



Gatwick Airport Northern Runway Project

Environmental Statement

Appendix 14.9.9: Report on Engagement on the Noise
Envelope - Clean Version

Book 5

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Report on Engagement on the Noise Envelope¹

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¹ The Noise Envelope Group Output Report refers to this report as the 'Report on Noise Envelope Engagement'.

This Report

This Report on Engagement on the Noise Envelope sets out the process and summarises the consultation carried out by Gatwick Airport Limited (GAL) - beyond the prescribed Northern Runway Project (NRP) Consultations - for further engagement with stakeholders through a noise envelope Group (NEG), to seek views on, and develop the noise envelope for, the Northern Runway Project Development Consent Order (DCO) proposal. This report also includes copies of the various presentations given, papers submitted, and notes of the meetings held.

Objective

The aim of the noise envelope engagement was to further explore the NRP DCO noise envelope proposal - through discussion of the themes identified in the DCO consultation feedback - in order to support the creation of a feasible, clearly defined, measurable and enforceable noise envelope.

Process

The development of the noise envelope was informed through an engagement process which commenced in September 2021 when GAL published the Preliminary Environmental Impact Report (PEIR) as part of its NRP DCO public consultation. The PEIR provided an outline of the noise envelope and sought views on how it should be developed. Having completed the public consultation, attention turned to engagement with a full range of stakeholders interested in aircraft noise impacts around Gatwick - including the Local Authorities - through the NEG and associated sub-groups. Arrangements for complementary targeted engagement with Local Authorities through a series of Noise Topic Working Groups (the work of the Topic Working Groups is covered separately in the NRP engagement reports) were also put in place.

GAL formed a NEG (Terms of Reference at Appendix A) in May 2022 to seek further views on the noise envelope to help guide the development of the final noise envelope proposal. Two supporting sub-groups were established; the Local sub-group and the Aviation sub-group, to facilitate discussions with local communities, local authorities, and aviation stakeholders. (See Figure 1)

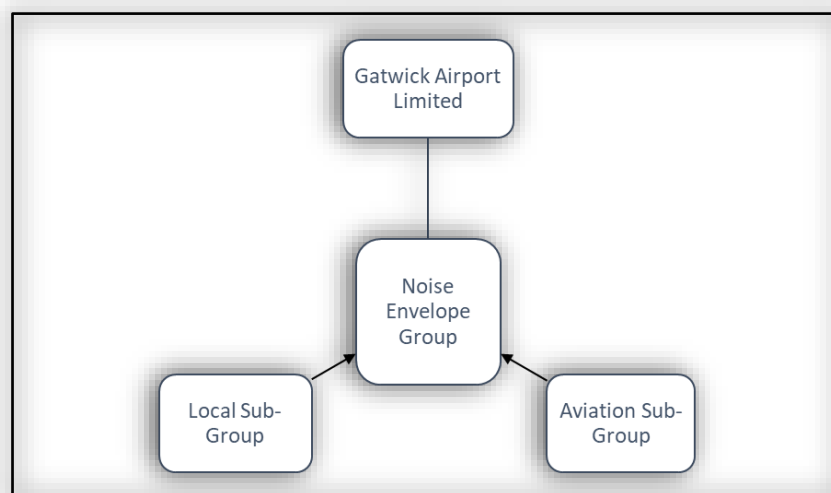


Figure 1

Each sub-group and NEG meeting was planned to be focussed on the themes identified through the DCO consultation responses. This meant that each meeting cycle was able to discuss one or more of the themes drawn from the DCO feedback which allowed the group to review each theme methodically, the timing of which was set out in the Terms of Reference. The four themes drawn from analysis of the Preliminary Environmental Information Report (PEIR) consultation responses were:

1. Developing the noise envelope – policy, guidance, PEIR consultation response
2. Options – metrics and associated topics
3. Operating the noise envelope – monitoring, reporting, actions GAL can take
4. Enforcement – periodic review, enforcement

The final two meetings focussed on producing the *Noise Envelope Group Output Paper*.

The briefings and discussions at each of the Local and Aviation Sub-Groups were used to inform those representing each sub-group at the subsequent theme-linked NEG. From inception five NEG meetings, four Local Sub-Group meetings and three Aviation Sub-Group meetings were scheduled with the outcomes of the engagement process being reported through Gatwick's existing noise engagement and management structure which includes the Gatwick Airport Consultative Committee (GATCOM, the Noise and Track Monitoring Advisory Group (NaTMAG) and the Noise Management Board.

By the time the NEG process had culminated the meeting schedule and structure had evolved slightly, for example, the sub-group 'kick-off' meetings were combined. In addition, the period of engagement was extended in response to concerns over the timeframe for the process raised by some local stakeholders. This enabled two additional meetings to be scheduled, meaning that in total 12 two-hour meetings dedicated to the NEG process were held between 26 May and 11 October 2022.

A full portfolio of the presentations provided, papers submitted, and notes of the meetings held are enclosed with this report.

Stakeholders

Airlines and industry trade bodies, Local Authorities and community noise action groups were all included in the noise envelope engagement process.

The engagement structure was based upon the Noise Management Board (NMB), in particular utilising the memberships of the NMB Community Forum (NCF) and NMB Delivery Groups (NDG) to form the two sub-groups. The membership was supplemented, as necessary, to ensure appropriate stakeholder representation. The NEG was chaired by GAL and included invited representatives from both sub-groups, local authority Environmental Health Practitioners (EHPs), technical experts and GAL.

Support for the NEG and the sub-groups included subject matter experts - for example from Airport Coordination Limited (ACL) - to provide meeting materials, brief meetings and answer questions in a way that was clear and understandable. For a full list of stakeholders and meeting dates see Appendix B.

Schedule of Meetings

Originally conceived to run from 26 May until 9 September, the period of engagement was extended to 11 October with the *Noise Envelope Group Output Report* completed and published the week commencing 31 October.

Meeting	Date (all 2022)
Local and Aviation Sub-group Joint Meeting	26 May
Noise Envelope Group	14 June
Local Sub-group	23 June
Aviation Sub-group	27 June
Noise Envelope Group	12 July
Local Sub-group	19 July
Aviation Sub-group	20 July
Noise Envelope Group	9 August
Local Sub-group	16 August
Noise Envelope Group	6 September
Local and Aviation Sub-group Joint Meeting	13 September
Noise Envelope Group	11 October

Figure 2

Output

The output of the engagement process was to be a report (the *Noise Envelope Group Output Paper*) setting out proposals for the addition of more detail and/or alternative approaches to the noise envelope proposed in the NRP PEIR. The feedback from the statutory consultation on the noise envelope proposed in the NRP PEIR, and from this engagement process, was to be used to inform the DCO application being prepared for submission by GAL.

The possibility of including a *Statement of Common Ground*, which captured areas where participants agreed and / or disagreed with GAL's suggested noise envelope, was considered as part of the process output. However, the majority of the further proposals put forward by GAL were not agreed with by the community noise action group representatives on the NEG, many of whom oppose any expansion of Gatwick airport. Other suggestions made were considered to be disproportionately complex or onerous in the context of the scale of likely noise impacts associated with the NRP. The *Noise Envelope Group Output Report* captures a summary of the areas discussed which might have been set out in a *Statement of Common Ground*.

Stakeholder Views on the Process

Throughout the process a number of the community noise action group representatives expressed strong reservations about the engagement process, these concerns are captured in the group's briefing material and in correspondence included at Attachments 2, 3 and 4 respectively.

Community noise action group concerns related to the entire process, its timeframe, design, composition and execution. In particular there was some focus on the perceived lack of alignment, or compliance, with the CAA publication CAP 1129 *Noise Envelopes*. Finally, on completion of the process one group in particular did not accept that the final *Noise Envelope Group Output Report* was a valid or complete record of the noise envelope discussions.

In terms of timeframe, GAL's view was that the noise envelope engagement process had started in September 2021 with the NRP DCO public consultation, a point acknowledged by some, including

members of the community noise action groups. The subsequent NEG process has provided for 20+ hours of direct discussion with stakeholders, over 12 NEG meetings. This included a timeframe extension to accommodate two further meetings following feedback from community noise action group representatives.

The engagement process established through the NEG, and set out in the Terms of Reference at Appendix 1, was designed to facilitate discussion of the themes identified in the DCO consultation feedback in order to support the creation of a final noise envelope proposal. The outputs from this process have been used to inform the DCO application and the noise envelope has evolved on the basis of the feedback sought and received through the NEG process.

Contrary to the views expressed by community noise action group representatives, GAL believes it went beyond the engagement envisaged in CAP 1129, for instance by including community noise action groups directly in the engagement process alongside the suggested Local Authorities and other stakeholders.

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Appendix 1 - Noise Envelope Engagement Process | Terms of Reference

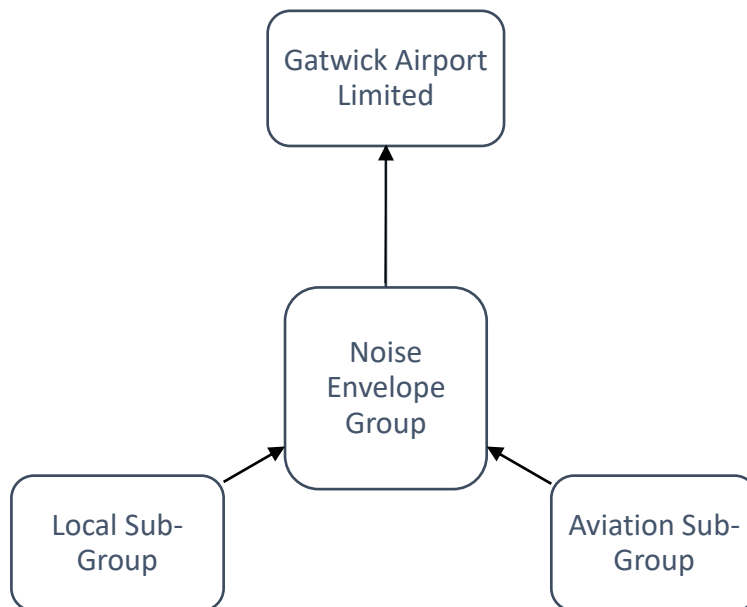
Aim

The aim of this engagement process will be to further explore the Northern Runway Project DCO noise envelope proposal - through discussion of the themes identified in the DCO consultation feedback - in order to support the creation of a feasible, clearly defined, measurable and enforceable noise envelope proposal.

Output

A document setting out proposals for the addition of more detail and/or alternative approaches to the outline noise envelope proposed in the Northern Runway Preliminary Environmental Information Report. Taking account of feedback from the statutory consultation on the outline noise envelope proposed in the Northern Runway Preliminary Environmental Information Report, and feedback from this engagement process, the outputs will be used to inform the Development Consent Order application being prepared for submission by Gatwick Airport Limited (GAL). A note may be prepared on areas where participants agree and / or disagree with GAL’s suggested noise envelope (“Statement of common ground”).

Engagement Structure



Membership

The work is being led by GAL. The engagement structure will be based upon the Noise Management Board, in particular utilising the memberships of the NMB Community Forum (NCF) and NMB Delivery Groups (NDG) to form sub-groups. The membership will be supplemented, as necessary to ensure appropriate stakeholder representation. The Noise Envelope Group will be chaired by GAL.

and could include invited representatives from both sub-groups, local authority Environmental Health Practitioners (EHPs) and/or technical experts, GAL and Airport Coordination Limited (ACL).

Support for the Noise Envelope Group and the sub-groups will include subject matter experts - to provide meeting materials, brief meetings and answer questions in a way that is clear and understandable.

Local - Sub-Group	Aviation - Sub-Group	Noise Envelope Group
<ul style="list-style-type: none"> • Existing NCF • + Northern Runway Noise Topic Working Group EHPs • 1 x NaTMAG (GATCOM Noise Rep) • 2-4 x subject matter experts 	<ul style="list-style-type: none"> • Existing NDG • + airline reps • 1 x ACL subject matter expert • 2-4 x subject matter experts 	<ul style="list-style-type: none"> • GAL Chair • 5 x NCF Reps • 3 x NDG Reps • 1 x NaTMAG (GATCOM Noise Rep) • 1 x GAL • 3 x EHPs / Technical • 1 x ACL subject matter expert • 2-4 x subject matter experts

Observers will be invited to the Local Sub-Group and the Noise Envelope Group meetings on a case-by-case basis.

Ways of Working

Each sub-group and Noise Envelope Group meeting will be focussed on the basis of the themes identified through the DCO consultation. This means that each meeting may deal with one or more of the themes drawn from the DCO feedback. This will allow the group to review all of the themes methodically in the time available.

Papers will be made available 5 days before each sub-group meeting. This will allow members to self-brief ahead of each themed sub-group meeting at which subject matter experts will talk members through the theme and the relevant feedback received ahead of an open discussion. Local and Aviation sub-group meetings will be held a minimum of 3-weeks ahead of each thematic Noise Envelope Group meeting. This will allow views to be discussed in the sub-groups but also allow a period following each sub-group meeting for stakeholders to further evolve their views ahead of the relevantly themed Noise Envelope Group.

The ideas and perspectives shared by the Local and Aviation sub-groups should be brought to the Noise Envelope Group. Sub-group representatives at the Noise Envelope Group will be responsible for ensuring that the views of all stakeholders they represent are shared with the Noise Envelope Group.

Study Content

	Theme	Content
1	Background	Policy, PEIR Proposal, Consultation Feedback Themes
2	Noise Envelope Options	Metrics, Years, Forecasts, Fleet
3	Operating a Noise Envelope	Process, Forecasts, Actions by GAL, Reporting
4	Enforcement	Review

General Points

Where possible initial group meetings will be held in person to help build confidence and engagement.

The NMB code of conduct applies.

It may be that the group is not able to agree on a single workable noise envelope solution, but instead delivers clear preferences on certain aspects of how they would prefer a noise envelope to be formed and administered.

Participation in this noise envelope engagement process does not prejudice the position that any member may wish to take on the noise envelope in the future. The Planning Inspectorate will examine GAL's final proposal and ultimately determine the noise envelope that would form part of the DCO application.

Timeline

See Annex 1 for the illustrative schedule of meetings. The meetings will be focussed on the basis of the themes identified through the DCO consultation.

The final outputs from the Noise Envelope Group should be shared with Gatwick Airport Limited no later than 9 Sep 22 in order to inform the current DCO preparation programme.

Annex 1 – Illustrative Meeting Schedule

	Week/C	23-May	30-May	06-Jun	13-Jun	20-Jun	27-Jun	04-Jul	11-Jul	18-Jul	25-Jul	01-Aug	08-Aug	15-Aug	22-Aug	29-Aug	05-Sep
Noise Envelope Group			◆		◆				◆				◆				◆
			Process & ToR		Theme 1				Theme 2				Theme 3 & 4				
Local SG		◆				◆				◆				◆			
		Theme 1				Theme 2				Theme 3 & 4				Review			
Aviation SG		◆				◆				◆							
		Theme 1				Theme 2				Theme 3 & 4							
Noise Governance		◆					◆		◆	◆			◆				
		NCF					GATCOM SG		NEX	GATCOM			NaTMAG				
										NDG							

Meeting dates are illustrative at this stage. The briefings and discussions at each of the Local and Aviation sub-groups will inform those representing each sub-group at the relevantly themed Noise Envelope Group. In addition, it may be useful to provide progress updates at some of the existing noise governance and oversight meetings listed. It is planned to schedule five Noise Envelope Group meetings, four Local Sub-Group meetings and three Aviation Sub-Group meetings.

Appendix 2 - Gatwick Airport Noise Envelope Group Meetings | Dates and Attendees

Noise Envelope Group

Position	Appointed	Organisation
GAL Chair	Rebecca Mian	GAL
NCF Representatives	Warren Morgan	Independent - Chair of SG
	Liz Lockwood	Tandridge District Council
	James Lee	TWANSNG
	Charles Lloyd	GACC
	Sally Pavey	CAGNE
NDG Representatives - Aviation SG - not AT providers	Graham Lake	Independent - Chair of SG
	Jonny Petts	Easyjet
	Lynne Clark	
	Spencer Norton	BA
	Simon Scholey	
Stijn Lambrecht	TUI	
NaTMAG/GATCOM Representative	Mike George	GATCOM
GAL Representative	Andy Sinclair	GAL
Environmental Health Practitioner /Technical Expert	David Monk	Crawley
	Leon Hibbs	Reigate
	Adam Dracott	Mid Sussex
	Rob Ivens	Mole Valley
	Lee Money	Horsham
Subject Matter Experts - briefers and contributors (not involved in debate)	Murray Taylor	GAL
	Steve Mitchell	Mitchell Environmental
	Nathan Smeaton	GAL
	Robert Drew	GAL

Local Sub-Group

Position	Appointed	Organisation
Sub-Group Chair	Warren Morgan	Independent
NCF Representatives	Existing NCF	
NaTMAG/GATCOM Representative	Mike George	NaTMAG
Environmental Health Practitioner /Technical Expert - Noise topic working group	David Monk	Crawley
	Leon Hibbs	Reigate
	Rob Ivens	Mole Valley
	Adam Dracott	Mid Sussex
	Lee Money	Horsham
Subject Matter Experts – briefers and contributors (not involved in debate)	Murray Taylor	GAL
	Steve Mitchell	Mitchell Environmental
	Nathan Smeaton	GAL
	Robert Drew	GAL

Aviation Sub-Group

Position	Appointed	Organisation
Sub-Group Chair	Graham Lake	Independent
NDG Representatives	Henry Game	ANS
	Vicki Hughes	
	Victor Gosling	
	Robin Clarke	NATS
	Andrew Burke	
	Ian Jopson	
	Mark Simmons	CAA
	Warren Morgan	Independent
	Jonathan Drew	
	Kim Heather	GAL
	Andy Sinclair	
	Wojciech Witkowski	
	Ruud Ummels	To70
Rebecca Mian	GAL	
Airline Representatives (Top 20 Gatwick airlines including 3 NEG airlines)	Jonny Petts	Easyjet
	Lynne Clark	
	Spencer Norton	BA
	Simon Scholey	
	Stijn Lambrecht	TUI
	Jorge Otero	Vueling
	Hugo Nilsen	Norwegian
	Base Captain	Ryanair
Gabor Tiba	Wizzair	

	Peter McDonnell	Aerlingus
	Dan Saunders	Aurigny
		Tap
		Turkish Airlines
		Air Baltic
	Charles Auty	Eastern Airways
	Rajesh Udhalikar	Emirates
		Iberia Express
		Air Europa
	Frankie Schembri	Air Malta
		Royal Air Maroc
	Christopher Lum	Jet Blue
	Mark Brady	West jet
Subject Matter Experts – briefers and contributors (not involved in debate)	Murray Taylor	GAL
	Steve Mitchell	Mitchell Environmental
	Nathan Smeaton	GAL
	Robert Drew	GAL

Meetings

<u>Noise Envelope Group – Meeting 1</u> - The Marcel Suite, Sofitel Hotel, - Gatwick Airport North Terminal	Tuesday 14 th June 15:00-17:00
Local Sub-Group – Meeting 2 - The Marcel Suite, Sofitel Hotel, - Gatwick Airport North Terminal	Thursday 23 rd June 15:00-17:00
Aviation Sub-Group – Meeting 2 - Online – Teams link provided on invitation	Friday 24 th June 13:00-15:00
<u>Noise Envelope Group – Meeting 2</u> - The Marcel Suite, Sofitel Hotel, - Gatwick Airport North Terminal	Tuesday 12 th July 15:00-17:00
Local Sub-Group – Meeting 3 - Online – Teams link provided on invitation	Tuesday 19 th July 15:00-17:00
Aviation Sub-Group – Meeting 3 - Online – Teams link provided on invitation	Wednesday 20 th July 09:00-11:00
<u>Noise Envelope Group – Meeting 3</u> Online – Teams link provided on invitation	Tuesday 9 th August 15:00-17:00
Local Sub-Group – Meeting 4 Online – Teams link provided on invitation	Tuesday 16 th August 15:00-17:00
<u>Noise Envelope Group – Review Meeting</u> Online – Teams link provided on invitation	Tuesday 6 th September 15:00-17:00
<u>Joint Sub-Group – Review Meeting</u> Online – Teams link provided on invitation	Tuesday 13 th September 15:00-17:00
<u>Noise Envelope Group – Review Meeting</u> Online – Teams link provided on invitation	Tuesday 11 th October 15:00-17:00

Appendix 3 – Meeting Notes

01. 20220526 – Noise Envelope Joint Sub-Group Meeting 1 – Theme 1 Presented

Gatwick Airport Noise Envelope Joint Sub-Group Meeting 1 **Theme 1 Presented**

Thursday 26th May, 2022 – Waters Suite, Sofitel

Key Points & Actions

	Discussions and Questions Covered:	Initials	Responses from GAL
JSG1.1	Challenge from community noise group (CNG) representatives on the timeline for this stage of the engagement process and the lack of an independent chair. It was suggested that a CNG rep could act as co-chair		<i>This will be taken to the NEG for discussion at the ToR session</i>
JSG1.2	'Flightpath to the Future' the DfT Strategy Document that had been released that very morning. It was not yet known if this would have a bearing on the work of the group	CS	Flightpath to the Future gives policy guidance on the near-term future of aviation, but not detail on noise policy. If further government policy on noise should emerge during the study, we will endeavour to respond to it
JSG1.3	A request for flexibility in the timeline at the end of the process to ensure that agreement could be reached	SP	<i>This was addressed with advice from GAL that the timeline dictates a tight turnaround following the inclusion of further community engagement in the process as a response to requests within the DCO feedback</i>
JSG1.4	It would help to understand how Gatwick has interpreted some of the relevant policy (incl. CAP 1129) and discussed the options for incentivising airline fleet replacement	FF	GAL believes that through the NEG CAP1129 guidance will be followed. Options to incentivise fleet replacement will be discussed in Theme 3 meetings

JSG1.5	The policy gap on night noise and health effects in relation to SoNA was raised	MG	SM referred to CAP2161 which considers the SONA findings on night noise metrics
JSG1.6	Information about the L_{Aeq} areas and population counts within a lower L_{Aeq} contour was discussed. It was advised that further conversation could be had after the meeting	JL	We will return to this in Theme 2 meetings
JSG1.7	<p>The need to focus on the policy objective was highlighted; ‘share the benefits’, and the balance of increased noise versus increase in passenger numbers – Policy needs to be up to date and comply</p> <p>Further questions around how the benefits are being shared. The Noise Envelope just seems to use the slow transition fleet case. Also discussed the merits of sensitivity testing and using a 2019 ‘no growth’ scenario. ie what does a 2019 no growth scenario look like with the anticipated technology benefits in the future are overlaid</p>	<p>CL</p> <p>LH</p>	<p>Agreed</p> <p>Noted, this could be a good way to discuss benefits sharing. GAL will aim to provide some analysis of this in the Theme 2 sub-group meeting</p>
JSG1.8	Does a Noise Envelope prohibit looking at other ways of controlling noise?	JL	Not at all. We hope the noise envelope will incentivises all noise management activities
JSG1.9	Debate around the PINS requirements and ‘do nothing’ versus ‘do minimum’		
JSG1.10	Whether the 2029 scenarios take into account all existing permissions		This is the intention
JSG1.11	<p>Why have GAL not taken into account the airspace and ATM technology benefits like TBS, which will decompress the main runway when the northern runway is in use, and offer significant benefit</p> <p>Why not increase certainty to below 51dB?</p>	JL	<p>We hope the noise envelope will incentivises all noise management activities</p> <p>There are difficulties modelling noise below these levels. Theme 2.</p>
JSG1.12	In relation to the 8hr night L_{Aeq} contour, why was the contour not reducing so much in size due to the existing ATM CAP; was the assumption this would remain in place?	CL	Night noise contours are reducing, but note the Night Restrictions, as assumed to prevail in

			future, cover only the period 2330 to 0600 hours, not the full 8-hour night. The noise enveloped proposes a full 8-hour night noise contour
JSG1.3	How might changes to the fleet forecast change the model and thus the proposed Noise Envelope	DM	We have modelled a range of fleets from the central case to the slow transition case. Theme 2 meetings will come back to this
JSG1.14	Why only using the summer contour (albeit the busy period) when plans include more intensive use all year round?	DM, LH	Theme 2 meetings will discuss this
JSG1.15	Does playing around with the ILS change the shape of an Envelope?	LL	The noise envelope as proposed is the area of noise contours not their shape
JSG1.16	Is there a commitment to keeping night-flight levels?	LH	The Night Restrictions set these limits over 6.5-hour night
JSG1.17	How might dispensation affect the night contour?	RI	SM noted the noise envelope contours are based on actual flights not scheduled, so dispensations are included and have to be accounted for
JSG1.18	Request that GAL fund competent, independent technical advisor be provided to the CNGs. Proposed To70 CAGNE will not support the use of To70 as the technical advisor	CL SP	GAL to reply

Summary of Actions

Joint SG 1	Action	Due	Response By
Action 1	All members to provide feedback on the material discussed via their representative to the NEG meeting	Next NEG	All

Action 2	Discuss opportunity for a co-community chair at the NEG	Next NEG	All

Attendees

Name	Organisation
Caroline Salmon	Mole Valley District Council
Liz Lockwood	Tandridge District Council
Sally Pavey	CAGNE
Charles Lloyd	GON
Fran Flammiger	GACC
Andy Sinclair	Gatwick Airport Limited
Atholl Forbes	PAGNE
Nick Eva	Plane Justice
Ed Winter	Plane Wrong
Martin Barraud	GON
Peter Barclay	GACC
Warren Morgan	NCF Chair
Rebecca Mian	Gatwick Airport Limited
Steve Mitchell	Mitchell Environmental
Kim Heather	Gatwick Airport Limited
James Lee	Independent
Mike George	GATCOM
Spencer Norton	British Airways
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Rob Ivens	Mole Valley
Murray Taylor	Gatwick Airport Limited
Jonathan Deegan	Gatwick Airport Limited
Nathan Smeaton	Gatwick Airport Limited

Apologies

Name	Organisation
Jonny Petts	Easyjet
Lynne Clark	Easyjet
Graham Lake	Independent

Future Meetings

Noise Envelope Group – Meeting 1	Tuesday 14 th June 15:00-17:00
Local Sub-Group – Meeting 2	Thursday 23 rd June 11:00-13:00
Aviation Sub-Group – Meeting 2	Monday 27 th June 15:00-17:00
Noise Envelope Group – Meeting 2	Tuesday 12 th July 15:00-17:00
Local Sub-Group – Meeting 3	Tuesday 19 th July 15:00-17:00
Aviation Sub-Group – Meeting 3	Wednesday 20 th July 09:00-11:00
Noise Envelope Group – Meeting 3	Tuesday 9 th August 15:00-17:00
Local Sub-Group – Meeting 4	Tuesday 16 th August 15:00-17:00
Noise Envelope Group – 4	Tuesday 6 th September 15:00-17:00

Gatwick Airport Noise Envelope Group Meeting 1
Theme 1 Feedback

Tuesday 14th June, 2022 – DeSoutter Suite, Sofitel

Key Points & Actions

	Discussions and Questions Covered:	Initials	Responses from GAL
NEG1.1	The question of whether GAL would fund additional technical support for community representatives was re-visited	MG, DM AS	GAL is not prepared to provide additional funding at this point – funding has already been provided to EHOs for technical support
NEG1.2	It's suggested that Luton paid for independent technical advisors, the name of which will be sought and fed back at the next meeting	CL	
NEG1.3	It is important to identify what is fundamentally trying to be achieved here	JL, AS	GAL appreciates that there will be areas where we do/not agree – but we want and need community views of this airport proposal. And GAL will take all views and input them into the feedback
NEG1.4	The opinion is re-iterated that the ToRs are wrong, and timescale has been imposed and is greatly inferior to Luton	CL, SM	It was asked where the information from Luton has come from– any information and guidance on their process would be gratefully received
NEG1.5	The NE team wants to clarify that it's open to all input and help	SM, CL	This is pleasing to hear
NEG1.6	Charles Lloyd presents slides on his community paper – submitted and circulated to all The offer to discuss/present any other thoughts/papers was offered to all and declined	CL GAL	
NEG1.7	Slide 4 – The wording is incorrect, and is important to note, as it changes the meaning:	SM	

	The APF quotation is not to '...reduce noise' specifically, it is to '...reduce those significantly affected by noise...'		
NEG1.8	It might be useful to separate what the policy says, and what GAL suggests they are going to recognise and do	JL	
NEG1.9	There is a challenge to Recommendation 10 on the slides	SM	
NEG1.10	The challenge will be considered	CL	
NEG1.11	It is suggested that GAL should be able to grow and open a runway as long as it is reducing noise every year Although it is agreed by all that there has to be exceptional circumstances applied to externalities, such as the pandemic	CL, All	
NEG1.12	It is suggested that rather than setting unrealistic reduction targets/expectations, why not aim for a reduction over 5 years? Is there anything else that could be of material benefit to communities that GAL could look at facilitating/providing as noise compensation?	RI	
NEG1.13	It is stated during the slide presentation, that 'as a group, our objective is wider than the policy'	CL, MT	This relates to a national noise metric, not policy. There is a 'where possible' clause in policy, which is key
NEG1.14	There is a need to recognise what benefit there is to be shared? – The only benefit that can currently be seen by community members that there is to be shared is that of reduced noise	JL, MT	There are specific points to be made here in that growth contributes to increased employment in the area, and contributes to industry, amongst others Growth is the main aim of the government, and CAP 1129 highlights that the only way that makes sense is to grow – growth is a continuum

			As part of Sustainable Development, a case has to be made to be able to grow – this is not a one-dimensional metric of benefit to GAL
NEG1.15	This is fundamental to what Sharing the Benefit means	JL, MT	GAL looks at the wider benefit that airports bring – ref. Aviation 2050
NEG1.16	Can we add ATMS? [slide 3 to 9]	RI	
NEG1.17	The key needs to be showing the difference between with/without a 2 nd runway to reflect growth in value of the asset? Is it only sharing the benefit of the fleet mix?	JL, MT	The government is going to look at this and clarify
NEG1.18	Under any measure of development, as airport capacity grows, you must reduce mitigation	CL	
NEG1.19	There may be conditions around policy	DM	
NEG1.20	Clarity is sought on MT's position on Sharing the Benefit – Is GAL looking at interpreting the policy as, what happens locally at the operational stie, and the benefit related to that?	DM, MT	GAL's interpretation of Government's policy position will be presented in the next meeting
NEG1.21	Fundamentally, as airports grow, it gets noisier	DM, MT	This is not true in the longer-term. At the next meeting, the benefits of growth will be shown and discussed
NEG1.22	An offer to look at the same analysis using the N-above metric was put forward Whilst this was accepted, a disagreement was stated with the N metric	SM, CL	
NEG1.23	The question was asked of whether community members -and indeed all – would have to accept at the end of the process that this is a living document, rather than one that is agreed and set?	MG	

NEG1.24	It was suggested that community members are not trying to look for a perfect model, just something that is better than now. The process isn't working because GAL keep defending their points, rather than listening to feedback and suggestions – please stop defending and justifying actions and let's work together to move forward		This point is gratefully received and strongly heard. Policy is always the hardest topic to 'discuss' because it is set – by government, not by GAL, with little clarity. The next theme is metrics, and how they are reported, when and how often, will be discussed, with much more scope and flexibility to reach agreement
NEG1.25	Is there a possibility to invite DfT to one of the meetings to discuss the fundamentals of what policy means? Tim May might be willing?	JL, MG	GAL will look into this and see if someone will agree to attend

Summary of Actions

NEG 1	Action	Due	Response By
Action 1.1	Provide information on Luton – which independent advisor was provided by Luton, and how the ToR process and timescales were arrived at/delivered	Next meeting	CL
Action 1.2	Present interpretation of government's policy, and the benefits of growth	Next meeting	NE Team
Action 1.3	Revisit analysis using the N Above metric	Next meeting	SM
Action 1.4	Ask DfT if a representative would attend a meeting to discuss fundamentals of the Policy	ASAP	NE Team

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Charles Lloyd	GON
Andy Sinclair	Gatwick Airport
Warren Morgan	NCF Chair
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
James Lee	Independent
Mike George	GATCOM
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Rob Ivens	Mole Valley
Murray Taylor	Gatwick Airport
Jonathan Deegan	Gatwick Airport

Apologies

Name	Organisation
Jonny Petts	Easyjet
Lynne Clark	Easyjet
Graham Lake	Independent
Nathan Smeaton	Gatwick Airport

Future Meetings

Noise Envelope Group – Meeting 1	Tuesday 14 th June 15:00-17:00 COMPLETE
Local Sub-Group – Meeting 2	Thursday 23 rd June 11:00-13:00
Aviation Sub-Group – Meeting 2	Monday 27 th June 15:00-17:00
Noise Envelope Group – Meeting 2	Tuesday 12 th July 15:00-17:00
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Aviation Sub-Group – Meeting 3	Wednesday 20 th July 09:00-11:00
Noise Envelope Group – Meeting 3	Tuesday 9 th August 15:00-17:00
Local Sub-Group – Meeting 4	Tuesday 16 th August 15:00-17:00
Noise Envelope Group – 4	Tuesday 6 th September 15:00-17:00

Gatwick Airport Noise Envelope Local Sub-Group Meeting 2
Theme 2 Presented

Thursday 23rd June, 2022 – DeSoutter Suite, Sofitel

Key Points & Actions

Key:

Regular, black font = responses from the NE team during the Sub-Group meeting

Blue, italic font = clarifications provided by the NE team following the Sub-Group meeting

	Discussions and Questions Covered:	Initials	Responses from the NE team
LSG2.1	The 4 written inputs that had been received from GACC x 2, CAGNE and Plane Justice are outlined	SM	
LSG2.2	Confirmation requested about the role of the group, what input would be required and whether the group would decide on metrics today	AF	It was explained that this session would build on the information pack distributed last week to help enhance understanding. Feedback would be taken in the meeting, ahead of the Noise Envelope Group (NEG) and at the NEG itself
LSG2.3	Challenge around the quality of the DCO consultation. View that people did not understand the concept, or the content, as set out in the consultation. Reservations expressed about the remit of this group	SP, SM	The range of responses received were explained, the large numbers of responses that provided input/feedback on noise and that responses had been received from all of the local authorities
LSG2.4	Question of whether the metrics had been modelled/tested to see what sort of results might have come from using alternative metrics CAGNE asked if metrics could be merged to create combined metrics	JL, SP, SM, MB	It was explained that multiple metrics could be used. AF supported this view (specifically around metrics that captured frequency of overflight) The number of flights is incredibly important

LSG2.5	Question asked as to why the baseline changed from 2018 to 2019 and whether 2018 was a better baseline year?	SP, SM	This was due to the delay to the process as a result of the COVID pandemic. But a result of this change was that the noise envelope was more stringent as the noise exposure contours in 2019 indicated a quieter year
LSG2.6	<p>A set of metrics has not yet been established that truly captures the effect. The current concept expects more flights but relies upon less noise per flight</p> <p>Need to understand what we are trying to demonstrate. We could use a combination of the following: change in average noise per ATM; increase in ATM, decrease in noise per aircraft</p> <p>The CAP1129 seems inadequate in this area</p> <p>View that benefit sharing does not exist today, it is entirely consumed by the industry</p> <p>Plea to go back to first principles</p> <p>Example of disturbed twice as many times but with half the noise does not produce a neutral result versus the baseline.</p>	JL, SM	backreference was made to the NMB-led work the catalyst for which was a CNG position paper on noise metrics. Prior to COVID the airport had been able to grow in the period 2015-2019 but also reduce noise impacts
LSG2.7	It was suggested that the L_{Aeq} is a deeply flawed metric	JL, SM	<p>L_{Aeq} is not the only metric – SoNA was criticised, but it has been reviewed subsequently and the report re-published less than a year ago (CAP 1506)</p> <p>This CAA report re-affirmed that L_{Aeq} provides the best correlation when assessing levels of community annoyance</p>
LSG2.8	Metrics that capture health impacts should also be considered	LH	
LSG2.9	FF the issue is the number of overflights and	FF	

	therefore capping of ATM is the best option, but there is also an issue of time between each overflight (intermittency ratio)		
LSG2.10	<p>CAGNE has an issue with the SoNA report including just considering impacts within the 51dBA contour and the location of those 'polled' as part of the study.</p> <p>Could we have additional metrics outside of the 'strict' noise envelope? Also mentioned the relationship with FASI-South and the separation of the two processes (the DCO and the FASI-South) which should be taken forward together, in the view of CAGNE</p>	<p>SP, MG</p> <p>SM</p>	<p>The DCO and FASI-South are distinct projects following necessarily separate processes, the latter being part of a government sponsored programme</p> <p>The impact of FASI-South is unknown</p> <p>The Noise Envelope could incorporate a review process that will allow it to adapt according to what is introduced through FASI-South (amongst other changes that may come along)</p> <p>SM need to have certainty that the noise envelope will work when FASI-South (LH... or another dramatic change like FASI)</p>
LSG2.11	<p>The idea of multiple metrics is supported</p> <p>The L_{Aeq} is a valid metric that may form the basis for controlling noise around the airport but reporting secondary metrics may give the communities some confidence</p> <p>A suggestion made that progress could be assessed over 5-year periods) - as conceded at the last meeting this might be the most appropriate period over which to assess noise impacts/reductions</p>	RI	
LSG2.12	CAGNE believes that the approach to this Northern Runway project is disingenuous given that FASI-South will introduce	SP	

	new flight paths, but this is not included in the DCO material		
LSG2.13	MB reinforced the point about frequency of overflight	MB, SM	In the written feedback that we have received some wished to focus on metrics that took into account populations rather than km ² . It was explained why this might be a challenge due to population growth and provided an example. Also pointed out that Noise Preferential Routes (NPRs) work well in flying over areas that are less well-populated
LSG2.14	The use of km ² is agreed as a good proxy measure, but you could have 2 population metrics, one using a baseline established at the start and then one using the current population picture. Pitfalls are that it may be irrelevant over time if there is significant population growth. A population metric should not be the primary metric but could be a secondary metric	LH	<i>Gatwick does not control population growth within the noise contours, or land use planning which could increase housing. This is a matter for the local authorities. Land Use Planning is also a key parameter within the ICAO balanced approach, and we should include it as a broad topic of discussion</i>
LSG2.15	Will historic data be used to model whether this, or a combination of metrics, will work and what it might look like? And have you already modelled what combinations of metrics might look like?	AF, SM	We have already modelled 70 sets of data
LSG2.16	Based on the PINS comment, 'consideration should be given to summer, winter and annual limits.' The view was expressed that the noise envelope needed more than a summer L _{Aeq}	RI LH, DM	<i>The summer period is the busiest period. There is no other 3-month period, which is busier. It coincides with warmer weather, and when people have windows open in houses for ventilation. Warmer weather may also be a factor in reducing climb performance for some aircraft. When the Government decided upon L_{eq}, it did this having reviewed how other metrics performed in tracking health and annoyance. L_{eq} performed the best overall. Whereas Gatwick acknowledges that</i>

	<p>LH and DM agree that an annual metric should be 'a' primary metric'</p> <p>A summer metric would be expected to be seen as well as an annual L_{Aeq} as primary metrics</p>		<p><i>there will be larger proportional growth in other months bordering the peak, the movements in these months will not exceed the busier summer months, and all things being equal, there is less likelihood of windows being open for ventilation than, say, on hot summer evenings. Assuming one of the purposes of the envelope is to understand the effects to people and limit these, then use of a secondary metric such as L_{den} will not add any more information than L_{eq}.</i></p> <p><i>The noise envelope already correlates an annual ATM throughput with an L_{eq} period footprint. We do not see any likely circumstances where the movements in any equivalent 3-month period outside of the L_{eq} period will be higher than within it.</i></p> <p><i>As stated, Gatwick is open to presenting other information to characterise the noise effects of the operation as part of the envelope process – including L_{den}, Number above contours etc.</i></p>
LSG2.17	<p>The late spring and early summer traffic are also increasing and so should be included somehow in a metric</p>	LL, SM	<p>SoNA tells us L_{Aeq} gives more of a correlation with annoyance than L_{DEN}. The assessment period – 16th June and 15th September – does give the period of peak noise impact at the airport</p> <p>There is a need to focus a headline metric in that peak period, but could have supplementary metrics to cover the rest of the year</p>
LSG2.18	<p>[Following the explanation of approach to the Bristol planning permission and how that was calculated]</p> <p>Using the concept of <i>magnitude, intensity and frequency</i>; the magnitude of the impact should be considered and the magnitude of a change at Gatwick is likely more significant than that of a change at Bristol</p>	RI, SM	<p>The example shared was merely an example of a previous approach upon which a decision has been reached by PINS</p>

LSG2.19	It was asked why a fast transition case was not included (see the York Aviation - which is working on behalf of local authorities – view, which suggests that the central case itself is overly optimistic)	AF	<i>We are required to assess the likely significant effects and propose mitigation for them. We are yet to discuss how a review process would work, so as to keep the envelope relevant. In the case we were ‘undershooting’ the DCO approved envelope because fleet transition had occurred, we would look to reset the envelope to a lower level</i>
LSG2.20	A question was asked of what could be done to prevent the 2032 peak in noise following opening? Would the only option be to feed in growth very slowly over time?	FF	<i>This would not be a normal approach to a big infrastructure/transport project and would likely make any project like this unviable</i>
LSG2.21	The policy tests applied to the envelope was challenged	MB	<i>Gatwick acknowledges that the CNGs have presented a paper which explains their reading of policy. Gatwick’s interpretation is different to the CNGs</i>
LSG2.22	It was challenged as to whether aircraft technology development is focussing on other aspects of climate reduction rather than noise reduction Does this mean that we should not rely on the noise reduction benefits of future aircraft?	SP, MT	It is possible noise reduction benefits of future technology in this respect may change and then this may be something that would have to be captured as part of a noise envelope review process in the same way that an over-performance on noise reduction would likely be the subject of similar action through a review process
LSG2.23	A calculation of the proportion of the benefits sharing be is suggested to be considered as the noise envelope	JL	<i>This could be included for information purposes using the method commented upon by the Planning Inspectorate at the Bristol appeal. However, we note that there is no requirement in policy to provide for a particular ratio of benefits sharing and no settled methodology as to how sharing of benefits should be calculated. We also question how relevant reporting annually on the ratio of ‘benefits shared since 2019’ in the 2030s would be for people at the time</i>
LSG2.24	A question as to whether the uptick on the data in the night period was due	LH, SM	Yes. The Northern Runway project has assumed that the Government’s night flights regime, and associated controls, will remain in place and thus there will be no increase in

	to growth in the shoulder period?		the number of flights during the core night period
LSG2.25	A request for the next Local Sub-Group to be an online meeting was submitted Other attendees preferred the dynamic offered by a face-to-face meeting	SP, AS	The NE team will look in to whether a hybrid meeting is possible

Summary of Actions

<i>Local SG 2</i>	<i>Action</i>	<i>Due</i>	<i>Response By</i>
<i>Action 1</i>	Look into Hybrid meeting		GAL

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Sally Pavey	CAGNE
Fran Flammiger	GACC
Andy Sinclair	Gatwick Airport Limited
Atholl Forbes	PAGNE
Martin Barraud	GON
Warren Morgan	NCF Chair
Robert Drew	Gatwick Airport Limited (Subject Matter Expert)
Steve Mitchell	Mitchell Environmental (Subject Matter Expert)
Kim Heather	Gatwick Airport Limited (Subject Matter Expert)
James Lee	Independent
Mike George	GATCOM
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Murray Taylor	Gatwick Airport Limited (Subject Matter Expert)
Nathan Smeaton	Gatwick Airport Limited (Subject Matter Expert)

Apologies

Name	Organisation
Jonny Petts	Easyjet
Lynne Clark	Easyjet
Graham Lake	Independent
Rob Ivens	Mole Valley
Jonathan Deegan	Gatwick Airport Limited
Spencer Norton	British Airways
Rebecca Mian	Gatwick Airport Limited
Peter Barclay	GACC
Charles Lloyd	GON
Caroline Salmon	Mole Valley District Council
Nick Eva	Plane Justice
Ed Winter	Plane Wrong

Future Meetings

Noise Envelope Group – Meeting 1	Tuesday 14 th June 15:00-17:00 COMPLETE
Local Sub-Group – Meeting 2	Thursday 23rd June 11:00-13:00 COMPLETE
Aviation Sub-Group – Meeting 2	Monday 27 th June 15:00-17:00
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Noise Envelope Group – Meeting 4	Tuesday 6 th September 15:00-17:00

Gatwick Airport Noise Envelope Aviation Sub-Group Meeting 2

Theme 2 Presented

Tuesday 27th June, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered	Initials
ASG2.1	Chair’s Introduction – See below	GL
ASG2.2	Introductions and Summaries to NE process: <ul style="list-style-type: none"> • Background to NEG and process to develop it • NRP timeline, and objectives of a NE • Overview of NEG development process • Policy • Fleet transient assumptions 	SM, MT
ASG2.3	Question to airlines: What could happen that could make it worse than we forecast, even in our Slower Transition Fleet case, which is a 5-year delay in fleet transition from pre-pandemic forecasts?	SM
ASG2.4	Answer: Airports will move aircraft from airports that charge more for noisier types, e.g., Geneva and the German airports	JP
ASG2.5	Draft NE presented	SM
ASG2.6	It was noted that a noise envelope in the form of a noise contour set well way from the airport will encourage good operational practices, whereas an ATM cap would not. It was then asked the airlines to help represent the industry to help inform our CNGs how the airport operated and help us address some of the comments on the communities This was echoed, and airlines were asked for their support especially in theme 3 and slot allocation	GL MT AS
ASG2.7	Concern was raised over unexpected events happening, like ATC restrictions over Europe, to which it was asserted that there will be a review mechanism in place, such as a force majeure clause, e.g., a DCO limit ‘not to exceed’ and we can set lower targets below	JP SM, MT
ASG2.8	Airlines were again asked to feed back any of topics that would make the fleet/operations noisier than expected, all of which add to	MT, SM, AS

	the case to have some headroom in the NE for other stakeholders to understand	
ASG2.9	It was noted that track keeping can be a challenge at Gatwick when optimally managing energy. Emirates would be happy to support by evaluating in simulators (as per current Route 4 departures)	RU
	Key Take Aways from the Meeting	
ASG2.10	Airlines need to understand the restrictions that could be applied by the SoS in approving the DCO, and the potential impact to their operation, as well as the corresponding incentive to transition to a quieter fleet. Note, this message has apparently not yet reached airlines, the NE process needs active airline engagement and feedback to help ensure that the NE is effective without being unduly onerous	
ASG2.11	Timing is short. The DCO application is expected relatively soon and the SoS decision likely before the end of 2024 (Q3). Engagement by airlines is needed now	
ASG2.12	Once approved, any noise restrictions associated with the DCO will in effect become law – a mandatory requirement	
ASG2.13	The pace and effect of fleet transition is material but is difficult to quantify, it may be impacted by noise related measures taken by other airports resulted in airlines redistributing noisier aircraft (eg, to Gatwick). Need more information from airlines and a better view of noise planning trends at other key airports (AMS/GVA etc.)	
ASG2.14	Although CAA NE implementation document (CAP1129) is guidance, rather than requirement, GAL is respecting the guided recommendations in large measure	
ASG2.15	GAL NE proposals will be anchored firmly in government policy	
ASG2.16	NE <i>could</i> be varied by time of day and operating season, more work is needed, especially as relates to both existing, grandfathered and new slots. Airline and ACL views needed	
ASG2.17	GAL appealed for industry to stand together and to communicate their views clearly in this engagement process and if providing feedback to SoS. (Side note should ACC be invited and briefed?)	
ASG2.18	NE proposal is much stronger than a movement cap, which is sometimes seen as an alternative. NE incentivizes continuous improvement (eg. NMB workplan topics CDO, CCO, LNAM, u/c deployment, RNN etc) whereas movement cap is a blunt instrument that does not incentivise improvement of the flights that do operate	
ASG2.19	NE expected to have force majeure type provisions to account for exceptional events (volcanoes, strikes, Wx, drones, blocked runways etc.)	
ASG2.20	NE needs to have a level of contingency provided, planning to use NE to maximum permitted risk exceeding limit and invoking of more onerous restrictions at short notice	

ASG2.21	Appeal from airlines for agenda for next meeting and for better indication of which airline departments should be engaged in process
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Chair's Introduction

Good afternoon

Thank you for joining the meeting, your time and attention to the important topic we are about to discuss is highly appreciated. I do hope that you have had a chance to review the documents that I provided last week, there will nevertheless be a short recap/overview for those that have not yet had the chance.

During today's meeting, should you wish to intervene or raise a question, please use the electronic raise hand facility, you may also use the chat facility which we will endeavour to monitor diligently (if your point is missed, please raise your hand).

Now to the business of the day.

Gatwick Airport Limited intends to apply to the Secretary of State for a Development Consent Order to authorise the alterations to the existing northern runway at Gatwick, which, together with the lifting of the current restrictions on its use, would enable dual runway operations, together with associated development. Gatwick's

view is that Bringing the Northern Runway into routine use offers an innovative, low-impact way of unlocking new capacity and increased resilience from the airport's existing infrastructure.

UK Government has proposed routinely setting noise caps as part of planning approvals for an increase on passengers or flights.

As a part of the northern runway planning process, Gatwick therefore propose to commit to a maximum noise envelope at the start of dual runway operations

A noise envelope (also known as a noise cap) is any measure which restricts noise. The Government proposes advocating caps which are based on setting maximum noise exposure levels such as contour area or noise quota. CAA gives guidance as to the forms noise envelopes can take and how they can be implemented (CAP1129).

A Noise Envelope Group has been established by GAL, including two sub-groups (Aviation and Local). These are intended to provide more information - and – the reason we are here today - the opportunity for discussion.

The aim of this noise envelope engagement process will be to further explore the Northern Runway Project DCO Noise Envelope proposal - through discussion of the themes identified in the DCO consultation feedback - in order to support the creation of a feasible, clearly defined, measurable and enforceable Noise Envelope proposal.

Today's briefing will be led by Steve Mitchell of Mitchell Environmental and Murray Taylor of GAL.

Please take a moment to introduce your affiliation and role for the benefit of other participants, we will then begin the substance of today's briefing and discussions.

Thank you

Attendees

Name	Organisation
Rajesh Udhalikar	Emirates
Jonny Petts	Easyjet
Mark Simmons	CAA
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Murray Taylor	Gatwick Airport
Graham Lake	Independent
Andy Sinclair	Gatwick Airport
Nathan Smeaton	Gatwick Airport
Robert Drew	Gatwick Airport

Apologies

Name	Organisation
Jonathan Deegan	Gatwick Airport
Ian Jopson	NATS
Andrew Burke	NATS
Mark Brady	Westjet
Christopher Lum	JetBlue
Charles Auty	Eastern Airways
Henry Game	ANS
Vicky Hughes	ANS
Victor Gosling	ANS
Robin Clarke	NATS
Spencer Norton	British Airways
Simon Scholey	British Airways
Stijn Lambrecht	Tui
Hugo Nilsen	Norwegian
Gabor Tiba	Whizz Airways

Name	Organisation
Peter McDonnell	Aer Lingus
Dan Saunders	Arigny
Kim Heather	Gatwick Airport
Lynne Clarke	Easyjet

Future Meetings

Noise Envelope Inaugural Joint Sub Group – Meeting 1	Thursday 26 th May 13:00-15:30 COMPLETE
Noise Envelope Group – Meeting 1	Tuesday 14 th June 15:00-17:00 COMPLETE
Local Sub-Group – Meeting 2	Thursday 23 rd June 11:00-13:00 COMPLETE
Aviation Sub-Group – Meeting 2	Monday 27 th June 15:00-17:00 COMPLETE
Noise Envelope Group – Meeting 2	Tuesday 12 th July 15:00-17:00
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Aviation Sub-Group – Meeting 3	Wednesday 20 th July 09:00-11:00
Noise Envelope Group – Meeting 3	Tuesday 9 th August 15:00-17:00
Local Sub-Group – Meeting 4	Tuesday 16 th August 15:00-17:00
Noise Envelope Group – Meeting 4	Tuesday 6 th September 15:00-17:00

Noise Envelope Joint Sub-Group – Review Meeting	Tuesday 13 th September 15:00-17:00
Noise Envelope Group – Review Meeting	Tuesday 11 th October 15:00-17:00

Gatwick Airport Noise Envelope Group Meeting 2
Theme 2 Feedback

Tuesday 12th July, 2022 – Marcel Suite, Sofitel

Key Points & Actions

	Action from NEG2	Response/Action Taken	Discussion in Meeting
Action 2.1	Provide information on Luton – which independent advisor was provided by Luton, and how the ToR process and timescales were arrived at/delivered	Luton’s process was conducted under NDAs	
Action 2.2	Present interpretation of government’s policy, and the benefits of growth	Addressed in previous Sub-Group meeting #1: ‘Background’ on 26 th May.	
Action 2.3	Revisit GACC ‘Sharing Benefits’ analysis using the N Above metric	SM review of N60 night/N65 day as an alternative to L _{Aeq} complete– To be discussed at next meeting, slide to be re-circulated	Outcome showed similar percentages sharing. Also, using the central case fleet with and without the project, the disbenefits were roughly halved
Action 2.4	Ask DfT if a representative would attend a meeting to discuss fundamentals of the Policy	Not invited to this theme but we can invite to a later stage in the process, we wished to focus on the material aspects of Theme 2	Request for the DfT to clarify position on policy/interpretation

	Discussions and Questions Covered:	Initials	Responses from GAL
NEG3.1	<p>Paper submitted by JL, but not able to attend today's meeting. Brief outline given of JL's paper</p> <p>The plan is to have a more thorough discussion directly with JL to explore the thinking behind the paper outside of the meeting.</p> <p>SM has briefly reviewed the paper shared by James Lee. An average fleet noise level metric could be a useful indicator of progress although the paper goes further. Tries to move away from the logarithmic noise scale and move to a more linear scale, but with some technical concerns</p>	RM, SM	
NEG3.2	<p>Could this form some sort of secondary metric? It looks like it is cast as one metric amongst several metrics that could form part of a dashboard. Though this misses the concept of outliers (which are the most disturbing flights), which is a strength of L_{Aeq}</p> <p>The focus was on a Gatwick fleet</p> <p>L_{Aeq} does not capture full effect of noise on communities</p> <p>JL paper will be circulated to allow others to take a view as to the benefits of this alternative</p> <p>This is an interesting idea but how does this calibrate to the objective?</p>	RI CL RI	
NEG3.3	<p>The view of the community position on the policy tests – presentation</p> <p>Quick recap:</p> <ul style="list-style-type: none"> - Fundamentally disagrees that the GAL interpretation of policy conforms with govt policy. 'Sharing the Benefits', a particular issue - Do not agree with SoNA conclusions, in particular circumstances around SoNA were during a period of little aviation growth. Also believe that 	CL	

	technology will not deliver anticipated benefits			
NEG3.4	Requested re-circulation of his detailed data request 21 June. SM explained this requested approximately 1000 noise model runs, which he thought was unreasonable. The PEIR had provide about 60	CL		
NEG3.5	Metrics and Limits community views: <ul style="list-style-type: none"> - Should be derived from multiple metrics - Should cover all times of day and all periods of the year - Be assessed at 45dBA - Take account of frequency of overflight 	CL		
NEG3.6	Support shown for all year-round metrics (or at least something that goes beyond the summer) Also support the use of L_{Aeq}	LA s		
NEG3.7	There is a wish to see summer and rest of the year metrics, and belief that multiple metrics will add overall confidence to assessment of metric. Some metrics can be secondary, i.e. not limits but used to inform progress	LA s		
NEG3.8	Also needing to be taken into account the impacts of noise by other flights (inc. overflights into/out of other airports i.e. LHR). <ul style="list-style-type: none"> - Should ensure continual noise reduction - Noise envelope should accommodate all types of noise reduction: technology, airspace, NMB initiatives... - Noise envelope should reflect the best-case fleet replacement - There should no commercial night flights for the 8-hour night period - Should be a constraint on the number of hourly ATMs at all locations to less than the limits recommended by the WHO - Should be binding limits on passenger numbers and total ATMs at Gatwick. This could be a 	LL & other CNGs		

	planning control rather than a facet of a Noise Envelope			
NEG3.9	Growth outside of the summer needs to be accommodated in the metric How does GAL make clear what is 'its' noise and the noise of others? Still important to weight towards outliers as they have the biggest impacts on rural communities	LL	MT	The PEIR included the annual L _{DEN} we could also look at an annual L _{Aeq} . We expect there to be a cap on ATMs as part of the planning permission
NEG3.10	How do we 'keep score' when impacts from multiple users are factored in?	LH	SM	The noise envelope can only limit noise from Gatwick
NEG3.11	Request for amendment to previous meeting's notes: <ul style="list-style-type: none"> - Has not seen any of the proposals shared at today's meeting - Current consultation is failing in that it is not covering noise envelope development - Freight flights are an issue - Totality of noise including noise from other noise generators should be captured - Do not agree with the 'employment' of independent technical expert (named) 	SP	RM	Noted Update: Amendments now made
NEG3.12	Is 54dBA used as a metric for the onset of significant annoyance (9%)? 51dBA is the lowest level for the onset of annoyance	LM	MT	There are other things that we can do but I believe that L _{Aeq} is the best measure
NEG3.13	Concerns are raised about the periods outside the summer peak period – because there is opportunity for the airport to expand outside of that period Impact of flights from multiple airports is a problem, but should you hold GAL responsible for those other airport's traffic? GAL also has no control over where those other aircraft will fly This is a national issue, rather than an airport issue – GAL is not the controlling body in this regard	MG		

NEG3.14	Given the preference of Luton's NE process over GAL's, would members of the group feel more comfortable taking Luton's approach of implementing a non-disclosure agreement for the remaining NE meetings? Would this enable more open discussions as was the reason behind Luton's NDA implementation. The Chair makes clear that this is by no way a suggestion or recommendation, rather, a demonstration of listening to members and their support of the approach undertaken by Luton	RM		LL, MG, SP, CL preferred not WM: NDAs are not normally a good fit, but on some occasions using Chatham House Rule sessions can help
NEG3.15	Some existing noise limits already form part of the noise envelope, i.e. QC night (summer/winter); ATM cap night (summer/winter); Departure Noise Limits...	SM		
NEG3.16	Can you commit to not exceeding the current night-flight limit ever?	CL		
NEG3.17	The concept of a single metric supported by a suite of complementary metrics has been raised at a previous sub-group meeting, was brought up as a consideration	AS	DM	Binding and non-binding metrics should be considered but what they might be needs much more investigation and discussion
NEG3.18	GAL should be prepared to commit to no more than 11,200 night-flights as part of a Noise Envelope proposal to give communities certainty	LH		

Summary of Actions

NEG 2	Action	Due
Action 2.1	Re-send analysis using the N Above metric	4.7.2022
Action 2.2	James Lee paper will be circulated ahead of NEG4	4.7.2022

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Charles Lloyd	GON
Andy Sinclair	Gatwick Airport
Warren Morgan	NCF Chair
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Lynne Clark	Easyjet
Mike George	GATCOM
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Rob Ivens	Mole Valley
Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Graham Lake	Independent

Apologies

Name	Organisation
Jonny Petts	Easyjet
Nathan Smeaton	Gatwick Airport
James Lee	Independent
Jonathan Deegan	Gatwick Airport

Future Meetings

Noise Envelope Inaugural Joint Sub-Group – Meeting 1	Thursday 26th May 13:00-15:30 COMPLETE
Noise Envelope Group – Meeting 1	Tuesday 14th June 15:00-17:00 COMPLETE
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Noise Envelope Group – Meeting 3	Tuesday 9 th August 15:00-17:00
Local Sub-Group – Meeting 4	Tuesday 16 th August 15:00-17:00
Noise Envelope Group – Meeting 4	Tuesday 6 th September 15:00-17:00

Gatwick Airport Noise Envelope Local Sub-Group Meeting 3
Theme 3 Presented

Tuesday 19th July, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered:	Initials		Responses from GAL
LSG3.1	It was stated that communities had met and agreed a position on the current process which was agreed did not confirm with the expected approach set out in Govt policy	CL	SP	Intervention that CL did not represent all communities and CAGNE had not been involved in any discussions.
LSG3.2	Grave reservations were stated, for the use of GATCOM as a review body for the Noise Envelope, due to bias and the vested interest of elected representatives in the success of the airport. A truly independent body is needed, and the review should be undertaken by a body that can enforce. There currently seems to be for example, no proposal for penalty in event of a breach, and there seems to be a lack of any enforceable adjustment mechanism	SP		
LSG3.3	The NE needs to apply from the date that consent is granted. GATCOM not a suitable body for the role envisaged. Should be undertaken by a competent body with regulatory powers. Anybody that includes the airlines on the airport not appropriate. Don't see evidence of any legal enforcement using this process. No proposal for penalty? Lack of enforceable adjustment mechanism	CL		
LSG3.4	Additional point made that GATCOM includes stakeholders that need to be involved in the process	CL		

LSG3.5	It was asked about how to share feedback. What is the endgame for this process	AF	MT SM	It was explained that a proposal would be shared with GAL following the process It was also explained about the cycle of meeting and show the process works for the sharing and assimilation of information and receiving feedback
LSG3.6	It was agreed that GATCOM not the best forum from which to draw the oversight body	LL		
LSG3.7	It was asked how slots can be restricted as a penalty given the slot rules? – How does this work when it says airlines must work to 80% to retain rights	SP	CF	This is overseen by ACL. There are slot penalties if the slot is being mis-used. It is rare to remove slots. This is a new way of using these provisions so it is something we can explore
LSG3.8	A question was raised over what would happen if a slot reduction was required if slots was already allocated (ie historic flights). Provided examples of Luton which was not able to remove slots due to historic flights	CL	CF	It was explained that Gatwick have done this recently in different circumstances for the summer. We have done it on a temporary basis and through the local rule
LSG3.9	The opinion was given that, capacity assumptions and slot allocation looked like they were a constraint. Purpose of the NE will be to give us a control tool. Assumption that we will get a set of metrics and control tools to manage the NE. But if slot rules will not allow you to control ATMs in the event of a breach, then the NE will not function as intended. The historic right to slots would need to change in order for this to work. Have a lot of work to do to make this a meaningful process. Today's presentation has showed there are real constraints if this type of mechanism is to work	JL	MT	A response was given that, this will be input-based, so we will only release slots if it looks like we are able to do so within the NE. the key part of what the airport is trying to do, is align how an airport operates within the terms of an environment
LSG3.10	A further opinion was raised that, if an airline is 'behaving itself' you are not able to remove slots. Therefore, you will not have the ability to remove slots to	LH	CF	A temporary capacity restriction in place to manage this. There are examples of how we can

	control in order to avoid exceedance. If you accidentally release too much capacity how can this be clawed back?		SM	manage this, especially in respect of night flights An annual review process should be able to manage capacity release based on annual forecast
LSG3.11	An assumption was given that it might be expected that airport will manage noise monitors through the year to prevent any potential exceedance of a noise contour. This was seen in Schipol.	RU		
LSG3.12	It was suggested that there is great interaction between slot allocation and forecast.	CL	MT	It was clarified that the DCO sets the outer limits, and the review body sets the parameters within those limits
LSG3.13	The opinion was provided that there is no one sufficiently independent with powers in GATCOM as the enforcement body was suggested that a Body It looks like a voluntary agreement by the airport. GATCOM is an appropriate body and is considered amateur in this field. This this should be watertight	CL	MT	It is envisaged that the envelope will be adhered to with some form of agreement, and will be fleshed out with the legal team. This process is all part of reaching a framework however, so all pragmatic solutions are very welcome. The DCO is a powerful legal tool, which will be the overarching enforcement
LSG3.14	Whilst understanding comments on GATCOM, it was confirmed that members of sub-committee are not all GATCOM members. Concerns that restrictions on slots might be circumvented through the use of dispensations. How could this be used?	MG	CF	Dispensations have very strict criteria, which the DfT controls
LSG3.15	A further opinion was provided that GATCOM is the entirely the wrong group to ensure enforcement. Guarantee from Gatwick on R4 at GATCOM was not enforced by GATCOM	FF		
LSG3.16	A suggestion was provided that contours should be based on 51 and 45 dBA. Potential for CAA Sustainability panel not	SP		

	a good option for membership of any oversight group from a community perspective			
LSG3.17	Frustration was expressed that this is not a 2-way discussion. That communities are not receiving feedback on input	FF	MT	It was explained that we are reviewing input and will provide feedback as we step through the process
LSG3.18	Concern was raised about the bi-lateral meetings to discuss the paper submitted by James Lee	SP		
LSG3.19	The opinion was given that incentives which seem to be working in the night, should be strengthened during the day. This was built upon with the suggestion that it looks like the airport has run out of incentives during the day. As part of the noise envelope, if by enhancing the day incentive do you lose some of the night?	SP RI	NS	There are some options, but charges would need to be balanced due to the regulated cap on night charges
LSG3.20	It was asked why the night charges focus just on the core night? Could this be expanded	LH	NS	Yes, we focus on the period when we have noise and ATM quota caps. But could dilute the price signal if you extended 2300-0700. As there are more movements this could be progressed
LSG3.21	A question was raised around the consideration that the envelope is based on slow fleet transition - why not the fastest possible transition? Could Gatwick incentivise the fastest possible fleet transition?	CL	MT NS	It was explained that a proportion of airline costs that relate to airline charges can vary greatly across airlines. Huge increases in costs may lead to challenge from airlines due to discrimination and as the airport is economically regulated it does not have much wiggle room to increase those charges This was further clarified by an explanation that charges may help the shift of aircraft within airline fleets to the airport but in relation to fleet replacement these charges are not proved to be

				effective; charges are less meaningful when going through big fleet transition and if reliant on fleet renewal programme, how much of that can an airport really convert to be meaningful
LSG3.22	The opinion was given that this is an airline and indirectly an airport responsibility. There is no sense that the airport is trying to influence in this area. You will base this on a worst case	CL	MT	York Aviation agreed that this was a robust worse case. Worth bringing these views to the NEG where airlines can explain their fleet transition plans
LSG3.23	It was asked if costs and the balance of costs to different airlines and whether the low-cost model	LH		
LSG3.24	Support was stated for not using GATCOM as the oversight body, concerned about the potential for dispensations and that the airport can really restrict flight numbers by reducing slots	MB		
LSG3.25	It was stated that the original proposal looks at a slow transition fleet and using a benefits-sharing methodology that sets an 'easy to achieve' envelope for the airport. At the moment the envelope as set will not set the appropriate amount of pressure for improvement that we would like to see	JL		

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Charles Lloyd	GON
Andy Sinclair	Gatwick Airport
Nathan Smeaton	Gatwick Airport
Rebecca Mian	Gatwick Airport

Name	Organisation
Steve Mitchell	Mitchell Environmental
Ed Winter	Plane Wrong
Mike George	GATCOM
Warren Morgan	NCF Chair
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Adam Draycott	Mid Sussex
Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Rob Ivens	Mole Valley
James Lee	Independent
Ruud Ummels	To70
Fran Flammiger	GON
Martin Barraud	GACC
Atholl Forbes	PAGNE
Peter Robinson	Independent
Chris Fields	Gatwick Airport

Apologies

Name	Organisation
David Monk	Crawley
Graham Lake	Independent
Jonathan Deegan	Gatwick Airport

Summary of Actions

LSG3	Action	Due
Action 3.1	No actions taken, just discussion	

Future Meetings

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Noise Envelope Joint Sub-Group – Review Meeting	Tuesday 13 th September 15:00-17:00
Noise Envelope Group – Review Meeting	Tuesday 11 th October 15:00-17:00

Gatwick Airport Noise Envelope Aviation Sub-Group Meeting 3

Theme 3 Presented

Tuesday 20th July, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered	Initials
ASG3.1	Overview Presentations on: Noise Envelope Operation and Review Noise Charges Briefing Slots	SM, MT, NS, CF
	Key Take Aways from the Meeting	
ASG3.2	Many airlines in attendance were new to the NE process and therefore discussion was limited, many choosing to listen to the presentations and provide feedback at a later date after taking the presentations back to discuss internally. During the meeting, most airlines were happy to give high-level initial thoughts as long as it remained anonymous. The Chair gathered the following summary of thoughts:	
ASG3.3	Airlines support measures to utilise quieter and more fuel-efficient aircraft types wherever possible	
ASG3.4	Airlines support collaborative efforts to identify and implement operational measures to further improve the noise environment for communities	
ASG3.5	Recognise that a Noise Envelope when approved will establish mandatory noise performance limits	
ASG3.6	Airlines confirm that the trend in re-fleeting of aircraft is towards quieter and more fuel-efficient aircraft, while noting that the pace and schedule of this re-fleeting is subject to external factors* so cannot be guaranteed Recent examples affecting airline fleet modernisation plans significantly have included: the global financial crisis, the grounding of the Boeing 737-Max, and the Covid Pandemic which has seriously impaired airline balance sheets	

ASG3.7	Airlines request that any proposal for NE limits include adequate contingency provision to take into account reasonable variations in planned fleet upgrades and day to day operations
ASG3.8	Airlines call for exceptional provisions in any Noise Envelope proposal to include relief for uncontrollable external factors beyond airline's control, for instance: <ul style="list-style-type: none"> ○ Delays to airspace modernisation including the Single European Sky, ○ Industrial Action, such as by Air Navigation Service Providers, ○ Severe Weather, ○ Airport infrastructure failures/unserviceability and, ○ Aircraft groundings and delivery delays, such as seen with the Boeing 737-Max and Boeing 787

Attendees

Name	Organisation
Rajesh Udhalikar	Emirates
Peter Raw	Emirates
Jonny Petts	Easyjet
Mark Simmons	CAA
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Murray Taylor	Gatwick Airport
Graham Lake	Independent
Andy Sinclair	Gatwick Airport
Nathan Smeaton	Gatwick Airport
Robert Drew	Gatwick Airport
Ruud Ummels	To70
Brian North	JetBlue
Chris Lum	JetBlue
David Imbusch	Aer Lingus
Paul Clarke	Westjet

Name	Organisation
Pete Robinson	ACL
Spencer Norton	British Airways
Murshad Habib	EasyJet

Apologies

Name	Organisation
Jonathan Deegan	Gatwick Airport
Ian Jopson	NATS
Andrew Burke	NATS
Charles Auty	Eastern Airways
Henry Game	ANS
Vicky Hughes	ANS
Victor Gosling	ANS
Robin Clarke	NATS
Simon Scholey	British Airways
Stijn Lambrecht	Tui
Hugo Nilsen	Norwegian
Gabor Tiba	Whizz Airways
Peter McDonnell	Aer Lingus
Dan Saunders	Arigny
Kim Heather	Gatwick Airport
Lynne Clarke	Easyjet

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Noise Envelope Group – Meeting 4	Tuesday 6 th September 15:00-17:00
Noise Envelope Joint Sub-Group – Review Meeting	Tuesday 13 th September 15:00-17:00
Noise Envelope Group – Review Meeting	Tuesday 11 th October 15:00-17:00

Gatwick Airport Noise Envelope Group Meeting 3
Theme 3 Feedback

Tuesday 9th August, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered:	Initials		Responses from GAL
NEG3.1	Actions from previous meeting notes should be separately captured, currently 6 are grouped under a single action	CL		Action complete
NEG3.2	Questions around industry views on noise vs emissions, caveats proposed by industry and the sharing of notes from the Aviation Sub-Group	SP, CL		
NEG3.3	Review of the GACC paper on sharing the benefits, using alternative metric, i.e., using number above	SM		Action complete, circulated 4 August
NEG3.4	Please make 'absolutely' clear who provided what input surrounding all of the ideas and info being shared (the info provided so far has been excellent)	SP		Action complete – all notes reviewed, and initials provided where a generic 'community members' might have been used
NEG3.5	A disagreement raised on the view of the comparison; the project does not happen (central case) versus project goes ahead and the slow fleet transition. A general principle of sharing the benefits' is not achieved by the example analysis	CL		No action required
NEG3.6	A like for like comparison should be considered. There will be a review process. So, if the fleet is doing better than the slow transition fleet, the noise envelope can be tightened	SM		No action required

NEG3.7	<p>Thinking behind the paper and the concept is a very much a simple calculation of noise reduction per flight, taking a basic problem-solving approach.</p> <p>A noise envelope should provide an empirical basis for how the benefits are shared and a mathematical basis for capping the movements if the technological benefits are not realised (as well as the certainty afforded to communities).</p> <p>Reason for choosing 50/50 as the sharing the benefit basis: Used Table 4.3.1 from the appendix on aircraft movements for the calculation. It would be useful to see the data behind the central and slow transition cases.</p> <p>The suggestion is to put this forward as part of a portfolio of metrics, as a complementary metric. This approach could provide a way of applying a dynamic ATM cap. Noise Envelope as currently constituted does not provide any pressure or drive for fleet replacement – this alternative approach might do just that</p>	JL		See GAL's response to the James Lee paper, issued 4 th August
NEG3.8	Concern raised around population counts (urban v rural)	SP		No action required
NEG3.9	<p>Conceptually a noise envelope is a good idea. It should be a constraining mechanism; this NE is not though. The way benefits are accrued need to be meaningful to communities. There is a need to understand better whether there are changes that would be noticeable to communities, which cannot be seen from the current concept proposal</p>	CL		No action required
NEG3.10	An agreement is raised that care needs to be taken when using certified values, rather than in service. The issue is that the certified values are based on noise levels from monitors within 3km of the airfield at which the aircraft are certified. There is a similar concern to using QC.	SM		No action required

	ANCON is based on noise levels measured at Gatwick from an array of noise monitors. These are measured values and validate the model on an annual basis at Gatwick based on Gatwick flights measured through Gatwick Noise Monitoring Terminals (NMT)s. They are measured in service, which is why ANCON is such a good model			
NEG3.11	If this is not a way of setting a dynamic cap, what way is? The request/need is for a penalty that focusses on ATM reductions if noise does not reduce, and a need to re-forecast year on year. As it is currently constructed it has no bite	JL	SM	There is no precedence, no guidance. GAL have looked at Bristol and we have suggestions from CL and JL. QC is a blunt instrument to control noise and does not account of operational changes/improvements
NEG3.12	The current proposal does not incentivise operational improvements (hence our request for data). An allowance should be factored into the envelope	CL	SM	GAL noted that not all noise management initiatives could be readily quantified and forecast
NEG3.13	From discussions with DR, conclusions of SoNA and whether L_{Aeq} is a suitable primary metric. No other metric performed better than other metrics. There is also a historic metric [I am not sure this what CL said]	CL	SM	L_{Aeq} is not perfect but nothing better than it. SoNA is the biggest social survey in this area and provided a correlation between this and annoyance
NEG3.14	Not anti- L_{eq} but there is a need for a suite of secondary metrics	LH		Noted, GAL is considering other additional metrics
NEG3.15	In terms of dynamicity, there is not an expectation of forecasting less than annually, too short a time frame may allow the airport to exploit improvements	JL	MT	This will be discussed at the next round of meetings under theme 4
NEG3.16	(See presentation for reference) - No certainty is offered around a quieter fleet being delivered through the noise envelope and it is felt that there is no time to discuss this process properly	SP	MT	Not sure that you can expand the noise envelope to include other airports. And as the Noise Topic Working Group meetings are continuing to the end of the year why can the

	<ul style="list-style-type: none"> - Although there was a lot of detail in the consultation, the topic is really complex for local stakeholders – to the extent that it is mis-leading - The proposed noise envelope only goes out to 51dBA. CAGNE does not agree with the process or the geographical representation on the meetings and feel the NMB process is also flawed (the basis for Local SG participation of this process is NMB membership, which is why this is relevant to this discussion) - CAGNE feel the process is disingenuous and lacks transparency - There is no offer to cap ATMs, and just relying on technology change - This only deals with Gatwick noise and so does not address other airport noise including Biggin Hill and London City but also low flying helicopters - The process does not recognise airspace change or FASI-S in particular. There is no proposal for alternative additional metrics - CAGNE does not think GAL can rely upon airline fleet change or operational changes to drive improvements when GAL has no control over these aspects. In terms of oversight/Review Body, CAGNE does not support CAA or GATCOM involvement - CAGNE believes that the GIP and VINCI do not understand nor accept the seriousness of noise impacts around the airport - CAGNE believes nothing has changed in the GAL proposal following a number of meetings - Additional supplementary metrics are proposed 			<p>work of this group not be extended</p> <p>GAL is considering an ATM cap.</p> <p>GAL is developing the Noise Envelope proposal and expects to submit an improved and much more comprehensive proposal with the DCO application having listened to the views of stakeholders via the NEG.</p> <p>As mentioned, GAL has no control over noise from other airports so cannot manage a Noise Envelope that includes their noise.</p>

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Charles Lloyd	GON
Andy Sinclair	Gatwick Airport
Warren Morgan	NCF Chair
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Robert Drew	Gatwick Airport
Mike George	GATCOM
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Adam Draycott	Mid Sussex
Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Graham Lake	Independent
James Lee	Independent

Apologies

Name	Organisation
Jonny Petts	Easyjet
Nathan Smeaton	Gatwick Airport
Jonathan Deegan	Gatwick Airport
Lynne Clarke	Easyjet
Rob Ivens	Mole Valley

Summary of Actions

NEG 3	Action	Due
Action 3.1	Actions from previous meeting notes should be separately captured, currently 6 are grouped under a single action	6.9.2022
Action 3.2	Make clear who provided what input surrounding all of the ideas and info being shared	6.9.2022
Action 3.3	A like for like comparison should be considered between central, slow transition case	6.9.2022
Action 3.4	A unanimous call to include supplementary metrics alongside the main L_{eq}	6.9.2022

Future Meetings

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Noise Envelope Group – Review Meeting	Tuesday 11 th October 15:00-17:00

Gatwick Airport Noise Envelope Local Sub-Group Meeting 4
Theme 4 Presented

Tuesday 16th August, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered:	Initials		Responses from GAL
LSG4.1	What penalties/are they targeted at an individual or the company and what should be the review body?	CS	MT	We believe it would be an officer of the company responsible i.e., the CEO. However, the purpose of the process is to bring the airport back into the agreed compliance limits. In relation to fines a continual breach would likely result in fines (we are unsure of the magnitude) but again the process is about becoming compliant as soon as possible. Good debate in a previous meeting. We had previously suggested a GATCOM sub-group, but feedback was unanimously against this proposal. Could be a group under the auspices of a government or regulator.
LSG4.2	Pg 5 – disagree that this is what people would sign up to. We have also suggested ATM and passenger caps, which is not covered	CL		
LSG4.3	Pg 6 – noise review body no conclusion here. Compliance report should be either independently generated or audited.	CL		
LSG4.4	Pg 13 – Should be financial penalties and a tightening of the limit, in that if you	CL	SM	good incentive to not 'non-comply'

	breach there should be a tightening in a subsequent year, mirroring the arrangements in the current night flights regime and in CAP 1129 (pg 51).			
LSG4.5	Pg 15 & 16 – Breach if the DCO not to provide reports or compliance plans. It does not actually say it would be a breach to breach the limits. Using the planning act of the breach, CAP 1129 makes reference to the inadequacy of the planning act in this respect. An example of this was at a breach at Luton airport. Arrangements that ensure the ‘goalposts’ cannot be shifted is key	CL	MT	We believe that the provisions of the Planning Act 2008 are different to those which framed the arrangements in place at Luton. Re massive financial penalty, what is proportional?
LSG4.6	I am less concerned about financial penalties, they should be reasonable, more attracted to a downward adjustment of a subsequent year’s cap. On the planning consent position, Crawley benefits from the airport and is relatively unimpacted by noise and hence the potential for how the local authority might act in that situation	CL		
LSG4.7	Crawley residents are impacted. A good Noise Envelope is key to enforcement. Independence: some funding has been provided to the local authorities so there are some ways of achieving independence	DM		
LSG4.8	In relation Gatwick, West Sussex and Crawley are the main interlocutors the other local authorities have memorandums of understanding	LH		
LSG4.9	Enforcement: Local authorities are stretched when it comes to enforcement. CAA has a vested interest in aviation and the DfT is a law unto itself	SP		
LSG4.10	Penalties: should this also be targeted at airlines? Could this also include removal of slots from the airlines or airport?	SP		
LSG4.11	Metrics: Should be a suite of metrics which include an early indicator of breach. And all of which should directly relate to compliance.	SP		

LSG4.16	We have suggested an ATM cap well below the current proposed forecast. But this would allow a stepped approach to this subsequently potentially releasing capacity over time, but it must be re-examined taking into account actual impacts	CL	SM	Challenge on the CAP 1129 pg 51 wording on tighter limits. Suggest this is rather about conditioning to prevent breach
LSG4.17	Has there been any discussion on the margin between the Compliance level and non-compliance action level	AT	SM	Still looking at this and considering sensitivities. We would welcome thoughts
LSG4.18	ATM caps, an overall cap, but what about an ATM cap (as a tool) to ensure the delivery of the 50/50 benefits of the proposal	AT	MT	Referred to the 70/30 of the Bristol planning consent and the 2 proposals from CL and JL with alternative ideas. We welcome alternatives if you have any others
LSG4.19	What is your view of a planning inspector potential for setting a cap?	LH	MT	It could well be a gradual increasing cap
LSG4.20	Pg 4 382K commercial ATMs. Why commercial? Why only specify commercial? Why not include all aircraft in the numbers (if we wish to give certainty to local communities)	LH	SM	There are some additional aircraft, ie GA...We can tidy up that ambiguity
LSG4.21	When will we achieve 382k? Why not commit to that contour	LH	MT	2038
LSG4.22	On enforcement I would support financial penalties, sufficiently large that pressure is brought to bear to fix the problem. You are looking at slow transition (ie worst case) therefore the penalty should be based on this worst case. And this should be paid to the local community	LH		
LSG4.23	Does this include the growth with FASI-S? What about the reduction in slots why not target these at the airline? Overscheduling by the airport should result in similar action against the airport. Numbers of flights should include all flights not just commercial. Should be transparent about total number of flights	SP	AS, MT, SM	FASI-S will not allow the airport to increase its capacity above the legally binding cap. ACL, the slot coordinator has ultimate control

LSG4.24	FASI and DCO interaction. AMS will allow unconstrained growth	CL		
LSG4.25	Alternative metrics being drawn into primary metrics	LH	AS	<p>Set out the next steps of the process</p> <p>A NEG would be held on 6 Sep to receive feedback and discuss the theme of today's presentation and discussion 'Enforcement'</p> <p>A session would be held on 13 Sep for all NEG members (inc local and aviation sub-group) to be briefed on the process output paper. This paper will in essence set out a compendium of the ideas, feedback and proposals gathered during the engagement process.</p> <p>A follow-on NEG will be scheduled for the week commencing 26 Sep (likely 27 Sep) to then receive feedback on the output paper.</p> <p>This will then be reviewed and used to shape the noise envelope proposal. It is anticipated that the work to develop the noise envelope proposal will be completed by end of 2022 and be shared with to all NEG members in early 2013</p>

Attendees

Name	Organisation
Liz Lockwood	Tandridge District Council
Charles Lloyd	GON

Name	Organisation
Andy Sinclair	Gatwick Airport
Caroline Salmon	Mole Valley District Council
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Ed Winter	Plane Wrong
Mike George	GATCOM
Warren Morgan	NCF Chair
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Adam Draycott	Mid Sussex
Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Rob Ivens	Mole Valley
James Lee	Independent
Ruud Ummels	To70
Fran Flammiger	GON
Martin Barraud	GACC
Atholl Forbes	PAGNE
Peter Robinson	Independent
Chris Fields	Gatwick Airport

Apologies

Name	Organisation
David Monk	Crawley
Graham Lake	Independent
Jonathan Deegan	Gatwick Airport

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Gatwick Airport Noise Envelope Group Meeting 4
Theme 4 Feedback

Tuesday 6th September, 2022 – Teams Meeting

Key Points & Actions

	Action from NEG3	Response/Action Taken
Action 3.1	Actions from previous meeting notes should be separately captured, currently 6 are grouped under a single action	Action complete
Action 3.2	Make clear who provided what input surrounding all of the ideas and info being shared	Action complete – all notes reviewed, and initials provided where a generic ‘community members’ might have been used
Action 3.3	A like for like comparison should be considered between central, slow transition case	
Action 3.4	A unanimous call to include supplementary metrics alongside the main L_{eq}	Noted

	Discussions and Questions Covered:	Initials		Responses from GAL
NEG4.1	GACC paper presented	JL		
NEG4.2	The opinion was given that the approach to this has not been compliant with CAP 1129 and will be a significant part of the challenge through the process with the Planning Inspectorate	CL	SM	SM thought that by the end of the NEG process the guidance on developing a noise envelope would largely have been followed
NEG4.3	Claims throughout the GACC slides that no response has been provided were contested. Whether agreement reached or not, response has been provided to all challenges through the NEG and SG discussions – and additional written challenges. JL acknowledged there has been a response but not always in writing. MT set out that in fact Gatwick had provided detailed presentations and the points several of the points made by GACC were in fact in response to these points	SM JL MT	CL	Agreement was given that there has been some discussion on points, and clarification that the ‘no response’ claim refers only to no formal Gatwick position against these points being published
NEG4.4	The Noise Envelope to be put to PINS with the DCO application will be more comprehensive and very different from that which was originally proposed	SM		
NEG4.5	A request was raised to formally note that CL does not represent all communities	SP		Noted
NEG4.6	CAGNE paper presented	SP	MG	It was suggested that, even though CAGNE members do not support the NRP a Noise Envelope would still be relevant even without the project
NEG4.7	It was suggested that the way the charity sector approaches oversight might be a way of thinking about how to constitute an independent oversight body	SP		No action required
NEG4.8	A consideration was raised to look across Europe for templates of how this is done	MG		GAL has and will continue to look for experience from

	elsewhere. The process needs to be transparent and include acoustic experts, industry, airport, airline, community. GATCOM do not see a place for themselves overseeing a noise envelope			elsewhere noting that the Noise Envelope policy is DfT's
NEG4.9	Using local authorities for the Review Body was suggested, and a question of the level of local authority that might be used, was raised	SM	SP	It was suggested that the issue is the S106 and the conflict of interest around economic benefit; councils that receive money but are impacted little by the noise from airlines using the airport
NEG4.10	The opinion was raised of there being many issues around using elected representatives in a review body: Politics, lack of continuity, limited capacity given other commitments. The Royal Institution was suggested as an example, following SP idea about using the way a charity may approach this.	LL		Noted
NEG4.11	Feedback from elected representatives: <ul style="list-style-type: none"> - Reduction of night flights - Residents within noise envelope do not wish to see an increase in noise at all, based on an original baseline - FASI-S is a concern because it is a complication, which makes it difficult to understand given the changes in flight paths - Volume of traffic, frequency of overflight, intensity of flying was concerns 	LL		Noted
NEG4.12	The question was raised of whether there are any examples of where else payments to all local residents on a particular contour is done. This was an idea raised within the CAGNE presentation	JL		GAL is not aware of examples of regular cash payments, but there are examples of payments for mitigation including at Gatwick
NEG4.13	Support was noted for self-imposed cap on night flights It was asked if there is a point about legal applicability, and how the airport might schedule if night flights were banned	LH	MT	The DfT own the night restrictions at Gatwick, and consult periodically on their renewal. Airlines have legitimate needs to fly at night subject to close controls. Gatwick would

				not be able to unilaterally close the airport at night on noise grounds without being subject to legal action of one form or another from airlines and the DfT

Attendees

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Liz Lockwood	Tandridge District Council
Charles Lloyd	GON
Andy Sinclair	Gatwick Airport
Jonathan Deegan	Gatwick Airport
Rebecca Mian	Gatwick Airport
Steve Mitchell	Mitchell Environmental
Robert Drew	Gatwick Airport
Mike George	GATCOM
David Monk	Crawley
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
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Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Rob Ivens	Mole Valley
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Jonny Petts	Easyjet

Apologies

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Nathan Smeaton	Gatwick Airport
Lynne Clarke	Easyjet
Warren Morgan	NCF Chair
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Future Meetings

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Noise Envelope Group – Review Meeting	Tuesday 11 th October 15:00-17:00

Gatwick Airport Noise Envelope Joint Sub-Group Review Meeting 1

Output Report Presented

Tuesday 13th September, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered	Initials		Responses from GAL
JSR1.1 Intro	Please give our feedback especially on omissions	SP		
JSR1.2 Intro	A complaint was raised on how the process has been conducted and a feeling of little time being provided for the process	CL		Already noted as a concern from each previous meeting. Additional meetings have been scheduled (this and 13.10.22) to accommodate as much as possible
JSR1.3 Intro	The attendance of Ruud Ummels was questioned as it is felt he is not an impartial actor due to having provided work for the GON and GACC CNGs	SP	AS	It was reiterated that this is not a NEG meeting, it is a joint sub-group meeting and therefore the wider NCF and NDG members are also invited – of which RU is one
JSR1.4 Policy	Reference Slide 7, last para: It was suggested that the Central Case vs Slower Fleet Transition point could link to the last point on Slide 10	SP		
JSR1.5 Policy	Reference Slide 7, last para: Caveat: to include frequency of overflights in this point	CL		
JSR1.6 Policy	Reference Slide 7, last para: Caveat: Subject to fleet change	SP		

JSR1.7 Policy	Reference Slide 7, para 4: Typo (Airspace Policy not Aviation)	LH		Typo corrected
JSR1.8 Policy	Reference Slide 7, last para: Other noise metrics do not go down	CL	SM	All CAP1616 noise metrics reduce, and the CAP recognises that overflights are not a noise metrics
JSR1.9 Policy	It was noted that there may not be a transference of fleet	SP	MT	If fleet did not transfer, a Noise Envelope would be limiting, which is the point
JSR1.10 Policy	Reference Slide 8, last para, Fig 8.3 of the consultation document: Consider rewriting to clarify, e.g., stating, ‘...hit382k ATM or by 2038’. This would give confidence to communities	LH		
JSR1.11 Policy	Reference Slide 10, last para: This point was made only relating to noise, please clarify this in text	SP		Change made
JSR1.12 Options, Metrics	Reference Slide 15: 3 rd para after CAP1129, this should be a new para	SP		Change made
JSR1.13 Options, Metrics	Reference Slide 15, last para: Arrivals also need including in this	SP	SM	This is not possible
JSR1.14 Options, Metrics	Reference Slide 15: CAA models are not valid low enough. The model is valid for night? It should be made clear that it is possible to measure the night period	JL	SM	NE Team to check whether the CAA Validation Report was circulated
JSR1.15 Options, Metrics	Reference Slide 16, 3 rd para: These measurements should not be possible in a winter period	CL	SM	Questioned whether a summer and annual metric combination would be better?
JSR1.16 Options, Metrics	Reference Slide 16, last para: The sentence, ‘that do not have limits’, should be changed, this	CL		

	does not reflect the view of the CAA, and there should be limits			
JSR1.17 Options, Metrics	Reference Slide 16: There should be an annual element to a NE, but there should be caution when it comes to how that might work, because a NE cannot just be set on a summer only measure. A second metric would be useful and valuable in identifying differences in ATMs. The Lmax is more sensitive to movements	RI	LH	If a second metric is highlighting issues, the metric could be promoted to the primary metric. There would need to be a suite of indicative metrics for various forecasts. N60 would also be a useful primary metric
JSR1.18	Regarding population figures, all need to be treated as overflowed	SP		
JSR1.19 Options, Limits	Reference Slide 18: This should be changed from 'GACC Key Points' to 'General Key Points' to reflect that it also incorporates CAGNE points raised, i.e., CAGNE also mentioned the shoulder periods in the night and passenger numbers	SP		Changes made
JSR1.20 Options, Limits, Benefit Sharing	Reference Slide 19, 4 th para: 'CAGNE proposed...' then needs inserting: 'to enable community buy-in...' It also needs noting that this point is 'all subject to reduction in noise'	SP		Changes made
JSR1.21 Options, Limits, Benefit Sharing	Reference Slide 19: This refers to sharing the noise benefits, not the whole benefit	CL		Agreed to add this point in as a repeat
JSR1.22 Operating, Slots	Reference Slide 21: Point to record: NE should take precedence over slot regulations	CL		Noted
JSR1.23 Operating Envelope	Reference Slide 22, Slots: It was suggested that GAL will exceed the NE and simply say they cannot do anything about it because of slot rules. It was asked	CL	MT	It was explained that summer 2022 was by agreement of airlines. In terms of the future and NRP, GAL could hold back

	why GAL can't take control of slots, just like it did in summer 2022?			releasing new capacity onto the Northern runway
JSR1.24 Operating, Charges	Slide 23 [Note this says we do not agree that N60 and N65 should have limits.]			
JSR1.25 Operating, Charges	It was asked why CAGNE has not been mentioned as much as GACC in the report	SP		GACC has submitted more feedback, and CAGNE has repeatedly requested that all CNGs are not lumped in together, and that stipulations be made as to which CNG has raised which point
JSR1.26 Enforcement	Reference Slide 25: It is reiterated that GACC wish to see excess taken off the following year's limits in the event of a breach, and suggest that this is noted by the CAA in one of their guidance documents	CL		
JSR1.27 Enforcement	A question was raised as to what the margin will be	SP	SM	This is still in the planning
JSR1.28 Enforcement	The question was raised of what happens if there is no	MG	SM, MT	There is no Noise Envelope requirement without a DCO
JSR1.29 Enforcement	Referencing margins between Limits and Action Levels, it was asked if GAL would penalise itself if the noise Action Level is exceeded, with an additional question added to this around what a reasonable purpose for this would be, e.g. the weather	RI SP		

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Fran Flammiger	GON
Mike George	GATCOM
Ed Winter	
Leon Hibbs	Reigate and Banstead
Lee Money	Horsham
Adam Dracott	Mid Sussex
Murray Taylor	Gatwick Airport
Sally Pavey	CAGNE
Rob Ivens	Mole Valley
James Lee	Independent
Jonny Petts	Easyjet
Nathan Smeaton	Gatwick Airport
Chris Leyland	
Atholl Forbes	PAGNE
Margot McArthur	
Graham Lake	Independent
Carlos Branco	Tap Airline
Charles Auty	Eastern Airways
Warren Morgan	NCF Chair
Rachel Francis	Easyjet
Ruud Ummels	To70
Janis Kristops	Air Baltic
David Monk	Crawley

Apologies

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Gatwick Airport Noise Envelope Joint Sub-Group Review Meeting 2

Output Report Feedback

Tuesday 11th October, 2022 – Teams Meeting

Key Points & Actions

	Discussions and Questions Covered
JSGR2.1	Feedback documents submitted ahead of this meeting were run through line by line upon the request of two community noise action groups, GACC and CAGNE. These feedback documents highlighted points throughout the report that the community noise actions groups did not agree with, prompting either agreement to change points, or explanation as to the factual nature of the point.

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Liz Lockwood	Tandridge District Council
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Lynne Clarke	Easyjet
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Appendix 4 – Meeting Papers
Themed Presentations

20220526 – Theme 1 | Background

20220623 – Theme 2 | Options

20220719 – Theme 3 | Operating: Aircraft Noise Charges

20220719 – Theme 3 | Operating: Review Process

20220719 – Theme 3 | Operating: Slots

20220816 – Theme 4 | Enforcement

Gatwick Northern Runway Project

Noise Envelope Group

Local Sub-Group and Aviation Sub-Group

Theme 1 Meeting

May 26, 2022



Agenda

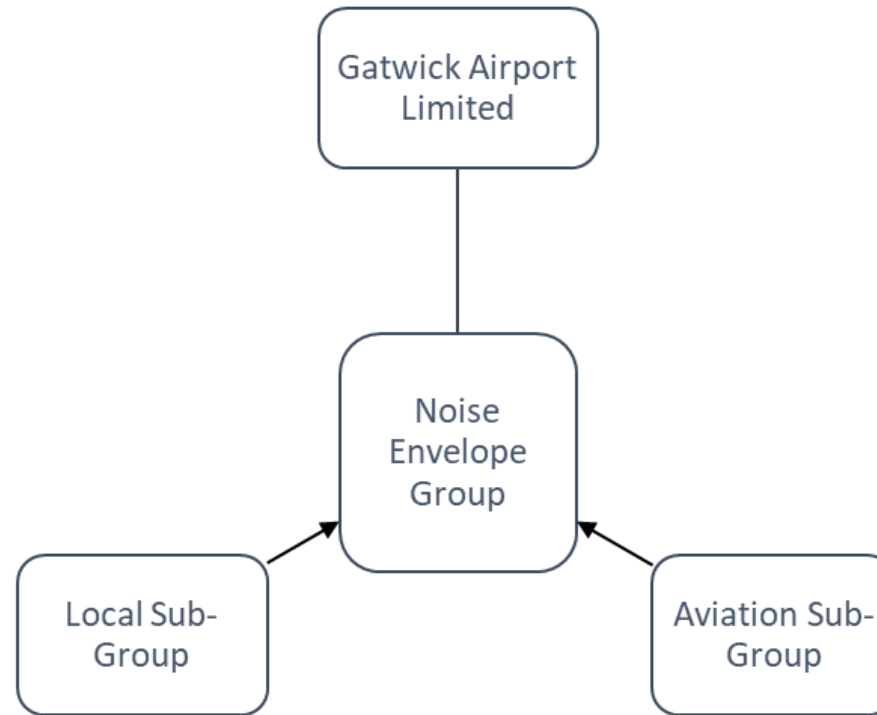
1. Introductions
2. Structure of the Noise Envelope Group and Sub-Groups Side 3
3. Northern Runway Project timeline Slide 4
4. NEG themes 'Developing the Noise Envelope' Slide 5
5. Theme 1 – Background
 1. Policy Slides 6 to 17
 2. Benefits of a Noise Envelope Slides 18 to 21
 3. CAP 1129 guidance Slides 22 to 24
 4. Regulation 598 considerations Slides 25 to 27
 5. PEIR proposal Slides 28 to 33
 6. PEIR Consultation response themes Slides 34 to 36



Structure of the NEG and Sub-Groups

Terms of Reference issued 9 May 2022

Discussed at NEG Meeting #1



Likely Northern Runway Project Timeline

September to December 2021

PEIR Consultation

May to September 2022

Noise Envelope Group

May to December 2022

NRP Noise Topic Group

September to December 2022

ES completed

Q1 2023

DCO submitted

Q2 2023

Pre-Examination

Q3 2023 to Q1 2024

Examination

Q2 2024

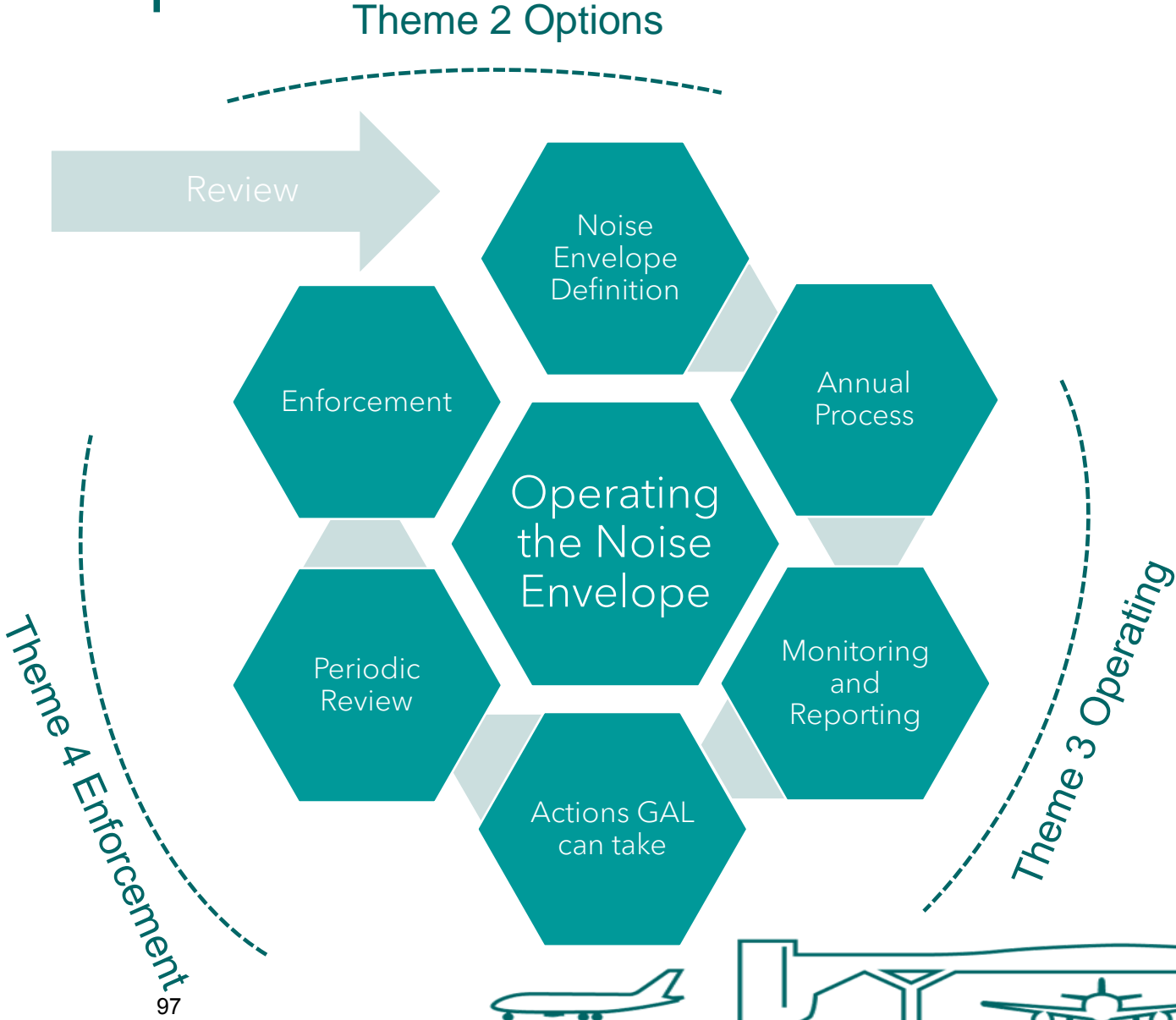
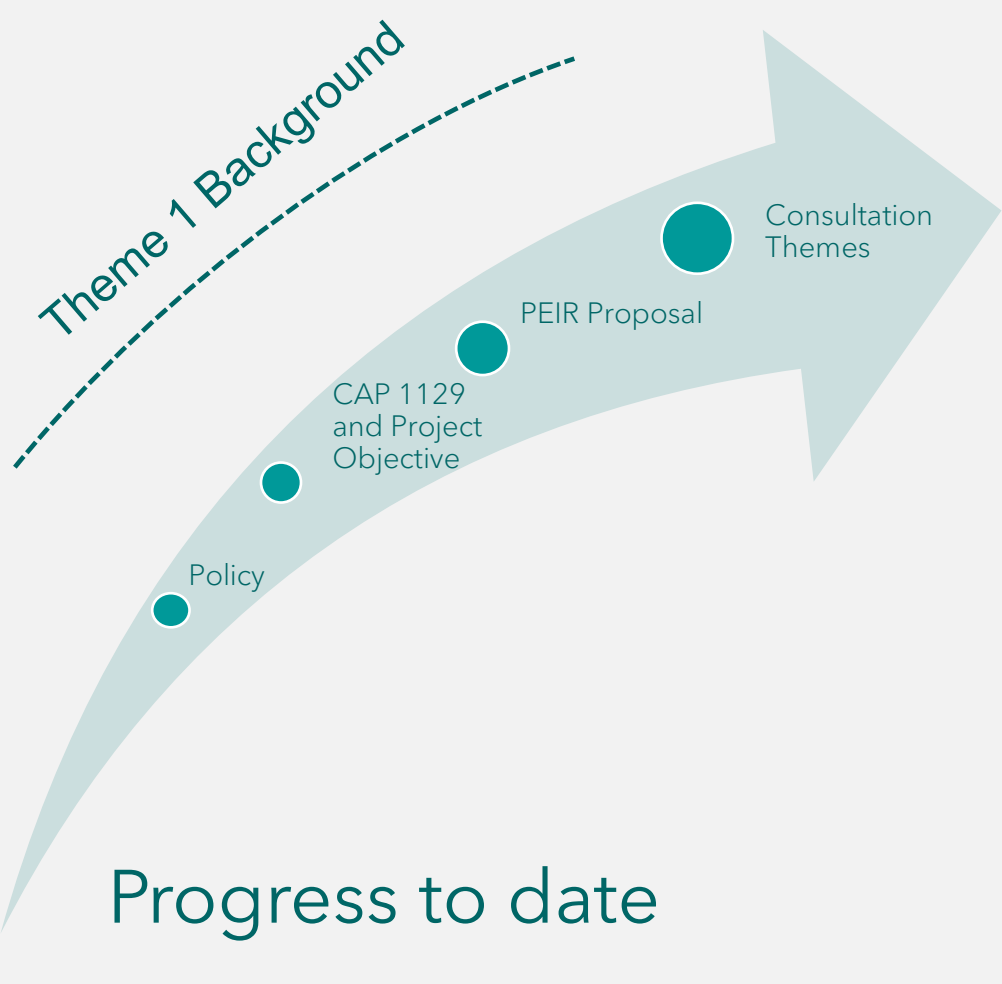
Inspectors Report

Q3 2024

SoS Decision



Developing The Noise Envelope



1. Policy on Noise Envelopes



Aviation Policy – Key Documents

There are six key documents which, together, have framed or developed Government Policy on noise and noise envelopes in the period since 2013. These are:

- Aviation Policy Framework (2013) – this remains the current formulation of Government aviation policy
- Survey of Noise Attitudes Study 2014 (SoNA; 2017)
- Airspace Policy Consultation, and Airspace Policy Consultation Response (2017)
- Airports National Policy Statement (June 2018)
- Aviation 2050 The future of UK Aviation, Consultation (Dec 2018)

It is important to have an understanding of the whole of the policy documents to come to a holistic view on what the totality of the policy is.

The following paragraphs identify key elements of the policies relevant to our discussions on the Noise Envelope.



Aviation Policy Framework 2013 – Objectives

Executive summary (ES), §1 In July 2012, the Government consulted on its strategy for aviation: the draft Aviation Policy Framework. This proposed a high-level strategy setting out our overall objectives for aviation and the policies we will use to achieve those objectives

Executive summary (ES), §5 The Government's primary objective is to achieve long-term economic growth. The aviation sector is a major contributor to the economy and we support its growth within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise. It is equally important that the aviation industry has confidence that the framework is sufficiently stable to underpin long-term planning and investment in aircraft and infrastructure.

ES §7. Aviation benefits the UK economy through its direct contribution to gross domestic product (GDP) and employment, and by facilitating trade and investment, manufacturing supply chains, skills development and tourism. The whole UK aviation sector's turnover in 2011 was around £53 billion and it generated around £18 billion of economic output. The sector employs around 220,000 workers directly and supports many more indirectly. The UK has the second largest aircraft manufacturing industry in the world after the USA and will benefit economically from growth in employment and exports from future aviation growth. Aviation also brings many wider benefits to society and individuals, including travel for leisure and visiting family and friends.



Aviation Policy Framework 2013 – Investment & Growth

2.37 The aerospace manufacturing industry recognises that the predicted level of future growth sharpens the emphasis on environmental concerns. Manufacturers have been responsible for most of the reductions in CO₂, NO_x and noise over the past 20 years and they are committed to maintaining this rate of reduction. The sector consistently spends between £100 million and £150 million a year⁷⁹ on long-term research and technology for civil aircraft, much of which is targeted at environmental improvement. The total civil research and development expenditure is £970 million, which, when combined with civil sales of £11.78 billion corresponds to 8.2% of sales for R&D. This is a high percentage for any UK sector, and indicates that the industry acknowledges and is working to address the problem.

3.3 We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.



Investment in New Aircraft



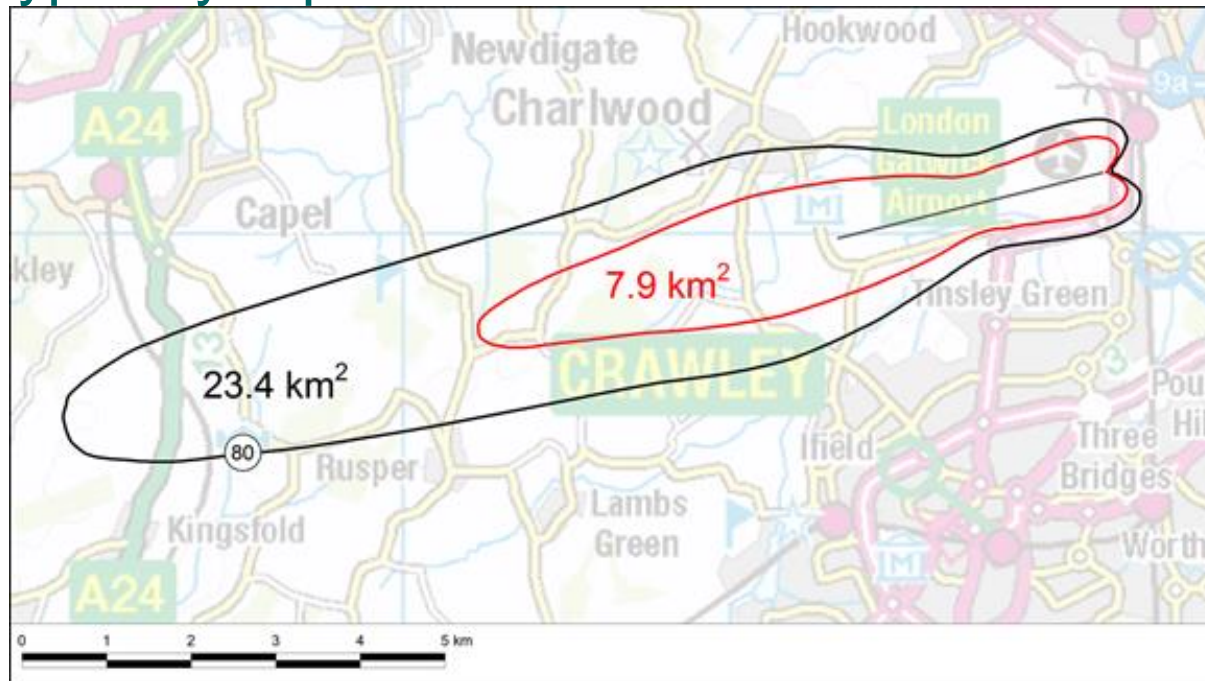
It takes around 10 years to develop a wholly new type of aircraft and bring it to the market. For example, the A350 was announced as a development programme in September 2004, and Qatar Airlines made their first scheduled flight in January 2015.

The total development cost has been estimated at \$15bn.



Noise Reduction from New Aircraft

The new generation of Airbus NEOs are approximately 5dB quieter on departure and 3dB quieter on approach than the older types they typically replace.



Aviation Policy Framework 2013 – Noise

3.12 The Government’s overall policy on aviation noise is **to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise**, as part of a policy of sharing benefits of noise reduction with industry.

3.13 This is consistent with the Government’s Noise Policy, as set out in the Noise Policy Statement for England (NPSE)⁹³ which aims to avoid significant adverse impacts on health and quality of life.

3.24 The acceptability of any growth in aviation depends to a large extent on the industry tackling its noise impact. The Government accepts, however, that it is neither reasonable nor realistic for such actions to impose unlimited costs on industry. Instead, efforts should be proportionate to the extent of the noise problem and numbers of people affected.

3.29 The Government wishes to pursue the concept of noise envelopes as a means of giving certainty to local communities about the levels of noise which can be expected in the future and to give developers certainty on how they can use their airports...

3.30 At other airports, local communities are encouraged to work with airports to develop acceptable solutions which are proportionate to the scale of the noise problem and be involved in discussions about the acceptable limits of noise. The Government believes that the process of designing and consulting on a noise envelope could be a suitable mechanism to achieve this. The CAA will produce further guidance [*this became CAP1129*] on the use and types of noise envelopes which may be used in the context of any proposals for new airport capacity and the work of the Airports Commission.



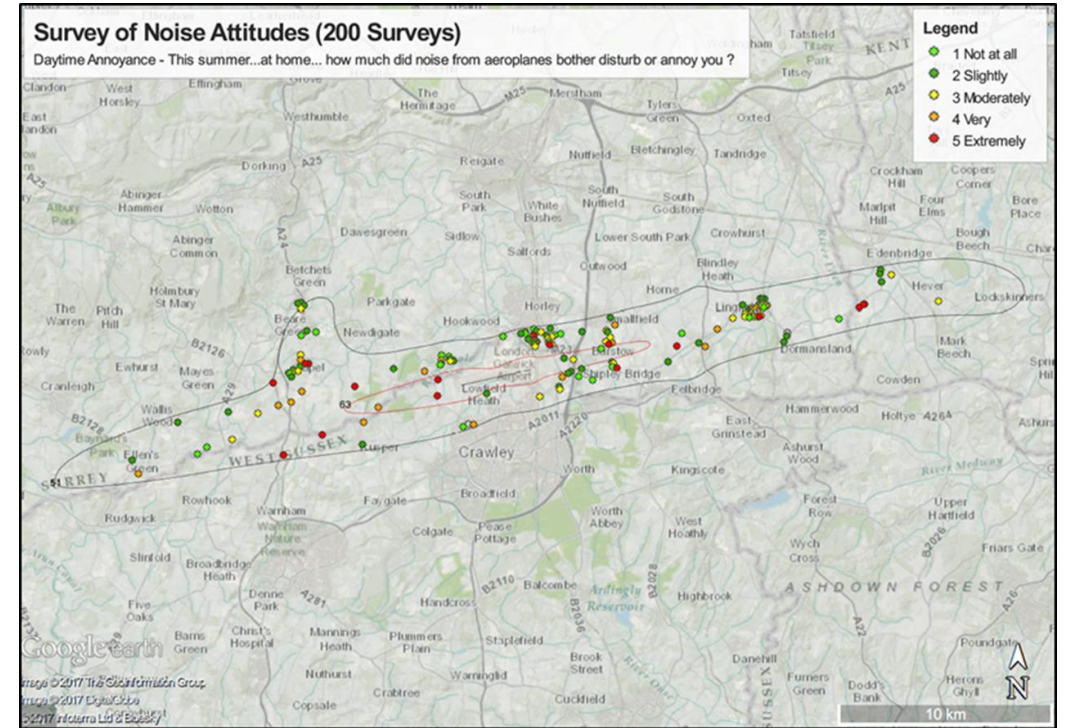
Survey of Noise Attitudes 2014: Aircraft, (SoNA)

A major DfT research study on the effects of aircraft noise:

- 9 UK airports
- 2,000 social surveys of individual's responses to aircraft noise, 200 at Gatwick
- Social surveys asked many other questions giving a great deal of context

Findings used to inform government policy:

- UK specific, current, noise annoyance dose/response relationship
- Lowest Observable Adverse Effects Level (LOAEL)
- Metrics – No metric is a better indicator of long-term annoyance than summer season L_{eq}

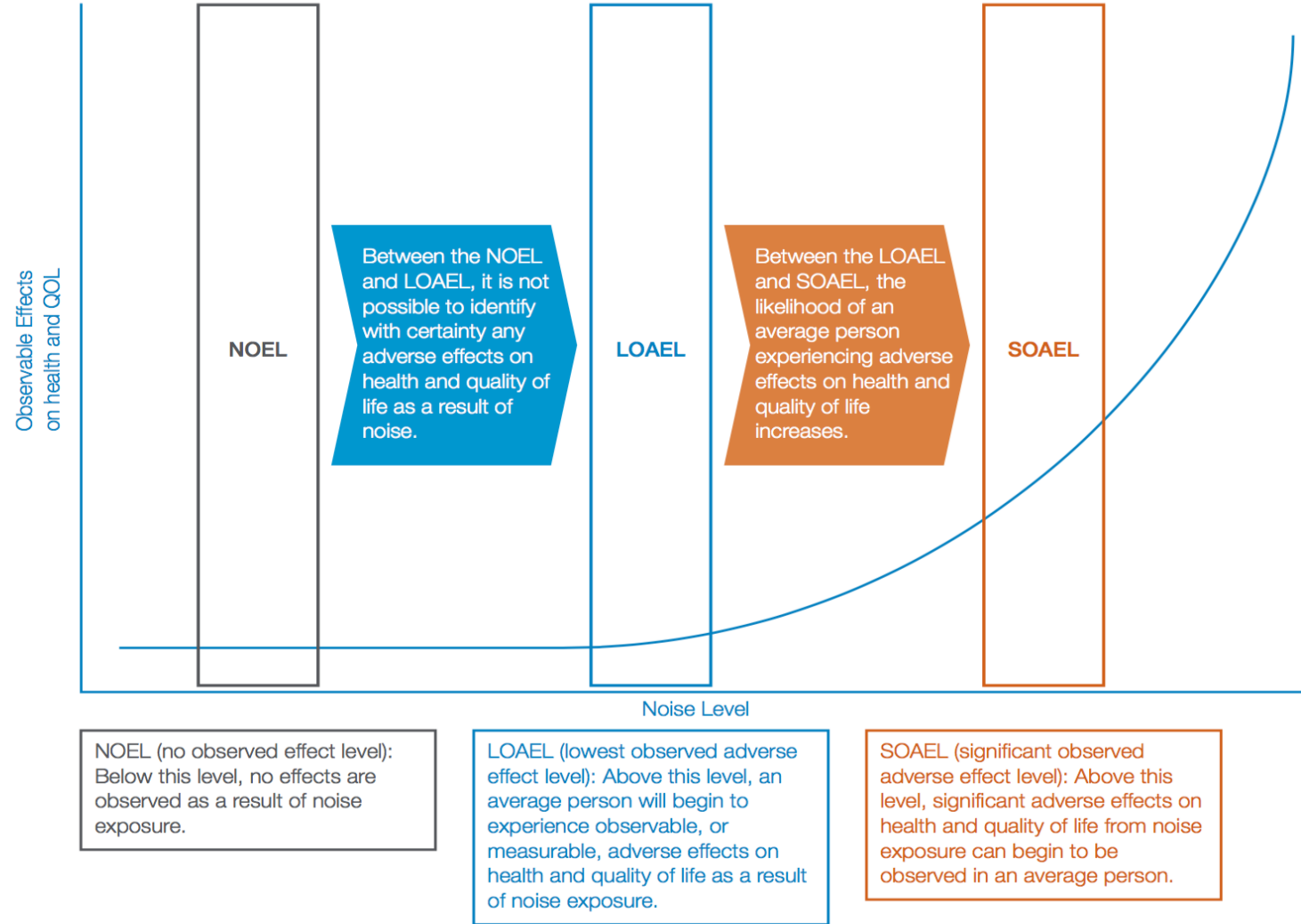


UK Airspace Policy Consultation: A framework for balanced decisions: on the design and use of airspace ('APC 2017'), Consultation Response on Airspace Policy ('APCR' 2017)

APC §3.14 Industry should, as far as is practical, proactively seek to avoid, minimise and mitigate adverse noise impacts, building on existing best practice. This is consistent with the overarching policy principle that the benefits of noise reduction brought about by new technology should be shared between industry and those affected by aircraft noise. This means that communities should benefit from noise reductions, while industry should have space to grow sustainably and serve passenger demand.

APCR 2.72 So that the potential adverse effects of an airspace change can be properly assessed, for the purpose of informing decisions on airspace design and use, we will set a LOAEL at 51 dB LAeq 16 hr for daytime, and based on feedback and further discussion with CAA we are making one minor change to the LOAEL night metric to be 45dB LAeq 8hr rather than Lnight to be consistent with the daytime metric. These metrics will ensure that the total adverse effects on people can be assessed, and airspace options compared. They will also ensure airspace decisions are consistent with the objectives of the overall policy to avoid significant adverse impacts and minimise adverse impacts.





Observable noise impacts



Airports National Policy Statement June 2018

The Airports National Policy Statement (ANPS, June 2018) (paragraph 5.60) includes policy relating to the proposed third runway at Heathrow. The NPS requires Heathrow to put forward a noise envelope for its third runway proposal:

‘Such an envelope should be tailored to local priorities and include clear noise performance targets. As such, the design of the envelope should be defined in consultation with local communities and relevant stakeholders and take account of any independent guidance such as from the Independent Commission on Civil Aviation Noise. The benefits of future technological improvements should be shared between the applicant and its local communities, hence helping to achieve a balance between growth and noise reduction. Suitable review periods should be set in consultation with the parties mentioned above to ensure the noise envelope’s framework remains relevant.’

Gatwick’s Northern Runway Project, the Planning Inspectorate’s Scoping Opinion

‘The Inspectorate notes that there is no reference to a defined ‘noise envelope’ as referred to in paragraph 5.60 of the Airports NPS, and the Applicant should make efforts to agree the need for such provisions with relevant consultation bodies as a mechanism to manage noise effects.’



Aviation 2050, The Future of UK Aviation, A Consultation, December 2018

3.115 The proposed new measures are:

- **routinely setting noise caps as part of planning approvals (for increase in passengers or flights).**⁷⁷ The aim is to balance noise and growth and to provide future certainty over noise levels to communities. It is important that caps are subject to periodic review to ensure they remain relevant and continue to strike a fair balance by taking account of actual growth and the introduction of new aircraft technology. It is equally important that there are appropriate compliance mechanisms in case such caps are breached, and the government wants to explore mechanisms by which airports could ‘pay for’ additional growth by means of local compensation as an alternative to the current sanctions available.

⁷⁷ A noise cap (also known as a noise envelope) is any measure which restricts noise. In its crudest form this could be a simple movement cap, but the government proposes advocating caps which are based on setting maximum noise exposure levels (such as contour area or noise quota). Noise caps should also consider the effect of night flights, given the health costs associated with sleep disturbance. These costs need to balance the benefits of night flights and any restrictions should be proportionate to local circumstances.



2. Benefits of a Noise Envelope



Benefits of a Noise Envelope

A Noise Envelope can:

1. limit noise exposure and hence noise effects
2. by providing certainty, influence non-acoustic factors that lessen noise effects

Non-Acoustic Factors Affecting Annoyance

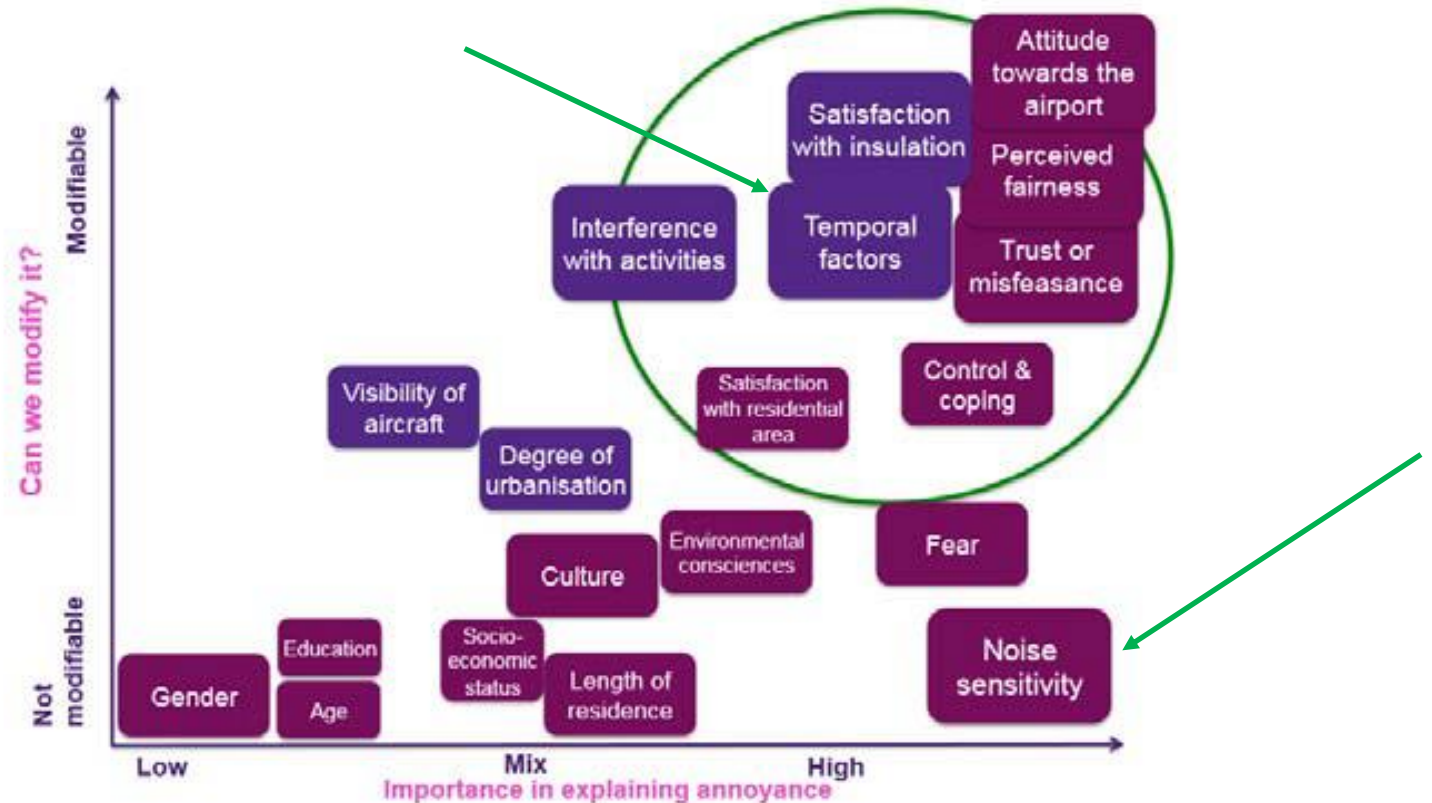
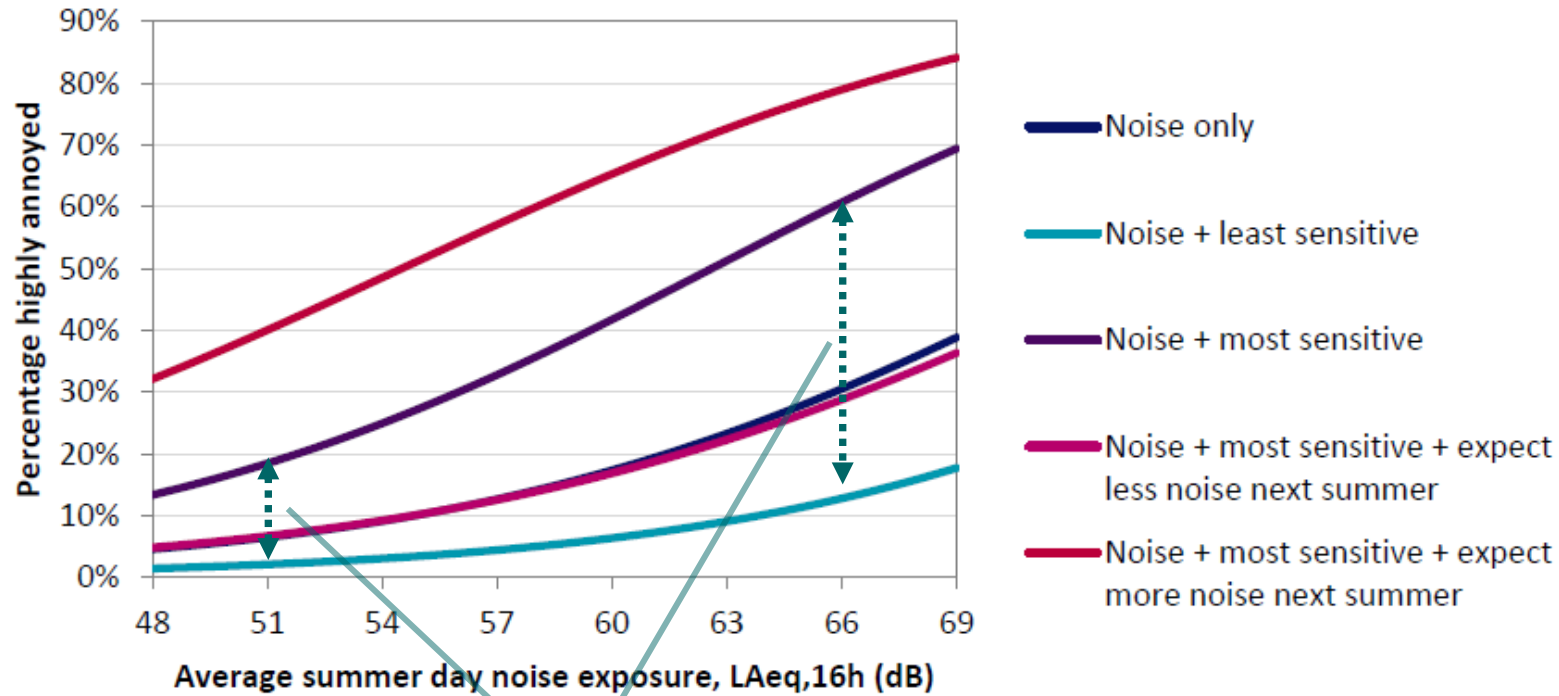


Figure 2. The importance of non-acoustic factors in explaining annoyance and the rating of ability to modify these factors. [Source: Anderson Acoustics]



SoNA, 2014 – Noise Sensitivity

Figure 9: Variation in dose response relationships for different logistic regression models

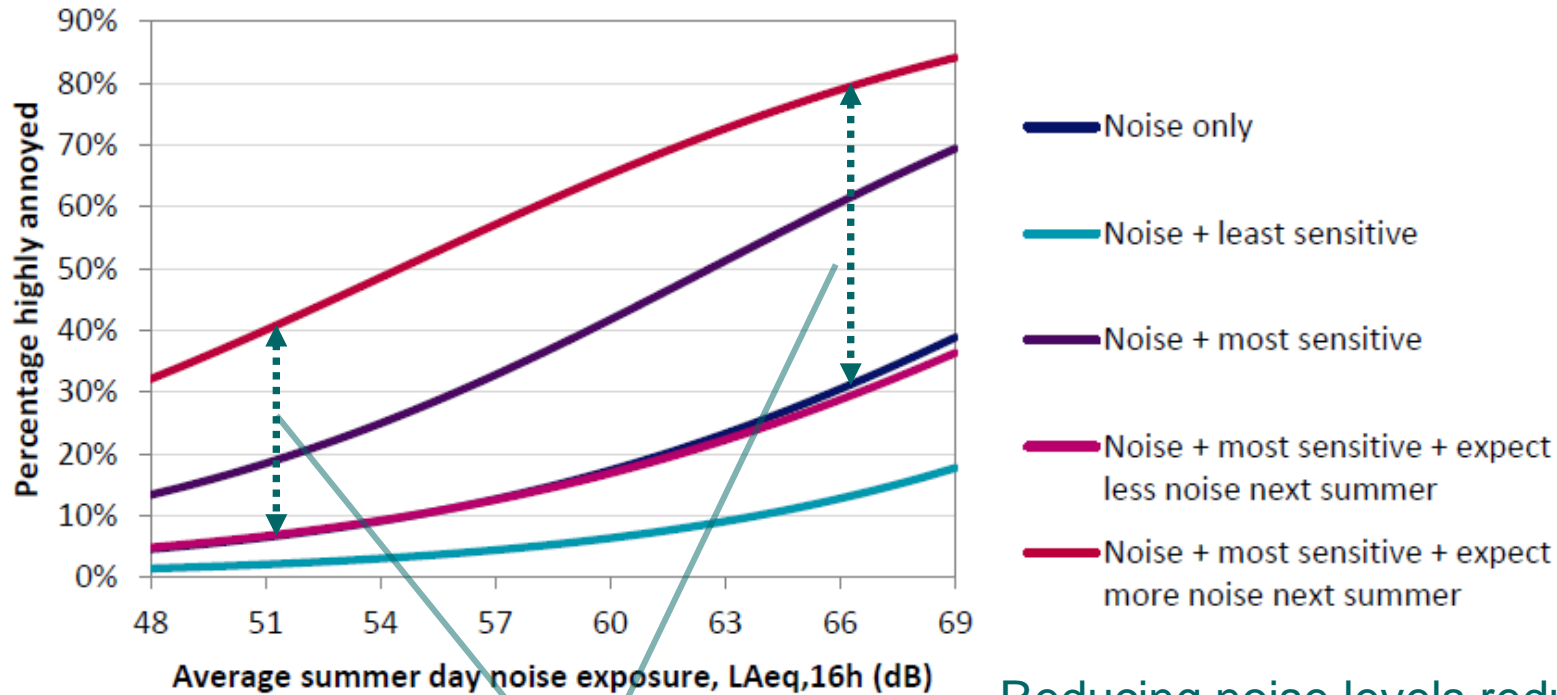


Range in annoyance due to personal sensitivity: 20-50%



SoNA 2014 – Expectation of Next Summer

Figure 9: Variation in dose response relationships for different logistic regression models



Range in annoyance due to different expectations of noise next summer: 30-50%

Reducing noise levels reduces community annoyance.

A Noise Envelope that gives a community certainty will reduce noise annoyance



3. CAP 1129 Guidance



CAP 1129 Guidance

Chapter 2 Current Thinking on the Noise Envelope Concept

Chapter 3 Defining a Noise Envelope

- Characteristics
- Parameters

Chapter 4 Setting the limits

- Sharing the benefits
- Providing assurance
- Reviews

Chapter 5 Implementation

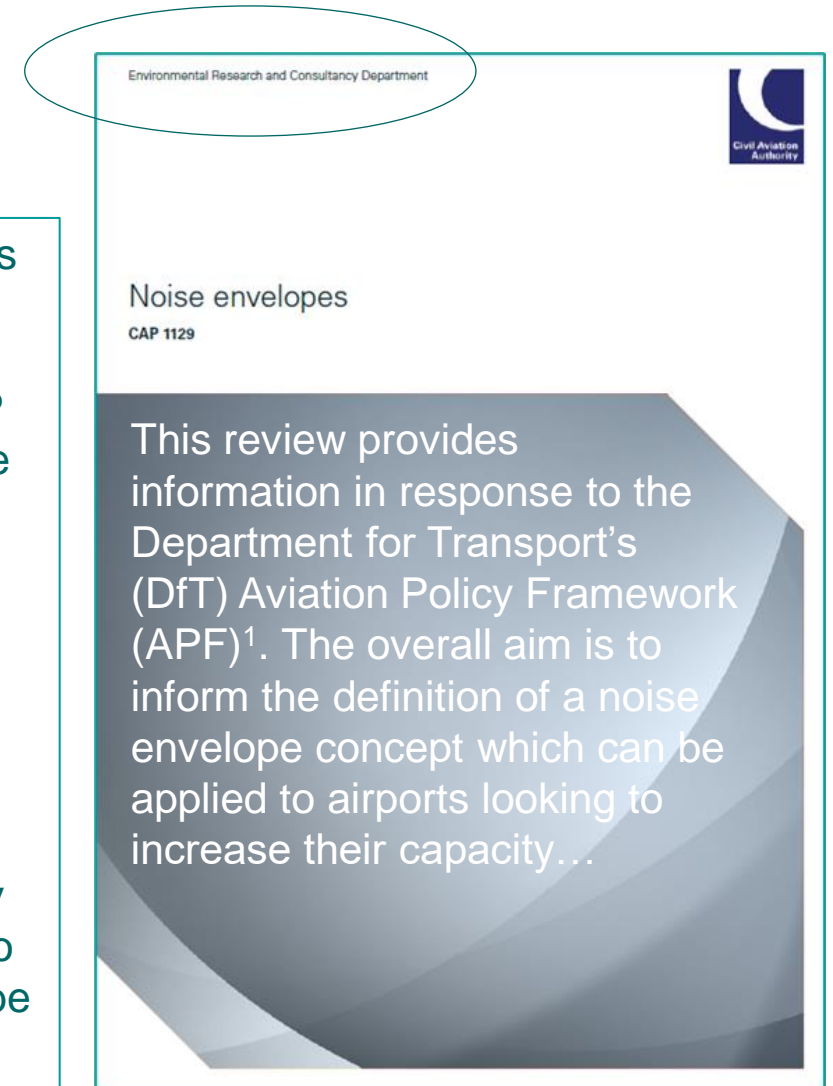
- Process
- Obtaining agreement among stakeholders
- Legal basis, planning and controls
- The role of government in implementing envelopes

Chapter 6 In Operation

- Monitoring compliance in operation
- Enforcement
- Local monitoring and enforcement plan

Some CAPs prescribe rules and procedures that the CAA require the aviation industry to follow, e.g. CAP 1616 dictates how airspace changes must be carried out.

CAP 1129 does not prescribe rules and procedures. Rather it is a report of research carried out by the Environmental Research and Consultancy Department of the CAA into how noise envelopes can be defined.



CAP 1129 Guidance

‘This review provides information in response to the Department for Transport’s (DfT) Aviation Policy Framework (APF)’.

CAP 1129 (CAA, 2013) gives guidance as to the forms that noise envelopes can take, and how they can be implemented.

In Chapter 3:

‘To function as intended, a noise envelope should as a minimum:

1. be clearly defined
2. be agreed among stakeholders
3. be legally binding
4. not be compromised by the lack of up-to-date understanding of the relationship between annoyance and the exposure to aircraft noise
5. take account of new technology
6. have proportionate aims, which are appropriate for the airport to which it applies, i.e. to permit growth, maintain a status quo, or manage a reduction in noise impact.’

Chapter 4 Setting Limits includes a short section on Sharing Benefits briefly discussing Heathrow and Stansted examples, and notes *‘Clearly, striking the right balance is not an easy task.’*

GAL fully understands the guidance given in CAP 1129, as applicable to Gatwick Airport.

The PEIR proposed an outline of the Noise Envelope to seek views from all stakeholders, as part of the process to develop the noise envelope through engagement with stakeholders.



4. Regulation 598 Considerations



Regulation 598 Considerations

UK Regulation 598 seeks to ensure that 'noise related operating restrictions' are only imposed when other measures within the ICAO "Balanced Approach" have first been considered, and where those other measures are not in themselves sufficient to attain the specific noise abatement objectives for the airport. It is assumed that the proposed noise envelope would be a noise related operating restriction under the Regulation.

The balanced approach to noise management requires a combination of measures to be considered:

- reduction of noise at source;
- land use planning and management;
- noise abatement operational procedures;
- not applying operating restrictions as a first resort, but only after considering the other measures of the Balanced Approach;



Noise Objective for purposes of Regulation 598

GAL proposes the following noise objective for the Project:

The Project will:

- **Avoid significant adverse impacts on health and quality of life from noise;**
- **Mitigate and minimise adverse impacts on health and quality of life from noise;**
- **Where possible, contribute to improvements to health and quality of life; and**
- **Provide certainty to the communities around Gatwick that noise will not exceed contour limits and will reduce over time,**

consistent with the ICAO Balanced Approach.

PEIR Appendix 14.9.5 Section 4 explains how we have taken the other requirements of Regulation 598 into account.



5. PEIR Noise Envelope Proposal



The Proposed Noise Envelope

This section states the proposal put forward in PEIR Chapter 14 (p14.60 to 14.63) and Appendix 14.9.5.

- The options considered will be discussed with stakeholders in Theme 2
- The way in which the noise envelope could operate will be discussed with stakeholders in Theme 3
- The way in which the noise envelope could be reviewed and enforced will be discussed with stakeholders in Theme 4



PEIR Proposed Noise Envelope

“By the end of the first year after opening of the reconfigured northern runway pursuant to the Project, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

- Leq 16 hour day 51 dB: 146.7 km²
- Leq 8 hour night 45 dB: 157.4 km²

By the end of the first year in which annual commercial ATMs exceed 382,000, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

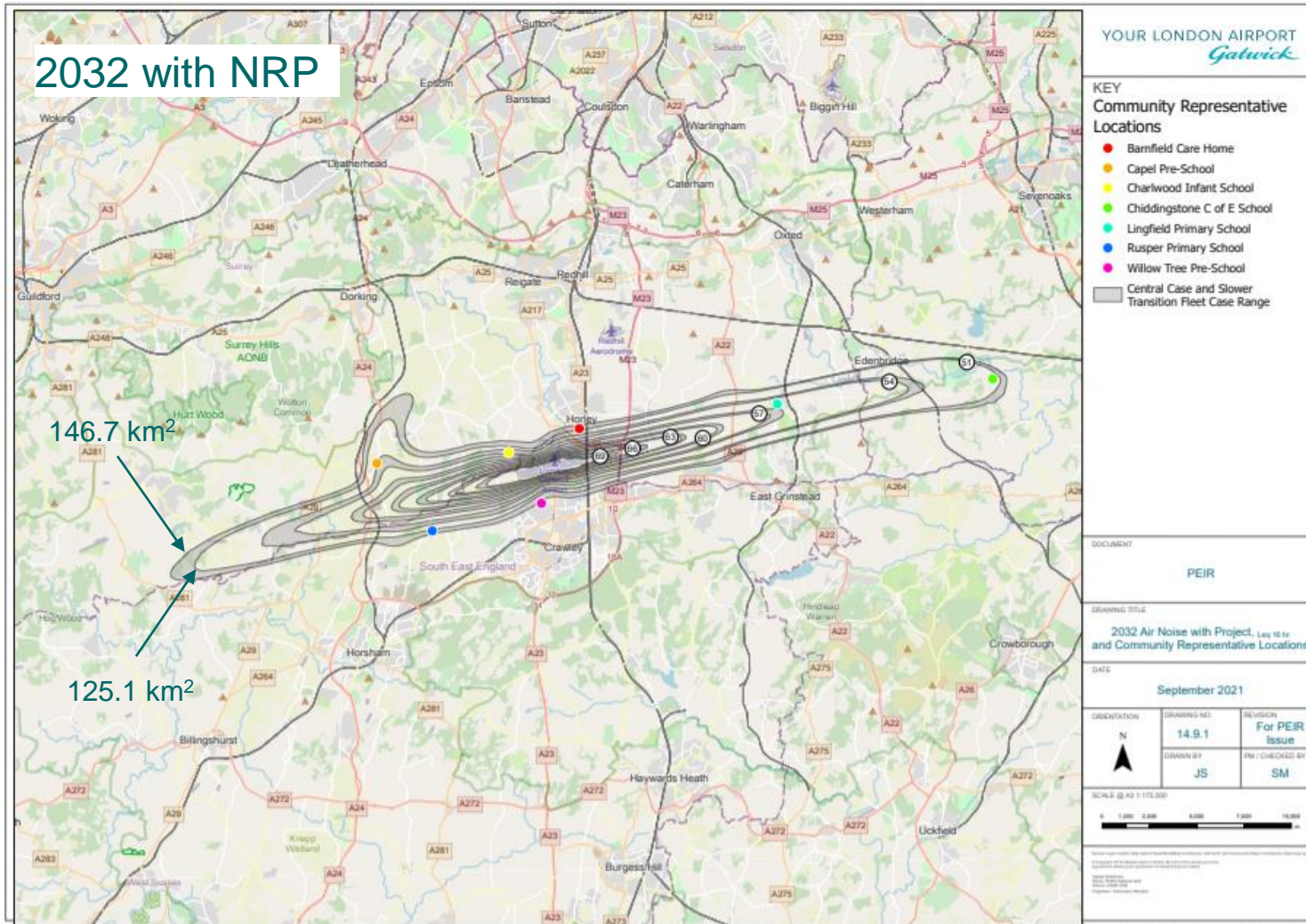
- Leq 16 hour day 51 dB: 125.7 km²
- Leq 8 hour night 45 dB: 136.1 km²

The area of the Leq day and night contours will not exceed the limits above, and the noise envelope would provide certainty to the community that noise levels will be limited and will reduce in the future as the airport grows so as to share the benefits of that growth and new technologies with the community.

GAL will report on performance within the noise envelope annually and set in place internal management processes to forecast performance in the years ahead so as to pre-empt potential non-compliance and put in place operating practices and measures to reduce noise before an exceedance arises. Such measures would be subject to consultation with industry and community stakeholders if they trigger the requirements of Regulation 598. “



Forecast Leq 16 hr Day Noise Contours (LOAEL)

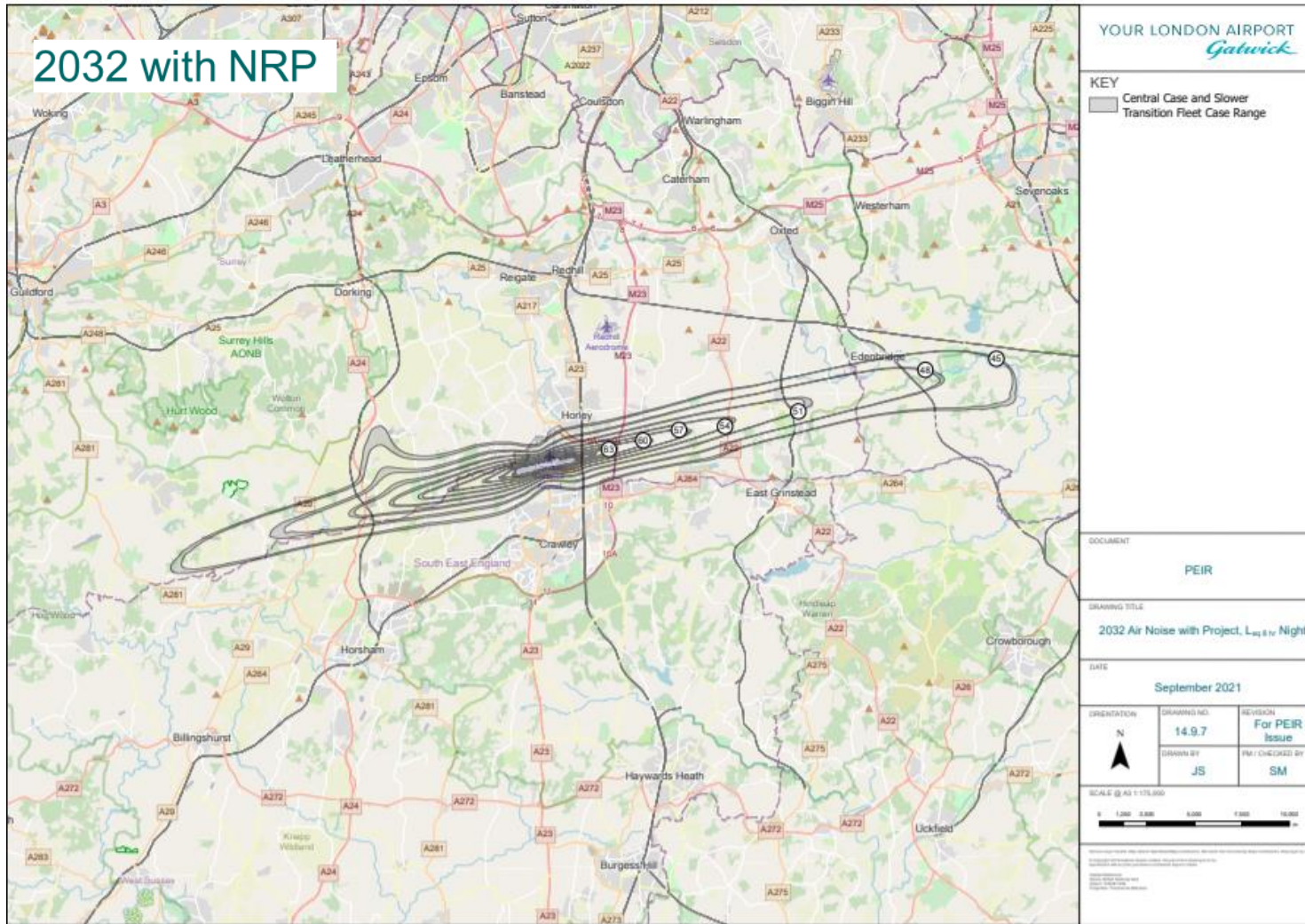


L _{eq, 16hr} dB	Area (km ²)		
	2019 Base	2032 Base	2032 with Project
51dB Central Case	136.0	107.3	125.1
51dB Slow Transition Fleet Case	136.0	125.8	146.7

L _{eq, 16hr} dB	Area (km ²)		
	2019 Base	2038 Base	2038 with Project
51dB Central Case	136.0	96.5	113.7
51dB Slow Transition Fleet Case	136.0	107.4	125.7



Forecast Leq 8 hr Night Noise Contours (LOAEL)



L _{eq} , 8hr dB	Area (km ²)		
	2019 Base	2032 Base	2032 with Project
45 dB Central Case	159.4	124.6	136.2
45dB Slow Transition Fleet Case	159.4	143.9	157.4

L _{eq} , 8hr dB	Area (km ²)		
	2019 Base	2038 Base	2038 with Project
45 dB Central Case	159.4	115.3	125.8
45dB Slow Transition Fleet Case	159.4	124.3	136.1



6. PEIR Consultation Response Themes



PEIR Consultation Response

There were 15,000 comments on noise*, by 3,200 respondents

There were 5,941 comments submitted under the consultation report heading 13b Managing and mitigating effects: Noise Envelope. Of these:

9% supported the Noise Envelope proposal

4% opposed the principle of the proposed Noise Envelope

87% made suggestion to improve the Noise Envelope

1,000 comments specifically referred to the Noise Envelope. Several organisations made multiple comments:

Horsham District Council (35), Betchworth Parish Council (31), Plane Wrong (31), Bidborough Parish Council (27), Gatwick Area Conservation Campaign (27), Wisborough Green Parish Council (26), Tunbridge Wells Anti Aircraft Noise Group (TWAANG) (21), Kent County Council (20).

* Including duplicates



PEIR Consultation Response Noise Envelope Themes

	NEG
	Theme
587 comments relate to the noise metrics proposed, most suggest multiple metrics as well as ATM caps	2
444 comments mention enforcement, and request details	4
132 comments suggest a ban on night flights	2
131 comments refer to airspace or FASI-S, many suggesting the envelope needs a review mechanism	4
118 comments refer to a lack of consultation	All
107 comments refer to sharing benefits, mostly suggesting the proposal does not share benefits	2
58 comments say GAL has not followed CAA guidance CAP 1129	All
The noise envelope should cover a larger area	2
It should be enforced by the competent authority not GAL itself.	4

GAL has considered these comments carefully, and begun to develop its proposals in these key areas to discuss with stakeholders under the following 3 themes.



End

Next Meetings:

Noise Envelope Group (Theme 1) w/c 13 June

Local Steering Group (Theme 2) w/c 20 June

Aviation Steering Group (Theme 2) w/c 20 June

Noise Envelope Group (Theme 2) w/c 11 July



Gatwick Northern Runway Project

Noise Envelope Local Sub-Group

Theme 2 Meeting

June 23, 2022



Agenda Part 1 (items in yellow will be taken as read, but please ask questions if required)

Introductions, Scope of the Meeting

1. Options for a Noise Envelope

- PEIR metrics and Consultation Responses Slide 6-7
- CAP 1129 guidance on options Slides 8-9
- Various Metrics (QCs, noise levels, caps etc) Slides 10-16
- Noise Contour Area Slides 17
 - What noise metric – L_{eq} , N65, N60 Slides 18-24
 - L_{eq} v Number above Slides 25-26
 - Time Periods – Annual L_{den} , L_{Night} v summer L_{eq} Slides 27-29
 - Which Contour noise level Slide 30

Break



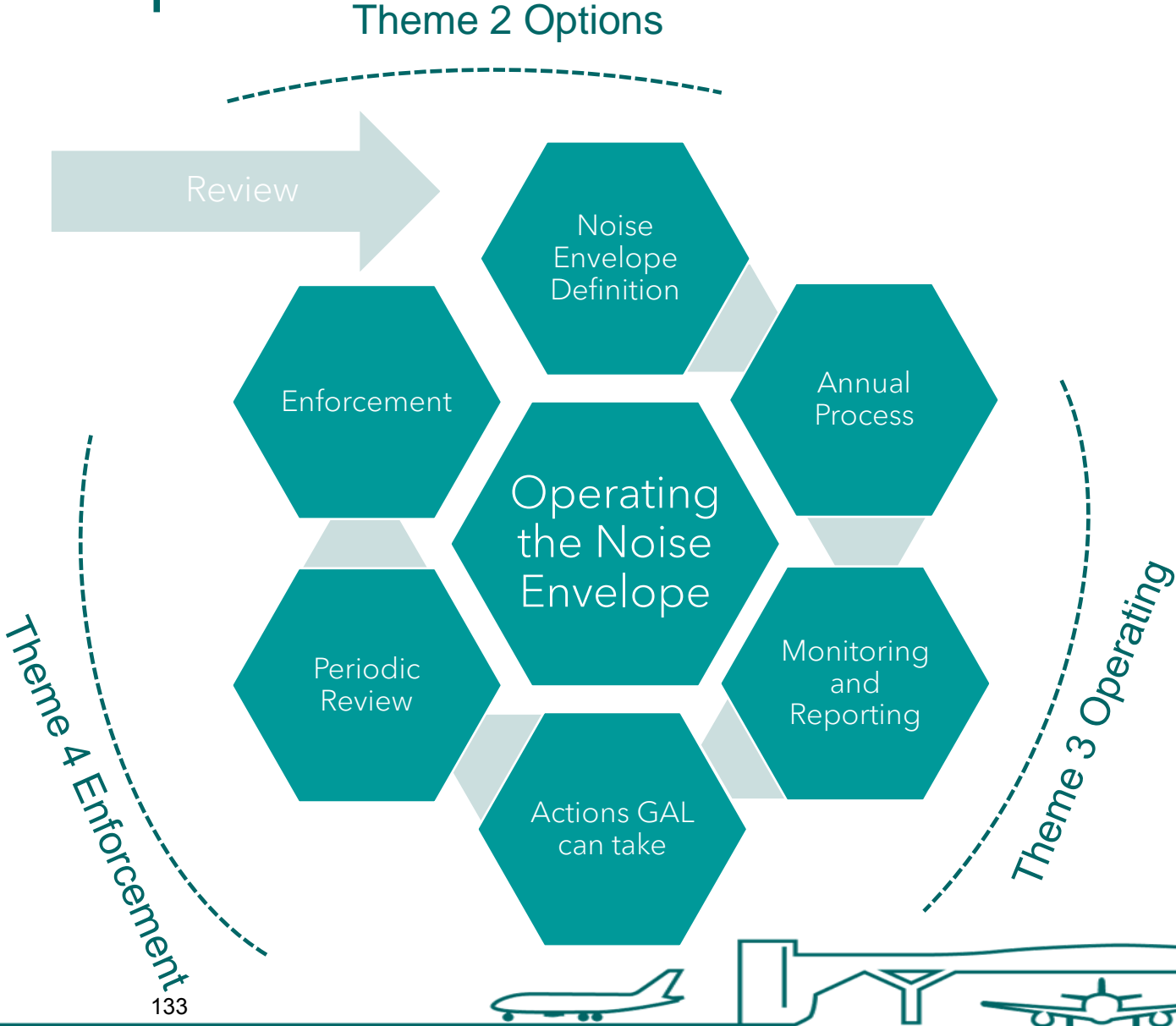
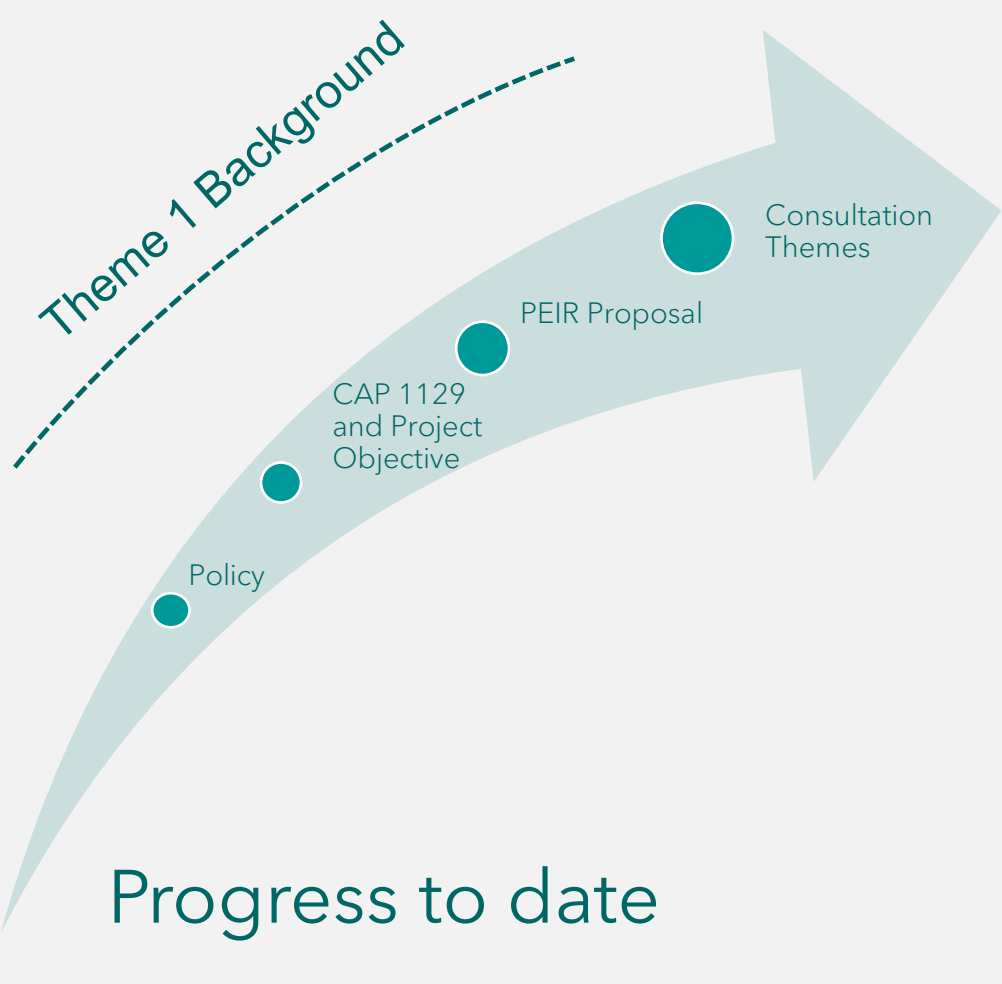
Agenda Part 2 (items in yellow will be taken as read, but please ask questions if required)

2 Setting Limits

- Objective Slide 32
- Forecasting - fleet transition effect Slides 33-35
- Sharing the Benefits
 - Policy Slide 36
 - Bristol Airport Planning Inspector example Slides 37-39
 - Gatwick Airport Slides 40-46



Developing The Noise Envelope



1. Options For a Noise Envelope



PEIR Air Noise Metrics Reported

Primary noise metrics - $L_{eq16\text{ hr}}$ day and $L_{eq8\text{ hr}}$ night contours to quantify changes in in terms of areas of noise contours and populations within them, and likely significant effects on health and quality of life.

$L_{eq16\text{ hr}}$ day and $L_{eq8\text{ hr}}$ night difference contours to show noise changes across the area.

Secondary Noise metrics - N65 Day and N60 Night contours to quantify changes in community noise exposure measured in terms of the numbers of noise events (above L_{max} 65dB and L_{max} 60dB) and areas of noise contours and populations within them. L_{den} and L_{night} annual average contours.

Community Representative Locations -Noise levels in terms of primary and secondary noise metrics at these particular 7 locations to describe in more detail how noise would change on average summer easterly and westerly operating days.

L_{max} 60 and 65dB footprints and difference contours plotted to illustrate how L_{max} levels would change for departures from the northern runway compared to the main runway.

Noise Sensitive Buildings - noise levels at 50 schools, hospitals, places of worship, community buildings and heritage assets.

Overflights– change in the numbers of overflights expected within a wider area up to 35miles from the airport are estimated to inform those living further from the airport.

59 Air Noise Figures in PEIR.



PEIR and Consultation Response - Noise Envelope Noise Metrics

	NEG Theme
587 comments relate to the noise metrics proposed, most suggest multiple metrics as well as ATM caps	2
444 comments mention enforcement, and request details	4
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It should be enforced by the competent authority not GAL itself	4



Approaches to a Noise Envelope

CAP 1129 Noise Envelopes (2013) gives CAA guidance on noise envelopes and observes there are three possible approaches to setting a noise envelope:

1. restricting inputs
 - e.g. Night Restrictions
2. restricting noise impact
 - i.e. noise levels on the ground, e.g. contours
3. restricting noise exposure
 - i.e. number of people affected

GAL has considered the pros and cons of these approaches in considering options.



Options Considered

CAP 1129 outlines the following main options for noise envelopes:

- aircraft movement caps
- passenger throughput cap
- noise quota count (QC) cap
- noise level caps
- population/dwellings exposed to noise
- number of people annoyed (daytime)
- number of people sleep-disturbed (night-time)
- Person-Events Index (PEI)
- Average Individual Exposure (AIE)
- noise contour shape
- noise contour area

All these options were considered, see PEIR appendix 14.9.3.

The following slides summarise the consideration of each for the Gatwick Airport Northern Runway Project Noise Envelope.



Aircraft Movement Cap

CAP 1129 notes that: *'The simplicity of the movement cap is clearly attractive in terms of engaging people, but it has drawbacks as well. A key drawback is that it does not take into account the noisiness of aircraft and would therefore not offer incentives to industry to operate quieter aircraft.'*

Also, movement caps do not encourage any other noise reduction measures such as quieter operating procedures.

Passenger Movement Cap

Similar to a movement cap.

The intent of a passenger cap may be to use passenger numbers per flight as a proxy for noise level, but in practice there is a weak link between the two.



Quota Count Cap

Gatwick already has a Quota Count and movements noise envelope, for night flights under the government Night Flights Restrictions, which are in place at the designated London airports.

QC approximates noise emission level:

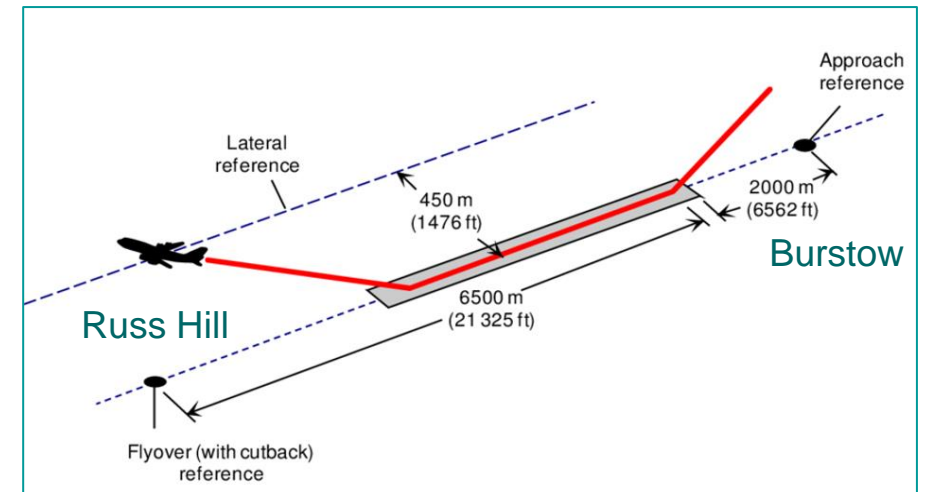
Quota Count validation study at Heathrow Airport (CAP 1869, CAA 2020)

... *the operational approach levels of 13 aircraft types (out of 111) lie entirely above their QC bands.*

On departure, the operational levels of 21 aircraft types (out of 131) lie entirely above their QC bands, including variants of the A320neo and B737 MAX 8.'

QCs are derived from noise levels measured during certification and take no account of aircraft noise levels more than about 3 km from the airport. Most of the people affected by noise from Gatwick airport live well beyond 3 km from the airport.

A QC limit gives no credit to an airport that develops advanced noise abatement operating procedures that reduce noise further away. Low noise arrivals procedures and greater climb rates, for example, would go unnoticed in a QC system envelope whereas they would reduce noise levels in affected areas.



Noise Level Caps

Noise limits could be set at measurement locations.

Where, and how would they represent all communities?

There may be ways to reduce noise levels at these locations that increase noise at the other locations.

Measurements can also be affected by other noise and weather conditions.

Noise contours, provided they are reliably predicted based on detailed information on aircraft operations, are therefore considered more appropriate than noise levels for setting a noise envelope.



Population/Dwellings Exposed to Noise

Has the advantage that it relates closely to noise effect.

However:

The population may grow, making this form of envelope difficult to monitor in the future.

And new residential development under the airport flight paths should be granted planning permission only with suitable mitigation.

So, the potential advantage of setting a noise envelope in terms of the population within given noise contours is likely to be offset by the uncertainty it creates compared to setting a noise envelope in terms of noise contour areas.

ERCD Draft 2021 Annual Contour Report:

'Within the extent of the 2021 average summer day standard 54 dB Laeq, 16h contour, the population count using the 2021 population database was 12% higher compared to using the 2020 database'.



Number of People Annoyed or Sleep Disturbed

Has the advantage that it relates directly to noise effect.

Noise envelopes that restrict noise impacts can be set in terms of the extent of noise effects e.g. Schiphol Airport has had limits of populations highly annoyed, and populations sleep disturbed. However, these rely on applying dose/response relationships for the effects, which can generate uncertainty, can vary between locations and over time, and can be subject to challenge.

Future growth in population would also increase complexity.

In addition, existing housing may be fitted with sound insulation reducing sleep disturbance. Similarly, new housing may only be permitted with good sound insulation to reduce sleep disturbance. But the benefits of these would be very difficult to capture in this form of envelope.



Person-Events Index (PEI)

The Person Events Index is a measure developed in Australia that uses the number of noise events above a given threshold, like the Number Above metrics (N65 and N60) used in the PEIR. It then sums the results at every population point, e.g. home, within the community. It is a measure of the total noise load or burden the airport places on the surrounding population.

However, like N60 and N65 it makes no allowance of the extent to which noise events are above the threshold and, as with noise impact metrics, uses population size and so is affected by population growth with the inherent complications/uncertainty discussed above.

Average Individual Exposure (AIE)

Average Individual Exposure is simply the PEI divided by the total population, i.e. the average number of noise events per exposed person. Like PEI, it takes a simplistic account for noise level and uses population and so is affected by population growth.



Noise Contour Shape

In principle, a contour shape uses a contour that relates to community locations and so provides greater protection for communities.

However, this would be more onerous than a contour area, placing greater restriction on an airport's operations. Fluctuations in weather or operational requirements could pose challenges.

Schiphol airport is probably the most well-known example of a form of contour shape-type limit. It has five runways providing some flexibility in implementation that would not be available at Gatwick. A contour area shape is also complex to administer, and not considered to be appropriate for a single runway airport such as Gatwick.



Noise Contour Area

CAP 1129 notes that:

'A clear and concise way of describing the noise exposure in the vicinity of an airport is to quote the area enclosed by the noise contour of a particular noise metric and level. Being a single numerical value, it is straightforward to set a limit on this value to restrict aircraft noise exposure in the vicinity of an airport.'

Noise contour area limits incentivise improvements in operational procedures.

The choice of noise contour metric should reflect the impact.

Summer season $L_{eq\ 16\text{-hour}}$ day or $L_{eq\ 8\text{-hour}}$ night contours are the most common contours used in the UK because their relationships to annoyance and sleep disturbance in this country are well understood.

Other noise metrics that accumulate noise events during the day or night are available, such as N60 and N65, but their relationship with health effects is less well understood than the L_{eq} metrics.



Noise Metrics – Guidance

CAP 1129 Guidance:

P.47 Although the APF states that the noise-designated airports will continue to provide annual Leq,16h noise contours, it states in paragraph 3.16 that airports are not precluded from producing results using other indicators to describe the noise impact of their operations.

In general terms, where unilateral agreement cannot be achieved using standard metrics, consideration should be given to designing envelopes using other metrics, provided that they are scientifically valid and robust.

P.7, 3. An envelope is likely to be defined by a combination of parameters.

P.14 ...be clearly defined.

P37. For a noise envelope to be effective, it should be simple and easily understood by all stakeholders. Therefore, the introduction of separate criteria for different time periods and/or seasons must be on the condition that there is a clear and justifiable need for it.

NMB Study 2018



2018 NMB Noise Metrics Project - Timeline

- 15 November 2018: Quantifying Air Noise, NMB/8 Community RNN Briefing
- 22 March 2018: CNG's *'Gatwick Noise Metrics Discussion Paper'*
- 11 April 2018: Aircraft Noise: Metrics and Trends, presentation NMB/10
- April 2018: GAL produced paper NMB/10 IP08 'Developing a Plan for Gatwick Growth and Noise'
- 3 May 2018: Metrics Meeting at Gatwick
- June 2018: NMB11/IP29 Developing Metrics for Gatwick Growth and Noise, GAL Update



Quantifying Aircraft Noise: Leq

Consider a classroom of 30 children, aged 5, and one teacher aged 40.

What is the average age of all the people in the room?



Quantifying Aircraft Noise: Leq Equivalent Noise Level

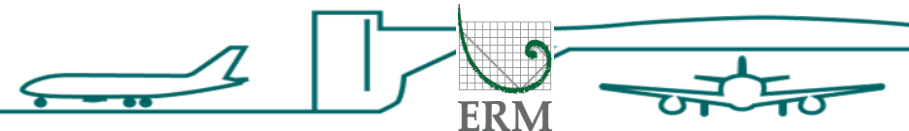
Consider a classroom of 30 children, aged 5, and one teacher aged 40.

What is the average age of all the people in the room?

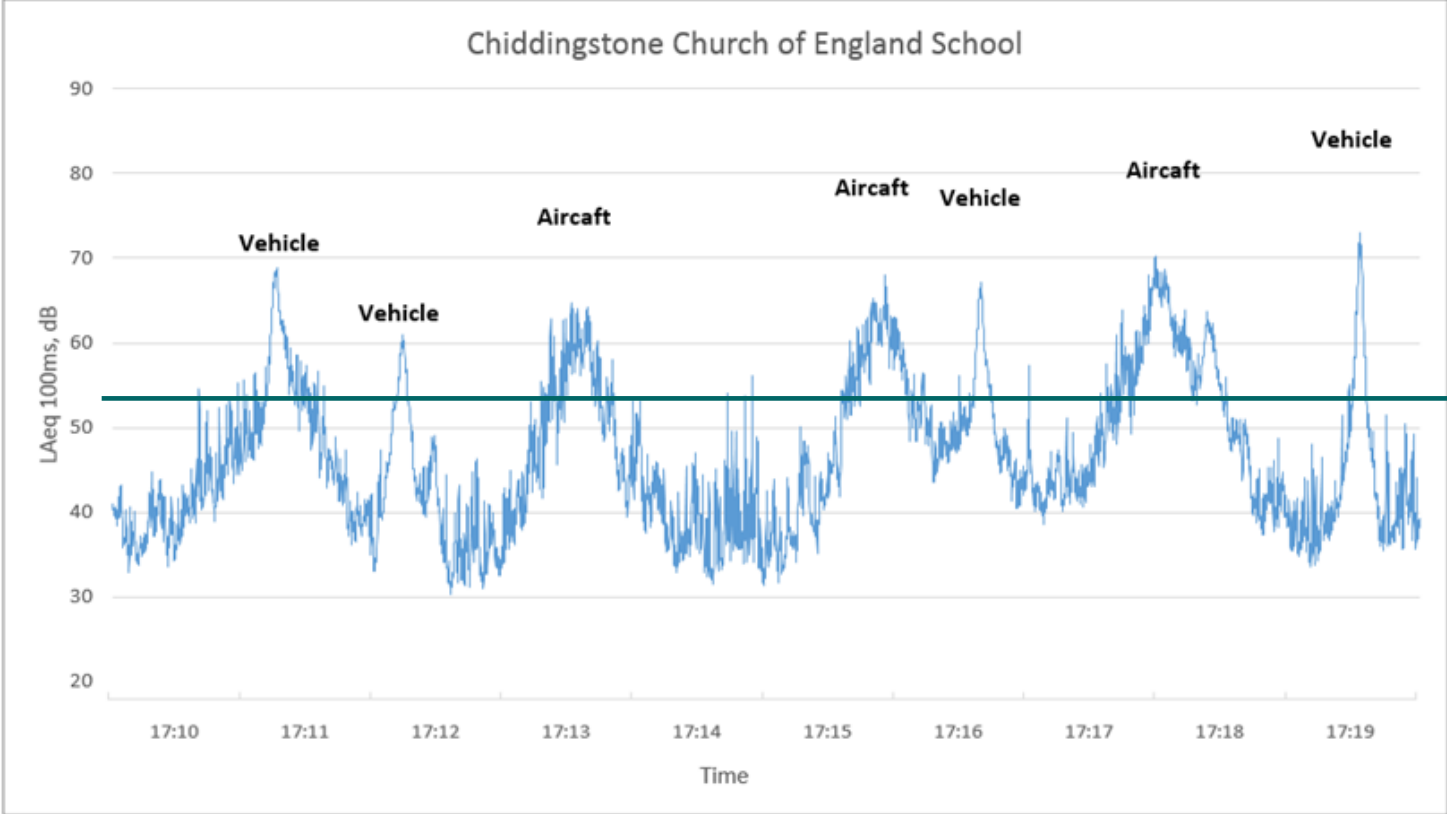
Mean average age – 6.1 years

L_{eq} average age – 25 years

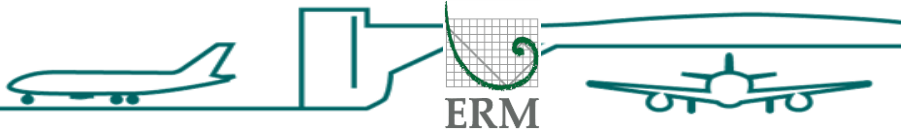
L_{eq} is not an 'average' in the usual meaning of the word, it is a logarithmic average, which makes it heavily weighted by peaks in noise such as those from aircraft.



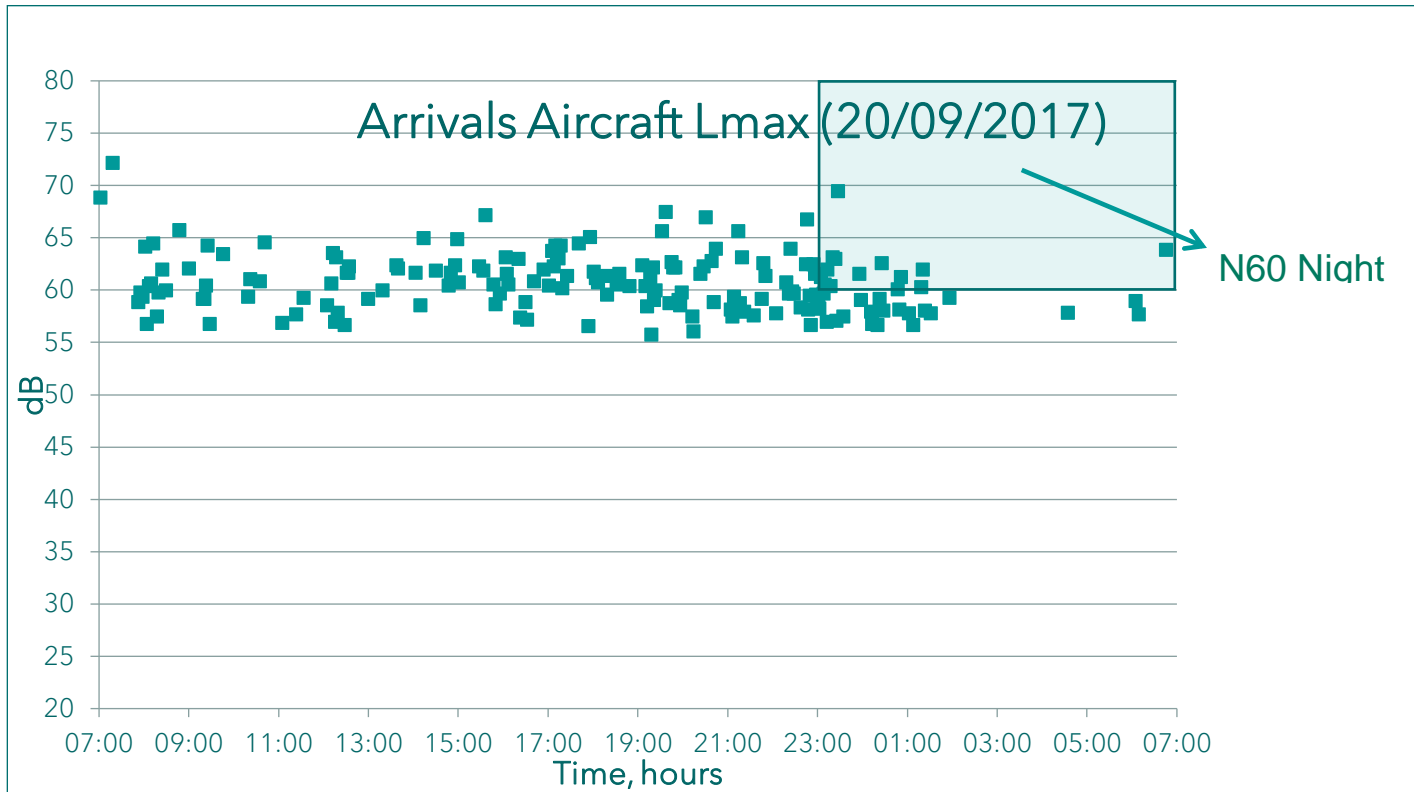
Leq



Total Ambient Noise
Leq, 30 minutes 53dB

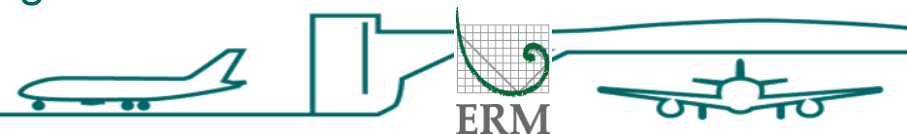


N60



Whereas all aircraft noise events contribute to Leq 8 hour, only the noisiest 10 count for the largest N60 10 contour.

N60 takes no account of how many aircraft are below Lmax 60, or high much above Lmax 60 the peaks are.



SONA (CAP1506 Second Edition, July 2021) And Annoyance Metrics

Is LAeq,16h still the most appropriate indicator to use to estimate the annoyance arising from aircraft noise?

8.7 The study compared reported mean annoyance scores against average summer-day noise exposure defined using four different noise indicators: $L_{Aeq,16h}$, L_{den} , N70 and N65.

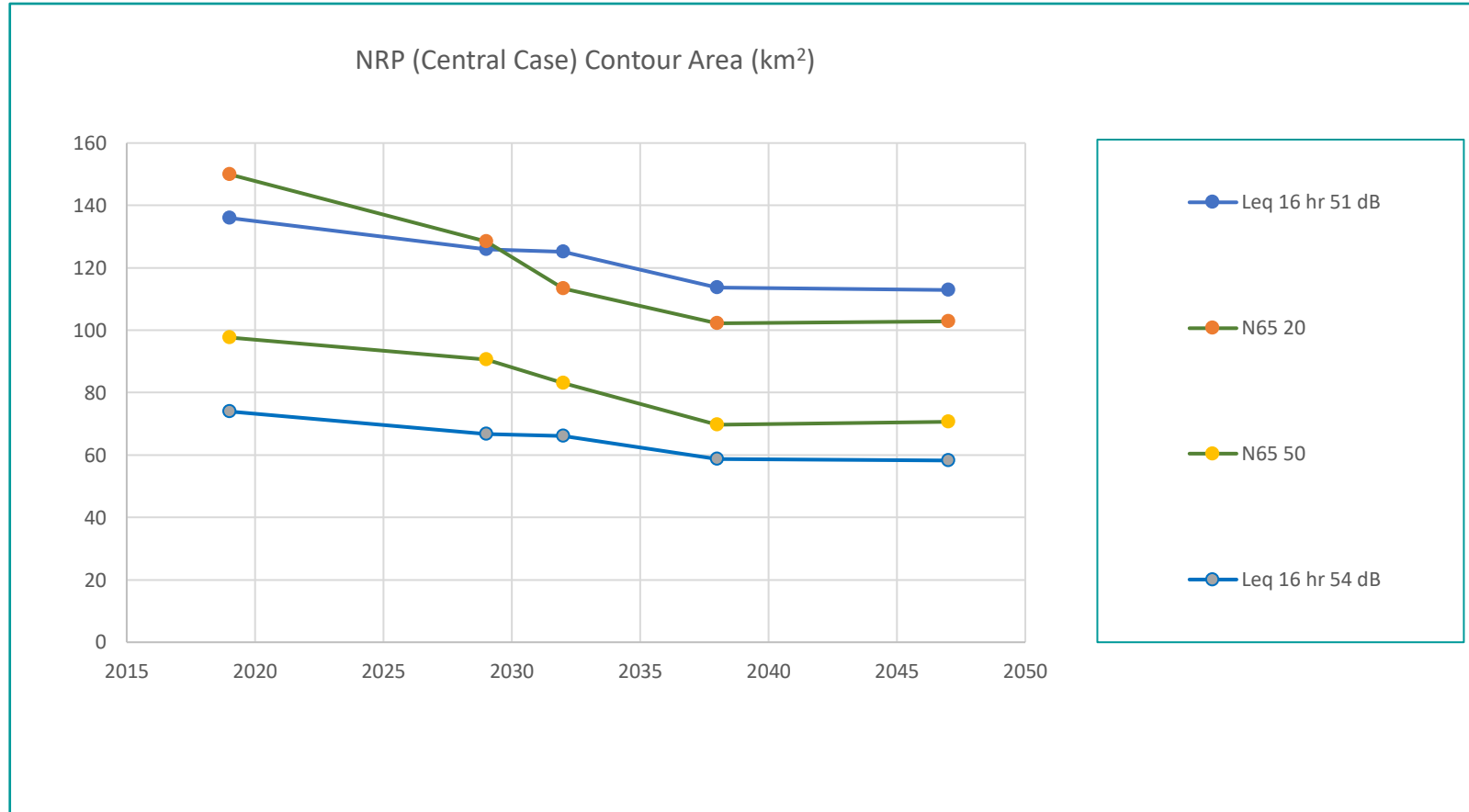
8.8 Evidence was found that mean annoyance score correlated well with average summer day noise exposure, $L_{Aeq,16h}$ ($r^2=0.87$). **There was no evidence found to suggest that any of the other indicators L_{den} , N70 or N65 ($r^2=0.66-0.73$) correlated better with annoyance than $L_{Aeq,16h}$.**

8.9 Having said this, the study recognises that residents can struggle to understand the concept of a time-averaged metric such as $L_{Aeq,16h}$ and L_{den} and the fact that it is measured and reported on a logarithmic scale where a change of 3 dB represents a doubling or halving of noise energy.

8.10 There is, therefore, merit in considering greater use of 'Number Above' metrics as supplemental indicators to help portray noise exposure but recognising that evidence-based decisions should continue to use $L_{Aeq,16h}$. In this context, N65 is preferred over N70 as noise events in many areas are already beginning to occur at levels less than 70 dB L_{ASmax} and are forecast to reduce over time.



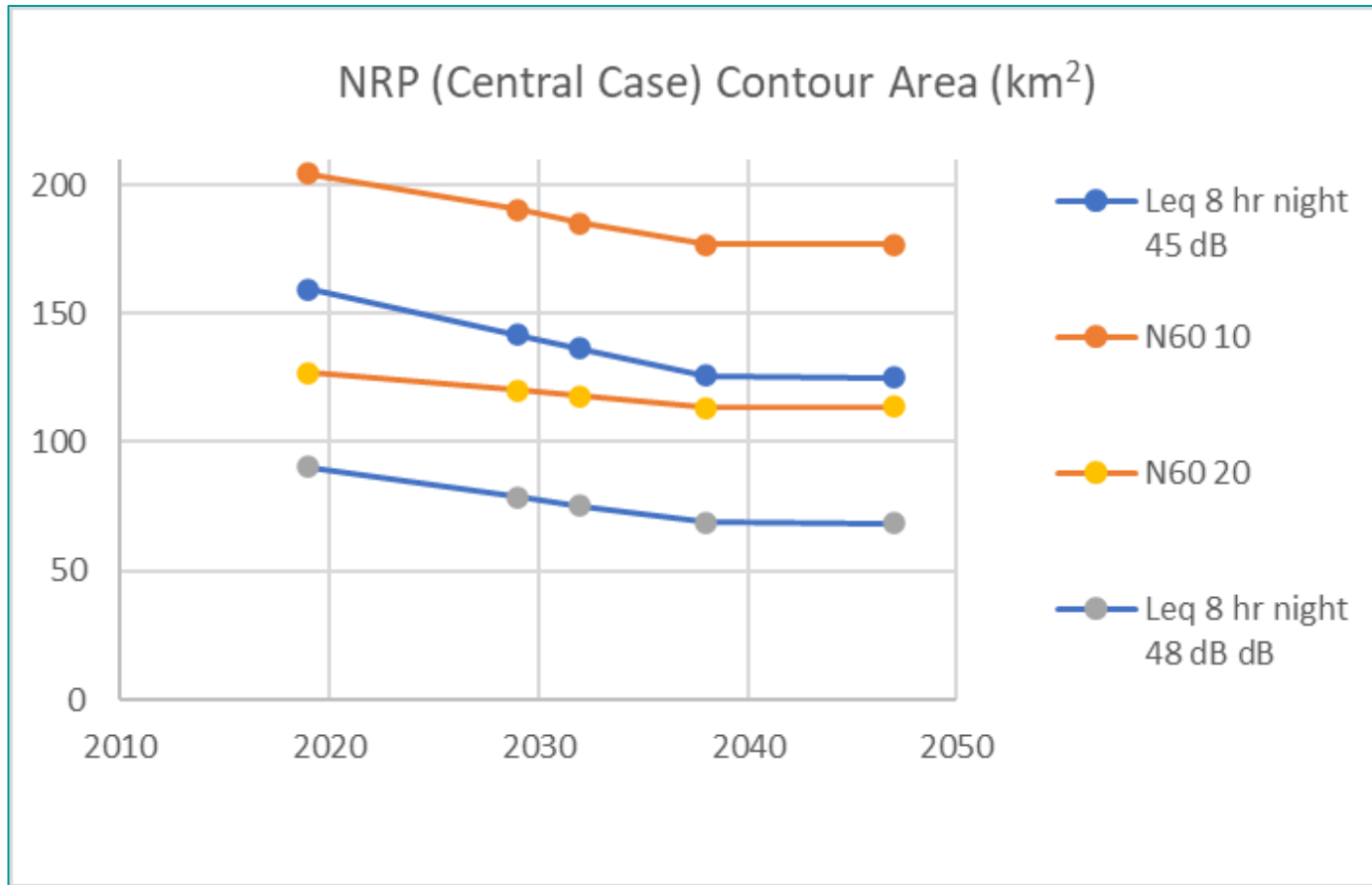
Noise Contour Metrics - Day



$L_{eq\ 16\ hr}$ and N65 contour areas follow similar trends



Noise Contour Metrics - Night



$L_{eq\ 8\ hr}$ night and N60 contour areas follow similar trends



Time Periods

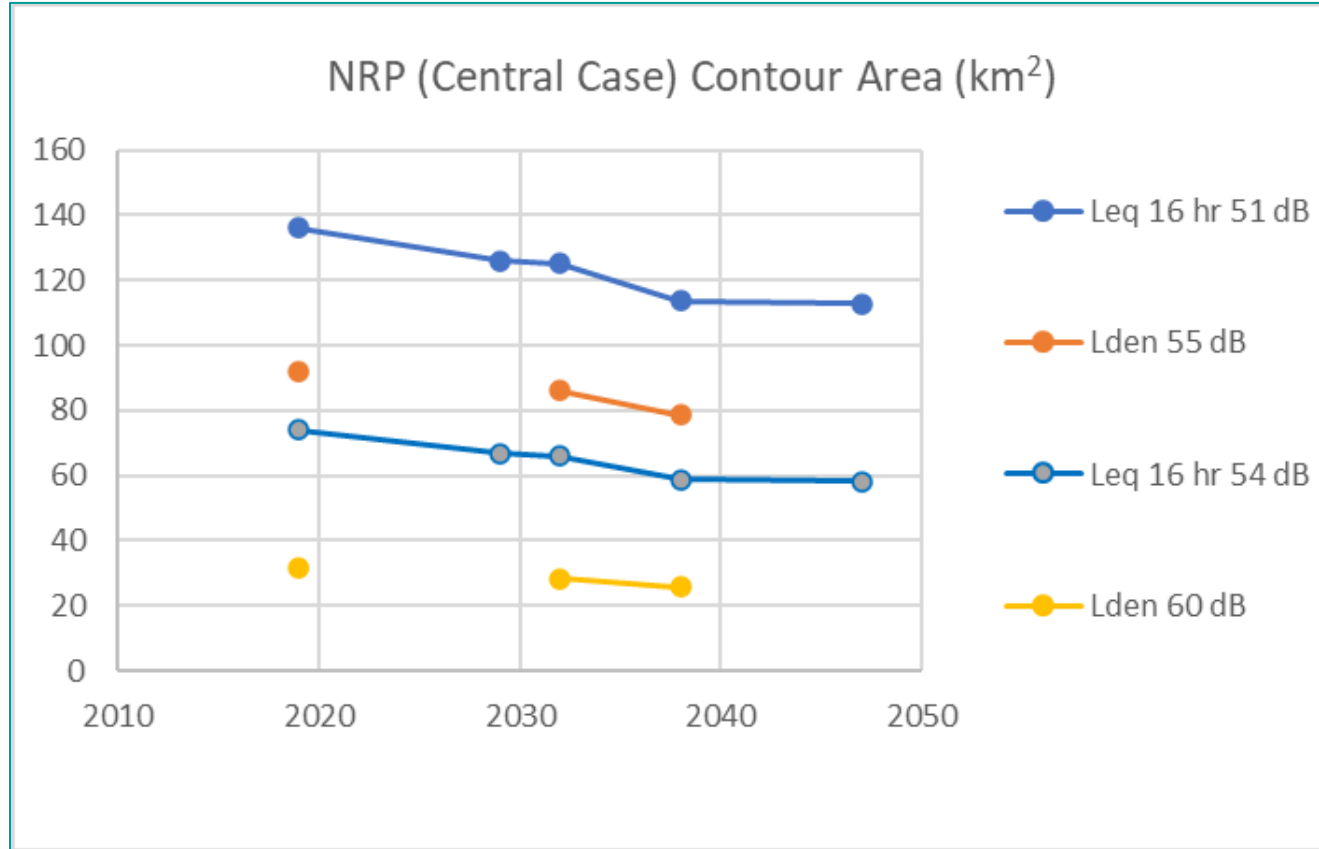
CAP 1129:

P37. For various reasons, the type and degree of impact of noise exposure varies depending on the time of day (or night) that the noise exposure occurs. The degree of impact also varies depending when in the year the noise occurs, again for a variety of reasons.

Where limits are set, consideration should also be given to whether the limits apply to summer, winter or annual average operations.



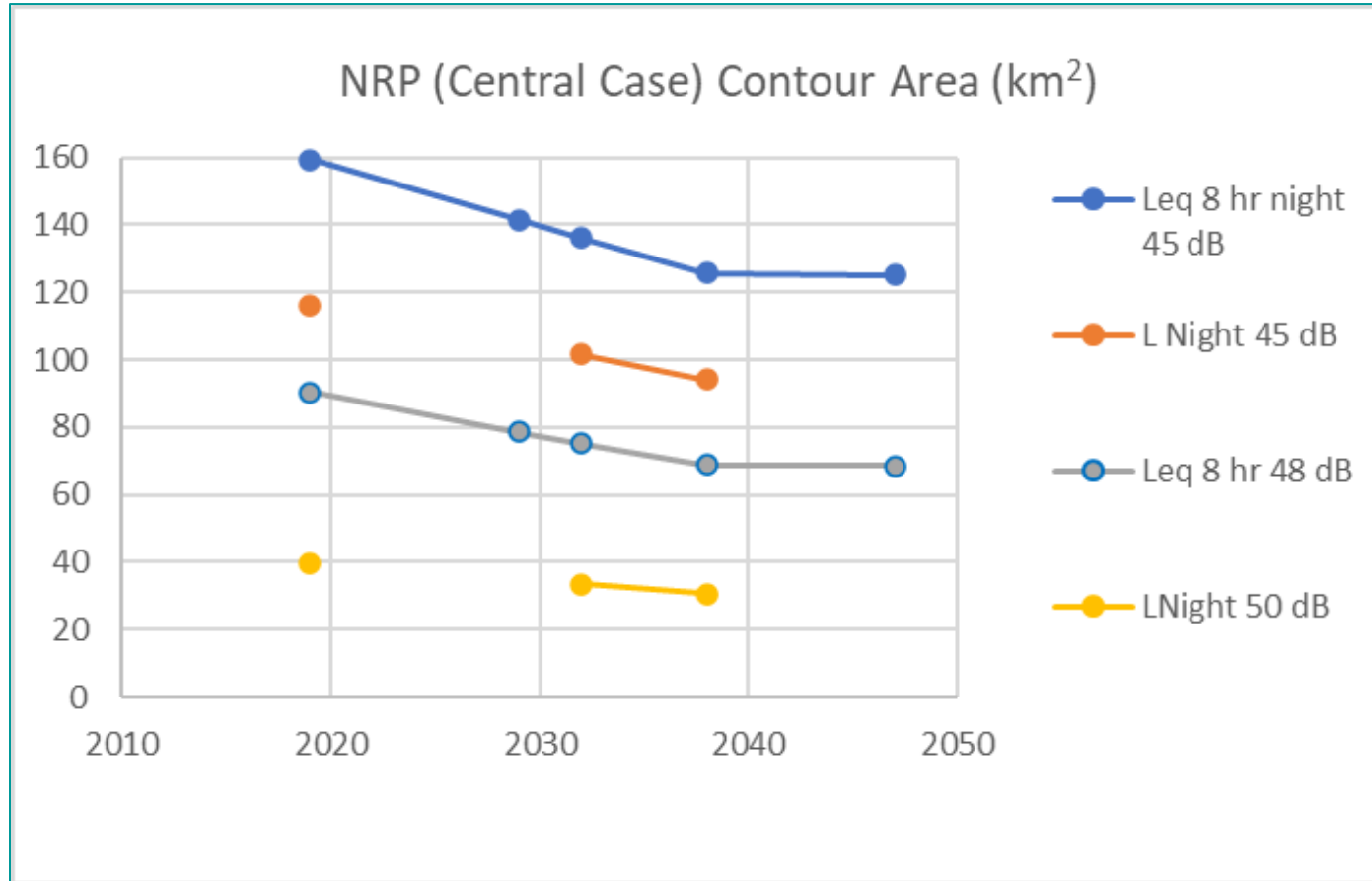
Annual L_{den} and L_{eq} 16 hr Summer Season



The PEIR provides annual L_{den} contours for the key assessment years



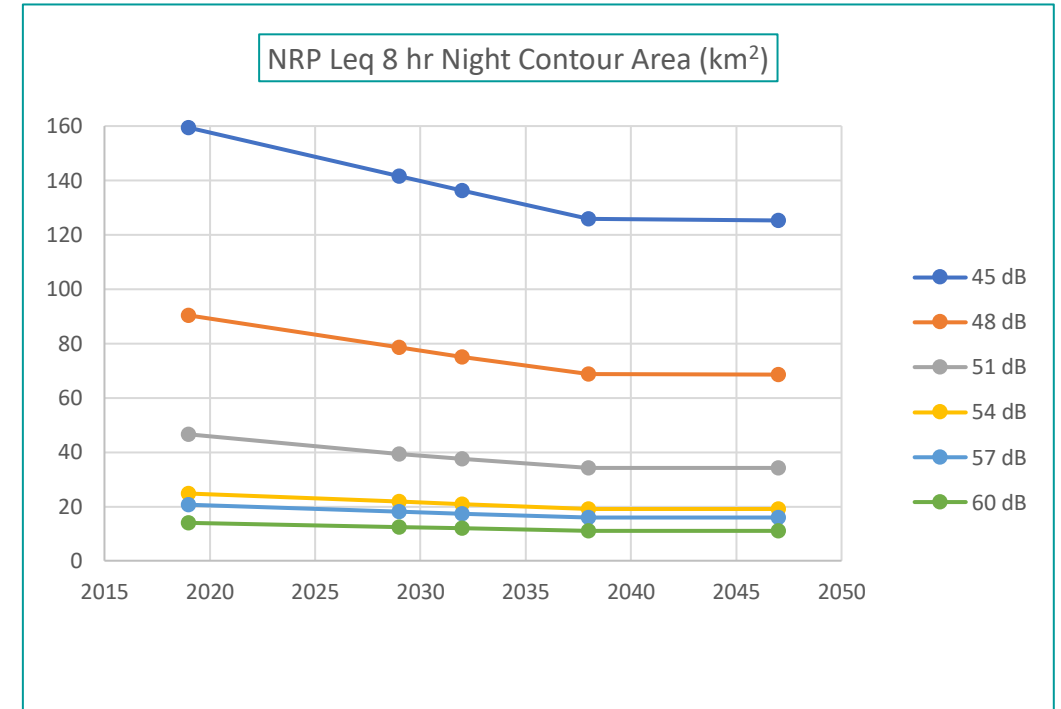
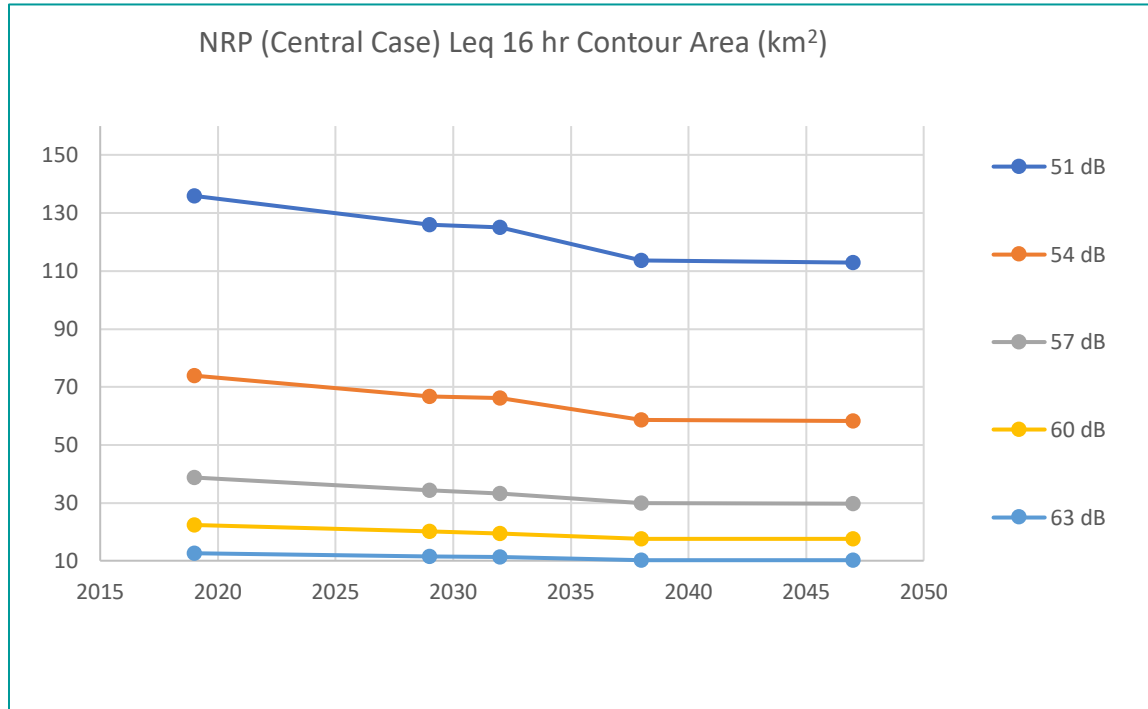
Annual L_{Night} and $L_{\text{eq 8 hr}}$ Night Summer Season



The PEIR provides annual L_{Night} contours for the key assessment years



Noise Contour Levels



For a given noise metrics, the areas of contours at different levels follow similar trends



2. Setting Limits



Objective

In summary:

A noise envelope is required to provide communities with certainty that future noise levels are capped and will reduce over time.

The noise envelope will lay out how compliance will be forecast, reported and reviewed, but it will not specify what noise management activities are required.



Expected Investment by Airlines in New Aircraft

The fleet transition programmes in the central case and slower transition case are summarised in Appendix 14.9.5 Table 4.2.1 which gives the forecast percentage of Next Generation, i.e. quieter, aircraft in each assessment year under the two fleet transition scenarios.

The central case fleet forecast anticipates that between 2019 and 2032 airline investment will increase the proportion of quieter next generation aircraft in the Gatwick fleet from 13% to 82%, and to 100% by 2038.

For the slower transition fleet, the effect of the 5-year delay is that by 2032 some 50% (i.e. nearly 4 times the proportion in 2019) of the aircraft operating are future generation types increasing to 82% by 2038.

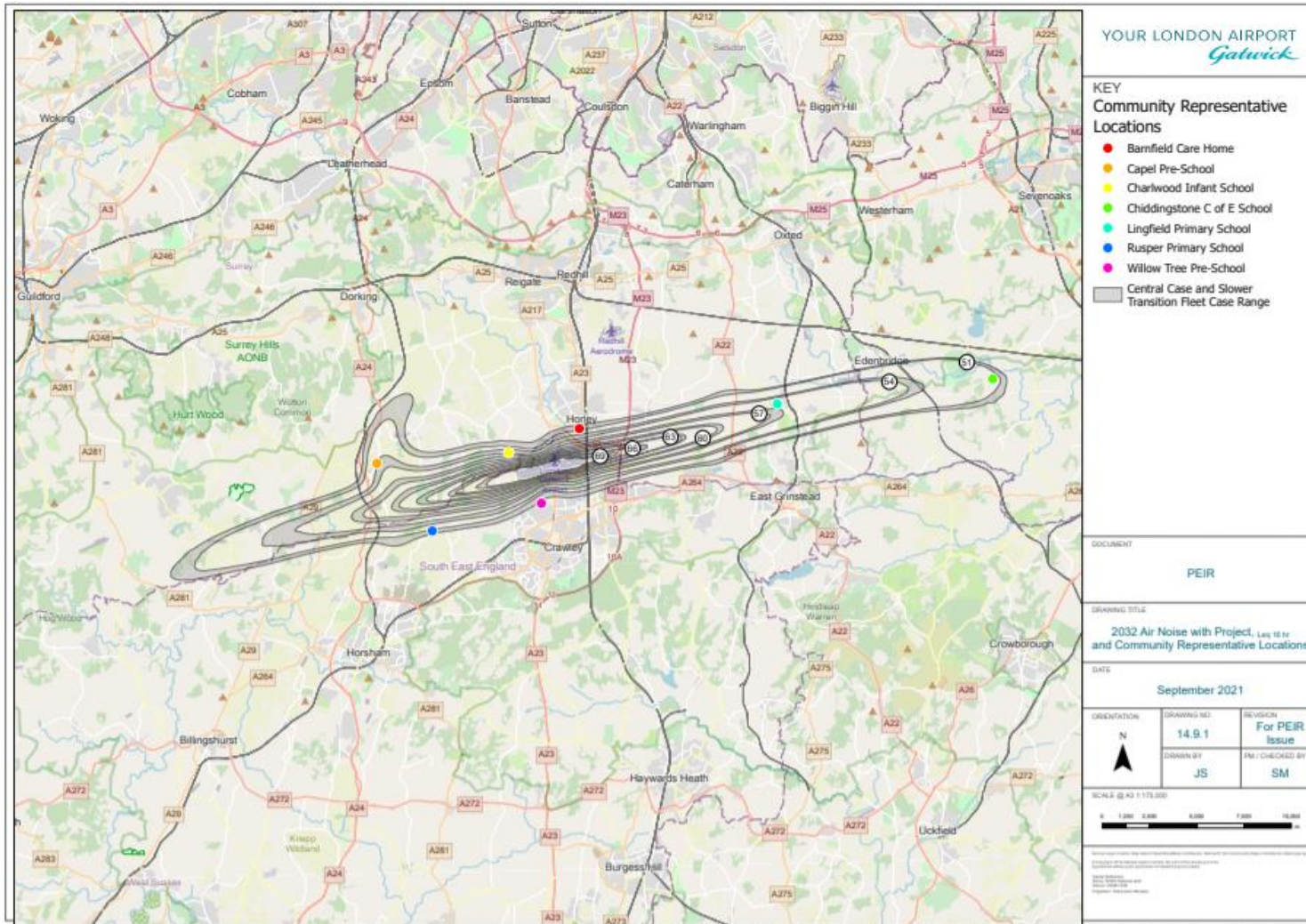
Table 4.2.1: Future Fleet Compositions

Year	Central Case Fleet % Next Generation Aircraft	Slower Transition Case Fleet % Next Generation Aircraft
2019	13%	13%
2029	59% (x4.5 proportion in 2019)	40% (x3.1)
2032	82% (x6.3)	50% (x3.8)
2038	100% (x7.7)	82% (x6.3)

The York Aviation review of the PEIR noted ‘We consider that the fleet mix assumed in the Central Case for assessment is somewhat optimistic, particularly in the early years given the deferral of aircraft orders that has occurred during the pandemic, but that the Slower Transition Case represents a robust worst case’.



Forecast Leq 16-hr Day Noise Contours, 2032 NRP

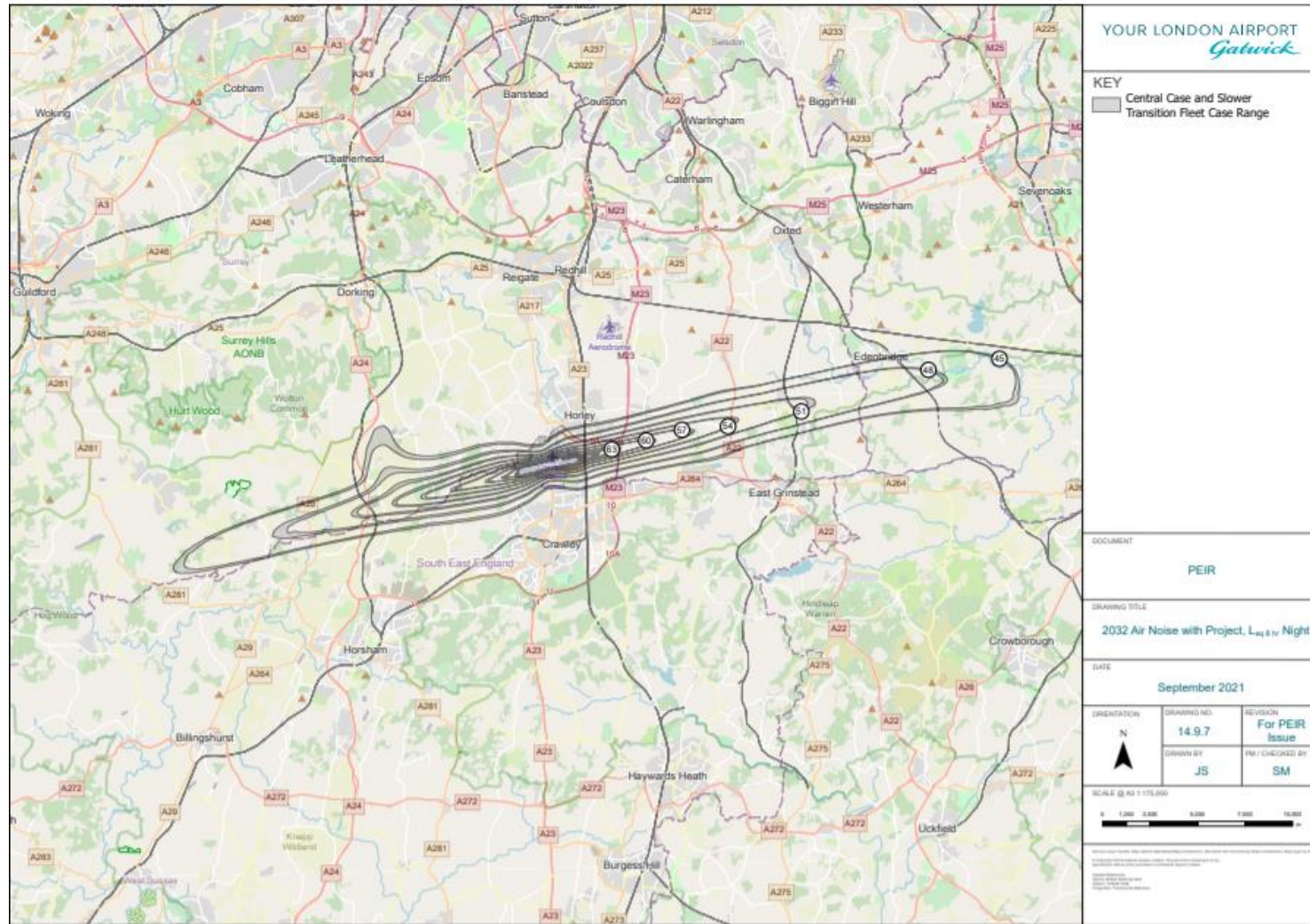


Leq, 16hr dB	Area (km ²)		
	2019 Base	2032 Base	2032 with Project
51dB Central Case	136.0	107.3	125.1
51dB Slow Transition Fleet Case	136.0	125.8	146.7

Leq, 16hr dB	Area (km ²)		
	2019 Base	2038 Base	2038 with Project
51dB Central Case	136.0	96.5	113.7
51dB Slow Transition Fleet Case	136.0	107.4	125.7



Forecast Leq 8-hr Night Noise Contours, 2032 NRP



$L_{eq, 8hr}$ dB	Area (km ²)		
	2019 Base	2032 Base	2032 with Project
45 dB Central Case	159.4	124.6	136.2
45dB Slow Transition Fleet Case	159.4	143.9	157.4

$L_{eq, 8hr}$ dB	Area (km ²)		
	2019 Base	2038 Base	2038 with Project
45 dB Central Case	159.4	115.3	125.8
45dB Slow Transition Fleet Case	159.4	124.3	136.1



Sharing the Benefits

APF Para 3.3

‘We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.

This means that the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.’

‘As noise levels fall with technology improvements’ refers to noise levels from next and future generation aircraft with quieter engines and airframes being quieter than those flying today.

Industry is expected to share the benefits from the improvements in noise it delivers.

The APF does not say how to quantify the benefits of new technology or to what extent they should be shared. Options might be:

- Leq (dB) noise levels in communities affected
- Other noise metrics
- Areas in noise contours
- Populations in noise contours
- This list is indicative, not exhaustive



Sharing the Benefits – Bristol Airport Example

Bristol Airport Planning Appeal Decision, Appeal Ref: APP/D0121/W/20/3259234, 2 February 2022

Inspectors' Report approving the proposal, extracts:

270. These findings, in part, relate to improvements in aviation noise from an updated fleet which would reduce the noise impacts of the additional growth. Related to this is the matter of shared benefits from technological advancement and 'less noisy' next generation aircraft. As calculated by NSC, some 77% of the reduction in the daytime LOAEL would be consumed by the expansion plans, 71% of the reduction in contour area would be taken compared with a without development scenario for daytime SOAEL and 66% of the reduction in highly annoyed population would be taken.

271. The concept of sharing the benefits is set down by the APF, but it gives no guidance on how it should be calculated or assessed. The figures cited above demonstrate, along with the raw data from the 'with' and 'without development' scenarios against the baseline, that all benefits are not fully taken up by the proposed expansion and thus there would be some sharing. However, the benefits are weighted more in favour towards expansion, rather than towards the community.

The inspector considered sharing of the noise benefit in terms of the proportion of the potential reduction in LOAEL and SOAEL contours taken away by ATM growth

The inspector approved the scheme as consistent with noise policy, whilst noting that 77% of this potential noise benefit was to be taken by ATM growth



Sharing the Benefits – Planning Inspectorate Method

Bristol Airport had a 10mppa cap imposed by a previous planning condition.

The assessment year for the development being fully utilised was 2030. The Planning Inspectorate (PINS) used information from the ES addendum, which showed that as the airport could not grow beyond 10mppa, the community would expect noise levels to fall as a result of long-term industry investment in new technology and aircraft.

The PINS method can be summarised in three steps, and the worked example overleaf gives further details.

Step 1: The “total available benefit” to be shared with the community can be expressed as the area of Leq noise contours in a future year with no improvement in fleet noise performance, less the contour area in the same future year where fleet improvement occurred.

Step 2: The part of the total available benefit that goes to the community is then calculated as the area the future “no improvement with fleet” baseline less the area of the Leq contour with the Project.

Step 3: The benefits shared between community and industry can be expressed as relative percentages of the total available benefit (see overleaf).



Bristol Airport Sharing the Benefits – Worked Example

LOAEL Contour area

The 2017 LOAEL (10mppa) contour area is held constant at 37.7km² to represent the “no fleet improvement, constrained at 10mppa case” in 2030. With fleet improvement, the LOAEL contour is expected to drop to 30.7km² by 2030.

The “total available benefit” is $37.7 - 30.7 = 7.0 \text{ km}^2$.

PINS then compares the 2030 no fleet improvement 10mppa case with the 2030 “with Project” (12mppa) case: The LOAEL contour area for the former is 37.7km² (as above), and with the Project it would be 35.2km² – the difference is the benefit the community $37.7 - 35.2 = 2.5 \text{ km}^2$;

In terms of relative benefits, the community gets 2.5km² and the Project takes 4.5km² of the “total available benefit” 7.0km². Therefore proportionally, $2.5/7.0 = 36\%$ to the community; and $4.5/7.0 = 64\%$ to industry.

Population within LOAEL

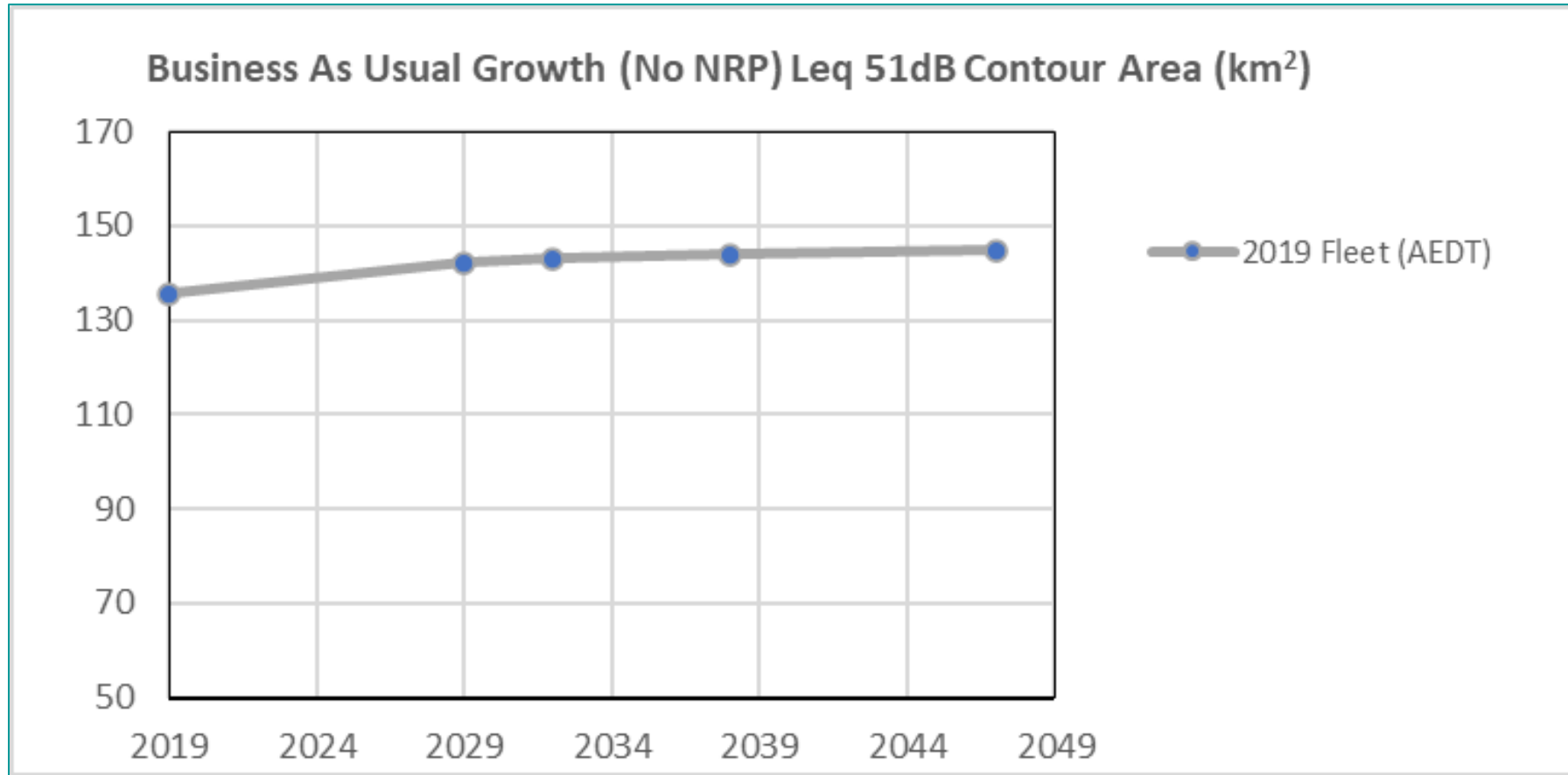
Similarly, the population within the LOAEL is held constant at 3250 to represent the “no fleet improvement, constrained at 10mppa case” in 2030. With fleet improvement, the LOAEL population is forecast to drop to 2600. The total available benefit is $3250 - 2600 = 650$.

The Project reduces the noise reduction that would otherwise occur, and 3100 people would be within the LOAEL. Therefore the benefit to the community is $3250 - 3100 = 150$

The relative benefits in terms of populations within LOAEL are that the community gets 150 and the Project takes 500 of the “total available benefit” of 650. Therefore proportionally, $150/650 = 23\%$ to community; and $500/650 = 77\%$ to industry.



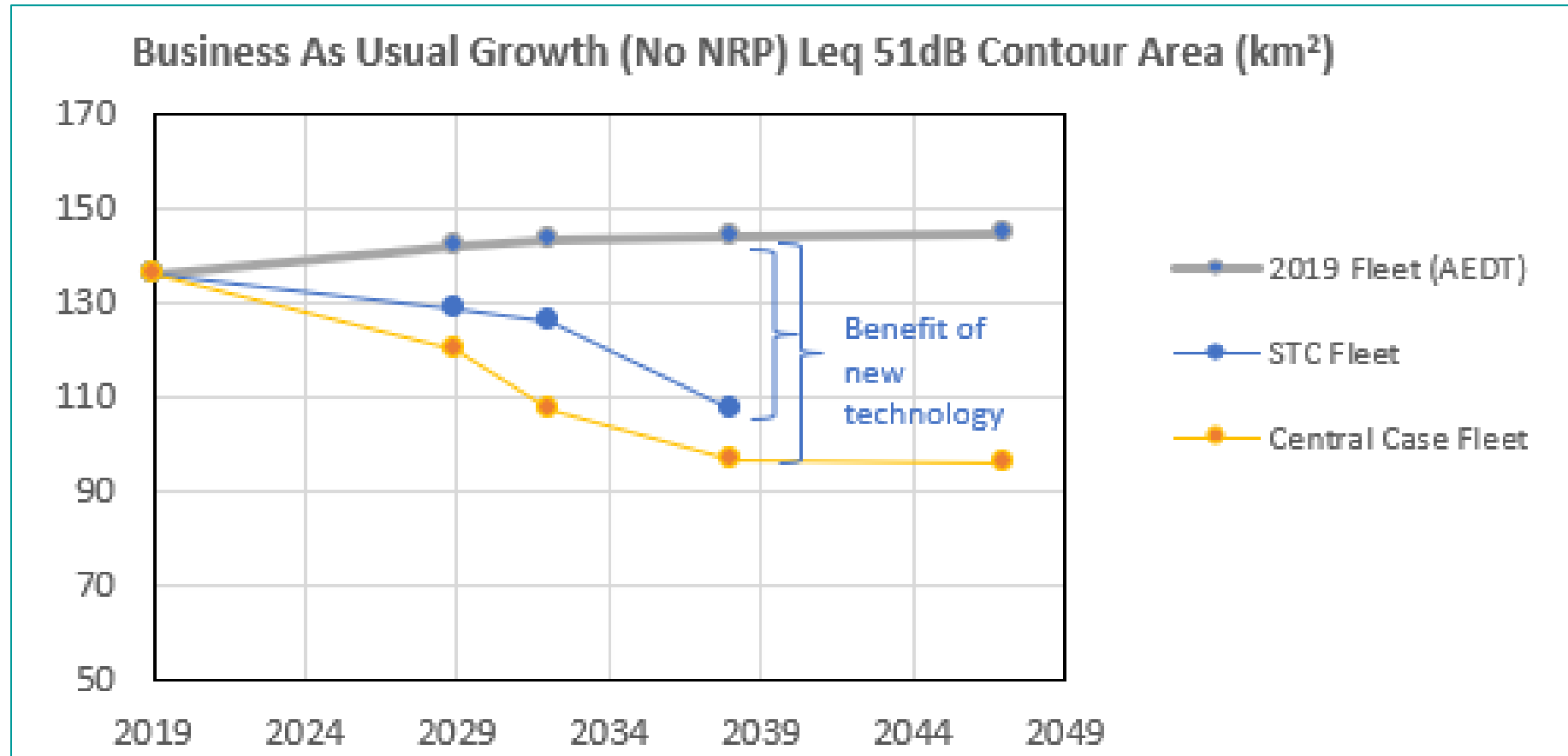
Gatwick Baseline Future Growth (Summer Day)



ATMs	2019	2029	2032	2038	2047
Day	766	811	818	825	831



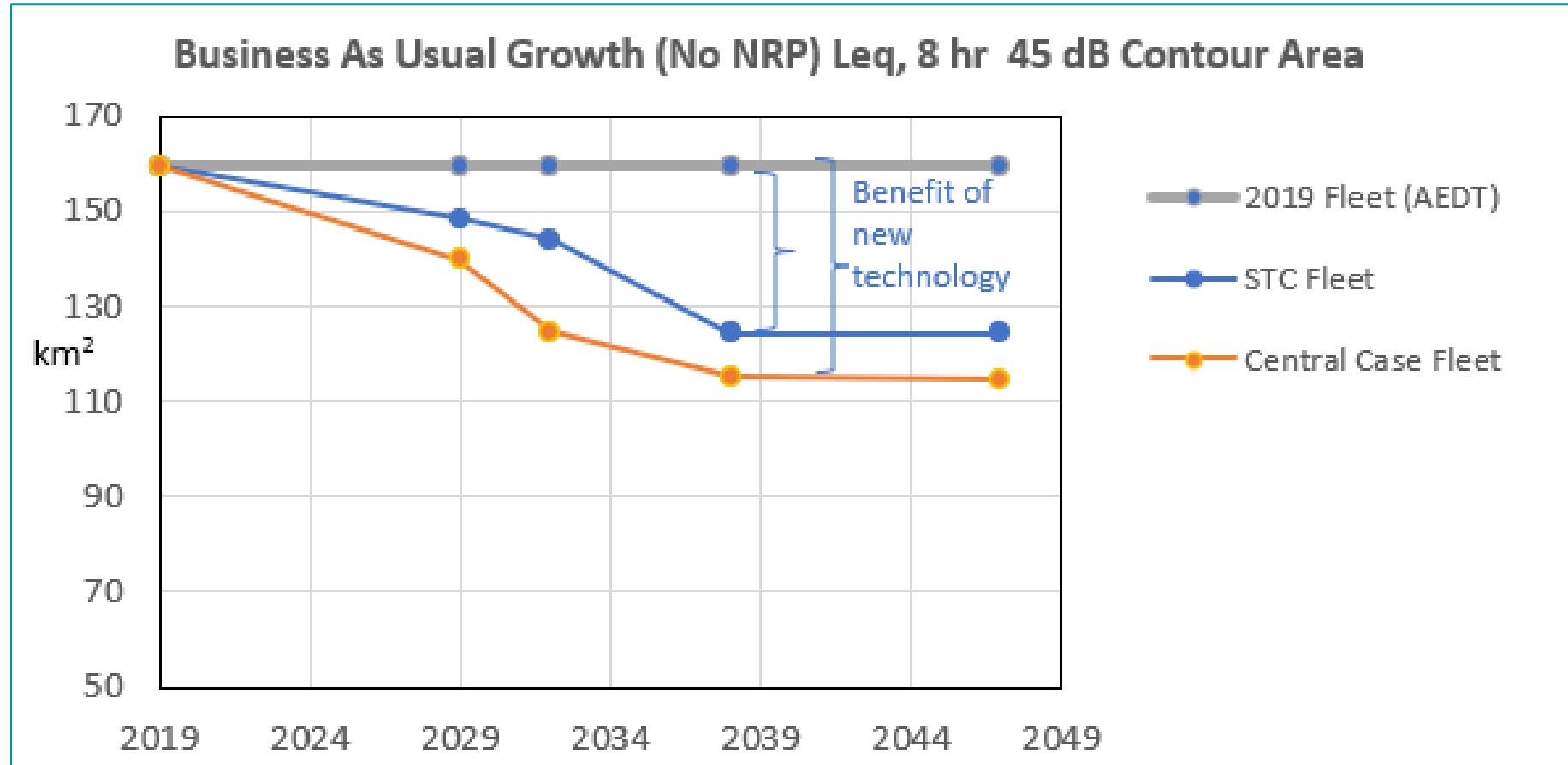
Gatwick Baseline Future Growth (Summer Day)



ATMs	2019	2029	2032	2038	2047
Day	766	811	818	825	831



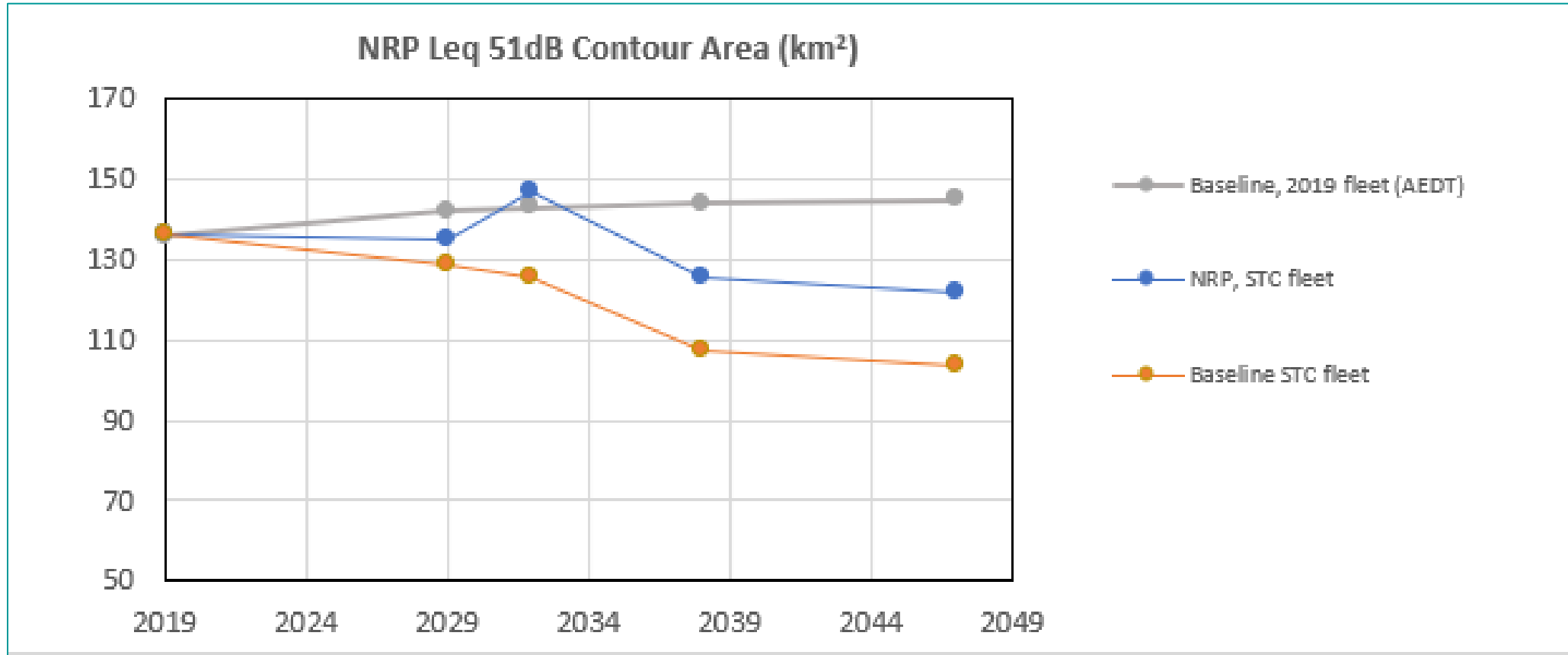
Gatwick Baseline Future Growth (Summer Night)



ATMs	2019	2029	2032	2038	2047
Night	127	125	125	124	124



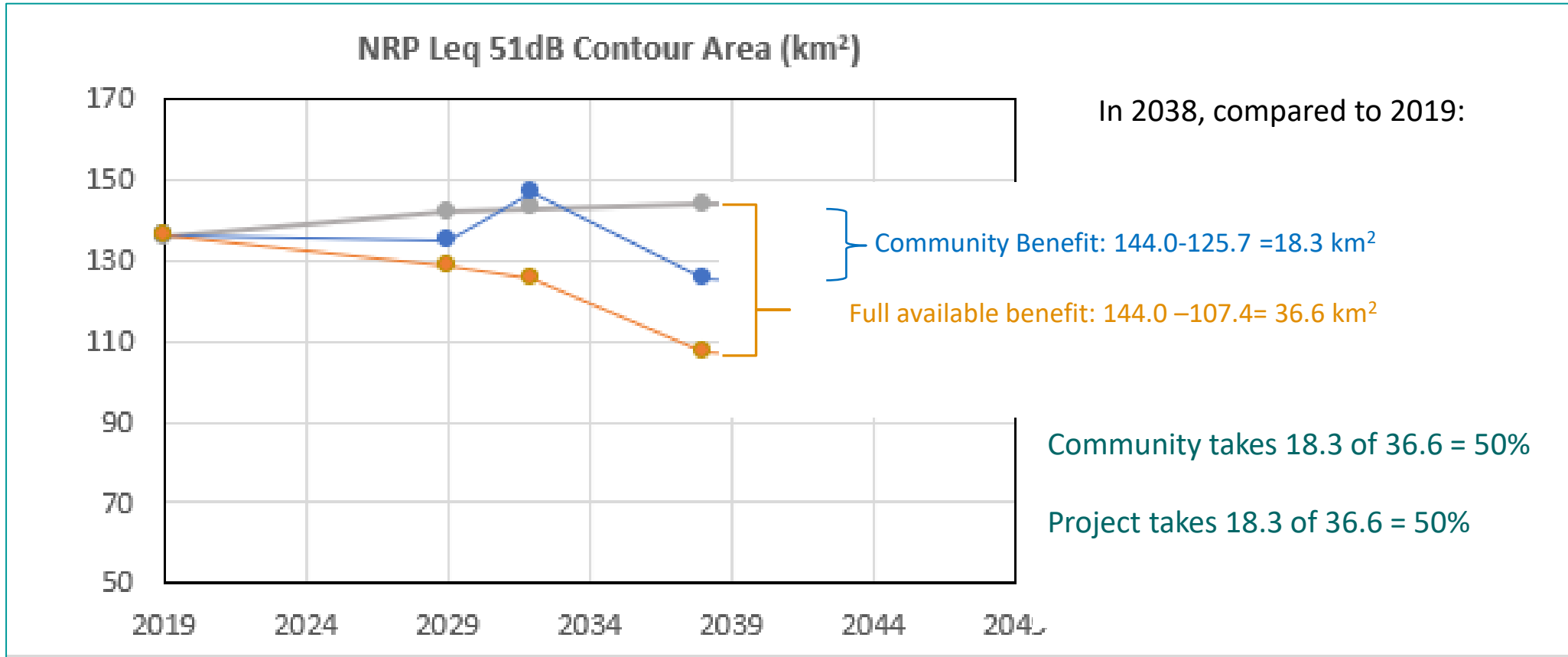
Gatwick NRP Slow Transition Case Fleet (Summer Day)



ATMs	2019	2029	2032	2038	2047
Day	766	848	976	983	988



Gatwick NRP Slow Transition Case Fleet (Summer Day)



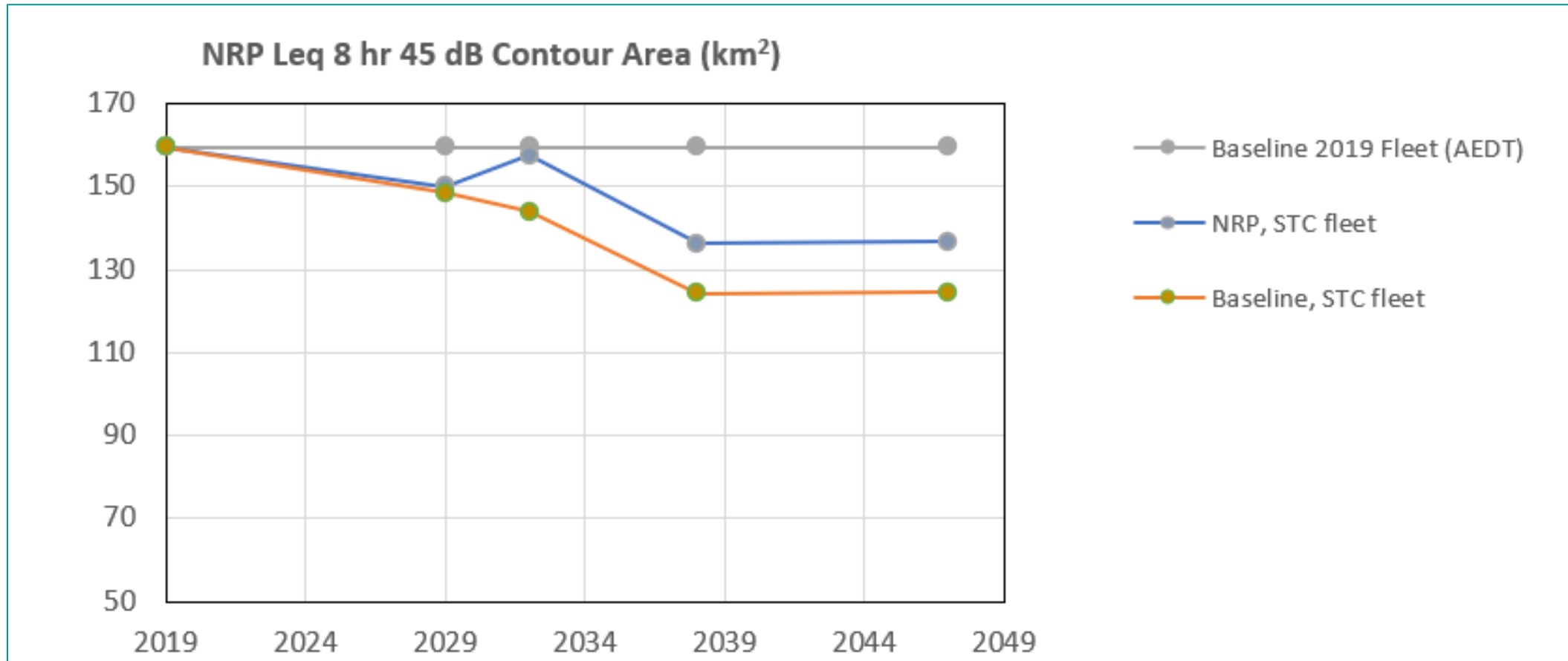
ATMs	2019	2029	2032	2038	2047
Day	766	848	976	983	988

In the early years after opening noise increases and the Project/industry takes the benefit.

The Central Case has not been modelled.



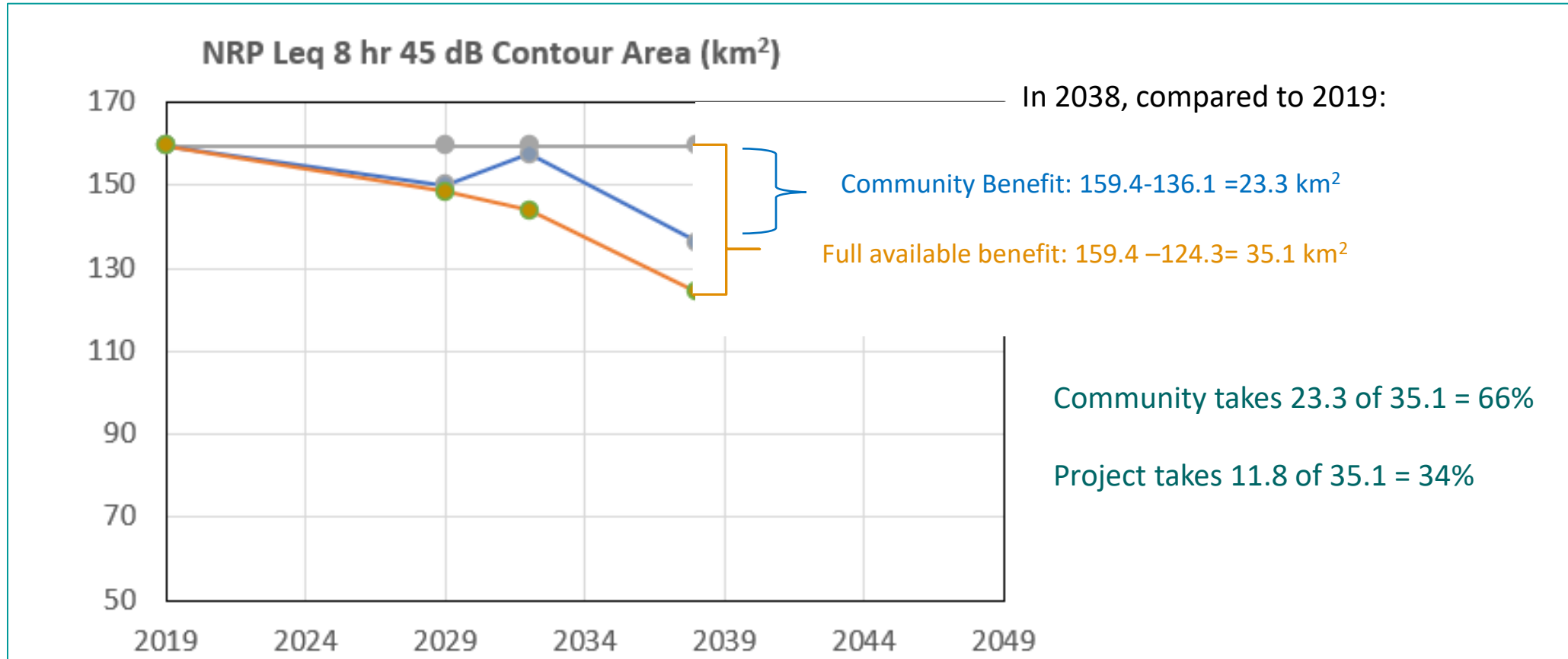
Gatwick NRP Slow Transition Fleet (Summer Night)



ATMs	2019	2029	2032	2038	2047
Night	127	127	137	137	137



Gatwick NRP Slow Transition Fleet (Summer Night)



ATMs	2019	2029	2032	2038	2047
Night	127	127	137	137	137

In the early years after opening noise increases and there is a smaller benefit to the community.

The Central Case has not been modelled.



End

Next Meetings:

Noise Envelope Group (Theme 2) – Tuesday 12th July, 15:00-17:00



Gatwick Northern Runway Project

Noise Envelope Group

Noise Envelope Operation and Review Process

July 2022



Noise Envelope Review Principles

In accordance with the emerging policies in relation to the review of noise envelopes, the **key underlying purpose of undertaking a review is to ensure that the noise envelope secured by a grant of consent remains relevant over time**, continuing to strike a fair balance by taking account of actual growth and the introduction of new aircraft technology.

Presentation Structure:

- Slide 3: The noise envelope proposed in the PEIR
- Slides 4 & 5: Annual performance monitoring, production of a monitoring report
- Slide 6: Timetable at which reviews of the noise envelope are to be undertaken
- Slide 7: Inputs to the review process
- Slides 8 & 9: Actions to be taken in the event of a noise envelope breach
- Slides 10 & 11: Noise Envelope Review Body and Decision Making process



Noise Envelope - PEIR Proposals

Whilst the Noise Envelope contained in the PEIR is subject to review in connection with the undertaking of environmental assessment and further stakeholder consultation, it is a useful tool to illustrate the principles for GAL's proposed noise envelope in connection with future airport growth and the processes to manage and monitor compliance and for reviews to be undertaken.

The PEIR Noise Envelope provided as follows:

By the end of the first year after opening of the reconfigured northern runway pursuant to the Project, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

- (A) *Leq 16 hour day 51 dB: 146.7 km²; and*
- (B) *Leq 8 hour night 45 dB: 157.4 km²*

By the end of the first year in which annual commercial ATMs exceed 382,000, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

- (A) *Leq 16 hour day 51 dB: 125.7 km²; and*
- (B) *Leq 8 hour night 45 dB: 136.1 km²*



Performance Monitoring and Forecasting Ahead

In order to ensure that GAL is considering actual performance and expected future performance annual forecasting and performance monitoring is required.

As detailed within the PEIR, GAL proposes to report annually on performance against the noise envelope – this will be in two parts – a review of actual performance against the envelope, and a review of forecasts for future growth.

Actual performance review

- At the end of each 92 day summer season GAL will review and report on the noise envelope for that season as soon as the relevant noise data is available, to check compliance with the noise envelope.

5 year forecasting ahead on a rolling basis

- GAL will forecast the anticipated Leq 16 hour day and Leq 8 hour night noise contours for the 5 years ahead annually, taking into account scheduled number of flights and best knowledge of the noise performance of the aircraft utilising the capacity of the airport. This forecasting will be undertaken as early as possible in advance of the following year based on when the data necessary to allow for an accurate forecast is available.
- The forecasting exercise will also take into account the capacity for the relevant scheduling seasons, including any controls identified as necessary to apply to that declared capacity.
- The forecasting will be used to identify further measures that may need to be taken to ensure compliance with the noise envelope.



Noise Envelope - Annual Report to Review Body

Every year, Gatwick will a report to a **Review Body**, this will consider:

- **Actual performance:** Noting that the noise envelope forecasts will in part be based on the 92 day summer season actual performance monitoring, it is currently proposed that reporting of the actual noise performance will be made available as a comparison against the forecasted levels by February of the following year;
- **Future forecasting:** The annual forecasting for the future 5 year period will be required to identify if the permitted contour areas could be exceeded. This will be done by reference to expected maximum forecasted number of ATMs, taking into account existing and proposed future capacity declarations, known trends for fleet transition based on previous year's monitoring and forecasting trends for future years.

This information will be published and shared with the Review Body in the form of a report.



Noise Envelope - Review Timetable

Based on the PEIR example, reviews of the noise envelope could be undertaken at the following points, reflecting the milestones for the noise envelope:

- Prior to the end of the first year after opening;
- Every 5 years thereafter to align with the Noise Action Plan;
- Prior to the end of the first year in which annual commercial ATMs exceed 382,000;
- Extraordinary review – for example, force majeure, significant policy changes or major airspace change.



Noise Envelope Review: Inputs

The expected inputs for the noise envelope review will be:

- Actual performance;
- Fleet transition forecasts and ATM forecasts;
- Any changes in aircraft routings or other material considerations – e.g. changes in Government policy or implementation of airspace change.



Actions in the Event of an Identified Potential Noise Envelope Breach

- Where forecasting identifies that GAL may breach the currently applicable noise envelope milestone, GAL will be required to identify the measures within its control that could be expected to address any predicted breach. The types of measures which GAL could progress include:
 - *Introduction of a Local Rule, which secures noise operating criteria in relation to future released slots;*
 - *Introduction of changes to airport charges so as to incentivise the use of quieter aircraft, which is a longer term planning measure and which must demonstrate financial neutrality.*
- All of these measures, which impact on users of the airport, will require appropriate consultation and stakeholder agreement, and it will be GAL's responsibility to manage this with its stakeholders to achieve the best use of the airport's resources whilst respecting environmental limits.
- A summary of the measures proposed will be included in the report, which is published and submitted to the Review Body.



Actions in the Event of a Noise Envelope Breach

In the event that actual performance modelling for a 92 day summer season identifies an exceedance of the noise envelope contour for the preceding summer season, GAL will be required to identify:

- (1) the reason for the exceedance and why this was not predicted to ensure any issue with the forecasting methodology is rectified; and
- (2) the operating practices and measures to reduce noise and avoid a further exceedance of the noise contour.

Should GAL not be able to provide a plan which details how any further exceedance is not forecasted to occur in future years, further capacity will not be able to be declared until a plan to achieve compliance is produced by GAL and approved by the Review Body.



Noise Envelope Review Body

GAL recognises the need for the **noise envelope to be periodically reviewed by stakeholders and for decisions to be taken by an appropriate multi-party review body.**

It is expected that the review body will be formed as a sub-committee of GATCOM membership.

It is considered that the **Review body should be responsible for annual performance monitoring and future noise envelope reviews**, to ensure a full knowledge of relevant airport air noise related matters.

The review body may include:

- The Airport;
- The Airport Scheduling Committee;
- The Local Planning Authorities, including EHO's;
- Airport Coordination Limited;
- Representatives of the airline operators;
- 2 members of GATCOM, who represent community interests;
- A technical advisor.

The function and Terms of Reference, including the process for how the Review Body makes decisions, will be submitted and approved as part of the DCO.



Noise Envelope Review: Decision-Making Process

A **decision-making framework** will be produced to detail the matters to be taken into account and the timescales for review and comment by members of the approving body and for the issue of outcomes.

Broadly the decision-making process will include for:

- Decision on submitted reports/plans for approval within set timeframes, subject to an ability for further information to be requested by the Review Body;
- Standard timescales are likely to be 28 days, subject to extension where further information is requested from the point of the provision of further information;
- A right of appeal to the Secretary of State in the event of a refusal.

This process will be similar to the approval processes commonly provided for in the DCOs, save that the decision-making body will be the Review Body.

It is anticipated that terms of reference will be established for the Review Body, to ensure it can consult all members and take decision in a fair and timely manner.



Presentation to Gatwick Noise Envelope Local Sub-Group meeting 3

19 July 2022



Agenda

Introduction and overview

Regulatory context for slot allocation

What a slot is and why it's required; independent slot coordination by ACL;

How seasonal scheduling works - slot allocation and historic rights

Timetable for slot allocation;

Local Rules;

Slot monitoring

Additional means to influence slot use

Scope as regards managing new slots released by the NR Project



Key messages

Runway slots are required to manage and make best use of capacity where there is more demand than capacity available.

The allocation of slots is bound by regulation in some jurisdictions including UK and Europe.

The Airport is responsible for declaring the capacity limits set in consultation with the incumbent airlines and ATC via the Airport Coordination Committee. The DfT takes the role of arbitrator if required.

The Coordination Committee can define additional rules for slot allocation (Local Rules) applicable to the airport within the state regulations.

ACL is the independent slot coordinator bound by the rules of slot allocation to allocate airline slot demand in a fair and equitable manner without bias so as to make best use of available airport capacity.

Once an airline has been allocated a slot series, it retains historic rights to operate that slot as allocated in-perpetuity, provided that it operates at least 80% of the slots as allocated in each season and operated as allocated.

ACL monitors airlines' use of slots and in the event of mis-use can levy penalties or, in extremis, remove the slot.

The airport would propose to manage to stay within the noise envelope through a combination of:

- Declared capacity limits - limiting the total number of slots which can be allocated in each hour of the day
- Local rules - limiting the noise category (QC) of aircraft operating at Gatwick and providing a seasonal QC quota for airlines to operate within.
- Use of airport charges to encourage use of quieter aircraft over time.

Note that the airport is not required to release all available capacity



Introduction and overview

Runway slots are required to manage and make best use of capacity where there is more demand than capacity available.

There is a legal basis for the issuing of slots (the **Airports' Slot Allocation Regulations**).

The Airport:

- declares the capacity it has available subject to constraints;
- gives over the responsibility for issuing slots within the available capacity to an independent coordinator (**ACL**);
- ACL is appointed by the Secretary of State for Transport and the Regulation requires that slots are allocated by ACL.

The **Gatwick Airport Coordination Committee** is composed of the airport and airlines, ATC and ACL (as an observer). It votes on **Local Rules** for the administration of capacity at Gatwick which form the basis of how ACL will administer slot allocation

- Local Rules provide further guidance to the coordinator but ultimately it is the Regulation that determines the basis of slot allocation.
- Airlines have 80% of the voting rights on the committee;
- Discussions on capacity for the following Summer season, start in the August of the year before, and a final declaration on capacity being given in January;



Introduction and overview

Once an airline has been issued a slot it can gain **historic rights** and provided it continues to use it within the agreed rules, the slot may not be removed from it;

ACL monitors airlines' use of slots and in the event of mis-use can levy penalties or, in extremis, remove the slot.

Other factors can influence the type of aircraft operating at Gatwick The type of aircraft to be used would need to be cleared by the coordinator. If not, that could be misuse and may lead to sanctions and/or loss of a slot.

Post Northern Runway, there will be a collaborative approach across stakeholders e.g., a Local Rule to administer issue of new slots so that the airport remained within its noise contour.



Regulatory Context

EU Slot Regulations

Document drafted by the European Commission reflecting the WASG as applied in a European context

To be replaced by UK Regulations – DfT



World Airport Slot Guidelines

WASG

Document jointly drafted by Airlines (IATA), Airports (ACI) and Coordinators (WWACG) forming industry standards and best practice guidance for slot allocation and management



Coordination Committee Constitution

Document drafted by the Gatwick Coordination Committee to implement regulations - represented by the airport (GAL), Incumbent airlines (Scheduling Committee), Coordinator (ACL) and Air Traffic Control provider (eg NATS)



Local Rules

Documents drafted by the Coordination Committee to reflect additional rules specific to the airport governing slot allocation and management.

- 1. The WASG forms the industry standard guidance on airport slot management** and, while it is not enforceable, it is widely accepted by countries internationally. It was originally drafted by IATA to guard against protectionist behaviour by individual countries.
- 2. EU slot regulations reflect the WASG guidance in the form of enforceable regulations.** Now that the UK has left the EU, the DfT is able to draft a UK specific set of regulations although currently they remain unchanged but are subject to a review currently.
- 3. The tasks of the Coordination Committee are set out in the Regulation.** The implementation of the Regulation is overseen by the DfT. The CC has limited scope.

Gatwick is designated as a fully coordinated airport i.e. it is capacity constrained and without imposing limits on the number of aircraft which can operate from the airport, the capacity of the airport would be exceeded. Ref: article 3 in the UK Slot Regulations.



Roles and responsibilities - defining capacity & allocating slots

Airport / ATC (GAL / NATS)

Seasonal Capacity Declaration

*In consultation with the
Coordination Committee*

DfT

Arbitration

*If the Airport is not meeting its obligations
through the Coordination Committee*

Airlines

Submit slot requests

*Required to operate 80% to
retain historic rights*

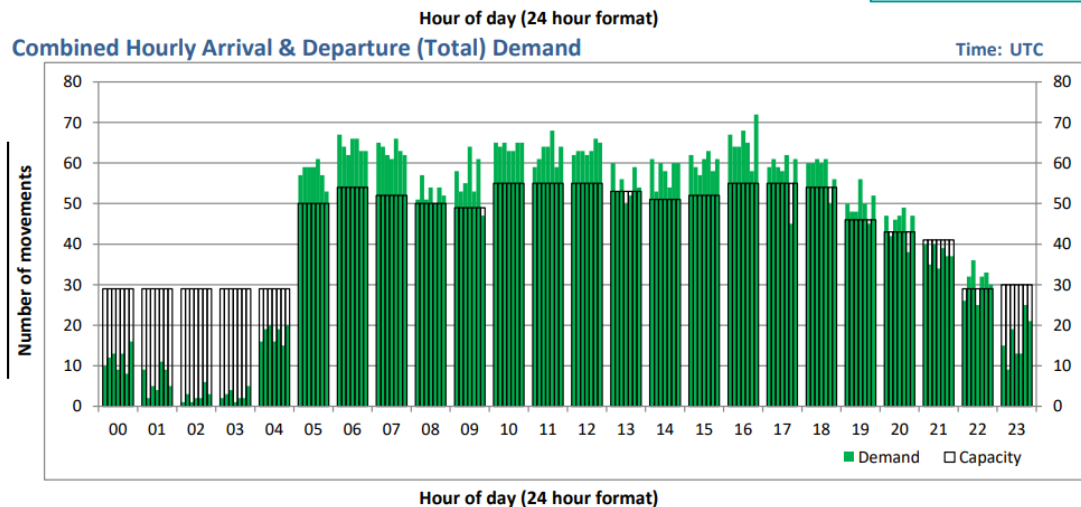
*Note additional scheduling limits apply to
reflect Terminal and Apron constraints*

Airport Coordinator (ACL)

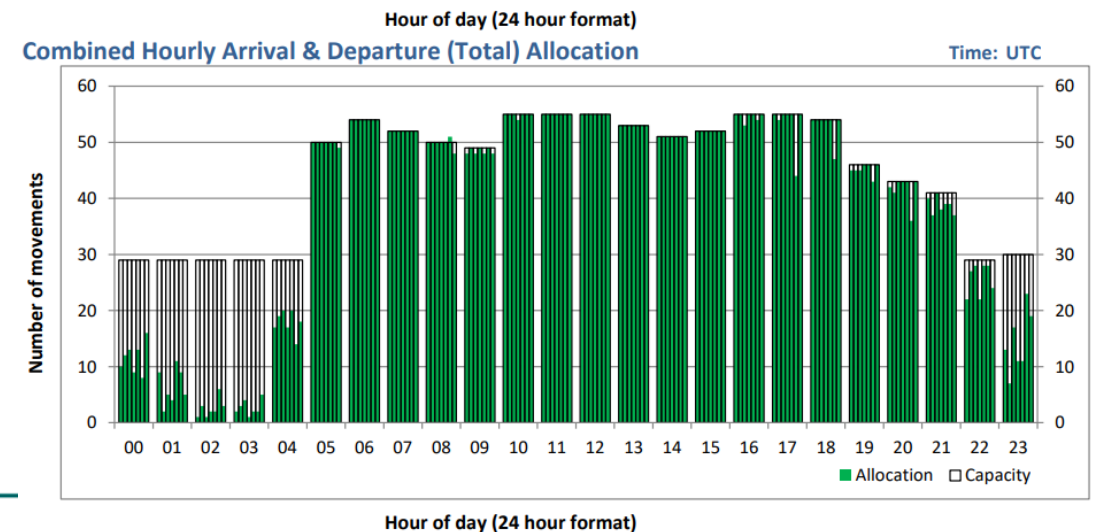
Allocation of slots to airlines

*According to defined regulations and
priority rules*

Demand v capacity



Allocated demand



Managing to stay within the Noise Envelope

1. Pre-emptive management

- Longer term forecasts (5-10 years) updated each year and taking account of changing forecast environment in terms of traffic mix, fleet planning and capacity planning
- Altering charging structures to help influence operation of quieter aircraft
- Introduce restrictions on operation of noisier aircraft so that they can be phased out
- Introduction of Local Rule based on QC quota to stay within the Noise Envelope.

2. Season ahead controls

- Restricting the amount of capacity released in any season conditional on meeting quota targets.
- Introduction of QC quota allocation for airlines to limit the airport to a seasonal QC limit as a proxy for the Noise Envelope
- Apply QC restrictions on any new capacity allocated

3. In season controls

- Require action from airlines who are forecast to exceed their QC quota to take action to bring it down.
- Last resort - prevent airlines from operating services which put the airport at risk of exceeding the airport QC quota and as a consequence, the noise envelope.



YOUR LONDON AIRPORT
Gatwick

APPENDICES



What slots are, and why they're required

Gatwick is designated as a fully coordinated airport i.e. it is capacity constrained and without imposing limits on the number of aircraft which can operate from the airport, the capacity of the airport would be exceeded. Ref: article 3 in the UK Slot Regulations.

The airport is responsible for setting limits on the number of slots which can be scheduled so as to avoid exceeding the runway capacity. In addition, constraints are put on gate movements and hourly seats by Terminal to avoid exceeding the capacity of the Terminal infrastructure and surface access.

The Airport consults with the Coordination Committee represented by airlines, the air traffic control operator (ATC) and airport coordinator (ACL) to gain views on the Declaration Limits of the airport for the following season. It is incumbent on GAL to demonstrate the capability to deliver against the scheduled limits.

In addition to the declared limits based on airport capability, the total number of slots which can be operated in the night period (23:30 - 06:00 Local) is limited by a seasonal ATM and QC cap. GAL is responsible for setting a limit on the number of slots in total which can be scheduled in the night such that the seasonal night quota is not exceeded. Airlines are responsible remaining within their allocated quota and, as a last resort, the airport can prevent services from operating if it risks exceeding the seasonal night quota.



How seasonal scheduling works - slot allocation and historic rights

Once an airline has been allocated a series of slots for a season (summer: Apr-Oct, winter Nov-Mar) they retain the rights to operate those in future seasons provided they operate at least 80% of them. This is described as a **historic right** to operate.

To count as a series, the slot operated at a particular time on a particular day of the week must have at least 5 consecutive weeks of operation. In subsequent seasons, airlines may change the time of operation or the flight destination or even the aircraft type provided the seat capacity does not result in exceeding the declared Terminal Limit.

Once all series have been allocated, unused slot capacity may be allocated to ad hoc services on a non-historic basis.

Slots are initially allocated by the independent coordinator ACL for the subsequent summer season in September/October and series must be finalised by 30th January (handback deadline) after which the 80:20 use it or lose it rule applies to retain historic rights.

When new capacity becomes available, either because of a capacity release or because an airline has failed to meet the 80:20 criteria, at least 50% should go to new entrants. Secondary criteria as defined in the WASG such as series length, aircraft capacity and market served apply when prioritising slot allocation with the objective of making best use of available airport capacity.



Timetable for slot allocation

The table on the right illustrates the calendar of coordination activities for the three seasons: summer 2022 and winter 2022/23 through to Summer 2023.

The exact dates vary from one year to the next dependent on the start of season date when the clocks change.

The SAL (Slot Allocation List) deadline is when the initial coordination is completed and it is at the Slot Conference that airlines see what they and their competitors have been allocated and start to rework their schedules trying to match up both ends of the route.

Once capacity has been allocated it cannot easily be taken back due to historic rights.

CALENDAR OF COORDINATION ACTIVITIES

ACTIVITY	S22 SC/149	W22/23 SC/150	S23 SC/151
SHL Deadline	13-Sep-21	25-Apr-22	12-Sep-22
Agreed Historics Deadline	30-Sep-21	12-May-22	29-Sep-22
Confirmation of final coordination parameters and details of available capacity	No later than 30-Sep-21	No later than 12-May-22	No later than 29-Sep-22
Initial Submission Deadline	07-Oct-21	19-May-22	06-Oct-22
Appointments calendar opened to coordinators to make appointments with airlines	02-Nov-21	07-Jun-22	01-Nov-22
SAL Deadline	No later than 04-Nov-21	No later than 09-Jun-22	No later than 03-Nov-22
Appointments calendar opened to airlines to make appointments with coordinators	08-Nov-21	13-Jun-22	07-Nov-22
IATA Slot Conference	16-19 Nov 21	21-23 Jun 22	15-18 Nov 22
Series Return Deadline	15-Jan-22	15-Aug-22	15-Jan-23
Historics Baseline Date	31-Jan-22	31-Aug-22	31-Jan-23
Start of Season	27-Mar-22	30-Oct-22	26-Mar-23

Local Rules

In addition to the primary rules of coordination, airports can agree with the Coordination Committee Local Rules which are particular to the airport. At Gatwick these include:

- Night quota management - the rules by which slot allocation is restricted in order to ensure that the DfT imposed restrictions on night usage are adhered to.
- Urgent & time critical services - conditions under which services may be prioritised irrespective of whether they have a slot allocated
- Ad hoc restrictions - particular rules which apply to the allocation of ad hoc services and limit use by GA and business aviation during peak periods of operation.
- Capacity reduction - rule by which a temporary reduction in scheduled services can be imposed by the airport in the event that the capacity is temporarily unavailable.

Local rules must be voted in by the Coordination Committee for which airlines hold 80% of the vote as detailed in the Coordination Committee constitution.

Gatwick can propose changes to conditions of use, but these cannot remove historic rights to operate. This has to be done voluntarily by the airline. However, changes can be effected via a Local rule.



Slot monitoring

ACL monitors the use of allocated slots by airlines both to determine whether they are being used and whether this is as allocated.

If slots are being mis-used then ACL will issue a warning letter to notify the airline and demand an explanation.

If the slot continues to be misused in a similar way, ACL can fine the airline for repeated and intentional misuse.

If this continues, the fines are escalated and ultimately ACL may remove the right for the airline to operate the slot.

ACL does not manage UK coordinated airports for profit and the proceeds of fines are used to offset the cost of administering the scheme. Any surplus goes to the Treasury.

The primary ways in which slots are misused are:

- Operating without a slot
- Non-ops where a flight is not operated without notifying the coordinator
- Repeatedly and consistently operating at a different time from the slot allocated
- Operating in a different way such as a different seat capacity than scheduled without notifying the coordinator.



Additional means of influencing slot use

The DfT sets rules governing which aircraft can operate in the UK in accordance with international agreement. If the DfT directs that a particular type of aircraft should have restrictions on operating, then GAL may issue changes to the conditions of use of the airport in accordance with these. These would not remove the slot from an airline directly, but would require a change in the type of aircraft operating.

If the Airport Scheduling Committee is in agreement, then voluntary scheduling bans on particular aircraft types may also be implemented.

Airport charges - GAL may introduce charges which penalise the use of noisier aircraft relative to quieter. **These changes must be demonstrably financially neutral** and introduced gradually over a period of time to enable airlines to adjust to them accordingly. Gatwick's charges are regulated by the CAA.

Airlines have a right of appeal to the CAA in respect of changes to Gatwick's charges.



Points for further discussion regarding slot allocation in relation to the future noise envelope

It would be GAL's intention to incentivise the use of quieter aircraft at Gatwick such that it is able to grow its traffic within the limits defined by the noise contour.

In the event that GAL forecasts demonstrate a risk of breaching the noise envelope, GAL may restrict further slot release or introduce noise related restrictions on the allocation of new capacity through a Local Rule in order to help ensure that growth can be managed within the noise contour. The Airport Coordination Committee would then vote on the Local Rule.

GAL can elect not to release additional capacity to prevent exceedence of the noise contour.



Gatwick Airport Aircraft Noise Charges

Presentation to Gatwick Noise Envelope Local Sub-group

Meeting 3: 19 July 2022



Regulatory Context: Commitments Framework

- The CAA has powers under the Civil Aviation Act 2012 for the economic regulation of airport operators that pass the market power test in the Act.
- The CAA's most recent assessment (published in January 2014) concluded that Gatwick Airport Limited (GAL) satisfied all component of the market power test and in February 2014, the CAA granted a licence to Gatwick Airport Limited (GAL).
- The licence included a set of price, service and investment commitments which GAL gave to airlines covering the period from 1 April 2014 to 31 March 2021.
- The CAA consulted on proposed modifications to GAL's licence in February 2021 and confirmed its final decision in May 2021. The licence modifications included an updated set of price, service and investment commitments which cover the period from 1 April 2021 to 31 March 2025.
- GAL has recently launched a consultation with its airline customers on a proposed extension to its commitments which would expire in March 2029.



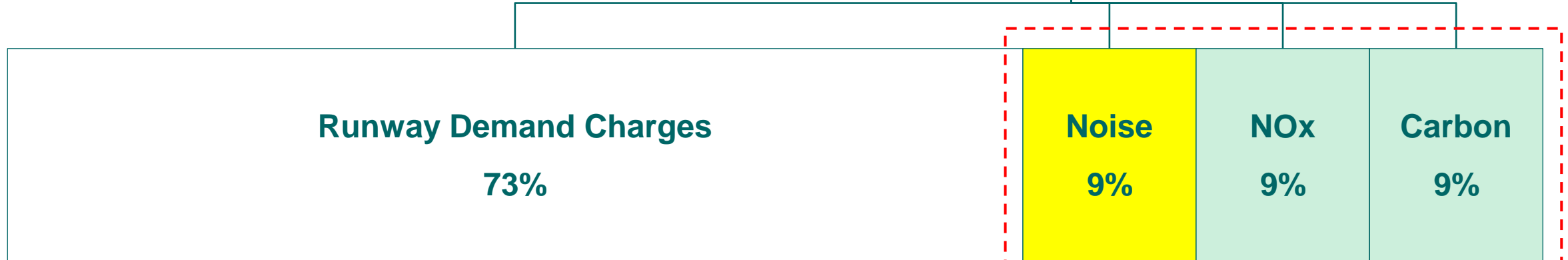
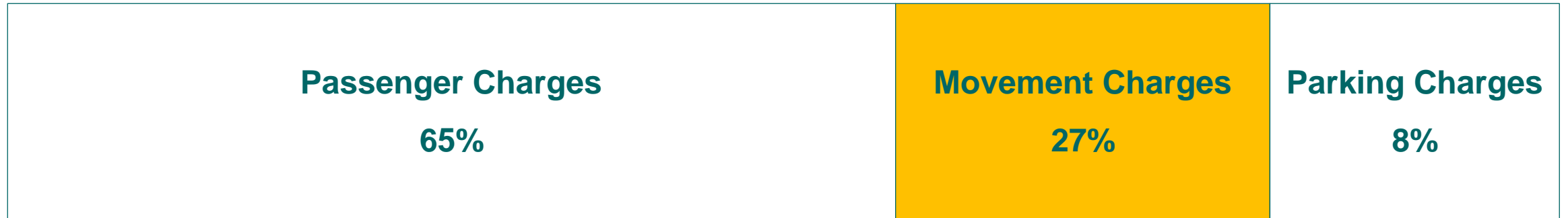
Regulatory Context: Airport Charges

- **Under the Airport Charges Regulations 2011, GAL is required to consult annually on the structure and level of its airport charges:**
 - Price Level: Subject to GAL's published price commitment which caps the revenue per passenger which GAL is permitted to recover through its airport charges each year.
 - Charge Structure: GAL retains discretion over the structure of its airport charges but must consult on any proposed changes. Structural changes are revenue neutral to GAL but may impact the level of charges paid by individual airlines. Airlines have a right of appeal to the CAA.
- **GAL's charging structure seeks to incentivise the use of quieter, cleaner and greener aircraft:**
 - Noise Charges: Lower charges for aircraft with better noise performance, particularly at night.
 - NOx Charges: Lower charges for aircraft which produce less NOx emissions.
 - Carbon Charges: Lower charges for aircraft which produce less CO₂ emissions.



GAL's Airport Charge Structure

Environmental charges (noise, NOx & carbon) account for circa 7.5% of total airport charges



Environmental Charges 27%

Demand charges also send indirect price signal which helps to incentivise improved noise performance – see supporting slide.



GAL's Noise Charges Effective 01-Apr-22

Charging structure incentivises use of a/c with best in class noise performance, particularly at night

Noise charges are higher at night year round.

Charge per Movement (Departure & Arrival)	Day Charges (Summer Only)	Night Charge ⁽²⁾ (Year Round)	Example Aircraft ⁽³⁾
Unmodified A320 ⁽¹⁾	£883	£2,442	A320ceo family
Chapter 3 & Below	£88	£2,442	A321ceo
Chapter 4	£44	£1,221	B737-800
Chapter 14 High	£26	£732	A320ceo, A330
Chapter 14 Base	£22	£610	A319ceo, B777
Chapter 14 Minus	£18	£488	A320neo, B737MAX, A350, B787

Lower charge as noise performance improves.

Noise performance is a function of airframe & engine type.

- (1) Charges for unmodified A320 aircraft apply year round at all times of the day.
- (2) Night period aligned with night quota period; 23:30 to 05:59 local time.
- (3) ICAO noise charge classification sensitive to airframe type and engine technology.



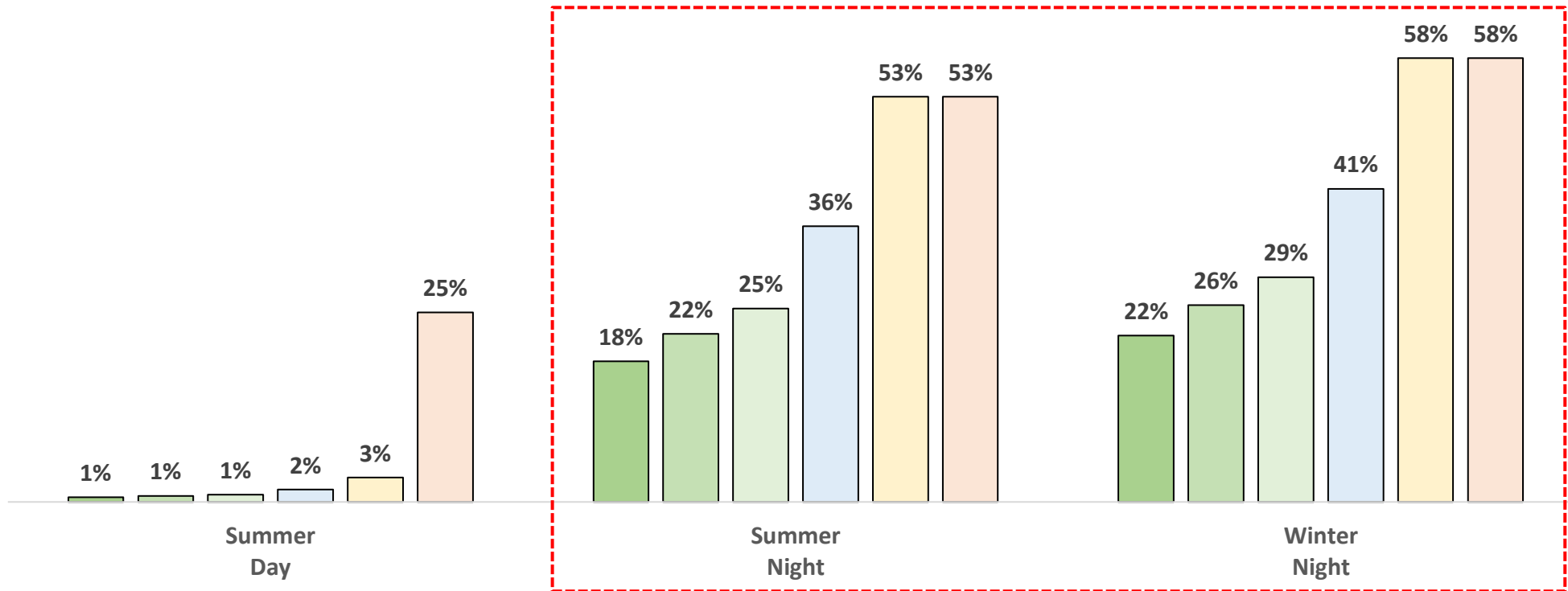
Noise Price Signals at Night

Noise charges account for between 20% and 60% of total airport charges at night

Noise Charges as % Total Airport Charges

- Illustrative Analysis Based on Turnaround Charges for A321 Aircraft -

■ Chapter 14 Minus
 ■ Chapter 14 Base
 ■ Chapter 14 High
 ■ Chapter 4
 ■ Chapter 3 & Below
 ■ Unmodified A320

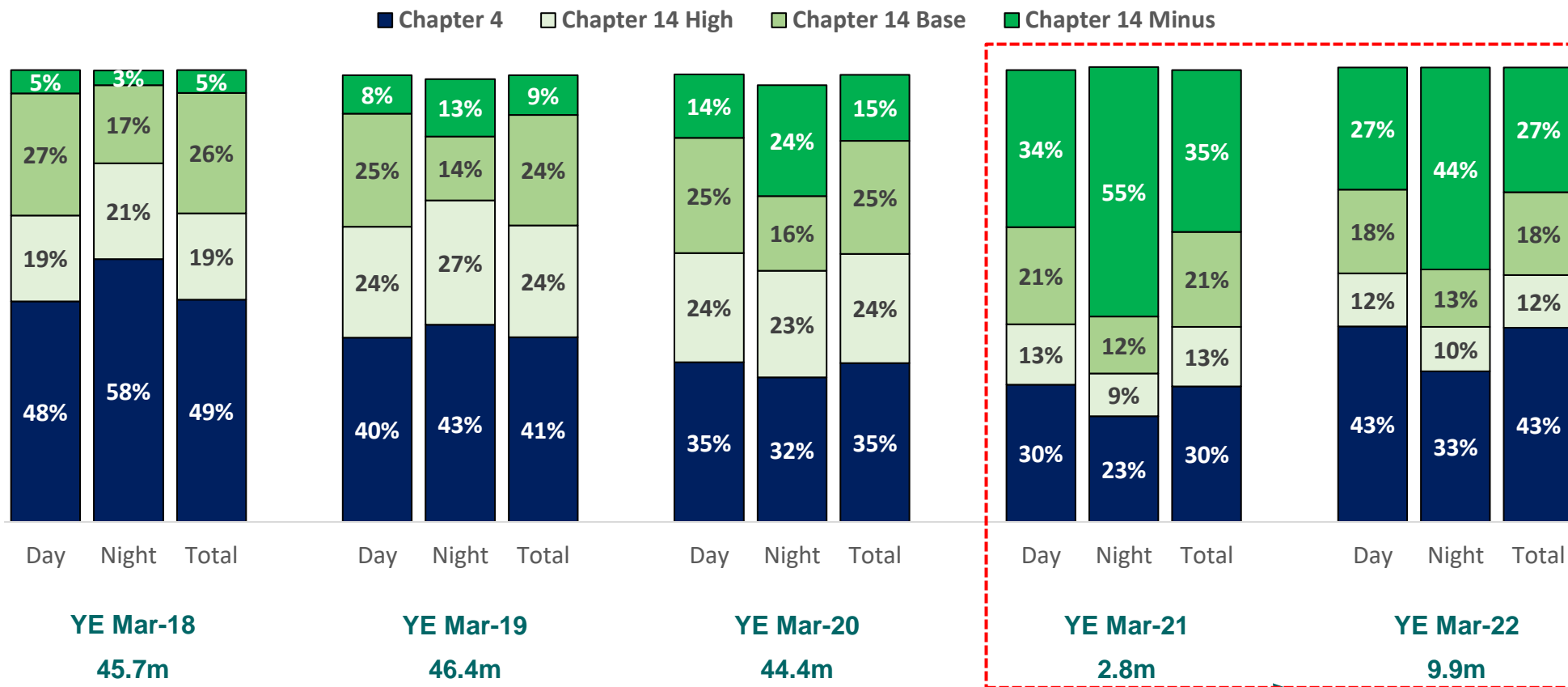


Evolution of movement distribution by noise charge category

Noise performance has improved (more Chapter 14 a/c), particularly during the night period

Distribution of Movements by Noise Charge Category

Source: Gatwick Airport Limited



Year-on-year comparison impacted by pandemic

210

118



Demand Charges

GAL demand charge also helps to incentivise improved noise performance

Fixed demand charge drives lower demand charge per seat for larger a/c.

easyJet Fleet

Metric	A319ceo	A320neo	A321neo
Seat Capacity	156	186	235
GAL Demand Charge ¹	£772	£772	£772
Demand Charge per Seat	£4.95	£4.15	£3.29
GAL Noise Charge Category ³	Chapter 14 Base	Chapter 14 Minus	Chapter 14 Minus

Demand charges do not vary by a/c size; incentivises use of larger a/c and higher load factors.

Helps to support improved noise performance by (i) incentivising efficient use of slots (fewer a/c movements required to serve demand) and (ii) incentivising use of more modern a/c with better noise performance (fleet dependent).

- (1) Summer Base demand charge per GAL 22/23 Conditions of Use.
- (2) Sourced from CAA G-INFO database.
- (3) Noise charge category per GAL 22/23 Conditions of Use.

Larger a/c have new engine option and meet Chapter 14 Minus noise charge criteria



Discussion Points (1 of 2)

1) How strongly do airport charges influence outcomes?

- GAL caters to a broad range of airline business models (low cost, leisure and full service) serving a range of markets (short and long haul).
- The proportion of an airline's cost base accounted for by airport charges varies by airline business model and service type; airport charges typically account for a higher proportion of the cost base for low cost carriers operating short haul services.
- Using publicly available accounts and industry insight, total airport charges (not just noise charges) may account for anywhere between less than 5% or up to 25% of an airline's operating costs (depending on business model and market).
- GAL continues to believe that airport charges have incentive effects which help to support improved noise performance – e.g. (i) reduction in use of A320 family aircraft which do not have the FOPP modification and (ii) improvement in noise performance, particularly at night.

2) How practical is it for GAL to strengthen pricing signals relating to aircraft noise performance?

- GAL has discretion over the structure of its airport charges but is required to consult with its airline partners. Airlines have a right of appeal to the CAA.
- GAL may also seek to strengthen pricing signals via bilateral agreements; subject to commercial agreement with individual airlines.



Discussion Points (2 of 2)

3) How may GAL look to strengthen pricing signals?

- As with all aspects of the charging structure, GAL will keep noise charges under regular review.
- GAL will have due regard to any updates to policies and directives issued by DfT and CAA; current structure is consistent with DfT policy on night flights and CAA good practice principles with respect to aircraft noise charges.
- Approach will need to be considered in context of (i) broader commercial and environmental objectives and (ii) final noise envelope commitment (to inform charging metric).
- Potential to strengthen price signals by (i) increasing the proportion of revenue collected through environmental charges, (ii) increasing the relativity of charges between noise charge categories (e.g. Chapter 4 versus Chapter 14) and (iii) further disaggregating Chapter 14 category.
- Bilateral agreements allow for bespoke approaches tailored to individual airlines recognising e.g. impact on compliance with noise envelope and fleet opportunities / risks.



Annex: CAA's good practice principles with respect to noise charges

CAA published a paper on noise charges in 2013 (CAP 1119) which set out a series of good practice principles

CAA published a follow-up paper in 2017 (CAP 1576) to assess performance relative to these principles

	CAA Good Practice Principles	Status	GAL Comments
a)	Noise charging categories should be based on ICAO certification data, namely the margin to Chapter 3, to incentivise best-in-class.		<ul style="list-style-type: none"> Charge structure is based on ICAO certification data.
b)	Noise charging categories should be of equal width, typically 5 EPNdB, or narrower, to ensure adequate differentiation of noise performance.		<ul style="list-style-type: none"> Chapter 4 noise category has a width of 7 EPNdB. GAL has focussed on incentivising Chapter 14 noise category which is sub-divided into 3 categories (high / base / minus) of equal 3 EPNdB width.
c)	The noise charging categories used at a given airport should cover the full range of aircraft in operation at the airport. This range should be reviewed periodically and modified as appropriate.		<ul style="list-style-type: none"> Unmodified A320 charge and differentiation of Chapter 14 category ensures charging structure recognises full range.
d)	Noise charges for operations occurring at night should be greater than those that occur during the day.		<ul style="list-style-type: none"> Noise charges are higher at night year round.
e)	Where noise-related charge differentials occur depending on the time of day of an operation, the scheduled time of operation should be used as oppose to the actual time. Penalties may be used to disincentivise operations scheduled to occur on the cusp of the night period that regularly fall into the night period.		<ul style="list-style-type: none"> GAL charges based on actual time of operation; operations falling into the night period are subject to higher charges.
f)	There should be a clear distinction between noise-related landing charges and any non-noise related charges, e.g. demand related charges.		<ul style="list-style-type: none"> Noise charges are separated from other charge categories.



Our primary statutory duty

1.3 The Civil Aviation Act 2012 ('the Act') gives us a single primary duty to carry out our economic regulation functions in a manner that we consider will further the interests of users of air transport services. Under the Act, users of air transport services are defined as present and future passengers and those with a right in property carried by the service i.e. cargo owners.

1.4 The scope of our primary duty concerns the range, availability, continuity, cost and quality of airport operation services. We must carry out our functions, where appropriate, in a manner that will promote competition in the provision of airport operation services.

§1.5 In discharging this primary duty we must also have regard to a range of other matters. These include:

- the need to secure that GAL is able to finance its provision of airport operation services;*
- to secure that all reasonable demands for airport operation services are met;*
- to promote economy and efficiency in the provision of airport operation services;*
- the need to secure that GAL is able to take measures to reduce, control or mitigate adverse environmental effects;*
- any guidance issued by the Secretary of State or international obligation on the UK notified by the Secretary of State;*
and
- the better regulation principles.*



Gatwick Northern Runway Project

Noise Envelope Group

Theme 4 Meetings

Enforcement

August 16th 2022

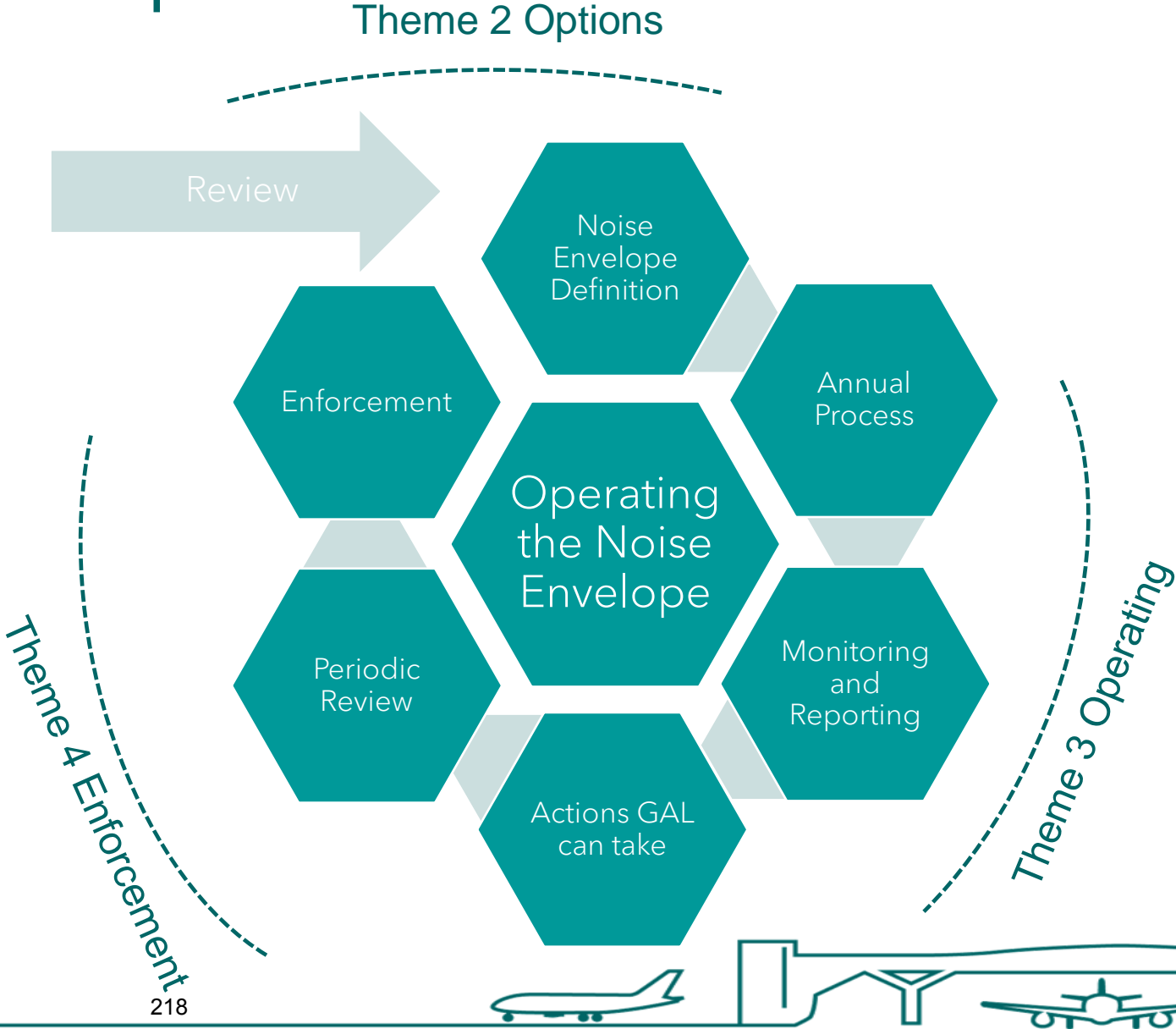
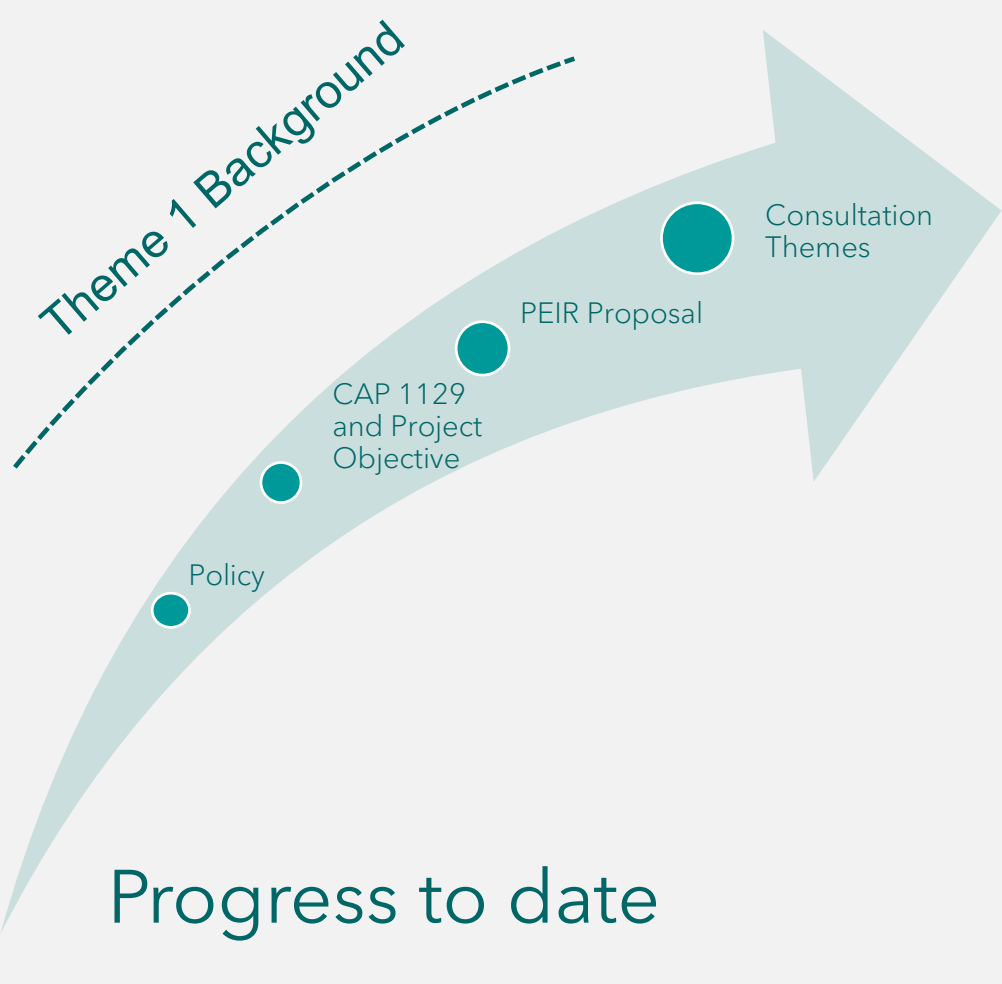


Agenda

- | | |
|-----------------------------------------------|-------------|
| 1. Introduction | Slide 3-4 |
| 2. Key Elements of the Noise Envelope – Recap | Slide 5-6 |
| 3. Forecast Uncertainties | Slides 7-8 |
| 4. Forecasts And Action Plans | Slides 9-14 |
| 5. Noise Metrics and Review | Slide 15 |
| 6. Enforcement | Slide 16 |



Developing The Noise Envelope



PEIR Proposed Noise Envelope

“By the end of the first year after opening of the reconfigured northern runway pursuant to the Project, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

- Leq 16 hour day 51 dB: 146.7 km²
- Leq 8 hour night 45 dB: 157.4 km²

By the end of the first year in which annual commercial ATMs exceed 382,000, and thereafter, the area enclosed by the 92 day summer season average mode noise contours produced by the CAA shall not exceed the following:

- Leq 16 hour day 51 dB: 125.7 km²
- Leq 8 hour night 45 dB: 136.1 km²

The area of the Leq day and night contours will not exceed the limits above, and the noise envelope would provide certainty to the community that noise levels will be limited and will reduce in the future as the airport grows so as to share the benefits of that growth and new technologies with the community.

GAL will report on performance within the noise envelope annually and set in place internal management processes to forecast performance in the years ahead so as to pre-empt potential non-compliance and put in place operating practices and measures to reduce noise before an exceedance arises. Such measures would be subject to consultation with industry and community stakeholders if they trigger the requirements of Regulation 598.”



Key Elements of the Noise Envelope - Recap

Our discussions over the past three rounds of meetings have pointed towards the following main elements:

- Noise Limits:
 - Primary Noise Metrics – to set Noise Limits
 - Secondary Noise Metrics – to monitor and forecast performance
- Reporting requirements
 - Annual Compliance Monitoring Report
- Action that can be taken
 - Scheduling, Local Rules, operating procedures etc.
- Review Process
 - 5-yearly, or as required to reset the noise limits

>> Enforcement in the event of a breach or forecast breach



Annual Compliance Report

To be prepared by GAL in March each year to report:

- Previous years Actual noise levels – to check compliance
- Forecast noise levels for next 5 years
- Supporting information
- Action Plans as required

The Noise Envelope Review Body will consider the report and approve it only if it complies with the requirements.



Forecast Uncertainties

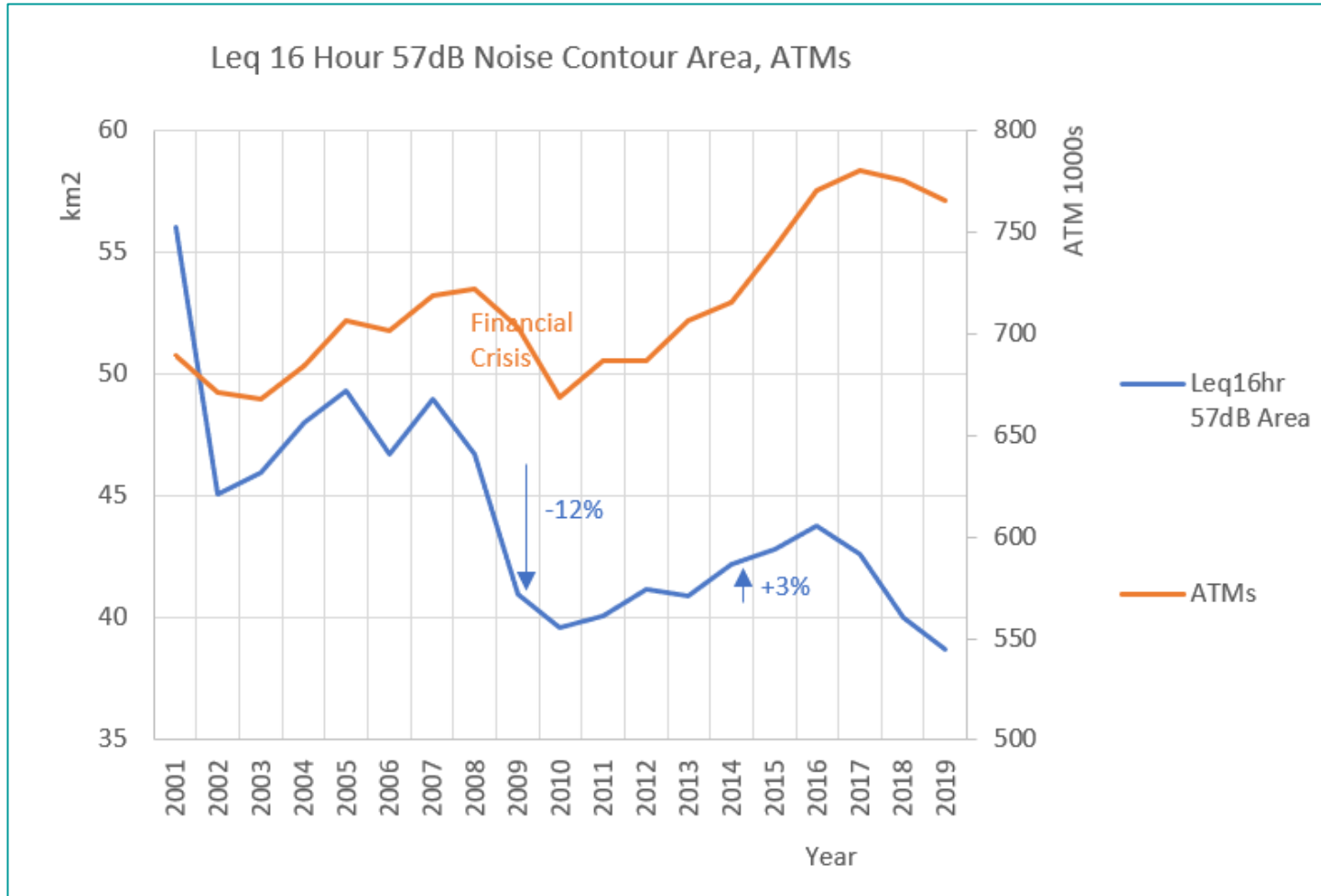
The main uncertainties in forecasting noise levels from forecasts of air traffic movements are:

- Forecast accuracy - due to the economy and markets changing
- Fleet composition – due to airline fleet procurement, aircraft types swapping
- Load factors – affecting rates of climb
- Operating Procedures – low noise arrivals, departure profiles etc.
- Air Traffic Control – may vary aircraft procedures, routes
- Weather – and runway modal split

So, whilst noise level forecasts will be made on the best available data, Actual noise levels will vary above or below the forecasts.



Leq 16 Hour Contour Area Historic Trends



Before the global Pandemic in 2020 there was a general downward trend, but year on year contour areas fluctuate due to changes not just in ATMs but also other factors.



Forecasts And Action Plans

When forecasting noise against the Noise Limits, because of the inherent uncertainty in the noise forecasts a margin must be maintained to help ensure compliance.

So, as well as the *Noise Limits*, we propose *Noise Action Levels*, which are set a margin lower.

In the Annual Monitoring Report, noise forecasts would only be approved by the Review Body when they are below the Noise Action Level. This will help ensure we remain within the Noise Limits.

In the event the Actual noise levels exceed the Noise Limits or the Noise Action Levels, GAL will be required to produce Action Plans. We propose 2 levels of Action Plans:

- *Non-Compliance Action Plan* – actions to return to compliance
- *Compliance Action Plan* – actions to remain in compliance

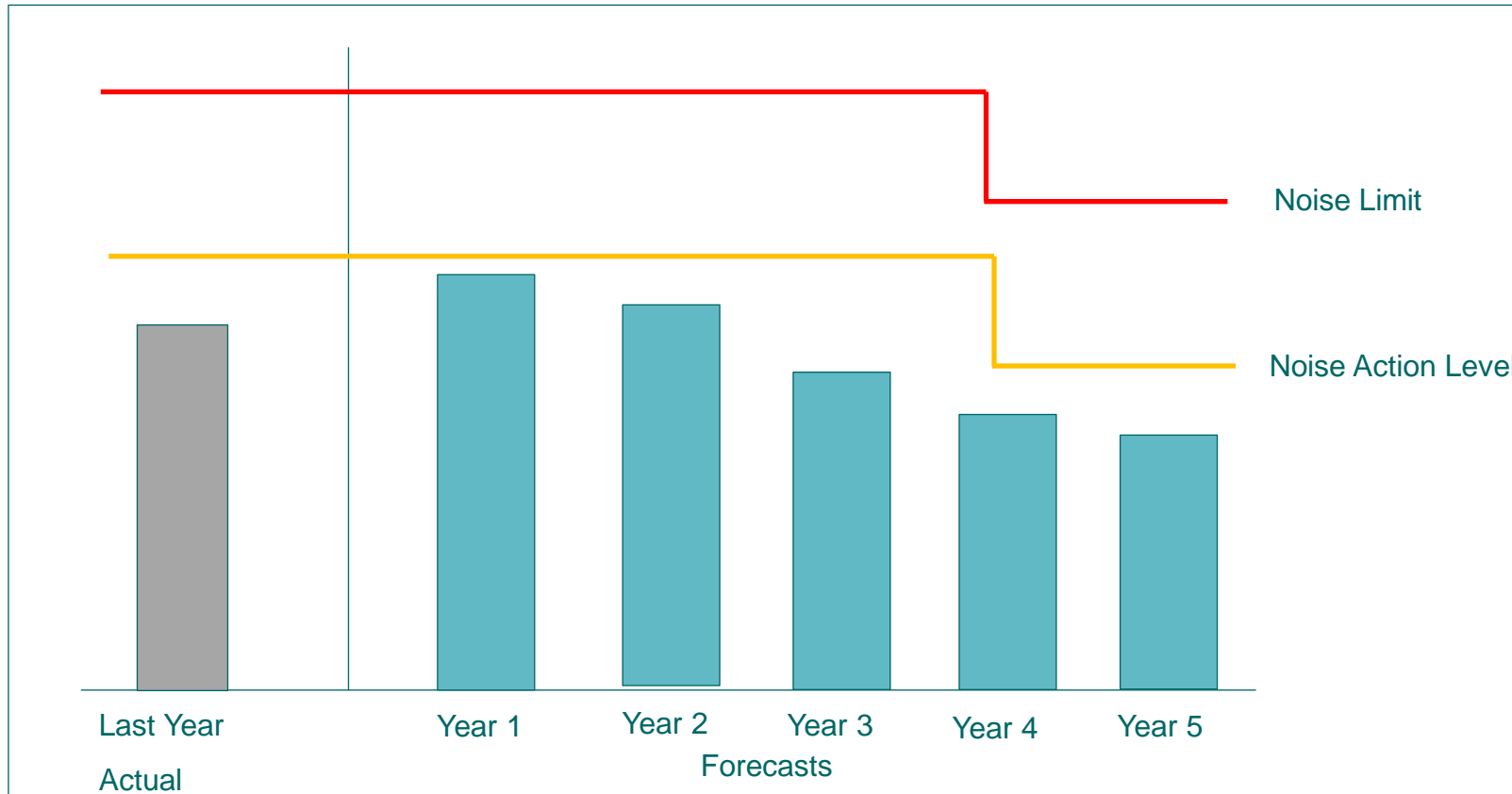
This structure of limits and action is illustrated in the following slides by considering the three possible outcomes of each Annual Monitoring Report:

1. compliance below the Noise Action Level
2. compliance above the Noise Action Level or
3. non-compliance with the Noise Limits



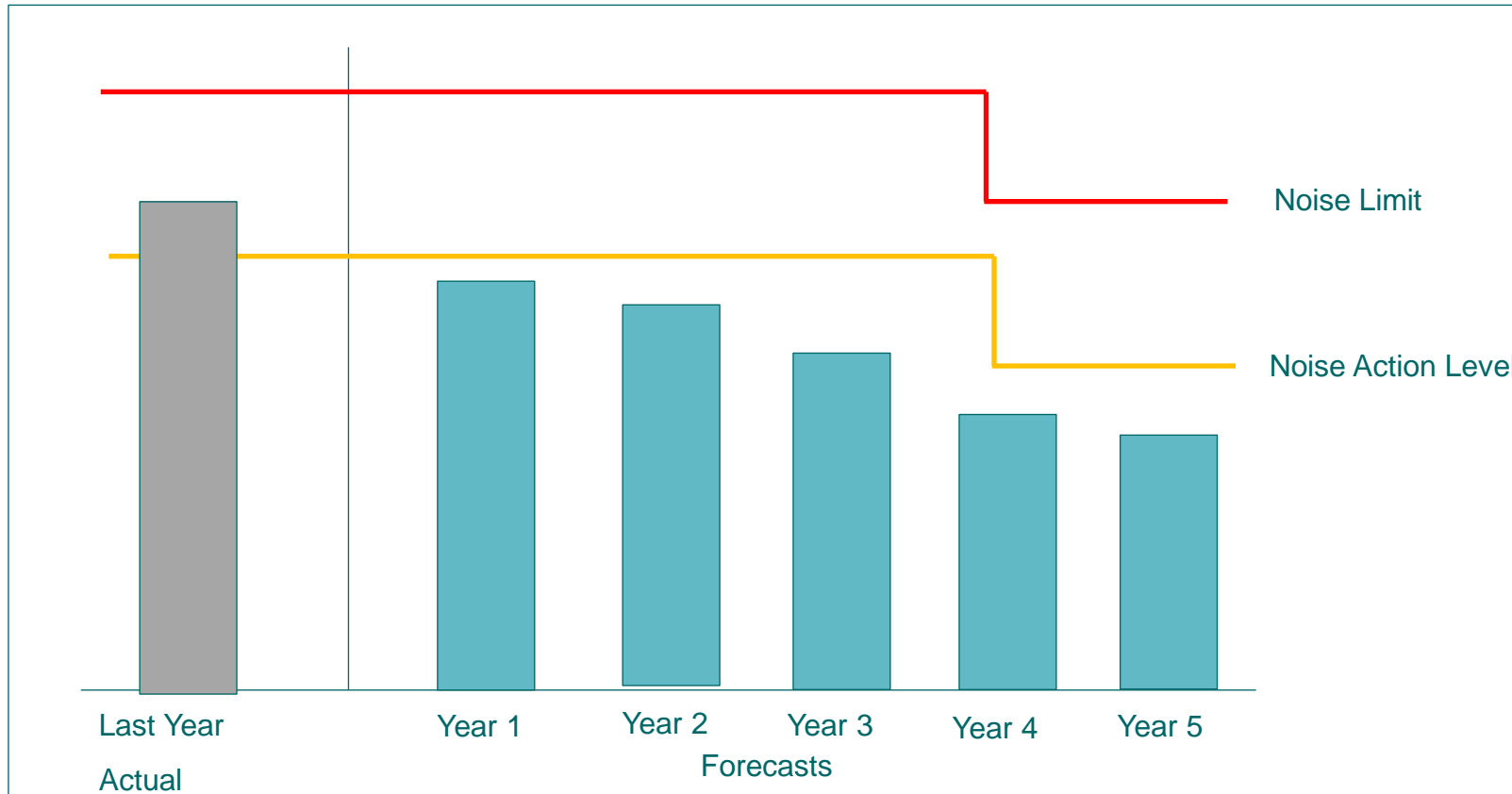
Compliance within the Noise Action Level

Actual noise levels and forecast noise levels below Noise Action Level – No action plan required



Compliance Above the Noise Action Level

Actual noise levels above Noise Action Level – *Compliance Action Plan* required



Compliance Noise Action Plans

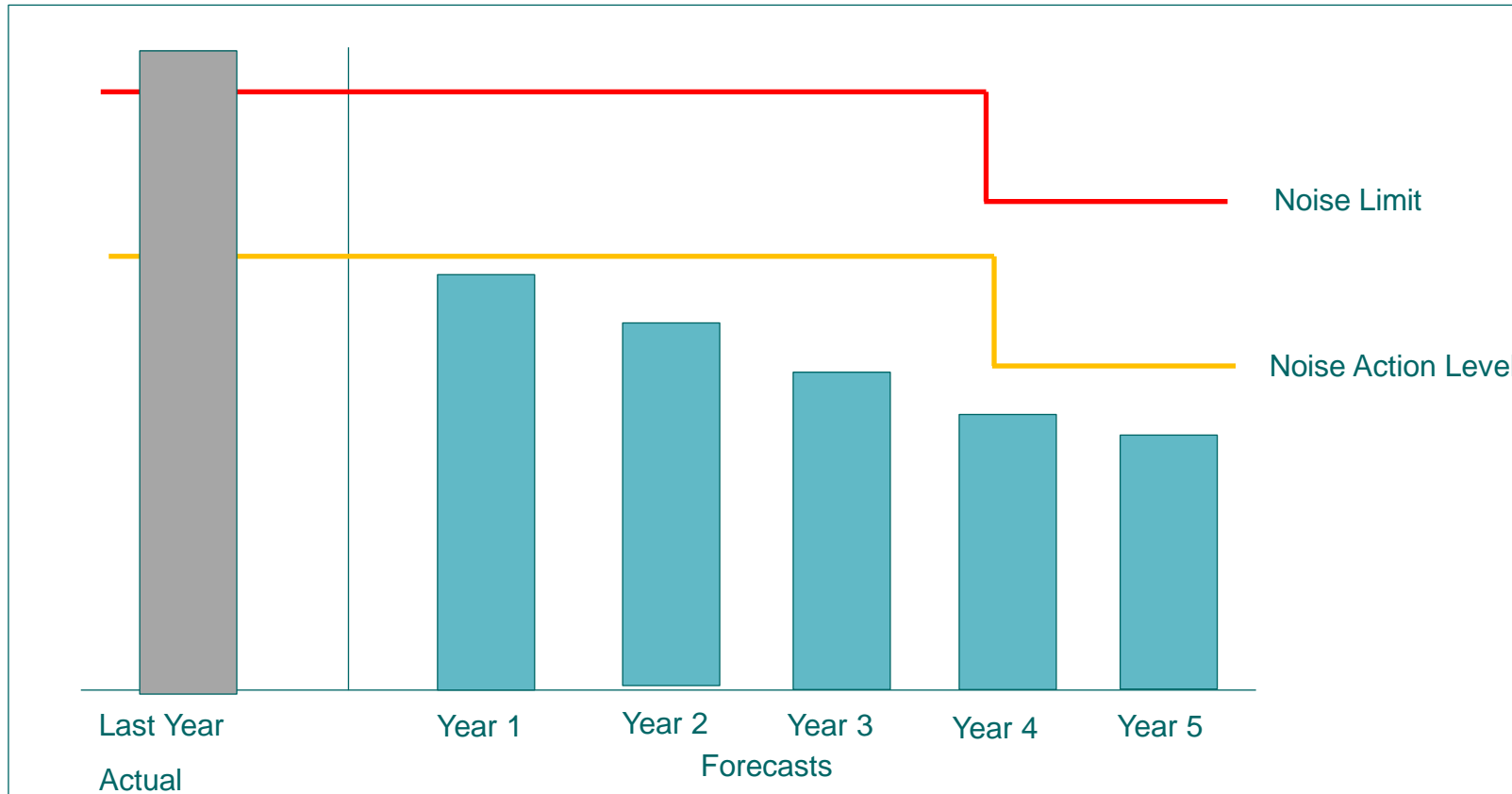
A Compliance Action Plan would include:

- Explanation as to why noise levels were higher than forecast
- Action to ensure under-estimation error is not repeated, if appropriate
- Actions proposed to reduce noise next year, as necessary:
 - Fleet Change
 - Local Rule
 - Operational Procedures
- Forecasts for next 5 years within Noise Action Level



Non-Compliance, Above the Noise Limit

Actual noise levels above Noise Limit – *Non-Compliance Action Plan* required



Non-Compliance Action Plans

A Non-Compliance Action Plan would include:

- Explanation as to why noise levels were higher than forecast
- Action to ensure under-estimation error is not repeated, if appropriate
- Actions proposed to reduce noise next year, as necessary:
 - Fleet Change
 - Local Rule
 - Operational Procedures
 - Capacity Management Measures
 - Operating Restrictions
- Forecasts for next 5 years within Noise Action Level



Noise Metrics and Review

Noise Limits would be set for all Primary Noise Metrics. Non-Compliance with any would require the appropriate Noise Action Plan.

Secondary Metrics would not have limits, but the Annual Monitoring Report would give actual and forecast levels as indicators of actions that may need to be taken.

Review:

If as a result of a 5-yearly review, or some other review, the noise envelope Noise Limits were changed, the new Noise Limits would be adopted in the Annual Monitoring Report with Action Plans with the appropriate actions being required at corresponding noise levels.

Failure to provide Annual Monitoring Reports and the required Action Plans to reduce noise would be in breach of the anticipated DCO requirements and enforceable under the provisions of The Planning Act 2008, as follows.



Enforcement under the Planning Act 2008

It is anticipated that DCO requirements will require the production of Annual Monitoring Reports, and when necessary, Action Plans to reduce noise. Where secured through the DCO, failure to produce these would be in breach of such a DCO requirement. Any such breach would be capable of enforcement in accordance with the Planning Act 2008.

The Planning Act 2008 enforcement regime provides the ability for the local planning authority to legally require the provision of information in relation to the provisions of any DCO, including its requirements, for the purpose of establishing whether a breach has occurred. It also provides a direct route for a local planning authority to seek an injunction from the Courts to prevent any such breach. As with the more familiar Town and Country Planning Act 1990 enforcement regime, any person may petition a local authority to investigate matters and to bring enforcement related action, and it is for the local authority to determine how they wish to proceed.

In addition, it is a criminal offence for a person to fail to comply with the terms of a DCO without reasonable excuse, and any person may petition the police to seek to bring a conviction in those circumstances.



CAGNE
Communities Against Gatwick
Noise and Emissions
The umbrella aviation community and
environment group for Sussex, Surrey and Kent

Noise envelopes – CAGNE comments on process to date 4.6.22

- We would hope to see Gatwick engaging in the spirit of the CAP1129 guidance.

We would ask that much of the work undertaken by ICCAN be considered as best practice by Gatwick, for engagement and work undertaken on this matter.
- We would not support the GACC noise groups' request of a community co-chairperson, as we see this as non-constructive.
- We would not support TO70 working with the community groups, due to the emphasis TO70 has placed, in the past, on the GACC noise groups' requirements/ views. We would welcome independent support for the main working groups, if felt necessary.
- Much had already been put in place by Gatwick without consultation, prior to the DCO PEIR process. We welcome the PINS request for additional work to be undertaken on the Noise Envelope but, once again, raise concern of the lack of geographical spread on the noise envelope group, local sub-group, and aviation subgroup, being dominated by GACC noise groups. We have, to date, seen little input from West Sussex at these meetings, so their communities are underrepresented.
- CAGNE has, throughout the Sept-Dec 2021 DCO PEIR public engagement process, reported on the poor engagement operated by the airport. We must therefore question whether the process has had a good enough foundation to go forward.
- The time allowed is very short, compared to the Heathrow process which was over 1 year. We accept that the public consultation (Sept-Dec 2021) was part of the process, but request consideration for extension of timing being allowed.
- Much is detailed by Gatwick about the process and current policy. CAGNE requests that there be flexibility to allow for any changes to policy that may be forthcoming from government.

- By the time the DCO is registered with PINS, much will have changed from the outset of the process – initiated in the master plan of 2018. How flexible will the process be to incorporate such changes?
- We are concerned by the chosen baseline of 2019, as this was when Gatwick was at its peak movements, with significant increases in noise complaints. CAP 1129 states ‘maintain a status quo’ – we do not wish to see the high level of noise complaints in 2019 being the norm for communities.
- The NATMAG member is solely concerned with Horley, his elected ward, which allows Horley to have favourable input over other areas.
- Regulation 598 considerations – we raise concern, again, that the studies brought by the GACC noise groups, through the NMB, are biased. CAGNE questions whether these should be used as part of the noise envelope work, as they favour set geographical locations of airspace (removal of the NAP ILS at night and FED).
- We recognise night flights as a major concern for communities, but accept that they are part of the government’s consultation process next year, in view of the recent NMB paper on the subject. CAGNE seeks to reduce and limit night ATMs through the noise envelopes process (current limitations being noted due to policy).
- ‘Mitigate, minimise adverse impacts on health and quality of life from noise’ – no evidence has ever been forthcoming of aviation being able to provide this. ‘Mitigate/ mitigation’ are unsubstantiated terms used by industry, but not trusted by communities.
- Noise contours shrink as the airport seeks to show noise has been reduced. We must question this and ask how it will reflect in the noise envelopes.
- Noise metrics - 51dB is not seen as going out far enough, to actually deal with the geographical spread of the noise complaints already being expressed (flight performance report 2019).
- Residents do not hear noise as an average and so we would welcome other noise criteria and acoustics.
- There is a lack of community trust in Gatwick Airport (due to trials) and aviation – we see no evidence of quieter planes. In fact, the 3dB and 5dB reduction detailed by Mr Mitchell of Gatwick Airport is questionable, due to the increase in the flight frequency, and the fact that the human ear does not necessarily recognise such a small change. For example, this is offered as new fleets – NEO – are being flown at Gatwick, and yet noise complaints have significantly increased, which does not reflect the Gatwick claim of ‘quieter’ aircraft.
- The example provided by GAL illustrates that planes would have to be in production now, as *‘it takes around 10 years to develop a wholly new type of aircraft and bring it to the market’*. As much is being spent on reducing

emissions from planes, we see no evidence/ certainty provided for quieter planes being introduced.

- Gatwick continue to use the SONA report, which is seen as flawed as it only engaged with 200 people in the Gatwick area. Gatwick receive more complaints than this in one month of normal operation. For example, 2019 flight performance report 1 Jan – 31 March recorded 24,204 noise complaints from 774 individuals, up from 2018 when 18,952 complaints were received from 952 individuals.
- No noise caps - We see no reference to FASIS in the process, so we question the 'enforcement' and 'periodic review', as these would suggest that the noise limits being offered by Gatwick are in fact moveable parameters to allow for changes to airspace and noise levels. We see no guarantees for residents with the proposed noise envelopes process, due to the FASIS desires for growth.
- How does this affect Route 4 and 3 with the current CAP1616 process, as Gatwick detail that FASIS will not include the current process?
- How will the noise envelopes accommodate the growth of Horley, Crawley, and Horsham through new housing? Will this inevitably move noise further out and over more rural locations?

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GATWICK NOISE ENVELOPE COMMUNITY GROUP POSITION PAPER – NOISE METRICS AND LIMITS

This paper sets out the initial proposals of the groups listed below for a noise envelope at Gatwick Airport. At this stage our views are provisional and subject to change in the light of further analysis and discussion. The paper does not address monitoring and enforcement issues or the legal form a noise envelope should take. We will comment on these points in due course.

Context

We strongly oppose the growth proposals set out in Gatwick’s DCO consultation and believe they should be rejected. Nothing in this paper should be taken as indicating support for Gatwick’s DCO proposals.

The airport has failed to demonstrate that there is a need for additional airport capacity or that the project would have net employment or economic benefits. The government’s climate change advisers have made clear that there is no case for additional airport capacity in the UK and that any net expansion would have unacceptable climate impacts. Expansion at Gatwick would also have other devastating consequences for local communities and people under flight paths: there would be more noise, more road and rail congestion, worse air quality and properties under flight paths would be devalued. The airport’s proposals in each of these respects are unacceptable.

We support the development of a noise envelope for Gatwick and believe one should be put in place whether or not the DCO is granted. The agreement of a noise envelope would be by far the most important noise management development proposed at Gatwick for many years. It is likely to determine the noise environment around the airport and under flight paths for many years to come.

Key policy tests

The noise envelope should comply with the Airports National Policy Statement and wider government aviation noise policy. It should be developed in line with, and meet the recommendations of, the CAA’s guidance on noise envelopes, as set out in CAP 1129.

In our view the key policy tests that any noise envelope proposal must meet are:

1. That future growth in aviation should ensure that benefits are shared between the aviation industry and local communities¹.
2. That the industry must continue to reduce and mitigate noise as airport capacity grows².
3. That as noise levels fall with technology improvements the aviation industry shares the benefits from these improvements³.
4. That noise should be limited and both the number of people significantly affected by aircraft noise and the total adverse effects on health and quality of life from aviation noise should reduce^{4,5}.

¹ Aviation Policy Framework paragraph 3.3

² Aviation Policy Framework paragraph 3.3

³ Aviation Policy Framework paragraph 3.3

⁴ Aviation Policy Framework paragraph 3.12

Gatwick's noise envelope proposal

Gatwick's DCO consultation set out the airport's noise envelope proposals. Gatwick proposed that the area affected by average noise over 51dB during the day and 45dB at night in the summer should not exceed the limits set out in bold below. It did not propose any limits for the winter or any limits on the population exposed to noise.

	End of the first year after opening of the reconfigured northern runway, and thereafter (forecast to be ???)	End of the first year in which annual commercial ATMs exceed 382,000, and thereafter (forecast to be 2038)	2019 base (for reference)	2032 central case base forecast (for reference)	2038 central case base forecast (for reference)
92 day summer season Leq 16 hour day 51 dB average mode contour not to exceed	146.7 km²	125.7 km²	136 km ²	107.3 km ²	96.5 km ²
92 day summer season Leq 8 hour night 45 dB average mode contour not to exceed	157.4 km²	136.1 km²	159.4 km ²	124.6 km ²	115.3 km ²

Assessment

The benefits and disbenefits of Gatwick's proposals can be illustrated as follows:

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
Noise day contour (community benefit/ (disbenefit))	136 km ²	146.7 km ²	(7.9%)	107.3 km ²	(36.7%)	125.7 km ²	7.6%	96.5 km ²	(30%)
Noise night contour (community benefit/ (disbenefit))	159.4	157.4	1.2%	124.6	(26%)	136.1	14.6%	115.3	(18%)

* Aviation 2050 consultation paragraph 3.115

It is self-evident from our analysis that Gatwick's proposals do not meet policy test 1 above. In each case and for each period, the industry would realise very substantial benefits but the community would realise disbenefits or only very modest benefits, substantially less than those accruing to the industry.

It is also self-evident that Gatwick's proposals do not meet policy test 2 above. Even using Gatwick's preferred average noise metric (which does not represent noise impacts adequately), noise is projected to increase as the airport's capacity grows, rather than to reduce as policy requires. The proposed Leq day contour limit in 2032 is over 36% higher than the central case base contour in that year and the proposed night limit is over 26% higher than the central case base contour in that year. In 2038 the proposed limits are some 30% and 18% above the base case for day and night periods respectively. For this reason alone the airport's proposals are not policy compliant and must be revised.

It follows that the benefits of technology improvements are not being shared or are being more than outweighed by additional traffic. In the few cases where there is some mutual benefit, the benefits accrue disproportionately to the industry. Policy test 3 is therefore also failed.

Finally, policy test 4 is partially disregarded in Gatwick's noise envelope proposals because they make no reference to reducing the number of people significantly affected by aircraft noise. This test is therefore also failed.

In addition, GAL's proposals fail to meet some of the CAA's other key CAP 1129 recommendations. In particular:

1. Gatwick has made no attempt to agree its proposals with other stakeholders as CAP 1129 requires.
2. Gatwick has proposed the single metric that best suits its interests rather than a combination of parameters as CAP 1129 recommends.
3. There has been no discussion on the life-span of the proposed envelope or the means of implementation and enforcement.
4. There has been no involvement of independent third parties in the development of the envelope.

Gatwick noise envelope proposals

Any noise envelope at Gatwick should comply with all relevant government policies and the CAA's CAP 1129 advice. In particular a noise envelope should demonstrably meet the core policy tests set out above.

We propose:

1. As recommended by the CAA, the noise envelope should comprise multiple metrics and limits rather than a single metric.
2. The envelope should set overall limits on passenger numbers and total traffic movements at Gatwick. If the DCO is granted, we propose these should be a passenger limit of 60 million per annum and a traffic movement limit of 330,000

per annum. These limits are below the passenger/traffic levels projected in the DCO consultation to ensure that the actual climate, noise, air quality and other impacts of growth are fully assessed before any additional growth could be undertaken. If the DCO is not granted overall airport limits should be set through an alternative planning or other regulatory mechanism. Those limits should be 45 million passengers per annum and 280,000 traffic movements per annum. Inclusion of overall limits will bring Gatwick into line with other major UK airports and ensure it can no longer expand without a robust planning process, as it has in recent decades.

3. The envelope should specify that there will be no flights for a full 8-hour night period at all times of year, other than for clearly and narrowly defined emergency or humanitarian purposes.
4. The noise envelope should restrict aircraft movements and noise exposure at times of the day that are of particular community sensitivity outside of the night period, such as shoulder periods. Appropriate periods and limits should be considered and agreed by the NEG.
5. The envelope should recognise the full population that is adversely impacted by aircraft noise, not just those whose physical and mental health is threatened or those that are regarded as being significantly affected. The WHO's recommended aircraft noise limits should be used for this purpose. The population within the 51 dB Leq contour that Gatwick proposes to use is less than 25,000. However, the population that is adversely impacted by Gatwick is greater than this by orders of magnitude. This larger population also needs to be measured and reported by the application of appropriate metrics.
6. The envelope should be defined in terms of both Leq and agreed number above limits. Frequency of disturbance can be as relevant as average sound energy level.
7. In each case, population needs to be measured, limited and reported as well as land area.
8. The envelope should take account of the impact of all relevant new technologies and operational improvements, not just fleet changes. Gatwick have included the beneficial effect of changes in the mix of quieter and noisier aircraft but have not included the impact of new navigation technology or of operational improvements. FASIs could well be implemented before the second runway can be opened. Its effects should be included in all limits that are set, or there should be an agreed change mechanism that enables them to be taken into account.
9. Limits for all metrics should be set for each year following the decision on Gatwick's DCO application, for both summer and winter 16-hour day periods.
10. Each annual contour limit should be lower than both the actual 2019 contour and the base year contour for the relevant year. In addition, each contour limit should be lower than the actual contour for the year immediately preceding the relevant year by an amount that ensures that benefits are shared between the aviation industry and local communities. In our view this requires a directly proportionate relationship between increases in capacity and reductions in all noise contours.

11. Proposed limits for each year should be determined by an Independent Expert whose identity and terms of reference should be agreed by the NEG.
12. The base year contours for each relevant year should incorporate, inter alia, a Reasonable Allowance for each of best case fleet transition, noise reductions arising from operational improvements including those arising from the work of the Gatwick's Noise Management Board, and FASIs. The Reasonable Allowance for each relevant year should be determined by the Independent Expert.
13. There should be change provisions that enable the contours to be reduced to take account of any unanticipated reduction in noise, for example arising from an approved airspace change. There should also be change provisions enabling the contours to be reduced to take account of any material new evidence as regards the health effects of aircraft noise.
14. The noise envelope should specify the date by which aircraft noise will comply with the day period limit recommended in the World Health Organisation's Environmental Noise Guidelines for the European Region.
15. The noise envelope should require annual reductions in noise impacting National Parks and AONBs on a basis to be agreed by the NEG.
16. The other metrics discussed in CAP 1129 (i.e. noise quotas, an overflight area metric, noise limits at individual monitors, number of people annoyed or sleep disturbed, a person event index, average individual exposure index) should be considered by the NEG and included in the noise envelope if appropriate.
17. As part of the envelope Gatwick and all airlines providing more than 5% of traffic movements at Gatwick should commit, on a best endeavours basis, to identify and effectively implement all safe and reasonably practical measures to reduce aircraft noise and noise impacts, and to put in place agreed processes for engaging and dealing with the concerns raised by people that are and could be negatively impacted by Gatwick aircraft noise.

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GATWICK NOISE ENVELOPE COMMUNITY GROUP POSITION PAPER – NOISE METRICS AND LIMITS

This paper sets out the initial proposals of the groups listed below for a noise envelope at Gatwick Airport. At this stage our views are provisional and subject to change in the light of further analysis and discussion. The paper does not address monitoring and enforcement issues or the legal form a noise envelope should take. We will comment on these points in due course.

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Theme 2

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Theme 2

Theme 2

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| 3. The envelope should specify that there will be no flights for a full 8-hour night period at all times of year, other than for clearly and narrowly defined emergency or humanitarian purposes. | Theme 2 |
| 4. The noise envelope should restrict aircraft movements and noise exposure at times of the day that are of particular community sensitivity outside of the night period, such as shoulder periods. Appropriate periods and limits should be considered and agreed by the NEG. | Theme 2 |
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NOISE ENVELOPE GROUP COMMUNITY GROUP POSITION PAPER

June 2022

POLICY TESTS

1. Benefits must be shared between the aviation industry and local communities
2. The industry must continue to reduce and mitigate noise as airport capacity grows
3. As noise levels fall with technology improvements the aviation industry must share the benefits from these improvements
4. Noise should be limited and both the number of people significantly affected by aircraft noise and the total adverse effects on health and quality of life from aviation noise should reduce

In addition policy says: *“The acceptability of any growth in aviation depends to a large extent on the industry tackling its noise impact”.*



Policy test 1

Benefit sharing

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
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Noise night contour (community benefit/ (disbenefit))	159.4 km ²	157.4 km ²	1.2%	124.6 km ²	(26%)	136.1 km ²	14.6%	115.3 km ²	(18%)



3

Policy test 1

Benefit sharing - Leq metric

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
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Benefits must be shared between the aviation industry and local communities



4

Policy test 2

Noise reduction - vs 2019 (Leq)

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
Noise day contour (community benefit/ (disbenefit))	136 km ²	146.7 km ²	(7.9%)	107.3 km ²	(36.7%)	125.7 km ²	7.6%	96.5 km ²	(30%)
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5

Policy test 2

Noise reduction - 2032 vs 2019

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
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The industry must continue to reduce and mitigate noise as airport capacity grows



6

Policy test 2

Noise reduction - 2038 vs 2019

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
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The industry must continue to reduce and mitigate noise as airport capacity grows



7

Policy test 2

Noise reduction - 2032 vs base case

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
Noise day contour (community benefit/ (disbenefit))	136 km ²	146.7 km ²	(7.9%)	107.3 km ²	(36.7%)	125.7 km ²	7.6%	96.5 km ²	(30%)
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The industry must continue to reduce and mitigate noise as airport capacity grows



8

Policy test 2

Noise reduction - 2038 vs base case

	2019	2032 proposed cap	2019-2032 benefit	2032 base case	2032 vs base case	2038 proposed cap	2019-2038 benefit	2038 base case	2038 vs base case
Capacity (industry benefit)	46.6 mppa	72.3 mppa	55%	59.4 mppa	22%	75.6 mppa	62%	62.4 mppa	21%
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9

Policy tests 1 and 2 conclusions

Gatwick's proposals clearly do not meet policy tests 1 and 2:

1. The industry would realise very substantial benefits but the community would realise disbenefits or only very modest benefits
2. Even using Gatwick's preferred average noise metric (which does not represent noise impacts adequately), noise is projected to increase as the airport's capacity grows, rather than to reduce as policy requires

It follows that the benefits of technology improvements are not being shared, or are being more than outweighed by additional traffic. Policy test 3 is therefore also failed.



10

Policy test 4

Noise should be limited and both the number of people significantly affected by aircraft noise and the total adverse effects on health and quality of life from aviation noise should reduce.

Gatwick's noise envelope proposals make no reference to reducing the number of people significantly affected by aircraft noise or the total adverse effects of noise.



11

CAA CAP 1129

Gatwick's proposals fail to meet key CAP 1129 recommendations.

In particular:

- It has made no attempt to agree its proposals with other stakeholders as CAP 1129 requires
- It has proposed the single metric that best suits its interests rather than a combination of parameters as CAP 1129 recommends
- There has been no involvement of independent third parties in the development of the envelope
- There has been no discussion on the life-span of the proposed envelope or the means of implementation and enforcement



12

REGULATION 598

GAL's proposed regulation 598 objective cherry picks government policy:

- It omits the policy requirement to reduce noise as airport capacity grows
- It fails to require the benefits of growth to be shared
- It does not require the total adverse effects on health and quality of life from aviation noise to be reduced.

The objective is inappropriate and needs substantial amendment.



13

APF Policy

3.3 We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.

3.24 The acceptability of any growth in aviation depends to a large extent on the industry tackling its noise impact.

Community Group Position Paper – Noise Metrics & Limits June 2022. Additional Analysis

GATWICK NOISE ENVELOPE
COMMUNITY GROUP POSITION PAPER - NOISE METRICS AND LIMITS JUNE 2022
ADDITIONAL DATA 22/6/2022

CENTRAL CASE / SLOW TRANSITION FLEET
cc / stc

	2019	2032 proposed cap	2039-2022 benefit	2032 base case cc / stc	2032 vs base case cc / stc	2039 proposed cap	2039-2032 benefit	2039 base case cc / stc	2039 vs base case cc / stc
Capacity (Industry benefit)	46.6 mpps	73.3 mpps	33%	35.4 mpps	32%	73.4 mpps	33%	65.9 mpps	33%
Noise day contour (community benefit/ disbenefit)	L_{eq} 136 km ²	146.7 km ²	(7.9%)	137.3 km ² /135.5 (10.6%)	7.6%	125.7 km ²	7.6%	96.5 km ² /102.4 (17.2%)	(19%)
N65 20	49.9	151.0*	(0.7%)	106.2 /126.4 (16.7%)	(42.3%)	116.7*	72%	99.3 /108.5 (7.6%)	(23%)
Noise night contour (community benefit/ disbenefit)	L_{eq} 129.4 km ²	157.4 km ²	1.2%	126.6 km ² /143.4 (10.9%)	(26%)	136.1 km ²	14.6%	115.3 km ² /124.3 (9.4%)	(18%)
N60 10	30.2	207.7*	(1.7%)	135.4 /143.0 (7.6%)	(17.8%)	184.4*	13%	169.1 /175.7 (4.9%)	(9%)

(DHERAF112)

* NOT PROPOSED IN PEIR

Part of the CNGs' methodology is to use the ratio of "Slower fleet transition, with NR development" contour area in an assessment year, to "central fleet, no NR development" to report a percentage of benefit or disbenefit occurring.

This is an incorrect comparison with which Gatwick cannot agree, as the central and slower fleet transition cases represent different versions of the future. A slower transition future year, would not exist with a central fleet base year. A "like for like" comparison would report the central case "with and without development", and the slower fleet transition "with and without development" separately.

When such like for like fleet comparisons are done for the slower fleet transition, they reduce the disbenefits shown by the CNG's calculation method by around 50% of the disbenefits reported in the original paper.

Gatwick was asked in the meeting to review the results of a similar analysis using number above metrics. This shows N65 20 and N60 10 analyses give broadly similar results as L_{eq} 16 hr and L_{eq} 8 hr

SHARING BENEFITS First Draft

This memorandum was prepared by James Lee for the NEG2 meeting.

A new approach

It proposes a new basis for a Noise Envelope, which both reflects people's real concerns about frequency and intensity of aircraft noise; and provides an empirical basis for measuring and monitoring the extent to which the very significant benefits of quieter aircraft are to be shared between industry and communities.

The proposal has two significant merits. First, it uses simple and readily understandable metrics. Second, it provides a rigorous and dynamic basis for limiting and controlling increases in aircraft movements in line with agreed noise objectives.

A noise envelope is intended to give some certainty to the impact of future growth. But more importantly, the noise envelope should also provide a basis for controlling that growth.

Government policy is to share benefits with communities. But the definition of benefits is not clear, nor is there any consensus on what constitutes a fair share. This proposal seeks to clarify matters.

The proposal defines the **benefit** to be shared as the reduction in noise per aircraft, which will result from the gradual and inevitable introduction of quieter aircraft such as the A320 Neo and the B737 Max.

Sharing is defined as the extent to which the reduction in noise per aircraft is consumed by the growth in the number of arrivals and departures.

Gatwick intends to significantly increase the number of movements by quieter narrow-bodied aircraft and to grow movements of wide-bodied aircraft relatively faster. These larger planes are heavier and therefore significantly noisier. Because of these two factors, a very substantial share of the potential reduction in noise could be consumed by the growth in the number of flights.

This is unfair. The fairest way of sharing benefits would be to split them 50/50 and to cap movements to achieve this aim.

Our proposed Noise Envelope has four principal metrics:

1. Noise per ATM
2. Number of ATMs
3. Total noise
4. A "sharing" ratio

Gatwick have recommended that the sole noise envelope metric should be the land area in square kilometres within a single noise contour based on one selected level of dB leq. While this is one way measuring noise, it has very many flaws.

1. Leq is a single composite metric which embraces frequency, interval and intensity of noise.
2. Different people experience noise in different ways. Some are primarily concerned with frequency, others may be influenced more by intensity, while others are equally annoyed by both.
3. A set of metrics that disaggregates frequency and intensity is therefore needed.
4. Choosing a single contour [such as 51dB leq] ignores the experience of very many people who suffer from noise further from the airport, as well as the relatively greater predicament facing those much closer.
5. Leq is a method of averaging sound energy, which is extremely difficult for a lay person to comprehend.
6. Measures in decibels dB use a log scale which can easily be misinterpreted and mask the true extent of changes.
7. Expressing changes in noise in terms of reductions in square meters is confusing, to say the least.

Our proposal recommends a radically different approach; namely to measure noise in terms of "noise at source". In other words, the intrinsic noise level created by each aircraft. This is a metric known as EPNdB. The data are readily available and easily understood.

1. Every class of aircraft is certified as emitting a certain level of noise, on departure, on arrival, and on the ground.
2. This noise is measured in EPNdB
3. The level of EPNdB is the primary determinant of the relative changes in noise experienced by people and communities at all distances from the airport, no matter how close or how far.
4. And, EPNdB is the main driver of the ANCON model which determines the dB leq contours.
5. Furthermore, EPNdB is well established as the basis for the Quota Count [QC] system already in use to control night flights at Heathrow.

Our Noise Envelope uses an index [2019 =100] for the change in both the average EPNdB per flight [noise per ATM] and the cumulative EPNdB for all flights [total noise]. These indices are based on the anti-log of dB and indicates real changes in noise, which can be matched and compared to changes in movements.

The "Sharing" ratio is computed by expressing the reduction in total noise as a percentage of the reduction in noise per aircraft. A 50/50 relationship is deemed to be most fair.

First draft of a model

To demonstrate the efficacy of this new approach, we have created a basic model, which the NEG will need to develop and refine.

The EPNdB data for each principal aircraft type were taken from the *The Quota Count Validation study at Heathrow Airport*, published as CAP 1869. Certain approximations have had to be made to fit the PEIR data about aircraft types.

The EPNdB assumptions for each class of aircraft are shown in the table below.

Type	Arrival EPNdB	Departure EPNdB	Average EPNdB
Narrow Body			
A320	95.0	84.2	92.3
737	95.6	83.8	92.8
Other CG	95.0	84.2	92.3
A320 Neo	92.4	80.3	89.6
737 Max	94.2	82.8	91.5
C Series	92.4	80.3	89.6
Wide Body			
A330	97.5	97.9	97.7
777	98.5	98.6	98.6
747	101.0	97.3	99.5
A380	97.7	94.9	96.5
Other CG	82.5	94.9	92.1
787	94.9	87.5	92.6
A350	96.8	85.5	94.1
Other WB	84.3	85.5	84.9

Average noise per ATM have been calculated using the mix of movements for each class of aircraft described in the PEIR Data Book.

Type	Average ENPdB	Fleet Mix - 2019	Fleet Mix - 2029	Fleet Mix - 2032	Fleet Mix - 2038	Fleet Mix - 2047
Narrow Body						
A320	92.3	62%	32%	16%	0%	0%
737	92.8	15%	4%	1%	0%	0%
Other CG	92.3	4%	0%	0%	0%	0%
A320 Neo	89.6	7%	36%	51%	66%	65%
737 Max	91.5	0%	12%	13%	13%	13%
C Series	89.6	1%	2%	4%	4%	4%
		89%	86%	85%	84%	83%
Wide Body						
A330	97.7	2%	1%	0%	0%	0%
777	98.6	3%	3%	1%	0%	0%
747	99.5	1%	0%	0%	0%	0%
A380	96.5	1%	1%	1%	0%	0%
Other CG	92.1	1%	0%	0%	0%	0%
787	92.6	4%	7%	11%	13%	13%
A350	94.1	0%	2%	2%	3%	3%
Other WB	84.9	0%	0%	0%	1%	1%
		11%	14%	15%	16%	17%
Noise per ATM						
ENPdB			93.0	92.1	91.2	90.6
Index			100	81	66	58
Reduction [2019]				19%	34%	42%

By 2029, Noise per ATM could be reduced by nearly 20%. However, by 2032 Noise per ATM could be reduced by as much as a third, and by 42% by 2038. This is the measure of the benefits that need to be shared.

ATMs are taken from the PEIR forecast of flight movements and are indexed using 2019 = 100. The table below illustrates the sharing of benefits as ATMs grow and Noise per ATM is reduced.

	2019	2029	2032	2038	2047
Movements [Index]	100	116	132	134	136
Noise per ATM [Index]	100	81	66	58	58
Total Noise [Index]	100	95	88	78	78
Sharing ratio		28%	36%	53%	52%



The graphical representation of these indices provides a readily understood picture of the changes that can be expected if Gatwick expands at its forecast rate.

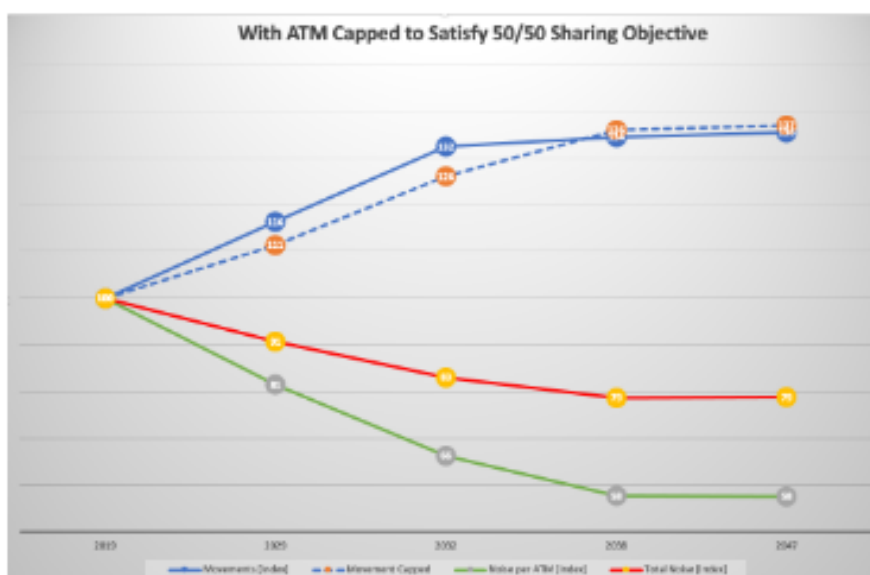
The 2038 and 2047 forecasts are largely academic, being up to 25 years in the future, at a time when aircraft technology is bound to have changed [not necessarily towards quieter aircraft]. It is only the 2029 and 2032 dates which are relevant.

1. Unless flight patterns change radically, in 2029 every home that is currently impacted by aircraft noise, will experience 16% more disturbances, although these will be marginally quieter by around 19%.
2. And, by 2032 every home that is currently impacted by aircraft noise, will experience 32% more disturbances, although these will be quieter by around 34%. By any reckoning this will be perceived a serious increase in disturbance.

This is the true measure of disturbance, not Leq which averages frequency and intensity, as if these were somehow fungible.

Furthermore, without a cap on movements, the sharing ratio is unacceptably low at 28% and 36%. A cap to reduce ATMs by around 5% would improve the ratio to 50/50.

	2019	2029	2032	2038	2047
Movements [Index]	100	116	132	134	136
Movement Capped	100	111	126	136	137
Noise per ATM [Index]	100	81	66	58	58
Total Noise [Index]	100	91	83	79	79
Sharing ratio		50%	50%	50%	50%



Conclusions

Ten key features of an effective noise envelope.

1. Measuring both frequency and intensity of noise separately is better than measuring sound energy levels: disaggregation is better than averaging.
2. Measuring noise at source is better than at a single contour: changes in noise at source affect everyone proportionately, no matter how far from the airport.
3. Change in noise per ATM should be the key metric to measure the intensity of aircraft noise.
4. EPNdB is the best metric to measure and communicate changes in noise per ATM.
5. EPNdB is already used by the ANCON model to measure the impact of change fleet mix. Noise contours are neither helpful nor necessary for the purposes of the noise envelope.
6. The noise envelope must include caps on ATMs: without caps, the sharing of benefits is likely to be unfair.
7. Caps on ATMs need to be variable and adaptable; related to quantifiable measures of performance.
8. Performance should be measured in terms of a sharing of benefits ratio.
9. Benefits should be shared 50/50 using this ratio
10. A relatively marginal decrease in ATMS [$<5\%$] could achieve the 50/50 objective.

Next Steps

1. Steve Mitchell to invited to critique these proposals
2. A more robust model needs to be developed
3. Data for more years and different fleet scenarios should be modelled

James Lee
1st July 2022



NOISE ENVELOPE GROUP METRICS AND LIMITS COMMUNITY GROUP VIEWS

July 2022

COMMUNITY REQUESTS

	Request	Response
1	Terms of reference to be reviewed to comply with CAA advice	Refused
2	Process to be overseen by an independent party	Refused
3	Timetable to be extended to enable issues to be explored in necessary detail	Refused
4	Above issues (and others) set out in letter to Stewart Wingate dated 13 June	No reply
6	Budget for technical advisory support to be provided	Refused Subsequently committed to consider further. No further response received
7	Community group data request dated 21 June	No reply



POLICY TESTS SUMMARY

	Policy test	Assessment of GAL's proposals
1	Future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.	Not achieved. The industry would realise very substantial benefits but the community would realise disbenefits or only very modest benefits
2	The industry must continue to reduce and mitigate noise as airport capacity grows	Not achieved. Noise is projected to increase as the airport's capacity grows, rather than to reduce as policy requires.



3

POLICY TESTS SUMMARY

	Policy test	Assessment of GAL's proposals
3	As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.	Potentially partially achieved, but insufficient evidence provided to judge overall effects
4	Limit and, where possible, reduce: <ul style="list-style-type: none"> - the number of people in the UK significantly affected by aircraft noise - total adverse effects on health and quality of life from aviation noise 	Gatwick's proposals make no reference to reducing the number of people significantly affected by aircraft noise or the total adverse effects of noise



4

METRICS AND LIMITS COMMUNITY GROUP VIEWS

1. The noise envelope should comprise, or be derived from, multiple metrics and limits rather than a single metric.
2. Metrics and limits must include all of:
 - a. the area within average noise (Leq) contours down to at least the 45dB level
 - b. the area within contours that take full account of the frequency of aircraft noise events above agreed dB levels
 - c. all times of day and all periods of the year
 - d. the impacts of all overflying aircraft including those not arriving or departing from LGW.
3. The noise envelope must ensure noise and noise impacts reduce continually as airport capacity grows.
4. Noise envelope limits must take account of all relevant new technologies and potential operational improvements, not just fleet changes.



5

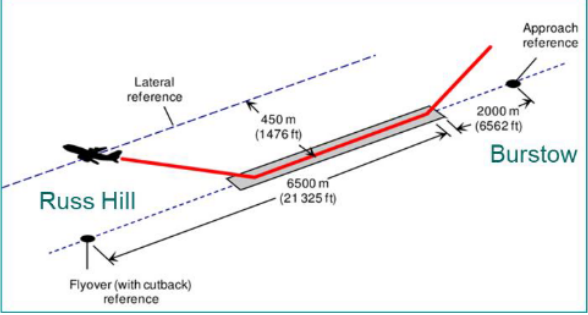
METRICS AND LIMITS COMMUNITY GROUP VIEWS

5. Noise envelope limits must reflect a best case, strongly incentivised, fleet transition scenario.
6. There should be no commercial flights for a full 8-hour night period at all times of year
7. Limits must reflect a genuine and balanced sharing of the benefits of growth and of technology improvements, as required by policy.
8. Hourly aircraft movements should be limited at all times of day to levels that ensure the reduction of aircraft noise in all locations to less than the limits recommended by the WHO.
9. There must be overall, binding, limits on both passenger numbers and total traffic movements at Gatwick.

Sharing Benefits, First Draft, James Lee 1 July 2022

Queries and Comments, 18 July 2022

Page, Section	Comment
P2 para 1. Gatwick have recommended that the sole noise envelope metric should be the land area in square kilometres within a single noise contour based on one selected level of dB leq. While this is one way measuring noise, it has very many flaws.	The proposal in the PEIR is not one selected level of dB Leq, it is to add two additional noise caps; Leq 16 hr day and Leq 8 our night, expressed at contours areas, to the current suite of noise caps already at the airport that are regulated by DfT, namely QC limits for summer and winter night, movement limits for summer and winter night, and departure noise limits for day and night that apply all year (and currently are subject to revision as noted in the PEIR). Ie note we already have QC based limits for night and hence incentives to airline derived from certificated noise levels.
P2 Para 2. 3. A set of metrics that disaggregates frequency and intensity is therefore needed.	If separate metrics are used for frequency and intensity how will the two metrics be weighted or interact so as to control overall effect ?
P2. Para 2. 4 4. Choosing a single contour [such as 51dB leq] ignores the experience of very many people who suffer from noise further from the airport, as well as the relatively greater predicament facing those much closer.	We note the acknowledgement of the greater predicament of those living nearer the airport, and whilst we feel that restricting noise via an Leq 16 hr 51dB contour and an Leq 8 hour night 45dB contour will also restrict noise at higher noise level nearer the airport because the measures taken to address this should also apply closer the airport, this possible unexpected consequence of setting noise contour limits at the LOAEL contours has been pointed out by the Local Authorities and we are keen to avoid it.
P2 para 2, 5. Leq is a method of averaging sound energy, which is extremely difficult for a lay person to comprehend.	We note the calculations to derive metrics in this paper appear to also use Log arithmetic, and if so would the suggested metrics not suffer equally ? The SONA study concluded that Leq 16 hour levels have the closest correlation to community annoyance.
P2 para 3. Our proposal recommends a radically different approach; namely to measure noise in terms of “noise at source”. In other words, the intrinsic noise level created by each aircraft. This is a metric known as EPNdB. The data are readily available and easily understood.	EPNdB is an integrated logarithmic metrics like A-weighted Leq but with a more complex frequency weighting that relates to the perceived noisiest (PN) level of aircraft. QCs are derived from 3 noise levels measured during certification (see diagram below) and take no account of aircraft noise levels more than about 3 km from the airport. Most of the people affected by noise from Gatwick airport live well beyond 3 km from the airport, so EPN levels do not reflect the noise characteristics of aircraft in the locations where communities are affected.

	 <p>A QC limit gives no credit to an airport that develops advanced noise abatement operating procedures that reduce noise on the ground from in-service aircraft. Low noise arrivals procedures and greater climb rates, for example, would go unnoticed in a QC system envelope whereas they would reduce noise levels in affected areas.</p>
P2 Para 4, 4. 4. And, EPNdB is the main driver of the ANCON model which determines the dB leq contours.	The ANCON model is driven by A-weighted Sound Exposure Levels (SEL) and Lmax levels calibrated by measurements at Gatwick.
P2 Para 4, 4. 5. Furthermore, EPNdB is well established as the basis for the Quota Count [QC] system already in use to control night flights at Heathrow.	It would be more balanced to note that the Quota Count system also operates at Gatwick.
P2 para 5. Our Noise Envelope uses an index [2019 =100] for the change in both the average EPNdB per flight [noise per ATM] and the cumulative EPNdB for all flights [total noise]. These indices are based on the anti-log of dB and indicates real changes in noise, which can be matched and compared to changes in movements.	We agree, the average noise level per flight may be a useful indicator of fleet noise performance., although we note this may not reflect outliers well.
P 3 Table	The table log averages arrival and flyover EPNLs (we have not checked this). QC classifications for departures are based on the average of the lateral and flyover EPNLs, and for arrivals after subtracting 9 EPNdB from the approach EPNL. Further technical details can be found in ERCD Report 020410. Thus

	this table should preferably use both departure noise levels, and it applies 9dB too high a weighting to arrivals noise.
P4 Table.	Can you confirm if you have analysed the central Case Fleet or Slow Transition Fleet cases ?
	The movement index is relative to 2019 (subject to checking), you should also consider reference to the future base case which would prevail with no NRP.
P 4 Table 2.	Can you advise how the Noise per ATM index is calculated ?
	Can you advise how the Total Noise index is calculated ?
	Can you advise how the sharing ratio is calculated ?
	Notwithstanding the comments and queries above, we note the concept of calculating what proportion of the average aircraft noise emission reduction available due to fleet transition is given to overall noise reduction experienced in the community (ie with the proposed increased ATMs). Given that the Total Noise (Index) reduces, there clearly is some sharing, using the method presented here of 28% by 2029 rising to 52% by 2038. Please clarify your reference for the need for this to be 50%. In the presentation given to the NEG2 Local Sub-group we noted the inspector at Bristol Airport approved the scheme as consistent with noise policy, whilst noting that 77% of this potential noise benefit was to be taken by ATM growth.
P5. Bullet 1 (and 2 similarly) Unless flight patterns change radically, in 2029 every home that is currently impacted by aircraft noise, will experience 16% more disturbances, although these will be marginally quieter by around 19%.	16% is the increase in flights, not disturbance as this does not take into account the reduction in noise of a proportion of flights.
P5 para 4 This is the true measure of disturbance, not Leq which averages frequency and intensity, as if these were somehow fungible.	It is misleading to say the true measure of disturbance is 16% in 2029 (32% in 2032) when this is simply the increase % in ATMs compared to 2019 and takes no account of reductions in fleet noise levels, particularly as the need to consider both these factors (frequency and intensity) is stated as a key objective of the method presented.
P6 Next Steps. Steve Mitchell to invited to critique these proposals	We would be interested in review comments from others including local authorities and their technical advisors.



Gatwick Airport 2nd Runway

DCO process on Noise Envelopes, summer 2022

The position paper and conclusions from meetings on this subject

CAGNE has consulted community groups at Heathrow and Luton

the umbrella aviation community and environment group for Sussex, Surrey and Kent

Community Certainty

- Noise envelopes should offer certainty to residents about what noise they will have to endure if the DCO is granted.
- The key words missing in this process have been 'communities' and 'noise'.
- There is no offer of certainty in the evolution of a quieter fleet with G2, and lack of time given to progress the design of NE. The process to date has been deficient in meeting the desire of certainty that Noise Envelopes are meant to offer.

Not fit for purpose

- Gatwick do not have a mandate for formalising this subject further, due to the complex consultation and poor engagement for the DCO conducted by them in autumn 2021. We find the process to be deficient.
- Lack of detail in the current summer consultation, with no information on how residents can engage, obtain greater understanding, or contact community representatives.
- Reference to the NMB as a community forum – the continued usage of this geographically-biased forum of community representatives is concerning.
- No independent chair, and lack of transparency in not sharing all details with all participants.
- Gatwick allowing one noise group, GACC, to speak as if they represent all communities – the fact that they do not is ignored by GAL.
- Operating separate meetings with local authorities on the same subject, not allowing for full and frank discussion between community and elected members (topic working groups).

Policy and guidance CAP1129

- The National Policy Statement (NPS) shows that Gatwick is not compliant. Noise Envelopes (autumn 2021) states that by 2038 with 2 runways, the noise will be the same as in 2019.

The lifespan of an envelope must be agreed, and its parameters defined to maintain appropriate sharing of the benefits over its intended lifespan.

- The Noise Envelopes will not be relevant. FASIS has already been submitted by Gatwick for a 2-runway airspace, which makes the lifespan irrelevant.
- The CAA states -

The benefits of future technological improvements must be shared fairly between industry and local communities

Gatwick seems reluctant to enter into the spirit of the CAA CAP1129 document to balance growth with community concerns and impacts.

Lack of Transparency

- Gatwick state (ref 1.15 summer consultation) 'no new flight paths would be created as a result of the project' (to rebuild the emergency runway as a 2nd runway)
- Gatwick are currently progressing the modernisation of airspace (FASIS) for a 2-runway airport. Now at Stage 2 of CAA CAP1616, seeking new flight paths to grow capacity, and save both fuel and time in the air.
- The NMB work has been biased to set geographical areas that wish to move noise over others – Arrivals Review including Imm11, removal of the NAP join to ILS at night, FED.
- The chair's suggestion of secrecy to enable open discussion; CAGNE strongly oppose this due to -
 1. elected members being present (guided by local authority FOI action)
 2. other noise groups having previously undertaken changes to airspace without being transparent to all communities, leaving some communities impacted by change

Disingenuous

- No offer of a reduction of night flights, in fact no undertaking that no additional night ATMs/quotas would be requested for a 2-runway airport via the DfT consultation in 2023.
- No offer of a cap on aircraft movements within the NE, in fact the only offer is evolution of quieter planes.
- No evidence provided by Gatwick that airlines will continue to invest in reducing aircraft noise - the focus currently (and Government investment) is on saving fuel, reducing air time, seeking growth and saving CO2.
- Gatwick has not made clear that NE will only deal with noise from Gatwick, and not the totality of noise created by other London airports or green airspace.

Lack of recognition of airspace change

- On 23rd June, Kingsfold witnessed the WIZAD route being flown, with a noise reading of 51dB. As Kingsfold is outside of the 51 Leq noise contour (west of the airport), this perhaps gives an insight into how the expectations of Noise Envelopes must be managed. It also questions what they will legally deliver, especially as Gatwick continues to progress FASIS with new flight paths to benefit Gatwick.
- No acceptance of robust and regular engagement, or enforcement of noise-limit breaches.
- No acceptance of noise outside of 45dB at night and 51dB in daytime to be considered.
- No alternative or additional noise metrics are to be used.

Alternative metrics help with noise-charging

- An alternative metric – EPNdB – would fit with other elements of Gatwick’s strategy, e.g. on noise-charging, where ICAO suggests using the noise certification classes (measured in EPNdB) as the basis for noise charges. But a couple of essential points:
 - The certification data is measured under test conditions and often differs from actual operational measurements. It is therefore important to use the actual data – reference the CAA validation figures.
 - Gatwick has no control over the airlines, as illustrated through CDO, NAP procedures, so we find this is not reasonable for GAL to offer as assurances.

EPNdB – Effective perceived noise in decibels is a measure of the relative noisiness of an individual aircraft pass-by event. It is used for aircraft noise certification and applies to an individual aircraft, not the noise exposure from an airport.

Charging and who benefits



- One issue with noise-charges is that over two-thirds of the traffic is Chapter 14 compliant already, with the remainder being Chapter 4.
- Chapter 14 is separated into high, base and low aircraft; the difference between the best and worst is **only £8** and there's **only an £18 difference with Chapter 4**.
- We would like to see a lower category than Chapter 14 minus.
- The night charges look significant and may influence behaviour (we would still wish to see a ban on night flights), but the **daytime values do not seem designed to drive change**.
- We would like to see the shoulder periods moved into the night charges, because of the health impacts of late and early flights.
- The revenues must be earmarked for those who suffer the most, not just to build a village hall or fund a charity. For example, in the Netherlands they calculate the cost of insulating homes well (including ceilings and doors) and apply the charge to recover costs.

Review Board – residents come first



- Should those who formalise the Noise Envelopes also be those who monitor and enforce?
- CAGNE would not accept the CAA as an advisory body, or a review panel made from GATCOM, as not deemed independent.
- Governance must be in favour of communities, not of aviation or government.
- The board must be robust in holding the airport to account – they must be quick to accept breaches in the Noise Envelope to offer certainty to communities. There must be a trigger threshold set. For example, a set Noise Envelope will be easily breached with FASIS.
- We are concerned about legal costs that would be incurred by communities who act, if GAL refused to act.

Vested Interest

- We see little evidence of GAL shareholders accepting that aviation noise is an issue.
- We see no penalty scale, and do not accept community funding for village halls or charities as a 'benefit in kind' to allow growth.
- Noise contour/ noise envelope reduction is a concern when noise issues are far-reaching, outside of 45dB and 51dB contours.
- We have not found that the noise metric company appointed by GAL has been representative of all communities during the NMB, so we are concerned by who would be appointed as a metric adviser.

Tick Box Exercise

- Noise Envelopes process is not a tick-box exercise, as being witnessed by the process being operated by GAL.
- We are also concerned that the FASIS process, being undertaken **concurrently** by GAL, is not included in this work, as GAL has already submitted plans for a 2-runway airspace.



Requests

- We would like to see:-
 - The night charges carried over onto the shoulder periods – evening and morning.
 - Aircraft movements (ATMs) and quotas as a combined metric. Quotas would allow for planes to be flown consistently – one noisy plane an hour is better than 56 ATMs of marginally quieter planes an hour, over the same communities.
 - Additional noise metrics used to capture exposure – single mode metric – noise measured over a house/area and uniformity. This could be applied to areas outside of the 51dB/45dB contours.
 - Noise Events (day and night) factored into metrics.
 - Slot allocation in line with noise produced by individual aircraft at the time of allocation.

CAGNE



The umbrella aviation community and environment group for Sussex, Surrey and Kent

Est Feb 2014
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Twitter @cagne_gatwick
Facebook GatwickCAGNE
Instagram @CAGNE
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From: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Sent: 02 August 2022 17:03
To: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Cc: Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com> <[REDACTED]@gatwickairport.com>; [REDACTED]@midsussex.gov.uk' <[REDACTED]@midsussex.gov.uk>; lee.money <[REDACTED]@horsham.gov.uk>; Rebecca Mian <[REDACTED]@gatwickairport.com>
Subject: RE: GAL Noise

Hi Leon

Thanks for your email. Yes, the departure Lmax footprints we supplied are for Route 1, which is the closest to a straight out westerly departure. We do not have departure footprints on all the other routes for all aircraft types from ERCD, but we did include them for the most common current generation (A320) and new generation aircraft (A320NEO) in the PEIR as Figures 14.9.23 and 14.9.24, as attached.

Could you also please clarify what you want the footprints for and how you intend to use them?

Regards

Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Sent: 26 July 2022 19:25
To: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Cc: Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com> <[REDACTED]@gatwickairport.com>; [REDACTED]@midsussex.gov.uk' <[REDACTED]@midsussex.gov.uk>; [REDACTED] <[REDACTED]@horsham.gov.uk>; Rebecca Mian <[REDACTED]@gatwickairport.com>
Subject: RE: GAL Noise

Steve,
At the moment the B787 in departure looks as if this reflects a route 1 departure, so is it really appropriate to 'spin it round'?
Also there appears to be no departure footprint around route 4 is this also correct?

Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

From: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Sent: 19 July 2022 10:53

To: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Cc: Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>;
Murray Taylor <[REDACTED]@gatwickairport.com> <[REDACTED]@gatwickairport.com>;
<[REDACTED]@midsussex.gov.uk>; lee.money
<[REDACTED]@horsham.gov.uk>; Rebecca Mian <[REDACTED]@gatwickairport.com>
Subject: RE: GAL Noise

Hi Leon.

The Lmax footprints are only westerly off the southern runway. I don't have them on Easterly.
Hopefully your GIS team can spin them round as necessary.

Regards

Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Sent: 18 July 2022 22:05
To: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>;
Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com>
<[REDACTED]@gatwickairport.com>; <[REDACTED]@midsussex.gov.uk>
<[REDACTED]@midsussex.gov.uk>; lee.money <[REDACTED]@horsham.gov.uk>; Rebecca Mian
<[REDACTED]@gatwickairport.com>
Subject: RE: GAL Noise

Steve,
Not had a chance to open the Lmax files as GIS is down at the moment - but do the KML's also
include easterly operations as well (as requested).

Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

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From: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Sent: 18 July 2022 17:05
To: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>;
Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com>
<[REDACTED]@gatwickairport.com>; <[REDACTED]@midsussex.gov.uk>
<[REDACTED]@midsussex.gov.uk>; lee.money <[REDACTED]@horsham.gov.uk>; Rebecca Mian

[REDACTED]@gatwickairport.com>

Subject: RE: GAL Noise

Hi Leon

Please find the following attached in response to your request dated 23 June.

For i) – as you know, we do not have specific 2028 forecasts to hand. The aircraft with the largest arrival noise footprint expected to be operating at night in 2029 is the A321. The aircraft with the largest departure noise footprint expected to be operating at night in 2029 is the B737-800. I attach Lmax footprints for both of these as kml files. These are for westerly arrivals and departures to the main runway.

For iv) I attach a further analysis for “benefits sharing” using the NSC method reported by PINS at the Bristol Airport Planning Appeal, for the 2038 Slow Transition Fleet, extended from Leq 16 hr 51dB to include 54, 57, and 60dB. This is as a table rather than graphically. The proportion of benefits sharing at 51dB was 50% to the community. At higher noise levels the proportion of sharing to the community is higher. These figures are provided as requested, and as we have discussed, policy does not define a benefits sharing formula, nor any particular proportion of sharing.

Regards

Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Steve Mitchell
Sent: 08 July 2022 11:32
To: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com>; [REDACTED] <[REDACTED]@gatwickairport.com>; [REDACTED] <[REDACTED]@midsussex.gov.uk>; Lee Money <[REDACTED]@horsham.gov.uk>
Subject: RE: GAL Noise

Hi Leon

Thanks for your reply. I will try to prepare this information for you next week. I note your point on item i) re 2028, and will check which types are most relevant to send.

Regards

Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Sent: 01 July 2022 18:26
To: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>

Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com>; [REDACTED] <[REDACTED]@gatwickairport.com>; [REDACTED] <[REDACTED]@midsussex.gov.uk>; Lee Money <[REDACTED]@horsham.gov.uk>

Subject: RE: GAL Noise

Steve,

In terms of the responses the requests below are for data to inform the thinking of the 5 main local authorities involved in the DCO work, and to help us assess the reasonableness of GALs overall approach to noise.

Sadly we have no access to the data needed to produce a number of the items requested below, otherwise we would have simply commissioned them independently, and you did say after the 1st noise envelope meeting that if we needed any additional data to help us with our work to get in touch.

With regards to point i) just to clarify we would like 2028, not 2038 as you state in your response.

If you can let me know which items you will be able to supply (and a timescale) and which you will not be supplying it would be appreciated.

Thanks,
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

Follow the council on [Twitter](#) / [Facebook](#) / [LinkedIn](#).

From: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Sent: 30 June 2022 10:41
To: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>; Murray Taylor <[REDACTED]@gatwickairport.com>; [REDACTED] <[REDACTED]@gatwickairport.com>
Subject: RE: GAL Noise

Hi Leon

Thanks for your email, and again for your contribution to the NEG Local Sub-Group meeting on 23 June. As agreed in order to provide a separate opportunity for discussion specifically with EHPs we are looking to arrange a Topic Working Group specifically to discuss the Noise Envelope, and I think enabling us to talk to you and the other EHPs on some of the details we have already mentioned will work well. With regards your information request, I can reply as follows.

i) LA max (60) foot print of the noisiest aircraft in operation at the airport (23:00 to 07:00) that is still likely to be going in 2028 (Easterly and westerly operation - take off and landing).

The PEIR has Lmax 60 and 65dB footprints for the most common aircraft the A320 and its next generation replacement A320NEO. We can provide examples of noisier types likely to be operating in 2038, but could you clarify why you want these?

ii) Single mode contours Leq day and night for 2019 and 2032 slow transition case

I believe we have discussed this in the TWG, but forgive me if not. The PEIR does not provide single mode contours because we do not have a dose/response for them, and their frequency of occurrence varies year on year, so we do not believe they are a suitable metric to consider for a noise envelope.

iii) Today you did some graphs with 2019 technology frozen but single runway business as usual growth to look at contour areas. Is there any chance the graph could be reproduced with an additional two lines showing ATM growth frozen but technology improvements in line with the central and slow transition scenarios.

You asked me to clarify this in the meeting. Business as usual growth is the future baseline, so it would be artificial to freeze the traffic at 2019 levels.

iv) With the graphs looking at the proportion shared these are all based on the 51 contour. Is there any chance this could be repeated for the 57 or 60 contour – as discussed earlier we have concerns about a focus on 51.

Yes, we can provide this. As we explained using a lower noise level ie larger contour would better capture the benefits of improved operational procedures; continuous descent operation, continuous climb etc. However, I note the concern expressed that setting a noise envelope at Leq 16 hr 51dB and Leq 8 hr 45dB would not safeguard against unexpected noise increases at higher noise contour levels where greater health effects arise. We welcome this important point, and whilst as discussed we think this unexpected consequence is unlikely we look forward to working with you to explore this concern.

Regards

Steve
Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs <[REDACTED]@reigate-banstead.gov.uk>
Sent: 23 June 2022 20:21
To: Steve Mitchell <[REDACTED]@mitchellenvironmental.co.uk>
Cc: Andy Sinclair <[REDACTED]@gatwickairport.com>; Monk, David <[REDACTED]@crawley.gov.uk>; Ivens, Rob <[REDACTED]@molevalley.gov.uk>
Subject: GAL Noise

Steve,

Nice to speak to you at the end of the meeting and looking forward to having a decent chat with yourself and Murray at some point about the plans for the noise envelope.

Anyway just a quick follow up on what I'd like (if possible) just to help out with some things on this side.

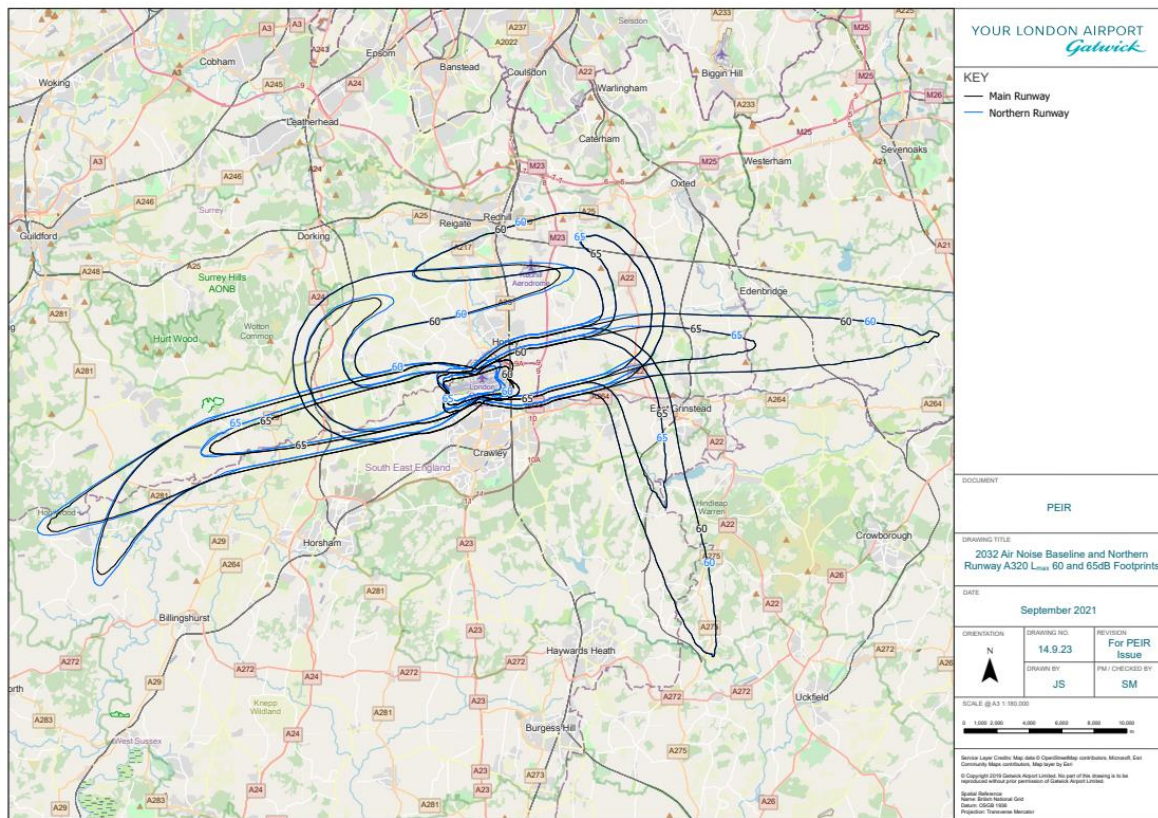
- i) LA max (60) foot print of the noisiest aircraft in operation at the airport (23:00 to 07:00) that is still likely to be going in 2028 (Easterly and westerly operation - take off and landing).

- ii) Single mode contours Leq day and night for 2019 and 2032 slow transition case
- iii) Today you did some graphs with 2019 technology frozen but single run way business as usual growth to look at contour areas. Is there any chance the graph could be reproduced with an additional two lines showing ATM growth frozen but technology improvements in line with the central and slow transition scenarios.
- iv) With the graphs looking at the proportion shared these are all based on the 51 contour. Is there any chance this could be repeated for the 57 or 60 contour – as discussed earlier we have concerns about a focus on 51.

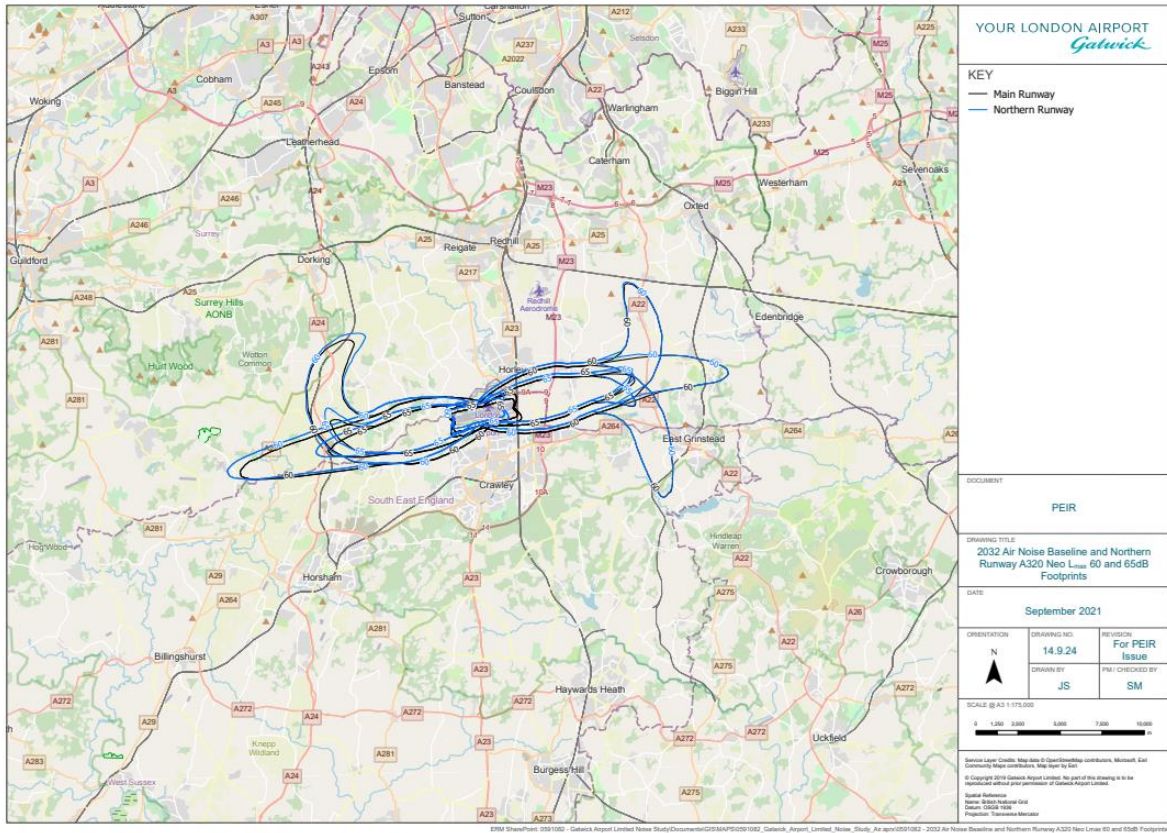
Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

20220802 – GAL Response to Leon Hibbs (ReigateBanstead) Slow Transition: Attachment 1



20220802 – GAL Response to Leon Hibbs (ReigateBanstead) Slow Transition: Attachment 2



**GATWICK NOISE ENVELOPE GROUP MEETING 9 AUGUST 2022
SUMMARY OF KEY ISSUES AND POSITIONS**

	Factor	GAL DCO position	Community Group position¹	GAL Response
1	Policy requirement that: <i>“As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.”</i>	Benefits defined solely as improvement in the noise profile of the fleet.	Benefits defined as all the benefits of growth including capacity and economic gains as well as the noise profile of the fleet. NE should include a quantifiable basis for measuring all benefits to be shared and a policy for sharing them. Industry benefits should be matched by directly proportionate noise reductions measured on an agreed basis. Metrics might include change in certified noise of the fleet (ENPdB), QCs, Leq and frequency metrics (see below).	
2	Policy requirement that: <i>“The industry must continue to reduce and mitigate noise as airport capacity grows.”</i>	Policy requirement is satisfied if noise, measured solely using GAL’s preferred metric, is lower in 2038 than it was in 2019.	Policy requires noise, measured using metrics that genuinely reflect community impacts, to continue to reduce year on year as airport capacity grows.	

¹ This paper has been agreed by all community groups participating in Gatwick’s limited noise envelope engagement process other than CAGNE. Comments have been invited from CAGNE.

3	Movement caps	No NE proposals to cap ATMs or passenger numbers	There should be overall ATM and passenger number caps that cannot be exceeded without a further full planning process. In addition, ATM caps should be set for each and every year under the NE process. ATM caps should be variable and related to metrics and formulae that measure and control the sharing of benefits including but not limited to performance in improving the noise profile of the fleet	
4	Monitoring points [years]	NE offers only two monitoring points: 1. One year after opening of northern runway 2. When ATMs exceed 386,000	NE should include targets for each and every year after any granting of the DCO. NE should cover the significant growth in traffic <u>before</u> the opening of the northern runway	
5	Metrics	NE based solely on dBleq sq km contour metric	NE should comprise, or be derived from, multiple metrics and limits rather than a single metric. The NE should incorporate a full suite of metrics, including ² : 1. dBleq 2. Noise event frequency (N above) 3. Quota Counts – QCs	

² Some community groups would also like the NE to limit the population within agreed noise contours, others do not support this.

6	Periods controlled	Summer period only	GAL proposal allows unlimited growth outside summer period. NE metrics and limits must include all times of day and all periods of the year.	
7	Contours	NE contour based on 51/45 dB	51/45 dB ignores a significant number of people who suffer from aircraft noise and fails to measure most operational changes. 45 dB should be used for both day and night contours, together with potentially lower levels for night contours	
8	Fleet assumptions	Fleet mix based on slowest rate of adoption of quieter aircraft.	Fleet mix assumptions should incentivise GAL and airlines to induce the introduction of quieter aircraft. Noise envelope limits must reflect a best case, strongly incentivised, fleet transition scenario.	
9	Operational noise improvements	No allowance for operational improvements included in noise envelope.	Noise envelope limits must take account of all relevant new technologies and potential operational improvements, not just fleet changes.	
10	Night flights	No limit on night ATMs proposed.	There should be no commercial flights for a full 8-hour night period at all times of year	

3

11	Hourly movements	No limit on hourly ATMs proposed.	Hourly aircraft movements should be limited at all times of day to levels that ensure the progressive reduction of aircraft noise in all locations to less than the limits recommended by the WHO.	
12	Flights to/from other airports	Noise generated by flights to/from other airports excluded from noise envelope	Metrics and limits must include or otherwise take account of the impacts of all overflying aircraft including those not arriving or departing from LGW.	
13	Monitoring and control	Annual review based on two fixed points Five year forecast as basis for releasing new capacity	Annual review based on <u>annual</u> targets Capacity released based on actual performance to date, not a five year forecast	
14	Capacity management	Additional capacity released annually No basis for reducing capacity as slots carry historic rights	Renegotiate and modify historic rights to retain slots so as to ensure compliance with NE is achievable in all circumstances.	
15	Remedial action	No formal basis for reducing ATMs if NE conditions are breached	Legally binding process to determine and require reductions in ATMs if NE is breached	
16	Consequences for breach of noise envelope	No consequences for breach of noise envelope.	Consequences for breach to include penalties and tightening of future NE limits.	
17	Reviews	Regular reviews and modification of the NE limits	Reviews may never <u>dilute</u> the level of any limits in the NE	

4

18	Review body	Review body controlled by GAL and including the airlines and local business interests	<p>Proposed review body is not independent, and is dominated by those with a clear economic imperative to maximise growth.</p> <p>Review body should be an independent, competent and empowered regulator or government department.</p> <p>Review body determinations must be based on clear, agreed processes and duties.</p> <p>NE performance should be reported upon by a reputable firm of independent auditors</p>	
19	Legal enforcement	Enforcement in accordance with the DCO conditions	Legally enforceable contract with fines and other penalties	

20220808 – GACC Presentation for NEG 3



NOISE ENVELOPE GROUP COMMUNITY GROUP VIEWS SUMMARY FOR NEG MEETING 3

August 2022

COMMUNITY REQUESTS PROCESS AND DATA

	Request	Response
1	Terms of reference to be reviewed to comply with CAA advice	Refused
2	Process to be overseen by an independent party	Refused
3	Timetable to be extended to enable issues to be explored in necessary detail	Refused
4	Budget for technical advisory support to be provided	Refused
5	Community group data request dated 21 June	Refused



2

COMMUNITY PROPOSALS METRICS ETC

	Proposal	Response
1	Noise envelope should comprise, or be derived from, multiple metrics and limits rather than a single metric (NEG 3.5)	No response
2	Metrics and limits must include the area within average noise (Leq) contours down to at least the 45dB level, the area within contours that take full account of the frequency of aircraft noise events above agreed dB levels, all times of day and all periods of the year, the impacts of all overflying aircraft including those not arriving or departing from LGW (NEG 3.5)	No response
3	The noise envelope must ensure noise and noise impacts reduce continually as airport capacity grows (NEG 3.8)	No response
4	Noise envelope limits must take account of all relevant new technologies and potential operational improvements, not just fleet changes (NEG 3.8)	Whilst under the NMB workplan we will continue to discuss ways to predict the benefits, both acoustic and non-acoustic, we do not consider it possible at this stage to quantify them ... within the noise envelope.



3

COMMUNITY PROPOSALS: METRICS ETC

	Proposal	Response
5	Noise envelope limits must reflect a best case, strongly incentivised, fleet transition scenario (NEG 3.8)	A noise envelope based on best case fleet transition would provide less certainty to communities than the one based on a slow transition.
6	There should be no commercial flights for a full 8-hour night period at all times of year (NEG 3.8)	No response
7	Hourly aircraft movements should be limited at all times of day to levels that ensure the reduction of aircraft noise in all locations to less than the limits recommended by the WHO (NEG 3.8)	No response
8	There must be overall, binding, limits on both passenger numbers and total traffic movements at Gatwick (NEG 3.8)	GAL expects there to be a cap on ATMs as part of the planning permission, but has not specified the level at which this might be set. No response on a passenger CAP.



4

POLICY TESTS SUMMARY

	Policy test	Assessment of GAL's proposals
1	Future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.	Not achieved. The industry would realise very substantial benefits but the community would realise disbenefits or only very modest benefits
2	The industry must continue to reduce and mitigate noise as airport capacity grows	Not achieved. Noise is projected to increase as the airport's capacity grows, rather than to reduce as policy requires.
3	As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.	Potentially partially achieved, but insufficient evidence provided to judge overall effects
4	Limit and, where possible, reduce: <ul style="list-style-type: none"> - the number of people in the UK significantly affected by aircraft noise - total adverse effects on health and quality of life from aviation noise 	Gatwick's proposals make no reference to reducing the number of people significantly affected by aircraft noise or the total adverse effects of noise



5

OPERATING ARRANGEMENTS COMMUNITY GROUP VIEWS

1. Principles: the initial noise envelope and successive reviews must ensure that:
 - a. total aircraft noise and noise impacts (including from aircraft using other airports) reduce continually as airport capacity grows, using a combination of metrics that is meaningful to communities; and
 - b. there is a fair sharing of the benefits of growth between the aviation industry (capacity) and local communities (noise reduction)
2. Performance reviews and forecasting should cover all periods of the year and all agreed metrics
3. Limits, reporting and forecasting should commence as soon as possible, whether or not a DCO is granted
4. Extraordinary reviews should be triggered by significant airspace changes, policy changes and research findings. Reviews should be able to reduce limits but not increase them



6

OPERATING ARRANGEMENTS COMMUNITY GROUP VIEWS

5. Achievement of noise envelope limits must be enforceable, not subject to variation through the planning system, and take precedence over other contractual rights including to slots.
6. Breach of the noise envelope should result in both financial penalties (for the benefit of communities) and compensatory reductions in future limits
7. The noise envelope review body should be independent, expert and have legally-binding enforcement powers. A sub-committee of GATCOM does not meet these tests and would not be acceptable

From: James Lee <jas.lee@btinternet.com>
To: Gatwick Airport Noise Management Board
Sent: 10 August 2022 10:31
Subject: Additional Documents - NEG 9.8.2022

Rebecca,

I was most encouraged by the response to my paper at yesterday's NEG meeting. I was particularly pleased by Steve's relatively positive comments. I fully understand and even share some of his caveats about the use of the EPN certification metric, and his points about operational factors. Nevertheless, I conclude that three important ideas have firmly taken root. In fact something valuable may have been achieved after all.

1. The idea of having a simple measure of changes in noise per aircraft is accepted as a feasible and worthwhile objective. The question is whether certified EPN is the right metric remains the open issue. I would like to work with Steve to examine other options which might better achieve the same objective. For example, it occurred to me after yesterday's meeting, that the 23 aircraft noise metrics that are apparently used by the ANCON model might be another and possibly better option.

2. The need for an empirical basis for measuring, monitoring and sharing benefits is recognised as being absolutely essential. The conundrum is how this should be achieved. Sharing of benefits is at the very heart of government policy, yet it appears that no-one has thought about how to measure benefits or how to measure how they are shared. Steve believes that we may be pioneers in this field, which is hardly encouraging. I have suggested one basis for doing this, which I readily accept to be pretty crude. I think that GAL need to identify and present different ways of achieving the same all-important objective.

3. The principle of dynamic caps on ATMs is accepted, although not necessarily using the methodology I have suggested. My idea is to use the ratio of change in total noise to the change in noise per aircraft. Steve has seems to prefer using the changes in the area bounded by the 51/45 dBleq contours. Since we all seem to agree that ATM caps need to be included in the modified noise envelope, we really need to review all the various technical ways this might be achieved. Without this, in my opinion, the noise envelope will be totally ineffective.

Time is pressing. I hope that all three of these matters can be addressed before our final meeting. They are the essential components of any modified noise envelope.

In the meantime, I intend to do some more work on my concept. But to do so I need Steve to confirm whether this table, which I have used really is the central case, as I have assumed. There is no reference in the text that could help! Can you please send me tables [in this format] for both the central case and the slow transition case? I can then use my model to explore different ways of establishing dynamic ATM caps.

- A1.3.3 Over the forecast period the next generation share is forecast to steadily increase approaching 60% in 2029 and we expect virtually all current generation aircraft to be phased out by 2038.
- A1.3.4 Beyond the mid-2030s there is the potential for future generation aircraft types to enter service (e.g. neo and MAX replacements) as well as other modes of propulsion (e.g. electric, hydrogen). Given the uncertainty surrounding these types it was assumed that future fleet transitions were relatively minor. Notwithstanding this expectation, some sensitivity testing is being undertaken in relation to the rate of fleet mix transition in the noise assessment.

Table A1.3.1: Fleet Generation (Movements & Mix) (including Non-Commercial Movements)

	2019 Actual	2029		2032		2038		2047	
		Base Case	Northern Runway Case	Base Case	Northern Runway Case	Base Case	Northern Runway Case	Base Case	Northern Runway Case
Next Gen	12%	59%	59%	80%	82%	100%	100%	100%	100%
Other	88%	41%	41%	20%	18%	0.4%	0.4%	0.2%	0.2%
Total	285k	313k	333k	316k	381k	321k	385k	328k	389k

Detailed Fleet Tables

Table A1.3.2: Fleet Types (ATMs and NATMs)

	2019 Actual	2029		2032		2038		2047	
		Base Case	Northern Runway Case	Base Case	Northern Runway Case	Base Case	Northern Runway Case	Base Case	Northern Runway Case
Narrow Bodied									
A320s ceo	178k	101k	107k	55k	61k	0k	0k	0k	0k
737 series	42k	11k	12k	2k	2k	0k	0k	0k	0k
Other NB CG	12k	1k	1k	1k	1k	1k	1k	1k	1k
A320s neo	20k	113k	119k	158k	192k	215k	254k	215k	254k
737 Max	0k	36k	39k	40k	51k	48k	52k	48k	52k
C Series	2k	8k	8k	9k	15k	8k	16k	8k	15k
Wide Bodied									
A330 series	5k	3k	3k	1k	1k	0k	0k	0k	0k
777 series	9k	9k	10k	2k	2k	0k	0k	0k	0k
747	2k	0k	0k	0k	0k	0k	0k	0k	0k
A380	2k	2k	3k	2k	2k	1k	1k	0k	0k
Other WB CG	2k	0k	0k	0k	0k	0k	0k	0k	0k
787 series	12k	23k	25k	33k	43k	38k	49k	44k	52k
A350 series	1k	6k	6k	6k	5k	8k	10k	9k	11k
Other WB NG	0k	0k	1k	1k	1k	3k	3k	4k	4k
All	285k	313k	333k	316k	381k	321k	385k	328k	389k

Thank you,
\ James

20220830 – CAGNE Position Paper for NEG 4



Gatwick Airport 2nd Runway

DCO process on Noise Envelopes, summer 2022

The position paper 2 and conclusions from meetings on this subject

CAGNE has consulted community groups at Heathrow and Luton and members



No Certainty
offered by GAL
noise envelope

- Noise envelopes should offer **certainty to residents about what noise they will have to endure if the DCO is granted.**
- There is no offer of certainty in the evolution of a quieter fleet with G2, and lack of time given to progress the design of NE. The process to date has been deficient in meeting the desire of certainty that Noise Envelopes are meant to offer.
- Gatwick has not changed its set noise metric (51 and 45dB Leq) from the outset of this process.



Still not fit for
purpose

- Gatwick do not have a mandate for formalising this subject further, due to the complex consultation and poor engagement for the DCO conducted by them in autumn 2021. We find the process to be deficient.
- Lack of detail in the summer consultation, with no information on how residents can engage, obtain greater understanding, or contact community representatives.
- Reference to the NMB as a community forum – the continued usage of this geographically-biased forum of community representatives is concerning.
- No independent chair, and lack of transparency in not sharing all details with all participants.
- Gatwick allowing one noise group, GACC, to speak as if they represent all communities – the fact that they do not is ignored by GAL.

A suite of metrics, each one being a reason to investigate noise increases.



We do not support primary and secondary noise metrics, as all noise measurement should be based on the recording of noise being experienced by communities.

- Leq
 - Leq 16 hour 51dB contour
 - Leq 8 hour night 45dB contour (PIER pg 139)
- (51dB - 25,300 population - an area of 140.9km²) (45dB - 27,500 population - an area of 161.1km²)
- Single mode metric – noise measured over a house/area and uniformity.
- EPNdB – (Effective perceived noise in decibels is a measure of the relative noisiness of an individual aircraft pass-by event).

This should be taken from factual data obtained via commercial flying, not

test certification

- N65 Day 20, 50, 100, 200, 500;
- N60 Night 10, 20, 50, 100.
- Overflight (<7,000 ft) >48.5 degrees to the horizontal (CAA, 2017b)
- Lden or CNEL

The Lden (Day Evening Night Sound Level) /or CNEL (Community Noise Equivalent Level) is the average sound level over a 24 hour period, with a penalty of **10dB** (5 dB) added for the evening hours or 19:00 to 22:00, and a penalty of (10dB) **20 dB** added for the night-time hours of 22:00 to 07:00.

Incentive to fly quieter planes



Charges should be increased for noisier planes -

One issue with noise-charges is that over two-thirds of the traffic is Chapter 14 compliant already, with the remainder being Chapter 4.

- Chapter 14 is separated into high, base, and low aircraft; the difference between the best and worst is only £8 and **there's only an £18 difference with Chapter 4.**
- **We would like to see a lower category than Chapter 14 minus. (same as Heathrow)**
- The night charges look significant and may influence behaviour (we would still wish to see a ban on night flights), but the **daytime values do not seem designed to drive change.**
- The revenues must be earmarked for those who suffer the most, not just to build a village hall or fund a charity. For example, **payment to houses inside the 51dB and 45dB contours.**

The cap on ATMs to grant the DCO



- An ATM cap should be set on an annual basis from the year the 2nd runway is built on total ATM capacity of the airport.

For example, Gatwick state an increase from 285,000 (2019 baseline) to 382,000 ATMs by 2038.

'It is anticipated that by 2038, these improvements could increase passenger throughput to approximately 75.6mppa, compared to a maximum expected capacity (based on existing consents) of approximately 62.4 mppa within the same timescale without the Northern Runway.'

- As Gatwick use the baseline of approx. 285,000 with one runway.
- Gatwick seeks growth from the one runway with the modernisation of airspace to from 46m to 62.4m going from approx. 56 ATM an hour to over 60 ATMs an hour, approx. 321,000 ATMs a year.

The CAP based on current flight paths only



- The first year 2 runways are operational Gatwick should be restricted to 321,000 ATMs year shared equally between two runways on all departures.
- If the noise contours decrease by 3dB Gatwick should be allowed to increase ATMs the next year by 2%.
- This can then consecutively increase until reaching 382,000 as the final total cap **but only if Gatwick decreases each year by 3dB from the previous year overall noise measurements in the suite of noise metrics that govern the noise envelope.**
- **FASIS is sadly not included in the noise envelope or 2nd runway forecasts as such any new flight paths must be seen to breach the noise envelope as they fly over new communities.**



Night ATM Ban

[*https://blogs.bmj.com/bmj/2019/06/18/the-harms-to-health-caused-by-aviation-noise-require-urgent-action/](https://blogs.bmj.com/bmj/2019/06/18/the-harms-to-health-caused-by-aviation-noise-require-urgent-action/)

- **The night movements** are not confirmed as **not** increasing, only that the 2nd runway will not be used at night.
- We request a total block on additional aircraft movements at night.
- We request that the shoulder periods (time when health impacts increase*), ie 6-6.30am and 11-11.30pm, be moved into the night quota of flights e.g. Summer 11,200 and winter 3,250 schedules.
- Gatwick should seek to reduce night movements until they are **banned completely by 2038**



Share the benefits

- To allow Gatwick to grow, each house within the 51dB and 45dB should be paid £5,000 a year until they are out of the noise contour band. This payment would be index linked annually.
- Gatwick would have to illustrate a significant reduction of CO2 and other greenhouse gases from flying planes each year.



Other considerations to the CAP

- If Gatwick are to achieve the 60% on public transport, as desired but highly unlikely, that's still an additional 4,611.6m passengers on the roads.

'In addition to the changes in passenger numbers, cargo throughput is also predicted to increase. Based on the future predicted mix of aircraft types and the amount of cargo that is carried in the belly holds of passenger aircraft, it is predicted that cargo throughput will increase from 157,500 tonnes in 2018 to some 227,100 tonnes in 2038.'

- Plus, cargo on the roads – an additional 69,600 tonnes which can equate to an additional 9,280 lorries at 7.5tonnes per load.
- A CAP should include the impact on infrastructure and ongoing investment for surrounding roads



Consequences of a breach in the context of the planning controls

Compensation to those affected – CAP1129 - financial compensation should be paid to a community fund.

- CAGNE would not accept a fund, as much of the community fund currently has very restrictive criteria to paying out for e.g., village halls and charities, which GAL use for good PR stories. **The money should go to the individuals affected.**
- This should be index linked so the scale of impact is reflected in the amount paid directly to the homeowner/ tenant.

For example, for every day/ night the house is impacted by the breach the occupant should be paid £1,000 (set at date of the DCO but related to inflation as the years progress from date of approval).

- SoS intervention under CAA Civil Aviation Act 1982 – Section 78 – to restrict the movement of arriving and departing aircraft ie Gatwick will not be permitted to grow as suggested in this paper and may have ATMs removed
- Airlines involved in the breach should have slots reviewed at the time of allocation with a view to having a 2% removal of slots. (Gatwick using the 'complexity' of slot allocation as a reason not to use them is not accepted).



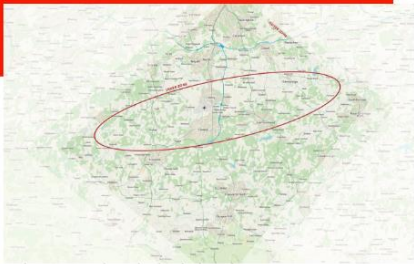
Margin – Headroom above noise envelope

- This should be no more than one noise contour plus that of the 51dB and 45dB.
- Concern is that the margin be set so high that it would allow for growth whilst still inside the noise envelope, as such not providing any certainty to the communities on the ground
- We would propose a 3dB contour per issue identified, below, by GAL as the margin from noise action to noise breach.

- 1 *Forecast accuracy -due to the economy and markets changing*
- 2 *Fleet composition –due to airline fleet procurement, aircraft types swapping*
- 3 *Load factors –affecting rates of climb*
- 4 *Operating Procedures –low noise arrivals, departure profiles etc.*
- 5 *Air Traffic Control –may vary aircraft procedures, routes*
- 6 *Weather –and runway model split*

- **A total margin of 18dB annually.**

Classification of noise impact



- The noise contours are so tight to the airport we see very little rural area being impacted, as such we classify **all as highly impacted by aircraft noise as residents have gardens and communal areas outside.**
- The noise contours do not even cover the 'inner zone' as identified in the consultation documents. **We question why not?** Map opposite taken from G2 2021 consultation

'The government's overall policy on aviation noise is to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise, as part of a policy of sharing benefits of noise reduction between industry and communities in support of sustainable development.'

Monitoring and Review body

Criteria -

- This should consist of those organisations that worked to form the noise envelope **not the CAA or DfT as suggested by GAL** as both are seen as having a vested interest by communities in aviation growth .
- A review panel made from **GATCOM is not deemed independent.**
- Governance/ ToR **must be in favour of communities**, not of aviation or government.
- The board must be **robust in holding the airport to account** – they must be quick to accept breaches in the Noise Envelope to offer certainty to communities. There must be a trigger threshold set.
- We are concerned about legal costs that would be incurred by communities who act if GAL refused to act.
- **GAL should fund an independent research body to undertake the monitoring and reporting to the Noise Envelope Body.**
- **Noise Action Plans are seen to be biased in favour of the airport.**
- **Local authorities have a vested interest in 106 funding**



The umbrella aviation community and environment group
for Sussex, Surrey and Kent

Est Feb 2014

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#pledgetoflyless

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Facebook GatwickCAGNE

Instagram @CAGNE

LinkedIn CAGNE

NOISE ENVELOPE GROUP COMMUNITY GROUP VIEWS SUMMARY FOR NEG MEETING 4

September 2022

COMMUNITY GROUP REQUESTS PROCESS AND DATA

	Request	Response
1	Terms of reference to be reviewed to comply with CAA advice	Refused
2	Process to be chaired by an independent party	Refused
3	Timetable to be extended to enable issues to be explored in necessary detail	Refused
4	Budget for technical advisory support to be provided	Refused
5	Community group data request dated 21 June	Refused

COMMUNITY PROPOSALS METRICS ETC

	Proposal	Response
1	Noise envelope should comprise, or be derived from, multiple metrics and limits rather than a single metric (NEG 3.5)	No response
2	Metrics and limits must include the area within average noise (Leq) contours down to at least the 45dB level, the area within contours that take full account of the frequency of aircraft noise events above agreed dB levels, all times of day and all periods of the year, and the impacts of all overflying aircraft including those not arriving or departing from LGW (NEG 3.5)	No response
3	The noise envelope must ensure noise and noise impacts reduce continually as airport capacity grows (NEG 3.8)	No response
4	Noise envelope limits must take account of all relevant new technologies and potential operational improvements, not just fleet changes (NEG 3.8)	“Whilst under the NMB workplan we will continue to discuss ways to predict the benefits, both acoustic and non-acoustic, we do not consider it possible at this stage to quantify them ... within the noise envelope.”

COMMUNITY PROPOSALS: METRICS ETC

	Proposal	Response
5	Noise envelope limits must reflect a best case, strongly incentivised, fleet transition scenario (NEG 3.8)	A noise envelope based on best case fleet transition would provide less certainty to communities than the one based on a slow transition.
6	There should be no commercial flights for a full 8-hour night period at all times of year (NEG 3.8)	No response
7	Hourly aircraft movements should be limited at all times of day to levels that ensure the reduction of aircraft noise in all locations to less than the limits recommended by the WHO (NEG 3.8)	No response
8	There must be overall, binding, limits on both passenger numbers and total traffic movements at Gatwick (NEG 3.8)	GAL expects there to be a cap on ATMs as part of the planning permission, but has not specified the level at which this might be set. No response on a passenger CAP.

POLICY TESTS SUMMARY

	Policy test	Assessment of GAL's proposals
1	Future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.	Not achieved. The industry would realise very substantial benefits but the community would realise disbenefits or only very modest benefits
2	The industry must continue to reduce and mitigate noise as airport capacity grows	Not achieved. Noise is projected to increase as the airport's capacity grows, rather than to reduce as policy requires. Under GAL's proposals the day period 51dB noise contour would be permitted to <u>increase</u> from 136km ² in 2019 (and forecast 120km ² in 2029) to 146.7km ² . Increased noise could potentially increase indefinitely if the ATM threshold of 382,000 was not reached.
3	As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.	Potentially partially achieved, but insufficient evidence provided to judge overall effects
4	Limit and, where possible, reduce: <ul style="list-style-type: none"> - the number of people in the UK significantly affected by aircraft noise - total adverse effects on health and quality of life from aviation noise 	Gatwick's proposals make no reference to reducing the number of people significantly affected by aircraft noise or the total adverse effects of noise
5	Noise envelopes should incentivise airlines to introduce the quietest suitable aircraft as quickly as is reasonably practicable.	By defining the noise envelope based on a slow fleet transition, Gatwick's proposals disincentivise the introduction of quieter aircraft

OPERATING AND ENFORCEMENT ARRANGEMENTS

1. Principles: the initial noise envelope and successive reviews must ensure that:
 - a. total aircraft noise and noise impacts (including from aircraft using other airports) reduce continually as airport capacity grows, using a combination of metrics that is meaningful to communities; and
 - b. there is a fair sharing of the total benefits of growth between the aviation industry (capacity) and local communities (noise reduction), not merely a sharing of any benefits from technology improvements
2. Performance reviews and forecasting should cover all periods of the year and all agreed metrics
3. Limits, reporting and forecasting should commence immediately after the DCO process, whether or not it is granted
4. Extraordinary reviews should be triggered by significant airspace changes, policy changes and research findings. Reviews should be able to reduce limits but not increase them

OPERATING AND ENFORCEMENT ARRANGEMENTS

5. Achievement of noise envelope limits must be enforceable, not subject to variation through the planning system, and take precedence over other contractual rights including to slots
6. Breach of the noise envelope should result in both financial penalties (for the benefit of communities) and compensatory reductions in future limits, as proposed by the CAA
7. The noise envelope review body should be independent, expert and have legally-binding enforcement powers. A sub-committee of GATCOM does not meet these tests and would not be acceptable

Appendix 6 – Stakeholder Feedback Correspondence and GAL Responses

20220606 – GAL Response to Ian Hare (APCAG) Comments

From: Andy Sinclair [REDACTED]
Sent on: Monday, June 6, 2022 7:44:10 PM
To: Ian Hare [REDACTED]
CC: Peter Drummond - APCAG [REDACTED]
Subject: RE: Noise Envelope Group

Dear Ian,

Apologies for the delay in response, I am sure that you will appreciate there has been quite a lot going on at the airport over recent weeks.

Cutting to the chase regarding the concerns that you outline below.

You may recall that the original process for follow-on engagement focused upon the local authority environmental health practitioners and was to be based around the themes identified through the feedback captured through the DCO consultation process. The environmental health practitioners represented are incredibly well qualified, and placed, to test and challenge the airport through the engagement process. Nevertheless we have extended the stakeholder groups to include all the members of the NMB Community Forum that wish to participate through the local sub-group. By establishing this local stakeholder group we have sought to include all those that wish to take part.

We have through necessity sought from among that group a smaller number of NMB Community Forum representatives to bring forward and share the views of all of the local sub-group members.

This is a process which has worked very well at the NMB thus far and I am sure it will continue to work well for the purposes of this engagement process.

The inclusion of five NMB community forum members along with a smaller number of environmental health practitioners is part of the process for drawing in the feedback of all and does not, in my view, exclude communities from any area in the environs of the airport. I explained at both the NMB Community Forum and the Noise Envelope Group meeting that representatives had been selected for a variety of reasons which included, for example: intellectual contribution, longevity of engagement on noise issues, understanding of the issues and breadth of group membership. You may recall the NMB co-chairs had written to ICCAN for guidance on a similar matter some time ago but ICCAN was unable to provide advice to guide the selection of community groups.

This is not to say that other members and groups did not fulfil some or all of those 'criteria', for example there are a number of members who have made a significant intellectual contribution to the work of the NMB but have not been included in the Noise Envelope Group. These are however, members of the local sub-group and I would expect their views and insights to be offered through their fellow local sub-group members. To be clear on this point, my expectation is that the views of

the wider communities will be represented through both the local sub-group and the Noise Envelope Group.

I'm afraid that I will not agree to any bi-lateral discussions on this multi-lateral process but should say that the meeting of the Noise Envelope Group currently scheduled to take place in the week commencing 13 June will include an item on the terms of reference. I think that your contribution and challenge, and that of your group, has always been welcomed at the NMB and I hope that you will continue to contribute proactively and in the positive way as you have always done, to the Noise Envelope engagement process.

Regards
Andy

Head of Noise & Airspace Strategy
Gatwick Airport

Email: [REDACTED]
From: Jonathan Drew [REDACTED]
Sent: 03 June 2022 10:52
To: Andy Sinclair [REDACTED]
Subject: [EXTERNAL SENDER] Fwd: Noise Envelope Group
CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

From: Ian Hare [REDACTED]
Sent: Friday, June 3, 2022 9:18:32 AM
To: Gatwick Airport Noise Management Board [REDACTED]
[REDACTED]
Cc: Peter Drummond - APCAG [REDACTED]; [REDACTED]
Subject: RE: Noise Envelope Group

Dear Andy,

I am disappointed that I have not had an acknowledgement to my email below. Please may I have a reply with a date for a discussion.

Kind regards,
Ian.

From: Ian Hare
Sent: 28 May 2022 10:56
To: Gatwick Airport Noise Management Board <[REDACTED]>
[REDACTED]
Cc: Peter Drummond - [REDACTED]
[REDACTED]
Subject: RE: Noise Envelope Group
Importance: High

Dear Andy,

I am writing to you with grave concerns about the selection process for the noise envelope group and how you explained your selection criteria at the NCF meeting this week.

My concerns are:

1. You have overturned the democratic principles for community groups to nominate chosen representatives who are best qualified for a particular role
2. Regarding the people selected (with the exception on one member of the panel) you have chosen individuals with localised personal agendas who do not represent the views of the wider communities to the North, West and East of the airport

Please can I have an urgent discussion with you about this outcome.

Kind regards,
Ian.

Ian Hare
Chairman APCAG



From: Ian Hare [REDACTED]
Sent: 07 November 2021 11:01
To: Gatwick Airport Noise Management Board [REDACTED]
[REDACTED]
[REDACTED]
Cc: Peter Drummond - APCAG [REDACTED]
Subject: RE: Proposed Extension of Gatwick Airport's Noise Management Board

Andy,

Thanks you for your email below. We would support the extension of the current NMB term.

Kind regards,
Ian.

Ian Hare
Chairman APCAG



From: Gatwick Airport Noise Management Board [REDACTED]
Sent: 04 November 2021 13:20
To: [REDACTED]
[REDACTED]
Subject: Proposed Extension of Gatwick Airport's Noise Management Board

Dear NMB Co-Chairs,

I am acutely aware the COVID-19 pandemic has presented you with a number of challenges given our decision in March 2020 to pause the NMB and the majority of its activities - ultimately by around 5 months - until such time that stakeholder meetings could re-commence.

I was pleased that new ways of working, centring on virtual online meetings, enabled the NMB to restart in August 2020 with surgeries between the NCF and NEX Chairs and NMB stakeholders. However, NMB activities restarted at a slow pace, whilst industry continued to manage the impacts presented by the pandemic, and this delay has meant that fewer than anticipated NEX, NCF and NDG meetings have taken place, and that the adoption of the NMB Workplan was delayed until March 2021 following engagement with NMB members. The NDG, although gradually increasing its tempo, also currently continues at a slower rhythm than that envisaged at the start of the NMB, because of ongoing resource challenges across industry as a result of COVID-19.

Whilst work on the majority of the 12 noise reduction initiatives contained in the Workplan continues, the current low levels of air traffic mean in many cases the level of track and noise data needed to support projects, such as the "RNN" trial, is insufficient.

Given the concerns about the pace of work following the challenges outlined above, and as a result of the feedback heard both directly from you and also from other NMB colleagues, I propose to extend the NMB's Second Term until December 2023, to allow for continued stakeholder collaboration and progression of NMB Workplan activities.

*I hope that this extension will enable the noise management, mitigation and reduction work of the NMB to progress as traffic recovers. Please can you and NMB colleagues copied into this email let me know by **19 November** if you have any views you would like to share or if you don't support the extension of this term of the NMB. Please provide these views to [REDACTED].*

My thanks to you and indeed all NMB colleagues for your continued commitment and valuable contribution to the NMB and its activities to date.

*Best regards,
Andy Sinclair*

Head of Noise and Airspace Strategy

20220613 – GACC Request for Process and GAL Response

From: Andy Sinclair [REDACTED]
Sent on: Monday, June 13, 2022 6:39:34 PM
To: Charles Lloyd [REDACTED]
CC: Jonathan Drew [REDACTED]; Warren Morgan
[REDACTED] <Warren.Morgan@[REDACTED]>
Graham Lake [REDACTED] Gatwick Airport Noise
Management Board [REDACTED]
Subject: RE: Noise envelope advisory support for community groups

Evening Charles,

I wanted to pick up your point below and the others that you had raised with me at the meeting on 26 May ahead of the Noise Envelope Group meeting tomorrow.

You had asked about a community co-chair for the Noise Envelope Group, that you be able to join the group in place of another Local Sub-Group representative and that resource be made available to the community groups as you outline below.

I believe that your position on the Noise Envelope Group has been addressed, taking the place of Fran.

The role of the chair of the Noise Envelope Group is purely one of facilitation and meeting management and has no decision making capacity in relation to the Noise Envelope Group nor of the Noise Envelope itself, a point I hope that came across at our first (combined) meeting. With that in mind, the purpose of a co-chair seems unwarranted (and is certainly not clear to me) so is not something that we will take forward.

In relation to funding again I am afraid that we will not be able to agree to further resource funding. As you are aware, and as you touch upon below, the local authorities provide technical resource in the form of the environmental health practitioners who attend not only the Local Sub-Group and Noise Envelope Group but also the Noise Topic Working Group meetings that we are hosting for the local authorities. This is a highly experienced and well-informed group of independent subject matter experts.

More importantly, I have now learned that the local authorities have been provided with substantial funding by the Airport in order to engage with the DCO on a range of subjects including noise. I suggest that you confirm with the Local Authorities what independent contractor support has been engaged to understand how this might fulfil your requirements below. To be clear, this is completely separate from GAL.

I am content to discuss this in the meeting tomorrow, hence my haste to get this response to you this evening. I am not sighted on the arrangements that have been put in place but I hope this will allow you the opportunity to pick this up with the Local Authorities tomorrow.

Regards,
Andy

From: Charles Lloyd [REDACTED]
Sent: 09 June 2022 10:51
To: Andy Sinclair [REDACTED]
Cc: Jonathan Drew [REDACTED] Gatwick Airport Noise Management Board [REDACTED]
Subject: [EXTERNAL SENDER] Noise envelope advisory support for community groups
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Dear Andy

At the initial Noise Envelope Group meeting, on 26 May, I asked Gatwick to make available a budget to allow the community groups to access independent advice on noise envelope issues. You agreed to consider that request.

In my view there are many reasons for Gatwick to do so.

In particular, as you know, the CAA has advised that agreement should be reached between stakeholders on noise envelope matters, and I hope you'll agree that that would be desirable. The chances of reaching agreement are greater if all stakeholders have access to independent advice on key technical and other issues. They are correspondingly much less if there is a substantial imbalance in the resources and expertise accessible to different stakeholders, as there clearly is now. More broadly, in my view, the engagement process you've set up would be materially compromised if there are no arrangements for community groups, as a key stakeholder in the process, to access independent advice.

I appreciate that the NEG will have access to subject matter experts but they will not be able to offer advice or views that we can rely on if they are advisors to Gatwick, such as Steve Mitchell. Both Luton and Heathrow, went to great lengths to ensure that their noise envelope development processes benefitted from independent advice that community stakeholders could rely on.

GAL's willingness to provide resources for groups to access advice on NMB issues has been widely welcomed and, for the above and other reasons, I hope you'll agree to our request. If you do, we will have to decide who to engage. As you know there were different views on this, as regards technical advice, at the 26 May meeting. I see that as a matter for the community groups to resolve between themselves.

Regards
Charles

20220616 – Atholl Forbes (PAGNE) Comments

From: Atholl Forbes [REDACTED]
Sent on: Thursday, June 16, 2022 7:49:33 PM
To: Gatwick Airport Noise Management Board [REDACTED]
CC: Andy Sinclair [REDACTED]
Subject: Re: [EXTERNAL SENDER] Re: Noise Envelope Group Agenda

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Thanks Rebecca

I have to say I'm disappointed that meeting notes are not being produced. Of course it's useful to get the action points from the NEG meetings, but in my view, what's needed is a clear statement of what our reps proposed and opposed during NEG meetings. Without this level of detail and with no pre-meeting engagement

from some of the reps it's impossible to get a clear understanding of the reps' views and the rationale for those views.

For reasons that you're aware of, it's highly unlikely that the reps will ever work as a single unit with information being fully shared and opinions respected. In these circumstances, we really need to get an understanding of the discussion including what is being proposed, who is proposing it and, equally as important, who is opposing it.

For those of us outside the NEG meeting process this is important information and with that in mind I'd definitely like to take you up on your offer to provide me with the discussion points. However, if you are producing such information, I'm struggling to understand why you only appear willing to provide it on an ad hoc request basis when, for the reasons stated above, it should be circulated to all Noise Envelope participants as a matter of course. Appreciate that you are extremely busy at the moment and that this would be more work for you, but as we've consistently said GAL are working to an overly aggressive timeline which appears to put expediency ahead of a robust meeting process.

Thank you also for your feedback re PAGNE's engagement with the reps. On that basis PAGNE will continue to work collaboratively, but where any of our views can't be part of a consensus view then we will look to submit these directly to yourself for communication at the meeting.

Kind regards

Atholl

On 16 Jun 2022, at 13:30, Gatwick Airport Noise Management Board

<[REDACTED]> wrote:

Dear Atholl,

Thank you ever so much for your patience, and apologies that I didn't get chance to come back to you yesterday as I endeavoured to.

Notes-wise, I don't intend to be circulating full meeting notes as is the case with the NCF meetings, for example. I will be circulating the actions of meetings to the members of each. I am however still capturing the key discussion points within each meeting, and of course am happy to provide them on an adhoc request basis, for transparency purposes. I am very mindful of the common narrative amongst stakeholders that there is much reading material coming out of the Noise Envelope work, so am trying to limit where possible as much as I can. From your request, I will of course send you over a copy of the key points and actions – this may take a couple of days as I hope you can appreciate the volume of work and other requests at the moment.

In response to your query on the role of Noise Envelope Group representatives, the expectation is that it could work either way. NCF members could reach out to NEG reps or vice versa. The purpose is to ensure that all views are captured, either through the meeting or via email if you would prefer. It is not necessary for all NEG reps to capture all feedback. I am sure you are already well in touch with your regular representatives, however, if you require contact with any of the other NCF representatives from the NEG, a list of these names are provided on the Full Meeting List document, which I am happy to send you if you do not already have sight of this. The NE team is certainly keen to get as wider viewpoint and feedback as possible, so if you do have anything that you wish to be brought back to the NEG, please do contact one of the representatives to discuss.

I hope this helps. I will be in touch within the next few working days with a copy of the key discussion points.

Thank you for getting in touch, and thank you ever so much again for your patience.

Regards,
Rebecca

Dr Rebecca Mian

Noise Management Initiatives Engagement Manager
Airspace Office
Corporate Affairs, Planning and Sustainability

Gatwick Airport Limited

7th Floor, Destinations Place
Gatwick Airport, West Sussex, RH6 0NP

From: Atholl Forbes [REDACTED]
Sent: 11 June 2022 18:57
To: Gatwick Airport Noise Management Board <[REDACTED]>
Cc: Andy Sinclair [REDACTED]
Subject: [EXTERNAL SENDER] Re: Noise Envelope Group Agenda
CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

Dear Rebecca

As you know I wasn't able to attend the combined NEG, Local & Aviation Sub Group meeting on 26th May, so am feeling a bit behind the curve with what was discussed and agreed at that meeting. Will you be circulating any meeting notes, so those unable to attend, can better understand the discussions that took place and any agreements reached.

I was also wondering about the role of the NCF reps on the NEG. As I said at the last NCF meeting, I had no intention of being a rep due to other demands on my time, but as I understand it, the role of the reps is to represent the views of the other NCF members and not just of their own organisation. On that basis, I had expected all of the NCF reps to contact PAGNE so we could share our views on Noise Envelope matters. So you're aware, to date, only Charles Lloyd has requested PAGNE's input which we have since provided. Would your expectation be that the other reps will be in contact in due course, although I'm aware there is very little time between now and Tuesday's NEG meeting? If we don't receive any contact from the other reps I would have to ask whose views they are seeking to represent?

As Andy will attest, I'm very much a process person who likes to understand how a process is meant to operate, so that we can endeavour, as best we can, to avoid misunderstandings whilst ensuring that all views are accurately and transparently represented. Currently, I'm struggling to see how the representative process is meant to work effectively if only one of the reps engages with the NCF membership whilst the other three choose not to.

I look forward to your feedback
Atholl

On 8 Jun 2022, at 20:48, Gatwick Airport Noise Management Board [REDACTED] wrote:

Dear Charles,
Thank you ever so much for this.

In line with my previous email to you, I will get this paper circulated to the full Noise Envelope Group along with your accompanying email.

Regards,
Rebecca

Dr Rebecca Mian
Noise Management Initiatives Engagement Manager
Airspace Office
Corporate Affairs, Planning and Sustainability
Gatwick Airport Limited
7th Floor, Destinations Place
Gatwick Airport, West Sussex, RH6 0NP

From: Charles Lloyd [REDACTED]
Sent: 08 June 2022 18:48
To: Gatwick Airport Noise Management Board <[REDACTED]>
Cc: GACC [REDACTED]; Martin Barraud [REDACTED]; Cllr Lockwood, Liz [REDACTED]; CAGNE Gatwick <[REDACTED]> Ian Hare [REDACTED]; Atholl Forbes [REDACTED]; James Lee [REDACTED]; David Howden [REDACTED]; Francesca Lancet [REDACTED]; Andy Sinclair [REDACTED]; Irene TWAANG [REDACTED]; Angus Stewart [REDACTED]; 'Ed Winter' [REDACTED]; 'Nick Eva' [REDACTED]; [REDACTED]; Jonathan Drew [REDACTED]; Graham Lake [REDACTED]; Paula Street [REDACTED]; [REDACTED]; [REDACTED]
Subject: [EXTERNAL SENDER] Re: Noise Envelope Group Agenda
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Dear Rebecca

On behalf of the groups listed in it, I attach a position paper on a future noise envelope at Gatwick.

We would be grateful if this could be circulated to all members of the NEG as soon as possible. We hope the proposals in it will form a substantial part of next week's meeting. For the avoidance of doubt, although the paper has been agreed by the groups listed in it, some or all of them may want to raise additional points of behalf of their members.

Regards
Charles Lloyd

From: Gatwick Airport Noise Management Board [REDACTED]

Sent: 08 June 2022 18:35

Subject: Noise Envelope Group Agenda

Dear Noise Envelope Group member,

Ahead of the Noise Envelope Group meeting scheduled for Tuesday 14th June, please see below a reminder of the areas for discussion. The aim of this meeting is to build upon the explanations and discussions at the combined Noise Envelope Group and Sub-Groups meeting held on 26th May. The papers that you received ahead of that meeting contain all of the content relevant to the Noise Envelope Group meeting agenda. We will make a brief period of time available at the start of the meeting to discuss the process Terms of Reference with the aim of identifying any significant omissions before moving on to the main part of the discussion around 'Theme 1'.

The purpose of the meeting is to discuss, following the previous meeting's presentation, the elements that comprise the noise envelope based on the themes identified through the DCO consultation feedback. As a reminder, the contents of our 'Theme 1' meeting on 26th May is shown in the 2 slides, below. With that in mind we would welcome that you bring the ideas, views and perspectives shared by the Local and Aviation sub-groups to this meeting.

As a reminder the ultimate objective of this engagement process is to further explore the Northern Runway Project DCO Noise Envelope proposal - through discussion of the themes identified in the DCO consultation feedback - in order to support the creation of a feasible, clearly defined, measurable and enforceable Noise Envelope proposal.

I thank you for your time and look forward to seeing you next week.

With regards
Rebecca

Chair Noise Envelope Group

From: Andy Sinclair [REDACTED]
Sent on: Thursday, June 23, 2022 4:30:17 PM
To: Monk, David [REDACTED]
Subject: RE: Policy

Hi David,

As promised please find a response to your request for clarity on your points below.

Hope this is helpful.
Andy

1. We discussed aviation policy. A summary of national policy is contained within the PEIR. However, please can I ask you to confirm where Gatwick has documented it's interpretation of the various national policies in relation to noise from air transportation as distinct from the reiteration in the PEIR ?*

*** I ask this because I asked Murray to clarify his comments about interpretation of policy at the meeting and I find it difficult to understand that interpretation. To have a clearly stated view by Gatwick would be very helpful.**

The presentation given to the NEG was intended to provide a guide through salient parts of the various policies to help reach a common understanding across NEG members.

It is our view that Policy is intended to be consistent both within and across the various policy documents. This means that sections which relate specifically to managing aviation noise issues, and the policy support for having a noise envelope, must be read in the context of wider policy objectives towards supporting long term economic growth within a framework of sustainable development, and should not be inconsistent with these.

Moreover, policy must take into account the regulatory bases for (economic and safety) for UK airports, rules in relation to slot allocation, and the UK's international obligations (e.g. as an ICAO signatory).

The Aviation Policy Framework (2013) remains the current summary formulation of Government Aviation Policy. This was confirmed in Aviation 2050 (December 2018 – see paragraph §3.10) and in the Inspector's Report (IR) from the Bristol Airport Planning Inquiry (February 2022, IR §65). The Flightpath for the Future document (May 2022) states that the "Making best use of existing runways" (2018) and "Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England" (2018) are the most up-to-date policy on planning for airport development (footnotes 4, 5, 13 and 22).

The APF sets out in its Executive Summary (ES) at §5, that Government's primary objective is securing long term economic growth. Government wants to strike a balance between the benefits of aviation and its costs in terms of climate change and noise. However, the APF states that it is equally important that the aviation industry has confidence to underpin long term planning and investment in aircraft and infrastructure (ES §7).

The Executive Summary goes on to explain the value in jobs and economic output that the Aviation Sector provides to the UK Economy. The UK Aviation sector's turnover in 2011 was around £53 billion, and it generated £18 billion of economic output. The sector employed around 220,000 people directly, and supported many more jobs indirectly. The UK is stated as having the second largest aircraft manufacturing industry in the world.

Later in the APF (see §2.37), the investment by the aviation industry in reducing noise and emissions is discussed. The Aviation Sector is stated as spending nearly a billion pounds annually on research and development, which when combined with civil sales, was almost £12 billion. The APF states that this is a high percentage for any sector and indicative that industry acknowledges and is working to address its environmental impacts.

The third chapter of the APF sets out the Government's policies with respect to noise and other local environmental impacts. Paragraph 3.3 states:

3.3 We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements.

The wording of paragraph 3.3 must be read in the context of the wider document and the sections preceding.

Taking each part in turn:

We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights.

The Government has set out that its primary objective is securing long term economic growth. It wants to strike a fair balance between the negative impacts of noise, which are specified as being related to effects on *health, amenity (quality of life)* and productivity, and the economic benefits.

As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities.

This general principle is then qualified as follows:

This means that the industry must continue to reduce and mitigate noise as airport capacity grows.

The requirement is that *industry* must continue to reduce and mitigate noise as airport capacity grows. The industry as a whole comprises manufacturers, airlines, airport operators, air navigation service providers, ancillary service providers etc. The part of industry which, all other things being equal, has the most influence over the continuing reduction and mitigation of noise "as airport capacity grows", are the manufacturers and the airlines who equip with their products.

As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements

The aviation industry does not extract any commercial benefit from noise reduction per-se. Industry spends a lot of money every year on research and development towards reducing noise and emissions, and airlines may incur fuel costs from additional weight carried by the aircraft (see CAP1129 Chapter 4, page 8). If industry is allowed access to growth, then it can share the benefits of this noise reduction. This in turn continues the incentive to invest to reduce noise and emissions and supports jobs and economic output.

The benefits from investment in improving technology occur over the medium to longer term, and the APF wants the aviation industry to have confidence to be able to invest in aircraft and infrastructure (see again the Executive Summary §7).

Where an airport does not require permission to expand facilities then policy support favours making best use of existing runway capacity. Where an airport requires some form of consent to expand facilities, then the planning balance weighing social, environmental and economic costs and benefits applies. A decision maker will weigh the costs and benefits, and may give permission subject to conditions, or decide to refuse it.

Para 3.12 of the APF sets out the Government's overall policy on aviation noise.

The Government's overall policy on aviation noise is to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise, as part of a policy of sharing benefits of noise reduction with industry.

The key requirement is to *limit and where possible reduce* the number of people *significantly* affected by noise. Moreover, the policy does not preclude noise increasing as a result of Airport development – and this was confirmed by the Inspector at the London City Airport Planning Appeal (see the Inspector's Report July 2016, §55).

The next paragraph, §3.13 explains that the above policy is consistent with the Noise Policy Statement for England. The NPSE sets out that the long term vision for Government noise policy is to promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.

2. *Please can you confirm from Gatwick's perspective on the purpose of the noise envelope? How would Gatwick write a statement on the purpose in the document containing the details?*

The noise envelope provides an assurance to stakeholders that noise at Gatwick with the Northern Runway will have to be less than with one runway in 2019, for Gatwick to realise the full capacity of the Northern Runway Project. The noise envelope will assist Gatwick with fulfilling the Project Noise Objective (see the Appendix 14.9.5 of the PEIR) which is related as follows:

GAL propose the following noise objective for the Project:

- *The Project will:*
 - *Avoid significant adverse impacts on health and quality of life from noise;*
 - *Mitigate and minimise adverse impacts on health and quality of life from noise;*
 - *Where possible, contribute to improvements to health and quality of life; and*
 - *provide certainty to the communities around Gatwick that noise will not exceed contour limits and will reduce over time, consistent with the ICAO Balanced Approach*

3. You have mentioned three criteria in your introductions in that the noise envelope needs to be legal, practical and workable. Are these the only criteria by which you are assessing proposals? In order to understand whether options and proposals for the noise envelope are likely to be effective then they will need to be judged against something.

These are the key criteria and are similar in character to the tests for a planning condition set out in paragraph 55 of the NPF:

- necessary;
- relevant to planning;
- relevant to the development to be permitted;
- enforceable;
- precise; and
- reasonable in all other respects.

We are open to discussing other criteria via the NEG.

From: Andy Sinclair

Sent: 22 June 2022 23:09

To: Monk, David [REDACTED] >

Subject: RE: Policy

Hi David,

Sorry this is late but I wanted to confirm ahead of our meeting tomorrow that we agree in principle to the scheduling of additional discussion on the Noise Envelope through the Noise Topic Working Group, ie a specific local authority officer meeting.

I'll chat to the team about getting something in the diary aligned to the schedule of the Noise Envelope Group meetings.

I'll respond as soon as I am able on the policy questions, hopefully sometime on Thursday. See you tomorrow.

Andy

From: Monk, David [REDACTED]

Sent: 21 June 2022 16:46

To: Andy Sinclair [REDACTED]

Subject: [EXTERNAL SENDER] FW: Policy

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Dear Andy,

As time is moving on quickly can I confirm that the local authority staff formally request that we have a separate meeting of the noise envelope group directly with Gatwick airport and it's technical representatives.

I note that my request to attend the industry group has been declined and I have been referred to the narrower noise envelope group where discussions can be held.

I should be grateful if you would also provide me with an indication of when you might respond to the questions contained in the email below.

Yours
David

David Monk
Principal Environmental Health Officer

From: Monk, David
Sent: 16 June 2022 10:31
To: Andy Sinclair [REDACTED]
Subject: Policy

Dear Andy

Thank you for the meeting on the 14th June. Following on from that I have a number of initial queries and I should be grateful if you would provide clarification for me.

If these need to be addressed to someone else then please do let me know but given your presence at the meeting yesterday I'm presuming that you, as well as Murray, can speak on behalf of the company in this process – but I do need to be clear.

1. We discussed aviation policy. A summary of national policy is contained within the PEIR. However, please can I ask you to confirm where Gatwick has documented its *interpretation* of the various national policies in relation to noise from air transportation as distinct from the reiteration in the PEIR ?*

* I ask this because I asked Murray to clarify his comments about interpretation of policy at the meeting and I find it difficult to understand that interpretation. To have a clearly stated view by Gatwick would be very helpful.

2. Please can you confirm from Gatwick's perspective on the purpose of the noise envelope ? How would Gatwick write a statement on the purpose in the document containing the details?
3. You have mentioned three criteria in your introductions in that the noise envelope needs to be legal, practical and workable. Are these the only criteria by which you are assessing proposals? In order to understand whether options and proposals for the noise envelope are likely to be effective then they will need to be judged against something.

If this process is to be meaningful and successful then establishing the above points will shape the subsequent discussions.

Referring back to the meeting I have always thought it was unusual forum to have the local authority EHOs with the community groups. Clearly the local authorities need to understand the concerns of the communities and this is helpful. They also need to understand the industry (in which I include

Gatwick Airport Ltd) and Rebecca has confirmed that we may have a representative attend as observers to understand the views of the airport's customers. However, I would find it helpful to have a specific local authority officer group – in addition to the community group - and I am canvassing my colleagues on their views. If there is agreement, can you confirm how might such a request be received by you?

Yours sincerely
David

David Monk
Principal Environmental Health Officer

20220630 – Leon Hibbs (ReigateBanstead) Comments on Local SG2

From: Leon Hibbs [REDACTED]
Sent on: Thursday, June 30, 2022 4:33:31 PM
To: Gatwick Airport Noise Management Board [REDACTED]
CC: Andy Sinclair [REDACTED]; Monk, David [REDACTED]
Subject: [EXTERNAL SENDER] RE: Noise Envelope Local Sub-Group Notes
Attachments: Noise Envelope Local SG Meeting Notes - 23.6.2022.docx (45.2 KB)

Follow up: Follow up
Follow up status: Completed
Completed on: Wednesday, April 19, 2023 9:09:00 AM

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Rebecca / Andy,

Just to clarify my point at LSG2.14 (not sure if I didn't make the point clearly or Andy was in placate mode and didn't get in down properly!).

I agree on the km2 metric but a number of people in the room were making the point it was about population not area (which I felt was completely reasonable), and there were also concerns expressed by others that FASI might change the shape of the contour and potentially the number of people affected but not necessarily the area.

My suggestion was that population data is provided to supplement the area data, with the address points within the contour whenever it comes into force e.g. 2025 are reported. After this point the population within the contour is reported based on i) the 2025 / baseline address point cut, and ii) the actual population in the year under consideration e.g. 2029,2030 etc.

The reasons for this are:

- i) Ultimately we are looking to protect human health and so an insight into the reduction in the number of people affected is useful
- ii) Comparisons of the 2025 fixed residential address population with say the actual population in the year under consideration along with the area information will give an indication as to how well land use polices are working, and so give an idea of how much of any increase in population affected is not attributable to the airport.
- iii) It will help address some of the community concerns of FASI in that if changes do occur you are able to demonstrate that if the contour shape does change that there has been no overall change in the people originally affected.

The population data within a contour area is already reported annually anyway, and simply overlaying the 2025 (or whatever year has been selected as the base / fix year) address point data with the contour data would take 5 mins, so there is no cost implication to the airport.

The pitfall here is referring to just looking at population changes without reference to the 'fixed / base' population, not the population approach in general.

Hope this helps.

Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

Follow the council on [Twitter](#) / [Facebook](#) / [LinkedIn](#).

From: Gatwick Airport Noise Management Board [REDACTED]

Sent: 30 June 2022 15:46

Subject: Noise Envelope Local Sub-Group Notes

Dear all,

Thank you ever so much to those who attended the Local Sub-Group last Thursday, for your attendance and input – it was felt to have been a really valuable session, with lots of good challenges and appreciated points made.

As requested, please now find attached the notes from the meeting.

Regards,
Rebecca

Dr Rebecca Mian

Noise Management Initiatives Engagement Manager
Airspace Office

20220706 – CAGNE Comments on NE

CAGNE Communities Against Gatwick Noise and Emissions

The umbrella aviation community and environment group for Sussex, Surrey and Kent

Noise Envelopes –July 2022

CAGNE is concerned about the following –

- We believe that neither Gatwick, nor those participating in the noise envelopes groups, have a mandate to formalise this subject further, due to the complex consultation for the DCO conducted by Gatwick from September to December 2021. With over 1,000 pages, that consultation was far too long and complex, but also included limited information that made noise envelopes sound like a benefit, whereas the reality seems to fall far short of the promise.
- The noise envelopes/ contours of 51dB and 45dB at night do not actually reflect the distance from Gatwick of the complaints they receive now, with a single runway. This should have been explained to residents in both the December 2021 and the current consultations. The text on this subject in the current consultation offers no additional information on noise envelopes, nor on who is being consulted on them. If a resident did not understand or know of the original poor and complex consultation (December 2021) they will not understand the relevance of noise envelopes or what they refer to as such the text contained is disingenuous to the reader. It also misleads residents about the NMB being an effective and fair body for communities, whereas in fact it is a narrow engagement process of unsubstantiated noise groups focused on limited geographical areas. Therefore, any subjects tackled by the NMB have been biased, due to ‘consensus’ being used, and the monopoly held by one noise group that has repeatedly looked to move noise over those closer to the runway, without all communities being consulted or represented in a fair and balanced way.
- The restriction of the NE meetings being held in person (whereas the aviation groups are permitted to participate online) is seen as Gatwick actively preventing our environmental and community group from attending. Gatwick has an air quality and small particles issue (Imperial College study of 2021), and this pollution would be exacerbated by Gatwick insisting that we attend. Public transport to these meetings is not an option, due to the rural locations of our committee members (bar one who lives in Crawley but does not deal with airspace). Also, at this time COVID cases are increasing in Sussex and Surrey areas, so inviting community representatives to the airport would seem unwise.
- We find Gatwick to be untruthful in stating that there will be no new flight paths with a 2nd runway, whereas they are knowingly progressing FASIS for a 2-runway airport. This is currently proposing to fly over many new areas, as well as bring arrivals over those closest to the runway who have not previously had to endure planes at such low heights over their homes, on the final approach (ILS). The NMB work has also looked to move noise with the GACC noise group study on the NAP ILS removal. The current consultation is misleading residents by implying that Gatwick’s plan for the airspace of a 2-runway airport is already the situation at Gatwick.
- Lack of flexibility in the contours: On 23rd June, Kingsfold (to the west of the airport) witnessed the WIZAD route being flown, with a noise reading of 51dB. As Kingsfold is outside of the 51 Leq noise contour, this perhaps gives an insight in to how the expectations of noise envelopes need to be managed, and questions what they will actually legally deliver, especially as Gatwick continue to progress FASIS with new flight paths to benefit Gatwick.

○ Night noise is a major issue with well documented studies to the health impacts of aircraft noise at night. The 45dB does not reflect the impact Gatwick has on residents outside of this contour nor on those within. The insulation offered is not an adequate alternative to sleep deprivation as such we would like to see this area of the noise envelope process given far more consideration. We accept that the government will be consulting again on this matter next year, but do not believe at this time Gatwick is giving NE as much weight to the discussions as should be required when there are health risks associated to flying at night.

Est Feb2014

[REDACTED]

20220715 – GACC email to Stewart Wingate and GAL Response

From: Tim Norwood [REDACTED]
Sent on: Friday, July 15, 2022 2:37:20 PM
To: [REDACTED]
CC: Gatwick Airport Noise Management Board [REDACTED]; Warren Morgan [REDACTED]; [REDACTED] Ian Hare [REDACTED]; Martin Barraud <[REDACTED]>; Charles Lloyd [REDACTED]; Atholl Forbes [REDACTED]; Fran Flammiger [REDACTED]; Nick Eva [REDACTED] ed winter [REDACTED]; [REDACTED]; [REDACTED]; Andy Sinclair [REDACTED]
[REDACTED]

Subject: RE: [EXTERNAL SENDER] Gatwick's engagement on its noise envelope proposals

Dear All,

Thank you for your recent email to Stewart and your continued interest and participation in the development of a noise envelope at Gatwick as part of the Northern Runway Project Development Consent Order process. Stewart has passed your email to me to respond as the GAL Exec member taking the project forward.

Whilst I note your concerns, I can assure you that the Gatwick team have listened to all views received during our DCO consultation process and very carefully reviewed and analysed the feedback including subsequently acting on that feedback by putting in place a mechanism to allow groups such as yours further engagement opportunities on the development of the noise envelope.

I understand that the questions you have raised in your email have also been raised in various forms by a number of the noise action group representatives prior to, and during, the ongoing engagement process so you may have already heard this response in various forms on a number of occasions.

Given the level of detail received previously I will keep my responses brief to the four main points that you have raised. However, I should first address an assertion regarding the coercion of local stakeholders as part of this process. Participation in this process is entirely voluntary, that has been

made clear from the outset, and involvement in the noise envelope engagement process does not prejudice the position that any member may wish to take on the noise envelope in the future. Rather I hope you would take the approach that this is an opportunity to put forward thinking and alternative ideas to help build the proposal.

In reply to your four main points please find my responses below:

...the airport is seeking to impose terms of reference for the process that are one-sided and which it has so far refused to discuss. In particular Gatwick proposes that the starting point for the exercise should be its own noise envelope proposals.

The process for further engagement in relation to the noise envelope has expanded on the basis of the feedback received through the DCO consultation. In practice this has meant significantly expanding the engagement mechanism from one which included local authorities and environmental health practitioners to one which also involved local councillors and community representatives. In order to facilitate this broader stakeholder group we invited all Noise Management Board (NMB) members, including members of the Community Forum to contribute to the process.

As you know, the more detailed follow-on discussion, on our outline noise envelope proposal set out in the PEIR, has been shaped directly by the extensive feedback received through the DCO consultation; 5941 comments were made in relation to noise management and 1000 of those explicitly referred to the noise envelope.

The rationale for the 'starting point' given the requirements of the process and the extensive feedback received is clear.

Secondly the process Gatwick has set up lacks any independence.

The environmental health practitioners represented are incredibly well qualified, and placed, to test and independently challenge the airport through the engagement process.

The purpose of this element of the process has been clearly set out in that it seeks to further explore the Northern Runway Project DCO noise envelope proposal - through discussion of the themes identified in the DCO consultation feedback - in order to support the creation of a feasible, clearly defined, measurable and enforceable noise envelope proposal.

Ultimately, the noise envelope contained within the DCO application will be GAL's proposal and therefore GAL will need to ensure it is fit for purpose. Whilst we hope for, and will continue to work towards, finding consensus with the various stakeholder groups, the final outcome on its acceptability will be independently tested by the Planning Inspectorate, who will examine GAL's final proposal contained in the DCO application before making a recommendation for the Secretary of State to determine.

Thirdly, having failed to respond to our calls for proper engagement on a future noise envelope for many months, Gatwick now requires the process to have been completed by 9 September 2022...

The public engagement process on the noise envelope commenced in September 2021 during the period of the DCO public consultation. This second phase of our public engagement will indeed aim to complete by 9 September in order that our noise envelope proposal is able to be completed by the planned submission date in early 2023. The Topic Noise Group meetings with local authorities will continue until December 2022.

This phase of the process involves a thorough approach to the sharing of information with stakeholders across a range of themes identified through the consultation feedback. I understand

this includes multiple 4-week cycles of sharing briefing material, sub-group briefings and workshop style discussions which are attended by subject matter experts to present the information.

Finally, Gatwick has sought to dictate community membership of the Noise Envelope Group in a way that is inappropriate and undemocratic

I should highlight once again that we have extended the stakeholder groups to include all the members of the NMB Community Forum (which includes all of the noise action group representatives as well as all council members) that wish to participate through the local sub-group. By establishing this local stakeholder group we have sought to include all those that wish to take part. If others wish to join in the process, then this can also be accommodated. We have through necessity sought from among that group a smaller number of NMB Community Forum representatives to bring forward and share the views of all the local sub-group members. This is a process which has worked very well at the NMB thus far and I am sure it will continue to work well for the purposes of this engagement process. The Noise Envelope Group sub-groups are led by the independent chairs of the NMB Community Forum and Delivery Group.

Yours Sincerely,

Tim Norwood

From: [REDACTED] >
Sent: Monday, June 13, 2022 6:20:49 AM
To: Stewart Wingate [REDACTED]
Cc: Gatwick Airport Noise Management Board [REDACTED] >; Warren Morgan [REDACTED] Ian Hare [REDACTED] Martin Barraud [REDACTED] >; Charles Lloyd [REDACTED] >; Atholl Forbes <[REDACTED]>; Fran Flammiger [REDACTED] >; Nick Eva <[REDACTED]>; ed winter [REDACTED] >; [REDACTED] <[REDACTED]>
[REDACTED]
[REDACTED]; Andy Sinclair [REDACTED]
[REDACTED]
[REDACTED]
Subject: [EXTERNAL SENDER] Gatwick's engagement on its noise envelope proposals
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Dear Stewart

Gatwick Airport has invited us to participate in an engagement process to further explore the Northern Runway Project DCO Noise Envelope proposal".

We intend to participate in this process because it is the only engagement that Gatwick has offered on a future noise envelope. However, the arrangements Gatwick has put in place are wholly unsuitable given that the noise envelope is by far the most important noise management development at Gatwick for many years and is likely to determine the noise environment around the airport and under flight paths for decades to come. Amongst other things your engagement plans are incompatible with good practice at other airports and do not comply with the CAA's advice on noise envelope development.

In our view community representatives are being coerced to participate in a process that is unacceptable in multiple serious respects. We are writing to set out our concerns formally.

First, the airport is seeking to impose terms of reference for the process that are one-sided and which it has so far refused to discuss. In particular Gatwick proposes that the starting point for the exercise should be its own noise envelope proposals. In our view those proposals do not comply with government policy and CAA guidance to such an extent that using them as the basis for engagement is not credible. The process should instead examine all noise envelope options, metrics and limits from a first principles basis. The fact that Gatwick's noise envelope proposals were only supported by 9% of respondees to its DCO consultation further supports the need for a first principles approach.

Secondly the process Gatwick has set up lacks any independence. You have proposed that the Noise Envelope Group should be chaired by an airport employee and advised by subject matter experts whose role is to promote the outcomes Gatwick is seeking to secure. Luton and Heathrow, the only other airports to have done work on noise envelopes, set up independently chaired and advised, well-resourced, multi-stakeholder groups. The CAA recognises the potential need for independent third parties to assist stakeholders to reach agreement, but no such involvement is proposed at Gatwick.

Thirdly, having failed to respond to our calls for proper engagement on a future noise envelope for many months, Gatwick now requires the process to have been completed by 9 September 2022, allowing only three months, over the summer holiday period. It is proposing that the Noise Envelope Group should only meet three times in that period. Luton's noise envelope development work took over 18 months and the group it set up met 15 times in that period. Having run down the clock on engagement you are now seeking to impose a wholly unrealistic timetable. We do not believe there is any prospect of completing the work required in the period Gatwick has allowed.

Finally, Gatwick has sought to dictate community membership of the Noise Envelope Group in a way that is inappropriate and undemocratic.

In each of these respects the arrangements Gatwick has imposed are very significantly out of line with the approach adopted by other airports and with the CAA's advice. They suggest that the exercise is intended to serve a presentational purpose for the airport but is not a serious attempt to achieve the full agreement between all stakeholders that the CAA says is essential.

We urge Gatwick to reconsider its proposals and to work with Councils and community groups to design and implement a process that has a better chance of achieving consensus and which is consistent with the CAA's recommendations.

We are copying this letter to the chairs of Gatwick's Noise Management Board and Consultative Committee and to the Planning Inspectorate and the Aviation Minister.

Yours sincerely,

Peter Barclay, Chair, Gatwick Area Conservation Campaign
Martin Barraud, Chair, Gatwick Obviously Not
Ian Hare, Chair, Association of Parish Councils Aviation Group
Atholl Forbes, Chair, People Against Gatwick Noise and Emissions
Ed Winter, Chairman Plane Wrong
Nick Eva, Acting Chairman Plane Justice

David Howden, Tunbridge Wells Aircraft Noise Study Group

20220722 – Aviation SG Chair’s email to Airlines

From: Graham Lake <[REDACTED]>
Sent on: Friday, July 22, 2022 10:16:56 AM
To: Rebecca Mian [REDACTED]
Subject: [EXTERNAL SENDER] IMPORTANT - Gatwick Airport Noise Envelope - Response requested by 5th August
Attachments: Noise Envelope Operation and Review Presentation.pdf (170.24 KB), Noise Charges Briefing.pdf (366.76 KB), Slots Presentation.pdf (442.39 KB), Noise Envelope Meeting1 - Theme1[229703].pdf (1.48 MB), Noise Envelope Theme 2 Meeting - 23.6.2022[231117].pdf (1.15 MB)

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, **do not** click links or open attachments

Dear Colleagues,

Following up from the Gatwick Noise Envelope Aviation sub-group meeting at which we discussed some further elements on which **Gatwick is again seeking your feedback on these latest briefings not later than Friday 5th August**. (Note that this request is in addition to the feedback already requested on Themes 1 & 2 already discussed and included as italicised text later in this message).

The latest elements requiring feedback are described in three attachments to this message:

- Noise Envelope Operation and Review
- Slots Presentation
- Noise Charges Briefing

A Noise Envelope (NE) has the potential to impact in future the size and scope of each airline’s operation at Gatwick. Your airline’s views will help to inform the development and design of the Airport’s Noise Envelope proposal. You will recall that as a part of the northern runway planning process, Gatwick propose to commit to a maximum noise envelope at the start of dual runway operations based on the 51 dB Leq contour.

PLEASE SHARE WITH ANY POTENTIAL IMPACTED DEPARTMENT IN YOUR AIRLINE

Please provide feedback to [REDACTED] the chair of the Noise Envelope Group, with copy to me as independent chair of the Aviation sub-group at [REDACTED] or [REDACTED].

At prior meetings of the NE Aviation sub-group, we have discussed the Theme presentations circulated previously (also attached to this message), these explain in detail the **Noise Envelope themes - for which Gatwick is also seeking feedback from airlines, again not later than Friday 5th August.**

I have consolidated below the comments received so far on themes 1 and 2, and request that you indicate any changes, additions or corrections that you would like to see, respecting the August 5th timeline.

DRAFT AIRLINE FEEDBACK – Themes 1 & 2.

STARTS

For reasons of fairness and transparency, given the number of stakeholders impacted and the range of views, we feel it is important that airlines using Gatwick participate in these important discussions through the existing regulatory/consultation framework. While noting that;

- *Airlines support measures to utilise quieter and more fuel-efficient aircraft types wherever possible*
- *Airlines support collaborative efforts to identify and implement operational measures to further improve the noise environment for communities*
- *Recognise that a Noise Envelope when approved will establish mandatory noise performance limits*
- *Airlines confirm that the trend in re-fleeting of aircraft is towards quieter and more fuel-efficient aircraft, while noting that the pace and schedule of this re-fleeting is subject to external factors* so cannot be guaranteed*
- *Airlines request that any proposal for NE limits include adequate contingency provision to take into account reasonable variations in planned fleet upgrades and day to day operations*
- *Airlines call for exceptional provisions in any Noise Envelope proposal to include relief for uncontrollable external factors beyond airline's control, for instance:*
 - *Delays to airspace modernisation including the Single European Sky,*
 - *Industrial Action, such as by Air Navigation Service Providers,*
 - *Severe Weather,*
 - *Airport infrastructure failures/unserviceability and,*
 - *Aircraft groundings and delivery delays, such as seen with the Boeing 737-Max and Boeing 787*

**Recent examples affecting airline fleet modernisation plans significantly have included; the global financial crisis, the grounding of the Boeing 737-Max, and the Covid Pandemic which has seriously impaired airline balance sheets*

ENDS

It is recognised that your airline may choose in its response to replace 'Airlines' with the carriers name.

Thank you for engaging in this important activity during the busiest season of the year. It is very much appreciated.

community representatives) will take place **Tuesday 9th August at 15:00-17:00.**

See MS Teams link below
All the best
Graham Lake
Independent Chair
NE Aviation Sub-Group

20220722 – Rob Ivens (Mole Valley) Comments on NE

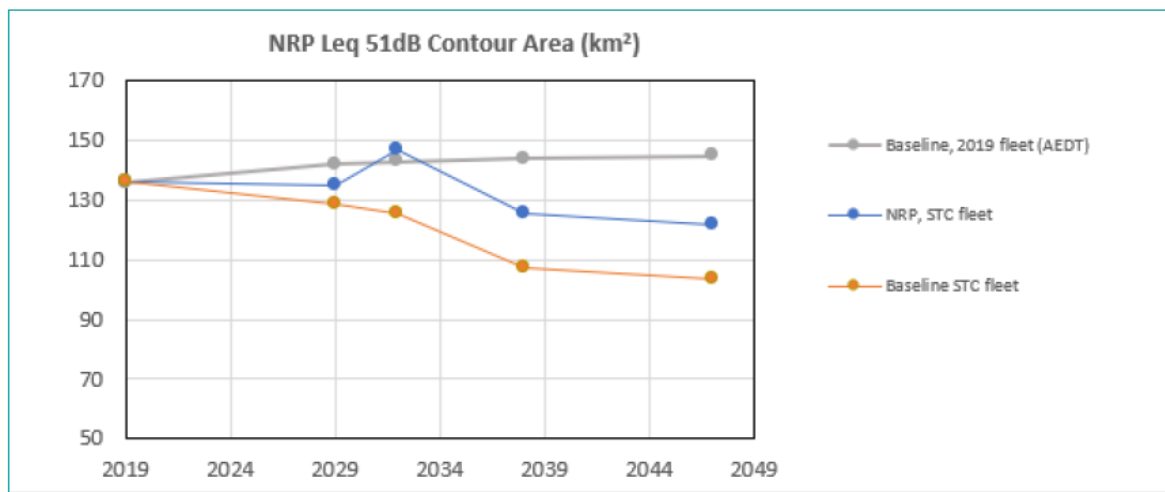
From: Ivens, Rob [REDACTED]
Sent on: Friday, July 22, 2022 4:40:00 PM
To: Lydia Grainger [REDACTED]; Rebecca Mian [REDACTED]
CC: leon Hibbs [REDACTED] <leon.Hibbs@neplpa.com>; Monk, David [REDACTED]; Sue Janota [REDACTED]; lee.money [REDACTED]; Smith, Del <[REDACTED]>
Subject: [EXTERNAL SENDER] FW: [EXTERNAL] NEG LPA Meeting

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, **do not** click links or open attachments

Dear Rebecca,

- MVDC don't accept the 51dBA as being a suitable Laeq- we consider uncertainty is too great and it is an inappropriate measure for the noise envelop
 - MVDC suggests 54 should be the main metric (subject to support of the other EH authorities)
 - MVDC also believes that a high impact contour at 60 or 63 should be provided as a main metric and
 - MVDC support the community wishes to have secondary metrics reported that count the N above events day and night
 - Annual and summer contours should be provided to monitor growth outside the summer period (see PINS comments)
 - MVDC is interested in the community idea of having a separate review model that tracks improvement of the fleet and can be considered as part of assessing the technology share as the project moves forward
- MVDC fundamentally question what controls you will put in place to limit the exceedance of the grey line in your presentation and how the rising noise levels will be tackled as they exceed the proposed base case.

- These should be identified before MVDC will consider agreeing to an elevation above the base case
 - The reporting cycle MVDC considers that annual reports are needed and that a 5 year action plan should be develop on a cyclical basis
 - With a three year interim progress report and then a 5 year progress report which should include a back cast review (lessons learned) and forecast forward
 - Thought needs to be given on the timing and consultation of any new plan timescales could be very tricky given the need to consult with stakeholders
 - The airport should ensure some form of slot release mechanism to mitigate the impact of the exceedance and try to manage it down,
 - Slots/capacity should only be released when suitable targets have been met.
 - Verification and review of the noise monitoring and tracking network this should be built into year one of commencement of the scheme and reviewed every 5 year all work to be carried out by a suitably qualified person with a view to ensuring the best match of monitoring location to the data required to model the noise envelop. (see PINS comments) ID 4.8.8
- Clarification on exactly how the grey line below is derived the assumptions behind it- in words please so this can be agreed or disputed
 - Enforcement similar to the COCP we probably need to work on a possible approach for this and se if a document can be agreed that captures the reporting and enforcement



ATMs	2019	2029	2032	2038	2047
Day	766	848	976	983	988



Rob Ivens
 Pollution Team
 01306879232

From: Rebecca Mian [REDACTED]

Sent: 22 July 2022 12:16

To: Ivens, Rob [REDACTED]

Cc: Lydia Grainger [REDACTED]

Subject: [EXTERNAL] NEG LPA Meeting

Importance: High

Warning: email from outside of MVDC - if in any doubt do not open links or attachments, or carry out requested actions

Dear all,

Lydia has very kindly set up the meeting between yourselves and the Noise Envelope team for discussion away from other stakeholder groups, to allow for more time on the topics that you would like more information and further discussion on.

Given this meeting is at the request of yourselves, we need **you to set the agenda** and let us know exactly what you'd like to discuss/get further information of, so that the team can come prepared and pull any slides/information together that might be useful for the discussion.

As a reminder of the themes that Murray and Steve have identified through the consultation feedback and which have shaped the noise envelope engagement process, the broad headings are outlined below, albeit the team have of course not yet briefed or discussed the final theme (4).

1	Background	Policy, PEIR Proposal, Consultation Feedback Themes
2	Noise Envelope Options	Metrics, Years, Forecasts, Fleet
3	Operating a Noise Envelope	Annual Process, Forecasts, Actions by GAL, Reporting
4	Enforcement	Penalties, Review

Please can you come back to me by **close of play today**, otherwise I cannot guarantee that all information will be available for the meeting on Monday.

If you can also send a list of any outstanding questions that you would like answering that again, might need some additional information pulling together so that you can get the most out of this meeting, this would be beneficial to all.

Thank you for your time, and I look forward to hearing back from you, and seeing you Monday.

Rebecca

Dr Rebecca Mian

Noise Management Initiatives Engagement Manager

Airspace Office

Corporate Affairs, Planning and Sustainability

Gatwick Airport Limited

7th Floor, Destinations Place

Gatwick Airport, West Sussex, RH6 0NP

YOUR LONDON AIRPORT

Gatwick

From: Leon Hibbs [REDACTED]
Sent on: Tuesday, July 26, 2022 6:25:00 PM
To: Steve Mitchell [REDACTED]
CC: Monk, David [REDACTED]; Ivens, Rob [REDACTED] Murray Taylor [REDACTED] lee.money [REDACTED] >; Rebecca Mian [REDACTED]
Subject: [EXTERNAL SENDER] RE: GAL Noise

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

Steve,

At the moment the B787 in departure looks as if this reflects a route 1 departure, so is it really appropriate to 'spin it round'?

Also there appears to be no departure footprint around route 4 is this also correct?

Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

Follow the council on [REDACTED].
From: Steve Mitchell [REDACTED]
Sent: 19 July 2022 10:53
To: Leon Hibbs [REDACTED]
Cc: Monk, David [REDACTED] Ivens, Rob [REDACTED] Murray Taylor [REDACTED] [REDACTED] [REDACTED] [REDACTED] >; Rebecca Mian [REDACTED]
Subject: RE: GAL Noise

Hi Leon.

The Lmax footprints are only westerly off the southern runway. I don't have them on Easterly. Hopefully your GIS team can spin them round as necessary.

Regards
Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs [REDACTED]
Sent: 18 July 2022 22:05
To: Steve Mitchell [REDACTED]
Cc: Andy Sinclair [REDACTED]; Monk, David [REDACTED]
Ivens, Rob <[REDACTED]>; Murray Taylor [REDACTED]
[REDACTED]
[REDACTED] Rebecca Mian
[REDACTED]
Subject: RE: GAL Noise

Steve,

Not had a chance to open the Lmax files as GIS is down at the moment - but do the KML's also include easterly operations as well (as requested).

Thanks
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

From: Steve Mitchell [REDACTED]
Sent: 18 July 2022 17:05
To: Leon Hibbs <[REDACTED]>
Cc: Andy Sinclair <[REDACTED]> Monk, David <[REDACTED]>
Ivens, Rob <[REDACTED]>; Murray Taylor ([REDACTED])
[REDACTED]; [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: GAL Noise

Hi Leon

Please find the following attached in response to your request dated 23 June.

For i) – as you know, we do not have specific 2028 forecasts to hand. The aircraft with the largest arrival noise footprint expected to be operating at night in 2029 is the A321. The aircraft with the largest departure noise footprint expected to be operating at night in 2029 is the B737-800. I attach Lmax footprints for both of these as kml files. These are for westerly arrivals and departures to the main runway.

For iv) I attach a further analysis for “benefits sharing” using the NSC method reported by PINS at the Bristol Airport Planning Appeal, for the 2038 Slow Transition Fleet, extended from Leq 16 hr 51dB to include 54, 57, and 60dB. This is as a table rather than graphically. The proportion of benefits sharing at 51dB was 50% to the community. At higher noise levels the proportion of sharing

to the community is higher. These figures are provided as requested, and as we have discussed, policy does not define a benefits sharing formula, nor any particular proportion of sharing.

Regards
Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Steve Mitchell
Sent: 08 July 2022 11:32
To: Leon Hibbs <[REDACTED]>
Cc: Andy Sinclair <[REDACTED]>; Monk, David <[REDACTED]>; Ivens, Rob <[REDACTED]>; Murray Taylor ([REDACTED]) <[REDACTED]>
Subject: RE: GAL Noise

Hi Leon

Thanks for your reply. I will try to prepare this information for you next week. I note your point on item i) re 2028, and will check which types are most relevant to send.

Regards
Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs <[REDACTED]>
Sent: 01 July 2022 18:26
To: Steve Mitchell <[REDACTED]>
Cc: Andy Sinclair <[REDACTED]>; Monk, David <[REDACTED]>; Ivens, Rob <[REDACTED]>; Murray Taylor <[REDACTED]>
Subject: RE: GAL Noise

Steve,

In terms of the responses the requests below are for data to inform the thinking of the 5 main local authorities involved in the DCO work, and to help us assess the reasonableness of GALs overall approach to noise.

Sadly we have no access to the data needed to produce a number of the items requested below, otherwise we would have simply commissioned them independently, and you did say after the 1st noise envelope meeting that if we needed any additional data to help us with our work to get in touch.

With regards to point i) just to clarify we would like 2028, not 2038 as you state in your response.

If you can let me know which items you will be able to supply (and a timescale) and which you will not be supplying it would be appreciated.

Thanks,
Leon

Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

Follow the council on [REDACTED]

From: Steve Mitchell <[REDACTED]>
Sent: 30 June 2022 10:41
To: Leon Hibbs <[REDACTED]>
Cc: Andy Sinclair <[REDACTED]>; Monk, David <[REDACTED]>; Ivens, Rob <[REDACTED]>; Murray Taylor <[REDACTED]>
<[REDACTED]>
Subject: RE: GAL Noise

Hi Leon

Thanks for your email, and again for your contribution to the NEG Local Sub-Group meeting on 23 June. As agreed in order to provide a separate opportunity for discussion specifically with EHPs we are looking to arrange a Topic Working Group specifically to discuss the Noise Envelope, and I think enabling us to talk to you and the other EHPs on some of the details we have already mentioned will work well. With regards your information request, I can reply as follows.

i) LA max (60) foot print of the noisiest aircraft in operation at the airport (23:00 to 07:00) that is still likely to be going in 2028 (Easterly and westerly operation - take off and landing).

The PEIR has Lmax 60 and 65dB footprints for the most common aircraft the A320 and its next generation replacement A320NEO. We can provide examples of noisier types likely to be operating in 2038, but could you clarify why you want these?

ii) Single mode contours Leq day and night for 2019 and 2032 slow transition case

I believe we have discussed this in the TWG, but forgive me if not. The PEIR does not provide single mode contours because we do not have a dose/response for them, and their frequency of occurrence varies year on year, so we do not believe they are a suitable metric to consider for a noise envelope.

iii) Today you did some graphs with 2019 technology frozen but single runway business as usual growth to look at contour areas. Is there any chance the graph could be reproduced with an additional two lines showing ATM growth frozen but technology improvements in line with the central and slow transition scenarios.

You asked me to clarify this in the meeting. Business as usual growth is the future baseline, so it would be artificial to freeze the traffic at 2019 levels.

iv) With the graphs looking at the proportion shared these are all based on the 51 contour. Is there any chance this could be repeated for the 57 or 60 contour – as discussed earlier we have concerns about a focus on 51.

Yes, we can provide this. As we explained using a lower noise level ie larger contour would better capture the benefits of improved operational procedures; continuous descent operation, continuous climb etc. However, I note the concern expressed that setting a noise envelope at Leq 16 hr 51dB and Leq 8 hr 45dB would not safeguard against unexpected noise increases at higher noise contour levels where greater health effects arise. We welcome this important point, and whilst as discussed we think this unexpected consequence is unlikely we look forward to working with you to explore this concern.

Regards
Steve

Steve Mitchell
Mitchell Environmental Ltd

From: Leon Hibbs [REDACTED]
Sent: 23 June 2022 20:21
To: Steve Mitchell [REDACTED]
Cc: Andy Sinclair [REDACTED]; Monk, David [REDACTED]
Ivens, Rob [REDACTED]
Subject: GAL Noise

Steve,

Nice to speak to you at the end of the meeting and looking forward to having a decent chat with yourself and Murray at some point about the plans for the noise envelope.
Anyway just a quick follow up on what I'd like (if possible) just to help out with some things on this side.

- i) LA max (60) foot print of the noisiest aircraft in operation at the airport (23:00 to 07:00) that is still likely to be going in 2028 (Easterly and westerly operation - take off and landing).
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Thanks
Leon
Leon Hibbs
Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

From: North, Brian [REDACTED]
Sent on: Wednesday, August 3, 2022 7:54:07 PM
To: Rebecca Mian [REDACTED]
CC: [REDACTED]; Lum II, Chris [REDACTED]
Subject: [EXTERNAL SENDER] FW: IMPORTANT REMINDER - Gatwick Airport Noise Envelope - Response requested by 5th August

Attachments: Noise Envelope Operation and Review Presentation.pdf (170.24 KB), Noise Charges Briefing.pdf (366.76 KB), Slots Presentation.pdf (442.39 KB), Noise Envelope Meeting1 - Theme1[229703].pdf (1.48 MB), Noise Envelope Theme 2 Meeting - 23.6.2022[231117].pdf (1.15 MB)

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

Good Evening All,

From JetBlue:

- JetBlue supports using more fuel-efficient A/C whenever possible.
- JetBlue supports collaborative efforts to improve noise issues. Any group working on their own without the input other impacted parties will not be successful.
- Many times, fleet procurement decisions (purchasing) are impacted by things beyond JetBlue's control (COVID, war).
- Weather, ATC required maneuvering, and other impacts beyond the control of the flight crew should not cause an airline to find itself "outside" the envelope. The envelope should allow for routine, day to day operations.
- Crews should be able to deviate outside the envelope in the interest of safety whenever required without bringing the airline out of compliance with the envelope. Any negative impact precipitated because of a crew trying to maintain safety levels has the potential to negatively impact operational safety at the airport.
- Emissions vs. Noise. If we increase track distance to avoid noise sensitive airports, we run the risk of going out of compliance with NOx/CO2 emission limits to achieve noise envelope limits. This must be rectified so we don't negatively impact one positive outcome to influence another.
- JetBlue encourages the utilization of significant forecast buffers to allow for real world weather impacts, maintenance delays, go arounds, ATC required maneuvering, etc.

- Pilots won't know if they are in a noise envelope, they are either on a published procedure or they aren't. JetBlue requests that any noise envelope be crafted to incorporate the published arrivals, departures and approaches.
- Procedures should not require any abnormal maneuvering/procedures (steep descents, etc.).

Regards,

Brian North

Director Flight Standards

From: Graham Lake [REDACTED]

Date: Tuesday, August 2, 2022 at 8:07 AM

To: North, Brian [REDACTED]
[REDACTED]

Subject: FW: IMPORTANT REMINDER - Gatwick Airport Noise Envelope - Response requested by 5th August

Dear Aviation sub-group colleagues

Please see the message below, as indicated I would very much appreciate a response by Friday this week to help build an understanding of industry stakeholder views in Gatwick's Noise Envelope activity.

Thank you

Graham LAKE

Independent Chair

NE Aviation Sub-Group

From: [REDACTED]

Sent: 22 July 2022 11:16

To: [REDACTED]

Subject: IMPORTANT - Gatwick Airport Noise Envelope - Response requested by 5th August

Dear Colleagues,

Following up from the Gatwick Noise Envelope Aviation sub-group meeting at which we discussed some further elements on which **Gatwick is again seeking your feedback on these latest briefings not later than Friday 5th August.** (Note that this request is in addition to the feedback already requested on Themes 1 & 2 already discussed and included as italicised text later in this message).

The latest elements requiring feedback are described in three attachments to this message:

- Noise Envelope Operation and Review
- Slots Presentation

- Noise Charges Briefing

A Noise Envelope (NE) has the potential to impact in future the size and scope of each airline's operation at Gatwick. Your airline's views will help to inform the development and design of the Airport's Noise Envelope proposal. You will recall that as a part of the northern runway planning process, Gatwick propose to commit to a maximum noise envelope at the start of dual runway operations based on the 51 dB Leq contour.

PLEASE SHARE WITH ANY POTENTIAL IMPACTED DEPARTMENT IN YOUR AIRLINE

Please provide feedback to [REDACTED] [m](#) the chair of the Noise Envelope Group, with copy to me as independent chair of the Aviation sub-group at [REDACTED] or [REDACTED].

At prior meetings of the NE Aviation sub-group, we have discussed the Theme presentations circulated previously (also attached to this message), these explain in detail the **Noise Envelope themes - for which Gatwick is also seeking feedback from airlines, again not later than Friday 5th August.**

I have consolidated below the comments received so far on themes 1 and 2, and request that you indicate any changes, additions or corrections that you would like to see, respecting the August 5th timeline.

DRAFT AIRLINE FEEDBACK – Themes 1 & 2.

STARTS

For reasons of fairness and transparency, given the number of stakeholders impacted and the range of views, we feel it is important that airlines using Gatwick participate in these important discussions through the existing regulatory/consultation framework. While noting that;

- *Airlines support measures to utilise quieter and more fuel-efficient aircraft types wherever possible*
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- *Airlines confirm that the trend in re-fleeting of aircraft is towards quieter and more fuel-efficient aircraft, while noting that the pace and schedule of this re-fleeting is subject to external factors* so cannot be guaranteed*
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 - *Delays to airspace modernisation including the Single European Sky,*
 - *Industrial Action, such as by Air Navigation Service Providers,*
 - *Severe Weather,*
 - *Airport infrastructure failures/unserviceability and,*
 - *Aircraft groundings and delivery delays, such as seen with the Boeing 737-Max and Boeing 787*

**Recent examples affecting airline fleet modernisation plans significantly have included; the global financial crisis, the grounding of the Boeing 737-Max, and the Covid Pandemic which has seriously impaired airline balance sheets*

ENDS

It is recognised that your airline may choose in its response to replace 'Airlines' with the carriers name.

Thank you for engaging in this important activity during the busiest season of the year. It is very much appreciated.

The next plenary virtual meeting of the Noise Envelope Group (including community representatives) will take place **Tuesday 9th August at 15:00-17:00.**

See MS Teams link below

All the best

Graham Lake

Independent Chair

NE Aviation Sub-Group

20220805 – EasyJet Comments on NE (attachment)

5 August 2022

By email only

Dear Rebecca,

We are writing regarding the Gatwick Airport Noise Envelope and the feedback requested following the Gatwick Noise Envelope Aviation sub-group meeting.

We welcome the opportunity to be involved and to provide views on the proposals. easyJet is absolutely committed to reducing noise generated by aircraft and it remains a priority for us. This is reflected in the continued modernisation of our fleet, as well as the new innovative operational procedures we have implemented.

As per your email, we note that as part of the Northern Runway planning process, Gatwick is proposing to commit to a maximum noise envelope at the start of the dual runway operations based on the 51 dB Leq contour. We have separately raised concerns over the Northern Runway Project, regarding on time performance, resilience, airspace modernisation prioritisation, and the overall improvement of customer satisfaction.

While methodologies to reduce noise have been outlined, no detail has been provided by GAL on the proposed changes and how these would be implemented. It remains unclear what GAL is proposing in these documents or the rationale for these specific changes. Nor does it factor in GAL's own resilience capacity in preventing breaches of the Noise Envelope.

We have set out below our key questions at this stage. Timing and process. We would like to understand GAL's timetable for seeking views on these proposals. We are currently in the middle of the Summer holidays –our busiest period -when not only are key personnel within the organisation on holiday at certain points, but airlines are still dealing with the ongoing challenges within the industry (that are affecting every level of the supply chain). This is putting a huge amount of pressure on resources. As well as engaging on both the noise envelope and the Northern Runway proposals, we are also being asked to consider GAL's separate proposals relating to its regulatory framework and its request to extend the current Commitments to 2029.

All of this makes it incredibly challenging for airlines to give any proposals the proper time and consideration that they require. The noise envelope could have a significant impact and it is important that it is reviewed in sufficient detail (once those details have been made available).

At the same time, given that the DfT has not yet come back on the Night Flights consultation, it is difficult to understand how GAL can develop the details of the proposal at this stage.

For this reason, we would ask GAL to set out a reasonable timeframe for this project, taking into consideration the points raised above. It is also critical that there is a full consultation process, involving all affected airlines.

Rationale for the changes

It would be helpful to understand why GAL believes that the current Local Rules regarding night lights (both movements and QC) are not sufficient and why these new proposals are needed. GAL should also set out why these changes would be in the best interest of passengers.

Slots

It would be helpful for GAL to set out how the proposals for the noise envelope will comply with both the UK and EU slot regulations.

Noise Envelope Operation and Review

As highlighted by GAL, the expected inputs for the noise envelope review will be, 1) actual performance, 2) fleet transition forecasts and ATM forecasts, and 3) any changes in aircraft routings or other material considerations – e.g., changes in government policy or implementation of airspace change.

We have previously reiterated that where GAL plans to see growth in numbers in the airport, including via a noise envelope, it must factor in aircraft utilisation and acceptable on time performance with reasonable levels of certainty. Gatwick should build into its planning the adequate spare capacity that is needed to ensure the recovery of operations following the types of disruption that can reasonably be expected in the normal course of events, which in turn impact the night flying quotas.

The purpose of the Review is not clear from the documents, so it would be helpful for GAL to clarify the proposed aims and outcomes of these reviews. It is imperative that those parties involved in the review have the necessary expertise and are representative of the broad spectrum of views and priorities. We would also stress the need for safeguards to be in place where commercially sensitive information is being disclosed.

Furthermore, the airspace environment needs to be considered when proposing the Noise Envelope. Current levels of airspace congestion must be a focus, given the delays with airspace modernisation. Without improvements in airspace structure, noise and sustainably change could potentially remain slow in delivery. These are more immediate and practical solutions that Gatwick can adopt to ensure noise for the airport and local communities is minimised further, rather than introducing operational restrictions and scheduling bans. This includes focusing on airspace modernisation to allow for the new and modern aircraft which we operate to fly more efficiently by operating quieter landing and take-off procedures, thus reducing noise for local communities. Our investment in the Airbus 320 NEO family has already demonstrated that newer aircraft technology can bring significant advances in reducing noise at source and on take-off.

Given the limited information we have received to date, it is not possible to provide any further comment at this stage. However, were main committed to engaging with GAL and we look forward to providing our feedback when GAL is in a position to provide the necessary details on this proposal.

Kind regards,

Murshad Habib

European Policy Manager

20220805 – EasyJet Comments on NE (email)

From: Murshad Habib [REDACTED]
Sent on: Friday, August 5, 2022 2:42:02 PM
To: Rebecca Mian [REDACTED];
[REDACTED]

CC: Laura Hannay [REDACTED]; Ross Kennedy (EZY) [REDACTED] Jon Petts [REDACTED]; Seb Pelissier [REDACTED]; Gary Butler [REDACTED]

Subject: [EXTERNAL SENDER] Gatwick Airport Noise Envelope - easyJet response

Attachments: Gatwick Airport Noise Envelope - easyJet Response - FINAL.pdf (97.25 KB)

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, **do not** click links or open attachments

Dear Rebecca,

Following the Gatwick Noise Envelope Aviation sub-group meeting, we welcome the opportunity to be involved and to provide views on the proposals. It is not yet clear from the documents we have received to date what GAL is proposing or the rationale for these specific changes. However, we have set out in the attached document our key questions at this stage.

Given the limited information we have at this time, it is not yet possible to provide any further comment. However, we remain committed to engaging with GAL in these discussions and we look forward to providing feedback when GAL is in a position to provide the necessary details.

Murshad Habib
European Policy Manager

20220808 – GACC Data Request and GAL Response

Subject: RE: Noise envelope engagement -data request

Dear Andy

Thank you for your email of 28 July responding to mine, on behalf of the community groups listed, of 21 June and 14 July.

It's disappointing that it's taken you over 5 weeks to respond, particularly in the context of an exercise for which GAL has only allowed 15 weeks in total.

It's even more disappointing that you haven't taken up our offer of a discussion to prioritise the data we requested, and instead rejected every element of our request.

In the light of your response, our view continues to be that GAL is deliberately withholding, or refusing to generate, information and analysis which only it is able to provide and which is an essential input to effective noise envelope engagement. Without this information and analysis it is not possible to formulate, let alone agree, noise envelope proposals in the way the Airports National Policy Statement requires and the CAA's guidance advises. GAL's engagement therefore continues to be both tokenistic and incompatible with policy and regulatory guidance.

I've commented in detail on your individual responses below.

Please could this exchange be circulated to all NEG members and added to the agenda for Tuesday's meeting?

I am also copying this to Tom Crowley and Jonathan Drew.

Regards

Charles

Subject: RE: Noise envelope engagement -data request

Dear Charles,

Please find below a response to your original email of 21 June. You'll be aware that we have discussed aspects of your request at various noise envelop group and sub-group meetings in the intervening period, however, we thought it would be helpful to set out clearly the response to your questions. I am sorry it has taken some time to do that.

We should at the outset make clear that the views you have shared -which include the views of a number of the local stakeholder groups -are welcome, and along with the inputs from other local and industry stakeholders involved in this process continue to build upon the themes identified through the feedback received during the DCO consultation and will contribute to the shape of a future noise envelope at the airport.

In response to your specific points:

1 - Fleet transition, best case scenario.

The PEIR provides a detailed noise assessment for two rates of fleet transitions, a Central Case and a Slow Transition Case. York Aviation has been appointed by the Local Authorities as expert advisors on aviation economics and aircraft forecasts. The York Aviation review of the PEIR noted: We consider that the fleet mix assumed in the Central Case for assessment is somewhat optimistic, particularly in the early years given the deferral of aircraft orders that has occurred during the pandemic, but that the Slower Transition Case represents a robust worst case.

The Noise Envelope is required to give certainty to communities that noise will be limited and where possible reduce. This requirement would not be met by an aspirational 'best case' target that was likely to be exceeded. Instead, we propose a noise envelope 'not to be exceeded', enforced through the legal powers of the DCO, with annual monitoring and forecasting of compliance, and regular reviews built in to ensure the levels remain relevant so as to incentivise quieter aircraft and operational practices that reduce noise.

2 - Operational improvements

Many of the benefits of projects and actions arising from the work of the Gatwick's Noise Management Board will have noise benefits that are not quantifiable in acoustic terms, ie dBs required to set a noise envelope. Some projects and actions will create small or localised noise reductions. Whilst under the NMB workplan we will continue to discuss ways to predict the benefits, both acoustic and non-acoustic, we do not consider it possible at this stage to quantify them to set a 'Reasonable Allowance' within the noise envelope.

3 - Frequency metrics-historic data

A series of 8 noise metrics is listed. The request is for each metric be modelled for summer and winter periods from 2010 to 2019 (ie 11 x 2 cases). This amounts to 176 noise models. See below.

4 - Frequency metrics: future forecasts

The request is for the same 8 metrics, for summer and winter each year from 2022 to 2038 (17 x 2) for three fleets (x 3). This amounts to 816 noise models. Added to the historic data request, this amounts to 992 noise models. This is considered an unreasonable request given that it is not clear which of these metrics, years, seasons or fleets you suggest should be considered in a noise envelope.

The PEIR models noise using the following parameters:

- 6 noise metrics: Leq 16hr day, Leq 8hr night, N65 Day, N60 Night, Lden, LNight, Lmax
- 5 years: 2019 base, 2029, 2032, 2038, 2047
- 2 seasons: Leq 92-day summer, Lden/LNight annual average

The PEIR provides 54 noise contour plots covering these parameters and contour areas and population counts for all in Appendix 14.9.2.

We believe this describes the future noise environment with or without the Project adequately using all the noise metrics relevant to a noise envelope.

We understand you wish us to consider frequency metrics and we welcome your views on this. The Noise Envelope Group Local Sub-Group meeting slide deck, dated 23 June 2022, after your information request, provided some analysis comparing trends between the areas of the following metrics:

- Leq 16hr and N65 day
- Leq 8hr and N60 night
- Leq 16hr summer season and Lden annual average day
- Leq 8hr summer season and LNight annual average night

These comparisons were for the Northern Runway Project Central Case fleet forecasts. We have received further Lden, LNight, N65 and N60 results from ERCD since. If you would like these added please let us know. If you think it would be helpful, we could also generate similar comparisons for the Slow Transition Case fleet and/or the future Baseline.

5 - Restrictions at times of particular community sensitivity

“Our paper proposes that the noise envelope should restrict aircraft movements and noise exposure at times of the day that are of particular community sensitivity outside of the night period, such as shoulder periods. We would like GAL to commission an analysis to identify such periods and, in the light of that analysis, to propose additional restrictions on flights in those periods for discussion by the NEG.”

We presume you mean periods outside the Night Restrictions period 2330 to 0600 hours. We are not sure how we can robustly conduct such an analysis but perhaps as a first step we would ask that you canvass opinions across the members of all the Community Noise Groups represented by the paper of 8 June, and preferably the others in the NMB too, as to exactly which periods are of most concern.

I look forward to hearing from you in due course.

Regards

Andy

Head of Noise & Airspace Strategy

Gatwick Airport

From: Charles Lloyd [REDACTED] Sent: 14 July 2022 14:48

Subject: [EXTERNAL SENDER] Re: Noise envelope engagement - data request

CYBER AWARE-Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

Dear Andy and Rebecca

One of the issues we discussed in and after Tuesday's Noise Envelope group meeting was GAL's failure to respond to our data request of 21 June, below. Although I understand some aspects of the request were touched on briefly at the local sub group meeting on 23 June, there's been no substantive response to, or discussion of, our requests.

In my view we've reached the position where GAL is deliberately withholding, or refusing to generate, information and analysis which only it is able to provide and which is an essential input to effective noise envelope engagement. Without this information and analysis it will not be possible to formulate, let alone agree, noise envelope proposals in the way the Airports National Policy Statement and the CAA's guidance require. Unless there is movement on this issue the engagement you are currently undertaking will clearly be tokenistic and incapable of generating meaningful outputs.

I understand that you may have concerns about the quantity of information we've requested, and the costs of generating some of it. If that is the case, we'd be happy to discuss ways in which our requests could be prioritised.

I hope you will now engage on this critical request in a constructive way. If there's been no change in the position by the local sub group meeting on 19 July I intend to escalate it to GAL's senior management, and bring it to the attention of PINS, GATCOM and ministers.

Regards

Charles

From: Charles Lloyd

Sent: 21 June 2022 18:14

Subject: Noise envelope engagement - data request

Dear Andy and Rebecca

On behalf of the signatories to the noise envelope paper sent to you on 8 June, I'm writing to ask Gatwick to make available the analysis and data set out below. In our view each of these is an important input to the noise envelope discussions, without which properly informed engagement on metrics and limits will not be possible.

1 - Fleet transition, best case scenario. Our paper proposes that all noise envelope limits should take account of a "best case" fleet transition scenario. By this we mean an accelerated process where fleet modernisation is taken forward rapidly and is strongly incentivised both through Gatwick's charging arrangements and by the noise envelope itself. Our position reflects the fact that fleet replacement is wholly within the industry's control. It is not therefore appropriate for communities to bear the risk of a slow pace of fleet replacement, as GAL has proposed. The DCO consultation contains data for central case and slower transition case fleet replacement but not for a best or accelerated scenario. We would like to see best/accelerated scenario data for each existing data set in the DCO consultation and for the additional metrics in point 4 below. If GAL does not currently have a best/accelerated fleet replacement case one should be prepared and independently reviewed urgently.

2 - Operational improvements. Our paper proposes that the noise envelope, specifically the limits for each relevant year, should incorporate a Reasonable Allowance for noise reductions arising from operational improvements including those arising from the work of the Gatwick's Noise Management Board. We would like Gatwick to prepare an analysis of historic and prospective operational improvements and to propose a Reasonable Allowance based on that analysis. As explained in our paper, we envisage that the Reasonable Allowance for each relevant year should be determined by an independent expert in due course.

3 - Frequency metrics-historic data. Our paper proposes that the noise envelope should include both Leq and noise frequency metrics and limits (in addition to the other metrics it sets out). As a first step to help inform consideration of frequency metrics and limits and their interaction with Leq metrics and limits it would be helpful to understand how the two have related to each other in the past. We therefore request that Gatwick prepares an analysis that sets out the following:

- Leq day period contour area and population at each of 57, 54, 51 and 48 dBs
- 45dB Lden area and population contour
- Leq night period contour area and population at each of 51, 48 and 45 dBs
- 40 dB Lnight area and population contour
- N 65 and 60 dB, 20 and 50 events, day period contour area and population
- N 60 and 55 dB, 10 and 20 events, night period contour area and population
- Day period Quota Count •Day period Person Event Index
- In each case for each year for the period 2010-2019 for both summer and winter period.

4 - Frequency metrics: future forecasts. Alongside historic data we would like to see forecasts of each of the above data sets for each year from 2022 to 2038 for all fleet transition scenarios including the best/accelerated case requested in point 1 above. 5 -Restrictions at times of particular community sensitivity. Our paper proposes that the noise envelope should restrict aircraft movements and noise exposure at times of the day that are of particular community sensitivity outside of the night period, such as shoulder periods. We would like GAL to commission an analysis to identify such periods and, in the light of that analysis, to propose additional restrictions on flights in those periods for discussion by the NEG.

We may want to request additional data in due course.

I would be grateful if you could copy this to all NEG participants.

Regards

Charles

20220815 – GACC email to Aviation SG Chair and Response

From: Graham Lake [REDACTED]
Sent on: Monday, August 15, 2022 7:11:43 AM
To: Charles Lloyd <[REDACTED]>
CC: Gatwick Airport Noise Management Board [REDACTED]; Rebecca Mian [REDACTED]
Subject: [EXTERNAL SENDER] RE: NEG industry sub group

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Charles

The consolidated summary of industry views will be reflected in the material produced by GAL, in the same way as the various community and council views will be documented.

I already explained why my speaking note will not be shared.

If the Aviation sub-group gets to a position where participants wish to formalise their feedback, I will let you know.

Graham

Sent from [Mail](#) for Windows

From: [REDACTED]
Sent: 15 August 2022 07:03
To: [REDACTED]
Cc: [REDACTED]
Subject: NEG industry sub group

Dear Graham

A quick note to repeat my request that you share your speaking note from last week's NEG meeting, so that all members have a clear understanding of industry's views on GAL's current proposals. There's been transparency on community views, so I hope the reverse will be possible too.

Thanks.

Charles

20220815 – GACC Request on Night Flight Controls and GAL Response

From: Andy Sinclair [REDACTED]
Sent on: Monday, August 15, 2022 8:05:43 PM
To: Charles Lloyd [REDACTED] Gatwick Airport Noise Management Board [REDACTED]
Subject: RE: Night flight controls
Attachments: DfT NFC Part 2 _GAL response (submitted).pdf (643.98 KB)

Evening Charles,

Please find attached Gatwick's response to the DfT Night Flight consultation. It is just worth covering a few points in relation to the document itself.

No information has been redacted or removed from the attached document.

I will ask the team to have this placed on an appropriate area of the Gatwick Airport website to allow access to others.

You will notice the document is marked: 'CONFIDENTIAL – CONTAINS COMMERCIAL SENSITIVE INFORMATION Not to be published or shared with third parties without prior Gatwick Airport Ltd's consent'. To be clear I am sharing this on behalf of GAL and thus consent is implicit.

Within the document an appendix is referenced. The appendix does not exist; during an earlier stage of the drafting process consideration was given to the inclusion of additional information and a placeholder introduced into the text, however, it was decided that this was not needed. Its reference within the document is an error.

Regards,

Andy

From: Charles Lloyd [REDACTED]
Sent: 09 August 2022 16:45
To: Andy Sinclair [REDACTED]; Gatwick Airport Noise Management Board [REDACTED]
Subject: [EXTERNAL SENDER] Re: Night flight controls

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Andy, Rebecca

Reference some of the comments in the meeting this pm, I'd appreciate an answer to this question.

Thanks.

Charles

From: Charles Lloyd

Sent: 14 July 2022 10:33

To: Andy Sinclair [REDACTED]; Gatwick Airport Noise Management Board
[REDACTED]

Subject: Night flight controls

Dear Andy and Rebecca

One of the things GAL has claimed in the noise envelope discussions is that communities should take comfort from the existence of DfT night flight controls. We don't agree with that, but as input to the discussion I'd be grateful if you could let me have a copy of GAL's response to DfT's latest night flight consultations.

Thanks

Charles

20220914 – GAL Response to Leon Hibbs (ReigateBanstead)

From: Steve Mitchell [REDACTED]

Sent on: Wednesday, September 14, 2022 2:22:22 PM

To: Rebecca Mian [REDACTED]

CC: Andy Sinclair [REDACTED]; Murray
Taylor [REDACTED]

Subject: [EXTERNAL SENDER] FW: Slow transition noise envelope

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Hi Rebecca

Copy of email to Leon et all below, without zip file that created a bounce back from you and Andy. CC Murry for info.

I think this shows Leon is taking an interest in the NE, in our 2038 limits in particular, which has to be encouraging.

Regards

Steve

Steve Mitchell

Mitchell Environmental Ltd

From: Steve Mitchell

Sent: 14 September 2022 15:11

To: Leon Hibbs [REDACTED]

Cc: Monk, David [REDACTED]; Andy Sinclair

[REDACTED]; [REDACTED]

[REDACTED]; Rebecca Mian

[REDACTED]

Subject: RE: Slow transition noise envelope

Hi Leon

Please find attached kml and shapefiles for 2038 Slow Transition (ST) Fleet, N60 and N65, base case and NRP case noise contours.

Any problems with the data please get back to me.

Regards

Steve

Steve Mitchell

Mitchell Environmental Ltd

From: Rebecca Mian [REDACTED]

Sent: 14 September 2022 14:52

To: Leon Hibbs [REDACTED]; Steve Mitchell

[REDACTED]

Cc: Monk, David [REDACTED]; Andy Sinclair

[REDACTED]

[REDACTED]

Subject: RE: Slow transition noise envelope

Hi Leon,

Thanks for your email.

I believe Steve has the ERCD-supplied scenarios for these, so have copied him in to respond to you with them, directly.

Hope this helps.

Rebecca

Dr Rebecca Mian

Noise Management Initiatives Engagement Manager

Airspace Office

Corporate Affairs, Planning and Sustainability

Gatwick Airport Limited

7th Floor, Destinations Place

Gatwick Airport, West Sussex, RH6 0NP



From: Leon Hibbs [REDACTED]
Sent: 14 September 2022 12:13
To: Andy Sinclair [REDACTED] Rebecca Mian
[REDACTED]

Cc: Monk, David <[REDACTED]>
[REDACTED]

Subject: [EXTERNAL SENDER] Slow transition noise envelope

CYBER AWARE - *Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments*

Andy / Rebecca,

Given GAL look set to go down the slow transition route for the noise envelope, could you supply copies of the N60 (8hr night) and N65 (16hr day) contours (as shapefiles) for 2038 under the slow transition

Scenario with the northern runway in place and also if possible without the runway (base case).

Contour intervals would be as for 2032 i.e. N60 at 10, 20, 50, 100, with the N65 at 20, 50, 100, 200, 500.

Thanks

Leon

Leon Hibbs

Environmental Health, Reigate & Banstead Borough Council, Town Hall,
Castlefield Road, Reigate, Surrey, RH2 0SH.

20220916 – Atholl Forbes (PAGNE) Comments and GAL Response

GAL Response in [blue](#)

Thanks Rebecca

Yes, during PAGNE's NMB surgery session we queried how information captured by the airport's noise monitors is then used. Although Warren helpfully suggested that NATMAG could attend the forthcoming NCF meeting to provide a general update, we would suggest that, on reflection, what are quite localised queries, would be better addressed by a simple email response from NATMAG. This would ensure that sufficient NCF meeting time is made available to focus on the most important issues such as FED Stage 2, Noise Envelope and a Work plan progress review to help consider overall NMB effectiveness.

In terms of what we're looking for, we'd be grateful for responses to the following specific questions:

1) Once captured, how is the noise monitor data used?

We have 21 noise monitors (fixed and mobile) currently out in the field, plus a further 7 monitors currently collecting baseline data for the Reduced Night Noise trial and are placed further away from the airport under the Arrivals swathes. The noise monitor data is imported by Gatwick's Noise and Track Keeping (NTK) System where it is then categorised into either an aircraft noise event or a community noise event (non-aircraft related). The data is also filtered for any noise that is related to wind or equipment faults. Gatwick's Airspace Office check the noise monitor data on a daily basis to ensure that there have been no breaches to the departure noise limits. This applies to departures passing over the 5 fixed noise monitors located at 6.5km from start of roll either side of the runway. We report any breaches of the departure noise limits in the Airspace Office quarterly and annual reports, which are reviewed at the Noise and Track Monitoring Advisory Group (NaTMAG). Any breaches will then be followed up with the airline concerned who would be fined accordingly. The data itself for all noise monitors is validated by the Airspace Office and aircraft noise events data is reviewed by the Gatwick Noise Monitoring Group every 6 months. This group is a sub-group of NaTMAG involving the Airspace Office and local Environmental Health Officers. Trends or anomalies in the data are identified in these meetings and further investigation is then carried out by the Airspace Office. The group is also responsible for siting new locations for noise monitors from requests that have come through NaTMAG.

In addition to noise monitor data, there are various other noise abatement procedures that are monitored by the Airspace Office (as per the Aeronautical Information Publication). These include data on CDA and track keeping, which is monitored on a daily basis. If there are track keeping infringements, the team will get in contact with NATS, ANS and also the airline directly, to find out more about what caused the track deviation. Our NTK system has weather built in so we can immediately take account of any weather deviations from follow up. We report track keeping, along with CDA to our airlines on a monthly basis and provide very detailed information on level flight and the specific routes that the track deviations occurred. This then forms part of the conversations on improvement when the Airspace Office conduct airline engagement sessions directly with the airlines. The Airline Noise Performance Table also contains data on CDA and track keeping, which allows us to identify those airlines that are poor performers and may need some additional assistance from us to improve their performance. All data is published quarterly and annually in the Airspace Office reports, available online.

The Airspace Office also monitor the ILS joining point, on a monthly basis. Data is reported in our Airspace Office quarterly and annual reports and the data is also shared monthly with NATS. It is a focus of the Flight Operations Performance Safety Committee (FLOPSC) to monitor the data as the group consists of airlines, ATC, and also GAL representatives.

More recently, data from our NTK system has been provided to the DfT for their upcoming research study on the health impacts of aviation night noise. We will continue to support this work as it develops.

2) Given the recent and rapid increase in traffic volume being endured in the Loxwood, Plaistow and Ifold area, we'd like to know whether noise monitor data is, as a matter of course, shared with NATS, ANS or any other organisations?

As mentioned, the noise monitor data is shared amongst the Gatwick Noise Monitoring Group to ensure the data is consistent. Acoustic consultants Applied Acoustic Design (AAD) and Anderson Acoustics both look after our noise monitors and have provided technical assistance to the Airspace Office on NMT data. We also commission noise reports from our acoustic consultants, which is something we will be revisiting following the COVID-19 pandemic. As also mentioned, details of NMT infringements are also published in our Airspace Office quarterly and annual reports.

As mentioned above, our NTK system data is regularly shared with NATS, ANS and airlines to drive continuous improvement. There are many aviation noise related research projects ongoing, particularly with the NMB workplan and FASI-S. The Airspace Office continue to support these projects by providing accurate and adequate amounts of data for the analysis.

3) If data is shared, can you confirm whether it is then used to help facilitate a more equitable distribution of air traffic?

You'll be aware of the work that resulted from the independent review of arrivals. As a result of that work ILS joining point traffic distribution is captured, reported to NaTMAG, published in our quarterly reports and shared directly with NATS.

4) Despite being adversely impacted by both departures and arrival traffic, the Loxwood, Plaistow and Ifold area is currently outside the lowest Gatwick noise contour. With a noise monitor already located in Ifold, why does the airport not produce noise contour data to cover areas more distant from the airport but which are so adversely impacted?

Taken from the 2021 ERCD Noise Exposure Contour Report: Noise exposure is depicted in the form of noise contours, i.e., lines joining places of constant LAeq, akin to the height contours shown on geographical maps or isobars on a weather chart. Historically in the UK, LAeq,16h noise contours have been plotted at levels from 57 to 72 dB, in 3 dB steps. However, the Survey of Noise Attitudes, SoNA 2014 found that the degree of annoyance (based on the percentage of respondents highly annoyed) previously occurring at 57 dB, occurs at 54 dB. The LAeq,16h contours have therefore been plotted down to the lower level of 54 dB since 2016. <https://www.gatwickairport.com/globalassets/company/airspace/noise-reports/fpt/noise-contour-report-2021.pdf>

We have sought to improve the assessment of noise impacts included in our annual reports through the addition of noise event (or N Above contours), which have been included in Gatwick's annual Noise Exposure Contours Reports since 2019 following work with our Noise Management Board identifying frequency of overflight as a concern for local stakeholders that was not adequately captured by the reports at that time.

We don't have Kimberley's email address, so would be grateful if you could forward on our behalf and now look forward to receiving NATMAG's response.

Kind regards

Atholl

20221001 – CAGNE Comments (Summary) on NE

1st October 2022

Feedback from CAGNE on the Gatwick Airport Noise Envelope summary

Throughout this process, CAGNE has clearly stated that:

- There is no mandate to take forward Noise Envelopes, as the consultation with the public has been so flawed and inadequate to date.
- Much emphasis is placed on the GACC noise group through using the NMB, which is dominated by the GACC noise groups and lacks a geographical balance in representation. The document presented by GAL illustrates this perfectly.
- Gatwick's interpretation of policy and lack of time given to the process, is not acceptable or accepted.
- CAGNE has consulted over 5,000 members, plus elected bodies, yet much emphasis is based on, and attributed to, the GACC noise groups plus one individual from Kent (similar airspace to the GACC noise groups). This, once again, makes the process flawed and not representative of all communities' views.

Page 7 last paragraph – This requires some clarification, as there is no evidence that planes will get quieter. It could be linked to page 10.

Page 8 CAGNE did not state –

'Planning Inspectors had incorrectly interpreted Government Policy in approving airport developments at London City, Stansted and Bristol, which increased noise'

These statements, above and below, should be attributed to the GACC noise group, or Mr Lee, as you have attributed specifics to CAGNE in this document. This is not a CAGNE statement -

'One particular Community opinion stated that within Gatwick's proposal, the day period 51dB noise contour would be permitted to increase from 136km² in 2019 (and forecast 120km² in 2029) to 146.7km², and that noise could potentially increase indefinitely if the ATM threshold of 382,000 was not reached.'

Page 10 - This statement attributed to CAGNE is incorrect – *'It was stated by CAGNE that Airbus and Boeing have both expressed having no current or imminent plans for the development of new aircraft*

types. As such, CAGNE believes that only the noise performance of existing types of aircraft should be considered.'

CAGNE stated this in relation to the development of quieter planes than exist today. Obviously, planes are being developed to reduce emissions, as required by government.

Page 11 – CAGNE has stated throughout this process that we do not believe that what is being offered by GAL will give residents 'certainty'. We would request this be added accordingly to the statement –

'Provide certainty to the communities around Gatwick that noise will not exceed contour limits and will reduce over time, consistent with the ICAO Balanced Approach.'

Pages 13 and 14 – CAGNE are concerned that statements such as:

'GAL seeks views from stakeholders on the proposed noise envelope for consideration as part of this consultation.'

are misleading, due to the poor consultation to date conducted by GAL, leading to the planning inspectorate to seek more work to be undertaken on the NE. We do not believe that the work undertaken by GAL has provided stakeholders with enough input to make changes to what was proposed at the outset by GAL in the PIER. We feel that GAL has made little effort to accommodate stakeholders' requirements, for example, a suite of noise metrics.

Page 15 – you state – *'It was suggested by CAGNE that charges should be increased for noisier aircraft. GAL acknowledged that the Departure Noise Limits fining regime is another example of a noise management process that could contribute to help ensure compliance with a future Noise Envelope. The Departure Noise Limits Review will progress following the delay caused by the NEG consultation.'*

It should be made clear that CAGNE did not suggest the Departure Noise Limits. Although we accept this will help, we would like it made clear that CAGNE seeks both arrivals and departure noise to be addressed.

Page 16 states – *'The concept of supplementary noise metrics was discussed, with broad agreement that additional supplementary noise metrics, that do not have limits, should be reported in the Noise Envelope to help foresee problems and manage noise.'*

CAGNE do not accept this as a true record of what was conveyed at the meetings. CAGNE requested a suite of metrics to judge all aspects of the Noise Envelope and did not agree to primary and secondary as proposed by GAL.

It should be noted that Gatwick has refused the request by communities to expand the noise contours, or to change the contours set by Gatwick at the outset of this process (Autumn 2021 consultation). The contours therefore do not encapsulate those impacted by the increase in aircraft movements outside of the 51dB and 45dB areas, or areas recognised by Gatwick as the inner area of impact of 2 runways.

Page 17 – CAGNE has requested that there be a passenger cap as well as aircraft cap, subject to improvements in the reduction of aircraft noise. CAGNE proposed a community buy-in and that ground noise from Gatwick's operations should also be a consideration, being within the 51dB and 45dB areas.

We see no mention of this, only the GACC noise groups' point.

Page 18 - CAGNE is not happy that this is all attributed to GACC noise groups when much of what is stated has been stated by CAGNE, the umbrella aviation community and environment group for Sussex, Surrey, and Kent. These points should be attributed also to CAGNE, not GACC only.

- *Noise envelope limits must take account of all relevant new technologies and potential operational improvements, not just fleet changes. GAL noted that not all noise management initiatives could be readily quantified and forecast*
- *There should be no commercial flights for a full 8-hour night period at all times of year*

CAGNE was clear in documentation that we wished to have the shoulder periods included in the night period, with no additional flights. This needs to be added.

We are very concerned by a suggestion by a member of the Gatwick team that a night ban could facilitate more daytime movements.

- There must be overall, binding limits on both passenger numbers and total traffic movements. This was discussed and GAL explained it is considering an ATM cap. To be clear as to whom GACC noise group represents, we list committee members who have also attended the NE larger meetings in their own right. The GACC noise group consists of 2 members from GON (Kent), 2 from Plane Wrong (Holmwood), PAGNE (Ifold), (Crowborough) ESSCN and two from Charlwood, Epsom and Reigate. GACC noise group also holds all seats on the GATCOM forum, so this unhealthy monopoly ensures set airspace is a major consideration, all of which is outside of the Noise Envelope area. Mr Lee is also from Kent, GON location.

What is detailed in your paper from our community and environment group is correct (below), but this is only acceptable if 'community buy-in' is a factor, being that communities impacted are paid to accept noise.

'CAGNE Key Presentation Points and Opinions: CAGNE proposed that within the first year of the Northern Runway, Gatwick should be restricted to 321,000 ATMs, shared equally between two runways on all departures. If the noise contours decrease by 3dB overall, Gatwick should be allowed to increase ATMs the next year by 2%. This can then consecutively increase until reaching 382,000 as the final total cap.'

Page 19 – states – *'CAGNE proposed that to allow Gatwick to grow, each house within the 51dB and 45dB should be paid £5,000 a year until they are out of the noise contour band. This payment would be index linked annually.'*

As GAL was made aware, this was subject to a public consultation to which, to date members had responded that they did not support a 2nd runway at Gatwick and so did not agree with Noise Envelopes. This should be included.

Page 21 – once again, only the GACC noise group comments are noted. CAGNE has been clear on slots, that these should be used against poor performing airlines at time of allocation, and there should be a removal of slots (ATM capacity) if GAL breached the Noise Envelope.

Page 22 – where you state – *'Gatwick set out that its charging structure seeks to incentivise the use of quieter, cleaner and greener aircraft.'*

CAGNE request that our point be included that the charges do not seem substantial enough to incentivise airlines to fly quieter planes during the day. These should be increased.

Page 23 states – *'The primary metric for assessing effects would be the areas of the day and night LAeq noise contours. Again, following consideration of stakeholder views, Gatwick agreed that additional secondary metrics, including N65 day and N60 night should also be reported by the noise envelope process. Gatwick does not agree that these metrics should form part of the noise envelope.'*

It should be stated that CAGNE does not accept this, as we require a suite of metrics to be primary metrics.

Page 23 – states - *'Extraordinary review –for example, force majeure, significant policy changes or major airspace change.'*

CAGNE request that residents can call for an extraordinary review at any time that they feel noise is unacceptable. Should GAL decline, communities should be able to go to the review body to request such a review without GAL agreement – Point7 of page 25.

Page 24 – CAGNE has requested that the review body be made up of those who have worked to form the Noise Envelope. This is not stated in the paper. We request this be added –Point4 of page 25.

Page 26 – Airline Feedback - It is very disappointing that there is a lack of feedback from a broad spectrum of airlines that use Gatwick Airport on a regular basis.

It should be made clear who has had input into the statements on page 26 and the airlines that did not participate.

Gatwick stated that only EasyJet, Jet Blue, BA and Emirates had responded.

BA is a major contributor to current noise issues at the airport, on departures.

Emirates operate their own NAP to benefit the airline rather than those on the ground. They also contribute to visual pollution due to the fleet uniform.

Airlines that are seeking to grow at Gatwick should be party to the noise envelope debate, such as Wizz, Ryanair, WestJet, Tui, Turkish, Aer Lingus, Aeroflot, Air Arabia, Air Europa, Air Malta, Air Transat, Aurigny, Austrian, Belavia China, Croatia, Finnair, Iberia, Icelandair, Iraqi, Norwegian, Nouvelair, Qatar, Royal Air Maroc, Air Baltic, Swiss International, TAP, Titan, Tunisair, Ukraine, and Vueling.

Page 28 – concern must be noted that still there is no indication of what the ‘head room’ will be. CAGNE refers to our presentation whereby we suggest 18dB be included.

Page 29 – we believe alphabetical listing is preferable, considering that CAGNE has consulted members of the public who will be impacted by the 2nd runway, unlike the noise group.

20221001 – GACC Comments on Output Report

COMMUNITY GROUP COMMENTS ON GATWICK AIRPORT NOISE ENVELOPE GROUP OUTPUT REPORT

1. The comments below are submitted jointly by the community groups that participated in Gatwick Airport Limited’s (GAL) noise envelope engagement process, other than CAGNE. A full list of those groups is below.
2. Individual groups may wish to submit supplementary comments in addition to these joint comments.
3. Submission of these comments should not be taken as endorsement of, or agreement with, the noise envelope engagement process undertaken by GAL or of its output report.
4. In our view GAL’s engagement was defective in numerous material respects. As a result, it did not comply with the CAA’s advice on noise envelope engagement or the Government’s requirements as set out in the Airports National Policy Statement (ANPS). Nor did it comprise “another appropriate method” of engagement as advised by the Planning Inspectorate in cases where the CAA’s guidance is not followed. The engagement GAL has carried out therefore does not, in our view, provide a sound basis for noise envelope proposals and GAL’s proposals cannot be considered to have been “defined in consultation with local communities” as required by the ANPS.
5. Whilst recognising that CAP1129 provides only guidance on the Noise Envelope engagement process, the CAA does make clear that, “for an envelope to function as intended, it is essential that full agreement is achieved between all stakeholders on the envelope’s criteria, limit values and means of implementation and enforcement.” In our view, GAL has shown little appetite to carry out this engagement process in a manner capable of delivering such agreement. Instead, GAL has conducted a process that, on the key issues, has failed to provide the time necessary to facilitate the collaborative discussions required to achieve broad stakeholder consensus. We are therefore of the view that GAL’s engagement process has been fundamentally flawed.

APCAG

GACC

Gatwick Obviously Not

High Weald Councils Aviation Action Group

PAGNE

Plane Justice

Plane Wrong

TWANSNG

From: GATCOM Secretariat [REDACTED]
Sent on: Monday, October 3, 2022 8:28:44 AM
To: Gatwick Airport Noise Management Board [REDACTED]
CC: Mike George [REDACTED]
Subject: [EXTERNAL SENDER] Noise Envelope Group Output Report - feedback

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Dear Rebecca

GATCOMs Lead Member for Noise, Mike George has shared the Noise Envelope Output report with myself and the GATCOM Chairman. Following discussion between the 3 of us we wish to make the following comments prior to the report being finalised:

A query relating to page 23 of the report 'Feedback on Operating and Enforcement Arrangements' 3. Limits, reporting and forecasting should commence immediately after the DCO process, whether or not it is granted. At the last NMB meeting Mike asked what would happen to the NE if the DCO failed.

GAL responded the NE was totally connected to the DCO process & if it failed it would be down to the NMB to instigate discussions for an NE based on a single runway operation. This seems to be a contradiction to what is included in the report and we would like to understand what would happen with the NE if the DCO failed.

We would also like to comment on the GAL proposal that the noise envelope should be reviewed by an appropriate multi party review body and the suggestion that review body could be formed as a sub-committee of GATCOM.

The report does note that there was consensus, including from a GATCOM member, that GATCOM should not be an oversight body. GATCOM Secretariat and Chairman would like to reinforce this view that it would not be appropriate for GATCOM to be the review body but that GATCOM would expect to have regular reports from the reviewing body that feed into GATCOM.

I hope these comments are useful and are taken on board ahead of finalising the report.

Kind Regards

Monique
GATCOM Secretariat

From: Cagne [REDACTED]
Sent on: Thursday, October 13, 2022 1:14:05 PM
To: Gatwick Airport Noise Management Board [REDACTED] Andy Sinclair [REDACTED] Murray Taylor [REDACTED]
CC: Warren Morgan [REDACTED] <Warren Morgan [REDACTED]>; Jonathan Drew [REDACTED] Graham Lake [REDACTED]; Tim Norwood [REDACTED]; GATCOM Chairman [REDACTED]
Subject: [EXTERNAL SENDER] Noise Envelope

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CAGNE

Communities Against Gatwick

Noise and Emissions

**The umbrella aviation community and
environment group for Sussex, Surrey and Kent**

13th October 2022

Dear Rebecca, Andy, and Murray

The CAGNE committee would like to make a formal complaint to the process by which the Noise Envelope work has been undertaken and allowed to progress.

The Noise Envelope meeting (11.10.22) was far from acceptable. No documentation was circulated prior to the meeting as such members were in the dark to what was to be discussed. This was not the first time this has happened leaving attendees totally in the dark to what has been submitted, yet the meetings are expected to commence with the allowance of dominance of one noise groups views.

Having endured yet another meeting dominated by the demands of GACC which comes in disguises of GON, James Lee and now PAGNE, all unsubstantiated noise groups. We have, as mentioned in the meeting, and brought to the attention of Gatwick management many times, the lack of transparency to whom these groups

truly represent or how they engage with residents that they seek to portray in representing.

In view of the document submitted yesterday by PAGNE with a list of community group signatories we provide the attached screenshots and comment -

The High Weald Aviation Group of council's website has not been updated since 2016. On information from members, we understand that a GACC committee member no longer runs this group since taking over the GATCOM seat and being elected as a Kent councillor. There are no details of any meeting where this NE document was agreed.

The APCAG group of unknown parish council membership. The website carries no details of any members and no details of any activities of the NMB. No elected member has attended any of the NE meetings. There are no minutes of any meetings that have been conducted.

The CAGNE Aviation Council Forum discussed APCAG (11.10.22) and the council that is a member did not know of any Noise Envelope document that they had apparently signed up too. We know that APCAG is run by the chairs of Pulborough and Wisborough Green Parish Councils, but these websites do not show any minutes whereby these councils approved the NE document. We therefore must question the validation of this PAGNE/ GACC/ GON document.

What took place at the NE meeting was unacceptable in lack of transparency to whom these noise groups deem they speak for or seek to represent. This inclusion of these noise groups and substance must bring the whole process into question to the validation of a consultation on noise envelopes.

The other noise groups signatories TWANSG (TW), Plane Wrong (x 2), GON (x 2) are all committee members of the GACC noise group and as such one signature.

Plane Justice has not been seen at a NE meeting to our knowledge, but CAGNE was unable to attend an initial meeting due to the meeting not being held online.

CAGNE on the other hand has gone out of its way to inform members and consult over 5,000. The verdict being clearly that they do not support a 2nd runway at Gatwick as such do not support NE formation. This has not been captured in any of the Gatwick summary documents whilst favouring these noise groups (GACC) demands.

If this NE work is to have any credit, then it needs to be transparent. We once again call for an independent review of these noise groups that Gatwick continue to use as validation for a process of consultation in seeking a 2nd runway.

Once again it appears that the process is being manipulated. The credibility of the NE and the NMB is at stake. CAGNE ask, is Gatwick going to allow this to happen again? We hope not.

It would be disappointing that any respect Gatwick has achieved with the NMB has diminished fast and continues to build a lack of trust in Gatwick's consultation process due to this manipulation by one noise group.

We must also, once again, question the validation of the GACC noise group representative holding all seats on GATCOM and NaTMAG when he has now looked to change his role with GACC noise groups seemingly being a chameleon when its suits.

Yours sincerely

Sally

Chair of CAGNE

On behalf of CAGNE committee

20221103 – Atholl Forbes (PAGNE) Complaint

From: Atholl Forbes [REDACTED]
Sent on: Thursday, November 3, 2022 4:15:11 PM
To: Gatwick Airport Noise Management Board [REDACTED] Andy Sinclair [REDACTED]
CC: Tim Norwood [REDACTED]; [REDACTED]
Helyn Clack [REDACTED] >; Jonathan Drew [REDACTED]; Warren Morgan [REDACTED]
Subject: [EXTERNAL SENDER] Re: NEG Meeting 11th October

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Dear Rebecca and Andy

Unfortunately, despite my 25th October reminder, I still await a response to my email of 16th October.

I don't understand why you appear to be ignoring my emails. In my view, I've raised significant and very valid concerns regarding the way the final NEG meeting was conducted. As I said in my last email, these concerns are shared by a number of the meeting attendees, so I had expected to receive a response without the need for multiple chasing emails.

In the absence of a reply, I have therefore copied in Tim Norwood, together with Tom Crowley and Helyn Clack, Chair and Vice Chair of GATCOM and Jonathan Drew and Warren Morgan in order that they're aware of my concerns and the fact that, despite my best efforts, you appear to be choosing not to respond.

Atholl

On 25 Oct 2022, at 16:40, Atholl Forbes [REDACTED] wrote:

Dear Rebecca and Andy

It's been over a week since I wrote to you setting out my concerns regarding the way the last NEG meeting was coordinated and conducted. Since the meeting, a number of attendees have expressed similar concerns, so it's particularly disappointing that you've failed to provide any response to my email, not even an acknowledgement.

I feel my email raises important issues which call into question the robustness of GAL's Noise Envelope engagement process and is therefore deserving of a full and now urgent response.

Consequently, can you please confirm when you intend providing a response to the important points and questions I've raised.

Atholl

On 16 Oct 2022, at 08:30, Atholl Forbes [REDACTED] wrote:

Dear Rebecca and Andy

I'm writing to convey my concerns and deep disappointment at the way Tuesday's NEG meeting was both coordinated and conducted.

Given this was the final meeting of the NEG, specifically held to allow member feedback to be discussed, it was absolutely inexplicable and wholly inexcusable that the meeting materials weren't circulated to all attendees in advance. So you're aware, and as a reminder for Andy, I had previously requested that I be copied into any papers received by GAL. Having received Andy's confirmation that this would be done, I trust you'll understand my particular frustration that Andy failed to follow through on his commitment. There can be no doubt that, as a direct result, the quality of this critical meeting was significantly compromised with community groups left unaware of respective views and therefore unable to fully contribute to discussions. Interestingly, even some of the GAL representatives expressed their concerns at this administrative omission. I appreciate you (Rebecca) only returned to the office from annual leave the day prior to the meeting, but even at that late stage, the papers could still have been circulated. However, you clearly chose not to. So you're aware, considerable time and effort was put into coordinating and documenting our joint feedback and to have it treated in this manner is, in my view, completely unacceptable.

I would also like to raise my concerns at the way the CAGNE representative was indulged during the meeting. Over twenty minutes at the beginning of the meeting were wasted with CAGNE querying both my attendance and the democratic legitimacy of the joint community noise group paper, often making offensive and inaccurate allegations. I fully appreciate that meeting attendees must be allowed to raise any concerns they have, but having done so, and having received a response, together with an offer to take the particular issue "offline", I don't understand why CAGNE was allowed to make the same point again and again during the remainder of the meeting. As a direct result of CAGNE's continued interruptions, the effectiveness of our presentation was undermined and ultimately I was unable to cover a number of important presentation points. You will also recall that the CAGNE representative complained that our presentation portrayed CAGNE as an "outlier". I can confirm that during the early stages of the Noise Envelope engagement process, CAGNE, along with the other community noise groups, were invited to comment on the briefings which had been prepared. So you're aware, on 18th June CAGNE made it abundantly clear that they didn't want to receive such briefings, so to now complain about being excluded is quite incredible. Should you wish to see them, I can share the relevant email exchanges. However, even more concerning was the way the CAGNE

representative was allowed to make deeply disrespectful comments about the co-signatories to the report, referring on numerous occasions to “Charles Lloyd and his merry men”. In my long professional career, I have never seen the use of such language being allowed to continue unchallenged. By saying nothing, CAGNE were emboldened and were given free rein to continue with their unprofessional and insulting comments which they did so with obvious glee.

There are some obvious questions to which I’d welcome your feedback: Why were the various meeting papers not distributed in advance? Why were CAGNE allowed to waste so much valuable meeting time and to treat attendees with such disrespect?

In my view, due to a combination of poor meeting organisation and Chairmanship, Tuesday’s meeting was completely unsatisfactory. Perhaps it "ticked the box" from the airport's perspective, but I can certainly say that the meeting fell very far short of what I'd expect from an organisation of Gatwick’s size. Given the issues set out above and taking account of the meeting’s significance, as part of GAL’s overall engagement process, I strongly feel that a follow up meeting is now required to review an updated draft of the Output Report and to allow those points I was prevented from covering at Tuesday’s meeting to be discussed in full. It would be entirely inappropriate for the thoroughness of GAL’s engagement process to be sacrificed for the sake of timetable expediency.

I look forward to hearing from you.
Atholl

20221107 – LA Comments on output Report and Process (attachment - this was later revised - see page 360 of this pdf - and see also GAL response at page 364).

Comments on Noise Envelope Group Output Report 07/11/2022

Introduction

1. These are the preliminary comments from the four local authority attendees at the Noise Envelope Group.
2. A noise envelope must tackle both health and quality of life effects therefore it should consider noise during the day and night. Comment has been made that the night is most important because of the potential health effects. Nonetheless, residents have an expectation they can enjoy their property during the day as well as the night.
3. With almost every other form of noise there is an opportunity for regulatory intervention; and separately for people to take common law action (for the purpose of securing compensation due to the ongoing effect on their lives). This basic common law right is extinguished by virtue of permission under the Planning Act and the text of the Civil Aviation Act for air noise. Aviation enjoys an immense privilege.
4. The noise envelope relates to the control of noise. It is separate but linked to the adaptation of property to reduce exposure and making of compensation for the continuing impact of noise or the change in noise experienced. We consider that improvements to noise insulation and compensation need to be made.
5. In many of the points below we seek to have further discussions. This is not only because we require further detail but also because so much work is continuing to establish what the actual impact of the development will be.
6. The comments below are without prejudice and we reserve the right to revise them as new information emerges and the proposal develops.

Process

7. From a local authority perspective we consider the time set aside and the process for the development of the noise envelope proposals have been inadequate. It is acknowledged that an additional specific meeting was held for the local authorities.

However, there was an expectation that there would be more before this point was reached. Whilst attendance at the community group meetings was helpful to understand concerns of the communities and the business it also limited the local authorities who are likely to have some form of enforcement role should the development proceed.

8. Generally we have support for the view that the meetings should have been independently chaired, more time should have been allowed to consider the information and specific funding made available, by Gatwick Airport Ltd, for the appointment of independent experts.

9. Furthermore, it is not clear to the local authorities that the spirit of UK Regulation 598 has been complied with.

10. We note on slide 2 of the output report presented on the 13 September 2022 that “The content of this report, and the detail of the feedback received through Gatwick’s Noise Envelope Group will be used to support the creation of a feasible, clearly defined, measurable and enforceable Noise Envelope proposal to be submitted as part of the DCO application.”

11. Therefore this is not the final report but is “to support the creation of a ...Noise Envelope”.

12. We understand that there will be no further consultation with the communities; and the possibility of limited further discussion with the local authorities through the topic working groups.

13. However, there continue to be outstanding items from the PEIR and the first round of topic working groups so we are not certain how there will be time to adequately address all these issues properly at the forthcoming topic working groups.

Purpose

14. We have not yet seen a clear explanation, by Gatwick, of the criteria by which they are judging if the noise envelope is suitable or not. Gatwick have referred to the tests set out under paragraph 55 of the National Planning Policy Framework (NPPF).

However, the requirements of the noise envelope should for example ensure that noise in generality and by regard to any features should be managed and the noise impact avoided or minimised on the local communities in the context of any permission, the Airport National Policy Statement (ANPS) and the Noise Policy Statement for England (NPSE).

15. There has been discussion over the concept of sharing the benefit as part of the construct for the noise envelope. The output report (page 9) states the government expectation that “future growth in aviation should ensure that benefits are shared between the aviation industry and local communities”. We concur and our interpretation is that the local community must derive benefits and although benefits may be seen across other parts of the UK, the primary sharing is for between the local airport operator and the local community.

16. As a defining principle of the noise envelope, we are firmly of the view that technological improvement and the introduction of quieter fleet must first occur before airport capacity is released. We consider that the primary role of the noise envelope is to control and reduce noise. It should not facilitate any increase in noise exposure and so to safeguard against any short to medium term increase in noise exposure no additional capacity should be released until a quieter fleet is in operation.

17. By reference to the slide 10, in relation to future fleet composition we consider that there is potential for a central case fleet mix to be delivered at the airport and that this should be the base line case for growth. We do not consider that the airport should become noisier. If capacity is delivered as a result of the completion of development but fleet is not as forecast then slot release can be withheld and release can occur on the basis of incentivising quieter aircraft.

18. Fleet mix is also referred to in slide 17. The York aviation position is quoted from the PEIR. It is considered misleading to quote this as the comments were based on limited information in the PEIR and this is over a year out of date. The current position may not reflect that view as it is subject to ongoing discussion.

Metrics

19. A number of metrics have been discussed. Local authorities believe that it is appropriate to have a suite of metrics. The metrics identify items to be monitored and reported. Appropriate baselines, operational ranges (including upper and lower limits), how those are treated and how they are used to drive performance is expected to be the subject of further discussion by reference to the existing proposals and we would also refer to the emerging Luton strategy.

20. Metrics have been described as being two categories: Primary and secondary. We consider primary metrics should be those against which airport performance is judged or there is some obligation for national or international comparability against standards. Typically these would be most influential on the operation of the airport and would ultimately be something that could result in a penalty.

21. The secondary metrics are those that are produced for information and may inform noise control.

22. It should be possible to escalate metrics from secondary to primary under an appropriate review mechanism. Similarly, there may be occasions when the primary metrics are relegated to secondary metrics. It is foreseeable that there may be two limits for the same noise index to reflect LOAEL and SOAEL.

23. The primary metrics / controls we consider necessary are:

- i. LA_{eq 16h} (with extent and area of 54 contour the limiting factor)
 - ii. LA_{eq 8h} (with extent and area of 45 contour the limiting factor)
 - iii. N above: N60 night (with extent and area of 10 events the limiting factor)
 - iv. N above: N65 day ((with extent and area of 100 events the limiting factor)
 - v. Night noise regime (for summer adopt existing DfT movement cap and reduce quota count for core night period. A local winter movement and quota cap needs to be agreed).
 - vi. Lden: tba
 - vii. Lnight: tba
 - viii. Full fleet noise quota information based on summer and winter periods. This will enable fleet transition to be monitored.
 - ix. A slot or air traffic movement cap. This is to include all aircraft movements not solely commercial aircraft.
- Items i to iv to be presented on summer, winter and annual basis.

24. The secondary metrics we consider necessary are:

- i. LA_{eq 16h} (with extent and area of 60 contour the limiting factor)
- ii. LA_{eq 8h} (with extent and area of 48 contour the limiting factor)
- iii. N above: N60 night (with extent and area of 30 events the limiting factor)
- iv. N above: N65 day (contour to be confirmed, provisionally 40 events)
- v. Awakening contours –one additional awakening compared to a 2019 baseline
- vi. Population / properties exposed – actual for a given year and population for 2025 base
- vii. Overflights (over periods to be defined and to be an enhancement of the existing CAP standard so that it includes consideration of an aircraft noise event). Air Traffic Movements by aircraft noise category: Annual; Monthly; diurnal by hour (for summer and winter).
- viii. Para 21. Items i to iv to be presented on a summer 100% Easterly and 100% Westerly operation.

For transparency and enforceability, any information needed to support a metric must also be monitored, verified and reported.

25. We consider that equal importance should be given to the N above contours N60 and N65 as well as the average sound levels Leq 8 and 16 hr respectively as we do not see that the two correlate as is stated in slide 15.

26. The publication of annual actual and predicted noise contours for all the noise indices must also occur showing appropriate intervals in addition to the above levels whether or not they are regarded as a metric under para 21. And 22. Above.

27. Composite metrics may be required following further discussion.

28. As great dependence is placed on monitoring and modelling for compliance, this process must also be regularly audited and verified to ensure confidence in the results.

29. In considering baselines, we do not agree that metrics should only be shown for the increase in capacity with the new runway. If there is a health effect then the total impact of one runway growth plus the additional capacity of the northern runway needs to be understood compared against the 2019 baseline position. The increase or change for the northern runway may be unacceptable in the context of an increasing baseline. We refer to the presentation of the awakening contours where the worst case marginal increase was said to be around 0.8 awakenings as an annual average but no figures were provided for the increase in awakening compared to a 2019 baseline.

Specific Controls

30. In addition to what might be viewed as general limits and measures (such as the 54 noise contour) there will also need to be specific controls over specified operational practices to limit impact on the communities. One such example is noise and track keeping compliance. Track deviation is unlikely to show in the primary metrics but will have an impact on the local communities that ought to be controlled.

Review of Envelope

31. We would welcome further discussions on how a review of a noise envelope is triggered and by whom. We concur with the need for a periodic review and extraordinary review. We would like further information about the proposals for the purpose of the operational review as we would expect operational thresholds to only be exceeded when there was confidence that the noise envelope noise levels would not be exceeded.

Oversight & Dispute Resolution

32. Any structure defined for the general oversight should include a mix of stakeholders including the Local Planning Authorities. Gatwick Airport Ltd should recompense in full any expenses incurred by the authorities. This includes any appointments for independent advice.

33. There may be occasions where there is a challenge by one party against a view held by another. Where that requires escalation for dispute resolution, appropriate structures and mechanisms need to be in place to determine a matter. We would like further discussion on this as there may be a case for GATCOM, the Local Planning Authority or another party to facilitate this. Prior to the formation of the NMB, structures funded by the Gatwick Airport Ltd and facilitated by the planning authorities were highly effective at addressing similar issues.

Enforcement

34. The noise envelope is seen as a management tool that should integrate operational and noise control and drive compliance. We support the aim of it being preventative or corrective in nature. Nonetheless it should also be capable of being enforced against where appropriate.

35. For specific aspects such as the noise and track keeping, we would expect the airport operator to be capable of this. However, ultimately the Local Planning Authority has a role and together with interested authorities it may become involved and we would welcome discussion on this aspect. We consider this needs to be better described before the submission of the DCO.

David Monk (Crawley Borough Council)

On behalf of:

Leon Hibbs, Reigate & Banstead Borough Council

Lee Money, Horsham District Council

Rob Ivens, Mole Valley District Council

Adam Dracott, Mid Sussex District Council

[20221111 – LA Comments on output Report and Process and GAL Response](#)

From: Rebecca Mian [REDACTED]
Sent on: Friday, November 11, 2022 6:01:19 PM
To: Monk, David [REDACTED]
CC: Leon Hibbs [REDACTED]; lee.money [REDACTED]; Adam Dracott [REDACTED]; Ivens, Rob [REDACTED]; Andy Sinclair [REDACTED]; Lydia Grainger [REDACTED]; Jonathan Deegan [REDACTED]; Murray Taylor [REDACTED]
Subject: RE: 2022_11_07 LA Comments on NEG output and Process.pdf

Dear David,

Thank you for sharing the combined local authority comments.

We have taken some time since receiving your input on Monday to consider how to integrate the submission and its content into the Output Report. As we reviewed your comments it became

apparent that a significant proportion related to the Noise Envelope itself, rather than the draft Output Report, which in many cases would have meant integrating completely new comments, ideas and proposals not previously discussed in the Noise Envelope Group meetings. Given the Output Report was largely finalised and the extensive nature and variety of your input, it has not proved possible to integrate your submission in a way that is consistent with the summary narrative and the discussions held through the process.

You'll be aware that while some of the points in your submission have been aired and discussed, others are new and are worthy of much more detailed discussion/exploration with you and the other Local Authority members. The analysis we would have been able to provide in the time available before our committed timeline for publication of the Output Report is not sufficient and with that in mind we have decided not to include the submission in the Noise Envelope Group Output Report. We will therefore, carry this over into our discussions with you and the Local Authorities through the Noise Topic Working Group, which will allow us the time to more fully explore your ideas and proposals. This will naturally be taken forward in to the Report that results from our engagement with you through the Noise TWGs, so it will not be omitted from our submission to PINS.

I hope you can understand the rationale for this course of action and that the results of this approach are aimed to provide a more detailed review of your submission. We look forward to discussing the points you raised over the coming weeks through the Noise TWGs. Lydia will be in touch in due course setting out how we plan to address the content of your submission starting at the next Noise TWG.

Once again please accept and pass on my thanks to your colleagues, for taking the time to provide this submission.

Regards,
Rebecca

Dr Rebecca Mian
Chair of the Noise Envelope Group
Noise Management Initiatives Engagement Manager
Airspace Office
Corporate Affairs, Planning and Sustainability
Gatwick Airport Limited
7th Floor, Destinations Place
Gatwick Airport, West Sussex, RH6 0NP
YOUR LONDON AIRPORT


From: Monk, David [REDACTED]
Sent: 07 November 2022 13:04
To: Rebecca Mian [REDACTED]; Andy Sinclair [REDACTED]
Cc: Leon Hibbs [REDACTED]; lee.money [REDACTED]; Adam Dracott [REDACTED]; Ivens, Rob [REDACTED]
Subject: [EXTERNAL SENDER] 2022_11_07 LA Comments on NEG output and Process.pdf

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, **do not** click links or open attachments

Dear Rebecca and Andy,

Please find attached the local authority comments in relation to the noise envelope group output report.

Yours sincerely
David
David Monk
Principal Environmental Health Officer

20221213 – GACC Complaint

From: Charles Lloyd [REDACTED]
Sent on: Tuesday, December 13, 2022 12:50:57 PM
To: Gatwick Airport Noise Management Board [REDACTED];
Andy Sinclair <[REDACTED]>
CC: GACC [REDACTED] >
Subject: [EXTERNAL SENDER] Re: Noise Envelope Group Output Report
Attachments: CNG COMMENTS ON GAL NOISE ENVELOPE GROUP OUTPUT
REPORT FINAL.docx (83.99 KB)

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, do not click links or open attachments

Dear Andy and Rebecca

I'm writing to let you know, for the record, that GACC does not accept that the final Noise Envelope Group Output Report you circulated on 11 November is a valid or complete record of the noise envelope discussions held over the summer, or of the comments we made during those discussions, or of the outputs of the process.

The community groups (other than CAGNE) commented extensively on your draft output report in our email of 1 October 2022 and the attachment to it (attached again for reference). Of the 28 comments we made, 19 were not reflected in the final report at all, eight (mostly minor) were accepted and one was partially accepted. There was no discussion with us in relation to the comments that you decided to reject and no explanation has been provided. In our view all our comments were necessary for a reader to gain a proper understanding of the engagement process you carried out and of the position of the community groups on the issues discussed and GAL's proposals.

We note that you intend to attach copies of all feedback documents to the final report when it is submitted to PINS, but do not believe that this is an adequate substitute for a complete report that properly reflects the views of all stakeholders.

We will be making PINS aware of our concerns in this respect in due course.

Regards

Charles

From: Gatwick Airport Noise Management Board [REDACTED]

Sent: 11 November 2022 20:39

Subject: Noise Envelope Group Report

Dear all,

Please find attached the final draft of the Noise Envelope Group Output Report.

Please note that when the report is sent to PINS, it will have attached each of your feedback documents in full, exactly how they were sent to me during the process. The only change I will be making is that if you sent anything in a word or powerpoint document, it will be converted to a pdf.

Once again, thank you all for your generous time and contributions.

With regards,
Rebecca

Dr Rebecca Mian

Chair of the Noise Envelope Group
Noise Management Initiatives Engagement Manager
Airspace Office
Corporate Affairs, Planning and Sustainability

Gatwick Airport Limited

7th Floor, Destinations Place
Gatwick Airport, West Sussex, RH6 0NP

YOUR LONDON AIRPORT

Gatwick

Subject: [EXTERNAL SENDER] Technical Note on Updated metrics docx.pdf
Date: Friday, 6 January 2023 at 15:54:08 Greenwich Mean Time
From: Monk, David
To: Andy Sinclair, Lydia Grainger, Murray Taylor
CC: Ivens, Rob, Leon Hibbs, lee.money, Adam Dracott
Attachments: image001.jpg, Technical Note on Updated metrics docx.pdf

CYBER AWARE - Caution, this is an external email. Unless you recognise the sender and know the content is safe, **do not** click links or open attachments

Dear All,

Please find attached confirmation of revised proposals in relation to the noise metrics.

Yours
David

David Monk
Principal Environmental Health Officer

CORONAVIRUS

WASH YOUR HANDS MORE OFTEN FOR 20 SECONDS

Use soap and water or a hand sanitiser when you:

- Get home or into work
- Blow your nose, sneeze or cough
- Eat or handle food

KEEP YOUR DISTANCE – NO CLOSER THAN 2 metres

Protect yourself & others

For more information go to [nhs.uk/coronavirus](https://www.nhs.uk/coronavirus)

Can't afford to heat your home or want to reduce your bills?

Visit our Winter Warmer locations for warm and comfortable spaces with free hot and cold drinks, mobile device charging, and cost of living and wellbeing information.

Technical Note to Gatwick Airport in relation to noise metrics

1. This document provides an update to the memoranda issued to Gatwick on the 7 November 2022.
2. It updates and replaces paragraphs 23 and 24 and in all other respects should be read in conjunction with the memorandum.
3. This is the most recent view of the local authorities in relation to the metrics for the noise envelope.
4. The primary metrics
 - i. Leq 16h (with extent and area of 54 and 60 contour as the limiting factor) expressed over the summer, winter, annual periods/
 - ii. Leq 8h (with extent and area of 45 contour the limiting factor) summer and winter periods
 - iii. Lnight (45)
 - iv. N above: N60 night (with extent and area of 30 events the limiting factor)
 - v. The night noise regime as it stands is to be adopted including existing DfT movement cap for summer and winter periods and reduction in the quota count for core night period.
 - vi. A slot or air traffic movement cap. This is to include all aircraft movements not solely commercial aircraft. This is phased release: ie release is dependent on the improvement in fleet.
 - vii. The publication of full fleet noise quota information based on summer and winter periods at periods to be agreed with the local planning authority. (This will enable fleet transition to be monitored.)

For transparency and enforceability, any information needed to support a metric must also be monitored, verified and reported.

Where a contour is to be reported then the polygon and the area are to be reported.

5. The secondary metrics are as follows:
 - i. N above: N60 night (with extent and area of 10 events the limiting factor).
 - ii. N above: N65 day (contour to be confirmed, 100 events)
 - iii. Awakening contours – one additional awakening when comparing all airport operations and air transport movements compared to a 2019 baseline.

- iv. The population and properties exposed – the actual figures for a given year compared to a baseline population and property dataset for 2025 for all indices and reported contours.
 - v. Overflights (over periods to be defined and to be an enhancement of the existing CAP standard so that it includes consideration of an aircraft noise event).
 - vi. Air Traffic Movements by aircraft noise category: Annual; Monthly; diurnal by hour (for summer and winter).
 - vii. Leq 16hr (summer & annual) , Leq 8hr, N60, N65 day to be presented on a summer 100% Easterly and 100% Westerly operation as well as standard and actual modal split where this is available.
 - viii. Lden as required by ERU adopted legislation.
6. For all noise indices the noise contours are to be shown at 3dB intervals with appropriate maxima and minima to be agreed with Planning Authority.
7. We consider that this requires the following datasets, most of which are already produced by the airport:
- a) Leq 16h: Annual
 - b) Leq 16h: Summer
 - c) Leq 16h: Winter

 - d) Leq 8h: Annual
 - e) Leq 8h: Summer
 - f) Lnight

 - g) N above N60 night
 - h) Night noise regime
 - i) N above N65 day
 - j) Ld,e,n
 - k) Air Traffic Movements
 - l) QC information for all fleet
8. For transparency and enforceability, any information needed to support a metric must also be monitored, verified and reported.
9. Should you require clarification please address these to us in writing. We are continuing to refine our thoughts so it would be good to receive your feedback on these points.

David Monk

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06/01/2022

GAL response to technical note issued by David Monk on behalf of Local Authorities on 06/1/2023 in relation to noise metrics. This response was circulated to Local Authorities on 03/02/2023 as part of papers for Noise TWG 4 of 8/2/2023		
Para	Local Authority Comment	GAL Response
1	This document provides an update to the memoranda issued to Gatwick on the 7 November 2022.	We have held 3 two-hour Topic Working Group (TWG) meetings since then to discuss the Noise Envelope, on 29/11/2023, 14/12/2023, 4/1/2023. As referred to on Slide 3 of the slide deck for the 4/1/2023 meeting we have now held 6 TWG meetings in which we have discussed Local Authority views on the Noise Envelope including noise metrics.
2	It updates and replaces paragraphs 23 and 24 and in all other respects should be read in conjunction with the memorandum.	Whereas we note this, it would be helpful if, having reviewed our responses in this document, you would please provide us with a single consolidated response. We have sought to clarify some of the comments made in your 7 November document within the TWGs, however, we remain unclear on the meaning of several of the points made. We would like to understand these given that many were not raised in the preceding NEG meetings or TWGs.
3	This is the most recent view of the local authorities in relation to the metrics for the noise envelope.	<p>The rationale for the noise metrics proposed was first published in November 2021 within Appendix 14.9.5 of the DCO PEIR, and summarised in Section 14.8. This followed consultation with the LPAs on the proposals earlier in 2021.</p> <p>GAL's views on Noise Metrics as then, were presented to the LPAs at the Noise Envelope Group (NEG) Theme 2 meeting on 23 June 2022 in detail. The NEG met 13 times between May and September 2022, during which meetings the subject of noise metrics was frequently brought up by stakeholders notably community groups. We welcome the LPAs further comments on noise metrics albeit during the very latter stages of the timescale within which GAL now has to finalise the Northern Runway Project (NRP) Noise Envelope.</p>

4	<p>The primary metrics</p> <p>i. Leq 16h (with extent and area of 54 and 60 contour as the limiting factor) expressed over the summer, winter, annual periods/</p>	<p>It is agreed that summer season Leq 16 hr should be a primary noise metric, ie a metric which is used to set a Noise Envelope limit.</p> <p>Government Policy and the Regulation 598 process requires that the noise envelope be defined in consultation with Local Communities and other stakeholders. The Local Authority Officers did not explain to the Noise Envelope Group that they would be recommending a 54dB Leq contour and 60 dB Leq contour as primary metrics.</p> <p>Community representatives on the NEG were of the opinion that the envelope should cover as wide an area as possible. We also heard from airline representatives that the envelope should not interfere with the safe operation of the aircraft. We consider that setting limits at higher contour levels is not desirable as these tend to be associated with the safety critical flight phases of flight where there is very little discretion on the part of the pilot regarding how the aircraft is to be operated.</p> <p>There was ample time for the LPA officers to explain your in-principle views to the wider stakeholder group in the sessions relating to the NEG Output Report, and to gain feedback on these from the other parties. No substantive debate occurred and yet it is clear that your position is at odds with the views of others.</p> <p>Our further observation is that Mole Valley DC's response in July 2022 contains a proposal for limits to be set on 54 and 60 or 63dB Leq contours. It was an oversight on our part that MVDC's comments were not included in the NEG Output Report – and as we have said clearly, we regret this - however, no attempt was made to raise the omission with us at the time. Moreover, given the memoranda issued to us subsequently, it seems indicative that the Local Authorities as a group may have held similar views to MVDC for some time but not made these points within the NEG debates.</p> <p>Moving on from this, as we stated clearly within the NEG, we believe the Leq 16 hr level should be 51dB because it is the Lowest Observable Adverse Effect Level (LOAEL) defined in government policy. The Leq 16 hr 54dB contour would encompass about 11,000 people, whereas the Leq 16 hr 51 dB contour would encompass about 26,000 people. The primary purpose of a Noise Envelope is to give certainty on future noise levels, and the proposal to apply this to the 54dB contour would give that certainty to 15,000 fewer people. Our proposal to use the Leq 16 hr 51dB contour also addresses the</p>
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		<p>views of various community groups, as we heard expressed in the NEG meetings, that the Noise Envelope should cover communities in lower noise level areas.</p> <p>The LPAs have expressed concern that Leq 16 hour noise levels as low as 51dB cannot be modelled accurately, so 54dB would be more reliable. Our proposal is for the CAA's ERCD to produce the noise contour using their ANCON model. We arranged for ERCD to give a presentation to the TWG (7th June 2022) on the validation of this model in which it was demonstrated that it is valid to Leq 16 hr 51dB. We have also taken on board the LPAs suggestion that the Noise Envelope processes should include further ongoing validation of the model.</p> <p>We welcome your comment that controlling noise using an Leq 16 hr 51dB contour level could have an unexpected consequence at higher noise levels closer to the airport, such as at 60dB. We have discussed this in our meetings, and whilst we consider such unexpected consequences unlikely for the reasons explained in our discussions, we have agreed to monitor and report noise levels (as contour areas) at the Leq 16 hr SOAEL level of 63dB as a secondary metric.</p> <p>We have discussed with you noise levels in winter and over annual periods. However, the 92 day summer season is the season used by government in defining LOAEL and for good reason, as we have explained – as it is the noisiest period in the UK and the period when noise impacts can be more felt due to the warmer weather. We have explained that at Gatwick winter noise levels will always be lower than summer. Our forecasts tell us this, and the differential in the DfT Night Restrictions for the summer and winter seasons dictate this for the night period. We therefore do not consider it necessary to report winter season noise levels.</p> <p>European legislation has required GAL to produce Lden and LNight contours (which cover the 12 month period) for Noise Action Plans and this requirement is expected to continue. However, as noted in EU regulation and for example by the WHO, where local noise dose response relationships are available those should be used. In the UK we have summer season Leq 16 hr and 8hr for which we have established dose/response relationships. Hence an annual average metric is less appropriate. However, as discussed with you we have agreed to include an annual average Leq 16 hr contour as a supplementary metric to monitor periods outside the summer to check they are not becoming noisier.</p>
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	<p>ii. Leq 8h (with extent and area of 45 contour the limiting factor) summer and winter periods</p>	<p>It is agreed that summer Leq 8 hr should be a primary noise metric, ie a metric to which a limit is set in the Noise Envelope.</p> <p>The Level of summer season Leq 8 hr 45dB is agreed as a primary metric with a limit. Like the Leq 16 hr 51dB, the Leq 8 hr 45 dB is the LOAEL.</p> <p>The areas of Gatwick's Leq 8 hr 45dB contours are typically slightly larger than the Leq 16 hr 51dB, eg 157.4 km² versus 146.7 km² in the 2032 NRP Slow Transition Fleet case. We note you have not expressed concern over the reliability of the ANCON noise model at levels down to Leq 8 hr 45dB. We would be happy to discuss your reasons for this further, as at face value it appears at odds with your concern over modelling accuracy for the Leq 16 hr 51dB contour which is smaller, and falls nearer the airport.</p> <p>As for Leq 16 hour, for the reasons given above, annual Leq 8 hr 45dB will also be reported as a secondary metric in the Noise Envelope. Annual Leq 8 hr night is the same as LNight as required for Noise Action Plans.</p> <p>The PEIR contains annual Leq 8hr or LNight contours, and demonstrates they are smaller than summer season Leq 8 hr, eg in the 2032 Slow Transition Fleet NRP case LNight 45dB has an area of 117.5 km² compared to summer season Leq 8 hr 45 with an area of 157.4 km².</p>
	<p>iii. Lnight (45)</p>	<p>This will be reported as a secondary noise metric as described in the previous line.</p>

<p>iv. N above: N60 night (with extent and area of 30 events the limiting factor)</p>	<p>Around the world there are dozens of metrics used to quantify aircraft noise. Any of these could potentially be used to set noise limits in a Noise Envelope. Our concern, however, is that the metric should have predictable characteristics, and have the best correlation with effects to health and quality of life. In the UK, Government uses summer season Leq 16 hr and Leq 8 hr night to quantify aircraft noise throughout the 24 hour period, and has set the LOAELs for each, above which that quantification is required, and various policy objectives apply. The Government has done this on the basis of studies on the effects of aircraft noise which have established dose/response relationships for these metrics. The metrics are then used within the WebTAG aviation workbook to assess the effects of transport projects. Dose/response relationships for N60 or N65 are not provided within WebTAG. Government research has reviewed the performance of these metrics and concluded that they do not perform as well as Leq.</p> <p>We have discussed the merits of N60 with you. In the NEG meeting on 23 June we explained in slide 23 (quote from CAA CAP1616):</p> <p style="padding-left: 40px;"><i>Whereas all aircraft noise events contribute to Leq 8 hour, only the noisiest 10 count for the largest N60 10 contour. N60 takes no account of how many aircraft are below Lmax 60, or how much above Lmax 60 the peaks are.</i></p> <p>This is not to say that Number above metrics do not have a place to aid understanding of noise exposure and hence we support their use as secondary metrics.</p> <p>In December LPA officers mentioned CAP2161 Survey of Noise Attitudes 2014: Aircraft Noise and Sleep Disturbance, July 2021 as the basis for your suggestion that N60 30 should be a primary metric. It was suggested by the LPA officers that this CAP proposed this level as a SOAEL. To be clear: CAP2161, does not suggest N60 30 as a SOAEL. It provides an analysis of the correlation of N60 and Leq 8 hr to self-reported sleep disturbance from the SONA 2014 survey. The r^2 correlations given in Table 12 are: Leq 8 hr 0.883 and N60 0.822. This suggests Leq 8 hr correlates slightly more closely with this measure of sleep disturbance than N60. The CAP concludes in paragraph 8.9:</p> <p style="padding-left: 40px;"><i>8.9 All three noise indicators are highly correlated with night-time self-reported sleep disturbance ($r^2=0.822-0.883$). The r^2 for Lnight (0.842) was slightly lower than for LAeq,8h (0.883). It is plausible that Lnight is inferior to LAeq,8h as both Gatwick and Stansted airports experience significant seasonality with greater numbers of night flights during the summer months. N60 is found to correlate almost as well as LAeq8h and Lnight. Based on this exploratory analysis, there</i></p>
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		<p><i>is insufficient evidence to change from the current practice of using average summer night LAeq,8h noise exposure for UK assessments.</i></p> <p>CAP 1731 Aviation Strategy: Noise Forecast and Analyses, February 2019 also provides some advice on the merits of N60 and N65 metrics:</p> <p>Chapter 7 Proposed Limit, 7.1 Noise metrics, page 59: <i>Other supplementary noise exposure metrics analysed to limit noise exposure are Number Above, PEI and AIE [Person Event Index and Average Individual Exposure]. These metrics can be applied to either summer or annual average time periods as well as for different periods of the day. In this report they have been analysed for the summer period. Number Above metrics are useful to understand how often a population is exposed to aircraft noise, but have the disadvantage that they treat noise at different levels in the same way, e.g. a noise event of 71 dB or 80 dB Lmax is counted, but an event at 69 dB or 50 dB Lmax is not. Nevertheless, Number Above presents a way of understanding the number of events above a certain noise level, but it does not directly relate to the level of exposure...</i></p> <p>Continuing on page 60 (our emphasis added): <u><i>Given that Number Above lacks an ability to restrict population exposure, it is not recommended as a main noise limit.</i></u> However, Number Above are recognised as a useful supplementary noise metric and it is recommended as a KPI to be monitored at each airport.</p> <p>Hence, the CAA guidance in 2019 and 2021 points out the shortcoming of N60 and N65 as indicators of noise impacts and recommends against using them as main noise limits. Taking account of this and in view of your suggestions and those of other stakeholders, GAL propose N60 10 and N65 20 as secondary noise metrics for the noise envelope. These will be modelled and reported annually but without fixed limits.</p>
	<p>v. The night noise regime as it stands is to be adopted including existing DfT movement cap for summer and winter periods and reduction in the quota count for core night period.</p>	<p>The Night Restrictions are set and enforced by the DfT and are consulted on periodically by the Department. As noted in the PEIR we have assumed they will prevail during the operation of the Northern Runway Project. They are important to Airport users and are part of the very wide series of controls limiting the effects of noise at Gatwick.</p>

	<p>vi. A slot or air traffic movement cap. This is to include all aircraft movements not solely commercial aircraft. This is phased release: ie release is dependent on the improvement in fleet.</p>	<p>See 5 vi below.</p>
	<p>vii. The publication of full fleet noise quota information based on summer and winter periods at periods to be agreed with the local planning authority. (This will enable fleet transition to be monitored.)</p>	<p>QC data is published under the Night Restrictions enforced by the DfT, as discussed below. Whilst QC is a broad (3dB banded) indicator of noise level, it is measured during aircraft certification and not during operation at Gatwick, thus it is not the best indicator for an aircraft noise level when operating at Gatwick.</p> <p>Taking on board discussions and suggestions from James Lee in the Noise Envelope Group we propose a secondary Airport Fleet Average Aircraft Noise as Lmax dB. This may be based on the average Lmax noise level from aircraft measured under the Departure Noise Limits monitoring regime over the summer season or a representative part of it.</p>
	<p>For transparency and enforceability, any information needed to support a metric must also be monitored, verified and reported.</p>	<p>Noted, as discussed and agreed.</p>
	<p>Where a contour is to be reported then the polygon and the area are to be reported.</p>	<p>Noted, this is our intention.</p>

5	<p>The secondary metrics are as follows: i. N above: N60 night (with extent and area of 10 events the limiting factor).</p>	<p>Your memo of 7th November suggested about 27 primary metrics, 20 secondary metrics giving a total of 47 metrics. This paper suggests about 22 secondary metrics and 14 primary metrics.</p> <p>In our TWG meeting on 29th November in discussing your proposals we presented on slide 23 the following context for the Northern Runway Project Noise Envelope.</p> <p><i>Noise Envelopes for airports envisaged by policy may arise in a variety of contexts. CAP1129 provides broad guidance relates to Noise Envelope in a variety of contexts. This Noise Envelope relates specifically to the Gatwick Northern Runway Project (NRP). The NRP Noise Envelope will be determined by the Planning Inspectorate and enforced via the DCO. The NRP Noise Envelope will be the primary noise planning condition for the Project.</i></p> <p>We referred to CAP1129 Chapter 5 Implementation; Legal Basis, Planning Controls, p48:</p> <div style="border: 1px solid black; padding: 10px;"> <p>On a number of occasions the courts have laid down the general criteria for the validity of planning conditions. In addition to satisfying the court's criteria for validity, the Secretaries of State take the view that conditions should not be imposed unless they are both necessary and effective, and do not place unjustifiable burdens on applicants. As a matter of policy, conditions should only be imposed where they satisfy all of the tests described in paragraphs 14-42 of the circular. In brief, these explain that conditions should be:</p> <ul style="list-style-type: none"> i) necessary ii) relevant to planning iii) relevant to the development to be permitted iv) enforceable v) precise vi) reasonable in all other respects. <p style="text-align: center;">_____</p> <p style="text-align: center;">12 Circular 11/95: Use of conditions in planning permission</p> </div> <p>December 2013</p>
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		<p>Circular 11/95 has since been replaced by Planning Practice Guidance, however the “Use of Planning Conditions” section on the Government website continues to reference the same six tests. We do not consider your suggestion for over 30 noise metrics to be appropriate - in particular they would be neither concise nor necessary to control the effects of the development.</p>
	<p>ii. N above: N65 day (contour to be confirmed, 100 events)</p>	<p>See 4 iv above. Taking account of this and in view of your suggestions and those of other stakeholders, GAL propose N60 10 and N65 20 as secondary noise metrics for the noise envelope. These will be modelled and reported annually but without fixed limits.</p>
	<p>iii. Awakening contours – one additional awakening when comparing all airport operations and air transport movements compared to a 2019 baseline.</p>	<p>Between 2019 and the opening of the NRP air traffic will change and so too will the number of awakenings, thus this metric would not measure the impact of the Project.</p> <p>We have provided awakening mapping in our presentation on our Physiological Sleep Disturbance Assessment study on 14 October 2022 and have subsequently issued these as shape files. The study will be reported in the ES and concluded: “The number of additional awakenings per person on an average summer night due to the Project is predicted to be less than one in all locations. This is in the context of the average number of awakenings for a healthy person for non-noise reasons of 20 per night”.</p> <p>The suggestion that awakenings are used as a further metric within the Noise Envelope in order to provide certainty over further noise levels is considered unnecessary, given the scope of the metrics we have proposed and with reference to CAP1129 and the current “Use of Planning Conditions” guidance.</p>
	<p>iv. The population and properties exposed – the actual figures for a given year compared to a baseline population and property dataset for 2025 for all indices and reported contours.</p>	<p>The problems associated with population changing over time and properties having noise mitigation, have been discussed with you on various occasions. And we note your agreement that for these reasons they cannot be limited in primary metrics.</p> <p>GAL agrees that populations within the various noise contours in the Noise Envelope should be monitored with reference to a fixed point in time such as the opening year of the Project, and annually thereafter noting population changes due to land use changes, population growth, new housing etc.</p>

	<p>v. Overflights (over periods to be defined and to be an enhancement of the existing CAP standard so that it includes consideration of an aircraft noise event).</p>	<p>Overflights have been modelled and assessed in the Environmental Statement in terms of their overall effect on landscape and tranquillity, but an overflight is not a measure of noise or noise impacts so would not obviously serve to meet the objectives of a Noise Envelope.</p> <p>Your suggestion to use a modification of the CAP1498 definition so that it includes consideration of an aircraft noise event is new, and you have not been able to offer explanation since. It remains unclear what you are suggesting. However, if this is proposing a further noise metric our general comments on multiple metrics above may apply.</p>
	<p>vi. Air Traffic Movements by aircraft noise category: Annual; Monthly; diurnal by hour (for summer and winter).</p>	<p>The number of ATMs is a very poor indicator of noise impact. CAP1731 (February 2019) analysed the correlation between various possible metrics and noise effects metrics (see table 7.1 (a) on p 57. The correlation between an average summer day ATM cap and the number of people highly annoyed by noise is 0.06 which is the poorest correlation of any of the 13 metrics analysed. The correlation between average summer day Leq 16 hr 54dB and the number of people highly annoyed by noise is 0.94, the highest correlation of all 13 metrics. GAL do not consider an ATM cap as a good metric through which to limit aircraft noise; however recognising its use in other planning precedents to assist in broadly limiting overall effects to those assessed, we are reviewing whether the use of an ATM cap has potential advantages generally for NRP.</p> <p>CAP1129 p16 notes: <i>The simplicity of the movement cap is clearly attractive in terms of engaging people, but it has drawbacks as well. A key drawback is that it does not take into account the noisiness of aircraft and would therefore not offer incentives to industry to operate quieter aircraft. If newer and quieter aircraft are brought into service at an airport whose activity is limited by a movement cap, the local communities' share of the benefits would be greater than that of the industry who brought about the changes in the first place. A movement cap may therefore not be appropriate for long-term agreements if an appropriate balance is to be struck between controlling noise and enabling economic growth.</i></p>

<p>vii. Leq 16hr (summer & annual) , Leq 8hr, N60, N65 day to be presented on a summer 100% Easterly and 100% Westerly operation as well as standard and actual modal split where this is available.</p>	<p>Leq 16 hr and Leq 8 hour are defined as average modal split by DfT when defining LOAEL. This is because long term noise effects such as annoyance and sleep disturbance are not determined by either noise levels on westerly operating days or by noise levels on easterly operating days, but by the combination of both as experienced in the relevant proportions over the long term.</p> <p>CAP 1506 Survey of Noise Attitudes 2014: Aircraft Noise and Annoyance, Second Edition, July 2021 concludes:</p> <p><i>Is summer day, average mode, still the best time period to use as opposed to single-mode?</i></p> <p><i>8.11 Whilst evidence was found indicating that easterly-mode noise exposure correlated best with mean annoyance score (r2=0.95), westerly-mode noise exposure was found to have the poorest correlation (r2=0.21). This occurs because respondents were found to be more annoyed by easterly-mode noise exposure compared to westerly-mode for a given noise level. Practically, this means that single-mode contours are unsuitable for decision making, but that they may be helpful for portraying exposure and changes to exposure.</i></p> <p><i>8.12 Of the average-day modes, the existing 92-day summer average mode was found to correlate better (r2=0.88) than shorter average modes (r2=0.69-83). There was therefore no evidence found to support a change from the current practice of basing LAeq,16h on an average summer day.</i></p> <p>If 100% easterly contours were generated and reported they would extend further to the East than average mode contours. Likewise, if 100% westerly contours were generated and reported they would extend further to the West than average mode contours. If adopted for a noise envelope the two additional areas to the East and West would be included within the noise envelope. The area to the East would be within the 100% modal split contours roughly 30% of the summer 92-day period, ie on average 28 days. The area to the West would be within the 100% modal split contours roughly 70% of the summer 92-day period, ie on average 64 days. It would seem inequitable to consider the area to the West in the same way as the areas to the East that is within the noise level 2.3 times less often. We do not have a dose response relationship for 100% modal contours. The Local Authorities have not explained what purpose they would serve, so GAL does not propose to produce them for the Noise Envelope.</p>
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<p>viii. Lden as required by ERU adopted legislation.</p>	<p>Lden was introduced under EC Directives 2002/49 as adopted in the Environmental Noise (England) Regulations, 2006 and accordingly GAL produce these noise contours within the Noise Action Plan every five years. Lden applies a 5dB weighting to the evening period and a 10dB weighting to the night period. There is no UK research to support these 5 and 10dB weightings. CAP 1506 Survey of Noise Attitudes 2014: Aircraft Noise and Annoyance, Second Edition, July 2021 considered the merit of Lden as an indicator of the annoyance levels reported by approximately 2,000 residents living around UK airports, and concluded:</p> <p><i>Is LAeq,16h still the most appropriate indicator to use to estimate the annoyance arising from aircraft noise?</i></p> <p><i>8.7 The study compared reported mean annoyance scores against average summer-day noise exposure defined using four different noise indicators: LAeq,16h, Lden, N70 and N65.</i></p> <p><i>8.8 Evidence was found that mean annoyance score correlated well with average summer day noise exposure, LAeq,16h (r2=0.87). There was no evidence found to suggest that any of the other indicators Lden, N70 or N65 (r2=0.66-0.73) correlated better with annoyance than LAeq,16h.</i></p> <p><i>8.9 Having said this, the study recognises that residents can struggle to understand the concept of a time-averaged metric such as LAeq,16h and Lden and the fact that it is measured and reported on a logarithmic scale where a change of 3 dB represents a doubling or halving of noise energy.</i></p> <p><i>8.10 There is, therefore merit in considering greater use of ‘Number Above’ metrics as supplemental indicators to help portray noise exposure, but recognising that evidence-based decisions should continue to use LAeq,16h. In this context N65 is preferred over N70 as noise events in many areas are already beginning to occur at levels less than 70 dB LASmax and are forecast to reduce over time.</i></p> <p>GAL will continue to report Lden contours in the Noise Action Plan but not in the Noise Envelope.</p>
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6	For all noise indices the noise contours are to be shown at 3dB intervals with appropriate maxima and minima to be agreed with Planning Authority.	Agreed, Leq contours will be reported in 3dB intervals. The LPAs have not indicated preferred maxima and minima and so we propose to follow CAA guidance in CAP 1616 as used in the NRP PEIR in November 2021 as follows: Leq 16 hr 51, 54, 57, 60, 63, 66, 69 dB Leq 8 hr 45, 48, 51, 54, 55, 57, 60, 63, 66, 69 dB
7	We consider that this requires the following datasets, most of which are already produced by the airport: a) Leq 16h: Annual b) Leq 16h: Summer c) Leq 16h: Winter d) Leq 8h: Annual e) Leq 8h: Summer f) Lnight g) N above N60 night h) Night noise regime i) N above N65 day j) Ld,e,n k) Air Traffic Movements l) QC information for all fleet	See above. In addition l) lists QC data. QC data is published under the Night Restrictions enforced by the DfT, as discussed above.
8	For transparency and enforceability, any information needed to support a metric must also be monitored, verified and reported.	Noted, as discussed, and agreed.

9	<p>Should you require clarification please address these to us in writing. We are continuing to refine our thoughts so it would be good to receive your feedback on these points.</p>	<p>As referred to on Slide 3 of the slide deck for the 4/1/2023 meeting we have now held 6 TWG meetings in which we have discussed Local Authority views on the Noise Enveloped including noise metrics. We welcome any further evidence-based suggestions for the noise envelope. However, we have made clear in our last two TWG meetings we are now finalising our Noise Envelope proposal and that this will be evidence and policy based.</p> <p>We would very much like to reach agreement with you on the Primary and Secondary metrics and hope you will find the above helpful in further understanding our position. We repeat also that we do not yet have a full understanding of some of the points made in your first memorandum of 7 November 22 and would be very willing to discuss these further, particularly so as to ensure that if there are actually matters of mis or non-understanding of each other's positions that we have the opportunity to resolve these. If you have refined your thoughts further it would be extremely helpful to provide a consolidated summary to us.</p>
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