlier holding times by 40%.	We note that, without such improvements being assumed, the average delays to departing aircraft in 2038 with the NRP assumed to be fully used in terms of movement capacity (Figure 11 of **REP1-054**) would still exceed 10 minutes on average over the busy 3 hour period, indicating that the runway would be operating at its acceptable limit of capacity based on the Applicant's assumed profile of aircraft movements in that year. However, before accepting that it can be assumed that this level of delay would be acceptable and the asserted capacity of the NRP attainable, we would still want to be reassured that the adjustments made to the modelling between the Application and the Examination documentation have been validated as capable of replicating historic performance at 2018 demand levels.
52.	As stated in the document, the 108 (60 departure and 48 arrivals) referenced is a '*theoretical airspace maximum capacity*' and has not been claimed as runway capacity. This theoretical airspace capacity is a relevant part of the story as it demonstrates that there is unutilised capacity in the local airspace and that the runway is the constraint at London Gatwick, which will be addressed through the NRP. This point is directly recognised by York Aviation in their paragraph 56. As mentioned by York Aviation, GAL have clearly stated this is a theoretical constraint with a number of caveats. The runway schedules take full account of all constraints listed by York Aviation, hence why capacity in the baseline does not exceed 55 and in NRP does not exceed 69.	The Applicant's response is noted and we are please to see the Applicant accept that there are other constraining factors that are relevant to understanding the capacity deliverable.
53.	**It is helpful that York Aviation recognise that the modelling supplied to the examination demonstrates reduced delay. That recognition,**	The Applicant's response is noted. To clarify, we did not expressly request that the simulation modelling be re-run but have been pointing out in discussions since 2022 that the assumption that 60 second separations

	however, should in fairness be recognised in other concerns raised. As per Gatwick's Manual of Air Traffic Services Part 2 'Subject to wake vortex and speed group, where 2 minutes separation is specified a departure interval of at least 5nm may be used as an alternative between aircraft on similar or diverging tracks' this rule is followed by London Gatwick, as with other airports in the UK. 5nm results in separations of approximately 90 seconds. Given London Gatwick's departure route set up, which will include requirements for 120 seconds same exact route, an average of 106 seconds separation is achieved for same wake aircraft departure separations travelling on similar routes. This is set to improve with the reduced departure separation project lowering the average separation to 90 seconds for similar route departures of the same wake turbulence category, as detailed in the **Capacity and Operations Summary Paper Appendix: Airfield Capacity Study** [REP1-054] section 4.4. As requested by York Aviation, all simulations were re-run. The baseline results were not significantly different from submission referenced in **Needs Case** [APP-250], although not identical due to the change in departure separation parameters and randomisation used in the re-run. As per the current operation, the 106 second separations are minimised in practice through optimised sequencing between departure routes and between arrivals and departures, minimising the impact on results. Hence the holding times in the baseline are modelled and expected to fall compared with 2018.	could be achieved between all departures, as in the original capacity modelling presented as part of the Application, was not realistic. We appreciate that the Applicant has now acknowledged that the use of a 60 second assumption was not realistic. As noted above, notwithstanding allowing for actual achieved separations between departing aircraft, the revised modelling does show reduced delays compared to the original modelling results but, as also noted above, we are still seeking confirmation that the modelling does not systematically understate delays when calibrated against the 2018 actual schedule and measured levels of delay. We reserve our position on whether the NRP will enable the Applicant's future demand forecast to be accommodated in full pending that confirmation.
54.	It appears that York Aviation has misunderstood or misinterpreted the information presented. The 34% of aircraft using Route 4 referenced is the aggregate for both runway directions across the full day of operation. Solely looking at Runway 26, this increases to 38% of departures using Route 4 when in Runway 26 direction operations. However, a	The Applicant's response is noted. Assuming that the information provided regarding the different distribution of aircraft movements by Route in the departure heavy hours is correct, we can understand the basis of the calculated theoretical capability of the runways purely for departures.

	departure route imbalance has the most significant impact in departure heavy hours where there are limited arrivals to sequence out the increased departure separation requirements of similar route departures. In the peak departure hour of 0500 UTC, in August 2019 46% of runway departures used Route 4 and the remaining 54% used Routes 1, 7 or 8 (which are all similar routes). This split allowed for the majority of consecutive departures to be on alternate routes thus reducing the separation required between departures to 60 seconds. The key hours where departure capability is relevant are 0500, 0600, 0700 and 0800 UTC as these hours have a higher proportion of departures than arrivals. In these hours in August 2019, when in Runway 26 direction operations, 41% of departures used Route 4 and the remaining 59% used Routes 1, 7 and 8. This would result in an average separation requirement of 67 seconds between departures when assuming current performance of 106 seconds. 68 seconds separation between departures delivers 53 departure movements in an hour. When taking into account the Reduced Departure Separation project, the similar route separation is expected to reduce to 90 seconds, resulting in an average separation requirement of 65 seconds, delivering 55 departure movements in an hour. As GAL stated under point 53, 120 seconds is not required between Routes 1, 7 and 8 as assumed by York Aviation in its calculation of the 45 departures referenced.	However, that is not the same as an attainable capacity as it would assume the ability to perfectly sequence departures to minimise separations, requiring aircraft to be held, incurring delay, to attain the perfect departure sequence by route. As a purely theoretical calculation, it is of no material relevance other than as a cross check that the proposed peak departure capacity of 48 departures an hour, having regard to the level of delay, is capable of being flown within the existing air traffic control procedures and required separations between aircraft in the air.
55.	Paragraph 3.1.5 of the Capacity and Operations Summary Paper Appendix: Airfield Capacity Study [REP1-054] does not state 55 is only obtainable in a 'perfect balance', it describes how 55 ATM/hour is achievable when the hour is balanced and continues to state '55 ATM/hours can still be achieved with small variations in the proportion of arrivals and departures.	The Applicant's response is noted. It confirms that 55 movements per hour remains the maximum proposed hourly capacity attainable when there is even mix of arriving and departing aircraft in an hour. The point that we were making in **REP3-123** was that, simply because it might be possible to achieve more than 55 movements in an hour in some circumstances, this did not mean that it

	Consecutive departures in alternating directions will allow a movement every 60 seconds increasing throughput'. The traffic mix was accounted for in previous declarations, hence why there were only 5 of the 17 core hours declared at 55 movements per hour (mph). The performance detailed is in reference to the operation prior to the new RET. **The new RET reduces arrival runway occupancy time allowing reduced separations between arrivals enabling 55 mph to be delivered in a greater range of scenarios and increases the 55 mph maximum capability to 56 mph. As the baseline schedule remains declared at a maximum of 55mph the additional movements can be accommodated without performance degradation due to the new RET.**	could reliably be declared as an attainable movement rate for scheduling that necessarily must allow for normal variability of actual operations on the runway. We noted that there would always be circumstances where this movement rate could be exceeded. Similarly, there will be circumstances where 55 movements per hour is attainable even if there is not a 'perfect' balance of arriving and departing aircraft.
56.	GAL agrees with the statement that **the single runway capacity is more constraining than the airspace in the baseline case.**	The Applicant's response is noted.
57.	The airspace modernisation to the south of London Gatwick, known as London Airspace South, is a discrete project scheduled for deployment in Q1 2027. The schedule for the deployment of modernised airspace across the remaining London airspace is later. **The dual runway capacity throughput modelled did not assume the delivery of airspace modernisation to the south of Gatwick nor the increased use of WIZAD.** The project would benefit from the deployment of London Airspace South, but it is not a prerequisite or enabler for the project. If a change to the use of the WIZAD SID routes were required, this would constitute a deliberate decision to redistribute traffic and would require the development of a Level 1 Airspace Change Proposal in accordance with CAP 1616 under the Planned and Permanent Redistribution (PPR) of air traffic provision set out in the Air Navigation Guidance (Amendment 2019).	The Applicant's response is noted. However, in respect of WIZAD SID, the Applicant's response here appears somewhat at odds with the response given to the JLAs' response to ExQ1 relating to the future use of WIZAD SID (page 94 of **REP4-031**) which states that imposing restrictions on the number of movements that could use WIZAD SID would *"act to unnecessarily limit the operations of the airport and the wider benefits that it will provide"*. This appears to confirm what the JLAs have always believed, namely that greater planned use of the WIZAD route will be required in order to ensure that the NRP is capable of delivering the full uplift in runway movements claimed contrary to the Applicant's previous claims that its use will remain purely as a tactical offload route [**REP3-078]**, 14.1AF page 192]. We note the Applicant's acceptance that an airspace change to enable greater use of WIZAD SID cannot be ruled out.

58.	**The additional 20 movements is not above the 2024 declared level but rather an increase compared to Summer 2018 busy day scheduled demand** (incl. all flight types). **Between 0500-2159 UTC the 2038 baseline has 13 movements less than the number of movements declared for 2024 and 11 movements less by 2047.**	We have addressed the overall capacity deliverable in the Baseline Case in response to the ExA's Rule 17 request in **REP4-049.**

Northern Runway Project		
59.	The full aircraft journey at the airport (from stand to local airspace and vice versa) has been fully modelled using fast time simulation and the results are presented in the **Capacity and Operations Summary Paper Appendix: Airfield Capacity Study** [REP1-054]. The simulation results clearly indicate on stand holding, taxi delays, and runway holding in Para 5.2.2. Table 9. Whilst the distribution of where aircraft holding may take place between stand, taxi and runway may differ, the total holding will remain the same. As detailed by the simulation results in the **Capacity and Operations Summary Paper Appendix: Airfield Capacity Study** [REP1-054] Para 5.2.2. Table 9, the service level delivered by the NRP is equivalent or improved compared to 2018.	As noted in response to points 50 and 51 above, we are still awaiting further information regarding the validation of the Applicant's revised simulation modelling of the capacity of the runway to ensure that it does not systematically understate delays, despite having allowed for more realistic separation times between consecutive departing aircraft. Our view on the actual hourly capacity increase deliverable by the NRP is dependent on receiving that assurance. We note that, based on known performance, the average delays to departing aircraft in 2038 with the NRP assumed to be fully used in terms of movement capacity (Figure 11 of **REP1-054**) would still exceed 10 minutes on average over the busy 3 hour period indicating that the runway would be operating at its acceptable limit of capacity based on the Applicant's assumed profile of aircraft movements in that year. However, before accepting that this is a robust conclusion, we would still want to be reassured that the adjustments made to the modelling between the Application and the Examination documentation have been validated as capable of replicating historic performance at 2018 demand levels.
60	The Applicant submitted the **Statement of Common Ground between Gatwick Airport Limited and the Civil Aviation Authority** [REP3-068] at Deadline 3.	We note that the Civil Aviation Authority has indicated in the Draft Letter of No Impediments appended to the Draft Statement of Common Ground with the Applicant (Paragraph 4.3 of Appendix 2 to **REP3-068**) that *"the CAA sees no*

		impediment to the approval of the Development with respect to the requirements of aerodrome certification". However, we would note that this agreement is limited to the ability of the airfield layout as proposed to be operated within the safety standards laid out for aerodrome certification. It does not imply an agreement by the CAA that a particular level of capacity is attainable with the NRP scheme.
61	GAL agrees that Dubai is not an identical operation. However, as with most airports there is no perfect comparator. Dubai is a useful close comparison to London Gatwick's proposed dual runway 2038 operation, because: 1. The airspace route structure of the two runways is coupled due to the short distance between the runways, so a departing aircraft cannot be given a clearance when an arriving aircraft is close to the threshold due to risk of aircraft being in close proximity in the event of the arrival needing to go around (like London Gatwick's proposed dual runway operation). 2. The airport's capacity is constrained by its runway configuration (like London Gatwick). While they are not identical operations, the theoretical capacity (if both airports had the same types of aircraft) would be similar. As Dubai has a fleet mix which is more challenging to efficiently integrate, this reduces its capacity to below that which London Gatwick would be able to deliver with the dual runway operation. Dubai's more challenging fleet mix requiring increasing wake vortex separation between aircraft creates losses in runway throughput capacity efficiency. During these efficiency losses, multiple aircraft might cross the runway from the taxiway between runways to reduce the impact on taxi times. - To its system efficiency benefit, London Gatwick has a fleet mix that may be more efficiently integrated and its runway system is designed with runway crossings factored	We continue to believe that the operation at Dubai does not provide a robust benchmark against which to judge the capacity deliverable with the NRP as its operating mode, with one runway used for arrivals and the other for departures, is sufficiently different as to make comparison spurious.

	into the standard concept of operations, avoiding significant system efficiency losses. - To its system efficiency detriment, London Gatwick expects many long haul aircraft departures to operate from the Main Runway, essentially reducing arrivals throughput capacity compared to Dubai's segregated runway modes (one servicing all arrivals and one servicing all departures). - The combination of these two effects is that in periods with an optimal fleet mix, London Gatwick can outperform Dubai's runway system efficiency, but when there are peaks in the proportion of large aircraft the system efficiency in terms of runway throughput, capacity reduces. This effect has already been accounted for in the forecast capacity releases. The average increase in flights, between 0500-2159, from NRP compared to Summer 2024 declaration is 9.5 slots, however the maximum slot release is 17 and the minimum is 3. The maximum release occurs in a well-balanced arrival/departure hour with a low proportion of wide body aircraft, whereas the lowest increase occurs when there is a poorer arrival/departure split and/or high number of wide body flights. Dubai can have long taxi times. There are many reasons for this, including airport layout. - The distance to travel between the runway and terminal is sometimes much greater than at London Gatwick and having terminals on both sides of the runway system makes for higher natural variation in taxi times than London Gatwick will naturally see. - London Gatwick's proposed busy day schedule is not as pressured as Dubai's 2023 when comparing runway system capability vs scheduled demand. - London Gatwick expects to operate its proposed dual runway operations at levels of congestion that are similar to or below London Gatwick's 2018 congestion levels, as has already been demonstrated in the modelling, and which airlines are already	

	accepting by continuing to operate from (and in many cases requesting more slots at) London Gatwick.	
62.	As stated by York Aviation, the summary of performance across the full day is provided in the **Capacity and Operations Summary Paper** [REP1-053] to give an overview of performance impact from the project for readers looking for a high-level view**.** Readers looking to understand further details of the modelling, are directed in the **Capacity and Operations Summary Paper** [REP1-053] to read the **Airfield Capacity Study** [REP1-054]. **This paper includes modelling results by time of day in graph format and summarised into the key periods of interest,** 0500-0900 UTC, 1200-1600 UTC, 0600-2200 UTC & across the 24 hour period. **The time-of-day results demonstrate NRP performance improvements are throughout the day whereas the baseline improvements are outside of the first wave.**	The Applicant's response is noted. Our caveat related to the updated simulation modelling is set out above.
64.	The 2038 schedule is consistent with Annex 7 to the **Forecast Data Book** [APP-075]. The 2029 schedule modelled is not stated in Annex 7 to the **Forecast Data Book** [APP-075]. The method described is correct.	The Applicant's confirmation that the updated simulation modelling has used the same demand profiles as set out in Annex 7 to **APP-075** is appreciated.
65.	It is correct that, when operating in dual runway operations, it has not been assumed that the rapid exit taxiway will provide capacity gain and it is not required to achieve the scheduled busy day demand. GAL has always been aware that the angle the new RET meets the Northern runway does not meet CAA safety requirements for crossing a live runway, and it was not designed for that purpose.	The Applicant's confirmation that our understanding is correct is noted.
66.	GAL has illustrated how each of the performance initiatives improves the airfield performance through modelling detailed in **Capacity and Operations Summary Paper** [REP1-053]. As stated in response to point 65, the RET was not utilised in the dual runway operation modelling. The 90 seconds departure separation is purely a result of the RDS project and has no reliance on the new RET. **Please also note modelling results have been provided with and without the**	For the reasons set out above, we continue to consider that the appropriate basis for capacity modelling is based on proven parameters and should not, at this stage, rely on potential improvements that may or may not be realised.

	benefits of RDS in the **Airfield Capacity Study** [REP1-054] Para 5.2.2. Table 9.	
66.	**York Aviation should recognise that the modelling results have been presented with and without enhancements on current practices** in the **Airfield Capacity Study** [REP1-054] Para 5.2.2. Table 9. The statement regarding the benefit of RDS on a 'normal' day has been considered when determining the reduction in minimum similar route departure separation from 106 seconds to 90 seconds. On non-standard days the departure separation will offer improved control over the departure separation resulting in the 90 seconds being maintained in a wider range of conditions compared to the 106 seconds. GAL still maintains the position that the future performance results, which include the benefits of RDS, represent the lead scenario. **RDS has been implemented at London Gatwick, as of January 2024**. Performance improvements from it are expected to materialise late in 2025 after the operational implementation phase is complete. GAL has been reasonable in its future baseline assumptions and has not included time based separation due to the uncertainty of the benefits on peak days. **However, both with and without these future performance assumptions the dual runway operation, resulting from NRP, provides improved overall performance compared to current performance and the future baseline.** As demonstrated in the **Airfield Capacity Study** [REP1-054] Para 5.2.2. Table 9, **by the 4.3 minute improvement in departure taxi time across the day modelled with current performance parameters and 5.7 minute improvement including the future performance initiatives.**	See response above.
68.	Following feedback from York Aviation, the capacity modelling was rerun as requested to include similar route departure separation to align more closely with 2018/19 operational performance. The addition of the similar route departure separation constraint required sequencing of similar departures, as a result	We did not explicitly request that the capacity modelling was re-run but have been highlighting in Technical Working Group meetings since summer 2022 that it was not considered realistic or reasonable to assume that 60 seconds separation could be attained between

	a greater focus was placed on improving the modelled runway allocation rules to improve sequencing, as would be performed in practice by the air traffic controller with the assistance of the tools available in the air traffic control tower. The main improvement in performance is seen outside of the first wave peak, as the original modelling underutilised the Northern runway. Limited focus was placed on optimising this period in the original modelling as departure holding times were already lower than current performance levels. The adjustments made to the simulation models increase alignment to 2018/19 operational performance assumptions and air traffic control capability.	all departing aircraft regardless of departure route. In the light of the Applicant's statement that the adjusted model increases alignment with the 2018/19 operational performance, we have asked for further information that validates this statement, i.e. do the delay results arising from modelling the 2018 or 2019 actual busy day schedule replicate the delays actually observed on that day, allowing for the fact that the new rapid exit taxiway was not in place at that time. This is important as, if the model does not produce delay results that closely align with actual delays, there is some risk of it overstating (or possibly even understating) delays for future modelled scenarios, leading to errors in the capacity assumed to be deliverable with the NRP and the assessment of impacts.

3. It is important to highlight that, whilst we have addressed the Applicant's response in relation to capacity point by point, the key concern of the JLAs is to understand what the capacity deliverable with the NRP means for the local area in terms of the actual levels of air traffic that will use the NRP compared to the Baseline Case. The JLAs are not directly concerned about the specific hourly capacity attainable with one runway or two but the level of usage of the runways to ensure that the impact of the project is fully understood and that appropriate controls are put in place.

4. The level of usage depends on two key factors, the physical capacity deliverable and the extent to which it is taken up by the airlines. The latter factor is a function of the level of service, including but not limited to delays, at which the capacity is offered and the extent to which there is underlying passenger demand sufficient to make services viable from Gatwick. For this reason, our submissions necessarily focus on the interaction between capacity, how it is likely to be taken up by the airlines and the underlying market that Gatwick seeks to serve.

Forecasting [REP4-022]

5. At the outset of Appendix A relating to the Forecasts **[REP4-022]**, GAL states, at paragraph 1.1.3, that it believes that matters relating to the physical capacity deliverable currently in the Baseline Case and with the NRP are close to being agreed. As noted above, we are awaiting final validation information relating to the capacity simulation modelling before being a position to confirm that the hourly capacity deliverable with the NRP is able to accommodate the profile of demand claimed by the Applicant for 2032, 2038 and 2047 which forms the basis of the assessment of the impacts of the Proposal.

6. We replicate the structure of **REP4-022** in dealing with the issues as a whole rather than responding to each and every paragraph individually but, at the outset, we would make two points:

*We welcome the Applicant's presentation of top down modelled forecasts of demand for Gatwick in **REP1-052** as these demonstrate a more realistic projection of how demand to use Gatwick is likely to build up over time, having regard to competition with other airports, than the original bottom up projections as set out in the 'Markets and Pipelines Report' at Annex 6 to the Forecast Databook **[APP-075]** as made clear at paragraph 41 of **REP4-052**.*

*There remain areas where our analysis of the nature of growth at Gatwick prior to and since the pandemic do not lead to the same conclusions about the nature and speed of future growth as claimed by the Applicant. Many of these are set out in **REP4-049** and **REP4-052**.*

Future Baseline

7. Most of **REP4-022** addresses the Future Baseline and sets out information that the Applicant kindly provided to us to inform discussions regarding the Future Baseline. We have taken this information into account in setting out our view as to the appropriate range for the Future Baseline in **REP4-049** in response to the ExA's Rule 17 request. Hence, we only deal here with points not specifically covered in **REP4-049**.

8. In Table 1, the Applicant provides further analysis of how growth was achieved between 2014 and 2019. As set out at paragraph 6 of **REP3-123**, the Applicant does not appear to have considered the extent to which peak day runway growth was driven by growth in declared capacity, which is no longer proposed as the current declared capacity already exceeds that assessed as the throughput for the Baseline Case (**REP4-049**, paragraph 11). Nor has it considered the extent to which the apparent spreading of the peak was influenced by the ability of airlines to add new year round services using the additional capacity declared that would naturally spread the peak, when combined with the replacement of highly seasonal charter services by low cost airlines operating with a less seasonal profile. Hence, we remain of the view that it is not appropriate to seek to extrapolate these ratios, even on a declining trend, as a basis for assessing the throughput attainable now that the capacity of the existing single runway as effectively 'maxed' out.

9. The reason that we have necessarily focussed on the detail of how growth will be attained in the Baseline Case (**REP4-022**, paragraph 2.19) is because, at a capacity constrained airport, the key question is how airlines will be able to add additional flights within the capacity available rather than it being fundamentally a question of underlying demand. This necessarily relies on a more granular bottom up assessment of how additional services can be accommodated within the constraints, having regard to the operating patterns of the airlines in different markets.

10. It is also different from the assessment of the scale of market available to an airport, having regard to competition, that is necessary to validate the longer term growth prospects and reasonable demand forecasts when additional capacity is planned. It is for this reason that top down forecasting is the most appropriate approach to set the ceiling on the demand that an airport could attract having regard to underlying drivers of demand, its catchment area and the level of competition in the market. The ability of an

airport to actually attract the unconstrained demand available to it is then constrained by its existing or planned capacity.

11. The Applicant has sought (**REP4-022**, paragraph 1.1.6) to draw parallels with the approach adopted in preparing forecasts for the Luton Airport DCO and it is important to highlight that, in this case, econometrically based top down modelling was undertaken to derive an unconstrained projection of the demand that the Airport might attract, with sensitivity testing having regard to:

- *Faster or slower economic growth*
- *Higher or lower costs of travel, including carbon costs*
- *The provision or otherwise of additional runway capacity at Heathrow and/or Gatwick*

Capacity constraints, in terms of the timescale for the phased provision of additional capacity at Luton, were overlaid on these underlying market projections to define an appropriate core planning case and faster and slower growth cases to ensure that the environmental impact assessments were robust. At this level, a bottom up approach was necessarily adopted for some elements to derive detailed busy day timetables for assessment purposes.

12. We have addressed in detail the individual components of the Applicant's claimed Baseline growth in **REP4-049** and set out our alternative views. We do not repeat these here. We concur with the Applicant's explanation at paragraph 2.1.7 of **REP4-022** that its presentation of the components of growth did not, in themselves, include double counting of effects. However, we remain of the view as set out in **REP4-049**, that the Applicant's approach failed to properly consider the inherent linkage between the ability to add new operations in the peak and the consequential flattening of the peak when such services are operated on a year round basis. We consider that this is key to understanding the scope for further material spreading of the peak in the Baseline Case.

13. Our principal views in relation to each of the components of growth discussed by the Applicant in section 2.2 of **REP4-022** have been set out in **REP4-049** but we would make the additional comments:

- *Peak Growth - examination of the profile of slots allocated in Summer 2024 (Figure 3 of **REP4-049**) shows the limited scope going forward for growth to be attained on different days in the week. As the Applicant says, the difference between the busiest day in August and the least busy day has narrowed and, it follows, that there is now less scope for continued narrowing of that gap. We considered this in setting out our view of the appropriate Baseline Case in **REP4-049** and provided movement estimates for the average day in the peak month and the average day through the whole summer period as used for noise monitoring. Ultimately, the number of additional slots available on most days in the week in summer is low and this acts as a limit to growth. In **REP4-049**, we considered the impact of an increase of 12 or 24 movements on the busy day and how this would enable growth over the year in the Baseline Case.*
- *Peak Spreading - As explained in **REP3-123** and **REP4-049**, much of the spreading of the peak over the period 2010-2019 was driven by the ability of the Airport to grow at peak and enable more year round services to operate, resulting in proportionately higher growth in the off-peak months. This was also linked to the change in the mix*

of traffic at the Airport, with less dependence on the highly seasonal operations of charter airlines and more dependence on year round low cost operations. Given this shift in traffic composition has already occurred, there is less scope for ongoing adjustment. Our assessment of the Baseline assumes that the degree to which there will be continued spreading of the peak will be driven largely by airlines' ability to add year round services within the limited capacity still available in peak periods.

- *In relation to peak spreading, we note that the Applicant also addressed this in its ISH7 Actions **[REP4-037]** in response to the ExA's Action Point 8. Whilst this deals with the incentives for airlines to operate more in off-peak periods, it remains the case that underlying passenger demand in many markets remains highly seasonal and airlines will only operate off-peak or extend their operating season to the extent that levels of demand are sufficient for services to be operated viably. Although pricing incentives can also impact on passengers' willingness to adjust their travel plans when passed through to the air fare, this may not be sufficient to stimulate the market in off-peak periods and, ultimately, it may simply not be economic for airlines to meet that demand notwithstanding any discounts to airport charges. The Applicant's approach to forecasting does not seem to take this into account.*
- *Aircraft Size and Load Factor - in relation to aircraft size trends, we largely agree with the Applicant except that, in respect of the Baseline, we have been more cautious about the ability to accommodate materially more long haul services within the limited spare capacity available from 2024 onwards. We are also slightly more cautious about the extent of further growth in average year round load factor. Nonetheless, as set out in **REP4-049**, we considered both the Applicant's and our assessment of future load factors in deriving a reasonable range for the Baseline Case.*

Sensitivity Analysis

14. In relation to the sensitivity testing requested by the ExA in relation to the Future Baseline, we have provided the Applicant with the information requested to enable this sensitivity testing to be undertaken.

Other Matters

15. It is notable that the Applicant has made only limited response to the bulk of **REP3-123**, which was addressed principally to ensuring that the assessment of the impacts of the NRP is based on robust and realistic forecasts of demand to use the Airport. This is a key part of the JLAs' concern given the need to ensure that growth is managed in line with its impacts as they arise over time, as explained in other submissions at this Deadline. The JLAs' current position on the matters flagged by GAL is set out in the Draft SOCG on Need and Capacity.

16. It is important to emphasise that ensuring that the projections of the use of the NRP are robust is at least as important to the validity of the impact assessments as getting the Baseline Case right. To reiterate our position, subject to being able to verify that the simulation modelling is robust, it appears plausible that the NRP may be able to accommodate c.80 mppa over the longer term based on the latest simulation modelling

presented by the Applicant. However, the question remains as to the timescale over which the passenger demand at Gatwick will build up and how this interacts with matters such as the transition of the airline fleet to new generation aircraft or the realisation of surface access targets and mitigations so as to ensure that controls and limits are set appropriately to manage the impacts of the NRP. It is equally important that the timescale over which the benefits of the development will arise are properly understood and that those benefits are not overstated.

17. In that regard, we note the further submission from Heathrow Airport Ltd **[REP4-118]**, which relates to how the Applicant has addressed the demand interface with Heathrow in its forecasting. In particular, it remains our view that Heathrow Airport is correct to highlight (paragraph 2.1.2 of **REP4-118**) that policy requires the Applicant to demonstrate that the demand that it seeks to meet is different from and complementary to the development of the hub at Heathrow. For the reasons set out in **REP3-123**, we do not consider that the Applicant has yet done so adequately, notwithstanding it response to Heathrow Airport Ltd **[REP4-025]**.

18. As we demonstrated clearly in Section 7 of **REP3-123**, it is not reasonable to rely, as the Applicant does, on there necessarily being the level of excess demand in the London airport system that would have no choice but to use Gatwick, assuming the NRP proceeds. Dependent on the assumptions made about other airports, including Heathrow, the demand available to Gatwick could be lower than claimed by the Applicant such that, at the very least, the build up to 80.2 mppa would be slower, even if that throughput could eventually be achieved on the runways.

19. For this reason, we strongly prefer the Applicant's top down modelling of demand as this does at least reflect how Gatwick may interact within a competitive market. However, concern remains that the core case is solely based on the assumption that no additional airport capacity is consented across the London airport system over the period to 2047, which does not appear a plausible assumption. Hence, we would favour the assessment of the benefits of the NRP project being undertaken based on a case that provides for some additional capacity in the system, including at Heathrow, in order to demonstrate that the benefits of the NRP are truly additional to and complementary to growth of the hub at Heathrow. As noted in **REP-052**, this would require elements of the economic case to be reworked as these rely on the as discussed in paragraphs 52-56 of **REP4-052**.

YAL/3.6.24