

Gatwick Airport Noise Management Board

Workplan Implementation Report

NDG-15
15th March 2023

Introduction

This report summarises the status of NMB activities captured within the NMB currently adopted Workplan. The 12 priority activities to improve the aircraft noise environment in and around Gatwick, and included within this report, are:

	Workplan Activity	Status	Status Key	
Procedural changes	1. Reduced night flight noise	➡	Complete or achieved	✓
	2. Landing gear deployment	➡	In progress ¹	➡
	3. New departure noise limits & fines	➡	Ongoing ²	↻
	4. Improve departure continuous climb	✓	Paused	⏸
	5. Review of noise abatement procedure for the Instrument Landing System (ILS) minimum joining point during the night	✓	Stopped/Not started	○
Procedural influences	6. Implement Airline Noise Table	↻	¹ In progress - An activity that is actively being progressed, and hasn't yet been implemented.	
	7. Deliver & incentivise Low Noise Arrivals Metric	➡		
	8. Agree & routinely use noise metrics	↻	² Ongoing - An activity that has been implemented and is carried out as a matter of routine.	
Strategic change influencing	9. Engagement with FASI-S	↻		
	10. Examine Fair & Equitable Distribution	➡		
Noise-related information for decision making	11. Planning & Noise	➡		
	12. Growth & Noise	➡		

The following slides provide a summary of progress, key milestones, interdependencies and current timelines for each workplan activity. **Revised target milestone dates** have been presented where activities have been paused due to the COVID-19 pandemic (resulting low traffic), and where progress doesn't align with target milestone dates as presented in the NMB Workplan.

Procedural Change

ACTIVITY 1: REDUCED NIGHT FLIGHT NOISE

Overview: The aim of the Reduced Night Noise Trial is to measure and assess the extent to which PBN technology can deliver noise benefits for arriving aircraft during the night period, by reducing the number of 'outliers' that are significantly lower or noisier than most aircraft. The trial, initiated in 2017, was paused in 2020 as a result of the pandemic. This activity focuses on re-start of the trial, including associated planning, training, trial implementation and post-trial review.

Status: ➡

Project milestones:

Key:

Not started

Ongoing

Complete

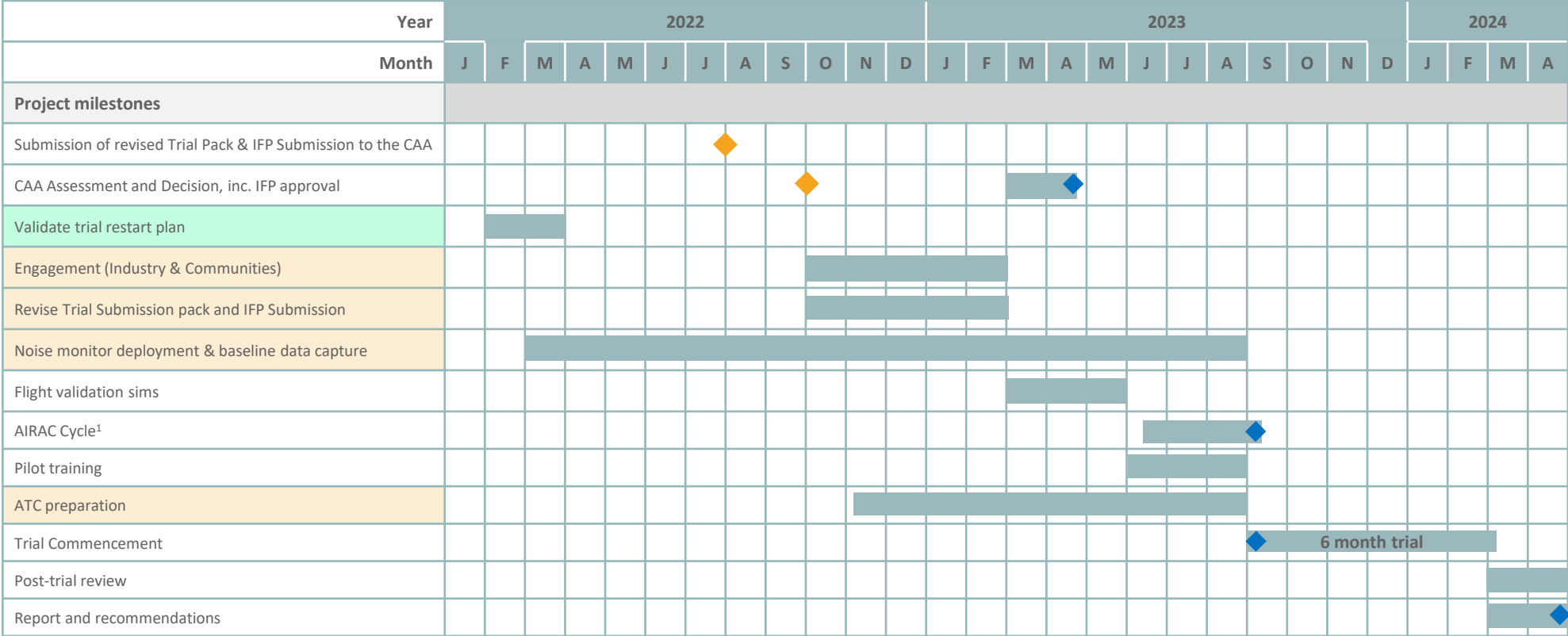
Key:

◆ NMB Workplan target date

◆ NMB Workplan Target date achieved

◆ Revised target date (due to COVID-19 / low traffic)

◆ Revised target date (due to other reasons)



Progress update:

- EasyJet have agreed to host Airbus sim trials, and BA have agreed to host wide-body Boeing sim trials.
 - The Trial Submission Pack and procedure designs are currently being updated.
 - CAA are currently reviewing IFP designs.
 - The baseline noise data capture is ongoing and will continue through 2023. Analysis will then be carried out to determine the key outliers and noise environment in pre-trial conditions.
 - Unchanged:** Current timescales assume trial start date 7 September 2023.
- ¹Mandatory 3-month publication cycle for global updates of aeronautical information, informing airspace users around the world of the temporary (trial) airspace change at Gatwick.

Procedural Change

ACTIVITY 2: LANDING GEAR DEPLOYMENT

Overview: The aim of this study is to determine whether noise reductions can be achieved at Gatwick Airport through optimisation of landing gear deployment by arriving aircraft at the airport.

Status: ➡

Key: Not started Ongoing Complete

Project milestones:

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021						2022												2023											
Month	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																														
Desktop review of other airports' trials	◆																													
Field study completion and development of a report.			◆									◆																		
Engagement with airlines to determine whether optimisation is feasible						◆							◆																	
Development of a landing gear deployment optimisation procedure, and engagement with stakeholders																	◆									◆				
Report and recommendations																	◆									◆				

Progress update:

- A pilot survey was undertaken in September 2021; due to low traffic levels this only assessed a small number of aircraft. The results of the pilot survey informed the main survey.
- Initial engagement with airlines to discuss the findings of the pilot study was undertaken in October 2021. Data was requested to allow further analysis.
- The main survey was completed in May 2022 and measured data for over 150 aircraft flown by various airlines. The data was combined with the Pilot Survey data, concluding that deployed landing gear increases L_{max} and SEL noise levels by approximately 2.5dB in Lingfield.
- Further engagement with easyJet in October 2022 confirmed that their Flight Data Recorder data on landing gear deployment would require a manual flight by flight extraction process and would be subject to complex union and security protocols, so unfortunately was not practicably possible for this study.
- Latest:** AIP guidance is being drafted for discussion at a workshop with industry stakeholders – Date 20.03.2023.

Procedural Change

ACTIVITY 3: NEW DEPARTURE NOISE LIMITS AND FINES

Overview: The aim of this study is to conduct a review of the current departure noise limit regime at Gatwick Airport, with the objective of incentivisation of additional fleet and procedural improvements to reduce departure noise. Engagement with stakeholders, including airlines, will be undertaken.

Status: ➡

Project milestones:

Key: Not started Ongoing Complete

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021						2022												2023											
Month	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																														
Data analysis, regime proposal, and report development		◆																◆												
Consultation on proposed scheme (through the Northern Runway Project Consultation)						◆																								
Engagement with industry (Airlines)												◆				◆		◆												
Engagement with the NMB												◆					◆													
Revised proposal, taking into account feedback received, approval by GAL															◆						◆									
Proposal shared with Secretary of State for approval																	◆							◆						
If approved, adoption of the new regime and system and documentation updates																														◆

Progress update:

- A new regime was proposed, and a report developed, in August 2021.
- The proposed regime was consulted on through the Northern Runway Project Consultation process, which concluded on 1st December 2021. Analysis of the consultation feedback completed in March 2022.
- Initial engagement WS with industry was held 19 October, and further engagement with industry and communities took place 5 December 2022.
- Latest:** The engagement report has been drafted and will be ready for discussion at NDG-15 in March 2023.

Procedural Change

ACTIVITY 4: IMPROVE DEPARTURE CONTINUOUS CLIMB

Overview: The aim of this study is to compare the noise environment (i.e. noise contours) of a range of CCO and non-CCO departure climb profiles for a range of aircraft types, to understand the noise impacts of each, and to feed the findings of the study into FASI-S options development work for future design consideration.

Status: ✓

Project milestones:

Key: Not started Ongoing Complete

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023												
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
Project milestones																																
Data analysis and report development	◆																															
CCO industry workshop to determine how the outputs of the study might inform FASI-S planning				◆																												
Revised report, taking into account feedback received, approval by GAL							◆																									
Report findings to the NMB								◆																								
Report findings to the FASI-S options development team											◆																					

Progress update:

- Analysis was undertaken in Q2 2021 and a report presenting the study findings was prepared. Following further engagement through a CCO industry workshop in September 2021, which discussed the findings of the study and looked to determine how the outputs might inform FASI-S planning, it was agreed that further analysis for a large aircraft type was required. Analysis for the large aircraft type was completed in December 2021.
- Due to the requirement for further analysis in Q3/Q4 2021, the workplan target date for the final report (Q2 2021) was extended by 6 months.
- Study findings were reported to the NMB through NCF-6 on 26 Jan 2022.
- A workshop with industry stakeholders, including CAA and FASI-S options development team, was held on 5 April 2022 to determine what the results of the study mean for FASI-S options development and future airspace design. The report has been shared with the FASI-S options development team marking the closure of this activity.
- The CCO study output will contribute to the Gatwick FASI-S ACP evidence base and will be factored into the design of the vertical profile for departure route options. The study output has also been shared with the Airspace Change Organising Group (ACOG) as part of a wider activity to assess how CCO can be applied across the airspace modernisation programme. Future FASI-S ACP progress will be captured through the FASI-S engagement activity.

Procedural Change

ACTIVITY 5: REVIEW OF NOISE ABATEMENT PROCEDURE FOR THE INSTRUMENT LANDING SYSTEM (ILS) MINIMUM JOINING POINT DURING THE NIGHT

Overview: The aim of this review is to perform a study of the noise abatement procedure for the ILS minimum joining point during the night, and to identify theoretical but realistic alternatives to the current minimum night joining point. The study will include an assessment of the associated noise impact of each option, including identification of suitable metrics to assess impacts. Study findings will be used to inform FASI-S planning.

Status: ✓

Key: Not started Ongoing Complete

Project milestones:

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
Establishment of the tSG and approval of tSG ToR	◆																														
Commission an independent delivery partner				◆																											
Undertake NMB ILS Workshop						◆																									
Data analysis and report development by independent delivery partner. Briefing of study findings to the NMB								◆																							
Report to FASI-S options development team								◆																							

Progress update:

- The technical Steering Group (tSG) ToRs were adopted in July 2021 and an independent delivery partner was appointed in September and work commenced in October 2021. The first NMB ILS workshop took place on 23 November 2021.
- Technical Steering Group meetings were held on; 21st October, 17th November, and 16th December 2021.
- The final report was presented to NMB members during an NMB briefing on 24 January 2022. The report was published in February 2022, and was shared with the FASI-S Options development team marking the closure of this activity.
- The ILS study output will contribute to the Gatwick FASI-S ACP evidence base and will be factored into the development process for arrival route options during the night. Future FASI-S ACP progress will be captured through the FASI-S engagement activity.

Procedural Influence

ACTIVITY 6: IMPLEMENT AIRLINE NOISE PERFORMANCE TABLE

Overview: The aim of this activity is to construct metrics and trial and implement the Airline Noise Performance Table (already achieved). Next steps involve a review of how the table is working, including a review of existing metrics and integration of new metrics if required.

Status: 

Key: Not started Ongoing Complete

Project milestones:

Key:  NMB Workplan target date  NMB Workplan Target date achieved  Revised target date (due to COVID-19 / low traffic)  Revised target date (due to other reasons)

Year	2021						2022												2023											
Month	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																														
Review and update the Airline Noise Performance Table						◆								Part 1 ◆										Part 2 ◆						

Progress update:

- The Airline Noise Performance Table has been reported in GAL's Noise Reports since Q4 2020. It is updated quarterly and reported through the Airspace Office's Quarterly/Annual Reports.
- The review scheduled for Q4 2021 was delayed due to limited data collection resulting from the pandemic. The review has been taking place in the latter half of 2022.
- The review is being conducted in two parts: Part 1 will focus on streamlining the backend data analysis process and improving the user interface. It was also going to be published as a separate article on the Gatwick Noise Website. Deployment was completed in August 2022.
- Latest:** Part 2 is currently ongoing. The table is being adapted to PowerBI capability and once complete shall be hosted on the Gatwick website in the form of an automated dashboard. Engagement with communities is currently anticipated to take place in Q1 2023, aiming for deployment in June 2023.

Procedural Influence

ACTIVITY 7: DELIVER & INCENTIVISE LOW NOISE ARRIVALS METRIC

Overview: The aim of this activity is to conduct desktop validation of the Low Noise Arrivals metric at Gatwick using measured noise data and arrival flight trajectories (already achieved). Next steps include a briefing and discussion on the new Low Noise Arrivals Metric to the NCF or NEX, and to adopt the metric following roll out by Sustainable Aviation (SA).

Status: ➡

Project milestones:

Key: Not started Ongoing Complete

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023												
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Project milestones																																
Metric briefing provided to the NMB	◆																															
CAA CAP publication				◆				◆																								
Development of operational roll out plan by SA sub-group				◆																◆												
LNAM in operational – shadow mode – use within GAL NTK system							◆																	◆								
LNAM NATS Dashboard in operational use within airlines and ANSPs – TBC																																

Progress update:

- Metric validation concluded in Q4 2020.
- A briefing on the new metric was provided to the NEX in Q2 2021, and the CAA CAP document was published on 13th January 2022.
- NATS have developed a dashboard, which will be used to monitor performance for ANSPs and UK airlines.
- GAL is currently working with Envirosuite (NTK provider) to integrate the metric into it's Noise and Track Keeping system. Once implemented, GAL will run an initial 12 months of monitoring in shadow mode to assess how the metric performs in day-to-day airport operations, in terms of industry response, adaptation, and benefit. This has been signed off by the SA LNAM sub-group; A programme of progress reporting will be agreed as part of the implementation planning, once a date is confirmed.
- An information piece is being drafted between GAL and ERCD ahead of a Sustainable Aviation Airlines Workshop in April 2023.
- **Latest:** Implementation of metric in to ANOMS is confirmed for May 2023.

Procedural Influence

ACTIVITY 8: AGREE & ROUTINELY USE NOISE METRICS

Overview: The aim of this activity is to agree and trial the use of >N60 and >N65 metrics (already achieved), and to consider noise metrics and communications protocol to be drafted by CNG representatives as the basis for future discussion.

Status: 

Project milestones:

Key: Not started Ongoing Complete

Key:  NMB Workplan target date  NMB Workplan Target date achieved  Revised target date (due to COVID-19 / low traffic)  Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
Use of N/above (N60 and N65) metrics alongside Leq (averaged) noise contours (throughout NMB second term)																															

Progress update:

- N/above (N60 and N65) metrics are routinely used for all noise reduction trials and to measure noise (already in use). These are monitored by Gatwick's Noise and Track Monitoring Advisory Group (NaTMAG).
- Proposed protocol prepared by CNG and discussed at NEX/3 in June 2021. GAL provided a detailed response the conclusion in which; 'GAL can see an opportunity to include further detail around Gatwick's commitment to noise monitoring and communication being included in the next iteration on the END Noise Action Plan; actions 32 to 39 of Gatwick's current END Noise Action Plan set out some of the airport's noise monitoring activity'.

Strategic Change Influence

ACTIVITY 9: ENGAGEMENT WITH FASI-S

Overview: The aim of this activity is to undertake FASI-South workshops for NMB stakeholders to develop participants knowledge on FASI-S and implications/possible advantages for noise reduction around Gatwick.

Status: 

Key: Not started Ongoing Complete

Project milestones:

Key:  NMB Workplan target date  NMB Workplan Target date achieved  Revised target date (due to COVID-19 / low traffic)  Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
FASI-South airspace change process is properly informed on Gatwick noise issues (throughout NMB Second Term)																															

Progress update:

- A virtual workshop was held on 24 June 2021 for NMB and NATMAG members
- Subsequent workshops took place with stakeholders, arranged by the FASI-S team:
 - 2021 - 2 & 3 Sep; 7 & 9 Dec
 - 2022 - 15, 17 & 23 Feb; 18 Mar
- Drop-in Q&A sessions were held: 17 & 23 Mar 2022
- Options appraisal engagement workshops in 2022:
 - 23, 24 & 28 Jun 2022
 - Feb 2023 (Planned)
- Parish Council engagement sessions:
 - 5 & 6 Oct 2022
 - 5 & 9 Dec 2022

Strategic Change Influence

ACTIVITY 10: EXAMINE FAIR & EQUITABLE DISTRIBUTION

Overview: The aim of this study is to define and quantify Fair and Equitable Distribution (FED) of aircraft, in order that FED concepts may be used to inform Option Development for FASI-S as regards aircraft using Gatwick, whether arriving or departing. The study includes an independent assessment of how FED concepts could be achieved, as well as identification of suitable metrics to measure and report distribution of traffic and noise disturbance.

Status: ➡

Key: Not started Ongoing Complete

Project milestones:

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
Establishment of the tSG and approval of tSG ToR	◆																														
Commission an independent delivery partner					◆																										
Undertake NMB FED Workshop						◆																									
Data analysis and report development by independent delivery partner. Briefing of study findings to the NMB.						◆				◆																					
Report to FASI-S Options development team							◆		◆																						

Progress update:

- An independent delivery partner was appointed in October 2021.
- Following a series of workshops, technical steering groups and NMB briefings spanning December 2021 – January 2022, the final report was presented to members at an NMB briefing and published in March 2022. The final report has been shared with the FASI-S ACP team.
- Funding from the UK CAA AMS Support Fund was confirmed in September 2022, allowing GAL to contract a new project team for further work on FED. The project duration will be 12 months, and within the full timeline of the project, key milestones are built in, to feed into the ongoing FASI-S process.
- **Latest:** The Expert Review Group and Stakeholder Focus Group took place in November 2022, with the first (of 4) of the Community Fundamentals Workshop rounds taking place February 2023. Once these have been completed, data will be analysed for the first Q-methodology stage and the first feed-in to FASI-S.

Noise Related Information for Decision Making

ACTIVITY 11: PLANNING & NOISE

Overview: The aim of this activity is to develop a proposal, following engagement with local planning authorities represented at NATMAG, and NMB stakeholders, to Councils and a separate one to Sustainable Aviation on need for greater consideration of aviation noise in residential land use planning decisions, to include identifying what additional information could be provided by airports to support planning authorities.

Status: ➡

Key: Not started Ongoing Complete

Project milestones:

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
Scoping of Action Plan																															
Engagement with local planning authorities and Councils																															
Report & recommendations																															

Progress update:

- Scoping of action plan undertaken in Q3 2021 for briefing to the NEX in Q4 2021.
- A questionnaire was circulated to local planning authorities in March and July 2022. Responses have been collated and reviewed.
- A Local Authorities workshop was held on 29 November 2022 – the report of which is being drafted and will be fed back to workshop attendees in February.
- **Latest:** A letter has been sent to the DfT by the NMB co-chairs setting out their views on the need for more effective measures for Land Use Planning.

Noise Related Information for Decision Making

ACTIVITY 12: GROWTH & NOISE

Overview: Discussions on growth and noise, dependent on flight growth post-COVID.

Status: ➡

Key: Not started Ongoing Complete

Project milestones:

Key: ◆ NMB Workplan target date ◆ NMB Workplan Target date achieved ◆ Revised target date (due to COVID-19 / low traffic) ◆ Revised target date (due to other reasons)

Year	2021							2022												2023											
Month	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Project milestones																															
Review airport growth and noise				◆									◆																		

Progress update:

- This topic was introduced during the NMB’s first term. GAL undertook a noise policy review and reported the findings (NMB/14 IP30) in January 2019. The COVID-19 pandemic impacted Gatwick traffic for the duration of the NMB’s second term so work in this area was paused.
- In May 2022 GAL formed a Noise Envelope Group (with two sub-groups) which included Community Noise Action Groups, industry stakeholders and Local Authorities, to consult on the development of a Noise Envelope to accompany the Development Consent Order application for the Northern Runway Project. NCF members were invited to join the Noise Envelope Local Sub-group, which met in May and June with further meetings planned for July and August. Discussions included how a noise envelope can be formed and managed to provide certainty that future noise levels will be limited and will reduce where possible, as the airport grows.
- The engagement process through the Noise Envelope Group was extended to include two further review meetings, lengthening the process into November. The engagement process is now complete. A report of the process and stakeholder feedback on the Noise Envelope proposal has been finalised and disseminated and will be submitted along with all feedback documents received to the Planning Inspectorate as part of the DCO at the end of Q1 2023.