



Airspace Modernisation Gatwick Airport

Stakeholder Engagement Report

Ref Code: Version 1.0

Date of Issue: September 2023

REDACTED

DOCUMENT CONTROL

Document Reference GAL FASI ACP Round 2 Stakeholder Engagement Report

Version V1.0

Date September 2023

Status Private until final and redacted and then public

Classification Public - Redacted for CAA Portal

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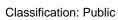
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1. Introduction

Purpose of this report

This document provides a detailed overview of how Gatwick Airport Limited (Gatwick, GAL, our or we) have engaged with Stakeholders during Stage 2 of our airspace change proposal (ACP) 2018-60 – the redesign of departure and arrival routes as part of the FASI (Future Airspace Strategy Implementation) South Programme. The stakeholder engagement is designed to meet the requirements laid out in the fourth edition of the Civil Aviation Authority's (CAA's) guidance on the regulatory process for changing the airspace design (known as CAP1616).

In the context of this report, the phrase stakeholder engagement is used in general terms to mean developing relationships with third parties that may be affected by the Gatwick FASI South ACP. The terms stakeholder engagement covers a variety of activities, including regular and one-off briefing sessions, workshops, focus groups, bilateral meetings with individual stakeholders, communications materials, and all related documentation.

Consultation, a formal notified period seeking structured inputs from stakeholders on specific proposals, is one aspect of the engagement activities required by CAP1616 process during Stage 3 of the seven-stage process.

This stakeholder engagement report documents the stakeholder engagement Gatwick has conducted throughout Stage 2 of the CAP1616 process. Much of the information contained within this document has been shared with stakeholders as we have progressed through Stage 2. Gatwick have now combined all the material into this document to form part of the material provided to the CAA as part of our regulatory submission for the Develop and Assess gateway at the end of Stage 2.



CAP1616 guidance on changing the notified airspace design

Airspace changes, including changes to the arrival and departure routes that serve airports, are governed by the CAA's Airspace Change Process, CAP 1616 which is split into 7 Stages, as illustrated in Figure 1 opposite.

The Gatwick FASI ACP is currently in Stage 2, Develop and Assess. Stage 2 is broken into 2 Steps, Step 2A where we develop a comprehensive list of options that address the Statement of Need and align with the design principles established during Step 1B.

We then test our comprehensive list of options with the same group of representative stakeholders that we engaged during Step 1B to ensure that the options align with the design principles, and we have satisfactorily accounted for stakeholder concerns.

Options can then be refined where necessary, using the feedback offered by stakeholders, before moving onto the Design Principle Evaluation.

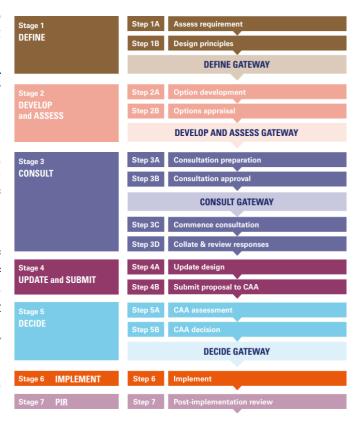


Figure 1 Overview of the CAP1616 Airspace Change Process

Step 2B is where we carry out the Initial Options Appraisal of the airspace change options which proceed from Stage 2A.

Structure of this document

This document is structured into the following sections set out in table 1.

Table 1 Structure of the round 2 stakeholder engagement report

Section Name	Description	
1. Introduction	An overview of the purpose of this document and how it fits within the CAP1616 process	
Stage 2 Stakeholder Engagement Strategy	Summary of our stakeholder engagement strategy for Stage 2 of this ACP	
3. Stakeholder Engagement Overview	An overview of the stakeholder engagement undertaken to date	
Airspace Awareness (Pre- Round 1 Engagement) (Event A) Details of the kick-off engagement event to restrict following the COVID-19 related pause Output Details of the kick-off engagement event to restrict following the COVID-19 related pause		
5. Stage 2A Round 1 Workshops	Details of the first round of engagement workshops focusing on the methodology that we propose to follow to develop and assess	



options for the ACP. The stakeholders invited to these worl were separated into three groups: 1) Communities and Government, 2) Airlines and ANSPs, and 3) General Aviati other airspace users		
Stage 2A Stakeholder Update Briefing	Details of the second round of engagement undertaken in December 2021 to update Stakeholders on progress of the ACP	
7. Summary of Actions: Round 1 A summary of follow up actions arising from the engaged conduct to date		
8. Stage 2A Round 2 Comprehensive List of Options Engagement	Details of the second round of engagement workshops where we shared our Comprehensive List of Options for this ACP and asked for feedback.	
9. Stage 2A Round 3 Design Principle Evaluation Details of the third round of engagement undertaken in to update Stakeholders on the outcomes of the engather the Comprehensive List of Options and provide an over Design Principle Evaluation Process.		
10. Stage 2A Route 3 Parish Council Details of the Parish Council engagement undertaken in and December 2022.		
11. Stage 2A Design Principle Evaluation Outcomes and Introduction to Initial Options Appraisal Details of the workshops held in January and February 20 explain the outcome of the Design Principle Evaluation (DPE provide an overview of the Initial Options Appraisal (IOA).		
12. Stage 2B Initial Options Appraisal Outcomes Details of the workshops held in July and August 2023 to part of the methodology and outcomes from the Options Appraisal.		
Appendix A – Plan for Stage 2 Engagement Rounds (From 2021)		
Appendix B – Stakeholder List and Engagement Log		
Appendix C – Round 2 Feedback Tables		
Stage 2 Engagement Evidence (Published on the CAA's Airspace Change Portal)		

Background

The Department for Transport (DfT) and CAA published the UK's Airspace Modernisation Strategy (AMS) in December 2018. The strategy describes how the airspace above Southern England is reaching capacity and contains design features that restrict the aviation industry's ability to improve its operational and environmental performance. Without a fundamental redesign of the airspace structure and route network, the industry will increasingly struggle to meet the future demand for air transport in a sustainable and resilient way.

The redesign of the airspace in Southern England is being delivered as a single coordinated programme known as FASI (Future Airspace Strategy Implementation) South. The DfT asked all affected airports, and NATS En route Limited (NERL), to develop ACPs as part of the programme. The ACPs are separated into local and network airspace components using approximately 7000ft as the dividing boundary. Under these arrangements, NERL is leading





the ACPs required to upgrade the airspace structure and route network above c.7000ft. The airports, including Gatwick, are leading a set of interdependent ACPs to redesign their respective local arrival and departure routes below c.7000ft. The interdependencies between the ACPs must be carefully coordinated to ensure that the options developed by the individual proposals can be integrated effectively and optimise the overall system-wide airspace design.

The Airspace Change Organising Group (ACOG) was established by the DfT and CAA to coordinate the FASI-S Programme and manage the interdependencies through the development of an Airspace Change Masterplan (the Masterplan). A high-level draft of the Masterplan (known as Iteration 1) was developed in 2020, before the programme was paused because of the extraordinary impact of the COVID-19 pandemic. In March 2021, the Government made funding available to restart the programme and help the airports to develop and assess airspace design options for their ACPs, enabling ACOG to produce the next iteration of the Masterplan (known as Iteration 2). We are working with ACOG, NERL and other airport ACP sponsors to ensure that our approach to developing and assessing options for the Gatwick FASI South ACP is aligned with the wider programme and generates the information required to support the further development of the Masterplan.

Note on pausing and restarting the ACP due to the COVID-19 pandemic

Given the uncertainty surrounding the extraordinary impact of the COVID-19 pandemic, the Gatwick FASI South ACP was paused in April 2020 whilst we, and our stakeholders, considered the effects on the industry and the public, and adapted our plans accordingly. In October 2020 the CAA released a policy statement providing guidance to sponsors currently progressing through the CAP1616 process about restarting ACPs that were paused due to the pandemic. For an ACP to restart, the CAA must understand if there have been changes to a number of contextual considerations, including; any changes to the issue or opportunity in the Statement of Need, the operating environment or geographical area in which the ACP is being developed; changes to law, government policy or CAA requirements that would affect the development of the ACP, or parts of an ACP; and changes to the identified stakeholder groups.

Following the announcement in March 2021 by the DfT and the CAA of Government financial support for the FASI programme, we requested to restart the Gatwick FASI South ACP in May 2021 and confirmed to the CAA that there had been no changes to any of the above contextual considerations. However, Gatwick did identify that it would be prudent to undertake some additional re-engagement with community stakeholders in preparation for the ACP restarting.



2. Stage 2 Stakeholder Engagement Strategy

Engagement objectives and principles

CAP1616 guidance lays out detailed process steps for the development of an ACP. The Gatwick FASI South ACP is currently in Stage 2 of the process. The overriding objective of Stage 2 is for all viable airspace design options to be developed and assessed in a manner that is consistent, repeatable, objective and transparent; specifically to:

- Adequately consider, in a consistent manner, all viable options.
- Enable the CAA to re-run aspects of the appraisal to validate the outputs.
- Demonstrate clear objectivity in the option assessment process.
- Enable stakeholders to understand the rationale behind our assessment.

The main output of Stage 2 is a shortlist of the most appropriate and effective design options that are then taken forward to the Full Options Appraisal and Consultation phase in Stage 3 of the process. Airspace design options are considered appropriate in the sense that they are aligned to the Design Principles developed with stakeholder representatives in Step 1B, and effective in the sense that they achieve the overall objectives of the ACP as set out in the Statement of Need.

One of the main goals of the CAP1616 process is that ACPs are developed openly through regular engagement with the affected stakeholders. Throughout the process, the ACP sponsor is required to demonstrate that effective engagement has provided the stakeholders with a reasonable understanding of the current situation, clear information about what is being proposed and the assurance that their inputs will be conscientiously taken into account. It is clear from the CAP1616 guidance and our experience of other airspace changes that for the process to function correctly the engagement must be conducted in an open, fair, transparent, and effective way. These objectives will underpin our approach to stakeholder engagement during all stages of the Gatwick FASI South ACP in the following ways:

- Open: Stakeholders will be assured that the airspace change process is not a foregone conclusion, their feedback is valued, and they can influence the final design.
- Fair: Stakeholders will have advanced notice of the engagement activities to plan their contribution and adequate time and information to form meaningful inputs.
- Transparent: Stakeholders will be presented with information to help them understand the impacts of the proposed changes on them. All information will be clear and accessible. Although the concepts included may be complex the language used to communicate them will not be.
- Effective: Stakeholders will be provided with a complete and accurate set of information that does not require technical knowledge to understand and respond. The engagement information will focus on the factors that are decisive and of substantial importance to the development and assessment of airspace design options, and not drift into related topics.



In addition to the objectives above, we have developed three key goals to help ensure that our engagement activities are effective. These are to:

- Engage early and often. Engaging with stakeholders at formative points in each stage of the CAP1616 process will help to establish a transparent and effective environment, as well as set an appropriate tone for ongoing engagement.
- All materials developed must be simple and tailored. This is to ensure that all stakeholders
 receive a transparent and focused engagement approach, allowing them to base their
 views on a reasonable understanding of the situation. The use of technical jargon and
 industry-specific acronyms will managed carefully.
- All feedback must be easy to provide and taken into consideration. Stakeholders must be
 able to express their views in an easy manner and have confidence that Gatwick will take
 them into consideration and offer feedback.



Stage 2 Engagement Requirements

Table 2 below summarises the engagement activity for Stage 2 of the ACP process. This aligns with and goes above the stakeholder engagement requirements set out in the CAP1616 guidance associated with Steps 2A, 2B and 3A of the CAP1616 process.

Table 2 Summary of planned stakeholder engagement for Step 2A, Step 2B and Step 3A

CAP1616 Step	Description	Summary of planned engagement activity	
Stage 2 Step 2A	Development of Airspace Design Options	 Test the methodology used to develop a Comprehensive List of all viable options for the ACP with the same representative stakeholders engaged in Step 1B. Engage the representative stakeholders on the Comprehensive List to ensure they are satisfied that the options are aligned to the design principles and the sponsor has understood and accounted for any concerns. 	
		 Update representative stakeholders on the outcomes of the Design Principle Evaluation that examines how well each option meets the Design Principles to narrow down to a shortlist of viable options. 	
Stage 2 Initial Options Appraisal	Options	Update representative stakeholders on the development of the Initial Options Appraisal to capture views from the representative stakeholders. This will <u>not</u> include detailed discussions on the pluses and minuses of each specific option because this takes place during Stage 3.	
Stage 3 Step 3A	Full Options Appraisal and Consultation Strategy	 Engage with representative stakeholders on the development of the Full Options Appraisal with a particular focus on airspace design trade- offs and the assessment of cumulative impacts with other interdependent ACPs (for example those being developed by Heathrow and NERL). 	
Stage 3	Ful public consultation	Consult with the public on Gatwick's Airspace Change Proposal	

Our strategy for meeting the Stage 2 stakeholder engagement requirements associated with Steps 2A and 2B is organised into three parts:

- Round 1: Kick-off Stage 2 stakeholder engagement and gather feedback to test the options development and assessment methodology that we plan to follow.
- Round 2: Engagement on the comprehensive list of options to provide assurance that the options are aligned to the design principles and identify stakeholder concerns.
- Round 3: Engagement on the outcomes of the design principle evaluation and the approach to developing the initial options appraisal.



Engagement Rounds

At the start of the Stage 2 engagement, Gatwick outlined the Stage 2 stakeholder engagement strategy and noted to stakeholders that this would evolve as the Airspace Change progressed through Stage 2. Gatwick's timeline for Stage 2 submission has changed twice since this first engagement strategy was shared with stakeholders and subsequently the plans for stakeholder engagement have been adapted to accommodate these changes as well as to reflect the feedback received from stakeholders around our approach to engagement.

The original plan for the Stage 2 engagement rounds is shown in <u>Appendix A</u> for transparency, however the following sections in this document reflect the actual engagement which was undertaken throughout Stage 2.

Originally, it was intended that this Stakeholder Report would be shared after each round of engagement and updated periodically throughout the engagement process. However, owing to the amount of engagement undertaken, the document rapidly became very large. Cognisant of stakeholder feedback around the quantity of engagement material, particularly as Gatwick was also engaging on the Route 4 ACP and the Northern Runway Development Consent Order, Gatwick chose to share the Question and Answer documents and key excerpts from this report with stakeholders at each round of engagement, rather than the full report. This enabled stakeholders to focus on the factors that are decisive and of substantial importance to the development and assessment of airspace design options which formed a key part of our engagement strategy.



3. Stakeholder Engagement Overview

Following the announcement in March 2021 by the DfT and the CAA of Government financial support for the FASI programme, we requested to restart the Gatwick FASI South ACP in May 2021. Table 3 shows the stakeholder engagement that has taken place following the ACP restart and provides links to where more information can be found in this document. The table also includes a letter reference which refers to the section within the Stakeholder Engagement Evidence published on the CAA's <u>Airspace Change Portal</u>.

The main Stakeholder Engagement Presentations have been combined into a separate Annex within the Stage 2 submission. <u>Annex A Evolution of the Options Design</u> can be found on the CAA's <u>Airspace Change Portal</u>.

Table 3 Summary timeline of stakeholder engagement activities conducted since the ACP restart

Timeline	Activity	Link to more details	Stakeholder Evidence Reference
June 2021	Airspace Awareness (Pre-Round 1 Engagement) Gatwick identified that it would be prudent to undertake some additional re-engagement with community stakeholders in preparation for the programme restarting. This engagement took place with Gatwick's Noise Management Board (NMB) and Noise and Track Monitoring Advisory Group. Although this engagement was outside of the formal rounds for Stage 2, we have included the information here as there were useful questions raised around the Airspace Change Process and it also enables us to record and track actions from the meeting.	Section 4	Event A
September 2021 & October 2021	Round 1 Options Development In September and October 2021 Gatwick held the first round of stakeholder engagement workshops. These were split into three groups; local communities and council stakeholders, airlines and ANSPs, and General Aviation and other airspace users.	Section 5	Event B, C and D
December 2021	Round 1 Stakeholder Update Briefing Originally, as part of the round 1 events, we had planned to hold round 2 workshops in December 2022 however due to changes to the ACP timeline, this round of engagement was postponed until February 2022. Instead, Gatwick held a stakeholder update briefing.	Section 6	Event E



	Round 2 Comprehensive List of Options		
February 2022	In February and March 2022, we held the second round of stakeholder engagement workshops. Gatwick invited all stakeholders who were engaged during round 1 and the December update briefings. Three workshops took place on the 15th, 17th and 23rd of February. For this round of engagement, to facilitate as many opportunities for engagement as possible we did not split the workshops into three groups as per round 1, instead all stakeholders were invited to attend any of the dates available.	Section 8	Event F
June 2022	Round 3 Design Principle Evaluation In June 2022 we held the third round of stakeholder engagement workshops. These sessions were originally due to take place in May, however as we extended the feedback period for the previous round of engagement, and as the dates would have fallen over the weeks either side of the Jubilee Bank Holiday weekend, we moved these sessions to the end of June. Gatwick invited all stakeholders who were engaged during Round 2 of stakeholder engagement. Three workshops were planned for 23 rd , 24 th and 28 th June. For this round of engagement all stakeholders were invited to attend any of the dates available.	Section 9	Event G
October and December 2022	Stage 2A Round 3 Parish Council Engagement In October and December 2022 Gatwick held four stakeholder briefing sessions with Parish Council stakeholders to introduce the new stakeholders to the ACP and developments to date, allowing them to join and participate in future engagement sessions.	Section 10	Event H
January and February 2023	Stage 2A/B Round 3 Design Principle Evaluation Outcomes and Introduction to Initial Option Appraisal Engagement Sessions In January and February 2023, Gatwick held three Stakeholder briefing sessions with all stakeholders to update on the outcomes of the Design Principle Evaluation and to provide an overview of the Initial Options Appraisal. For this round of engagement, to facilitate as many	Section 11	Event I



	opportunities for engagement as possible all stakeholders were invited to attend any of the dates available.		
July and August 2023	In July and August 2023, Gatwick held three Stakeholder briefing sessions to provide an overview of the Initial Options Appraisal (IOA) methodology and the outcomes of the IOA. For this round of engagement, to facilitate as many opportunities for engagement as possible, all stakeholders were invited to attend any of the dates available although a specific date/time for General Aviation (GA) representatives was made available.	Section 12	Event J

Stakeholder Identification

Stage 2 of the CAP1616 Process requires us to engage with the same Stakeholders engaged at Stage 1B. Throughout the Stage 2 activity to date, we have reviewed our stakeholder list and updated stakeholders as and when appropriate. We have introduced some additional stakeholders compared to Stage 1B and we have also removed some stakeholders; details of both can be found in the tables below.

Additional Stakeholders

Table 4 Additional stakeholders included in the Stage 2 stakeholder engagement activities

Stakeholder	Rationale	
Speldhurst Parish Council		
TWANSG	These stakeholders were invited to the Airspace Awareness events in their capacity as members of Gatwick's Noise Management Board and Noise and Track Monitoring	
Burstow Parish Council	Advisory Group.	
Horley Town		
General Aviation Awareness Council (GAAC)	Following the Stakeholder Engagement undertaken at Stage 1 Gatwick reviewed the engagement undertaken with General Aviation stakeholder representatives and also looked at best practice across other FASI-S ACPs. Gatwick decided to broaden the stakeholder engagement in Stage 2 to include those who represent General Aviation	



Stakeholder	Rationale
	pilots rather than just General Aviation Aerodromes and therefore the GAAC were added to the stakeholder list, as well as representatives from the National Air Traffic Management Advisory Committee detailed below.
National Air Traffic Management Advisory Committee (NATMAC)	
Airspace4All, Aircraft Owners and Pilots Association (AOPA), Airspace Change Organising Group (ACOG), Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK), British Airways (BA), British Airline Pilots Association (BALPA), British Airline Pilots Association (BALPA), British Balloon and Airship Club, British Business and General Aviation Association (BBGA), British Gliding Association (BGA) (NATMAC), British Helicopter Association (BHA) (NATMAC), British Hang Gliding and Paragliding Association (BHPA) (NATMAC), British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo) (NATMAC), British Model Flying Association (BMFA) (NATMAC), British Skydiving, Drone Major, General Aviation Alliance (GAA), Guild of Air Traffic Control Officers (GATCO), Honourable Company of Air Pilots (HCAP), Helicopter Club of Great Britain (HCGB), Heavy Airlines, Light Aircraft Association (LAA), Low Fare Airlines, Military Aviation Authority (MAA), NATS, Navy Command HQ, PPL/IR (Europe), PPL/IR (Europe), United States Air Force Europe (3rd Air Force-Directorate of Flying (USAFE (3rd AF-DOF), NATS, CAA Stakeholder Engagement	Following the Stakeholder Engagement undertaken at Stage 1 Gatwick reviewed the engagement undertaken with stakeholder representatives and also looked at best practice across other FASI-S ACPs. Gatwick noted that engaging with selected members of the National Air Traffic Management Committee (NATMAC), would enable us to broaden our stakeholders who represent the interests of General Aviation, operators from Gatwick, and other airspace users. Gatwick therefore added representatives from NATMAC to our stakeholder list for Stage 2.
Parish Councils (See Appendix B – Stakeholder List for full details)	During Stage 1, based on stakeholder feedback, Gatwick committed to broadening stakeholder engagement to Parish Councils during Stage 2 where and when appropriate.



Stakeholder	Rationale
	This is beyond the CAP1616 requirements, but Gatwick recognise the importance for local parish councils to be involved in the ACP process.
	Gatwick engaged parish councils during the third round of stakeholder engagement. The third round of engagement was identified as the most appropriate point in Stage 2 to engage these additional stakeholders as there was a shortlist of options that enabled more targeted engagement; any earlier in the process and the number of parish councils, and the scale of the engagement activity, would be disproportionate to the ACP requirements for engagement.
	Separate workshops were held with Parish Councils (details below) before they were invited to the engagement events with the broader stakeholder group.

Removed Stakeholders

Flybe, Virgin Airlines and Thomas Cook no longer operate out of Gatwick Airport and they have therefore been removed as stakeholders from our engagement list. The Independent Commission on Civil Aviation Noise (ICCAN) ceased operating on the 30th September 2021 and therefore the ICCAN representatives have been removed from our stakeholder list for the December update briefings and any future engagement activity.

CAA and **Department** for **Transport**

We have invited representatives from the CAA and the Department for Transport to participate in our sessions where appropriate. This is in the capacity of observation and providing input into some stakeholder questions.

4. Airspace Awareness (Pre-Round 1 Engagement) (Event A)

As described above, following the COVID-19 related pause Gatwick identified that it would be prudent to undertake some additional engagement with key community stakeholders in preparation for the ACP restarting. This engagement took place with Gatwick's Noise Management Board (NMB) and Noise and Track Monitoring Advisory Group (NATMAG) via a virtual Teams meeting held on June 24th 2021. The presentation was split into three sections:

Part 1: Airspace Modernisation

Part 2: The CAP1616 Regulatory Airspace Change Process

Part 3: Gatwick's FASI-South ACP

Throughout the presentation, there were opportunities for stakeholders to ask questions. The follow sections outline the questions and answers arising during the presentation and post meeting feedback received from attendees. Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Table 5 Summary of Airspace Awareness Engagement (Event A) Activity (engagement evidence references in parentheses)

Invitation	Agenda / Briefing	Post-Event	Feedback
Meeting invitation send on 27th May 2021 asking delegates to register by return email (A.1.)	Agenda / briefing note (A.4.) sent to registrants on June 17th 2021 (A.2.)	Presentation slides and draft minutes circulated via email after the workshop on July 2nd, 2021. (A.5.)	Two feedback emails received from stakeholders. (A.8.)

Questions and Answers arising during the Pre-Round 1 Airspace Awareness Engagement

Table 6 documents the questions and answers recorded during the meeting.

Table 6 Questions, answers and follow up actions arising from the pre-round 1 awareness engagement

Question (You Said)	Answer (We did)	Follow up actions (We did)
Is the FASI-S Airspace Change Proposal (ACP) looking to change the airspace for one, two or three runways?	The FASI-S ACP would be looking to accommodate future traffic levels at Gatwick – and across the UK more broadly – and therefore would incorporate traffic levels consistent with Gatwick's future growth plans including the Northern Runway project which is being taken forward through a Development Consent Order. The ACP is therefore based on a two-runway scenario.	n/a
Who is responsible for airspace design between the airport led ACPs and the NATS-led network ACPs?	Airports are responsible for maintaining and upgrading their arrival and departure routes up to 7000ft. NATS are responsible for maintaining and upgrading the network of routes above 7000ft. In practice, when looking at how to integrate the arrival and departure routes at lower altitudes with the network changes above, the airport-led ACPs may design routes above 7000ft in close collaboration with NATS.	n/a
Will the Gatwick FASI-S ACP take into account the 23 recommendations arising from the 2016 Gatwick Independent Arrivals Review?	Some of the specific recommendations of the Independent Arrivals Review are not relevant to the FASI-S ACP process however those that are will be drawn into the FASI-S ACP options development and assessment process during Stages 2 and 3.	n/a
How does the current Route 4 ACP link into the wider FASI ACP process?	Route 4 ACP is being taken forward independently but cognisant of FASI-S. The FASI-S ACP will consider all departure routes including Route 4.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How can all needs be accommodated fairly in the ACP process when the Statement of Need is based only on the sponsors needs rather than the needs of all Stakeholders?	A sponsor takes forward an airspace change driven by the issues and opportunities it identifies in its Statement of Need (SoN), but that is not without regard for numerous other factors and affected Stakeholders that are key to the process from Stage 1. The SoN is the tool to initiate the ACP and the contents of the SoN are the responsibility of the change sponsor. The CAA determines if the SoN is appropriate to be addressed through the ACP process at Stage 1A. At Stage 1B there are then opportunities for engagement with Stakeholders and their representatives during the development of the Design Principles and it is these Design Principles that form the framework when sponsors are developing airspace change options.	n/a
What funding will be available to community groups, parish councils et al. in order for them to support and respond to the ACP process?	Gatwick have asked the DfT to respond to this question and we will update stakeholder groups when information is available.	Yes – see <u>section</u> <u>8</u>
Please could you provide more information on Initiatives 7 & 8: PBN Route Replication, and PBN Route Redesign	There are potential benefits that can be generated from introducing new routes that are designed to satellite navigation standards (also known as Performance-based Navigation or PBN routes) rather than relying on conventional ground-based navigation beacons. The current route structure is designed around the fixed locations of ground navigation beacons that constrain how and where aircraft fly. Satellite-based PBN routes can be designed with greater flexibility and precision that offers the opportunity to redesign the airspace without these constraints. The widespread deployment of PBN routes is a key component of Airspace Modernisation that must be managed with care because of the potential for the transition to satellite navigation standards to change the distribution and concentration of aircraft noise.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How do I find out more about the Airspace Strategy Board meeting?	The DfT Aviation Minister chairs an Airspace Strategy Board meeting which is attended by a range of aviation stakeholders to discuss the policy and objectives of airspace modernisation. The Airspace Strategy Board meeting minutes and announcements are published on the government website: https://www.gov.uk/government/groups/airspace-strategy-board.	n/a
Government policy requires the CAA to balance all relevant factors in decisions on airspace changes, therefore why does the Airspace Modernisation Strategy set out that noise improvements should be explored where they are not in conflict with growth?	The Department for Transport (DfT) are undertaking external workshops to consider this matter with key stakeholders. The aim is to follow a balanced approach through the ACOG Masterplan process and the development of airspace design options within each of the FASI-S ACPs.	n/a
Will the ACP consider multiple route options for respite and will this include Arrivals and Departures?	The airspace design options development and appraisal activities conducted during Stage 2 of the CAP1616 process must include a consideration of the potential to deploy multiple route options that offer noise respite. The requirement covers all airspace design options considered as part of the ACP, therefore arrivals and departures.	n/a
What is the Government's definition of total adverse noise effects?	The Department for Transport (DfT) have confirmed that a full definition of the term is not set out in the Airspace Modernisation Strategy however information on assessing noise impacts is set out in paragraphs 3.4 to 3.12 and Annex C of the <u>Air Navigation Guidance 2017</u> (ANG). The latest Transport Analysis Guidance (referred to within the ANG as "WebTAG") can be found <u>here.</u>	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Will the analysis of airspace design options consider multiple route configurations for noise respite and will the cumulative impacts of the overall system design and options associated with other interdependent ACPs be included in the appraisal?	It is a requirement of the CAP1616 process to examine both single route and multiple route configurations. The issue of cumulative impacts associated with other interdependent ACPs will be addressed as part of the ACOG Airspace Change Masterplan as well as Gatwick's FASI-S ACP. At Stage 3 of the CAP1616 process there is the requirement to comprehensively assess the cumulative impact of the options proposed to be taken to consultation including the impacts linked to other interdependent ACPs.	n/a
What content of the Airspace Modernisation Strategy (AMS) relates to the potential concentration of aircraft noise impacts that may arise following the introduction of PBN routes?	Currently noise impacts are subject to a degree of natural dispersion that is caused because all aircraft fly the existing procedures slightly differently and air traffic control often vector aircraft during the arrival and departure phases of flight. Airspace modernisation will introduce greater systemisation of the route network and deconflict the main arrival and departure flows by design rather than tactical intervention from Air Traffic Controllers. This can be desirable if it allows traffic to be concentrated away from noise sensitive areas, however undesirable if the concentration of noise creates disproportionately negative effects on a minority of stakeholders. The Gatwick Noise Management Board (NMB) work programme includes a study into the fair and equitable distribution of noise impacts that will inform the Gatwick FASI ACP. The AMS acknowledges the issue of concentration vs dispersal of noise impacts but doesn't provide any specific solutions. The focus of CAP1616 is on demonstrating that we have sought to minimise the total adverse effects of aircraft noise. There are several ways to do this including, but not limited to, using multiple route options that might offer stakeholders with predictable relief or respite from noise, or designing single routes away from noise sensitive areas; these opportunities will be examined in further detail as Gatwick progresses through stages 2 and 3 the ACP process.	n/a

Question (You Said)	Answer (We did)	Follow up actions (We did)
Is Gatwick seeking to	NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport (DfT). The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot bypass this.	
remove the Noise Preferential Routes (NPRs)?	As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes. At this early stage we cannot determine if there are changes to the NPRs.	n/a
Why are you making decisions about the removal of NPRs before the public consultation at Stage 3C?	A decision on the location of NPRs cannot be made at this early stage. The NPRs are not being excluded from the airspace change process and if changes to NPRs become necessary as a result of the airspace modernisation they will be covered under a parallel DfT process.	n/a
Will details of the discussions between the CAA and DfT with regards to the treatment of ACPs that result in changes to the existing NPRs be made public?	The CAA have confirmed they raised this matter with the DfT in 2018 and a policy has been drafted. The related finalised policy will be published in due course and if attendees wish to approach the CAA directly about this matter, then please contact the team via airspace.policy@caa.co.uk.	n/a
What compensation will be available to those affected by overflights?	There are established government policies in place regarding compensation and it is the responsibility of the ACP sponsor to ensure there are appropriate compensation structures in line with those in place policies.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How will success be determined with regards to the expected noise benefits of Gatwick's FASI-S ACP? For example will success be judged by reductions in the number of people impacted or by reducing a measure of the total adverse effects on health and quality of life.	The ambition of the ACP is to minimise the overall adverse effects of aircraft noise in accordance with government policy. The DfT WebTAG methodology will be used to aggregate noise changes for every population point within the assessment area and this considers adverse health effect.	n/a
Will Gatwick hold a community focused workshop to explain the WebTAG methodology?	Gatwick will consider this suggestion and look to ensure that an explanation of the WebTAG methodology is provided at the appropriate stage of the CAP1616 process.	Yes – see <u>section</u> <u>5</u>
How will helicopters be captured as part of ACPs?	Helicopter operators and rotary wing operations are usually included as part of the General Aviation stakeholder category.	n/a
Will detailed slides be circulated to stakeholders prior to engagement workshops?	Where possible materials to be used as part of future Gatwick FASI ACP stakeholder engagement activities will be circulated to participants in advance of the sessions.	Yes – see <u>section</u> <u>5</u>
Will Gatwick be revisiting the Design Principles and	Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway. There are no plans to revisit the Design Principles established through targeted engagement during Stage 1.	n/a

Question (You Said)	Answer (We did)	Follow up actions (We did)
the stakeholders engaged during this process?	At Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage 1 and these stakeholders are all listed on the CAA Airspace Change Portal within Gatwick's <u>Stage 1B submission document page 55-61</u> . Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. Wider engagement will take place as the ACP progresses and more people will be drawn in at the appropriate stage in the ACP process.	
How will Gatwick communicate about progress on the ACP to stakeholders, I have found registering for updates via the CAA's airspace portal unreliable.	Airspace Change Sponsors are required to use the CAA's Airspace Change Portal and the CAA are currently updating the portal so that notifications are sent whenever a sponsor progresses through an ACP stage. Throughout Stage 2 Gatwick will email attendees following events to share notes and slides.	n/a
Will Gatwick Airport Limited (GAL) seek views of other organisations on the consultation plan? How will GAL look to engage with all those communities around the airport, including the hard to reach groups? Virtual consultation is one communication channel, but it is such a technical and complex area that other and more traditional	At Stage 2 of the ACP process, there is a requirement to engage with the Stakeholders engaged at Stage 1B of the process. We intend to hold three rounds of stakeholder engagement as we progress through Stage 2. A stakeholder engagement strategy has been developed for Stage 2A and this will be published on the Airspace Change Portal in due course. At Stage 3, Gatwick will be required to submit and publish a Consultation Strategy which explains our plans for a targeted airspace change consultation. This strategy will include; • Who we will be targeting within the consultation and how we have identified the stakeholder groups, • How we will consult with hard to reach stakeholder groups, • What consultation materials will be available and how we will share the information to enable stakeholders to provide an informed response, • When the consultation and any associated events will occur.	Yes – see <u>section</u> <u>5</u>

Question (You Said)	Answer (We did)	Follow up actions (We did)
forms of consultation/exhibitions may be needed. Will this feature as part of the plan and does GAL have the resource to cover such a wide area overflown now and in the future?	Towards the end of Stage 2, we plan to engage with stakeholder groups to help develop this strategy in preparation for Stage 3.	
How can GAL help inform all interested parties of implications of other airports' airspace design proposals which may have a negative impact on GAL's work, or may reduce scope for GAL to achieve greater noise improvements?	At Stage 3 of the Airspace Change Process, Gatwick will be required to undertake a Full Options Appraisal which identifies the cumulative impacts of other airport's ACPs and considers these as part of the appraisal of airspace change options. The Full Options Appraisal will be published as part of a suite of documents that form the consultation material that will be available to all stakeholders. Gatwick is working closely with the Sponsors of all other related ACPs through a Masterplanning process that is independently coordinated by the UK Airspace Change Organising Group (ACOG). More information about the work of ACOG and the development of the UK Airspace Change Masterplan can be found here . The next iteration of the Masterplan is expected to be published in Q1-2022 and will set out the interdependencies between specific ACPs and the approach to ensuring the overall programme of airspace change is optimised.	n/a
As ACOG is an industry body, does it mean their focus is on what is best for aviation rather than residents?	All stakeholders that are potentially affected by airspace modernisation will have the opportunity to engage in the development of the Masterplan. The Masterplan is intended to describe the network wide proposal and to coordinate interactions across the interdependent ACPs. The CAA's role is to assess the Masterplan and only to use it as part of the decision-making process for airspace changes when they are satisfied that sufficient consultation and engagement has been undertaken with all stakeholders.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Will the Masterplan be taking each of the 21 ACPs into consideration and will any of the proposals will be prioritised over others?	The Masterplan must take into account all 21 airport-led ACPs that make up the FASI initiatives, along with the NATS led airspace modernisation programme above 7000ft. ACOG is established to be impartial and therefore there will be no prioritisation of the ACPs.	n/a
Is there prioritisation of airports within FASI-South and the airports in the London Terminal Area specifically?	There is no prioritisation of airports. The ambition of the network level airspace modernisation programme (above 7000ft) is that it offers sufficient capacity, flexibility and resilience to accommodate all the airport's requirements for the lower altitude airspace without the need for prioritisation. One of the roles of ACOG is to ensure there is a balanced approach to the integration of airspace designs across sponsors to protect this ambition.	n/a
What about the implications for the Masterplan process if one or more of the airports are forced to close following the impacts of COVID-19?	This is something that ACOG will need to consider and this will include the smaller airports alongside the 21 ACPs to ensure the airspace design can accommodate these.	n/a
Why is Manston listed as a neighbouring Airport when it is closed?	Manston are developing proposals to reopen and they have an ACP underway.	n/a
What is meant by a sufficiently broad list of options and will there be an opportunity to look at	For an ACP of this size and scope the comprehensive list of options becomes very large very quickly and furthermore we need to articulate what is an option as it could be a single route option or a system. Gatwick will try to provide systemised/groups of options that are supported by the data taken from the development of many possible flight paths that are subject to environmental impact analysis.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
new options after consultation?	The intention of stakeholder engagement during Stage 2 and the public consultation at Stage 3 is to gather as much new information as possible about the airspace design options. If this information leads to the formation of new options then the ACP will return to the short listed options and re-assess the impacts on the proposal accordingly. If significant changes are made after the consultation at Stage 3, then there is specific guidance in CAP1616 at Stage 4A regarding the requirements to reconsult.	
Options in the Route 4 ACP were discounted due to some solutions only being available through a more comprehensive FASI-S ACP, how will this be addressed?	There may be a solution delivered through the, in progress, Route 4 ACP that is not able to take advantage of some of the opportunities likely to be presented through FASI-S (for example an uninterrupted climb profile), and this may mean a solution delivered through the Route 4 ACP may be replaced by an optimal, compatible solution through FASI-S.	n/a
When is the Stage 2 Gateway for the Gatwick FASI-S ACP?	The stage 2 Gateway is scheduled for July 2022. After July 2022 there is only an indicative schedule due to the Masterplan process and the requirement for a coordinated approach between ACP sponsors.	n/a
Will the Fair and Equitable Distribution (FED) Study look at arrivals and departures?	The NMB work plan contains an activity to undertake an independent assessment of fair and equitable distribution concepts to help inform stakeholder discussions. Departures and arrivals have different flight profiles and the study will consider both arrivals and departures.	n/a
What are the Independent Commission on Civil Aviation Noise (ICCAN) doing to protect all new people who will be impacted by noise?	ICCAN have provided links to the ICCAN Toolkit and Engagement best practice: https://consultation-toolkit.iccan.gov.uk/ and https://iccan.gov.uk/engagement-best-practice/ .	n/a

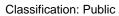


Feedback received post meeting

As this was an introductory airspace workshop that did not form part of our formal rounds of engagement, we did not ask stakeholders any specific questions at this stage however we did give participants the opportunity to provide any general feedback or ask questions. The following table summarises the feedback that was received from stakeholders:

Table 7 Questions, answers and follow up actions arising from the pre-round 1 awareness engagement (post meeting)

Feedback received post workshop (You Said)	Our response (We did)	Follow up actions (We did)
GACC had 4 seats at this meeting with TWANSG with 3 and Plane Wrong with 2 committee members. CAGNE would like to have the same opportunity of inviting more committee members to future events. Can you confirm this is possible in view of the number permitted to the GACC noise group?	If you would like additional committee members to attend future meetings then please send your request to the organiser at the time of invitation. Depending on the nature of the event, there may sometimes be the requirement to limit numbers of representatives per organisation, however we will endeavour to accommodate any requests fairly.	n/a
(Plane Wrong) asked whether details of the discussions between the CAA and DfT with regards to the treatment of ACPs that result in changes to the existing NPRs be made public. (CAA) agreed to take this question away and will update group. We would ask that these details be made available to CAGNE as our group covers all airspace of Gatwick Airport and beyond and not just to Plane Wrong.	Any information provided by organisations such as the CAA or DfT following the meeting will be shared with all attendees. We have added a post meeting note to the final meeting minutes with an update from the CAA (Para 27)	n/a
Plane Wrong also mentioned the 'totality' of what is suffered by route 4 due to Heathrow traffic. We would like to repeat our request that all airspace operations caused by Gatwick be considered and not in isolation as is currently the case as many communities suffer multiple departure routes as well as all arrivals.	As explained at the meeting (para 26 of the minutes), there is a requirement within the CAP1616 process to examine both single route and multiple route configurations. At Stage 3 of the Airspace change process there is the requirement to comprehensively assess the cumulative impact of the options proposed to be taken to consultation.	n/a





Feedback received post workshop (You Said)	Our response (We did)	Follow up actions (We did)
There would seem to be a contradiction of facts. It is suggested that the DfT and CAA will consider NPRs and yet it states that NPRs are not to be removed by AS. Can you please clarify if it is DfT and CAA that will remove NPRs due to GAL's FASIS process or policy for resilience and efficiency of airspace?	Within the meeting, explained that NPRs are not to be excluded as part of the Airspace Change Process and if changes to NPRs become necessary as a result of the airspace modernisation they will be covered under a parallel process. Earlier in the meeting, (para 19 and 20) and and (DfT) explained that the NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the DfT. The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot bypass this. As Gatwick progresses through the CAP1616 process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes. At this early stage we cannot determine if there are changes to the NPRs.	n/a
Under Compensation we believe we detailed and ask for correction - CAGNE stated that as FASIS will not be a new runway residents would not be entitled to compensation for loss of house value and would end up with negative mortgages as a result of new flight	We have amended paragraph 35 of the minutes to reflect this statement and also added a question about compensation to the circulated question and answer document.	n/a



Feedback received post workshop (You Said)	Our response (We did)	Follow up actions (We did)
paths over new areas. Would there be compensation in the form of full house devaluation?		
CAGNE has already approached GAL for funding in relation to G2 and has been declined. If funding is to be provided to assist with FASIS we would ask that CAGNE be given funding as we have held workshops before to explain airspace to residents of Kent, Sussex and Surrey. as the umbrella aviation community and environment group. Please confirm this?	As explained at the meeting (para 73), this question has been asked of the DfT and we will circulate any outcomes when available.	n/a.
Attendance list – I note you've referenced GATCOM in a number of places. The invitation to the event was only to NMB and NATMAG members (it was only those GATCOM members who hold a seat on NATMAG that received the invitation to attend and as GATCOM's rep on NMB). As currently drafted is seems that GATCOM was invited to the event but there was no formal invitation to GATCOM to attend. That's one of the reasons why I asked to attend as an observer as GATCOM Secretariat. Should GATCOM therefore be referenced in the way currently given in the draft minutes? There might be questions from other GATCOM members that they were not aware of the event – e.g. Rusper Parish Council, Charlwood Parish Council.	The final meeting minutes were updated to remove reference to some attendees also sitting on GATCOM	n/a
but holds a seat on NATMAG as an EHO representing Mid Sussex DC. is not one of GATCOM's appointees to NATMAG. should be referenced in the same way as	Final meeting minutes updated to reflect this correction.	n/a
Typo para 64 "traditional"	Meeting minutes updated.	n/a



5. Round 1 Workshops (September and October 2021) (Event B, C & D)

In September and October 2021, Gatwick held the first round of stakeholder engagement workshops. Stakeholders previously engaged at Stage 1 and some additional stakeholders were invited to the virtual sessions. These were split into three groups;

- Local communities and council stakeholders (Event B held on 2nd and 3rd September 2021)
- General Aviation and other airspace users (Event C held on 7th October 2021) and,
- Airlines and Air Navigation Service Providers (Event D ANSPs) (Held on 8th October 2021).

The purpose of these workshops was to brief stakeholders and gather feedback on the methodology that we intend to follow to develop and assess options for our airspace change proposal. The workshops were split into the following agenda sections:

- Methodology objectives and overview
- Developing an Airspace Design Database
- Defining the do-nothing scenario
- Building a comprehensive list of options
- Conducting a design principle evaluation
- Producing an initial options appraisal
- Setting out the methodology for the Full Options Appraisal

Throughout the workshop, there were opportunities for stakeholders to ask questions and the following section outlines the questions and answers from the workshops. Stakeholders also had the opportunity to feedback on the methodology that we plan to follow to develop our airspace change options; details of this are also shown in the table below.

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.



Table 8 Summary of Stage 2A Round 1 (Events B, C & D) activities (engagement evidence references in parentheses)

Event	Invitation	Agenda / Briefing	Post-Event	Feedback
B. Communities	Meeting invitation send on 16th August 2021 asking delegates to register by return email. (B.1.)	Agenda and additional pre- briefing information (B.4.) sent to registrants on August 26th 2021 (B.2.)	Presentation slides (B.6.) and stakeholder questions / feedback summary (B.7.) circulated to participants on 17th September 2021. (B.5.)	Two feedback emails received from stakeholders. (B.8.)
C. General Aviation and other Airspace Users	Meeting invitation send on 22nd September 2021 asking delegates to register by return email. (C.1.)	Agenda and briefing note (C.4.) sent to registrants on October 5th 2021 (C.2.)	Presentation slides (C.6.), circulated to participants via email	No feedback emails
D. Airline & ANSP Workshop	Meeting invitation send on 22nd September 2021 asking delegates to register by return email. (D.1.)	Agenda and briefing note (D.4.) sent to registrants on October 5th 2021 (D.2.)	Presentation slides (D.6.) and meeting notes / Q&A (D.7.)	No feedback emails

Questions and Answers during workshops

Table 9 Questions, answers and follow up actions arising from the round 1 engagement with communities

Question (You Said)	Answer (We did)	Follow up actions (We did)
At what stage in the CAP1616 process are airspace change design options assessed?	Airspace change design options are developed and assessed during Stages 2, 3 and 4 of the CAP1616 process.	
	We will develop our Comprehensive List of Options during Step 2A and conduct an Initial Appraisal of the shortlist of options that perform best against the Design Principles in Step 2B.	
	The shortlist of options will be subject to a more robust and quantitative Full Options Appraisal at the beginning of Stage 3 (Step 3A) in preparation for a Public Consultation.	n/a
	The Final Options Appraisal, incorporating the feedback gathered during the Public Consultation, will be conducted in Stage 4 in preparation for when the ACP is submitted to the CAA for a decision.	
At what stage in the process is an environmental impact assessment undertaken?	Environmental considerations are initially made at Stage 2A when we are developing airspace change options to meet our Statement of Need and the Design Principles. As part of Stage 2A, we then evaluate these options against the Design Principles. As Gatwick has some Design Principles that are based around noise and the environment, this will be the first opportunity for environmental assessment although at this stage the assessment will be high level and qualitative.	
	A more detailed environmental assessment of options begins in Step 2B as part of the Initial Options Appraisal and is expanded on, with progressively more quantitative detail about the environmental costs and benefits during the Full and Final phases of options appraisal.	n/a
	The Initial Options Appraisal requires a largely qualitative assessment of the environmental impacts, both positive and negative, of each option included on the shortlist. (Some of the specific assessment criteria regarding the potential impacts of aircraft noise will be based on quantitative information during the Initial Options Appraisal).	



Question (You Said)	Answer (We did)	Follow up actions (We did)
	The Full Options Appraisal in Step 3A requires a more detailed quantitative assessment of the environmental impacts, including all costs and benefits evaluated in monetary terms where possible, following the Department for Transport (DfT) WebTAG guidance.	
	The potential for cumulative noise impacts, where routes proposed as part of Gatwick's ACP may be positioned in the same volumes of airspace as those included in other interdependent proposals is an important consideration.	
	At Stage 3 (Step 3A) of the process there is a requirement to examine the cumulative impact of the options that are proposed to be taken to Public Consultation, including a detailed evaluation of the impacts related to the potential interactions with other interdependent ACPs (such as the FASI-S proposal sponsored by Heathrow Airport).	
At what point in the process will the potential for cumulative noise impacts associated with Heathrow's	We are formally engaging with Heathrow Airport and all other interdependent ACP sponsors throughout Stage 2 in preparation for the cumulative impact assessment work that will need to be conducted collaboratively in Stage 3. Details of our engagement with the other interdependent FASI-S ACP sponsors and the outcomes arising will be set out in our Stage 2 submission.	n/a
ACP be considered?	The CAA has made it clear that Gatwick (and all other FASI-S ACP sponsors) will be unable to progress through Stage 3 of the process until the potential cumulative impacts of the interdependencies with other FASI-S ACPs are identified and appraised as part of the Full Options Appraisal and in line with the accompanying Airspace Masterplan process that is led by the Airspace Change Organising Group (ACOG).	
	At present, ACOG is developing Iteration 2 of the Airspace Masterplan which is due to be submitted to the CAA in December 2021. Iteration 2 will outline the interdependencies between the FASI ACPs and identify the areas where cumulative impacts may arise. ACOG will start to develop Iteration 3 of the Masterplan in 2022, examining the interdependencies between proposals in more detail and reviewing ways to refine options to manage the interactions effectively and optimise the overall airspace design. In addition to the analysis that we will conduct collaboratively as part of the CAP1616 process, we expect the potential	



Question (You Said)	Answer (We did)	Follow up actions (We did)
	cumulative noise impacts generated by the interactions between Gatwick and other FASI sponsors to feature prominently in Iterations 2 and 3 of the Masterplan.	
How will Gatwick's methodology ensure that there is a fair approach for determining where new flight paths are positioned?	Gatwick's methodology follows a data driven approach that aims to demonstrate how all viable flight path options for the ACP have been adequately considered in an objective and transparent manner. Decisions about the development of airspace change design options are informed by a comparative analysis of the environmental performance of a broad range of notional flight paths. The methodology relies on the Design Principles agreed in Stage 1 and regular engagement with stakeholder representatives during Stage 2 to guide how the options are refined and appraised. The data, guidance and analysis used to conduct the options appraisals will be made transparent and provided to the CAA in a machine readable format so that the Regulator can rerun aspects of our assessment and independently validate the results.	n/a
Does the methodology to develop and assess options consider a 1 or 2 runway operation?	Both. The baseline against which the options will be appraised is a Do Nothing scenario that includes assumptions about traffic levels, airspace structures and the prevailing air traffic situation with and without the deployment of the Northern Runway Project.	n/a
How are the connecting points between the routes below 7000ft. and the airspace network above 7000ft. (that NATS is responsible for) determined?	At this early stage in the process, the connecting points between routes below 7000ft. that Gatwick is responsible for and the airspace network above 7000ft. that NATS is responsible for (in a separate but interdependent FASI-S ACP) have not been fixed. The sections of airspace that we are examining to support our options development during Stage 2 are based on conservative assumptions that retain the greatest possible flexibility regarding how and where the lower altitude routes will connect with the network. We are engaging regularly with the NATS ACP Team to understand the options being developed for the network above 7000ft. and to refine our options accordingly to ensure that the proposals integrate efficiently.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How have the maximum and minimum joining points for the notional flight paths that may be included in the arrivals component of an option been defined? Could there be an opportunity to develop an approach path closer in or further away?	When determining the maximum and minimum joining points for the arrival options, we examined a large body of existing operational data and the current distributions of traffic to understand the likely maximum and minimum points that air traffic control currently direct aircraft to join the ILS. This was determined to be from around 2000ft (minimum) to 5000ft (maximum). The minimum final approach distance allowable by technical airspace design criteria is 3 nautical miles (NM), with an accompanying intermediate approach segment of between 3 to 5NM. Given this, it would not be possible to get materially closer than the 2000ft point applied in the methodology. The maximum distance is based on current flight information. We will consider options for a joining point that is further away in greater detail during the next phase of work and report back in the second round of Stage 2 engagement in December.	n/a
Does the preliminary assessment of the notional flight paths defined to support the options development include a measure of population overflight?	Yes. The methodology uses the <u>CAA's definition of an overflight contour</u> to evaluate the number of people affected by each notional flight path. The preliminary assessment also considers measures of newly overflown (including rate of overflight) and event level metrics such as the number of people exposed above N65 Lmax.	n/a
Does the methodology consider the relative impacts of departure routes turning at different altitudes?	This level of refinement will be considered during the detailed quantitative assessment of the flight paths conducted as part of the Full Options Appraisal in Stage 3 (Step 3A).	n/a
Does the methodology consider the configuration of the existing Noise	Yes. The process requires that we compare options against a Do Nothing scenario that serves as a baseline for the appraisal. The Do Nothing scenario will be based on the existing airspace design and air traffic management arrangements (including the existing configuration of NPRs). We are also required to set out	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Preferential Routes currently in place at Gatwick?	the minimum level of change that we consider necessary to deliver the scope of the ACP (referred to as the Do Minimum Option) that will also consider the treatment of the existing NPRs.	
	As part of the Airspace Design Database we will include notional flight paths that align to the existing NPRs. This will allow us to compare these against all other notional flight paths to understand how they perform.	
How do Gatwick determine which metrics to use to assess the impact of aircraft noise and will this be shared with stakeholders?	We will provide details of all noise metrics used throughout the options development and assessment process in line with Appendix B of CAP1616.	n/a
Will you have to consider any wake turbulence issues when designing for routine operations from two runways?	The management of wake turbulence on successive departures will be considered as part of the Full Options Appraisal in Stage 3 (Step 3A). The issue will also be examined in detail as part of the Safety Assessment produced during Stages 3 and 4 to accompany the appraisal.	n/a
How do you intend to incorporate the Route 4 ACP into the Do Nothing Scenario?	We are currently examining how best to incorporate Route 4 operations within the Do Nothing scenario and Do Minimum Option for the wider FASI ACP. We will provide an update on how this issue has been addressed during the second round of Stage 2 stakeholder engagement planned for December 2022.	Yes – see section 8
If the Do Nothing scenario that is used as the baseline for options appraisal includes the traffic growth enabled by the Northern Runway Project, is there a	We will develop the Do Nothing scenario to be used as the baseline for options appraisal during October 2021. As part of the work we will consider this feedback, regarding the appraisal of options against lower traffic forecasts and an assessment of the impact of different growth profiles on the overall performance of different airspace design options.	Yes – see section 8



Question (You Said)	Answer (We did)	Follow up actions (We did)
risk that airspace design options that may otherwise have performed well at lower traffic levels are excluded?	We will provide an update on how this feedback has been addressed during the second round of Stage 2 stakeholder engagement planned for December 2021.	
Will the outputs generated by WebTAG be the determining factor in decisions made between different options or will other factors outside of the monetary values of costs and benefits be incorporated?	A detailed quantitative assessment of the positive and negative impacts of each shortlisted option is conducted as part of the Full Options Appraisal in Stage 3. The CAP1616 process requires us to examine the 10 year net present value for each shortlisted option based on an approach to monetising costs and benefits using the WebTAG guidance. However, the CAA recognises that as part of the options appraisal, decisions cannot be reduced to an entirely numerical exercise. The qualitative aspects of the assessment of airspace design options is first informed by the Design Principles, and then by incorporating feedback from successive rounds of stakeholder engagement and consultation that are intended to build the overall rationale for why the preferred option(s) may, or may not, perform best when evaluated purely in monetary terms.	n/a
How does the methodology treat difficult trade-off decisions for example between minimising the total numbers of people overflown and protecting areas like AONBs that are prized for their tranquillity?	The treatment of airspace design trade-offs, where an option that may generate benefits in one area is preferred at the expense of other options that may deliver improvements elsewhere, is one of the most challenging aspects of the appraisal process. The Initial Options Appraisal will identify the areas where trade-offs may arise (within the Gatwick ACP and in relation to other interdependent FASI proposals). The size and nature of the conflicts between options and the data that may be needed to inform decisions on trade-offs will also be examined as part of the Initial Appraisal. The detailed quantitative analysis of options conducted during the Full Options Appraisal in	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	Stage 3 will be used as evidence to support trade-off decisions and ensure alignment with Government Policy. However, there is no firm rule-set regarding the weighting of competing impacts so the final decisions on appropriate trade-offs must be guided by stakeholder engagement and consultation.	
Natural England have commenced a review of some AONB boundaries (although it may not be approved for another couple of years). Could this be considered as part of the appraisal at future stages?	Yes. We will make a note of this feedback and review the details as we develop our approach to the Initial Options Appraisal during Q1-2022.	Yes – see section 8
What type of assessment is conducted as part of the Design Principle Evaluation - is it a qualitative exercise?	The Design Principle Evaluation examines how well each option on the Comprehensive List meets the Design Principles defined in Stage 1, with the aim of narrowing down the list. The evaluation is a largely qualitative exercise that applies a general set of criteria drawn from the Design Principles (although some criteria associated with the impact of aircraft noise drawn from the Airspace Design Database may be quantitative).	n/a
The methodology refers to options being developed that address the Statement of Need, which is a predominantly airport centric view of the requirements for airspace modernisation and was not subject to stakeholder consultation.	As part of the CAP1616 process at Stage 2, airspace change design options are developed and assessed with reference to the Design Principles developed with stakeholders at Stage 1. Whilst the issues and opportunities laid out in the Statement of Need are considered throughout the options development process, it is the Design Principles (and the criteria drawn from them) that are used as the basis for evaluation and the decisions about the shortlist of options to take forward to the Initial Options Appraisal.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How are the options going to be evaluated to ensure fairness and meet the needs across all Stakeholders?		
How will you capture all future residential developments as part of your appraisals?	As part of the work undertaken in relation to the Development Consent Order submission for the Northern Runway Project, Gatwick has compiled a database that includes information regarding potential residential developments arising from district and local plans. In addition, we will use data sourced from CACI, which focuses on expected population changes overtime linked to long term economic growth.	n/a
Is there a minimum or maximum number of viable options to be considered in each phase of the appraisal process?	No. There is no minimum or maximum limit applied to the options development activity at any phase in the appraisal process.	n/a
Are the notional flight paths developed using Performance-based Navigation (PBN) criteria?	Yes. All the notional flight paths included in the Airspace Design Database and used to build options for inclusion in the Comprehensive List are designed using PBN criteria.	n/a
At what stage in the process will the methodology begin to consider noise respite routes?	We will begin to consider options with multiple route configurations that offer the potential to support noise respite arrangements when building the Comprehensive List of Options during Step 2A. These options will be considered as part of the Design Principle Evaluation alongside all the other viable options for the ACP.	n/a
The Noise Management Board is conducting a study into the Fair and Equitable	Yes. The FED study is expected to make recommendations about the approach and metrics that may be used to quantify and track the fair and equitable distribution of aircraft noise impacts in different	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Distribution (FED) of aircraft noise. Will the outputs of the FED study be incorporated into the methodology?	circumstances. We plan to incorporate the output of the FED study into the Initial Options Appraisal during Q1-2022 (and into the Full Options Appraisal in due course).	
Is Gatwick required to provide a rationale behind their preferred option?	Yes. If we have a clear preference regarding the airspace change design options considered, following the analysis and engagement activities conducted during Stage 2, we will set out the supporting rationale in full as part of the Stage 2 regulatory submission. We may be in a position where we do not have a preferred option at the end of Stage 2 and in that case, we will explain why and outline the information we intend to gather in Stage 3 to determine a preference.	n/a
Is it possible to have the mapping of the airspace change options above 7,000ft that has already been completed?	All available information regarding the progress of the NATS En route Limited (NERL) ACP to change the airspace design above 7000ft across the South of the UK is published on the CAA's Airspace Change Portal. A more detailed mapping of the interdependencies between the NERL ACP and airport-led FASI-S ACPs below 7000ft. is expected in the next iteration of the Airspace Masterplan that is currently being developed by ACOG for submission to the CAA in December 2021.	n/a
Can we see the Design Principles that were agreed in Stage 1?	Our <u>Design Principle submission document</u> is published on the <u>airspace change portal</u> . The final agreed Design Principles are set out on page 50.	n/a
How long will stakeholders have to respond to the second round of Stage 2 engagement in December 2021?	A minimum of four weeks, excluding the two week period in which Christmas Day and New Year's Day fall.	n/a

Table 10 Questions, answers and follow up actions arising from the round 1 engagement with airlines and ANSPs

Question (You Said)	Answer (We did)	Follow up actions (We did)
The design principles do not include airspace capacity? How will Gatwick ensure its ACP meets the demand for additional airspace capacity?	Gatwick's FASI ACP is part of a wider programme centred around the UK's Airspace Modernisation Strategy (AMS). The AMS aims to meet the demand for air transport in a sustainable and resilient way and therefore the Gatwick ACP, and its associated Statement of Need, include the requirement to deliver additional airspace capacity needed by Gatwick Airport in the context of the wider airspace upgrades planned for the London TMA (Terminal Manoeuvring Area). Options developed at Stage 2 are designed to meet the Statement of Need, and the Design Principles and therefore the requirements around capacity will be considered as part of our airspace change options development.	n/a
How are you going to assess the integration with other airport's in the London TMA and how much collaboration is there with other airports in the TMA?	There is ongoing collaboration with neighbouring airports, many of which are sponsoring interdependent ACPs, and the NERL team working on changes to the airspace above 7000ft, that forms part of our overall engagement process. CAP1616 places importance on ensuring sponsors follow a clear and transparent engagement process and therefore all our engagement activities are recorded and included in our ACP submission documents. One of the main challenges facing effective collaboration with the other London TMA airports and NERL is the coordination of timelines. In some cases we will need to wait for other ACPs to catch up in order to have informed discussions about the integration of potential design options.	n/a
By the consultation at Stage 3 will the options work with other neighbouring airports?	Yes, The CAA has made clear that Gatwick (and all other FASI-S ACP sponsors) will be unable to progress through Stage 3 of the CAP1616 process until the potential interdependencies with other FASI-S ACPs are identified and appraised as part of the Full Options Appraisal and in line with the accompanying Airspace Change Masterplan that is led by the Airspace Change Organising Group (ACOG).	n/a
When is Gatwick's Stage 2 submission Gateway scheduled?	July 2022	n/a
Other FASI Airports have asked us to sign a NDA, will we have to do the same with	The CAP1616 process requires open engagement and therefore a Non Disclosure Agreement (NDA) will not be required. The information presented in each engagement meeting during Stage 2 is the same	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Gatwick to have discussions?	for all stakeholder groups. In some meetings we may ask specific questions dependent on the stakeholder group.	
What stage will Safety assessments take place and what detail level be required?	The Design Principle Evaluation will involve a high-level qualitative evaluation of the Comprehensive List of Options against Design Principle 1: Safety by design (Airspace design must at least maintain, and ideally enhance, aviation safety, by reducing or removing safety risk factors, provided enhancement does not have a disproportionately detrimental impact on other benefits). Following the Design Principle Evaluation, a more detailed qualitative assessment will be undertaken on the shortlist of options as part of the Initial Options Appraisal. This detail level is then built upon in the Full Options and Final Options Appraisal, as options are developed in further detail.	n/a
How many options will be on the long list and is there a limit to the number of options?	There is no minimum or maximum limit applied to the options development activity at any phase in the process. At this stage we do not know how many options might form our Comprehensive List.	n/a
How many options will be on the short list?	At this stage we do not know how many options might form the shortlist as this will be dependent on the development of the Comprehensive List and how the options perform in the Design Principle Evaluation. Given the requirements of the Initial Options Appraisal, the number will be balanced with workload, practicality and the overall performance of each option.	n/a
Are Gatwick considering the deployment of the Airspace Change in phases?	Gatwick are in the process of considering phased deployments. In the first instance Gatwick are engaging with potentially affected parties, particularly NATS, through bi-lateral engagement to understand what might be possible. Alongside this, Gatwick will look to the Airspace Change Masterplan at a programme level around the robust reasoning for considering a split deployment.	n/a



General Aviation and other Airspace User Workshop

Owing to the low attendance, a formal Q&A document was not circulated following the General Aviation and other Airspace user engagement session, however one question was recorded as part of the workshop:

Table 11 Questions, answers and follow up actions arising from the round 1 engagement with General Aviation and other airspace users

Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
Were any other non-GA representatives invited to this engagement session?	Yes, this session covers General Aviation and other airspace users, and as part of this, we invited representatives from local air ambulances and other emergency services, as well as representatives of airspace users that form NATMAC. Airlines and ANSPs will be captured in a separate workshop.	n/a

Feedback

As part of the workshops, we asked stakeholders for feedback on the methodology presented and encouraged participants to ask any questions via email following the sessions. A minimum of a four-week feedback period was given following each workshop to respond. The following feedback was received from Stakeholders. Please note that these responses were received from 2 stakeholders however the feedback has been broken down onto separate rows in the table to aid with answering the points made.

Table 12 Feedback from Round 1 engagement

Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
Disingenuous of the sponsor - It is very disingenuous of Gatwick, who is the sponsor for both 2 nd runway and FASIS, to be misleading residents by detailing that the 2 nd runway will fly on the same departure routes as today as no requirement for a Planned and	The FASI ACP is completely separate project and therefore we cannot comment on the Northern Runway DCO as part of this engagement. With regards to the second part of feedback around transparency. The CAP1616 process outlines how sponsors broaden engagement as they	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Permanent Redistribution (PPR) as stated in CAP 1908 even though routes 3 and 4 move further north to accommodate the 12m rebuild of the runway. Gatwick then seek to look at all new routes for 2 runways through FASIS which could mean options to fly over new people as was the case with the 2 nd (now 3 rd runway) and LAMP – this lacks transparency as residents will not be informed at time of Gatwick 2 consultation and only at stage 3c when it will be too late to challenge stage 1 and 2 of CAP 1616.	progress through the airspace change process. This means that in the earlier stages, (Stage 1 and Stage 2) sponsors are required to engage with Stakeholder representatives. In stage 3, a full public consultation is then held. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway. At Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage 1 and these stakeholders are all listed on the CAA Airspace Change Portal within Gatwick's Stage 1B submission document page 55-61. Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. Wider engagement will take place as the ACP progresses and more people will be drawn in at the appropriate stage in the ACP process.	
Lack of transparency - The process may have to go through a CAP1616 7 stage process, but it is not transparent as it is not clear or detailed to those that could be newly overflown by the process due to the narrow engagement by Gatwick. The CAA Portal (searches of the CAA website for Portal nothing appears) will not be discovered until it is too late by most residents to be impacted. Gatwick should be engaging and be honest now so that all residents are informed of what is planned post G2.	Our stakeholder engagement activities that support the Stage 2 options development and assessment tasks must involve the same mix of representatives that helped us to develop the airspace design principles during Stage 1. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway. Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. We will undertake engagement activities with a wider mix of stakeholders as the ACP progresses and the potential impacts of the various airspace design options becomes clearer. In particular more people will be drawn into the process at Stage 3, when we will hold a full public consultation and all local residents will have the opportunity to feedback on our proposals.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
We reiterate that Gatwick states that the CAA have not approved stage 2 and that Heathrow is behind the timeline only on stage 1 as such Gatwick will have to pause.	During Stage 1B, the airspace design principles that guide our proposal were developed with stakeholder representatives as part of our engagement activity. We then submitted our Stage 1B Design Principle documentation to the CAA where we outlined the evolution of our Design Principles, and the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1B gateway.	n/a
	Gatwick have not yet submitted any material to the CAA with regards to Stage 2 of this Airspace Change. Our Stage 2 gateway is currently planned for July 2022. Subject to CAA approval of the Gateway, we will then progress into Stage 3.	
	Based on the current information we have from the Airspace Change Organising Group (ACOG) and the CAA, we will most likely be unable to progress beyond Stage 3A of the CAP1616 process until we can quantitatively assess the interdependencies with the other ACP sponsors participating in the FASI-South programme. We know that the Gatwick FASI ACP will be share significant interdependencies with the (amongst others) the Heathrow and NATS led ACPs.	
The airspace will be a blank sheet of paper with multiple routes to be considered, so no one is safe. Gatwick says the process is transparent but how many residents are aware of what is taking place now or of the CAA portal process? We are concerned that this process will end as LAMP did with the formation of many noise groups due to seeking to	Our stakeholder engagement activities that support the Stage 2 options development and assessment tasks must involve the same mix of representatives that helped us to develop the airspace design principles during Stage 1. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway	n/a
move noise over others/ new areas. (ADNID)	Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. We will undertake engagement activities with a wider mix of stakeholders as the ACP progresses and the potential impacts	



Question (You Said)	Answer (We did)	Follow up actions (We did)
	of the various airspace design options becomes clearer. In particular more people will be drawn into the process at Stage 3, when we will hold a full public consultation and all local residents will have the opportunity to feedback on our proposals.	
In view of the removal of ICCAN by the Aviation Minister CAGNE is very concerned that noise will now be ignored as the minister seems to believe that noise is no longer an issue due to the pandemic. This is not the case and as the CAA have acted as judge and jury in the past there is little confidence that they will not be biased towards aviation going forward at the expense of residents, newly overflown or currently overflown with the FASI-S process.	At this stage in the ACP process, we are developing an initial comprehensive list of options that aim to align with the design principles and statement of need. Gatwick has three design principles that focus on the impacts of noise and therefore this will be a significant consideration when developing our options. Following engagement with stakeholders on our comprehensive list, we will then begin a series of evaluation and appraisal of these options. The full options appraisal at Stage 3, is a robust quantitative appraisal that will report the noise benefits and impacts of each airspace change option. This information will be presented to the CAA and all stakeholders as part of the Stage 3 public consultation material.	n/a
We request mapping of airspace redesign above 7,000ft.	All available information regarding the progress of the NATS En route Limited (NERL) ACP to change the airspace design above 7000ft across the South of the UK is published on the CAA's Airspace Change Portal. A more detailed mapping of the interdependencies between the NERL ACP and airport-led FASI-S ACPs below 7000ft. is expected in the next iteration of the Airspace Masterplan that is currently being developed by ACOG for submission to the CAA in December 2021.	n/a
We are very concerned using WebTag as greater value cannot be placed on AONB over a person's garden, great value cannot be afforded urban areas vs rural in population count as suggested.	The use of WebTag is a requirement of the CAP1616 process and therefore Gatwick are required to include this quantitative monetary analysis as part of our appraisals. Any outputs of WebTag however will be presented alongside	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	other quantitative information and a qualitative conclusion, when determining the benefits and impacts of each airspace change option.	
We are not convinced by the geographical database of sections of airspace that is to be formed as to date the engagement has been dominated by set sectors of airspace further out from the runway. No engagement has been undertaken with residents that could be affected apart from CAGNE.	The Airspace Design Database collates a core set of information needed to clearly demonstrate how each option has been identified and why the first list is considered sufficiently comprehensive. It gives us a data-based approach to developing airspace change options. At this stage, the geographical sections (sections of airspace where a flight path may conceivably be positioned within the scope of the ACP) have only been constrained by the basic principles of regulatory airspace design criteria. Following the flooding exercise, where we define the broad range of notional flight paths that are technically possible within each section of airspace, we then undertake the preliminary evaluation which gives us the data to start developing airspace change options. Once we have our comprehensive list, we then test these with our stakeholder representatives, before refining and developing further and undertaking evaluation and appraisal. There will be the opportunity for all residents to comment on the airspace change proposals at Stage 3 of the Airspace Change Process when we hold a full public consultation.	n/a
The profile of aircraft in flight must have a value, as the frame of a plane on take-off or arrivals at 14nm+ from the runway is very different to 8nm from the runway, this must be factored in.	The altitude and profiles of aircraft are considered when undertaking noise and environmental analysis.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Historic value (protected by NPRs) must be included in the methodology as well as the totality of noise endured by multiple routes experienced.	As part of our methodology we have committed to looking at options that minimise the total number of population overflown <u>and</u> options which minimise the number of population newly overflown. We expect the options that minimise newly overflown to follow the existing NPRs. The cumulative impact of noise through multiple routes will be included as part of our appraisals.	n/a
Continuous Climb Operations are already causing issues for residents believing they are newly overflown by the noise shadow CAP 1498. It is therefore disappointing that you push ahead with CCO at 6% and that routings will not be considered with noise shadows to show impact of multiple routes as well as overflight of new areas with noise impact.	Our airspace design database includes overflight metrics, amongst others, which are based on the CAA's definition of overflight outlined in CAP1498. We will use these metrics when developing our comprehensive list of options.	n/a
If all airspace is to be considered then overflight of areas that are currently not permitted to be overflown such as Horley, Crawley, Horsham, must be included in the mix otherwise you will be targeting rural areas through unfair population count.	Our airspace design database includes notional flight paths that flood the geographic sections of airspace; there are no constraints based on existing areas of high population. As part of our methodology we have committed to looking at options that minimise the total number of population overflown and options which minimise the number of population newly overflown. The options that minimise newly overflown would naturally look to avoid new overflight in	n/a
Although SoNA results were inconclusive it is clear to residents that there is far greater ambient noise in an urban setting to a rural one as such both should be treated equally and not subject to population count which will target rural areas with intent.	all areas rural or urban. The balance of overflight of rural areas with overflight of areas of high population also forms part of the Fair and Equitable Distribution (FED) study. Gatwick, as part of the Noise Management Board (NMB) workplan, is currently undertaking a Fair and Equitable Distribution (FED) study, which aims to define and quantify fair and equitable distribution of noise. The outcomes of the study	

Question (You Said)	Answer (We did)	Follow up actions (We did)
	will be used at Step 2B to assess the airspace change options as part of the Initial Options Appraisal. Throughout the ACP process, as and when new information becomes available which is pertinent to our ACP, we may develop and refine options supported by the quantitative information contained within the Airspace Design Database. We will communicate the evolution of our options with stakeholders within our submission documents and, where possible, within our stakeholder engagement sessions.	
You've invited Kent CC - no longer a county councillor. was appointed to represent Kent CC on GATCOM and we've appointed to serve on NATMAG. I believe is also the Kent representative on the NMB. Should the invitation be sent to ?	Thank you for making us aware; we immediately updated our stakeholder contact list and invited to the workshops.	n/a
I've noticed that a x4 Parish and Town Councils have been invited to participate - Slinfold, Salford and Sidlow, Burstow and Horley (or have and been invited due to their role as GATCOM's Lead/Deputy Lead Member for noise?). Should the invitation be extended to other interested parish and town councils - particularly those on GATCOM - Charlwood & Rusper? Noting that Rusper PC's representative on GATCOM is also now a NATMAG member (all the other GATCOM NATMAG members have been invited). Is there a need for consistency in approach to which Town and Parish Councils are	At Stage 2 we are required to engage with the same stakeholders we engaged with during the development of the Design Principles (Stage 1B). Our stakeholder database contains all Stakeholders engaged at Stage 1 and this includes NATMAG and NMB members Horley sits on NATMAG, and also sits on NATMAG hence their invitations. Representatives from Slinfold and Salford and Sidlow parish Councils were invited in their capacity as members of the CAGNE Town and Aviation Parish Council Forum. GATCOM invitees only include the chair and secretary (as per Stage 1) During Stage 1, based on stakeholder feedback, Gatwick committed to broadening stakeholder engagement to Parish Councils during Stage 2 where	n/a



Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
invited to participate at this stage? East Grinstead, Dormansland and Warnham also spring to mind	and when appropriate. This is beyond the CAP1616 requirements but we recognise the importance for local parish councils to be involved in the ACP process. We plan to do this during the third round of stakeholder engagement when we have our shortlist of options and pertinent Parish Councils can be identified. It is planned that separate sessions will be held for these stakeholders so that we can explain the overall ACP process and our methodology, as well as present our shortlist of options. The third round of engagement has been identified as the most appropriate point in Stage 2 to engage these additional stakeholders as we will have a shortlist that will enable us to undertake targeted engagement; any earlier in the process and the number of parish councils, and the scale of the engagement activity, would be disproportionate to the ACP requirements for engagement. At Stage 3 of the process, we will undertake a full public consultation.	
Do you need to think about blind copying invitees as personal email addresses have been disclosed?	Thank you for making us aware of this which was unfortunately sent in error. All future emails sent have been blind copied.	

6. Stakeholder Update Briefing (December 2021) (Event E)

When the ACP restarted, Gatwick had planned to hold the second round of stakeholder events on the Comprehensive list of Options in December 2021, however due to changes in the overall Stage 2 timeline, this round of engagement was postponed until February 2022. As explained within the <u>contingency planning section</u> of our stakeholder engagement strategy, in the event of a delay with engagement, we decided to conduct a stakeholder update briefing instead, to share the progress made so far, explain the reasons for the delay and set out the new timeline.

Two virtual briefing sessions were held on the 7th and 9th of December, the purpose of these briefings was to update stakeholders on the development of the comprehensive list of options and the project timeline. We also gave stakeholders the opportunity to feedback on our engagement approach to date (considering that all engagement activities have so far been conducted virtually because of COVID-19 restrictions). The workshops were split into the following agenda sections:

- Update on the UK Airspace Change Masterplan
- Update on the overall timeline for the Gatwick FASI ACP
- Update on the development of the Comprehensive List of Options
- Briefing on technology options / operational concepts
- Feedback on the effectiveness of our engagement

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Table 13 Summary of Stage 2A Stakeholder Update Briefing (Event E) activities (engagement evidence references in parentheses)

Invitation	Agenda / Briefing	Post-Event	Feedback
Meeting invitation send on 17th November 2021 asking delegates to register by return email. (E.1.)	Agenda and briefing note (E.4.) sent to registrants on December 6th 2021 (E.2.)	Presentation slides (E.6.) and meeting notes / Q&A (E.7.) circulated to participants on 13th January 2022 (E.5.)	Fifteen feedback emails received from stakeholders. (E.8.)



Table 14 Questions, answers and follow up actions arising from the December 2021 stakeholder update

Question (You Said)	Answer (We did)	Follow up actions (We did)
	The outputs of the FED and ILS Joining Point studies will be incorporated into Step 2B of the ACP process during the development of the Initial Options Appraisal.	
Gatwick is currently undertaking the Fair and Equitable Distribution (FED) study, and a night time ILS joining point study, at what point in the ACP process will the outputs of these studies be taken into account?	The ACP is currently in Step 2A of the process that concentrates on the development of a comprehensive list of airspace design options for the proposal. The options should address the issues and opportunities set out in the Statement of Need and align to the design principles developed during Step 1B of the process. Step 2A concludes with a design principle evaluation where each option is evaluated against each design principle. The outcome of the design principle evaluation may be a shorter list of options that progress to the Initial Options Appraisal (IOA) in Step 2B. It is at Step 2B where we expect the outputs of the FED and ILS Joining Point studies to become available and inform the analysis that is conducted to support the IOA. As we progress through the process the options will be further developed and refined. This means that we may go back to the comprehensive list of options and bring forward additional options in response to the analysis and engagement we have conducted so far. When we do this, we will always explain and document what information has influenced the refinement, why the options has been developed and what (if any) additional options have been brought forward.	n/a
At what stage in the ACP process will Gatwick have to wait for other ACP sponsors, who share interdependencies with Gatwick, to catch up?	Based on the current information we have from the Airspace Change Organising Group (ACOG) and the CAA, we will most likely be unable to progress beyond Stage 3A of the CAP1616 process until we can quantitatively assess the interdependencies with the other ACP sponsors participating in the FASI-South programme. We know that the Gatwick FASI ACP will be share significant interdependencies with the (amongst others) the Heathrow and NATS led ACPs.	n/a
Are the notional flight paths contained within existing Controlled Airspace?	The notional flight paths we have developed are not constrained by the existing CAS structure. We will assess the impact to controlled airspace as part of the Initial Options Appraisal.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Are the 60dB and 65dB LAMax contours shown in the Airspace Design Database, the same as N60 and N65 contours?	Yes, 60dB and 65dB LAMax contours are sometimes referred to as N60 and N65 contours.	n/a
Do the noise assessments in the Airspace Design Database consider ground height?	Yes, the database takes into account ground height and profiles of aircraft operating from Gatwick.	n/a
Does Performance Based Navigation result in concentration?	Performance-based Navigation (PBN) tends to concentrate the flow of traffic around the route centreline because aircraft follow exactly the same coordinates with greater precision and air traffic controllers are not routinely required to vector flights.	n/a
Are you reviewing the boundaries, bases and classification of Controlled Airspace as part of this Airspace Change?	lled	
As part of your evaluation and appraisal, will you look at noise sensitive buildings such as schools and hospitals?	As part of our Initial Options Appraisal and Full Options Appraisal, we will include information about schools, hospitals and places of worship that may be affected by each airspace change option. At Step 2A, as part of the design database used to create the comprehensive list of options, we haven't included specific analysis of noise sensitive buildings to keep the methodology proportionate. There is typically a correlation between the density of population and the location of these buildings so we've therefore chosen to use some of the existing metrics as an indicator of impacts.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
If we have further questions following review of the presentation, how do we contact Gatwick?	If you have any questions throughout the Airspace Change Process please contact the team at LGWairspace.FASIS@gatwickairport.com	n/a
Workshop 2		
	Heathrow are currently at Stage 1 of their ACP, developing airspace design principles with representative stakeholders.	
Heathrow's ACP is behind in the airspace change timeline compared to other	Based on the current information we have from the Airspace Change Organising Group (ACOG) and the CAA, we will most likely be unable to progress beyond Stage 3A of the CAP1616 process until we can quantitatively assess the interdependencies with other ACP sponsors.	
FASI-S ACP sponsors. When are they expected to catch up to the level that Gatwick are at?	We are formally engaging with Heathrow Airport and all other interdependent ACP sponsors throughout Stage 2 in preparation for the cumulative impact assessment work that will need to be conducted collaboratively in Stage 3. Details of our engagement with the other interdependent FASI-S ACP sponsors and the outcomes arising will be set out in our Stage 2 submission.	n/a
	We expect to learn more about Heathrow's proposals and timelines over the next 12 months and we will update stakeholders on timelines following this.	
How do communities monitor other ACPs that may also impact them and	Iteration 2 of the UK Airspace Change Masterplan, produced by ACOG, is expected to be published in January and is intended to identify all the areas where potential interdependencies between FASI-S ACPs may arise. Stakeholders will be able to use this document to identify the overlaps with other ACP, as well as understand the risks and how these could be managed.	n/a
how will Gatwick ensure communities see the overall picture?	At Step 2B of the Airspace Change Process, Gatwick will start to identify interdependencies and we will share information about how other proposals may interact with ours. This will be an ongoing process as we receive further information from other airspace change sponsors. We will use the engagement sessions planned to keep our Stakeholders updated on information as and when it becomes available.	11/4



Question (You Said)	Answer (We did)	Follow up actions (We did)
Have you got a central portal which publishes information about Gatwick (and other) ACPs and provides an audit trail for the stages?	The CAP1616 process requires us to use the CAA ACP Portal (https://airspacechange.caa.co.uk/). On the portal, all documentation associated with each gateway submission for Gatwick's ACP is saved. Documents are typically uploaded when we progress through a process gateway. In addition, following all engagement sessions, we circulate the slides and a question and answer document to stakeholders. We've previously fed back to the CAA about the ease of use of the portal and we're aware that they're working on improvements.	n/a
What are the shadings showing on the map taken from the UK Airspace Change Masterplan? [Slide 10]	The shaded areas show the number of other proposals the Gatwick ACP shares interdependencies with below 7000ft. The shaded areas do not necessarily mean that options have been developed in those areas however it is an area where it's technically feasible for a flight path to be positioned and therefore an interdependency to arise.	n/a
How do the areas of interdependencies shown on the UK Airspace Change Masterplan map [Slide 10] get prioritised if multiple airports want to position a flight path in the area?	At Stage 3A airspace change sponsors are required to identify the potential interdependencies between the options included in their respective ACPs and undertake detailed quantitative assessments of the cumulative impacts that they may create. The outputs of the cumulative impact assessments will be used to inform trade-off decisions between route options that may be in conflict with one another. Conflicts between route options may be resolved in several ways, for example: • The route options could be deconflicted laterally, • The routes options could be deconflicted vertically, • The routes options could be deconflicted through ATC procedure, or • One or both of the route options could be removed. The way that sponsors make these trade-offs is going to be one of the largest challenges when developing the FASI-S airspace change proposals. Stakeholders will be able to influence trade of	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	decisions during the Stage 3 Public Consultations on the ACPs. For this reason, ACPs that share interdependencies are expected to conduct their Stage 3 Public Consultation in a coordinated way.	
Why does the UK Airspace Change Masterplan map [Slide 10] not specify Farnborough Airport and is there any priority between Gatwick serving the general public vs private airports like Farnborough?	Farnborough isn't included on UK Airspace Change Masterplan map because the airport operator is not currently sponsoring an Airspace Change Proposal. The Gatwick FASI ACP will have to manage the interdependencies associated with Farnborough's existing airspace arrangements. The policies and regulations that underpin the airspace change process treat all proposals equally – there is no prioritisation applied to larger commercial air transport airports such as Gatwick over smaller airports with more business jet and charter traffic.	n/a
Will Gatwick show their chosen airspace change routes in the engagement sessions in February 2022 and what mechanism will stakeholders have to appeal those chosen routes?	As part of the stakeholder workshops, currently scheduled for February 2022, we will share our comprehensive list of options. Our comprehensive list of options will include a wide range of workable systems (groups of arrivals or departure routes that are operationally compatible) and aim to address the Statement of Need and align with the Design Principles from Stage 1. When we present our comprehensive list options, we will not yet have evaluated or appraised the routes they contain in detail. This appraisal will take place in Step 2B and Step 3A. Following the stakeholder engagement sessions planned for February 2022, we will refine the options and potentially develop additional options as a result of the feedback received, before taking the updated list through to our Design Principle Evaluation. At this stage, we may shortlist options depending on their performance in the Design Principle Evaluation. The shortlist of options will then proceed to the Initial Options Appraisal where we will undertake a more detailed analysis of the potential impacts. The outcomes of the Initial Options Appraisal in Stage 3.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	At Stage 3 we will undertake a full quantitative appraisal of the shortlisted airspace change options. Following this appraisal, we will prepare consultation material and hold a public consultation where there will be the opportunity for all stakeholders and the public to comment on the proposed options.	
The CAA's airspace change portal is difficult to find when searching the CAA website and it is hard to find out information about the ACP, please could you feedback to the CAA and ask them to improve this?	Gatwick's ACP is available on the airspace change portal here . The portal home page (to access all ACPs) is available at https://airspacechange.caa.co.uk/ Gatwick Airport's website also has a link to Airspace Change Portal and we will raise again with the CAA around improving the visibility of the portal within online search results.	Yes – see section 7
Will you be removing the Noise Preferential Routes?	As part of the Airspace Design Database that we are using to develop the comprehensive list of options we have included notional flight paths that align laterally to the existing NPRs, however we have also developed a broad range of other notional flight paths that are not constrained by the existing NPRs. When we build our comprehensive list of options, we will aim to develop options that minimise population newly overflown, and it is likely these options will follow the existing NPRs. We will also develop options that minimise total population overflown, and these may not follow the existing NPRs. We'll also use the information in the database to try to develop options that achieve a balance between total population overflown and newly overflown. The NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process, which is overseen by the Department for Transport (DfT). As Gatwick progresses through the CAP1616 process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes.	
What population information does the Design Database use, and does it take into account local development plans?	The Airspace Design Database uses 2021 population postcode data provided by an organisation called CACI for the preliminary assessment of the performance of the notional flight paths. As the proposal progresses to the Initial Options Appraisal and Full Options Appraisal stages of the process the preliminary assessment data will be supplemented with additional information including planned developments and local plans.	n/a
Does the Airspace Design Database take into account the areas of AONB currently under consultation?	The airspace design database includes the current AONBs and we are aware of the ongoing consultation. The Initial Options Appraisal will take into account any changes as a result of the AONB consultation.	n/a
Are you considering the altitude of aircraft as part of the assessment?	The altitude of aircraft is taken into account when we are assessing the noise impacts of each option that is considered for inclusion on the comprehensive list. This ACP covers changes between 0 – 7000ft; changes above 7000ft are covered as part of the NATS-led FASI South ACPs.	n/a
In the slides, you've said that the newly overflown metric uses 2019 data however since 2019 Route 4 has changed; how have you considered this within the airspace design database?	We've used 2019 data about traffic volumes that broadly represent a busy operation, reflecting the recovery from the impact of the Covid-19 pandemic. However, for Route 4 we have adjusted the information in the database to reflect the extant Route 4 procedure.	n/a
The example of the functionality of the airspace	Gatwick, as part of the Noise Management Board (NMB) workplan, is currently undertaking a Fair and Equitable Distribution (FED) study, which aims to define and quantify fair and equitable distribution of	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
design database looks at population density, however when prioritising this, it is at the disadvantage of communities living within villages and rural areas. How is this being considered as part of the ACP?	noise. The outcomes of the study will be used at Step 2B to assess the airspace change options as part of the Initial Options Appraisal. Throughout the ACP process, as and when new information becomes available which is pertinent to our ACP, we may develop and refine options supported by the quantitative information contained within the Airspace Design Database. We will communicate the evolution of our options with stakeholders within our submission documents and, where possible, within our stakeholder engagement sessions.	
The treatment of Route 4 within the database doesn't reflect the Route 4 ACP and the ongoing events with the extant Route 4.	Based on the timelines and the status of the Route 4 ACP, for the purposes of this preliminary assessment as part of the Airspace Design Database, we have used what is currently being flown. At the Initial Options Appraisal stage, we will consider the Route 4 ACP and the current status of the extant Route 4 procedure and we will consider how this is incorporated into the baseline scenario.	n/a
Why are the dB levels within the Airspace Design Database set so high? The World Health Organisation guideline values states 55dB LAeq16hr for daytime serious annoyance and 45dB LAeq8hr sleep disturbance.	The nose analysis within the airspace design database is based on single aircraft event data whereas the World Health Organisation values stated are average exposure across a 16hr day and 8hr night period. This single aircraft event data, such as the 70dB and 80db Sound Exposure Levels (SEL), are part of the calculations for the average exposure measures across the day and night time periods. In order to calculate LAeq average exposure metrics, we need to define full systems of arrivals and departure routes. At this stage, while we are focusing on notional flight paths we use the single event metrics as indicators of the likely impacts/benefits of the LAeq metrics.	n/a
Your Stage 1B Design Principles were not agreed	During Stage 1B, the airspace design principles that guide our proposal were developed with stakeholder representatives as part of our engagement activity. We then submitted our Stage 1B	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
with Stakeholders, they were only agreed with the CAA.	Design Principle documentation to the CAA where we outlined the evolution of our Design Principles, and the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1B gateway.1	
How do you use the database to build overall systems rather than just to find high performing paths?	The information about the Airspace Design Database, provided within the workshops, was a simplified example of some of the functionality of the database. Within the database we are able to filter data to enable us to identify higher performing flight paths that work together to form workable systems of arrivals and departures. When we present our options at the next round of engagement, planned for February 2022 we will include an overview of the information we have used within the database to develop the systems. The database provides us information on noise impacts and will eventually also have track length (which is a high-level indication of fuel burn and CO2 emissions) however we also have other design principles that we need to consider. Many of these are considered at the point of developing the system options and therefore we will also outline how these have influenced the development of the comprehensive list.	n/a
How will you consider the northern runway DCO as part of your options appraisal and how will you examine options that may perform well at lower traffic levels?	As part of our Full Options Appraisal at Stage 3, we are required to quantitatively define the scenarios we will use to assess our Airspace Change Options for the planned year of implementation and 10 years following implementation. We expect this to include scenarios with and without the northern runway DCO project as well as with and without the Airspace Change. Subsequently, a range of traffic forecasts based on these scenarios will be used which will enable stakeholders to understand the overall performance of the different airspace design options with different traffic levels.	n/a
Will you be engaging with a broader mix of stakeholders at Stage 2?	Our stakeholder engagement activities that support the Stage 2 options development and assessment tasks must involve the same mix of representatives that helped us to develop the airspace design principles during Stage 1. A full list of these stakeholders is set out the CAA's Airspace Change Portal.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	We will undertake engagement activities with a wider mix of stakeholders as the ACP progresses and the potential impacts of the various airspace design options becomes clearer. In particular more people will be drawn into the process at Stage 3, when we will hold a full public consultation.	
Has Gatwick considered Monte Carlo simulation to develop the comprehensive list of options?	When building the Airspace Design Database, we have ensured that it is underpinned by data science principles, however we have balanced this with the ability to combine the data with professional judgement regarding the operational compatibility of the systems. We feel the approach that we are following is proportionate for this stage of the process but do not rule out the use of other techniques, if required, as the appraisal progresses.	n/a
As part of the technology section of the presentation, you referenced greater precision in turns, however this is not necessarily an asset as it may increase concentration. Will this be taken into account so that more dispersal can be achieved where fairness demands it?	The information shown in the technology section are the cornerstones for the network as a whole and there are many situations where aspects such as concentration are not desirable. Currently the technology outlined is largely untested at scale and this is something being considered by the CAA and DfT. There may be opportunities for the precise turns enabled by PBN to include a form of dispersion using particular waypoints. An example of this is the turn designed for Route 4. When we develop options as part of our ACP we will take this into account. We will also incorporate the outcomes of the Fair and Equitable Distribution (of noise) study and all other relevant technological and process developments.	n/a
How does CAP1498 factor into this process?	Our Airspace Design Database includes metrics which use the CAA's definition of overflight as outlined in CAP1498. Within the database, we have used the 48.5° overflight cone.	n/a
Currently holding stacks are no lower than 7000ft so will new routes over these areas be below 7000ft?	Within our Airspace Design Database, we have taken a 'blank sheet' approach to developing options that focus on minimising the adverse impacts of aircraft noise. This means that we have not been constrained by the existing location of holds or network entry/exit points. The notional flight paths developed all achieve continuous climb and descent and therefore, particularly for departures, routes would reach 7000ft earlier than they do today.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	At this stage, we are in the process of developing our comprehensive list of options, and we will have further information about the route positioning at the next engagement session in February 2022. The upper airspace above 7000ft will be covered under a separate ACP which is lead by NATS NERL.	
What does the technology update translate into for people on the ground, will this result in multiple routes, and is there a risk that the benefits aren't possible because the technology isn't available?	As part of our comprehensive list of options we will develop options that have multiple route configurations that are intended to meet our design principles regarding respite. At this stage, although we are aware of the technological developments and their potential, more information is needed about how they will be integrated into the operation in practice and the associated timelines before we can be certain how and when they will be effective. When we present our comprehensive list of options, we will provide a qualitative statement alongside each option that indicates whether the option is dependent on future technology and broadly how. This statement will also describe how the option may be operated whilst this technology is unavailable.	n/a
How does 3Di factor into your airspace change?	As part of our full options appraisal we will quantify track length, fuel efficiency and CO ₂ benefits and impacts however we won't use the 3Di tool to undertake this analysis.	n/a

Table 15 Stakeholder feedback on our engagement approach so far (provided in workshops)

You Said

Council meetings take place on a number of evenings in the week

Thanks and Level of detail is good. Timing with the DCO going on at the same time is not helpful given the amount of work that is needed to consider both proposals in detailed proposals.

Imagine during face to face there is richer interactions however the virtual engagement is extremely convenient. It enables more people to join. Ideally a combination of the two – where possible, critical engagement face to face and then periodic virtual engagement would be really helpful.



You Said

I'd echo comments on today's presentation: it has been very clear and helpful - a massive thanks to you all.

Me too - thank you! (In response to comment above)

Thank you GAL, complex subjects relating to CAP1616 ACP process, air traffic control and airspace design all superbly articulated throughout. Thanks for inviting NATS today.

Agree what we've seen today is very good technically and encouraging. Don't mind continuing in this format.

Teams is excellent, working really well

The Feedback received from Stakeholders following the December engagement workshops is shown in the table below:

Table 16 Stakeholder feedback on our engagement approach so far (Provided post workshop)

You Said	We did

Engagement feedback.

- The virtual format works well especially considering that many of the stakeholder representatives are vulnerable.
- More notice of meetings would be appreciated as most representatives are volunteers.
- I am not sure that enough stakeholders are involved given the wide ranging impact this ACP could have on all areas around Gatwick.
- Where there are several meetings available having a daytime and evening option is a good idea.
- The detail in presentations has been good.

Feedback on FASI presentation

We aim to provide a minimum of 4 weeks between sending out engagement invites and holding the meetings and we'll continue to try to provide as much notice as possible in future.

Feedback on the FASI Presentation:

As part of the next rounds of engagement (Round 2 and 3) we'll include further information around the baseline pre-implementation scenario and why we've used 2019 data to help define this.

As part of our comprehensive list of options, we plan to include options that aim to minimise newly overflown, and options that aim to minimise total population overflown. Those options that aim to minimise newly overflown will consider the existing NPR swathes. We'll also explore the different ways



You Said We did

- We do not believe that just a 2019 snapshot is a fair way to define "Previously Overflown". Whilst many routes have remained constant for many years other routes (3 and 4) have moved around considerably.
- We do not believe that anywhere within an NPR boundary should be classified as "not previously overflow". To do so would unreasonably restrain the options for dispersal. By definition areas within the NPRs, that have remained unchanged since the 1960s, should expect overflights.
- Whilst prioritising the avoidance of "not previously overflown" areas with current levels of traffic is reasonable, to do so in the longer term with huge increases in traffic would place an intolerable burden on the currently overflown areas.
- We would like to see the ability to facilitate Continuous Climb Operations become a high priority in deciding departure route options.
- A key principle should be to avoid any one community suffering noise from more than one airport or route. Any one community, except those on the runway extended centre line, should not suffer noise from both Easterly and Westerly operations. Also, Heathrow departures and arrivals should not overfly communities already affected by Gatwick routes.

we can potentially mitigate the impacts of noise such as respite configurations.

As we progress through the airspace change process we will investigate the options for continuous climb performance and this will be documented as part of the Design Principle Evaluation and Initial Options Appraisal.

Gatwick's design principles include 'Deconfliction by Design; 'The airspace design should seek, where possible, to deconflict routes by design below 7000ft and the prevalence of overflight of a community by flights on different routes and/or by neighbouring airport traffic, provided this does not significantly extend a departure or arrival route'. We will consider this Design Principle as we build our comprehensive list of options and all options will also be evaluated as part of the Design Principle Evaluation. As part of Stage 3 of the ACP, we will be required to quantify cumulative impacts with other airports.

Thank you for the opportunity to feedback regarding the stakeholder engagement process so far for the FASI-S ACP Project.

Thank you for this feedback, we will consider this as part of future rounds of engagement.



You Said	We did
I apologise for not having sent this by your deadline of last Friday, but there is just one point it would be useful to make, though this may already have been raised:	
This project is running alongside the Gatwick NRP DCO, and also that for the proposed Route 4. Therefore to allow time for local government officers under pressure from various other workstreams to provide considered responses it is important that consultation timings for this project are mindful of the timescales for the other projects.	
Regarding your request for feedback, we welcome the level and type of engagement that has taken place to date. The process of airspace modernisation and airspace change is complex, therefore it is imperative that the level of engagement continues throughout. Meaningful consultation materials and information should be produced in such a way that those without technical knowledge can understand the airspace change process, any options/proposals, and the likely effects of those proposals. The publication of a comprehensive list of options may create considerable concern to communities, therefore thought should be given to providing some weighting or scoring to the options, so that there is some indication of what is probable and possible. The modernisation of Gatwick and Heathrow airspace simultaneously may have cumulative effects on communities, therefore information should be provided to make clear where this may occur.	Thank you for this feedback which we will consider as part of future rounds of engagement and consultation and as we are generating our materials for stakeholders and regulatory submission documents.
I am happy to be able to provide you with the following feedback on the GAL engagement process to date:	n/a
NATS welcomes the constructive and open dialogue and feedback opportunities provided through the series of GAL informative and professionally presented webinars. These have shown the desire to introduce an optimal, modernised airspace solution which will benefit all	



You Said	We did
stakeholders taking into account the GAL original Statement of Need and Design Principles. We look forward to continuing to work with you.	
Sorry I have not been able to attend your meetings so far. I have found the information supplied to be clear and acceptable.	n/a
Please continue to keep me informed. Thank you for the resources from the last stakeholder engagement sessions. I have been happy with the frequency and content of engagement so far, though there is obviously a large amount of repetition across the project (I attend all of the different airports' sessions). Online delivery has been very useful given the WFH posture that continues and I would prefer that option in future even if restrictions are reduced. The main impact on Defence aviation is likely to be by changes to controlled airspace, so I will be involving a wider MOD stakeholder base at that stage and online delivery would lend itself better to involving those personnel (should they need to attend rather than me back-brief them). RAF Northolt input is all managed separately by their FASI team.	Thank you for your feedback; we intend to continue to provide online workshops as part of our Stage 2 engagement.
Regarding your request for feedback on the engagement process I feel it is going well. The briefing is good as are the discussions. I have a couple of questions following on from the last Meeting and I would appreciate a response if possible. 1. How have you determined the latest joining point on the ILS and what is it? Will it be the same for day and night time?	Thank you for your feedback. 1. The notional flight paths contained within the airspace design database join the final approach between 5nm and 15nm. Details such as the latest joining point on the ILS will be determined later in the process as we mature the proposals. As part of our Comprehensive List of Options, we will develop some night time specific options and we will also have options that could be operated during the day and night. The Step 2B Initial Options Appraisal and



You Said	We did
2. Why are you using 2019 Overflight detail and not the pre 2013 detail? 3. Can you confirm that the design intention is NOT to favour positioning the new routes over those previously overflown and that routes over those not previously overflown will be equally considered.	Step 3A Full Options Appraisal will evaluate the benefits and impacts of these. 2. As part of the next rounds of engagement we'll include further information around the baseline pre-implementation scenario and why we've used 2019 data to help define this. 3. As part of our comprehensive list of options, we plan to include options that aim to minimise newly overflown, and options that aim to minimise total population overflown. Those options that aim to minimise newly overflown will consider the existing NPR swathes. We'll also explore the different ways we can potentially mitigate the impacts of noise such as respite configurations.
Thank you for contacting us about Gatwick Airport's consultation about public engagement. We have the following comments to make. Whilst we welcome the opportunity to comment on the proposals for Gatwick Airport, we would recommend future consultation questions are open ended to allow for a wider range of views to be expressed. Waverley Borough Council declared a Climate Change Emergency in September 2019 and support the reduction in carbon emissions including through the aviation industry.	At this stage (Stage 2A), we're not consulting on our proposals; this comes as part of Stage 3. When we present our Comprehensive list of options as part of the next round of this Stage 2 engagement, there will be the opportunity for stakeholder representatives to provide feedback.
The text below represents the feedback from both the first round of the stakeholder meeting that I attended, and also the attached PowerPoint presentation of the meetings on the 7 th /9 th of December 2021 that was sent out to all stakeholders Almost all of the questions that I would have raised have been answered in the Summary of questions and answers from stakeholders	1. The presentations from the Stakeholder meetings, including the General Aviation meeting referred to in the feedback, will be published on the Airspace Change Portal as part of the Stage 2 submission to the CAA. Alongside this, there will be a log showing which organisation attended / received post-event updates. Feedback received in each round of Stage 2 engagement is provided in this report.



You Said We did

participating in the FASI-South update briefings held on the 7th and 9th December 2021. Version v1.0 20/12/2021.

Question 1.

Stakeholder engagement.

On the CAA's ACP website I have found the document that list the initial group of stakeholders that would be involved in the Gatwick ACP Step 2 engagement. On the first Teams meeting that I attended there was only one other stakeholder present and it was noted by the Gatwick ACP team that they would need to ensure better engagement with other stakeholders. My question is "Are the presentation of these stakeholder meetings going to be published on the CAA ACP portal with a list of stakeholders who attend?"

This would ensure that the engagement process in step 2a has some visibility and it is not just a tick box exercise when the CAA come to sign off on this gateway.

Question 2.

Airspace Modernisation Strategy.

On slide 24 of the presentation it introduces the Airspace Modernisation Strategy and how the ACP will follow the principles. It references CAP 1711 in the GAL FASI-South ACP Stakeholder Briefing Record, December 2021. The CAA have brought out CAP 2298 which is intended to replace CAP 1711. My question is "Once CAP 2298 has gone through the consultation process and been adopted will Gatwick then follow this document and all of the recommendation within it as part of their ACP process?"

2. As noted, CAP2298 is currently a draft document that forms part of the CAA's consultation of the Airspace Modernisation Strategy. When the updated strategy is published, Gatwick will be required to incorporate this into this ACP process.



You Said We did

CAGNE has provided the letter, as attached, previously in our feedback on the lack of full and transparent engagement to date by Gatwick Airport.

The CAGNE committee re-iterate -

Having participated in the Gatwick FASIS meetings, CAGNE continues to raise concern about the narrowness of Gatwick's engagement with residents and elected members.

There is a serious lack of transparency to allow residents to know what is being put forward by noise groups that seem to have little, if any, electoral credibility to who they are representing.

As such CAGNE has asked the chairs of the NEX and NCF for an independent review of the noise groups on the NCF that Gatwick continues to use to engage with. Gatwick uses these forums to push forward FASIS with little concern, if any, to those that could be newly overflown or that do not have fair and balanced representation on these noise forums or within the Gatwick statutory consultative committees.

This is particularly of concern as much of the NMB workplan has been brought by the noise groups that seek to move noise over those closer to the runway via studies (ILS NAP and FED) ignoring the government's view of TAG to give greater weighting to those already significantly affected by aircraft noise closer to the runway.

At this time we reiterate our request (sent to _____ - no reply received) for details of how the new routes are to be released, as stated in December, in February to residents?

Our stakeholder engagement activities that support the Stage 2 options development and assessment tasks must involve the same mix of representatives that helped us to develop the airspace design principles during Stage 1. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway.

Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. We will undertake engagement activities with a wider mix of stakeholders as the ACP progresses and the potential impacts of the various airspace design options becomes clearer. In particular more people will be drawn into the process at Stage 3, when we will hold a full public consultation and all local residents will have the opportunity to feedback on our proposals.



You Said We did

Having participated in the Gatwick FASIS meeting this week, CAGNE raise concern again with the CAA and DfT to the narrowness of Gatwick's engagement with residents and elected members.

We appreciate that we have stated this from the outset, but there is a serious lack of transparency to allow residents to know what is being put forward by noise groups that seem to have little, if any, electoral credibility to who they are representing.

This is being allowed to continue with one noise group continuing to have the monopoly at Gatwick on statutory bodies as well as noise forums by block voting and fixed airspace criteria ensuring that all communities do not have a fair or balanced voice.

Recent studies brought by these noise groups is an example of how they continue to seek to move noise over others closer to the runway or that suffer multiple routes to and from Gatwick airport with little respite currently at much lower heights.

Please see our letter to the chair of the Gatwick NEX. Prior to this the voting was fixed to ensure the GACC noise group had both seats, the latest vote simply replaced two members of GACC. (With the recent block voting orchestrated by your DfT representative).

By contrast CAGNE has provided a nomination supported by 31 elected councils and has been totally transparent to how we engage with residents with support in Kent, Sussex, and Surrey.

Allowing sponsors to continue in this format and having the CAA, an industry body, to approve such gateways would seem unsafe as it leaves a huge number of residents unaware, uninformed, and vulnerable to the sponsors and government actions.

Feedback sent to Secretary of State. Gatwick Airport was blind copied into the email. Please see above for Gatwick response to same Stakeholder.



You Said	We did
We accept that our correspondence on this subject may be frustrating to your department, but it would be unacceptable for CAGNE, as the umbrella aviation community and environment group for Sussex, Surrey, and Kent, not to continue to raise these concerns about monopoly and lack of full and transparent engagement with all. I hope you can still take into account this feedback, a point I raised with GAL a while ago, back in August 2021. Whilst I note that GAL is planning to expand the stakeholder engagement list to include potentially affected parish councils at the initial options appraisal stage, likely around mid-2022, there appears to be a gap in current parish council engagement. Not all the parish councils that are members of GATCOM are included. For example Horley Town Council and Burstow Parish Council representatives are currently engaged but I believe Charlwood and Rusper Parish Councils are not invited to participate. Is it possible to include these two parish councils in the engagement sessions sooner rather than later please?	At Stage 2 we are required to engage with the same stakeholders we engaged with during the development of the Design Principles (Stage 1B). Our stakeholder database contains all Stakeholders engaged at Stage 1 including NATMAG and NMB members. Horley Town Council and Burstow Parish Council are invited to participate in their capacity as members of these groups. GATCOM invitees only include the chair and secretary (as per Stage 1). As correctly noted, Gatwick will engage with Parish Councils as part of the third round of engagement at Stage 2 when appropriate. This is beyond the CAP1616 requirements but we recognise the importance for local parish councils to be involved in the ACP process. We plan to do this during the third round of stakeholder engagement when we have our shortlist of options and pertinent Parish Councils can be identified. It is planned that separate sessions will be held for these stakeholders so that we can explain the overall ACP process and our methodology to date, as well as present our shortlist of options. This is considered the most appropriate time to capture Charlwood and Rusper Parish Councils as it provides an opportunity for them to be guided through the work undertaken to date.
"In our view the FASI engagement process itself has been relatively good so far. The sessions have been useful and have provided a good update on where the project is, how it fits into the FASI work taking place at other airports and how it's being directed by the airspace master plan under the direction of ACOG. However, we would suggest	Thank you for your feedback around the engagement to date. On some occasions, such as these sessions where we have presented our Comprehensive List of Options, we considered it important to provide a verbal explanation alongside the presentation. This allows stakeholder representatives the opportunity to ask questions and have any points



You Said We did

a degree of caution in that, to date, we haven't seen any route options and it's only at that point that effective engagement will become more challenging.

Although there has been good engagement so far, we think this could be improved by invitees receiving presentation materials in advance of each meeting. In so doing, it would allow invitees to prepare in advance, ask better questions, allowing the sessions to be more interactive thereby making the overall engagement more effective. I'd also say that, to date, the sharing of the presentation materials and the questions and answers after each session has been far too slow. We are also aware that on occasion the post meeting response to questions asked, but not fully answered, has been very slow. To ensure that there is a good degree of continuity and to ensure that issues don't get "lost" along the way, I think it's important that such responses are expeditiously provided.

I hope our feedback is helpful and that the suggestions made are implemented as we move through the remainder of the project." clarified. Therefore we did not circulate the full presentation in advance. We did provide a briefing note to allow stakeholders to adequately prepare for the sessions.

In addition, regrettably there have been occasions where information from our engagement has been shared without context, which has been misleading to wider audiences. The opportunity for us to present prior to the information being shared means that on occasions where misleading information is circulated, stakeholder representatives are more equipped to understand the full context of the presentation and answer any questions that may arise from their groups.

We will continue where possible to circulate engagement materials to participants in advance of the sessions and take steps to speed up the process of sending out information following the last workshop sessions.





Improvements/Changes for future engagement (We did)

Following the feedback around the approach to engagement to date as shown in Table 16, and as part of the Stakeholder Engagement Report shared following Round 1, Gatwick outlined some of the key changes and improvements for engagement in future following the feedback:

- Background material sent out prior to engagement. As part of the airspace awareness
 events, some stakeholders raised that a briefing note outlining some background
 information, would be useful to review prior to the future engagement sessions. We
 therefore committed to providing a briefing note, where appropriate, prior to each round
 of stakeholder engagement.
- More reminder emails. There was excellent participation from stakeholders during the
 workshops held for the first round of engagement however we received little feedback
 in the following 4-week window. Following the briefing sessions in December we
 therefore sent out reminder emails prior to the response deadline and continued to do
 this in future engagement.
- Offering alternative workshop times. We recognise that some stakeholders may have difficulties attending workshops during conventional working hours (09.00 to 17.00).
 As part of round 2 we will hold one evening session. Following this we will review whether to continue offering these for subsequent engagement activities.
- Targeted GA Engagement. 35 stakeholders were invited to our round 1 engagement
 for General Aviation and other Airspace users however only 2 stakeholder
 representatives were able to attend the workshop. We therefore planned to undertake
 some targeted engagement with the General Aviation stakeholder group to raise the
 profile of the ACP and determine the most effective engagement mechanisms.



7. Summary of Actions: Round 1

Table 17 Summary of the actions arising from the engagement conducted during Round 1

Question (You said)	Answer (We did)	Update
What funding will be available to community groups, parish councils et al. in order for them to support and respond to the ACP process?	Gatwick has asked the DfT to respond to this question and we will update stakeholder groups when information is available.	Awaiting response from the DfT; further details will be circulated to stakeholders when available.
Will Gatwick hold a community focused workshop to explain the WebTAG methodology?	Gatwick will consider this suggestion and look to ensure that an explanation of the WebTAG methodology is provided at the appropriate stage of the CAP1616 process.	As we are still in Step 2A developing our comprehensive list of options, it is not yet the appropriate point to provide an overview of webTAG however we will ensure that an explanation of webTAG is included in our later engagement sessions.
Will detailed slides be circulated to stakeholders prior to engagement workshops?	Where appropriate materials to be used as part of future Gatwick FASI ACP stakeholder engagement activities will be circulated to participants in advance of the sessions.	Following this feedback, a summary of the briefing material has been circulated in advance of the engagement workshops and the detailed slide presentations have been shared after the meetings. We will continue with this throughout our Stage 2 engagement.
Will Gatwick Airport Limited (GAL) seek views of other organisations on the consultation plan? How will GAL look to engage with all those communities around the airport, including the hard to reach groups? Virtual consultation is one communication channel, but it is such a technical and complex area	At Stage 2 of the ACP process, there is a requirement to engage with the representative group of stakeholders engaged at Stage 1B of the process. At Stage 3, Gatwick will be required to submit and publish a Consultation Strategy which explains our plans for a public airspace change consultation. This strategy will include;	This document, once all rounds of engagement take place, will form our Stakeholder Engagement report for our Stage 2 submission to the CAA and will be published on the ACP portal.



that other and more traditional forms of consultation/exhibitions may be needed. Will this feature as part of the plan and does GAL have the resource to cover such a wide area overflown now and in the future?	Who we will be targeting within the consultation and how we have identified the stakeholder groups, How we will consult with hard to reach stakeholder groups, What consultation materials will be available and how we will share the information to enable stakeholders to provide an informed response, When the consultation and any associated events will occur. Towards the end of Stage 2, we plan to engage with stakeholder groups to help develop this strategy in preparation for Stage 3.	
How do you intend to incorporate the Route 4 ACP into the Do Nothing Scenario?	We are currently examining how best to incorporate Route 4 operations within the Do Nothing scenario and Do Minimum Option for the wider FASI ACP. We will provide an update on how this issue has been addressed during the second round of Stage 2 stakeholder engagement planned for December 2022.	We had originally planned to hold the second round of stakeholder events in December 2021 however due to changes in the overall Stage 2 timeline, this round of engagement was postponed until February 2022. At this round of engagement in February 2022, we plan to focus on the comprehensive list of options; we will therefore include information about the baseline scenario, but we will also provide further details as part of the engagement conducted during Step 2B, where we will update on the evaluation of the options including the baseline.
If the Do Nothing scenario that is used as the baseline for options appraisal includes the traffic growth enabled by the Northern Runway Project, is there a risk that airspace design options that	We will develop the Do Nothing scenario to be used as the baseline for options appraisal during October 2021. As part of the work we will consider this feedback, regarding the appraisal of options against lower traffic forecasts and an assessment of the	Our baseline 'do nothing' will include two scenarios; one with and one without the DCO. This is required as part of the CAP1616 process. We initially anticipate that there would be four scenarios quantitatively assessed as part of our Full Options Appraisal.



may otherwise have performed well at lower traffic levels are excluded?	impact of different growth profiles on the overall performance of different airspace design options. We will provide an update on how this feedback has been addressed during the second round of Stage 2 stakeholder engagement planned for December 2021.	 do nothing with ACP do nothing with DCO with ACP and DCO As per CAP1616 requirements, the quantitative assessment will be for the estimated year of implementation, which we plan to align with the DCO and for 10 years post implementation.
Natural England have commenced a review of some AONB boundaries (although it may not be approved for another couple of years). Could this be considered as part of the appraisal at future stages?	Yes. We will make a note of this feedback and review the details as we develop our approach to the Initial Options Appraisal.	At the point of developing our Airspace Design Database, the AONB boundaries have not yet been consulted on and therefore we have used the existing boundaries. When we commence our Initial Options Appraisal, we will revisit the progress with the review of the boundaries and will aim to take into account any changes if the information is available.
The CAA's airspace change portal is difficult to find when searching the CAA website and it is hard to find out information about the ACP, please could you feedback to the CAA and ask them to improve this?	Gatwick's ACP is available on the airspace change portal https://airspacechange.caa.co.uk/ Gatwick Airport's website also has a link to the Airspace Change Portal and we will raise again with the CAA the issue of improving the visibility of the portal within online search results.	Gatwick has raised the issues associated with online access to the portal with the Principal Engagement and Consultation Regulator at the CAA.



8. Round 2 Comprehensive List of Options Engagement (Round 2) (Event F)

In February and March 2022, Gatwick held the second round of stakeholder engagement workshops. We invited all stakeholders who were engaged during round 1 and the December update briefings. Three workshops were planned for 15th, 17th and 23rd of February.

For this round of engagement, to facilitate as many opportunities for engagement as possible, we did not split the workshops into three groups as per round 1, instead all stakeholders were invited to attend any of the dates available.

The purpose of the workshops was to brief stakeholders on Gatwick's FASI-S ACP comprehensive list of options, and the methodology used to develop the comprehensive list. The workshops were split into the following agenda sections:

- Welcome and introductions
- Background to the Gatwick FASI-S ACP
- Purpose of engagement on the comprehensive list of options
- Approach to developing the comprehensive list of options
- Comprehensive list of options overview
- Focus of this engagement exercise
- Next steps

Throughout the workshops, there were opportunities for stakeholders to ask questions and the section below outlines the questions and answers from the workshops. Following the final workshop, stakeholders were sent a link to download the Comprehensive List of Options presentation and a feedback form and were initially given four weeks to respond.

Additional workshop

During the engagement period, we became aware that a small number of stakeholders were unable to attend the workshops due to an error when sending out the meeting link. We therefore held an additional workshop on the 18th of March for the stakeholders who were unable to attend. We opened this invitation to all stakeholders who were yet to attend a workshop to provide another opportunity to engage.

Drop in question-and-answer sessions

In addition to the four main workshops, Gatwick also held two question and answer sessions where stakeholders could drop-in and ask questions about the Comprehensive List of Options and the presentation. No new material was presented at these sessions however the Gatwick team was available to clarify any additional information stakeholders required in order to fill out the feedback form and respond. All stakeholders were invited to these sessions.





Extended Feedback Period

Gatwick received requests from some stakeholders as part of the question and answer sessions to extend the feedback period. We also received an email from one stakeholder group requesting an extension to allow more time to engage with the groups that they represent. Following these requests Gatwick extended the feedback time frame from 25th March 2022 to 12th April 2022; providing a 6 week feedback period.

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Summary of Engagement Evidence

Table 18 Summary of Stage 2A Round 2 CLOO Engagement (Event F) Activities (engagement evidence references in parentheses)

Events	Invitation	Agenda / Briefing	Post-Event	Feedback
Main workshops:	Events i. / ii. / iii.:	Events i. / ii. / iii.:	Events i. / ii. / iii.:	28 feedback
F.i. 15th Feb. 2022 F.ii. 17th Feb.	Meeting invitation send on 24th January 2022 asking delegates to register by	Agenda and briefing note (F.4.) sent to registrants on February 9th 2022 (F.2.)	Presentation slides (F.6.) circulated to participants of main workshops on 4th March	documents received from stakeholders. (F.8.)
2022 F.iii. 23rd Feb. 2022	return email. (F.i.ii.iii.1.) Event v.: Meeting	2022 (1 .2.)	2022 (F.i.ii.iii.5.)	Note: analysis of feedback data later in this section
Drop-in / Additional:	invitation send on 4th March 2022 asking delegates			notes 26 responses (as opposed to 28
F.iv. 17th Mar. 2022	to register by return email. (F.v.1.)			docs received). This is due to 1 response being a
F.v. 18th Mar. 2022	Events iv. & vi.: Meeting invitation			duplicate and 1 response not relating to the
F.vi. 23rd Mar. 2022	send on 10th March 2022 asking delegates			CLOO questions.
	to register by return email. (F.iv.vi.1.)			



Questions and Answers during workshops

Table 19 Questions, answers and follow up actions arising from the round 2 engagement with stakeholders

Question (You Said)	Answer (We did)	Follow up actions (We did)
15/02/22		
The database seems to rely on concentrating paths. How are you considering dispersion?	The Government's Airspace Modernisation Strategy (AMS) requires airports to implement Performance Based Navigation (PBN). All the notional flight paths in the airspace design database are therefore designed to a PBN standard. The Air Navigation Guidance 2017 outlines a requirement to consider potential mitigations for the concentration that may be created by the use of PBN. We're aware of the potential negative effects of concentration, and that's why there are proposed mitigations such as alternative respite configurations included within our Comprehensive List of Options. Design Principle 7 also requires us consider respite arrangements. As part of the next steps in CAP1616 we will evaluate and appraise the benefits and impacts of each option, and this will consider the potential impacts of concentration and dispersion.	n/a
You have shown AONBs on the maps and how you have considered them, are you also considering the times in which it might be beneficial to fly over them?	We've used the outputs from the airspace design database to include options on our comprehensive list of options which overfly AONBs at night however the data is only the first step in the process; the ongoing engagement with stakeholders in Step 2B and Step 3A allows us to explore the impacts of operating in areas such as AONBs at different times of the day.	n/a
Does the airspace design database consider climb gradients?	Yes, the Airspace Design Database looks at a continuous climb gradient for our most common aircraft type operating at the airport.	n/a
What climb gradient does the airspace design database use?	The most common is 13% but we have also considered lower slower aircraft climbing at 6%.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
The displayed route going to the west of the airport looked very similar to a previous trial that Gatwick held and was met with much anger from the Gatwick community. How are you planning on considering past mistakes when doing these systems?	The Airspace Design Database does not consider any previous routes; it takes the thousands of notional flight path and calculates impact data for each so that we're able to identify the comparatively high performing paths, such as those which overfly the fewest population, or those minimise newly overflown. The next steps in the options development process are to consider stakeholders' subjective views on the routes.	n/a
What stage do you account for topography of the ground?	The airspace design database accounts for topography already. All the notional flight paths consider terrain.	n/a
Route spacing – Will there be a substantial amount of vectoring?	Some of the arrival options have associated vectoring areas. We are working with NERL, who are responsible for the airspace above 7000ft, to define the vectoring areas for these options as this will be dependent on the overall design of the network. In terms of departure routes, the Comprehensive List is currently designed to use PBN from 0-7000ft, assuming that aircraft will fly the routes as designed rather than be subject to vectoring. However depending on the airspace above 7000ft, vectoring may be required; this will be explored in further detail once information from NERL is available.	n/a
What is the closest approach you have considered?	There is an arrival option on the list which joins at 5nm, the furthest joins at 14.5nm. It's important to note at this stage that these are examples of many options, and we will investigate the benefits and impacts of each as part of the next steps of the CAP1616 process.	n/a
Are you assuming that final tracks for the approaches will be PBN routes?	Most of the arrival options on the comprehensive list are developed based on the use of PBN routes between 7000ft and landing, however we are aware that the air traffic operation may not be able to accommodate all the proposed configurations at the point of implementation, therefore we have also included some options which look to vector to final approach. We will work with NATS NERL, who are responsible for the airspace above	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
	7000ft, to understand expected levels vectoring in further detail as we progress through the process.	
How are you considering approaches against departures?	At the options development stage, given the thousands of permutations that would occur if we tried to combine arrival and departure options, we have chosen to keep these separate. As part of the Design Principle Evaluation, we will undertake high level analysis of potential arrival / departures conflicts and we will investigate this further as we shortlist options and we begin to develop and refine them.	n/a
You could look at larger groups in the departures to create areas that could be used for dispersion.	We're working with NERL, who are responsible for the airspace above 7000ft, to understand the number of departure routes which could potentially be accommodated or may be needed for capacity. There are also ways within Performance Based Navigation (PBN) that we can configure the routes to have some dispersion, particularly in the turns. This would form part of detailed Instrument Flight Procedure (IFP) design and we will explore this in further detail at Stage 3 once we have a shortlist of options.	n/a
The SID routes on the comprehensive list look shorter than today?	The routes developed assume continuous climb from 0-7000ft using a conservative 6% climb gradient which means they are shorter than today. Today some aircraft are prevented from continuously climbing and this extends the track length.	n/a
You have mentioned reduced departure splits and other users investigating this. Who is currently looking at this?	ACOG are starting work to consider whether it might be possible to use a generic rule for reduced departure splits and what angle of divergence might be more appropriate to the established 45° that is currently required.	n/a
Are you seeking to mirror west and east operations?	No. We've looked at easterly and westerly operations separately; the outputs are based on the higher performing tracks for any given area.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How are you planning on linking the current route 4 ACP with this ACP. The routes look considerably different.	The route 4 ACP is a completely separate ACP and it has a different scope compared to the FASI-S project. This is why the options may look different between the two ACPs. The Route 4 project is trying to design a new route based on current restrictions and airspace whereas with this ACP, we are able to take a 'blank sheet' approach to developing options.	n/a
Dispersal vs concentration – How are you considering dispersion with PBN tracks?	The current system options feature PBN departure routes which we are required to develop in order to meet the Government's Airspace Modernisation Strategy (AMS). As part of the airspace change, we also need to look at how we potentially mitigate the impacts of the concentration created by PBN and therefore we have included options on our comprehensive list which look to provide respite. There may also be ways within the PBN design criteria that we can configure the routes to have some dispersion, particularly in the turns. This would form part of detailed Instrument Flight Procedure (IFP) design and we will explore this in further detail at Stage 3 once we have a shortlist of options.	n/a
If overflown via an approach, will you be considering whether you can also be overflown by a departure?	We will look at potential cumulative impacts from arrivals and departures initially as part of the Design Principle Evaluation, and then in further detail at the Initial Options Appraisal.	n/a
How many PBN tracks are airlines willing to accept for Gatwick?	There are ongoing conversations with airlines to understand their requirements/capabilities regarding the use of PBN routes. If any feedback from airlines is used to influence the development of the comprehensive list then we will document this as part of our Stage 2 submission documents.	n/a
How are you planning on bringing in different studies that Gatwick are doing into these systems? For example, the FED study.	Where there is data available to aid us in the future development of these system options, we will incorporate it into the process. In the case of FED, if available we will incorporate into the Step 2B Initial Options Appraisal, and the Full Options Appraisal at Step 3A.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Is the radar vectoring areas set as displayed on your images?	No. The image shows an indicative area which we have developed using outputs from the Airspace Design Database. We're working with NERL, who are responsible for the airspace above 7000ft, to understand more about arrivals and information from this will be used when determining detailed designs for any potential vectoring areas. We will also need to engage with airlines and Gatwick ATC to determine an appropriate area.	n/a
The radar vectoring area would give dispersion – this is good.	Yes the use of a radar vectoring area would disperse aircraft tracks over the ground when compared to the use of PBN arrival routes.	n/a
How would a radar vectoring area cater for CDOs?	Within a radar vectoring area, air traffic controllers (ATC) provide tactical control (vectoring) to aircraft and therefore the controllers are able to direct aircraft in terms of distance, speed and descent; this means that continuous descent could still be achieved.	n/a
17/02/22		
In terms of comprehensive list – Has there been a degree of filtering already been applied?	We have created a structure for developing the options based around the design principles and the outputs of the airspace design database; more information will be provided later in the presentation.	n/a
How does height over the ground at any given point along the track come into account?	The airspace design database uses a continuous climb profile for the departure tracks based on the most common aircraft type. When we calculate the noise metrics in the database, we take into account this profile. Arrivals assume a continuous descent of 3° from 7000ft and again the noise metrics take into account this profile.	n/a
Does the airspace design database consider climb gradients?	Yes, the airspace design database looks at the climb gradient for our most common type operating at the airport, this is around 13% climb but we have also considered lower and slower aircraft with a conservative 6% climb gradient.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
Do the notional flight paths take into account existing restrictions?	At this stage we are assuming a blank sheet approach therefore the notional flight paths do not take into account any existing restrictions although there are some paths which are based on today's route centerlines.	n/a
Has any impact of ambient noise been taken into account in the construction of these systems? Most example shown only refer to total population overflown.	The system options that refer to minimising newly overflown typically impact more rural areas that often have lower levels of ambient noise. The evaluation of aircraft noise relative to the ambient noise of a particular area is not directly covered in the current airspace change process however Gatwick has committed to incorporating the outcomes of the Fair and Equitable Distribution (FED) study, which considers the treatment of areas with lower ambient noise.	See <u>Engagement</u> <u>Outcomes</u> section.
Do the notional flight paths consider the better fleet mix capable today?	Yes, the airspace design database looks at the climb gradient for our most common type operating at the airport which we expect to remain the majority in future. This is around 13% climb but we have also considered lower and slower aircraft with a conservative 6% climb gradient. When we move to the next steps of the process, particularly at the Step 2B Initial Options Appraisal, we will take into account the full fleet mix at Gatwick, and this will be based on the expected mix at the year of implementation (2026 onwards).	n/a
With better performance, do you envisage that controlled airspace (CAS) might be given back?	Given the number of options within the comprehensive list, and the number of permutations when considering easterlies/westerlies/arrivals and departures, at this stage it is difficult to determine the opportunities regarding the potential release of CAS. As we move to the next steps of the process, we will explore the opportunities to potentially release CAS; this will be documented as part of the Initial Options Appraisal.	n/a
How will aircraft be held in future and where will the holding stacks be positioned?	The airspace structures required to support airbourne holding of aircraft on arrival will form part of the NERL ACP for the airspace above 7000ft.	n/a



Question (You Said)	Answer (We did)	Follow up actions (We did)
How much influence does Gatwick have over the Transition altitude?	We're aware of the constraints of the current Transition Altitude (TA) and have raised with this NATS. Unfortunately it is outside the scope of Gatwick's ACP to change TA.	n/a
Having a simplified Transition Altitude would be beneficial to all airspace users.	Noted.	n/a
You mentioned that the technology might not be available to allow single PBN tracks for the approaches, What do you mean?	It is in reference to spacing and sequencing of traffic inbound to final approach in order to keep safe separation. We currently have a radar vectoring area that allows controllers to move aircraft into appropriate areas to achieve the required spacing while a single PBN route would take this flexibility away. Future technology will hopefully mean this flexibility is not required and accurate spacing and sequencing can be achieved by advanced ATC systems and aircraft avionics.	n/a
Would the sequencing challenge mean we would have a limited amount of PBN routes?	We have created a number of different system options that explore what might be needed to maintain the required levels of runway throughput but also allow for multiple PBN arrival routes that may offer noise respite opportunities. Once more information is known regarding how the network (airspace above 7000ft) will be organised to sequence the approach traffic, we will be able to assess the impacts of the options, from either a single PBN route to multiple PBN routes all the way to the continuation of a radar vectoring area.	n/a
Would this (see question above) create a concentration of the approaches?	The use of PBN routes typically concentrates aircraft tracks over the ground when compared to conventional navigation techniques and ATC vectoring. The comprehensive list includes single and multiple PBN tracks which would concentrate and radar vectoring areas which would disperse.	n/a
23/02/22		



Question (You Said)	Answer (We did)	Follow up actions (We did)
How are other sponsors progressing with their FASI-S ACPs?	Some FASI-S sponsors are at the same stage as Gatwick in terms of timelines and some started later than others. Heathrow commenced a new ACP in June 2021 to optimise the airspace that serves the current two runway operation so the development of their proposal is approximately 6-12 months behind the other FASI airports.	n/a
How does the comprehensive list take into account population in rural areas – where areas are already quieter, people may notice more noise?	See engagement outcomes section below	n/a
How are you weighting / scoring Design Principles as you build the comprehensive list of options	As part of the presentation, we've shown how we have used the Design Principles to build our comprehensive list of options. Some Design Principles such as safety are inherent to all options developed (i.e. we haven't designed specific options to be safe – all options are designed to be safe). Other design principles have been considered as we have built the system options (for example resilience). Finally, as we have explained in the presentation, some design principles have been considered as we have selected notional flight paths.	n/a
How are you considering AONBs and is there an opportunity to overfly these at night so to avoid populated areas?	Within the airspace design database we've calculated overflight of AONBs and this data has been used to develop options that aim to avoid AONBs, or minimise overflight, where possible to do so. We've also used the outputs from the airspace design database to include options on our comprehensive list of options which overfly AONBs at night however the data is only the first step in the process; the ongoing engagement with stakeholders allows us to explore the best times to utilise areas such as AONBs.	n/a
Why will the procedures be designed to only 7000ft?	Gatwick airport is responsible for maintaining and upgrading the arrival and departure routes that serve its operation between the ground and 7000ft (including the airspace structures required to protect the routes). NERL is responsible for the airspace structures	n/a



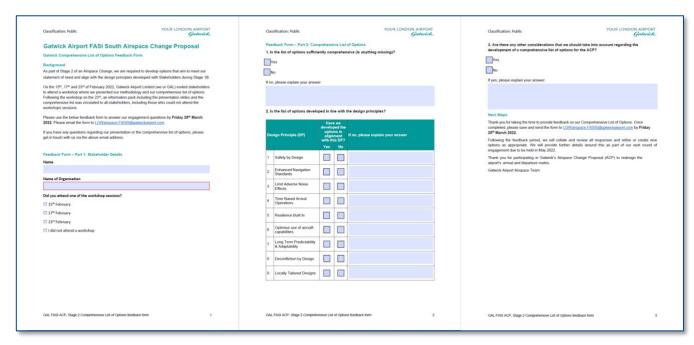
Question (You Said)	Answer (We did)	Follow up actions (We did)
	and route network that serve commercial air transport above 7000ft. The scope of Gatwick's ACP is to 7000ft, this is the same as all other airport-led FASI-S ACPs. Above 7000ft, the airspace is being modernised by NERL.	
Does the AONB map take into account the new areas currently under consultation?	We are aware of the ongoing consultation regarding the proposed changes to the dimensions of the Surrey Hills AONB. At the time of developing the airspace design database for the Gatwick FASI ACP the consultation was not underway however we've committed to taking into account any changes to the AONB when we undertake the Initial Options Appraisal at Step 2B and the Full Options Appraisal at Step 3B.	Ongoing action
Is the comprehensive list constrained by the existing NPRs?	Some options within the Comprehensive List are based on the existing RNAV1 nominal tracks and therefore follow the existing NPRs. Other options do not follow the NPRs. At this stage, the benefits and impacts of each option haven't been assessed and we will consider impacts associated with the existing NPRs in further detail as part of the Initial Options Appraisal.	n/a
Why undertake the Route 4 ACP when you are doing this FASI-S ACP? Do you risk upsetting people twice?	Route 4 ACP is distinct from FASI-S as it works within the scope of the current airspace. Consequently, it is more limited in potential impact. An airspace change is usually a protracted process with the eventual outcome taking some years before implementation. FASI-S is significantly more complex and demanding compared to a usual ACP, thus it will take significantly more time and effort to implement, with the changes not likely before 2026, thus there is a need for an interim solution, given that the RNAV route on Route 4 has been withdrawn with CAP 1912 and the conventional ground navigational aids being slowly taken out of commission.	n/a



Our Feedback Questions (We asked)

Following the third workshop on the 23rd of February, a link to where the comprehensive list of options presentation and feedback form could be downloaded was circulated to stakeholders. We asked stakeholders to fill out a PDF form, as shown in figure 2 below and return it to the main Gatwick FASI-S email mailbox.

Figure 2 Comprehensive List of Options feedback form



The main questions we asked stakeholders were:

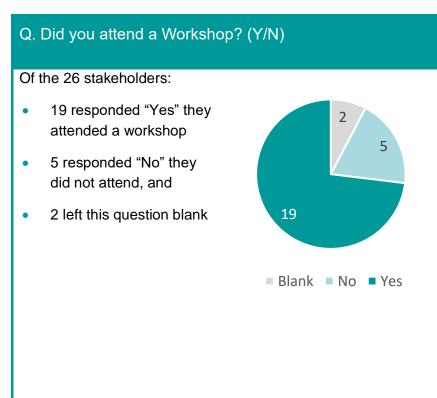
- Is the list of options sufficiently comprehensive (is anything missing)?
- Is the list of options developed in line with the design principles?
- Are there any other considerations that we should take into account regarding the development of a comprehensive list of options for the ACP?

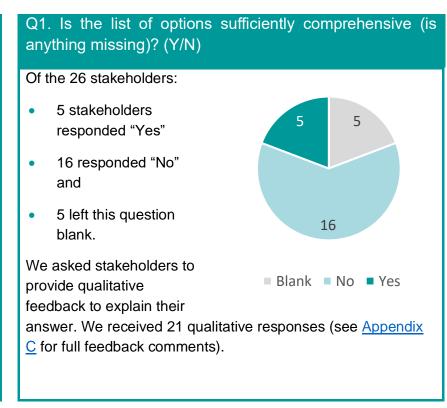
The feedback form was structured to enable to stakeholders to answer these questions and provide specific feedback for each design principle.



Engagement Outcomes (You Said, We Did)

26 stakeholders responded to our second round of engagement feedback request. The following section summarises those responses to each of the questions posed.







Q2. Is the list of options developed in line with the design principles? Comparison of responses for all Design Principles:



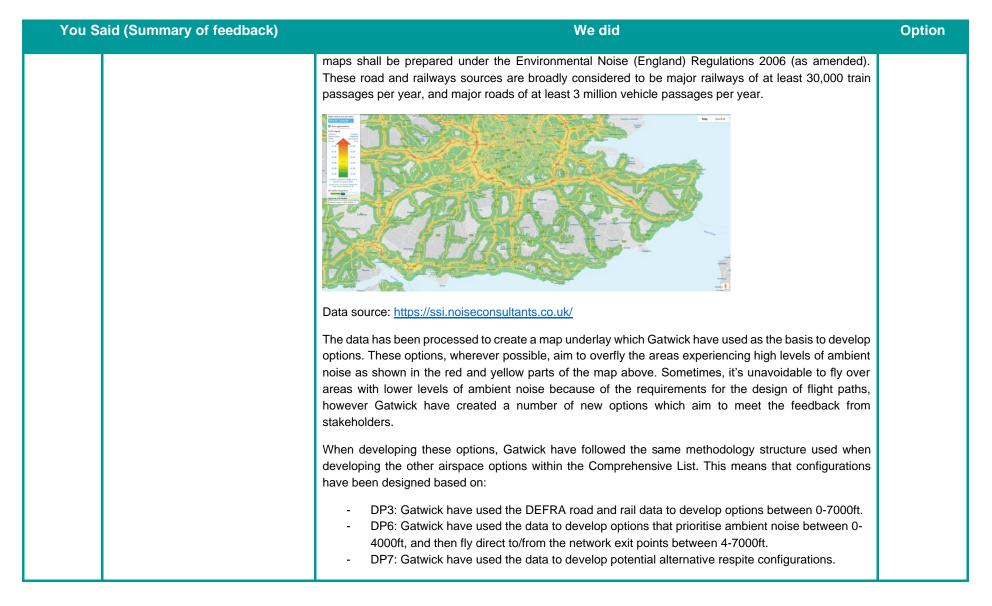
Summary of feedback that influenced our final Comprehensive List of Options (Round 2 Actions)

Feedback Tables in Appendix C contain a "You said / We did" analysis for each feedback point obtained for all the second round feedback questions. This section summarises the relevant feedback points from that analysis that influenced the final Comprehensive List of Options.

Table 20 Summary of Feedback that influenced the final Comprehensive List of Options

You S	aid (Summary of feedback)	We did	Option
Rural areas and ambient noise	We received numerous pieces of feedback which suggested that, as part of the development of the comprehensive list of options, we should consider the noise impacts on rural areas, particularly as some of the metrics used as part of the methodology are based on the number of population overflow. The feedback suggested that people in rural areas where ambient noise is low are affected by aircraft noise more so than people in areas where ambient noise levels are higher.	The measurement of ambient noise is complex and there is not any specific regulation or legislation that offers guidance on how sponsors should take ambient noise into account when developing and assessing options as part of an airspace change. In December 2018 the Gatwick Noise Management Board (NMB) commissioned the Ambient Noise Study. The study investigated if there is a link between ambient noise and aircraft noise impact. It noted that it has been suggested that people living in rural areas are affected by aircraft noise more so than people in urban areas and that this is because rural areas have lower levels of ambient noise levels. The study had three main conclusions: (1) The literature review found conflicting reports, some linking ambient noise to aircraft noise annoyance and some not. (2) Peaks in aircraft noise can be similar to peaks in road traffic noise at the fronts of houses but are generally above ambient noise at the rear of properties in rural as well as urban areas. (3) The further analysis of the SoNA data around Gatwick showed no clear relationship between ambient noise and aircraft noise disturbance. Gatwick recognise that this is an important issue for some stakeholders, which is reflected in the feedback received on our Comprehensive List of Options. In response to stakeholder feedback, Gatwick have looked at the data publicly available which could be used to develop options that aim to balance impacts to rural populations and ambient noise. Subsequently, Gatwick have taken DEFRA's strategic noise mapping for roads and railways as an indication of ambient road and rail noise data. This mapping is based on Laeq daytime and night-time contours. There is typically a correlation between populated areas and noise from road/rail infrastructure so Gatwick believe this data will achieve a balance between high ambient noise and population, rather than purely developing flight paths that aim to avoid rural areas as much as possible. It is important to note that this data does not include	WDJ, WDK, WDL, WDM, WDN, EDK, EDL, EDM, EDN, EDO, WAP, WAQ, EAO, EAP







You Said (Summary of feedback)		We did	Option
		When developing the options, Gatwick also considered the other Design Principles which are inherent to all options developed.	
		These options, along with the other options on the comprehensive list, will progress to the Design Principle Evaluation for qualitative evaluation.	
		The balance of overflight of rural areas with overflight of areas of high population also forms part of the second phase of the Fair and Equitable Distribution (FED) study. The study aims to define metrics that help to indicate the fair and equitable distribution of noise. The outcomes of the study will be used when available to assess the airspace change options. (Note: The outcomes are expected in Q4 2023 / Q1 2024 and therefore will be incorporated into the Full Options Appraisal).	
Balance of newly overflown and total population overflown	Feedback noted that outputs from the airspace design database should aim to balance total population overflown and population newly overflown.	We've revisited the airspace design database, following the same methodology used to develop the other options on our comprehensive list, and developed new options that aim to balance total population overflown and population newly overflown. We've done this by looking at the existing overflight swathes and then identifying the notional paths with the lowest population within these using the airspace design database data. Some options on our original comprehensive list already performed well overall when balancing these two considerations and therefore a full suite of new options has not been developed, but where required some additional options have been added.	WDO, WDP, EDP, EDQ, WAN, WAO, EAM, EAN
Arrivals that join the final approach between 7nm to 10nm	Feedback noted that there was a lack of westerly arrivals between 7nm and 10nm as part of the Comprehensive List of Options.	All of our arrival options developed are based on outputs from the airspace design database; in the case of the westerly arrivals, the data within the database did not suggest to locate a flight path within this joining area. Following the feedback, we have looked at all the notional flight paths that only join between 7nm and 10nm and we've used data within the database to identify a high performing path. As stakeholders also wrote to us around balancing population newly overflown and total population overflown, we have aimed to balance these two considerations when using the airspace design database to select a notional flight path.	WAK, WAL



You S	aid (Summary of feedback)	We did	Option
Two track respite arrivals options	Feedback noted that the arrivals options which looked to offer respite configurations mainly had 3 or 4 route options. They suggested to develop options that had two routes as part of the configuration.	Following the feedback, we developed additional arrivals options that were configured using two PBN routes. As stakeholders also wrote to us around balancing population newly overflown and total population overflown, we have aimed to balance these two considerations when using the airspace design database to selecting the notional flight paths.	EAK, EAL, WAM

Summary of feedback received that did not influence our final Comprehensive List of Options but will be taken into consideration in the next stages of the ACP process.

Table 21 Feedback received that will be taken into consideration in the next stages of the ACP process.

You said (Summary themes)	We did
We should consider noise impacts to health and quality of life	Our options have been developed using outputs from the airspace design database. This database includes metrics which are indicators of the primary and secondary metrics that will be used to appraise options later in the airspace change process. This includes Sound Exposure Level (SEL), which forms part of the L _{Aeq} calculations.
	Data from the L _{Aeq} contours is used as a primary metric in the airspace change process to assess impacts to health and quality of life. The Initial Options Appraisal will analyse impacts to these contours as well as reviewing secondary noise metrics such as N60 and N65 data, and overflight.
We should consider frequency of overflight and cumulative overflight	This will be evaluated as part of our Design Principle Evaluation and considered in further detail as part of the Initial Options Appraisal.



You said (Summary themes)	We did
Flight paths should achieve continuous climb/descent (CCO/CDO)	All of the options on the comprehensive list are designed to achieve CCO/CDO to/from 7000ft. As part of the Design Principle Evaluation and Initial Options Appraisal, we will introduce the information available from NERL about the network airspace above 7000ft and evaluate the potential for further CCO/CDO. The outcome may be that the options are refined in order to achieve optimal CCO/CDO where possible and balancing other considerations; this will be documented as part of our Stage 2 submission and communicated as part of stakeholder engagement workshops.
We should consider noise sensitive sites and tranquil areas such as local nature reserves.	Noise sensitive sites such as schools, places of worship and hospitals will be assessed as part of the Initial Options Appraisal. The Initial Options Appraisal also includes assessments on tranquillity and biodiversity.
We should consider the NPRs	Some options within the Comprehensive List are based on the existing RNAV1 nominal tracks and therefore follow the existing NPRs. Other options do not follow the NPRs. At this stage, the benefits and impacts of each option haven't been assessed and we will consider impacts to the NPRs in further detail as part of the Initial Options Appraisal.
We should consider Controlled Airspace	The potential benefits and impacts to General Aviation and other airspace users associated with the use/release of Controlled Airspace will be appraised as part of the Initial Options Appraisal.
Feedback was received regarding the use of 2019 flight data in the airspace design database to examine populations newly overflown. Some feedback suggested that historic data should be used, incorporating those that were not overflown in earlier years.	The Airspace Design Database contains 2019 data that has been adjusted to reflect the extant Route 4 procedure. This was selected as it aligned with the requirements of later parts of the CAP1616 process. As part of Step 2A, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. This scenario must take into account known or anticipated factors that might affect the baseline such as planned housing developments close to the airport, forecast growth in air traffic, or expected changes in airlines' fleet mix.



You said (Summary themes)	We did
	Our assessment of newly overflown linked to the Do Nothing baseline must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026. At the point of implementation (2026 onwards), it is expected that Gatwick will have recovered from the impacts of COVID-19 therefore 2019 was chosen as it was a year which most reflected a scenario where the airspace, and traffic patterns, had recovered from the impacts of COVID-19. The 2019 data will be developed to reflect the known and anticipated factors when describing the pre-implementation scenario.



9. Round 3 Design Principle Evaluation Workshops (Event G)

In June 2022 Gatwick held the third round of stakeholder engagement workshops. These sessions were originally due to take place in May, however as we extended the feedback period for the previous round of engagement, and as the dates would have fallen over the weeks either side of the Jubilee Bank Holiday weekend, we moved these sessions to the end of June.

We invited all stakeholders who were engaged during Round 2 of stakeholder engagement. Three workshops were planned for 23rd, 24th and 28th June. All stakeholders were invited to attend any of the dates available.

The purpose of the workshops was to update stakeholders on the progress made between April, May, and June 2022 to finalise the comprehensive list of airspace design options for the ACP, incorporating feedback provided by stakeholders following the engagement sessions in February and March 2022. We also provided an update on the development of the Design Principle Evaluation that examines how well each option aligns with the design principles.

The agenda for the briefings covered:

- An update on the overall timeline for the Gatwick FASI ACP
- A recap on the stakeholder engagement and consultation requirements in CAP1616
- An update on the development of the Comprehensive List of Options for the ACP following the previous round of stakeholder engagement conducted between February and April 2022.
- An overview of the Design Principle Evaluation
- The next steps in the CAP1616 process

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.



Table 22 Summary of Stage 2A Round 3 Design Principle Evaluation workshop (Event G) activities (engagement evidence references in parentheses)

Events	Invitation	Agenda / Briefing	Post-Event	Feedback
G.i. 23rd Jun. 2022 G.ii. 24th Jun. 2022 G.iii. 28th Jun. 2022	Meeting invitation send on 20th May 2022 asking delegates to register by return email. (G.1.)	Agenda and briefing note (G.4.) sent to registrants on June 21st 2022 (G.2.)	Presentation slides (G.6.) and meeting notes / Q&A (G.7.) circulated to participants on 22nd July 2022 (G.5.)	1 feedback response was received.

Questions and Answers during workshops

Throughout the workshops, there were opportunities for stakeholders to ask questions and the section below outlines the questions and answers from the workshops. Following the final workshop, stakeholders were sent a link to download the presentation and the question and answer document.

Table 23 Round 3 June 2022 Questions and Answers

Question (You Said) Briefing s	Answer (We did) ession #1: June 23 rd 2022	Follow up actions (We did)
1	What do you mean by 'Options'?	At this stage in the process, an airspace design option is one complete system of routes, either arrivals or departures, from the same runway end, for example, there are several different systems of easterly departure routes that are each considered as options on the Comprehensive List. Similarly, there are several different systems of westerly departures, easterly arrivals and westerly arrivals. Each individual system is an option. As we progress through the airspace change process, these options will be developed and refined through qualitative and quantitative assessment and stakeholder feedback. In Stage 3 of the process, the individual system options will be combined to create fully integrated options with a complete set of easterly/westerly arrival and departure routes that serve the airport.
2	How much are the options dictated by the Gatwick	The options developed aim to align with the design principles and the ACP statement of need. In the earlier rounds of Stage 2 engagement, we explained the methodology that we have used to develop airspace design

Question (You Said)	Answer (We did)	Follow up actions (We did)
	Airport 'need' and not governed by the design principles?	options, guided by the design principles. The later rounds of Stage 2 engagement provide the opportunity for stakeholders to ensure the comprehensive list of options has been developed in alignment with the design principles.
3	Do any of the current options involve additional volume of Controlled Airspace (CAS) or enable the possibility to reduce the current volume of CAS around Gatwick?	We will examine the potential impact of each of the options on the volume of controlled airspace as part of the Initial Options Appraisal in Step 2B of the process. The Gatwick FASI ACP is required as part of the wider Airspace Change Masterplan process to aim to deliver a net reduction in the total volume of controlled airspace and explore opportunities to enhance access/integration for other airspace users.
4	Continuous Descent Operations (CDO) and Continuous climb operations (CCO) are Noise Abatement Procedures for further out from the runway so if you are to restrict the track length how do you see this working?	All departure route options on the Comprehensive List have been developed to achieve CCO, based on a 6% climb rate. As we progress through the Design Principle Evaluation and Initial Options Appraisal, we will be able to draw on more information about the ACPs being developed by NATS (above 7000ft.) and other adjacent airports (below 7000ft), to better understand any external constraints on the CCO performance of our options. As noted in the briefing, we expect our options to evolve and refine as more information becomes available from the development of other adjacent ACPs. Most of the system options on the Comprehensive List show the total track length of each route (either arrival or departure) between 0-7000ft. There are some options that are prioritised for noise from 0-4000ft in isolation that show shorter track lengths (i.e. to/from only 4,000ft). There would still be portions of the route above 4000ft which would be optimised for flight efficiency and emissions, primarily through the application of CCO and CDO.
5	Will the actual climb rate be lower compared to operations with controller intervention?	At this stage, where there is very limited information about the interdependencies with ACPs sponsored by NATS and the adjacent airports, the future climb performance that can be achieved by aircraft operating at Gatwick is not fully known. All departure options on the Comprehensive List have been developed to achieve continuous climb based on a conservative 6% climb rate performance (most aircraft operating at Gatwick today achieve a higher rate of climb). As we progress through the Design Principle Evaluation and Initial Options Appraisal, we will introduce



Question (You Said)	Answer (We did)	Follow up actions (We did)
		information about the surrounding airports and airspace, to understand the impacts to continuous climb performance.
		As we have noted in the engagement sessions, we expect options to evolve and refine as more information becomes available in order to achieve continuous climb operations where possible.
		Alongside the interdependencies with other airports and NERL, aircraft climb performance is influenced by a number of factors including aircraft type, load, and weather conditions. As we progress through the process, we will introduce an assessment based on the actual fleet mix and climb profiles of aircraft departing from Gatwick; this will be used as part of our environmental assessments in the Initial and Full Options Appraisals.
_	ession #2: June 24 th 2022	
6	Suggest an information package to provide an overview of the process and ACP so far for parish councils to come up to speed.	As part of the next engagement sessions in Q3/Q4 2022, we will be conducting separate sessions with Parish Councils. These sessions are planned to be separate so that we have an opportunity to cover the work undertaken as part of the process to date and to introduce Parish Councils to the next steps as part of the ACP where they will have the opportunity to be involved in the process. We will take on board this suggestion to provide an information pack in advance to these stakeholders.
7	Given the timing of the second phase of the Fair	Any outcomes from the second phase of the FED study will be incorporated into Stage 3 of the ACP as part of the Full Options Appraisal and Consultation Strategy.
	and Equitable Distribution (FED) Study, will this be absorbed into Stage 3 and can revisions be made in Stage 3?	As part of the work at Stage 3 we expect the options to be developed and refined as more information becomes available from adjacent ACPs and ongoing engagement with stakeholders, therefore there will be opportunities to revise and improve options. We intend that there will be a clear audit trail to track the development and refinement of each option throughout the process and therefore any revisions made will be clearly documented.

Question (You Said)	Answer (We did)	Follow up actions (We did)
8	Some of the arrivals options use RNP-AR, is authorisation required for the aircraft, crew or both?	RNP-AR stands for required navigation performance authorisation required. It is a type of advanced PBN specification. In order to fly an RNP-AR route, both the crew and aircraft have to be approved to operate on the specific routes in question. At present, not all of Gatwick's fleet and airline crews are RNP-AR approved. Over time we expect more of the fleet to be able to utilise and crews to become familiar.
9	Some of the options developed aim to balance total population overflown and population newly overflown, how did you do this?	As part of the airspace design database, we have data about the notional flight paths that overfly the fewest population and also the notional flight paths that overfly the same areas as today. Alongside this, we used mapping data which shows 2019 overflight swathes. When developing options that aim to balance total and newly overflown population, we used the abovementioned data to identify the routes that overfly fewest people and are also located within the existing overflight swathes.
		The only exception to this was in the case of the respite configurations for the easterly arrivals; the data in this case suggested that there were high performing routes that deviated from the existing swathe owing to the very low population located under these routes. We therefore developed two respite options for easterly arrivals; one guided purely by the data, and the other by the overflight maps and the data.
10	Do the options which aim to balance total population overflown and population newly overflown conflict with Air Navigation Guidance? (CB answered)	At this stage we are generating a list of all viable options for the ACP. Some of these options consider what happens today, and others take a 'blank sheet' approach to options development. These 'blank sheet' options use outputs from the airspace design database and are developed in alignment with the design principles. The options that aim to balance total and newly overflown population are guided by the design principles. Some have been developed following stakeholder feedback.
		As part of the next steps of the process we will start to evaluate and appraise the options. As part of the Initial Options Appraisal, we will analyse the benefits and impacts of the options, being governed by the primary and secondary CAP1616 metrics and the Air Navigation Guidance.
		We're aware that some options may come into conflict with established policies, procedures, or agreements. If the benefit of these options are expected to outweigh the impacts, we will engage with the Department for Transport (DfT) and the CAA at the appropriate time to discuss the justification for deviating from established policies or modifying established procedures or agreements.

Question (You Said)	Answer (We did)	Follow up actions (We did)
11	Does the assessment of newly overflown consider the altitude and frequency of aircraft?	The assessments that form part of the Design Principle Evaluation and the Initial Options Appraisal, will take into account the altitude of the aircraft and the frequency of overflight.
12	Newly overflown should be defined as from 2013 when the closest joining point to the final approach changed from 7nm to 10nm then to 8nm. As a minimum, this should use 10 years of historic data.	As part of the CAP1616 process, we are required to define a 'do nothing' baseline scenario. This is then used to compare the benefits and impacts of each option. This 'do nothing' baseline scenario is required to describe the airspace environment immediately before implementation, in the case of Gatwick's ACP, this is estimated at around 2026 onwards. Our assessment of newly overflown must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026.
13	When selecting options, some communities think it is important to consider the wider historical impacts in option selection, not the baseline year.	We recognise that some stakeholders would like the baseline year to incorporate historic flight path data, such as changes pre-2014. Whilst the CAP1616 definition of a baseline is clear, as explained in the presentation and answer to question 12 above, there are also opportunities as part of the options appraisals for us to look at other relevant information when assessing options. This means that alongside the qualitative and quantitative assessment of the options against the formal CAP1616 baseline (a projected scenario in 2026), there may be opportunities for us to undertake some qualitative analysis against a broader historical background. This would be guided in part by the outcomes of phase 2 of the Fair and Equitable Distribution Study (FED Study).
14	Is there a link between the noise envelope being developed for the DCO application and the options as part of this ACP?	The DCO application and this airspace change proposal are two separate developments that follow two different planning/regulatory processes. Some metrics used as part of the DCO noise envelope may also be used in the CAP1616 process for this ACP, however the metrics agreed for the noise envelope should be configured to accurately represent the impacts of this ACP.



Question (You Said)	Answer (We did)	Follow up actions (We did)			
15	Are you evaluating population overflown all the way up to 7000ft?	Yes, one of the secondary CAP1616 noise metrics is overflight contours. The contours and associated data between 0-7000ft will form part of the Option Appraisals.			
Briefing s	Briefing session #3: June 28 th 2022				
16	Why does the timeline (Slide 7) not show Stage 3A?	The section on the timeline labelled 'Full Options Appraisal' shows the time allocated for the Stage 3A activity. We've updated the slide to show Stage 2A, Stage 2B and Stage 3A labels. It's important to note that beyond the Stage 2 gateway, this is an indicative timeline which may be subject to change.			
17	At the moment, options are considered as individual groups or systems of arrivals and departure routes rather than fully integrated options (i.e. easterly and westerly arrivals and departures combined). How will evaluation of these options work?	Owing to the number of options developed and our methodology, at this stage we've chosen to keep an option as one complete system of either arrival or departure routes from the same runway end. As part of the Design Principle Evaluation and Initial Options Appraisal we will begin to analyse the possible benefits and impacts of combining different system options into a fully integrated suite of arrival and departure routes serving all runway ends. As we move through to the Stage 3 Full Options Appraisal we will need to combine the options together and look at the full systems; this task will become more manageable at the end of the Initial Options Appraisal when we will have a shortlist of options.			
19	Lots of references are made to interdependencies with NATS / NERL and Heathrow but to what extent are smaller aerodromes suggest as Biggin Hill and Farnborough involved in engagement.	As part of the ACOG Masterplan Iteration 2 there's a map which shows all of the adjacent airports that Gatwick shares interdependencies with including Heathrow, Southampton, Biggin Hill and Farnborough. We are actively engaging with all of these airports via bilateral meetings and will continue to engage throughout the process in coordination with ACOG.			

Question (You Said)	Answer (We did)	Follow up actions (We did)
20	There is currently a restriction which says that aircraft are not allowed to overfly Horley, will the FASI-S ACP change this?	At the current stage we're generating a list of all viable options; some of these options consider the current restrictions, and others take a 'blank sheet' approach to options development. These 'blank sheet' options use outputs from the airspace design database and are developed in alignment with the design principles. As part of the next steps of the process we will start to evaluate and appraise the options and at this point we will consider how all options benefit/impact the baseline which takes into account the current constraints. Following the Design Principle Evaluation and then the Initial Options Appraisal, we will have a shortlist of options
		and at this point, we will have a better indication of whether the ACP has the potential to change the existing arrangements regarding Horley.
		We're aware that some options may come into conflict with established policies, procedures, or agreements. In the case that an option is progressed that conflicts with these, and where the options appraisals show that benefits are expected to outweigh the impacts, we will engage with the Department for Transport (DfT) and the CAA and the appropriate time to discuss the justification for making changes.
21	Have options EDL and EDM been trialled already? Are they based on a previous trial?	No. The options shown on the comprehensive list have been developed on paper for the FASI-S ACP. They are not based on any previous trials nor are any being trialled at present.
22	Why do the maps not include detailed placenames?	At this stage where we are developing options to align with the design principles, we have included maps with various background layers which help stakeholders understand how the options perform in respect to the design principles.
		As part of the next steps of the process, where we start to examine the benefits and impacts of the options, we will start to provide information overlaid on a standard Ordnance Survey map.
23	We got a high court judgement which said that Gatwick must broaden the 7 – 10nm swathe. Your	At this stage we are generating a list of all viable options for the ACP. Some of these options consider what happens today, and others take a 'blank sheet' approach to options development. These 'blank sheet' options use outputs from the airspace design database and are developed in alignment with the design principles.



Question (You Said)	Answer (We did)	Follow up actions (We did)
	options development should keep to this.	The options that aim to balance total and newly overflown population are guided by the design principles. Some have been developed following stakeholder feedback.
		As part of the next steps of the process we will start to evaluate and appraise the options. As part of the Initial Options Appraisal we will analyse the benefits and impacts of the options and this is guided by the primary and secondary CAP1616 metrics and the Air Navigation Guidance.
		We're aware that some options may come into conflict with established policies, procedures, or agreements. If the benefits of these options are expected to outweigh the impacts, we will engage with the Department for Transport (DfT) and the CAA at the appropriate time to discuss the justification for deviating from established policies or modifying established procedures or agreements.
agree tha definite y	Some communities do not agree that 2019 is the definite year for newly overflown, some	As part of the CAP1616 process, we are required to define a 'do nothing' baseline scenario. This is then used to compare the benefits and impacts of each option. This 'do nothing' baseline scenario is required to describe the airspace environment immediately before implementation, in the case of Gatwick's ACP, this is estimated at around 2026 onwards.
	communities may challenge the 2019 as the baseline in	Our assessment of newly overflown must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026.
	that respect.	We recognise that some stakeholders would like the baseline year to incorporate historic flight path data, such as changes pre-2014. Whilst the CAP1616 definition of a baseline is clear, as explained in the presentation and answer to question 12 above, there are also opportunities as part of the options appraisals for us to look at other relevant information when assessing options.
		This means that alongside the qualitative and quantitative assessment of the options against the formal CAP1616 baseline (a projected scenario in 2026), there may be opportunities for us to undertake some qualitative analysis against a broader historical background. This would be guided in part by the outcomes of phase 2 of the Fair and Equitable Distribution Study (FED Study).
25	Countryside locations are more likely to get adversely	As part of the comprehensive list of options, we have listened to stakeholder feedback and developed some options that aim to balance overflight of rural areas and areas with comparatively lower ambient noise. The measurement of ambient noise is complex and there is no regulatory guidance or legislation that guides how



1	Question	Answer	Follow up actions	
	(You	(We did)	(We did)	
	Said)			
		affected, how are we going	we incorporate it as a factor in our options appraisal. Nonetheless, we plan to take the outcomes of the second	
		to address that?	phase of the FED Study and appraise each option as part of our Full Options Appraisal at Stage 3.	
L		to address that:	priase of the 1 Lb study and appraise each option as part of our 1 till options Appraisal at stage 3.	

Feedback

Although as part of these sessions we did not ask any specific questions to stakeholders, we did invite stakeholders to raise any questions or comments via the usual FASI-S email address. 1 response was received.

Table 24 Feedback received following June 2022 engagement

Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
Just a comment on part of the methodology the route designers are using. I can understand the approach of using the (mainly) road noise mapping to avoid the more rural areas. However it is worth noting that for people close to a main road while the front of the house might be very noisy, the back of the house most of the time will actually be relatively quiet and so offer people in the house respite from the road noise. If you start flying planes over them the back of the house also becomes noisy and so there is no getting away from the noise. So now you have a group of people who are already exposed to relatively high noise levels getting an additional noise impact. So I think this is something you need to be careful with in your assessment and not treat it in such a black / white manner.	Thank you for your feedback. At this stage, following stakeholder feedback, we've used the DEFRA road and rail noise mapping in order to take a data based approach to developing some initial options that balance the overflight of rural areas and ambient noise. The DEFRA data has been used for options development but not for the appraisal of options. We're aware that the 2018 Ambient Noise Study (published via the Gatwick Noise Management Board) investigated if there is a link between ambient noise and aircraft noise impact and made several conclusions around ambient noise including the feedback raised around the noise at the front vs the back of a property. The evaluation of aircraft noise relative to the ambient noise of a particular area is not directly covered in the current CAP1616 metrics and airspace change process however Gatwick has	n/a



Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
Also in terms of the assessment work are there any plans to look at the routes in terms of areas of social deprivation i.e. to ensure that more socially deprived areas are not being disproportionately impacted by any possible future routes, as this is something that can be relatively easily assessed given the deprivation mapping available.	committed to incorporating the outcomes of the Fair and Equitable Distribution (FED) study, which considers the treatment of areas with lower ambient noise.	

10. Round 3 Parish Council Stakeholder Briefing Sessions (Event H)

In October and December 2022 Gatwick held four stakeholder briefing sessions with Parish Council stakeholders.

Gatwick initially invited Parish Council stakeholders to two briefing sessions on the 5th and 6th of October, 2022. However, in order to reach as many Parish Council stakeholders as possible, two further briefing sessions were held on the 5th and 9th of December 2022.

The purpose of these briefing sessions was to bring representatives from the Parish Councils up to speed with the ACP activities and developments to date, allowing them to join and participate in future engagement sessions. Gatwick explained the progress of the ACP to date and updated them on the Comprehensive List of Options we have developed, as well as providing an overview of the Design Principle Evaluation and Initial Options Appraisal processes. The agenda for the briefings included:

- Welcome and Introductions
- Background Concepts, including UK Airspace Modernisation and the CAP1616 CAA Airspace Change Process
- Update on Gatwick's FASI-S ACP, including the ACP timeline, and a summary of Gatwick's ACP activities to date (including Design Principles, Comprehensive List of Options Methodology Overview, and Design Principle Evaluation Methodology Overview)
- Question & Answer Session
- The next steps in the CAP1616 process

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Table 25 Summary of Stage 2A Round 3 Parish Council Stakeholder Briefing Session (Event H) activities (engagement evidence references in parentheses)

Events	Invitation	Agenda / Briefing	Post-Event	Feedback
H.i. 5th & 6th Oct. 2022 H.ii. 5th & 9th Dec. 2022	Event i: Meeting invitation send on 22nd September 2022 asking delegates to register by return email. (H.i.1.) Event ii: Meeting invitation send on 3rd November 2022 asking delegates to register by return email. (H.ii.1.)	Event i: Agenda and briefing note (H.i.4.) sent to registrants on 3rd October 2022 (H.i.2.)	Presentation slides (H.6.) circulated to participants on 9th December 2022 (H.5.)	No feedback responses received.

Questions and Answers during workshops

Throughout the sessions, there were opportunities for stakeholders to ask questions and the section below outlines the questions and answers from the workshops. Following the session, stakeholders were sent the presentation and the question-and-answer document.

Table 26 Consolidated Summary of Parish Council Briefing Session Questions and Answers

	Question (You Said)	Answer (We did)
1	Will Performance-based Navigation (PBN) routes be dangerous if aircraft follow the same track with high levels of precision?	No. Air Traffic Controllers ensure that all aircraft using PBN routes are safely separated at all times. PBN routes encourage more predictable and repeatable operations, making it easier for Air Traffic Controllers to manage the progress of flights safely and efficiently.
2	Is the Comprehensive List of Airspace Design Options developed for the Gatwick FASI South ACP publicly available?	No. Not yet. The Comprehensive List of Options has been shared with the stakeholder representatives engaged in supporting the development of the ACP during Stages 1 and 2 of the CAP1616 process. All materials relating to the development and assessment of the options, including stakeholder feedback, will be published on the CAA Airspace Change Portal and made publicly available at the end of Stage 2. In Stage 3, Gatwick will conduct a public consultation on the ACP that will include details of how the Comprehensive List of Options has been refined through rounds of appraisal and stakeholder engagement to generate the proposed design.
3	Should the comprehensive list of options be presented on standard map backgrounds that indicate the locations of towns and villages so that stakeholders can understand how they may be affected?	Not at this stage in the process. Each 'option' in this context is an operationally compatible configuration of multiple departure routes or multiple arrival routes that serve one runway end. The objective of engaging stakeholders on the options at such an early stage in the process was to test if the list is considered comprehensive when viewed as a collective (i.e. are there any technically viable configurations of routes that appear to be missing from the options list and why?). The number of options on the comprehensive list increased from 39 to 70 based on the feedback provided by stakeholders. We did not seek feedback on the geographical location of the individual routes that comprise each option at this stage because we have yet to conduct an impact assessment and expect the orientation of many routes to change when we do. When we have completed the initial appraisal for each option in Step 2b, we will present the routes on a standard Ordnance Survey map background, along with information about their expected impacts. An example of how the options will be

	Question (You Said)	Answer (We did)
		presented in the initial appraisal will be provided in the next round of stakeholder engagement sessions planned for late January and early February 2023.
4	What is the altitude cut-off for the options presented on the comprehensive list?	Gatwick is responsible for maintaining and redesigning the departure and arrival routes that serve the airport from the ground to 7000ft. Above 7000ft NATS En Route Limited (NERL), the UK's licensed Air Navigation Service Provider, is responsible. As a result, the options included in the Gatwick FASI South ACP are designed from the ground to 7000ft.
5	Have the options been assessed against the proposals being developed by other ACP sponsors in the FASI programme?	No. Not yet. At this early stage in the process, the Gatwick FASI ACP options have been developed largely in isolation of the interdependent proposals sponsored by other FASI airports in London and the Southeast. The other airports were engaged as stakeholders in the Gatwick ACP during Steps 1b and 2a of the process, alongside other aviation and community representatives. During Step 2b of the process, the Airspace Change Organising Group (ACOG – an independent organisation tasked with coordinating the interdependent ACPs) will facilitate a series of route interaction workshops with the airport ACP sponsors and NERL to begin assessing the proposals against one another in a transparent and join-up way.
6	If the Gatwick ACP options are designed between the ground and 7000ft., what happens above?	Above 7000ft. NERL is responsible for maintaining and upgrading the route network that serves all airports in the London and Southeast region as part of the FASI programme. In this capacity, NERL is developing a programme of ACPs to modernise the airspace structure and route network at higher altitudes and integrate them with the arrival and departure routes below 7000ft. designed by the airports. ACOG is tasked with coordinating the integration of the NERL-led network ACPs and the airport-led ACPs to ensure the overall system-wide proposal to modernise the airspace in London and Southeast is optimised.
7	How are the various interdependent ACPs tied together?	The Airspace Change Organising Group (ACOG) was established in 2019 by the CAA and Department for Transport (DfT) to coordinate the development and deployment of the interdependent ACPs required to achieve the goals of airspace modernisation. In this capacity, ACOG is tasked with producing a single joined-up implementation plan, known as the Airspace Change Masterplan (the masterplan), that ensures the overall system-wide design generated by the constituent ACPs is optimised. Iteration 2 of the masterplan was accepted



	Question (You Said)	Answer (We did)
		by the CAA and DfT in January 2022 and is published here ¹. Iteration 3 is expected to be submitted to the CAA and DfT for assessment in the summer of 2023 and published in the autumn.
8	How does the ACP account for the interactions with General Aviation operations conducted in the surrounding airspace?	The potential impact on General Aviation (GA) operations associated with the Gatwick ACP options will be assessed as part of the Initial Options Appraisal (Step 2b in Q1-2023) and the Full Options Appraisal (Step 3a later in 2023). Representatives from GA stakeholder groups have been engaged in the development of the ACP during Step 1b and Step 2a, with a particular focus on the approach to improving the access and integration of airspace users that operate predominantly in the uncontrolled airspace surrounding Gatwick.
9	Will the introduction of Performance-based Navigation (PBN) routes improve the trackkeeping conformance of flights operating at Gatwick?	Yes. The introduction of new PBN arrival and departure routes is expected to concentrate the distribution of flight paths around the route centerlines because all aircraft will fly a common set ofsatellite-based navigation waypoints with high levels of precision. In addition, Air Traffic Controllers are expected to vector flights off the routes less often once they are re-designed and integrated into an optimised network to maintain a safe and expeditious flow of traffic. The concentration of flight paths associated with PBN routes creates one of the most significant environmental challenges facing all airport-led ACPs in the masterplan – that the impacts of overflight and aircraft noise in certain areas become more frequent than in today's operation where the distribution of flights around a route centerline is typically more dispersed.
10	ACOG is staffed by industry resources (recruited from NERL, CAA and the airports). In this context, how much weight will be given to the feedback provided by local communities	ACOG is overseen by a Steering Committee with an independent Chairperson and seeks regular input from a Community Advisory Panel. One of ACOG's main functions is to identify potential design conflicts between interdependent ACPs, understand the cumulative impacts on communities and other third-party stakeholders of the different solutions and ensure the trade-off decisions associated with different design choices are transparent and can be meaningfully influenced through ACP engagement and consultation activities. ACOG will conduct a Public Call for Information in Q1-2023 to gather feedback from communities and other stakeholders on the development of the masterplan and the constituent ACPs.
11	Any significant changes to the established position of the arrival and departure routes serving Gatwick	The comprehensive list of options developed for the Gatwick ACP incorporates designs that aim to identify the highest-performing flight paths for minimising the total population overflown and the highest-performing flight paths for minimising the overflight of new communities. Feedback provided by community stakeholders has also

¹ https://publicapps.caa.co.uk/docs/33/UK Airspace Change Masterplan Iteration 2 v2.2.pdf

	Question (You Said)	Answer (We did)
	airport risks overflying new communities. How is the ACP managing this?	encouraged us to look at designs that aim to strike a balance between minimising total population overflown and newly overflown and other options that avoid areas with lower ambient background noise.
12	How does the ACP consider the planned developments on the ground like the construction of new housing estates?	The potential impacts of the airspace design options that are assessed as part of the Initial Options Appraisal (Step 2b) and Full Options Appraisal (Step 3a) are compared with a baseline scenario. Planned developments on the ground, like new housing are included in the baseline scenario for the next 15 years. The potential impacts of options are compared against the forecast situation on the ground in 2027 (the point when the ACP is expected to deploy) and 2037 (ten years after the ACP is deployed).
13	Are potential changes in Government policy factored into the ACP development process?	Yes. The ACP must be developed in line with extant Government policy, in particular, Section 70 of the Transport Act 2000, CAP1616 guidance on changing the airspace design and the DfT's guidance to the CAA on its environmental objectives when carrying out its air navigation functions, and to the wider industry on airspace and noise management. Gatwick and the other airports participating in the masterplan engage with the CAA and DfT on a monthly basis to understand the likelihood and nature of any emerging policy developments that may affect the ACPs. The Government has consistently emphasised the importance of a stable policy framework for airspace modernisation so we do not expect any significant changes. If important aspects of the policy framework did change, we would expect to step back through the process and reevaluate the work completed so far in light of any new or different requirements.
14	Will the information to be discussed in the next round of engagement in late Jan-2023 be circulated in advance?	We will circulate a briefing note two weeks before the engagement sessions planned for late January 2023, explaining the information that will be discussed.
15	During the formal consultation with stakeholders and the public on the preferred airspace design option(s) will the maps/charts offer a clear comparison with Gatwick's existing routes and the	Yes.



	Question (You Said)	Answer (We did)
	locations/altitudes that aircraft overfly today?	
16	Is the ACP monitoring potential changes to the boundaries of relevant Areas of Outstanding Natural Beauty?	Yes. We are aware that there are proposals under consideration to change the boundaries of some AONB's that may potentially be affected by the Gatwick FASI ACP and are monitoring the situation to understand if/when modifications to our impact assessments will be required.
17	Are there opportunities to further influence the ACP process and raise appeals?	 Yes. Before the Public Consultation stage, by participating in the stakeholder engagement sessions conducted to support options development and assessment activities (Step 2A, 2B and Step 3A). During the Public Consultation by providing feedback on the proposed airspace design option and associated consultation questions. (Step 3B) By participating in the Public Evidence Session(s) conducted by the CAA during the proposal decision stage (Stage 5)

Feedback

Gatwick did not ask any specific questions to stakeholders at this event, although we did invite stakeholders to raise any questions or comments via the usual FASI-S email address. No email feedback responses were received from stakeholders following these engagement events.



11. Round 3 Design Principle Evaluation Outcomes and Introduction to Initial Option Appraisal Engagement Sessions (Event I)

In January and February 2023, Gatwick invited stakeholders to three virtual meetings which were held on the 25th & 30th of January, and on the 2nd of February. The aim of these virtual meetings was to explain the outcome of the Design Principle Evaluation (DPE), and provide an overview of the Initial Options Appraisal (IOA) (the first of three rounds of options appraisal for the ACP). The agenda for the virtual meetings included:

- Welcome and Introductions
- Recap on the overall scope and timelines for the ACP
- Update on integration of Gatwick's ACP with interdependent proposals
- Summary of the options development conducted to date
- Overview of the Design Principle Evaluation approach and outputs
- Overview of the Initial Options Appraisal
- Update on the Stakeholder Engagement Report
- Discussion, feedback, next steps and close

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Events	Invitation	Agenda / Briefing	Post-Event	Feedback
I.i. 25th Jan. 2023 I.ii. 30th Jan. 2023 I.iii. 2nd Feb. 2023	Meeting invitation send on 23rd December 2022 asking delegates to register by return email. (I.1.)	Agenda and briefing note (I.4.) sent to registrants on 13th January 2023 (I.2.)	Presentation slides (I.6.) and meeting notes / Q&A (I.7.) circulated to participants on 3rd March 2023 (I.5.)	3 feedback emails received from stakeholders. (I.8.).

Questions and Answers during workshops

Throughout the sessions, there were opportunities for stakeholders to ask questions and the section below outlines the questions and answers from the workshops. Following the session, stakeholders were sent the presentation and the question-and-answer document.

Table 27 Initial Option Appraisal Engagement Sessions Questions and Answers

	Question (You Said)	Answer (We did)
Briefing	session #1: 25th January 202	23
1	The section of airspace in scope for the Gatwick FASI ACP from the ground to 7000ft. extends south towards Brighton City Airport (commonly known as Shoreham airport). Is Brighton City Airport, which also has plans to expand, included in the masterplan development process?	No. Brighton City Airport is not currently developing an ACP, so is not participating in developing the Airspace Change Masterplan for London and the Southeast. We have invited representatives from Brighton City Airport alongside other smaller aerodromes in the vicinity of Gatwick Airport, to engage about the development of our FASI South ACP. We will also include an assessment of the impacts of the design options in the Gatwick FASI South ACP on the existing operations of other aerodromes (including Brighton City Airport) during the Initial and Full Options Appraisals.
2	Could the text in the presentation be amended to change the 'Not met', 'Partially met' and 'Met' colours because they are difficult to read [slide 16 & slide 18]?	The presentation has been updated, and the font colours have been amended.
3	Does the Design Principle Evaluation consider whether the options are expected to deliver Continuous Climb and Continuous Descent (CCO/CDO) improvements?	Yes. The assessment of Design Principle 3 considers whether the options may offer improved CCO/CDO compared to today. There is also an assessment of CCO/CDO as part of Design Principle 6. As part of the Stage 3 Full Options Appraisal, the Gatwick ACP design options will be integrated with the wider airspace system, providing more details of the expected CCO/CDO performance. This information will inform the detailed quantitative noise modelling assessments at this stage.

	Question (You Said)	Answer (We did)
4	How are you considering respite within the arrivals options and what might respite look like?	The comprehensive list of arrivals options contains respite options. For the Design Principle Evaluation and Initial Options Appraisal, it is assumed that inbound traffic is distributed equally across the individual respite routes. We have not made assumptions about the schedule of alternation between routes at this stage (e.g. alternating morning and afternoon, day by day, week by week etc).
		The Full Options Appraisal will provide an opportunity to review the potential noise benefits and impacts of respite options in further detail. We will also incorporate the outcomes of the Fair and Equitable Distribution (FED) Study for further guidance on how to better mitigate the impacts of aircraft overflight.
5	Why is GAL not discontinuing options on the basis of noise impacts during the Design Principle Evaluation?	Earlier in the process, we conducted a high-level analysis of the performance of each notional flight path that may conceivably be included in an airspace design option for the Gatwick FASI ACP. The analysis was used to identify the comparatively higher-performing flight paths for inclusion in the airspace design options that formed the comprehensive list. We decided it was not appropriate to discontinue options on the basis of this high-level analysis during the Design Principle Evaluation (i.e. we wouldn't determine that one option is preferred to another based on the flight path-specific analytics only) because there will be the opportunity to include a more detailed assessment of aircraft noise covering the combined impacts of all flight paths included in each option during the IOA.
6	Please can you provide a worked example of the methodology used to develop and assess options, concentrating on Westerly Arrival Option D (WAD) and Westerly Arrival Option E (WAE).	Yes. When options WAD and WAE were developed, they were selected from a group of high performing notional flight paths and developed in line with the same design principles (DP3 focusing on noise and DP7 focusing on respite routes). This means the noise metrics evaluated for WAD and WAE are very similar when compared to all the other potential westerly arrival flight paths. In the Design Principle Evaluation, both options were evaluated to meet DP3 to limit and where possible reduce the adverse impacts of aircraft noise. Both options also met DP7 because they include multiple routes that can be alternated with the intention of offering predictable noise relief. WAE offers a slightly shorter track distance (used as a proxy for fuel burn and aircraft emissions in line with DP6) and slightly better safety performance in line with DP1. The overall highest-performing notional flight path for westerly arrivals is included in WAD (alongside an alternate route for respite). This notional flight path (without a respite alternative) is also included in WAA. For this reason, and encouraged by the slightly better safety and efficiency performance of the similar respite option WAE, we proposed to discontinue WAD.

	Question (You Said)	Answer (We did)
		As part of the update briefing, we agreed to provide a worked example. This can be found as an appendix to the presentation circulated to stakeholders. This shows that the sum of the population overflown in WAD is greater than in WAE. As part of the discussion prompted by this feedback, Stakeholders requested that further noise analysis is undertaken before any of the arrival options are discontinued. Gatwick has considered this feedback and will include all PBN arrival options (including the four options that we had proposed to discontinue - WAD, WAI, EAK and EAE) in the Initial Options Appraisal.
7	How have the noise assessments conducted so far considered the treatment of areas with lower ambient background noise and the general distribution of overflight between rural and urban areas.	As part of the comprehensive list of options, we have listened to stakeholders' feedback and developed additional options that aim to strike a balance between overflight of urban and rural areas and options that seek to avoid areas with comparatively lower ambient noise. The ambient noise options were developed using the DEFRA mapping of road and rail noise as the best available proxy data at this stage. The measurement of ambient noise is complex and there is no regulatory framework or legislation that guides how we incorporate it as a factor in our options appraisals. Gatwick has committed to incorporating the outcomes of the Fair and Equitable Distribution (FED) study which considers the treatment of areas with lower ambient noise into Stage 3 of the ACP.
Briefing	session #2: 30th January 202	23
8	Is noise analysis for each option only considered between the ground and 4000ft?	No. The noise analysis conducted for each option considers the impacts of aircraft noise between the ground and 7000ft. in line with the altitude based priorities set out in the Government's Air Navigation Guidance (ANG) 2017. The ANG explains that from the ground to 4000ft the government's environmental priority is to limit and, where possible, reduce the total adverse effects on people. Between 4000ft-7000ft the environmental priority should continue to be minimising the impact of aviation noise unless this would disproportionately increase CO2 emissions. CAP1616 instructs the use of primary and secondary noise metrics aligned to the ANG that should be used when
		considering noise impacts within the options appraisals. The primary metric is WebTAG which uses LAeq noise values to arrive at a total for significant adverse effects from noise. LAeq contour areas are typically located where aircraft are at or below 4000ft. To inform decision making in the regions from 4000ft to 7000ft, CAP1616 instructs the use of 'secondary metrics - those that are not being used to determine significant impacts but which are still able to convey noise effects, such as N65 contours and Lmax levels'. Overflight contours are also a

	Question (You Said)	Answer (We did)
		secondary metric used to inform decision-making. These secondary metrics are measured from the ground to 7000ft and combined with the primary metric to support the options appraisals.
9	Stakeholders raised concerns that some of the options are based on one single PBN route that would concentrate noise impacts for those	This feedback is noted. The Stage 2 Initial Options Appraisal will look to find the higher performing PBN routes from the options developed. It includes an appraisal of the benefits and impacts of a single PBN route, when compared to a respite configuration with multiple routes that may be alternated to a predictable schedule. In the Stage 3 Full Options Appraisal we will incorporate the outcomes of the FED Study for further guidance on how to better mitigate the impacts of aircraft noise.
	overflown.	It is also important to note that for the arrival options we expect that the routine use of ATC vectoring will naturally distribute the aircraft tracks around a PBN route centreline when the ACP is deployed. The air traffic management technologies required to stream inbound traffic on a single PBN route for landing during periods of high demand and to enable alternation between multiple arrival routes during these times will not be available when the Gatwick FASI ACP is deployed. More information about the use of ATC vectoring to enable the airspace design options (which is dependent on the airspace design above 7000ft) and the pathway to deploying multiple, alternating PBN arrival routes will be available during Step 3A.
10	Is each tile shown on the slide an option and where there is more than one line, what does this represent [Slides 33 and 34]?	Each tile shown is an arrival option (a system of operationally compatible arrival routes serving a specific runway end). The lines within the tiles represent routes. Some options feature a single route, others include multiple routes that may be alternated to a predictable schedule with the intention to offer noise respite. We expect the majority of inbound traffic to arrive from the south as per today. The arrival routes from the north that are included in some options are likely to be operated on a tactical rather than routine basis.
11	Finding a way to fairly distribute noise is really important to local communities.	This feedback is noted. We recognise the importance of considering how to distribute the impacts of aircraft overflight below 7000ft. and will incorporate the outcomes of the FED Study for further guidance on how to better mitigate the impacts of aircraft noise.
12	At present, the departure swathes are wide, will the centreline be determined as the designs progress?	Yes. As we progress through the stages of the CAP1616 process, the departure swathes will be progressively refined to the point where we have a single route centerline or configuration of respite routes that serves each network exit point. This refinement will be based on the Initial Options Appraisal and the integration of Gatwick's options with neighbouring FASI ACPs.

	Question (You Said)	Answer (We did)
13	How does the NERL feedback around the broad flows of departure traffic align with the aims of Airspace Modernisation to increase capacity and offer other benefits.	NERL expects that the redesign of the terminal airspace structure and route network above 7000ft, using PBN routes to improve navigation standards, will add sufficient airspace capacity to meet a reasonable rate of growth in demand for aviation across the airports in London and the Southeast out to 2040. Additional airspace capacity is expected to strengthen the resilience of the air transport network to poor weather and unplanned events. The changes above 7000ft, are also expected to reduce aircraft fuel burn and emissions per flight by improving CDO and CCO performance.
14	Given the global, interconnected nature of air transport, are the airports and air navigation service providers in neighbouring States developing similar proposals to modernise their airspace?	Yes. Our neighbouring States in Europe are modernising their airspace and air traffic management systems as part of the Single European Sky (SES) initiative. The FASI ACPs are developed in line with the SES initiative, but there is a misalignment in the timelines for airspace modernisation across the individual States. The UK FASI ACPs to modernise the airspace in London and the Southeast are likely to deploy ahead of similar changes to the airspace structure and route network across other European States. This may constrain the overall gate to gate benefits of the ACPs in the short-term.
15	Will Gatwick be publishing the vertical profiles of the routes included in the departure options?	Yes. The routes included in the departure options are assumed to climb at an average of 6% from the ground to 7000ft. The actual vertical profiles of the routes will be refined and published as part of the Stage 3 consultation once Gatwick's designs have been integrated with the wider airspace network and neighbouring airports. The noise and environmental analysis within the Stage 3 Full Options Appraisal will account for changes in the vertical profiles achieved across the fleet (a large proportion of the Gatwick fleet is expected to achieve climb rates greater than 6%).
16	How will communities affected by an increase in aircraft noise impacts be compensated?	The size and nature of the significant adverse effects generated by changes in the distribution of aircraft overflight associated with the Gatwick ACP will be determined in detail as part of the noise modelling conducted to support the public consultation in Step 3C of the CAP1616 process. Gatwick will continue to be guided by Government Policy regarding the arrangements for compensating people significantly adversely affected by aircraft noise.
Briefin	g session #3: 2nd February 202	23
17	How might the options presented here affect smaller General Aviation airports in	The Initial Options Appraisal will include an assessment of the potential for any impacts or benefits to General Aviation operating at nearby aerodromes. Redhill Aerodrome will be incorporated into our baseline 'do nothing'

	Question (You Said)	Answer (We did)
	the vicinity of Gatwick like Redhill aerodrome?	pre-implementation scenario and if impacts or benefits are expected then this will be highlighted on an option by option basis.
		The preferred option included in the final airspace change proposal will ensure that emergency responders, such as Police Helicopters and Air Ambulance operators that are located at aerodromes like Redhill, continue to maintain safe and expeditious access to the airspace. A broad range of General Aviation stakeholders including the Police and Air Ambulance operators are also part of our stakeholder engagement list.
19	How will the noise impacts from other airports be measured?	A requirement of Stage 3 of the CAP1616 process is that we consider the cumulative impacts of the airspace change proposal – this means we must consider any areas of cumulative overflight below 7000ft with other airport-led ACPs. Where interdependencies that may create cumulative overflights exist, we must explain the potential solutions to mitigating the impacts and any trade-offs arising in terms of noise impacts (costs) or benefits.
		Gatwick will participate in a process led by the Airspace Change Organising Group (ACOG) to understand the cumulative impacts and the potential trade-offs arising from the interdependent FASI South ACPs. ACOG has set out a Cumulative Analysis Framework (CAF) that explains the methods by which cumulative impacts will be identified, measured and managed. The Gatwick FASI ACP will not be able to progress to a public consultation until the CAA is satisfied that the cumulative impacts with interdependent ACPs is accurately represented in a relevant version of the Airspace Change Masterplan produced by ACOG. Stakeholders will be able to understand the cumulative impacts and influence any proposed trade-off decisions during the public consultation.
20	Please could Gatwick provide a list of the acronyms used in the presentation?	Yes. Our presentation slides contain a glossary with acronyms. For future engagement sessions we will include the glossary in the briefing note that is circulated in advance.
21	There is reference to avoiding areas of outstanding natural beauty (AONB), population, schools and other noise sensitive buildings, but does this not significantly restrict the areas where you	Yes. The objective of the process is to determine the optimum configuration of routes, taking into account a broad range of areas, buildings and other sites that are sensitive to aircraft overflight below 7000ft. When developing airspace change options it is very difficult to avoid all areas, buildings and sites such as AONBs, Schools, Hospitals, Hospices, Places of worship, areas of dense population, and areas that are prised for their tranquillity and/or biodiversity. The CAP1616 process requires us to define a 'do nothing' pre-implementation baseline and assess each option against this baseline to understand its benefits and impacts. That way we can aim to where possible reduce the impacts of aircraft noise compared to today.

	Question (You Said)	Answer (We did)
	can locate options if you are trying to avoid everything?	
22	Looking at option WAM, laterally how far apart are the respite routes?	At the closest point, there is laterally around 1.8nm (3.4km) between the two routes in WAM however it is important to note that there is also a vertical separation i.e an aircraft on route A will be lower than an aircraft on route B in this option at the point where the two routes are closest together. Graduate WAM
23	Some General Aviation aircraft use leaded fuels. How will the General Aviation operations from other aerodromes be considered as part of the Air Quality assessments?	The air quality and carbon emissions assessments in the Initial Options Appraisal (IOA) look at whether the changes to Gatwick's airspace will have benefits or impacts compared to a 'do nothing' pre-implementation baseline. The focus of the assessments is flights to and from Gatwick rather than operations at surrounding aerodromes. If a Gatwick ACP option resulted in a change to the profile of inbound or outbound traffic at an adjacent General Aviation aerodrome this will be highlighted qualitatively at this stage (as part of the General Aviation impact assessment portion of the IOA).
24	When do you expect to shortlist options?	We expect to have a shortlist at the end of the Initial Options Appraisal and this list may be further refined as we progress into Stage 3 and understand more about the surrounding airspace, interdependencies with neighbouring proposals, and the Full Options Appraisal.
25	It is difficult in 2 – 3 hour presentation for stakeholders to evaluate the potential benefits and impacts of each individual option presented.	The presentation will be shared with stakeholders for review in slower time, and any feedback or questions should be directed to LGWairspace.FASIS@gatwickairport.com by March 10th 2023. Although, at this stage in the process (prior to completion of the IOA), we are not engaging or consulting on the individual merits of each option.

	Question (You Said)	Answer (We did)
26	The map backgrounds for each option are not sufficiently detailed for stakeholders to understand the specific tracks over the ground or identify sites that are of interest to them.	The purpose of this round of engagement is to describe how the options development and assessment methodology is being applied in practice, what the list of options are when viewed as a collective, the outcomes of the Design Principle Evaluation and how the options list has evolved in response to stakeholders feedback. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside the outcomes of the Full Options Appraisal of the benefits and impacts of each option and there will be an opportunity to interrogate this information and feedback on the proposals.

Feedback

Although as part of these sessions we did not ask any specific questions to stakeholders, we did invite stakeholders to raise any questions or comments via the usual FASI-S email address. 3 emails were received from stakeholders however the feedback has been broken down onto separate rows in the table to aid with answering the points made.

Table 28 Feedback received following Initial Option Appraisal Engagement Sessions

Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
In response to your presentation, Warnham Parish Council would like to make the following comments/concerns: 1. The mapping is so dark and faded it makes it hard to see locations or how the changes to the departure routes and arrivals routes are proposed. In view of this it is difficult to provide informed feedback. From what can be made out using an OSM and main roads it would seem that the FASI-S process is targeting our rural parish to take all the burden of Gatwick's desire for growth and efficiency with no compensation to those that will be newly impacted by aircraft noise/ routings and have their homes devalued due to aircraft noise.	(1) At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside the outcomes of the Full Options Appraisal of the benefits and impacts of each option and there will be an opportunity to interrogate this information and feedback on the proposals. At this stage (Stage 2), the purpose the engagement is not to seek feedback on the specific geographical position of individual route proposals; instead we are looking to understand if the options have been designed in alignment with the design principles and we are engaging with stakeholders	Ahead of the next round of engagement planned for Q2 2023, we will share clearer images of the options as part of the information pack provided before the engagement

Question (You Said)	Answer (We did)	Follow up actions (We did)
· It would seem that the arrival RNAV route is to be placed over our parish rather than the northern part of the parish that currently receives the ILS. We therefore do not support EAI and EAD, but there may be others but as stated the mapping is so dark it is hard to provide informed feedback.	about the development, evaluation and appraisal of the options to get to a shortlist.	sessions however please note that detailed maps will not be published until Stage 3 of the ACP.
2. This FASI-S work does not consider the low height of the planes in taking a route less than 8nm to the ILS; the speed that will have to be taken off at a low height by dropping wheels and flaps all significantly increasing noise for new communities of our parish. It also does not consider the visual impact of such a low plane overhead and the noise from the frame of the plane making such a low manoeuvrer. Even with time-based operations this will still have a significant impact at less than 1,500ft.	(2) As part of the next step of the process, Step 2B Initial Options Appraisal, noise analysis will be undertaken on the options as part of the appraisal. This analysis accounts for the altitude of aircraft and includes noise and overflight metrics.	
Our member of parliament, was offered assurances by Gatwick Airport there would be no join at less than 8nm for arrivals.		
There is no such thing as a departure swathe, as such we detail that this is very disingenuous in suggesting that there is anything other than NPRs historically. NPRs routes protected residents in knowing where planes flew. Members of our parish have paid a premium not to be under a NPR as such we see no compensation or protection offered to our parish, we quote 'minimise population newly overflown'. The northern part of our parish is currently impacted by routes 1, 7 & 8 with the engine noise from route 4 as it heads north. The departure routes are the same as the ILS planes having joined at 8nm+ as such reduced and vectored before impacting our parish.	The departure options going into the Initial Options Appraisal have been described as having 'Option swathes'. The swathes denote areas where a route could potentially be located and as part of the Initial Options Appraisal, and detailed design work in Stage 3, we plan to use the analysis to narrow down the swathes to departure route centrelines. Sometimes the word 'swathe' is used to describe areas of vectoring. In the case of the Gatwick baseline, this swathe occurs above the NPRs which have a release altitude of 3000ft or 4000ft depending on the route.	



Question (You Said)	Answer (We did)	Follow up actions (We did)
As the mapping is dark and faded, we are not sure if WIZAD/ TIGER is proposed or a new route over our parish as was the case in 2014 with ADNID, 2nd runway and LAMP. We therefore oppose options. 8, 5, 6, 4, 2, 1 and 3 which all seem to impact our parish in either direct new overflight or sandwiching our parishioners between numerous departure routes as such offering no respite from concentrated routes and the noise cones produced (CAP1498).	With the exception of the options that are based on Gatwick's existing route centrelines, the options developed for the comprehensive list are not based on any previous routes or trial routes; they have been developed using the Airspace Design Database and the Design Principles, or as outcomes from this round of stakeholder engagement.	
Continuous Climb Operations (CCO) is offered on departures, but this is not explained to what improvements or additional impacts this departure manoeuvrer will have on those on the ground. We would suggest that this could impact our parish further with dispersed routing at 3-4,000ft.	As part of the next step of the process, Step 2B Initial Options Appraisal, noise analysis will be undertaken on the options. This analysis looks at noise and overflight metrics and compares the options against the 'do nothing' baseline to understand potential benefits and impacts.	
We strongly recommend that before this goes any further the clear mapping be provided so that this process can be undertaken again so that it is clear to what is being proposed by Gatwick Airport FASIS CAP1616 process.	At Stage 3 of the process, following detailed design work and the full options appraisal, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside the outcomes of the Full Options Appraisal of the benefits and impacts of each option and there will be an opportunity to interrogate this information and feedback on the proposals. At this stage (Stage 2), the purpose the engagement is not to seek feedback on the specific geographical position of individual route proposals; instead we are looking to understand if the options have been designed in alignment with the design principles and we are engaging with stakeholders about the development, evaluation and appraisal of the options to get to a shortlist.	Ahead of the next round of engagement planned for Q2 2023, we will share clearer images of the options as part of the information pack provided before the engagement sessions however please note that detailed maps will not be published

Question (You Said)	Answer (We did)	Follow up actions (We did)
		until Stage 3 of the ACP.
CAGNE continues to raise the fact that the mapping offered by this process is so dark and faded, it makes it hard to see locations or how the changes to the departure routes and arrivals routes are proposed. In view of this, it is difficult to provide informed feedback. We strongly recommend that, before this goes any further, clear mapping be provided so that this process can be undertaken again to clarify what is being proposed by Gatwick Airport FASI-S CAP1616 process. See letter to CAA.	At Stage 3 of the process, following detailed design work and the full options appraisal, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside the outcomes of the Full Options Appraisal of the benefits and impacts of each option and there will be an opportunity to interrogate this information and feedback on the proposals. At this stage (Stage 2), the purpose the engagement is not to seek feedback on the specific geographical position of individual route proposals; instead we are looking to understand if the options have been designed in alignment with the design principles and we are engaging with stakeholders about the development, evaluation and appraisal of the options to get to a shortlist.	Ahead of the next round of engagement planned for Q2 2023, we will share clearer images of the options as part of the information pack provided before the engagement sessions however please note that detailed maps will not be published until Stage 3 of the ACP.
It would seem that the FASI-S process is targeting rural parishes closest to the runway to take all the burden of Gatwick's desire for growth and efficiency, with no compensation to those who will be newly impacted by aircraft noise/routings, with their homes devalued due to aircraft noise. We must therefore consider as flawed, the process used by Gatwick, to date, to only consult those in noise groups currently overflown from further out.	At this stage there are a range of departure and arrival options being explored and the next steps of the process involve detailed analysis of these options to understand the benefits and impacts compared to the 'do nothing' baseline. Stakeholder representatives from Gatwick's potentially affected area (published on the CAA's Airspace change portal) were identified at Stage 1. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken	

Question (You Said)	Answer (We did)	Follow up actions (We did)
Even though Gatwick has started to engage with town and parish councils at CAGNE's request, to provide such poor mapping and misinformation will not ensure that these 'non-aviation experts' understand what Gatwick is proposing and what they are being asked to sign up to. It would seem that the arrival RNAV route is to be placed at less than 8nm, flying over new communities at very low heights. This is unacceptable due to the above and because these areas are not being informed clearly of this desire.	and passed the proposal through the Stage 1 Gateway. At Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage 1 and these stakeholders are all listed on the CAA Airspace Change Portal within Gatwick's Stage 1B submission document page 55-61. Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. Wider engagement will take place as the ACP progresses and more people will be drawn in at the appropriate stage in the ACP process. As such, Parish councils have been engaged as part of this third round of Stage 2 stakeholder engagement. At Stage 3, Gatwick will hold a full public consultation on the proposals.	
This FASIS work does not consider the low height of the planes in taking a route less than 8nm to the ILS; The speed that will have to be taken off at a low height by dropping wheels and flaps, all significantly increasing noise for new communities.	As part of the next step of the process, Step 2B Initial Options Appraisal, noise analysis will be undertaken on the options as part of the appraisal. This analysis accounts for the altitude of aircraft and includes noise and overflight metrics.	
It also does not consider the visual impact of such a low plane overhead and the noise from the frame of the plane making such a low manoeuvrer. Even with time-based operations, this will still have a significant impact at less than 1,500ft.		
There is no detail about how 'respite' is proposed as, with 3i incentives, a plane will not fly to 12nm when it can fly to 8nm. How will respite/ rotation of routes be given, to provide predictable respite? Point 4 – Much is being made of multiple arrival RNAV routes but in fact these are not able to be used, as seen with RNAV requests by	At this stage, some arrival options have been developed with the intention of providing respite. In these instances, we have said that traffic would be split equally down each route however we have not indicated a period (for example would the routes switch on a daily or weekly basis or perhaps on a different	



Question (You Said)	Answer (We did)	Follow up actions (We did)
CAGNE for rotation of routes to allow for dispersal. This is predominantly down to incentives and fines that air traffic control is offered (3i) to fly the shortest route.	period). This is something we will explore as the proposals mature, and we have a shortlist of arrival options.	
This is not being made clear to stakeholders and needs to be corrected.		
Point 6 – We question how Gatwick can detail predictable respite on arrivals, due to our comments above in point 4 – incentives and fines to fly the shortest distance.		
We believe Gatwick are misleading stakeholders in suggesting that 'predictable respite' is feasible. This can only be achieved if there are multiple routes offering the same shortest distance to land (so targeting those that suffer the most closest to the runway) as required by 3i and other incentives to fly the shortest distance (to save time and fuel) which only benefits aviation and complies with 3i.		
There is no such thing as a departure swathe, so we think that this is very disingenuous in suggesting that historically, there was anything other than NPRs. NPRs protected residents in knowing where planes flew.	The departure options going into the Initial Options Appraisal have been described as having 'Option swathes'. The swathes denote areas where a route could potentially be located and as part of the Initial Options Appraisal we plan to use the analysis to narrow down the swathes to departure route centrelines. Sometimes the word 'swathe' is used to describe areas of vectoring. In the case of the Gatwick baseline, this swathe occurs above the NPRs which have a release altitude of 3000ft or 4000ft depending on the route.	
We see no offering to 'minimise population newly overflown'. The departure routes to the west are the same as the ILS planes, so these residents already suffer multiple routings. If it is to be proposed, as	As part of the Comprehensive list of options, there are options based on the existing departure centrelines, and based on the concentrated areas of the existing arrivals swathes that seek	



Question (You Said)	Answer (We did)	Follow up actions (We did)
seemingly suggested, that an even greater number of routes be flown, these residents will have no respite at all. It would seem Gatwick seeks to offer no respite to new communities proposed to be impacted by multiple departure routes in view of the noise cone created by RNAV routes 9CAP1498).	to minimise population newly overflown. These were tested with Stakeholders as part of the engagement in February and March 2022. There are also some departure routes which utilise offset departures that avoid the final approach path of arrivals. As part of the next steps of the process the options will be compared to the 'do nothing' baseline to understand the potential benefits and impacts including any potential for respite. As part of the detailed design development at Stage 3, Gatwick have also committed to incorporating the outcomes of the Fair and Equitable Distribution Study (FED Study)	
It would seem that Gatwick seeks to fly over new communities in favour of those currently overflown. We therefore question the process that Gatwick has undertaken to date, to only consult existing noise groups.	Gatwick have developed options that seek to minimise new overflight, options that take a blank sheet approach, and options that aim to balance the total number of people overflown with those newly overflown. As part of the next steps of the process we will appraise these options to understand their benefits and impacts compared to the 'do nothing' baseline.	
	Stakeholder representatives from Gatwick's potentially affected area (published on the CAA's Airspace change portal) were identified at Stage 1. Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway. At Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage 1 and these stakeholders are all listed on the CAA Airspace Change Portal within Gatwick's Stage 1B submission document page 55-61. Attendees at our Stage 2	



Question (You Said)	Answer (We did)	Follow up actions (We did)
	engagement workshops are representatives of the local communities and the public.	
Continuous Climb Operations (CCO) are offered on departures, but this is not explained as to what improvements or additional impacts this departure manoeuvrer will have to those on the ground. We would suggest that this could further impact those close to Gatwick, with dispersed routing at 3-4,000ft. Point 3 - Much is being made of CCO, which affects those close to the runway but seeks to benefit with reduced noise by greater number of departure routes further out. This should be made clear. There is no mention of CDO, yet it purely benefits those further out from the runway. This must be made clear, due to the Noise Envelopes not covering these areas of concern of arriving aircraft. To date, CDO does not seem to reduce noise.	At this stage, prior to integration with neighbouring airports and the airspace above 7000ft, the options developed are assumed to achieve CCO and CDO to / from the ground to 7000ft. As part of the Step 2B Initial Options Appraisal, noise analysis will be undertaken on the options. This analysis accounts for the altitude of aircraft and includes noise and overflight metrics.	
To date in the FED work, there has been no incorporation of ambient noise. We find this response to stakeholders disingenuous to the facts.	The FED report is still in development and has not been shared with Gatwick at this stage.	
The government's Air Navigation Guidance altitude priorities should be observed throughout the process. I would not expect any option that was relatively attractive on noise grounds to be rejected because it did not perform well on climate/track miles grounds.	Gatwick is developing the airspace change proposal in accordance with government policy and airspace regulation. This includes the government's altitude based priorities.	



Question (You Said)	Answer (We did)	Follow up actions (We did)
In all noise assessments, full account should be taken of all communities under flight paths up to 7,000 feet.	Assessment of option benefits and impacts from 0-7000ft, including noise, is required throughout the ACP.	
GAL should develop and assess options that deliver greater dispersal than those currently proposed. It seems likely that most of the current options would impose substantially greater noise levels on some communities than they have experienced historically. That should be unacceptable. If options that deliver greater dispersal are not feasible GAL should explain why.	For arrivals, there are options based on a Radar Manoeuvring Area (RMA) which creates dispersion, as well as PBN arrival options which would create concentration. Some of these PBN arrival options also offer respite configurations to mitigate this concentration.	
	As part of the Step 2B Initial Options Appraisal, noise analysis will be undertaken on the options which will look at the benefits and impacts of these options. It is anticipated some level of vectoring will be required alongside any PBN arrivals implemented. The split of systemised PBN arrivals vs controller vectoring, and the nature of the vectoring area required will be explored as part of detailed design integration in Stage 3.	
	In terms of the departures, at this stage the routes within an option assume aircraft will follow the PBN route from 0-7000ft however Gatwick have committed to incorporating the outcomes of the Fair and Equitable Distribution Study (FED Study) into the detailed design development in Stage 3.	
GAL must articulate clearly the noise environment that communities will be subject to following any FASI(S) change under each option. Unless and until GAL is clear about the interaction between vectoring and PBN people will not be able to form a clear view of the noise to which they will be exposed under any particular option. No option	Ahead of the Stage 3 Full Options Appraisal (FOA) the options will go through detailed design development which involves integration with neighbouring airports and the network airspace above 7000ft. This work informs the FOA which in turn informs the public consultation where the noise benefits/impacts of an	



Question	Answer	Follow up actions
(You Said)	(We did)	(We did)
should be eliminated until GAL is able articulate the future position clearly.	option will be clearly articulated. In the consultation on the preferred option(s) Gatwick will need to set out its expectations as to PBN route utilisation versus overflight of areas due to vectoring.	
	Owing to the number of options for Initial Appraisal, and the number of options from other airports, it would not be possible to take all these options through, and develop in detail every single option, nor is it aligned with the intentions of the stages in CAP1616. Therefore the methodology for the IOA aims to provide data and appraisal that allows Gatwick to identify high performing options that would be suitable to be taken forward for this detailed design development and integration in Stage 3.	
GAL should explain how the interaction between PBN navigation and vectoring will operate and might change in the future. Within this it should explain whether any change in the proportion of PBN navigation would itself constitute an airspace change or a permanent and planned redistribution of airspace on which there would be consultation.	The Stage 3 Full Options Appraisal is required to forecast for year of implementation and year of implementation + 10 years. If the detailed design development suggests that changes to vectoring practices will occur over the 10 year period, then this will documented an form part of the Full Options Appraisal. In the event that Gatwick were to move towards a more systemised environment with less vectoring in the future, we would anticipate that a PPR ACP would be required.	
Each option should be shown on clearly readable OS maps.	At the Stage 3 Public Consultation Gatwick will publish detailed maps and noise contours alongside the outcomes of the Full Options Appraisal of the benefits and impacts of each option and there will be an opportunity to interrogate this information and feedback on the proposals.	Ahead of the next round of engagement planned for Q2 2023, we will share clearer images of

Question (You Said)	Answer (We did)	Follow up actions (We did)
	At this stage (Stage 2), the purpose the engagement is not to seek feedback on the specific geographical position of individual route proposals; instead we are looking to understand if the options have been designed in alignment with the design principles and we are engaging with stakeholders about the development, evaluation and appraisal of the options to get to a shortlist.	the options as part of the information pack provided before the engagement sessions however please note that detailed maps will not be published until Stage 3 of the ACP.
GAL should set out its proposals for compensating anyone who is subject to greater aircraft noise as a result of its FASI(S) proposals, including in relation to loss of property value.	In Step 2B, we will start to explore the benefits and impacts of each option and, where appropriate and aligned with government policy and legislation, we will detail any anticipated costs. At Stage 3, as part of the full options appraisal, these costs will be fully quantified.	
GAL should assess and demonstrate whether its proposals are compatible with the government's policy that "the industry must continue to reduce and mitigate noise as airport capacity grows", taking account of all growth that FASI(S) will facilitate.	Gatwick is developing the airspace change proposal in accordance with government policy, the Airspace Modernisation Strategy (AMS) and airspace regulation. Furthermore, one of Gatwick's core Design Principles from Stage 1B is to 'Limit adverse noise effects - The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise'.	

12. Round 3 Initial Options Appraisal Methodology Outcomes (Event J)

In July 2023, Gatwick invited stakeholders to three virtual meetings which were held on the 28th and 31st of July and the 2nd of August. The purpose of the sessions was to explain Gatwick's approach to conducting the Initial Options Appraisal (IOA) and provide an overview of the outcomes.

The agenda for the virtual meetings included:

- Welcome and introductions
- Recap on the overall scope and timelines for the ACP
- Summary of the options development and assessment conducted to date
- Overview of the Initial Options Appraisal Methodology
- Overview of the Initial Options Appraisal Outcomes
- Next steps in CAP1616 process
- Discussion, feedback, next steps and close

Details of the stakeholders who were invited and attended the workshop are shown in Appendix B.

Events	Invitation	Agenda / Briefing	Post-Event	Feedback
J.i. 28 th July 2023 J.ii. 31 st July 2023 J.iii. 2 nd August	Meeting invitation send on 5 th July 2023 asking delegates to register by return email. (J.1.)	Agenda and briefing note (J.4.) sent to registrants on 20 th July 2023 (J.2.)	Presentation slides (I.6.) and meeting notes / Q&A (I.7.) circulated to participants on 9 th August 2023 (I.5.) Follow up email sent on 17 th August (J.9.) (See section below for further details)	8 feedback emails received from stakeholders. (I.8.).

Questions and Answers during workshops

Throughout the sessions, there were opportunities for stakeholders to ask questions and the section below outlines the questions and answers from the workshops. Following the session, stakeholders were sent the presentation and a document which showed more detailed maps of the options.

#	Stakeholder Question	Gatwick Team Response
Brie	fing session #1: Friday 28 th July, 20	23 – 10:00 to 12:00
1	Does the noise data used to produce the IOA include the dB levels that form part of the World Health Organisation (WHO) guidance?	At this stage in the process, the noise modelling we have conducted for the IOA concentrates on the primary metrics used to assess adverse impacts as outlined in CAP1616 and UK Government Policy. The WHO recommended daytime and nighttime dB levels are not currently adopted into UK policy. Nonetheless, following the discussions in the IOA Engagement Sessions, we have committed to including the 45dB daytime and 40dB nighttime L_{Aeq} WHO levels as part of the Full Options Appraisal (FOA) at Stage 3.
2	Will the decision on the preferred option be made solely on the monetised outputs generated by webTAG? Some stakeholders have concerns over the use of webTAG and the Department for Transport's reliance on the LOAEL contours.	WebTAG is the Department for Transport's (DfT) suite of guidance on how to assess the expected impacts of transport policy proposals and projects. The webTAG workbooks can be used to monetise certain aspects of the noise impact however they require data from full airport system LAeq,16hr (daytime noise) and LAeq,8hr (night-time noise) contours including the Lowest Observable Adverse Effect Level (LOAEL) contours. At this stage in the process the options are based on partial systems. WebTAG outputs will be generated once full airport system options have been developed during Step 3A.
		CAP1616 (B47) states that the output from webTAG will form the primary measure of the noise impact for the purpose of the CAA's decision-making on a proposal. At Stage 3 Gatwick are therefore required to generate the webTAG outputs and the LAeq contours as per Government policy. Gatwick are aware of some community stakeholder's concerns regarding the application of webTAG outputs to determine the preferred option(s) for the ACP and understand that airspace design decisions should not be based on the monetised outputs alone. Gatwick will review the



		outcomes of the Fair and Equitable Distribution (FED) study and the overall outcomes from the Full Options Appraisal when determining the preferred option(s) for the ACP at Step 3A and then refine the design further using the qualitative and quantitative information arising from the Public Consultation at Step 3C.
3	Do you consider the impact of planned residential developments and how the size of the population in some areas may change in future?	Our Step 2B document includes a section on planned residential developments in the areas surrounding Gatwick airport. This information has been drawn from planning information published on local planning portals. As part of preparation for the Stage 3 Full Options Appraisal, we will refresh this information and also be in contact with local authorities regarding planned residential developments surrounding Gatwick Airport.
4	Gatwick should consider the Strategic Housing and Economic Land Availability Assessment (SHELAA) when considering future developments.	Thank you for this feedback, we will review the SHELAA information during our preparation for the Full Options Appraisal at Stage 3.
5	There are lots of categories of appraisal in the IOA, how do you balance all of those?	Balancing the different categories and outcomes of the IOA is one of the most challenging parts of the process however the CAP1616 process helps with this, as there is no requirement to develop one airspace change option right first time. Instead, we develop a long list of options and then step through several rounds of evaluation, engagement/consultation, appraisal and refinement before the final option is determined. At this stage we have a mix of qualitative and quantitative assessments and our discontinuing methodology (slides 50 – 52) shows how we've incorporated the Government's Altitude Based priorities as well as the various outcomes of the IOA. Although options have been shortlisted at this stage, and the presentation provides stakeholders with information around why each option has been either continued or discontinued, should further information become available in Stage 3 which suggests that a previously discontinued option should be reconsidered, then there is the mechanism to go back to the Comprehensive List developed in Stage 2 and bring additional



		designs forward into Stage 3. The process for reconsidering previously discontinued options would always be fully transparent and documented, in line with regulatory guidance.
6	What is the scope of the Air Quality Assessment and does it include ultra fine particles?	CAP1616 requires sponsors to produce information on local air quality impacts only where there is the possibility of pollutants breaching legal limits following the implementation of an airspace change (or worsening an existing breach of legal limits). The CAA deems that this is a possibility where:
		 there is likely to a change in aviation emissions (by volume or location) below 1,000 feet, and, the location of the emissions is within or adjacent to an identified AQMA.
		At stage 2 Gatwick has undertaken a qualitative screening assessment for Air Quality to identify whether both of the conditions above are met for an option.
		If an option meets the conditions above, at Stage 3 further air quality assessments would be undertaken based around the requirements of CAP1616 using a recognised and validated emissions model. This quantification would be based on nitrogen dioxide (NO2) and particulate matter (PM10 and PM2.5) for which legal limits have been set. Emissions of Ultra Fine Particles (UFP) are associated with the combustion of fossil fuels, including aircraft engines and road traffic. There is currently no legislated standard for UFPs, and there is no requirement to assess UFP concentrations within any national policies. UFP do not form part of the CAP1616 requirements or Government policy and therefore would not be modelled as part of an ACP.
7	Some stakeholders raised concerns about the potential for options should be discontinued solely on the basis of track mileage.	No options have been discontinued solely on the basis of track mileage. In the case of some options where there is similar performance when looking at the primary noise metrics, the wider IOA assessments have been considered and this includes the track mileage assessment for each option.
8	Gatwick should note there is Stakeholder concern regarding the	Thank you, noted. The Gatwick FASI ACP team recognise stakeholders' valid concerns regarding the potential for significant increases in the concentration and frequency of noise impacts associated with single PBN arrival routes. We understand that decisions on how best to concentrate or disperse aircraft noise must be informed by information about the local

	concentration created by single PBN arrival routes.	circumstances gathered through data analysis and stakeholder engagement. There are situations where multiple routes and/or conventional controller vectoring techniques, which may expose more people overall to noise but to a lesser extent, may be better from a noise perspective than a single PBN arrival route. The Fair and Equitable Distribution (FED) study is currently ongoing and Gatwick will use the outcomes from this research to guide how our airspace change options should evolve with regards to the sharing of noise. This will form part of the detailed design work undertaken at Stage 3.	
9	With regards to the hybrid PBN/vectoring scenario anticipated for arrivals, how will Gatwick account for changes over time to the percentages of aircraft flying the PBN routes vs being vectored.	Gatwick will undertake detailed Air Traffic Control (ATC) development simulations in Stage 3 on the shortlist of options to understand the expected usage of the PBN arrival routes compared to vectoring. As part of this work, if there is an indication that the use of the PBN routes may change over time then this will form part of the assumptions that are input into the Full Options Appraisal (FOA) at Stage 3. The FOA is required to assess the year of implementation and 10 years following implementation, and therefore the analysis can be adjusted to reflect any anticipated changes in usage.	
10	How can I identify my area and work out if the proposals make things better or worse in terms of noise?	The Stage 2 submission IOA dashboards will include noise contours for each option as well as heatmaps which show the 'do nothing' pre implementation baseline (examples are shown on slide 37 and 39). This is where stakeholders will be able to identify the broad geographical areas that may be affected by different options and compare them to the baseline option. As part of the public consultation at Stage 3, there will be detailed maps for all of the shortlisted options.	
Brie	Briefing session #2: Monday 31 st July, 2023 – 14:00 to 16:00		
11	Does the ACP assume one or two runway operations?	The Gatwick FASI-S ACP is a separate development to the Northern Runway DCO project. The options developed for the FASI-S ACP can be operated to/from either the main runway or the northern runway with and without both runways being in use at the same time.	



12	There is a minimum joining point of 8nm for Gatwick arrivals today. Will that continue in future? We are concerned whether some proposed tracks may join final approach at less than 8nm	There are options on the Comprehensive List drawn up in Step 2A which join the final approach path at less than 8nm. All the PBN arrival options have been appraised as part of the Initial Options Appraisal and the options that join at less than 8nm have been discontinued. More information can be found in the slide pack and will be included in our Stage 2 submission.
13	There is an ambition to achieve improved continuous climb performance but we are concerned this will increase noise for some areas and that aircraft levelling off maybe better for noise?	Overall there is an ambition for aircraft to have better climb performance than today as aircraft climbing higher sooner is largely seen as beneficial in terms of noise, fuel burn and emissions. There is however some research, undertaken as part of NATMAC, which shows that in some scenarios aircraft returning to a portion of lower thrust level flight and climbing again could reduce noise impacts in targeted areas. The outcomes of this study will be considered as part of the detailed design work in Stage 3 as we also incorporate the outcomes of the Fair and Equitable Distribution (FED) Study. This detailed design work will also consider how our options integrate with the wider London terminal airspace system and what this might mean for climb performance. The Full Options Appraisal will then take all of this information and quantify the noise benefits/impacts compared to the 'do nothing' pre-implementation baseline.
13	Are airlines concerned about fuel efficiency versus climb rate?	Some airlines have expressed that there is a balance to be achieved between climb rates, fuel efficiency and engine wear and tear. At this stage, the overflight contour assume a 6% continuous climb rate to 7000ft. and the Stage 3 detailed design development will consider climb rates in further detail.
14	What, specifically, does Gatwick mean by PBN procedures? (RNP1 or RNP0.6?)	At this stage the routes are designed to a minimum specification of Required Navigation Performance 1 (RNP 1). As part of the detailed design ahead of the Full Options Appraisal at Stage 3 we will look at the most suitable specification for the routes.
15	Why does GAL not implement more advanced PBN specifications.	The latest industry feedback from the airlines and equipage surveys suggests that not all Gatwick's fleet are equipped to fly Required Navigation Performance Authorisation Required (RNP AR) and



		Required Navigation Performance Radius to Fix (RNP RF) routes however this will be investigated further as part of preparation for the Stage 3 Full Options Appraisal.
14	Is Gatwick going to use enhanced route spacing per CAP1385	Yes, Gatwick will look to CAP1385 and other safety assessments when considering PBN route separations, in conjunction with NERL who are responsible for the airspace above 7000ft.
15	Given that the ACP aims to modernise the airspace, why will the arrivals require a hybrid approach with vectoring?	What is known at this stage is that the time-based arrivals technology required to facilitate systemised PBN arrivals will not be available at the point of implementation and therefore some level of vectoring will be required. The split of systemised PBN arrivals vs controller vectoring, and the nature of the vectoring area that is used are important unknowns. As part of the detailed design work and ATC development simulations at Stage 3 we will look at this topic in further detail.
16	Why are the arrival holding stacks not shown on the arrival images?	The arrival delay structures (either orbital or linear holding) form part of the NERL-led ACP for the airspace system above 7000ft and are therefore outside the scope of the Gatwick FASI-S ACP.
17	Although the scope of the ACP is at 7000ft how is Continuous Climb and Continuous descent measured when the procedures may start or end above 7000ft?	As we progress into Stage 3, we will be working closely with NATS NERL, who are responsible for the airspace above 7000ft, on the detailed design proposals and this will include how the Gatwick designs integrate with the plans for the network airspace. As part of this, the Continuous Climb or Descent performance of the procedure will be explored. At the Stage 3 consultation, the proposals will be presented together.
18	(Slide 69) The image of the departure options taken through to Stage 3 shows that some of the same areas may be affected by both routes for easterlies and westerlies.	At Stage 3 we will bring the easterly and westerly arrival and departure options together into full airport system options. As part of this process, we will look at areas of potential cumulative impact that may be affected by multiple different routes and examine options to mitigate them. This will form part of the wider work to build the system options and integrate the options with the surrounding airspace conducted during Stage 3.
	How does GAL propose to account for these routes potentially affecting the same communities twice?	The noise analysis within the Full Options Appraisal will be undertaken on the full airport system options and therefore this will account for any areas of cumulative impact. This includes within Gatwick's own options, and also within the wider airspace with aircraft from other airports.



19	When are communities going to see a view of the potential cumulative impacts generated by all the FASI airports?	This will form part of iteration 3 of the ACOG (Airspace Change Organising Group) Masterplan. At present there is no formal timeline for when this will be published, although we expect the work to be complete by 2025. In order to generate the information, as a minimum all airport's will need to have worked through their Stage 3 Full Options Appraisals and integrated their proposed designs with neighbouring airports and the airspace above 7000ft which is likely to take at least a year.
20	Do the options images show the 7000ft point.	Yes the overflight contours shown for each option cover 0-7000ft.
21	Are you planning on raising the base of controlled airspace (CAS) and will you design the CAS around what you actually need?	At this stage we expect the options will not require any additional CAS compared to the baseline however in order to determine whether it will be possible to raise the base of CAS, we need to develop full airport system options (i.e. easterly, westerly, arrival and departures combined). This work will be undertaken as part of Stage 3 when we will determine the CAS required to contain the options and explore locations where it might be possible to release CAS.
21	The westerly departure options show a sharp left hand turn, is that sharper than the Route 9 WIZAD route today and could it be used more frequently in future?	There are several left turn routes within various westerly departure options, including some that differ from the existing WIZAD route. In terms of frequency of use, there are various traffic scenarios applied to these options, but no decisions have been made at this stage. Please see the option information pack supplied alongside the presentation for more details.
22	Is it correct that, options featuring a single PBN arrival route are longer than some tracks today. Why are you not discontinuing all single track options at this stage?	No options are discontinued based on track miles alone. The PBN arrival routes have been compared against an average baseline arrival track. In today's operation, arrivals are vectored and therefore there are sometimes opportunities for aircraft to fly more directly to join the final approach path but there are also many occasions where arrivals are vectored indirectly in order to achieve separation and spacing requirements – following longer tracks.
		In future it is expected that all arrivals will be streamed from a point, or several points, in the network which will form part of the arrival delay mechanism above 7000ft and this allows for consistency with track mileage. As noted in the presentation, the hybrid approach to arrivals may also result in



		some aircraft continuing to be vectored. At this stage we do not know the split of PBN usage vs vectoring and therefore for these reasons combined, the single PBN arrival routes have been taken through. More detailed ATC development simulation work in Stage 3 will offer greater detail about the vectoring vs PBN split and what this means for track mileage overall.
23	Why have you discounted options that allow aircraft to turn onto final approach at less than 8nm?	The options that joined the final approach at less than 8nm cannot be flown as PBN to Instrument Landing System (ILS) arrival transitions. The ILS is a precision navigation aid that guides aircraft onto the final approach and pilots see the ILS as the 'gold standard' in reliably providing precision guidance on approach, particularly in periods of low visibility. An option without the ability to join the ILS reduces the frequency which that option can be operated and therefore reduces the potential benefits an option can realise. This, alongside the outcomes of other assessments has been balanced when determining which options to discontinue. The reasons for discontinuing each specific option are contained within the presentation and more
		information will also be provided in the Stage 2 submission document.
24	What approach path angle do the arrival options use? Is there any consideration of steeper approaches?	The PBN arrival options are based on a standard 3° approach. As part of the detailed design phase at Stage 3 there will be opportunities to look at the benefits and impacts of steeper approaches such as 3.2°.
Brie	fing session #2: Wednesday 2 nd Au	gust, 2023 – 17:30 to 19:30
25	When will the Stage 3 FASI-S consultation be held? Stakeholders are concerned about Consultation fatigue if the FASI-S consultation was to overlap with other Gatwick consultations.	Gatwick understands the concerns around consultation fatigue and will consider this when developing a Consultation Strategy at Stage 3. At present, it is expected that any plans for Consultation are at least 1 year away.



26	Does the AONB data take into account the revised boundaries?	Stakeholders have made us aware of the ongoing consultation on the Surrey AONB boundary. At the point of undertaking the IOA analysis a revised boundary has not been agreed however we will continue to monitor the outcomes of the consultation, expected in early 2024, and we will incorporate any applicable information into the Stage 3 Full Options Appraisal.
27	Do all of the options keep the Noise Preferred Routes (NPRs) the same as today?	The CAP1616 process requires ACP sponsors to develop and assess all viable options to address the Statement of Need. For the Gatwick FASI ACP that means there are routes included within some of the departure options that fall within the existing NPRs and there are also routes which fall outside of the existing NPRs. At this stage we are assessing the potential benefits and impacts of all options. Any changes to the NPRs will require separate approval through a DfT administered process.
28	Given that Gatwick stakeholders do not want to see concentrated routes, would it not be better to consider respite as part of the options assessment at Stage 2.	There are respite route options for PBN arrivals which have been considered as part of the IOA. For departures, there are many routes, options and traffic scenarios being assessed at this stage (some of which may be combined later in the process to offer respite options). It is not proportionate to try and also develop respite configurations at this stage with so many different, interrelated design options still under consideration. As we progress into Stage 3, the options will be further refined, and the outcomes of the FED study will be better understood. At this point we will explore respite for departures in greater detail and engage with stakeholders accordingly.
29	What is the time period for alternation applied to the arrival respite options?	A specific time period for alternating between multiple routes has not been applied at this stage however the respite options have been assessed as though traffic will be shared equally down the routes. For example for a two route respite option, it is assumed 50% of arriving traffic would use one route and 50% would use the other.
30	Does the noise analysis consider that Gatwick is busier in the summer period and noise disturbance is	The noise analysis is based on a 92 day summer period from the 16 th June to 15 th September as required by CAP2091. This period is chosen because residents are more likely to be outside or with windows open and so may be more affected by any aviation noise.

	likely to be greater during that time due to open windows and doors?	
31	Has the expansion plan for a third runway at Heathrow been agreed with all three political parties?	No. Gatwick is currently working closely with Heathrow as part of the FASI-S programme to integrate our respective airspace design options. Heathrow's FASI ACP is being developed for a two runway operation. Heathrow's expansion ACP for a three-runway operation is currently paused
32	When will fleet changes to lead to quieter planes and more sustainable aviation fuels.	Fleet changes leading to quieter aircraft is an on-going process in the aviation industry. Aircraft manufacturers have made significant improvements in noise performance over the past four decades through improved engine designs, aerodynamics and materials. We expect this work to continue. However, it's important to note that complete elimination of aircraft noise might be challenging due to the fundamental physics of flight. Sustainable aviation fuels, also known as biofuels or alternative jet fuels, are being developed as an alternative to traditional fossil-based aviation fuels. These fuels are made from renewable sources such as plant oils, waste biomass, and algae. The timeline for these changes is gradual and depends on various factors, including regulatory policies, technological advancements, market demand, and infrastructure development.
33	Will FASI-S look at the railway line to the airport?	This is outside of the scope of the Gatwick FASI-S ACP which is looking at the airspace and flight paths only.
34	Why are the holding stacks not shown on the option images?	The arrival delay mechanism forms part of the NERL-led ACP for the airspace above 7000ft and therefore it is outside the scope of this Gatwick FASI-S ACP.
35	Are Gatwick considering changing the Controlled Airspace Boundaries as part of FASI-S?	At this stage we expect the options will not require any additional CAS compared to the baseline however in order to determine whether it will be possible to raise the base of CAS, we need to develop full airport system options (i.e. easterly, westerly, arrival and departures combined). This work will be undertaken as part of Stage 3 when we will determine the CAS required to contain the options and explore locations where it might be possible to release CAS.



36	What is ANG 2017?	The Air Navigation Guidance 2017 (https://www.gov.uk/government/publications/uk-airnavigation-
		guidance-2017) is guidance to the CAA on its environmental objectives when carrying out its air
		navigation functions, and to the CAA and wider industry on airspace and noise management. The
		ANG outlines the Government's altitude-based priorities for consideration of the environmental
		impacts arising from airspace change proposals.

Post Workshop Feedback

Whilst Gatwick did not ask any specific engagement questions as part of these sessions, stakeholders were invited to email any questions or feedback around the Stage 2B IOA Methodology by Friday 18th August to be included in the Stage 2 submission. Gatwick explained that any responses received after this date would be included in Gatwick's Stage 3 submission.

The engagement materials were circulated to Stakeholders on the 9th of August however unfortunately there was a Gatwick IT Issue, due to the size of the stakeholder list, and not all stakeholders received the email. Gatwick were made aware of this on the 17th of August and the email was resent to all stakeholders. Some stakeholders requested the feedback window, for being included in the Stage 2 submission, be extended and Gatwick therefore extended the cut off to Friday 25th of August. The feedback received is shown in Table 29 below. Table 30 provides Gatwick's response to key points of feedback received following Initial Option Appraisal outcome sessions.

Table 29 Feedback received following Initial Option Appraisal Outcome Sessions

(You Said)

Thank you for your email. Naturally we were disappointed to learn of GAL's failure to effectively circulate the papers from the recent engagement session.

Having now had an opportunity to review the papers we would like to raise a number of significant concerns:

1. Once again the team has failed to provide maps containing the necessary geographic reference points. As a result, it's impossible to determine with any degree of accuracy the areas which would be overflown by the routes now being considered. We have raised this point a number of times now, most recently at the NMB Community Forum (NCF) meeting held on 24th May. Feedback from the GAL team at the NCF was contradictory, but I left that meeting reassured by confirmation that future maps would have the necessary level of detail. It's therefore extremely disappointing that, once again, maps have been circulated for comment without the necessary geographic granularity. Why is this detail still not being made available?

- 2. Associated with Point 1 above, we can see no reference to the noise environment that individual communities will be subject to as a result of any of the options being considered. In addition, with vectoring set to continue for some time, there is every chance that some of the options potentially being taken forward could increase the noise being suffered by certain communities. We would therefore suggest that, until such an analysis is completed and the results fully considered, no option can be eliminated.
- 3. Whilst we appreciate that the NMB's FED project remains on-going, it's clear that there is a widely held feeling that single concentrated flightpath options wouldn't deliver fair and equitable dispersal of air traffic. This being the case, can you please explain why of the 14 easterly arrival options assessed, 9 were single track options and why of the six options being progressed into Stage 3 of the project four are single track routes. We are extremely concerned that there appears to be a bias towards highly concentrated single track routes, potentially leading to a substantial increase in noise for certain communities.
- 4. It would also appear that the project team's approach has to been to consider arrival and departure route options on an individual basis. As GAL is well aware certain communities, including those that PAGNE represents, suffer from both arrival and departure noise. It is imperative that, for those communities that are impacted by both arrival and departure noise, GAL fully considers arrival AND departure noise in combination.
- 5. As part of our feedback to previous engagement sessions, we have highlighted the importance of taking full account of the increased impact of flying over rural areas where ambient noise levels are low. Although this point has previously been acknowledged by the project team, we would be grateful if the team could confirm how this factor has been considered as part of the Initial Option Assessment process.
- 6. It would appear that the project team has chosen not to consider any arrival options with an ILS join of less than 8nm. Such routes might actually improve noise profiles and could well provide greater opportunity for fair and equitable dispersal. Can you please explain why such options have been excluded.

Finally we are clearly aware that one of the key drivers of the wider FASI project is to facilitate greater volume. However, taking account of the points above and in association with government policy, we are concerned that the project has thus far failed to demonstrate the extent to which noise will be reduced and mitigated as traffic volumes increase.

Thank you once again for the papers and we now look forward to receiving your feedback.

Thank you for sending me the slides from your latest engagement meetings.

Having now had a preliminary look through them my view is that GAL has not carried out a sufficiently thorough initial options analysis and that it is not in a position to submit its stage 2b analysis to the CAA. If GAL chooses to submit an appraisal based on the current analysis my view is that the CAA should reject it, and I would intend to ask them to do so.

I have the following main concerns, most of which are unchanged from the feedback submitted in January.



GAL has not developed or assessed options that deliver an acceptable degree of arrivals dispersal, or adequately explained why such options cannot be considered. It seems likely that most of the options GAL proposes to take forward would impose substantially greater noise levels on some communities than they have experienced historically.

GAL has not assessed the increase in noise intensity each option would expose impacted communities to, or the effects (health, mental health, quality of life, reduction in asset values etc) of options. Some of the options GAL proposes to take forward would, depending on the extent of vectoring, increase overflight for some communities by four or five times. That would have a profound effect on such communities, which GAL has currently ignored.

GAL has relied excessively on LOAEL data in its analysis, whilst knowing that LOAEL has no objective or scientific basis.

GAL has carried out no research on the impacts of changes to flight paths including the effects of concentrating flight paths. Without such research its options analysis is materially defective.

GAL has not explained adequately why certain options, which might enable greater flight path dispersal, have been rejected. For example, options WAC, WAO are rejected partly on the grounds that they do not enable PBN-ILS arrival transitions, which would reduce capacity, but has not explained what this means. I do not accept that capacity should be prioritised over potentially improved noise outcomes in the way GAL is proposing.

GAL has not assessed any RMA options closer that 8nm but has not explained why such options, which might improve noise outcomes, have been excluded.

GAL has not articulated clearly the noise environment that communities will be subject to following any FASI(S) change under each option particularly the likely interaction between vectoring and PBN for arrivals. As a result, neither it nor those it has engaged have been able to form a clear view of the noise to which they will be exposed under any particular option. No option should be eliminated until GAL has set out the future position clearly. GAL must specifically explain how the interaction between PBN navigation and vectoring will operate and might change in the future. Within this it should explain whether any change in the proportion of PBN navigation would itself constitute an airspace change or a permanent and planned redistribution of airspace on which there would be consultation.

GAL has made no proposals for compensating anyone who is subject to greater aircraft noise as a result of its FASI(S) proposals, including in relation to loss of property value.

GAL has not demonstrated that its proposals will satisfy government policy that the industry must "continue to reduce and mitigate noise as airport capacity grows", taking account of all growth that FASI(S) will facilitate.

As previously these are my own views not those of any group although I intend to share them and seek a cross-group consensus that GAL's analysis to date is unsatisfactory and should be rejected.



The final FASIS presentation (28.7.23) by the Gatwick Airport FASIS team was very disappointing, as it appears not to consider the impact the airport's desired growth will have on local communities. This is not the first time that CAGNE has had cause to write concerning the flawed CAA CAP16161 process being operated by Gatwick Airport management.

This Gatwick final presentation must be seen as more whitewashing, purely to benefit the airport.

Time and time again, we are informed that the mapping is just an illustration, and that it can be influenced. Yet little seems to have been taken on board about the devaluing of residents' lives and their homes, with new flight paths over new communities, while those currently overflown can expect greater intensity of concentrated flight paths – purely to seek unconditional growth for this commercial airport.

One of the design principles was not to fly over new communities but this seems now to be lost.

Another factor is that these maps make it clear that the airspace desired by this process is for a 2-runway airport operation. The process to gain support for Gatwick's plans to rebuild the emergency runway as a 2nd runway details CAP 1908 that they will use the same flight paths as they do today, for a 2-runway operation. It has not made it clear to those they have consulted (both elected members and residents) that Gatwick seeks new airspace to accommodate the significant increase in flight numbers by designing new airspace with little consideration to those on the ground.

All of this comes with no compensation for the communities that Gatwick has chosen to impact in the name of the government's initiative, FASIS. The now-offered compensation for a 2-runway airport via the DCO is insignificant insulation for a very few residents close to the runway whilst nothing is offered for a newly designed 2-runway airspace. We have to ask why, when it is going to significantly affect residents' wellbeing and house values.

There is no mention of the World Health Organisation noise metrics which are a clear indication of how aircraft noise truly impacts residents.

Greater importance seems to be placed on ANOBs, hospitals, and schools (Gatwick is busiest when schools are closed, so not impacted by peak operations), while none is placed on the wellbeing of residents, quality of home life, or enjoyment of a garden and open spaces, in a rural lifestyle expected by those of Sussex, Surrey, and Kent.

We urge Gatwick to stop this process from progressing to stage 3, as the lack of adequate mapping provided to date has not permitted informed feedback. Only now are we seeing the extent of this true catastrophe for residents, just to fulfil Gatwick's desire for growth.

Little emphasis is being placed on air quality – in fact no data or information was provided about any air quality concerns that had been considered to date. No understanding or acknowledgement of ultra-fine particles were shown or disclosed (this is only to be measured up to 1,000ft).

According to the presentation, saving on fuel-burn is more important than impacting those closest to the runway, those currently overflown, and new communities. Instead of seeking to fly where residents have historically seen aircraft, the desired mapping looks to directly impact new communities,



without having consulted those residents. The impact on those who are already suffering most from the airport's current operations only seems to be discussed if respite is offered over new communities, omitting to address the impact of RNAV routes (concentration introduced by the CAA in 2014 on all departures routes and proposed with FASIS for arrivals).

PBN routing over both current and new communities will significantly increase noise for all, creating little, if any, respite due to the multiple routings so close to the airport (CAP1498).

We are, once again, urging Gatwick to stop this process as unlawful to those on the ground, as too much emphasis is being placed on aviation profits through growth, while ignoring the residents who suffer the effects.

Thank you for the documents and inviting feedback.

Despite the many pages of illustrations and explanations, this does feel to me like a document seeking to deliver a fait accompli (increased profits delivered via higher capacity through concentrated flight paths) and fails to address the core question - accepting that PBN is an available, proven technology, has its actual effect on humans been fully assessed prior to even considering implementation for arrivals at Gatwick?

Technology and its effects are not mutually exclusive.

No account has been taken around the combination of arrivals + departures and the 'Evolution of some departure routes' on pages 32/33 of Part 1 is a display of the disregard the industry appears to have for presently and potentially impacted communities. It is not sufficient to say that these combinations will be addressed in Stage 3 - if Stage 2 has no relevance, why is it being done at all?

The measuring of noise impacts by averaging is widely acknowledged to be a nonsense and the ones chosen here the worst of all.

Fair & Equitable Dispersal has not been addressed in any realistic sense.

No reference has been made to the hyper-concentration PBN delivers. No amount of nicely coloured illustrations can hide the effect FASI-S's work is going to have on tens of thousands of people. And those nicely coloured pictures show great, broad flight paths, in and out. This is simply not how they will be flown in terms of arrivals, and perhaps more critically given we have the actualité is not how NPR's are flown now.

Where is the detailed analysis around the effect of super-concentrated noise? Has the FASI-S team asked anyone outside the industry? Literally, anyone?

Have the effects witnessed around many US Cities subject to the imposition of NextGen [PBN/PR-NAV] been analysed?

Denying the options & opportunity for aircraft to join the ILS closer than 8nm because that 'impacts frequency' is simply not a valid reason to discontinue these options. Don't forget, we were told that they couldn't join as close way back in 2014 on safety grounds because they wanted to reduce Go-Arounds.

Via FOI's we proved by forensic analysis of the woefully-kept data of the time (with whole months of data missing) that this 'safety' argument was questionable. The Chair of the NMB even questioned it.

While it seems 'impacts frequency' is at least nearer the truth, 'frequency' is but one of many elements that should decide a route.

In line with that ceaseless drive for profit over everything else, has the FASI-S Team assessed the effect on the aviation industry eventually having to pay any tax/duty on aviation fuel? So far, its immense political power has avoided this possibility, but there is no doubt it will come and it will affect capacity. It needs to be built into the options.

The documents supplied simply do not justify submission to the next stage. I urge the FASI-S Team to go back to the drawing board, start over and commence their next attempt with the effects of concentration, once established. Anything less is a travesty of justice for those who will be so affected in the years ahead.

The Team needs to get out, get away from the computer design models, and talk to people. Lots of them.

Q1: 'Do you think hyper-concentrating flight paths is a good idea?'

Q2: 'Would you [the populace] want to live under one?

Humans, not just profits, really do count.

You might call it a design principle.

Good presentation. Thankyou.

I have been giving more thought to the point I raised at the presentation on 31st July.

I asked why you had discarded the potential westerly arrival routes that join the ILS at between 6 to 8 miles and 8 to 10 miles from the runway. Your basic answer was that pilots would not be happy and it would cause more tromboning of other arriving aircraft.

I do not believe this to be the case. There will obviously be times when these closer joining points are not appropriate but they should be part of the mix of viable westerly approach routes.

Previously up to about a decade ago many aircraft were flying these routes without any issue. My understanding from talking to a number of pilots is that it was not a problem. Today we are talking about a situation that comes into place in 4 or 5 years time. Aircraft technology has and will be further much improved and the whole flight path technology allows detailed and precise control from take off to landing. Safety should not be an issue.



Using westerly approach paths that join the ILS between 6 to 10 miles have been previously proven. They would minimise fuel burn and airlines and the environment would benefit. People have been previously overflown in these areas. Minimum numbers of people on the ground would be affected instead of your proposals that show routes overflying major towns such as Tunbridge Wells and Crowborough. It does not make any sense when considering FED not to use these closer arrival routes. With the new arrival systems in place there should be little or no need for tromboning to take place.

I therefore believe these closer joining arrival routes for westerly arrivals should be further considered in the overall analysis and be part of the mix.

Despite having requested to join one off the inform sessions I did not receive the 'link' and was unable to join the session.

I have since been able obtain a copy of the material and wish to make the following comment.

It is understood that it remains Government policy to choose for Westerly approaches to LGW's 26 Left Runway (Runways), tracks to ensure that the minimum number of people on the ground are overflown and disturbed.

From the diagram's I have now seen your Specialists research and recommendations fail to recognise this and their proposals must therefore be concluded as flawed.

As you are aware the Approach plate to be used when current radar vectoring is unavailable, is from the Mayfield VOR, (Physical or virtual) directly North to intercept the ILS at South Edenbridge. This track is the only track that minimises those overflown and should be your recommended PBN route for FASI (S). It joins between 6 to 8 nms and by definition is a perfectly manageable and safe route even for 'Heavy' and 'Super Heavy' aircraft.

Since this route directs approaching traffic over sparsely populated Ashdown Forest, and is the only route that avoids populated areas I should be grateful if you could kindly ensure this oversight is taken into your deliberations.

It is 17th August and my understanding was that any responses that Gatwick received after 18th August would not be included in the materials that will be submitted to the CAA in September.

Since you have not yet circulated the presentation, I have had to respond based on my notes and on the screenshots that I was able to capture during the presentation.

Our response is attached. Could you please acknowledge that you have received it in good time, and that it will be included in the package of materials that are to be submitted to the CAA.

(You Said)

Please note, that because of the inadequate imagery on your maps, we have had to superimpose them on the OS map using railway lines, rivers, and local authority boundaries to fit as best we could. There may be some distortion, but we are satisfied that our analyses, conclusions and recommendations are nevertheless valid

Response to FASI South July Presentation—Tunbridge Wells Study Group

Our response has had to be made without access to the presentation, which had not been circulated in time to meet the 18th August deadline to be included in the submission to the CAA at the end of the month.

Please note that this response relates solely to WESTERLY ARRIVALS.

Overarching response

The selection of "continuing options" is perverse and difficult to understand in relation to the policy of avoiding excessive concentration of PBN arrivals.

Fair and Equitable Dispersal

Although the precise definition of FED has yet to be determined, one essential principle is clear: concentration of PBN arrivals using a single track is unacceptable and should be avoided.

If this principle had been applied, then it is hard to understand why 5 of the 7 continuing options are based on a single track solution without a respite opportunity.

Only 1 two track and 1 three track option remain from an original portfolio of 5 multi-track options.

Perverse treatment of options

Three classes of continuing option have been selected; 1/2/3 track designs:

- 1. 9 single track options were considered; of which 4 were discontinued and 5 remain to be taken to the next stage.
- 2. 3 two track options were considered; of which 2 were discontinued and 1 remains to be taken to the next stage.
- 3. 2 three track options were considered; of which 1 was discontinued and 1 remains to be taken to the next stage.

Inadequate range of multi-track options

Only two multi- track options remain, of which:

- 1. The only surviving three track option is patently unrealistic, since the most easterly track overflies the centre of the urban area of Tunbridge Wells and the town of Crowborough.
- 2. The only surviving two track option fails to make use of the 8 nm ILS joining point and, as a result, overflies some of the most the populous satellite villages to the west of Tunbridge Wells.
- 3. There is no continuing two track option that makes use of some of the routes selected for the continuing single-track options, which is quite bizarre!
- 4. The two track options that were discontinued, were rejected either because they joined the ILS below 8 nm or "were broadly similar to other options". No attempt appears to have been made to reconfigure these options to join at between 8 nm and 10 nm.

These points are illustrated and supported by maps on the next few pages.

The Unacceptable Three Track Option

The map below shows that the ONLY surviving three track option overflies the western half of the urban centre of Tunbridge Wells, the most populous region of the RMA. The large town of Crowborough is also impacted adversely.



Note: Created from a screenshot of presentation slide superimposed on a more legible OS map

This option is clearly a nonsense and can only be regarded as an "Aunt Sally". It will almost certainly have to be abandoned once its impact is disclosed and understood. This could leave no viable three track option.



The CAA needs to scrutinise the rationale for this decision and require Gatwick to evaluate at least one alternative three track option that makes use of the 8 nm ILS joining point [used by the continuing single route options].

An Inadequate Two Track Option

The map below shows that the **ONLY** surviving two track option overflies the populous villages to the west of Tunbridge Wells including the significant communities of Langton Green and Rusthall.



Note: Created from a screenshot of presentation slide superimposed on a more legible OS map

The selection of this single option is also curious and difficult to understand. The 8 nm ILS join [red ring] has not been utilised. The decision to join at 12 nm and beyond has inevitably forced both tracks over the more populous half of the RMA.

The CAA needs to scrutinise the rationale for this decision and require Gatwick to evaluate at least one alternative option that makes use of the 8 nm ILS joining point [used by the continuing single route options].

An overlooked dispersal option

Closer examination of the continuing single track options, suggest that the most westerly track could be used as the principal route, while the most easterly could be used as a respite route.





Note: Created from a screenshot of presentation slide superimposed on a more legible OS map

Such a solution might well satisfy FED, since a significant degree of manual vectoring is expected to continue for the foreseeable future. Vectoring will emulate the current more random pattern of dispersal.

The solution would also avoid both the urban centres of Crowborough and Tunbridge Wells, as well as its satellite villages.

It is apparent that this solution could be regarded as an alternative two track option, since it would make use of the 8 nm ILS joining point [red circle]

The CAA needs to require Gatwick to evaluate this or other single track solutions with respite options.

RECOMMENDATION

The selection of continuing options is inadequate. There are insufficient options that offer respite from extreme concentration.

More options that can avoid concentration must retained or added in the next stage. These additional options should include at least:

- 1. Single track options that include a meaningful opportunity for respite.
- 2. Additional multi-track options that make greater use of the 8 nm ILS joining point.

The Parish Council would like to provide the following Feedback/comments:

(You Said)

Not in favour of anything happening at Gatwick which increases the frequency of flights passing over the southern part of the High Weald Area of Outstanding Natural Beauty. Punnetts Town happens to be roughly where the inbound flights throttle back and deploy flaps so we have our own, very distinctive, noise pattern here.

Concerns relate to the aircraft, the fuel that they use and the noise that they produce. Would like to see much more research and development...firstly to make aircraft more fossil fuel efficient and less noisy, but going forward into the development of alternative fuels which could/should also make them less noisy and to achieve zero emission alternatives.

Not against any development of the airport at Gatwick per se and can see huge local benefits including for employment, however we would add the caveat that we would wish to seek to resist any proposals that focussed on more flights over our (or indeed any other) settlements, especially in tighter bands and/or at a lower level.

Heathfield and Waldron Parish Council

Table 30 Gatwick Response to key points of feedback received following Initial Option Appraisal Outcome Sessions

(We Did)

Continuation of single PBN arrivals and concentration of PBN routes

Although Gatwick has continued various single PBN routes through to the Stage 3 Full Options Appraisal, we have also committed to incorporating the outcomes of the Fair and Equitable Distribution Study (FED Study) as part of the detailed design development at Stage 3.

Ahead of the Stage 3 Full Options Appraisal (FOA) the options will go through detailed design development which involves integration with neighbouring airports and the network airspace above 7000ft. This work informs the FOA which in turn informs the public consultation where the noise benefits/impacts of an option will be clearly articulated. In the consultation on the preferred option(s) Gatwick will need to set out its expectations as to PBN route utilisation versus overflight of areas due to vectoring. This applies to both departures and arrivals.

Owing to the number of options for Initial Appraisal, and the number of options from other airports, it would not be possible to take all these options through, and develop in detail every single option, nor is it aligned with the intentions of the stages in CAP1616. Therefore the methodology for the IOA aims to provide data and appraisal that allows Gatwick to identify high performing options that would be suitable to be taken forward for this detailed design development and integration in Stage 3.

When considering the single PBN arrival routes, it is anticipated some level of vectoring will be required alongside any PBN arrivals implemented. The split of systemised PBN arrivals vs controller vectoring, and the nature of the vectoring area required will be explored as part of detailed design integration

(We Did)

in Stage 3. We understand stakeholders concerns around concentration along a single PBN arrival route and we have committed to be guided by the principles of the FED study as we evolve the design. This may mean the single PBN routes are combined together into a respite configuration, or alternatively they may be left as they are if the anticipated levels of vectoring required alongside PBN arrivals means that a respite route would be ineffective. The outcomes of the FED study are expected in Q4 2023 / Q1 2024.

Cumulative impacts from arrivals and departures

Although as part of the IOA the arrival and departure options have been assessed separately, the qualitative noise assessment within the IOA has begun to look at cumulative impacts from Gatwick operations, particularly for those communities closest into the airport.

At this stage, the departure options are built using groups of routes and as part of the detailed design development work, there will be an opportunity to look at cumulative overflight when the groups are refined down to a single route centreline (or possible two routes if respite is being considered depending on the outcomes of FED).

ILS joins closer than 8nm

Within the IOA we sometimes refer to PBN options and whether they join final approach within 8nm from touchdown or further out from the runway than that. This is because there are different types of PBN arrivals; those that use PBN all the way to the runway or those that may use PBN to then establish onto the Instrument Landing System. (For more information about existing arrivals into Gatwick, please see the Stage 2A document on the CAA's Airspace Change Portal).

The ILS will always give the best minima for arrivals. i.e. The best performance when visibility is poor. Pure PBN arrivals cannot match Gatwick's ILS in terms of performance in these weather conditions.

In order to ensure the PBN arrivals can be used by all aircraft in the poorest of weather conditions, they will need to 'connect' to the ILS and when using the ILS, particularly in either busy arrival conditions and/or in poor visibility, the aircraft need to establish onto the ILS by no later than approximately 8nm. This allows ATC to provide accurate final approach spacing but also protect the ILS signal and ground movement operation in the poorest of weather conditions.

It is possible to have PBN arrivals that join the extended centreline closer than 8nm and that don't use the ILS but such arrivals would be limited in their use at Gatwick. This limitation is a factor in the qualitative appraisals as it affects their usability (runway throughput, resilience, safety etc) and also how effective they could be as noise mitigation measures.

Noise metrics



(We Did)

The noise metrics, and all assessments within the Initial Options Appraisal, are based around government policy and the requirements of CAP1616. Gatwick is required to use the LAeq and LOAEL contour when assessing the adverse impacts of noise.

As part of the last round of engagement, stakeholders raised about the World Health Organisation 45dB daytime and 40dB nighttime L_{Aeq} levels and, although they are not adopted into UK policy, Gatwick have committed to showing these as part of the Stage 3 Full Options Appraisal.

General Aviation Workshop

In July 2023, General Aviation (GA) Stakeholders were invited to a workshop to provide an overview of the IOA methodology and outcomes. Gatwick chose to engage with GA stakeholders separately in order to offer an opportunity to have more technical discussion around matters specific to GA stakeholders, which is often more difficult to facilitate in a group session with a wide range of stakeholders. 6 GA stakeholders registered to attend the event however on the day only 1 stakeholder joined. This stakeholder offered to join the afternoon workshop also held on the 31st July and therefore the workshop did not go ahead.



13. Update following Stage 2 Submission

Following submission of the Stage 2 documents to the CAA on the 1st of September 2023, Gatwick will write to all stakeholders informing them when the documentation has been uploaded to the CAA's airspace change portal.

Informed Parties

As part of Stage 1B Gatwick also contacted a list of 'informed parties' to provide an update on the airspace change. Following publication of the Stage 2 documents on the Airspace Change Portal, Gatwick will write to this list to inform them on progress with the ACP and provide information about where to find further information on the CAA's Airspace Change Portal.



Appendix A – Plan for Stage 2 Engagement Rounds (2021)

Following the first round of engagement in 2021, Gatwick shared the first part of this Stakeholder Engagement report and a plan for the Stage 2 engagement rounds. As noted in this document, the timeline for Gatwick's Stage 2 submission changed twice across Stage 2, and the plans for stakeholder engagement therefore evolved as the project progressed. The original plan, which was shared with stakeholders, is shown below for transparency and the main stakeholder engagement section of this document reflects the actual engagement that took place.

Stage 2A Engagement Rounds

Table 31 sets out the audience, approach, materials and timelines for round 1 – the kick-off to Stage 2 stakeholder engagement:

Table 31 Summary of the round 1 stakeholder engagement audience, approach, materials and timelines

The same group of stakeholder representatives that participated in the design principle engagement during Stage 1 were invited to contribute to each round of the Stage 2 engagement activities. These stakeholder representatives are organised into three categories:

- 1. Airspace users and other aviation stakeholders
- 2. Councils and public officials
- 3. Local community, environmental and special interest groups

During Stage 1 we identified 81 stakeholder representatives across these three categories that were invited to participate in the development of the design principles. Round 1 of the Stage 2 stakeholder engagement will focus on the same representatives, specifically:

Audience

- 24 County and Borough Councils
- 3 National Parks and AONBs
- 13 Community Noise/Action/Environmental Groups, some of whom were members of the Gatwick Noise Management Board
- 9 local civilian airfields of significance and 5 airports within the geographic footprint
- 22 Airlines that typically conduct more than 1000 air traffic movements per year in/out of Gatwick.
- 10 Airspace managers and users including: Emergency helicopter services, Ministry of Defence, representatives of general aviation, helicopter operators, air navigation service providers and other aviation stakeholders.

Approach

Airspace Awareness (Pre Round 1 Engagement)

Following the COVID-19 related pause we identified that it would be prudent to undertake some additional engagement with key community stakeholders in preparation for the ACP restarting. This engagement took place with Gatwick's Noise



Management Board (NMB) and Noise and Track Monitoring Advisory Group (NATMAG) via a virtual Teams meeting held on June 24th 2021. The sessions provided stakeholders with an update on:

- Airspace Modernisation, including the Airspace Modernisation Strategy, the drivers, benefits and impacts of airspace change and the roles and responsibilities of the organisations and stakeholder groups that are participating in the process.
- The Regulatory Process for Airspace Change, including an outline of the CAP1616 guidance, the role of the UK Airspace Change Masterplan and an overview of the FASI South Initiative and the position of the GAL FASI South ACP.
- The GAL FASI South ACP, including a reminder of the airspace design principles developed with stakeholders in Stage 1, the approach to Stage 2 and the associated engagement strategy and plan.

The sessions were conducted as online video conferences. An agenda for the sessions was circulated to stakeholders in advance. The information was presented to stakeholders by GAL and our key suppliers. The sessions paused regularly to invite questions and feedback from stakeholders and encourage discussion on the points that were raised. A record of the questions and feedback provided by stakeholders and our responses during the discussion was circulated in draft following the sessions.

Round 1 - Options development and assessment methodology engagement

Workshops were conducted on 03/09/21 & 03/09/21 (Communities), 07/10/21 (General aviation and other airspace users), and 08/10/21 (Airlines and Air Navigation Service Providers (ANSPs) to reengage the targeted group of stakeholder representatives that participated in stage 1 and brief the stakeholder representatives on our proposed methodology for developing and assessing airspace design options during Stage 2. The information presented at the sessions was identical, however some additional feedback questions were asked depending on the stakeholder group. Stakeholders were invited to participate in either, but not both. The sessions briefed stakeholders on:

- The development of an airspace design database with information about the relative performance of all notional flight paths that could conceivably be positioned within the scope of the ACP.
- The approach to defining a Do Nothing Scenario that will serve as the baseline for the ACP and the use of a Do Minimum Scenario if required.
- The approach to the development of a comprehensive list of all viable options that should be considered within the scope of the ACP.
- How we propose that the options included on the comprehensive list will be refined through the design principle evaluation and options appraisal.

An overview document that described our proposed methodology in full was circulated before the briefing sessions to allow stakeholders to familiarise themselves with some of the more complex and technical aspects of the material. Although some of the information included in the overview document is complex, the language used to explain the main features of our proposed methodology is intended to be simple and accessible. Stakeholders were invited to submit questions to GAL via email that may be prompted by the methodology overview document. All questions received were addressed during the sessions and captured in the record.



The methodology workshops were conducted as online video conferences, with a detailed agenda circulated in advance. A record of the questions and feedback provided by stakeholders and our responses were circulated following the sessions.

We used the following materials to support the Stage 2 kick off sessions and methodology briefings:

- Detailed agendas
- Materials
- Methodology overview document (briefing note)
- Slide presentations
- Records of questions, feedback and GAL responses for each session
- A consolidated round 1 stakeholder engagement report following the engagement (this document)

Agenda's and pre-reading materials for all sessions were circulated to stakeholders 1 week in advance.

Length

- The Round 1 methodology workshop ran for 2 hours.
- Stakeholders participating in each session were offered four weeks to provide further questions and feedback.



Table 32 below sets out the audience, approach, materials and timelines for round 2 of the Stage 2 stakeholder engagement activities on the comprehensive list of options to provide assurance that the options are aligned to the design principles and identify stakeholder concerns.

Table 32 Summary of the round 2 stakeholder engagement audience, approach, materials and timelines

Audience

The same group of stakeholder representatives that participated in the design principle engagement during Step 1B, the Stage 2 Round 1 methodology briefings will be invited to contribute to the second round of the Stage 2 activities.

Comprehensive List of Options engagement sessions

A set of Comprehensive List of Options engagement sessions will form the core of the round 2 activities. It is envisaged that three sessions will be held over a two week period on the 15th, 17th and 23rd of February 2022. One of the three sessions will be held during the evening to accommodate stakeholders that are not available during office hours.

The Comprehensive List of Options engagement sessions aim to generate assurance that the key stakeholder representatives are satisfied the airspace design options included on the comprehensive list are aligned to the design principles and that we have adequately captured and accounted for all reasonable concerns that are relevant to Step 2A of the CAP1616 process.

The Comprehensive List of Options engagement sessions will cover:

 The definition of an airspace design option in the context of the GAL FASI South ACP

Approach

- A description of the information drawn from the Airspace Design Database that
 has been used to develop each airspace design options and how stakeholders
 should interpret the information in order to provide meaningful feedback.
- An explanation of how each option addresses the scope of the ACP (set out in the Statement of Need) and aligns to the design principles.
- The management of data and information that supports each option, including an overview of the arrangements for tracking changes as new information arises.
- The approach and timelines for gathering feedback from stakeholders on the comprehensive list of options and an explanation of how the feedback will be categorised and used.

The Comprehensive List of Options engagement sessions will be conducted as online video conferences. A detailed agenda for the sessions will be circulated to stakeholders in advance. The information will be presented to stakeholders by GAL and our key suppliers. The sessions will pause regularly to invite questions and feedback from stakeholders and encourage discussion on the points that have been raised. A detailed summary of the information presented will be circulated in draft following the sessions. A final report, summarising the questions, feedback and outcomes from the sessions will be circulated to stakeholders prior to round 3.

Materials

The following materials will be used to support the Comprehensive List of Options Engagement Sessions.





- Detailed agendas
- Slide presentations
- A summary of the Comprehensive List of Options for stakeholders to review in the four weeks following the engagement sessions
- A consolidated Comprehensive List of Options engagement report that combines
 the feedback gathered during each session and in the following four weeks. The
 report will include a summary of how the feedback received has influenced the
 options included on the Comprehensive List

Agenda's and pre-reading materials for the Comprehensive List of Options engagement will be circulated to stakeholders 2 weeks in advance.

Length

- The engagement sessions will run for approximately 2.5 hours.
- Stakeholders participating in each session will be offered four weeks to provide further questions and feedback.
- The consolidated Comprehensive List of Options engagement report will be circulated to stakeholders before the third round of engagement.



Table 33 below sets out the audience, approach, materials and timelines for round 3 of the Stage 2 stakeholder engagement activities on the outcomes of the design principle evaluation and the approach to developing the initial options appraisal.

Table 33 Summary of the round 3 stakeholder engagement audience, approach, materials and timelines

	The same group of stakeholder representatives that participated in rounds 1 and 2 of the Stage 2 engagement activities will be invited to contribute to round 3.
Audience	In addition, Parish Council representatives will be invited to participate in the round 3 engagement activities. The engagement with Parish Councils will be guided by our understanding of the potential impacts of the airspace design options.
	Design Principle Evaluation engagement
	A set of Design Principle Evaluation engagement briefings will be conducted at the beginning of round 3. The objective of these briefings is to explain to stakeholders how well the options included on the comprehensive list have performed against each of the design principles. The briefings will also set out the comparatively higher performing airspace design options that have been identified to progress to a more detailed assessment as part of the Initial Options Appraisal.
	It is envisaged that three Design Principle Evaluation engagement briefings will be held over a two week period. The information presented at the briefings will be identical. Stakeholders will be invited to participate in one briefing only.
	The Design Principle Evaluation engagement briefings will cover:
	 The approach we have followed to conduct a qualitative evaluation of each option's performance against each individual design principle, when considered in isolation, which includes a description of how the option has either; Met, Partially Met, or Not Met each principle.
Approach	 How we have conducted an assessment of each option against the Design Principles, when considered as a set, and if appropriate the rationale for taking forward an option for further assessment as part of the Initial Options Appraisal.
	The approach and timelines for gathering feedback from stakeholders.
	Similar to the round 2 engagement sessions, the Design Principle Evaluation briefings will be conducted as online video conferences, with a detailed agenda circulated in advance. A record of the questions and feedback provided by stakeholders and our responses will be circulated in draft following the briefings.
	Initial Options Appraisal engagement sessions
	Two engagement workshop sessions will be conducted after the Design Principle Evaluation briefings, to discuss the development of the Initial Options Appraisal and capture views from the representative stakeholders, including Parish Councils. The workshop sessions will <u>not</u> include detailed discussions on the pluses and minuses of each specific option. The information presented at the sessions will be identical. Stakeholders will be invited to participate in one session only.
	The Initial Options Appraisal engagement workshops will cover:



- An overview of the specific assessment criteria regarding the potential impacts associated with the options and the quantitative and qualitative information used to conduct the appraisal.
- A summary of the relative impacts, both positive and negative, of the options.
- Details about the preferred option(s) and the reasons for the preference, if a preferred option can be clearly identified.
- The proposed approach to refining the assessment during the Full Options Appraisal phase in Step 3A, including any gaps in the data required and how we propose to address them.
- The approach and timelines for gathering feedback from stakeholders.

An overview document that describes the development of the Initial Options Appraisal will be circulated before the engagement workshop sessions to allow stakeholders to familiarise themselves with some of the more complex and technical aspects of the material. Although some of the information included in the overview document will be complex, the language used to explain assessment approach and the initial outcomes will be simple and accessible. Stakeholders will be invited to submit questions to GAL via email that may be prompted by the Initial Options Appraisal overview document. Any questions received will be addressed during the sessions and captured in the record.

The sessions will be conducted as online video conferences, with a detailed agenda circulated in advance. A record of the questions and feedback provided by stakeholders and our responses will be circulated in draft following the sessions. A final report, summarising the questions, feedback and outcomes of the round 3 engagement activities will be circulated to stakeholders prior to the Stage 2 regulatory gateway submission.

The following materials will be used to support the round 3 engagement activities.

- Detailed agendas
- Slide presentations

Materials

- Records of questions, feedback and GAL responses for each briefing/session
- A consolidated round 3 engagement report that combines the outputs gathered during each session and in the feedback period thereafter. The report will include a summary of how the feedback received has influenced the Stage 2 regulatory gateway submission.

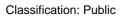
Length

Agenda's and pre-reading materials for the Design Principle Evaluation briefings and Initial Options Appraisal engagement workshop sessions will be circulated to stakeholders at least 2 weeks in advance.

- The Design Principle Evaluation briefings will run for approximately 2 hours.
- The Initial Options Appraisal engagement workshops will run for approximately 2 hours.
- Stakeholders participating in each briefing/session will be offered four weeks to provide further questions and feedback.



 The consolidated round 3 stakeholder engagement report will be circulated to stakeholders approximately six weeks after the final round 3 engagement session.





Appendix B – Stakeholder List and Engagement Log

The table below outlines the stakeholder groups engaged on the Gatwick FASI-S ACP to date, and their participation in the workshops.

Key: I=Invited, A=Attended, F=provided feedback

	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
1	Kenley Aerodrome (Glider)	Υ			Υ		Y	Y Y	Υ		Υ	Υ
2	Redhill Aerodrome (GA)	Y			Υ		Υ	Υ	Υ		Υ	Υ
3	Chichester (GA) – Goodwood Flying School	Y			Y		Υ	Υ	Υ		Υ	Υ
4	Dunsfold (GA-Bus))	Y			Y		Υ	Υ	Υ		Υ	Υ
5	Fairoaks (GA-Bus)	Y			Y		Υ	Υ	Υ		Υ	Υ
6	Farnborough (GA-Bus)	Y			Y	Y	Y	Υ	Y Y		Υ	Υ
7	Lashenden (Para)	Y			Y		Y	Υ	Υ		Υ	Υ
8	Rochester Aerodrome (GA)	Y			Υ		Υ	Υ	Υ		Υ	Υ
9	Shoreham (GA) – Brighton City Airport	Y			Y		Y	Υ	Υ		Υ	Υ
10	Aer Lingus >4k	Y				Y	Y	Υ	Υ		Y	Y Y
11	Air Baltic	Y				Υ	Υ	Υ	Υ		Υ	Υ
12	Air Europa	Y				Y	Υ	Υ	Υ		Y	Υ
13	Air Transat	Y				Y	Υ	Υ	Υ		Υ	Υ
14	Aurigny >4k	Y				Y	Υ	Υ	Υ		Υ	Υ
15	BA (IAG) >4k	Υ				Y Y	Υ	Y Y	Υ		Υ	Υ
16	Cathay Pacific	Y				Y	Y	Υ	Υ		Υ	Υ
17	easyJet >4k	Υ				Υ	Υ	Y Y	Υ		Υ	Υ
18	Emirates	Υ				Y	Υ	Υ	Υ		Υ	Υ
19	Flybe (Removed from Stage 2)	Y	-									
20	Iberia	Υ				Υ	Υ	Υ	Υ		Υ	Υ
21	rwegian >4k	Y				Y	Y	Υ	Υ		Υ	Υ
22	Qatar	Υ				Υ	Υ	Υ	Υ		Υ	Υ
23	Ryanair >4k	Y				Y	Υ	Υ	Υ		Υ	Υ
24	TAP Air Portugal	Y				Y	Y	Υ	Υ		Y	Υ
25	Thomas Cook >4k (Removed from Stage 2)	Y										
26	TUI >4k	Y				Y	Y	Υ	Υ		Υ	Υ
27	Turkish Airlines	Υ				Υ	Υ	Υ	Υ		Υ	Υ
28	Ukraine International	Υ				Υ	Υ	Υ	Υ		Υ	Υ
29	Virgin >4k (Removed from Stage 2)	Y										
30	Vueling >4k	Υ				Y	Y	Y	Υ		Y	Υ
31	Westjet	Υ				Y	Y	Y	Υ		Y	Υ
32	Error - Organisation number 32 skipped in Stage 1	Y										
33	Biggin Hill Airport											

	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
34	City Airport				En	gaged throug	h separate bi-	lateral meetin	gs.			
35	Heathrow Airport]										
36	Southampton Airport											
37	Bournemouth Airport]										
38	Air Navigation Services	Y		Υ		Y Y	Υ	Υ	Υ		Υ	Υ
39	NATS En-Route Ltd	Y		Y Y		Y Y	Y Y	Y Y Y	Υ		Y Y	Y Y
40	KSS Air Ambulance	Y			Υ		Υ	Y	Υ		Υ	Y
41	Sussex Police Helicopter - NPAS - Redhill	Y			Υ		Υ	Υ	Υ		Υ	Υ
42	British Helicopter Association (Fairoaks)	Y			Υ		Υ	Y Y	Υ		Υ	Y Y
43	General Aviation Alliance	Y			Υ		Υ	Υ	Υ		Υ	Υ
44	Gatwick Airline Operators Committee (captured as part of airlines above)	Y										
45	Ministry of Defence - Defence Airspace and Air Traffic Management (MoD DAATM)	Y			Y Y		Υ	Y Y Y	Y Y		Y Y	Y Y
46	AOA	Y					Υ	Y	Υ		Υ	Υ
47	Airlines UK - Association of UK Airlines	Y				Υ	Υ	Υ	Υ		Υ	Υ
48	Gatwick Airport Consultative Committee (GATCOM)	Y	Y	Y Y Y			Y Y	Y Y	Υ		Υ	Υ
49	East Sussex County Council	Y	Y	Υ			Y Y	Y Y	Υ	Y	Υ	Υ
50	Kent County Council	Y		Υ			Υ	Y Y	Y Y		Υ	Υ
51	Surrey County Council	Y		Υ			Υ	Y Y	Y Y		Υ	Y Y
52	West Sussex County Council	Y	Y	Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y
53	Adur & Worthing District Council	Y		Υ			Υ	Υ	Υ		Υ	Υ
54	Arun District Council	Y					Υ	Υ	Υ		Υ	Υ
55	Brighton & Hove City Council	Y		Υ			Υ	Υ	Υ		Υ	Υ
56	Crawley Borough Council	Y		Υ			Υ	Υ	Y Y		Υ	Υ
57	Lewes District & Eastbourne Borough Council	Y		Υ			Υ	Y	Υ		Υ	Υ
58	Guildford Borough Council	Y		Υ			Υ	Y	Y Y		Υ	Υ
59	Hastings District Council	Y					Υ	Υ	Υ		Υ	Υ
60	Horsham District Council	Y	Y	Υ			Y Y	Y Y Y	Y Y		Y Y	Y Y
61	Maidstone District Council	Y		Υ			Υ	Υ	Υ		Υ	Υ
62	Mid-Sussex District Council	Y	Y	Y Y			Y Y	Y Y	Y Y		Y Y	Y Y
63	Mole Valley District Council	Y		Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y
64	Reigate & Banstead Borough Council	Y	Y	Y Y			Y Y	Y Y	Y Y Y		Y Y	Y Y
65	Rother District Council	Y		Υ			Υ	Υ	Υ		Υ	Y
66	Sevenoaks District Council	Y		Υ			Y Y	Y	Y Y		Y Y	Y Y
67	Tandridge District Council	Y	Y	Y Y			Υ	Y Y Y	Y Y	Y	Υ	Y Y
68	Tonbridge & Malling District Council	Y	Y	Υ			Υ	Υ	Υ		Υ	Y
69	Tunbridge Wells District Council	Y		Y Y			Y	Y	Y		Υ	Y
70	Waverly District Council	Y		Υ			Υ	Y Y Y	Υ		Υ	Y Y
71	Wealden District Council	Y		Υ			Υ	Υ	Y Y		Y Y	Y Y
72	Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	Y	Y	Y Y			Υ	Y Y	Y Y		Υ	Y Y
73	East Sussex Communities for the control of air noise (ESCCAN)	Y	Y	Υ			Υ	Υ	Υ		Y	Υ



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
74	Association of Parish Councils Aviation Group (APCAG)	Y	Y	Υ			Υ	Y	Υ		Υ	Υ
75	High Weald Council Aviation Action Group (HWCAAG)	Y	Y	Υ			Υ	Υ	Υ		Υ	Υ
76	CAGNE	Y	Y	Y Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y Y
77	PAGNE	Y	Y	Y Y			Y Y	Y Y Y	Y Y		Υ	Y Y Y
78	GON ²	Y	Y	Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y Y
79	Plane Justice	Y	Y	Y Y			Y Y	Y Y Y	Υ		Y Y	Y Y
80	Plane Wrong	Y	Y	Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y
81	Error - Organisation number 81 skipped in Stage 1	Y										
82	High Weald AONB	Y		Υ			Y Y	Y	Υ		Υ	Υ
83	Surrey Hills AONB	Y		Y Y			Υ	Y Y Y	Υ		Y Y	Υ
84	South Downs National Park	Y		Υ			Y	Y	Υ		Υ	Υ
85	Gatwick Area Conservation Campaign (GACC)	Y		Υ			Υ	Y Y Y	Υ		Y Y	Υ
86	Chichester District Council			Υ			Υ	Y Y Y	Y Y	Y	Υ	Y Y
87	Speldhurst Parish Council		Y	Υ			Y Y	Υ	Υ	Y Y	Y Y	Y Y
88	TWANSG		Y	Y Y			Y Y	Y Y Y	Y Y		Y Y	Y Y
89	NMB Chair		Y	Y Y			Y Y	Y Y Y	Y Y		Y Y	Υ
90	Burstow Parish Council		Y	Υ			Υ	Y Y Y	Y Y	Υ	Y Y	Υ
91	Horley Town		Y	Y Y			Y Y	Y Y	Y Y	Y Y	Υ	Y Y
92	General Aviation Awareness Council (GAAC)				Υ		Υ	Υ	Υ		Υ	Υ
93	Airspace4All				Υ		Υ	Y	Υ		Υ	Υ
94	Aircraft Owners and Pilots Association (AOPA)				Υ		Υ	Υ	Υ		Υ	Υ
95	Airspace Change Organising Group (ACOG)						Υ	Υ	Υ		Υ	Υ
96	Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK)				Υ		Υ	Υ	Υ		Υ	Υ
97	British Airways (BA)					Y Y	Υ	Υ	Υ		Υ	Υ
98	British Airline Pilots Association (BALPA)					Υ	Υ	Y Y	Υ		Υ	Υ
99	British Balloon and Airship Club				Υ		Υ	Υ	Υ		Υ	Y
100	British Business and General Aviation Association (BBGA)				Y		Υ	Y	Υ		Υ	Y
101	British Gliding Association (BGA)				Y Y		Y	Y Y	Υ		Υ	Y Y
102	British Hang Gliding and Paragliding Association (BHPA)				Υ		Υ	Υ	Υ		Υ	Υ
103	British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo)				Υ		Υ	Y	Υ		Υ	Υ
104	British Model Flying Association (BMFA)				Υ		Υ	Υ	Υ		Υ	Υ
105	British Skydiving				Y		Y	Y	Y		Y	Y
106	Drone Major				Υ		Υ	Y	Υ		Υ	Y
107	Guild of Air Traffic Control Officers (GATCO)					Υ	Υ	Υ	Y		Y	Υ
108	Honourable Company of Air Pilots (HCAP)					Y	Y	Y	Y		Y	Y
109	Helicopter Club of Great Britain (HCGB)				Υ		Υ	Υ	Y		Y	Υ
110	Virgin Atlantic Airways Limited					Y	Y	Y	Y		Y	Y
111	Light Aircraft Association (LAA)				Y		Y	Y	Y		Y	Y
112	Military Aviation Authority (MAA)				Υ		Υ	Υ	Υ		Υ	Y

² Gatwick received feedback from members of GON for engagement events I & J, responding as individuals rather than as members of the group



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
113	NATS					Υ	Υ	Y Y Y	Y Y		Y Y	Y
114	Navy Command HQ				Υ		Υ	Υ	Υ		Υ	Υ
115	PPL/IR (Europe)				Υ		Υ	Υ	Υ		Υ	Υ
116	United States Air Force Europe (3rd Air Force-Directorate of Flying (USAFE (3rd AF-DOF))				Υ		Υ	Υ	Υ		Υ	Υ
117	Bucklands Surrey Parish Council									Y Y	Υ	Y Y
118	Shipley Parish Council									Υ	Υ	Υ
119	Hever Parish Council									Υ	Υ	Υ
120	Brockham Parish Council									Υ	Υ	Υ
121	Cuckfield Parish Council									Y Y	Υ	Y Y
122	Balcombe Parish Council									Υ	Y Y	Υ
123	Rusper Parish Council								Y	Υ	Υ	Y Y
124	Wizz Air										Υ	Υ
125	London Chamber of Commerce and Industry								Y			Υ
126	Salfords and Sidlow Parish Council									Y Y	Y Y	Υ
127	Lasham Gliding Society							Y Y			Y	Υ
128	Abinger Parish Council									Υ	Υ	Υ
129	Addington Parish Council									Υ	Υ	Υ
130	Albourne Parish Council									Υ	Υ	Υ
131	Alciston Parish Council									Υ	Υ	Υ
132	Alfold Parish Council									Υ	Υ	Υ
133	Alfriston Parish Council									Υ	Υ	Υ
134	Amberley Parish Council									Υ	Υ	Υ
135	Ansty and Staplefield Parish Council									Υ	Υ	Υ
136	Ardingly Parish Council									Υ	Υ	Υ
137	Arlington Parish Council									Υ	Υ	Υ
138	Ashington Parish Council									Υ	Υ	Υ
139	Ashurst Parish Council									Υ	Υ	Υ
140	Ashurst Wood Village Council									Υ	Υ	Υ
141	Aylesford Parish Council									Υ	Υ	Υ
142	Benenden Parish Council									Υ	Υ	Υ
143	Berwick Parish Council									Υ	Υ	Υ
144	Betchworth Parish Council									Υ	Υ	Y
145	Bewbush/Gossops Green/Maidenbower									Υ	Υ	Y
146	Bidborough Parish Council									Υ	Υ	Y
147	Billingshurst Parish Council									Υ	Υ	Y
148	Birling Parish Council									Υ	Υ	Y
149	Bletchingley Parish Council									Υ	Y Y	Y
150	Bolney Parish Council									Υ	Υ	Y Y
151	Borough Green Parish Council									Υ	Υ	Y
152	Bramber Parish Council									Υ	Υ	Y
153	Brasted Parish Council									Υ	Υ	Y



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
154	Brenchley Parish Council									Υ	Υ	Υ
155	Broadbridge Heath Parish Council									Υ	Υ	Υ
156	Broadfield/Tilgate/Furnace Green									Υ	Υ	Υ
157	Burgess Hill Town Council									Υ	Υ	Υ
158	Burham Parish Council									Υ	Υ	Υ
159	Buxted Parish Council									Υ	Υ	Υ
160	Capel Parish Council (Kent)									ΥΥ	Υ	Υ
161	Capel Parish Council (Surrey)									Υ	Υ	Υ
162	Caterham on the hill Parish Council									Υ	Υ	Υ
163	Caterham Valley Parish Council									Υ	Υ	Υ
164	Chaldon Parish Council									Υ	Υ	Υ
165	Chalvington with Ripe Parish Council									Υ	Υ	Υ
166	Charlwood Parish Council									Y Y	Υ	Υ
167	Chelsham and Farleigh Parish Council									Υ	Υ	Υ
168	Chevening Parish Council									Υ	Υ	Υ
169	Chichester District Council									Υ	Υ	Υ
170	Chiddingly Parish Council									Υ	Υ	Υ
171	Chiddingstone Castle									Υ	Υ	Υ
172	Chiddingstone Parish Council									Υ	Υ	Υ
173	Coldwaltham Parish									Υ	Υ	Υ
174	Colgate Parish Council									Υ	Υ	Y Y
175	Cowden Parish Council									Υ	Υ	Υ
176	Cowfold Parish Council									Υ	Υ	Υ
177	Cranbrook & Sissinghurst Parish Council									Υ	Υ	Υ
178	Cranleigh Parish Council									Υ	Υ	Υ
179	Crockenhill Parish Council									Υ	Υ	Υ
180	Crowborough Town Council									Υ	Υ	Υ
181	Crowhurst Parish Council (East Sussex)									Υ	Υ	Υ
182	Crowhurst Parish Council (Surrey)									Υ	Υ	Υ
183	Cuckmere Valley Parish Counci									Υ	Υ	Υ
184	Danehill Parish Council									Υ	Υ	Υ
185	Ditchling Parish Council									Υ	Υ	Υ
186	Ditton Parish Council									Υ	Υ	Υ
187	Dormansland Parish Council									Υ	Υ	Υ
188	Dunton Green Parish Council									Υ	Υ	Υ
189	East Dean and Friston Parish Council									Υ	Υ	Υ
190	East Grinstead Town Council									Υ	Υ	Y Y
191	East Hoathly with Halland PC									Υ	Υ	Υ
192	East Malling and Larkfield Parish Council									Υ	Υ	Υ
193	East Peckham Parish Council									Y	Υ	Υ
194	Ebernoe Parish Council									Y	Υ	Y Y



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
195	Edenbridge Town Council									Υ	Υ	Y
196	Ewhurst and Ellen's Green Parish Council									Υ	Υ	Υ
197	Eynsford Parish Council									Υ	Υ	Y Y
198	Farningham Parish Council									Υ	Υ	Υ
199	Fawkham Parish Council									Υ	Υ	Υ
200	Felbridge Parish Council									Υ	Υ	Υ
201	Fletching Parish Council									Υ	Υ	Υ
202	Forest Row Parish Council									Υ	Υ	Υ
203	Forge Wood									Υ	Υ	Υ
204	Framfield Parish Council									Υ	Υ	Υ
205	Frant Parish Council									Υ	Υ	Υ
206	Frittenden Parish Council									Υ	Υ	Υ
207	Fulking Parish Council									Υ	Υ	Υ
208	Godstone Parish Council									Υ	Υ	Υ
209	Gossops Green									Υ	Υ	Υ
210	Goudhurst Parish Council									Υ	Υ	Υ
211	Hadlow Down Parish Council									Υ	Υ	Υ
212	Hadlow Parish Council									Υ	Υ	Υ
213	Hailsham Town Council									Υ	Υ	Υ
214	Halstead Parish Council									Υ	Υ	Υ
215	Hartfield Parish Council									Υ	Υ	Υ
216	Hartley Parish Council									Υ	Υ	Υ
217	Hassocks Parish Council									Υ	Υ	Υ
218	Hawkhurst Parish Council									Υ	Υ	Υ
219	Haywards Heath Town Council									Υ	Υ	Υ
220	Headley Parish Council									Υ	Υ	Υ
221	Heathfield & Waldron Parish Council									Υ	Υ	Y Y
222	Hellingly Parish Council									Υ	Υ	Υ
223	Henfield Parish Council									Υ	Υ	Υ
224	Herstmonceux Parish Council									Υ	Υ	Υ
225	Hextable Parish Council									Υ	Υ	Υ
226	Hildenborough Parish Council									Υ	Υ	Υ
227	Holmwood Parish Council									Υ	Υ	Υ
228	Hooe Parish Council									Υ	Υ	Υ
229	Horam Parish Council									Υ	Υ	Υ
230	Horne Parish Council									Υ	Υ	Υ
231	Horsham: Denne Neighbourhood Council									Υ	Υ	Υ
232	Horsham: Forest Neighbourhood Council									Υ	Υ	Υ
233	Horsham: Trafalgar Neighbourhood Council									Υ	Υ	Υ
234	Horsmonden Parish Council									Υ	Υ	Υ
235	Horsted Keynes Parish Council									Υ	Υ	Υ



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
236	Horton Kirby & South Darenth Parish Council									Υ	Υ	Υ
237	Hurstpierpoint and Sayers Common Parish Council									Υ	Υ	Υ
238	Ifield - Talk Ifield									Υ	Υ	Υ
239	Ightham Parish Council									Υ	Υ	Υ
240	Isfield Parish Council									Υ	Υ	Υ
241	Itchingfield Parish Council									Υ	Υ	Υ
242	Kemsing Parish Council									Υ	Υ	Υ
243	Kings Hill Parish Council									Υ	Υ	Υ
244	Kingswood Residents Association									Υ	Υ	Υ
245	Knockholt Parish Council									Υ	Υ	Υ
246	Lamberhurst Parish Council									Υ	Υ	Υ
247	Langley Green Forum									Υ	Υ	Υ
248	Langton Green Village Society									Υ	Υ	Υ
249	Laughton Parish Council									Υ	Υ	Υ
250	Leigh Parish Council (Kent)									Υ	Υ	Υ
251	Leigh Parish Council (Surrey)									Υ	Υ	Υ
252	Leybourne Parish Council									Υ	Υ	Υ
253	Limpsfield Parish Council									Υ	Υ	Υ
254	Lindfield Rural Parish Council									Υ	Υ	Υ
255	Lingfield Parish Council									Υ	Υ	Υ
256	Little Horsted Parish Council									Υ	Υ	Υ
257	Long Man Parish Council									Υ	Υ	Υ
258	Lower Beeding Parish Council									Υ	Υ	Υ
259	Loxwood Parish Council									Υ	Υ	Υ
260	Maidenbower Park Community Club									Υ	Υ	Υ
261	Maresfield Parish Council									Υ	Υ	Υ
262	Mayfield & Five Ashes Parish Council									Υ	Υ	Υ
263	Mereworth Parish Council									Υ	Υ	Υ
264	Mickleham Parish Council									Υ	Υ	Υ
265	Newdigate Parish Council									Υ	Υ	Υ
266	Newtimber Parish Council									Υ	Υ	Υ
267	Ninfield Parish Council									Υ	Υ	Υ
268	North Horsham Parish Council									Υ	Υ	Υ
269	Northgate Matters									Υ	Υ	Υ
270	Nutfield Parish Council									Υ	Υ	Υ
271	Nuthurst Parish Council									Υ	Υ	Υ
272	Ockley Parish Council									Υ	Υ	Υ
273	Offham Parish Council									Υ	Υ	Υ
274	Otford Parish Council									Υ	Υ	Υ
275	Outwood Parish Council									Y Y	Υ	Υ
276	Oxted Parish Council									Υ	Υ	Υ



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
277	Paddock Wood Town Council									Y	Υ	Υ
278	Parham Parish Council									Υ	Υ	Υ
279	Pembury Parish Council									Υ	Υ	Υ
280	Penshurst Parish Council									Υ	Υ	Υ
281	Petworth Town Council									Υ	Υ	Υ
282	Pevensey Parish Council									Υ	Υ	Υ
283	Plaistow and Ifold Parish Council									Υ	Υ	Υ
284	Platt Parish Council									Υ	Υ	Υ
285	Plaxtol Parish Council									Υ	Υ	Υ
286	Polegate Town Council									Υ	Υ	Υ
287	Pound Hill (North) Residents Association									Y		Υ
288	Pound Hill/ West Green/Forge Wood									Υ	Υ	Υ
289	Poynings Parish Council									Υ	Υ	Υ
290	Pulborough Parish Council									Υ	Υ	Υ
291	Pyecombe Parish Council									Υ	Υ	Υ
292	Riverhead Parish Council									Υ	Υ	Υ
293	Rotherfield Parish Council									Υ	Υ	Υ
294	Rudgwick Parish Council									Υ	Υ	Υ
295	Rusthall Parish Council									Υ	Υ	Υ
296	Ryarsh Parish Council									Y	Υ	Υ
297	Sandhurst Parish Council									Υ	Υ	Υ
298	Seal Parish Council									Y	Υ	Υ
299	Selmeston Parish Council									Υ	Υ	Υ
300	Sevenoaks Town Council									Υ	Υ	Υ
301	Sevenoaks Weald Parish Council									Υ	Υ	Υ
302	Shermanbury Parish Council									Υ	Υ	Υ
303	Shipbourne Parish Council									Υ	Υ	Υ
304	Shoreham Parish Council									Υ	Υ	Υ
305	Slaugham Parish Council									Υ	Υ	Υ
306	Slinfold Parish Council									Υ	Υ	Υ
307	Snodland Town Council									Υ	Υ	Υ
308	Southborough Town Council									Υ	Υ	Υ
309	Southgate Community Forum									Υ	Υ	Υ
310	Southwater Parish Council									Υ	Υ	Υ
311	Stansted Parish Council									Υ	Υ	Υ
312	Steyning Parish Council									Υ	Υ	Υ
313	Storrington and Sullington Parish Council									Υ	Υ	Υ
314	Sundridge with Ide Hill Parish Council									Υ	Υ	Υ
315	Swanley Town Council									Υ	Υ	Υ
316	Talk Bewbush									Υ	Υ	Υ
317	Talk Broadfield									Υ	Υ	Υ



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F
318	Tandridge Parish Council									Υ	Υ	Υ
319	Tatsfield Parish Council									Υ	Υ	Υ
320	Thakeham Parish Council									Υ	Υ	Υ
321	Tilgate Community Forum									Y	Υ	Υ
322	Trottiscliffe Parish Council									Υ	Υ	Υ
323	Turners Hill Parish Council									Υ	Υ	Υ
324	Twineham Parish Council									Y	Υ	Υ
325	Uckfield Town Council									Υ	Υ	Υ
326	Upper Beeding Parish Council									Υ	Υ	Υ
327	Wadhurst Parish Council									Y	Υ	Υ
328	Warbleton Parish Council									Υ	Υ	Υ
329	Warlingham Parish Council									Y	Υ	Υ
330	Warnham Parish Council									Y Y	Y Y	Y Y
331	Wartling Parish Council									Υ	Υ	Υ
332	Washington Parish Council									Y	Υ	Υ
333	Wateringbury Parish Council									Y	Υ	Υ
334	West Chiltington Parish Council									Υ	Υ	Υ
335	West Green Community Form									Y	Υ	Υ
336	West Grinstead Parish Council									Υ	Υ	Υ
337	West Hoathly Parish Council									Υ	Υ	Υ
338	West Kingsdown Parish Council									Υ	Υ	Υ
339	West Malling Parish Council									Υ	Υ	Υ
340	West Peckham Parish Council									Υ	Υ	Υ
341	Westerham Town Council									Y Y	Υ	Υ
342	Westham Parish Council									Υ	Υ	Υ
343	Whyteleafe Parish Council									Υ	Υ	Υ
344	Willingdon & Jevington Parish Council									Υ	Υ	Υ
345	Wisborough Green Parish Council									Υ	Υ	Υ
346	Wiston Parish Council- unsubscribe?									Υ	Υ	Υ
347	Withyham Parish Council									Υ	Υ	Y Y
348	Wivelsfield Parish Council									Υ	Υ	Υ
349	Woldingham Parish Council									Υ	Υ	Y Y
350	Woodmancote Parish Council									Υ	Υ	Υ
351	Worth Parish Council									Υ	Υ	Υ
352	Wotton Parish Council									Υ	Υ	Υ
353	Wouldham Parish Council									Υ	Υ	Υ
354	Wrotham Parish Council									Υ	Υ	Υ
355	Airfield Operators Group (AOG)											Υ
356	Aviation Environment Federation (AEF)											Υ
357	BAe Systems											Υ
358	Iprosurv											Υ



	Stage 2A Stakeholder Information	Engaged at Stage 1B	Event A - Airspace Awareness	Event B - Round 1 Community	Event C - Round 1 GA	Event D - Round 1 Airline & ANSP	Event E - December Briefing	Event F - Round 2 CLOO	Event G - Round 3 DPE	Event H - Round 3 Parish Councils	Event I - Round 3 IOA	Event J - Round 3 IOA Outcomes	
GAL Org Ref	Stakeholder Organisation		I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	I A F	
359	Isle of Man CAA											Υ	
360	UK Airprox Board (UKAB)											Υ	
361	UK Flight Safety Committee (UKFSC)											Υ	
362	Southend Airport												
363	Northolt												
364	Luton Airport	Engaged through separate bi-lateral meetings											
365	Stansted Airport												



Appendix C – Round 2 Feedback Tables

The tables in Appendix C shows each piece of feedback received following the engagement on our comprehensive list of options, followed by our response to this feedback. Where some feedback covers a variety of topics, if the sender has not already done so, we have numbered each point so that our response can be easily identified.

Stakeholder org.	You Said	We Did
Communities Against Gatwick Noise and Emissions (CAGNE)	Provided in email: (1) Noise is still the number one consideration up to 7,000ft not saving CO2 with the Air Navigation guidance stating noise comes before saving CO2. In direct contrast to the design principles and the governance of CAA Gatwick/ TRAX are seeking to fly over new areas at low heights. (2) Throughout the process to-date, there has been a very narrow form of engagement, only consulting with unsubstantiated community groups instead of statutory elected consultees, such as town and parish councils. There has also been a geographical imbalance of those consulted by Gatwick and TRAX, due to the monopoly permitted by Gatwick of noise groups from outside LOAEL, mostly concerned with arrivals. This has led to the TRAX document being biased towards those that seek to move noise and 'share the load' as well as adhering to what would appear to be a direct request to the sponsor that goes against many of the DP (Design Principles), such as the ADNID departure route over new rural communities and moving the arrivals join to form. This must be seen as appeasement to noise groups (DP1 and DP2) due to only consulting those currently impacted by Gatwick operations. Going forward, we do not believe that Gatwick should be allowed to continue with CAP1616 until the narrowness of the engagement is addressed. Town and parish councils are democratically elected stakeholders and they have not been consulted, bar the ones that are currently impacted by Gatwick operations, via GATCOM, NCF and NEX. (3) To go to Stage 3 (the public consultation) without showing the historic routes would be seen as disingenuous to those currently overflown and those who could be newly overflown. This will be seen as Gatwick deliberately seeking to confuse residents with the complexity of airspace changes, whilst ignoring historic departure routes and arrival swathes. Residents will want to see clearly where they live so that they can comment to protect their wellbeing and house value. Without this information, it is difficult to unders	(1) Our comprehensive list of options includes options which focus on the nois design principles up to 7000ft as well as some options that look to balance noise and CO ₂ by prioritising noise between 0-4000ft and then balancing CO ₂ and noise beyond this. We've noted that these options that look to balance noise and CO will be adjusted laterally to account for noise, once further information is know fro NERL about the airspace above 7000ft. The comprehensive list of options include options that aim to minimise population newly overflown i.e. avoid overflight of ne areas, and options which look to minimise total population overflown which moverfly new areas. Both sets of options have been partially driven by DP3 71 airspace design shall aim to limit and where possible reduce the adverse impact of aircraft noise. Gatwick's design principles do not make specific reference avoiding overflight of new communities and therefore at this stage, we are require to explore all viable options; later in the process we will evaluate and appraise the benefits and impacts of each option compared to the 'do nothing' primplementation baseline before shortlisting. (2) Stage 1 was completed in July 2019 when the CAA validated the engageme activities undertaken and passed the proposal through the Stage 1 Gateway. Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage and these stakeholders are all listed on the CAA Airspace Change Portal with Gatwick's Stage 1B submission document page 55-61. Attendees at our Stage engagement workshops are representatives of the local communities and the public. Wider engagement will take place as the ACP progresses and more peop will be drawn in at the appropriate stage in the ACP process. Parish councils we engaged, in separate workshops, as part of the next round of engagement of the Initial Options Appraisal. (3) On our comprehensive list of options presentation, we've included a heatma which shows overflight in 2019 allowing stakeholder representatives to compa the opt



Stakeholder org.		You Said	We Did
			 (4) Step 2A of the CAP1616 process requires us to set out a list of viable options for the airspace change. Later on in Step 2B, we will start to explore the benefits and impacts of each option and, where appropriate and aligned with government policy and legislation, we will detail any anticipated costs. At Stage 3, as part of the full options appraisal, these costs will be fully quantified. (5) LAeq noise contours will be qualitatively evaluated as part of the Step 2B Initial Options Appraisal. We will describe the contours based on the baseline 'do nothing' pre-implementation scenario as well as the potential benefits or impacts of an option. This will enable comparison to be drawn between the 'do nothing' and an airspace change option to understand the potential impacts to noise. At present the exact metrics that will be used to define Gatwick's noise envelopes have not been finalised however ongoing engagement suggest that it is likely to involve the LAeq metrics
Horsham District Council	No	 Areas of locally important amenity such as local nature reserves, ancient woodland, outdoor sports facilities should be considered along with AONB's. The magnitude of predicted change in the noise climate should be reported. The majority of the areas to be overflown are rural and characterised by dispersed settlement rather than typically urban settings such as around Heathrow. The impacts of concentration of flights along new or established routes should be considered. Allocated large scale expansion of settlements and new neighbourhoods as set out in local authority development framework plans should be included in the allocation process. For Horsham District Council the West of Ifield, North Horsham or Billingshurst and Southwater expansions are not shown on the population heat maps. 	 (2) As part of the Initial Options Appraisal (Step 2B), we will appraise potential benefits and impacts to tranquillity and biodiversity and as part of this we will identify noise sensitive areas such as SSSIs and SPAs. The noise assessment will also identify noise sensitive buildings such as schools, hospitals and places of worship. As we progress through the process and more information becomes available, there will be opportunities for the options to be optimised to where possible avoid these areas. (3) Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the feedback that influenced our final comprehensive list of options section above. (4) The impacts of noise concentration will be assessed as part of our Initial Options Appraisal at Stage 2B when we compare each option against the 'do nothing' baseline scenario. (5) The baseline 'do nothing' scenario describes the airspace environment immediately prior to implementation of the airspace change (estimated 2026+). There is a CAP1616 requirement (para B53) to look at how future housing developments may impact noise metrics. We will use future CACi population data forecasts and we will also identify new developments or planned developments which may impact population numbers. Details of this will be included in our Stage 2B Initial Options Appraisal submission.
Warnham Parish Council	No	There is a lack of historic routes shown to enable residents and an elected body to see where the routes currently fly within Noise Preferential Routes and the arrival swathe. Without this information it is difficult to understand how any proposals can be accepted or commented upon.	At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. This included a heat map which shows 2019 overflight. Some options are based on existing nominal centrelines which include the NPRs currently flown at Gatwick. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps for stakeholders and the



Stakeholder org.	You Said	We Did
		wider public alongside detailed appraisals of the benefits and impacts of each option.
Tunbridge Wells No Aircraft Noise Study Group (TWANSG)	The list of options cannot be said to be COMPREHENSIVE, since no routes that join the ILS between 7 and 9 nm are considered. A comprehensive 10 page response was also provided by TWANSG as a Memorandum – see Appendix A, Table 45 for summary.	Although the data from the airspace design database did not suggest to locate a route between 7 and 9nm, following the feedback we have explored this option. For more information, please see the <u>feedback that influenced our final comprehensive list of options</u> section above.
Gatwick Obviously Not (GON)	No, the list is not sufficiently comprehensive and yes, some things are missing. Some of this response has been taken from GACC's submission. Additionally, some charts have been taken from TWANSG's submission. Both with permission. 1. No reference appears to have been made to the debacle around the introduction of concentrated flight arrival paths in the USA and the now very well known risk of such policies. NextGen and has caused havoc in & around many Cities across the States. FASI-S needs to acknowledge and understand the risks of designing in concentrated flight paths per se and cannot ignore those risks. "NextGen has created a "rail" or concentrated path of flights in cities across the United States. The new paths often reduce the number of people exposed to noise, but those who get noise receive it far more consistently "The result of this change is that many localities experience increases in air traffic over previously quiet areas. Complaints have risen with the added traffic and multiple municipalities already have filed suit, with more considering such a move. Many metropolitan airports have been affected, such as Baltimore, Boston, Charlotte, Los Angeles, Phoenix, San Diego, and Washington, D.C "Navigation changes have angered residents living with increased noise, and they are pushing back on the FAA https://www.nvtimes.com/2019/11/18/business/planes-noise-flight-paths.html 2. Newly overflown/previously overflown. This is an over-simplistic and narrow lever for deciding where these monumental changes might take place. Many areas have been previously excently overflown east of Gatwick. Who decides when the cut-of date is? 15 years ago? 20 years ago? Is the team behind FASI-S itself to be judge & jury? This needs proper, deep & objective analysis carried out by a professional body not allied to the aviation industry. 3. The designs as laid out here show joining points to the ILS for Westerly approac	(1) The Government's Airspace Modernisation Strategy (AMS) requires airports to implement Performance Based Navigation which does potentially lead to concentration along flight paths but as part of the Air Navigation Guidance 2017 there's also a requirement for mitigation of this concentration to be considered. We're aware of the potential negative effects of concentration, and that's why there are proposed mitigations such as alternative respite configurations included within our Comprehensive List of Options. Design Principle 7 also requires us consider respite arrangements. As part of the next steps in CAP1616 we will evaluate and appraise the benefits and impacts of each option, and this will consider the potential impacts on concentration. (2) The Airspace Design Database contains 2019 data that has been adjusted to reflect the extant Route 4 procedure. This was selected as it aligned with the requirements of later parts of the CAP1616 process. As part of Step 2A, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. This scenario must take into account known or anticipated factors that might affect the baseline such as planned housing developments close to the airport, forecast growth in air traffic, or expected changes in the aircraft fleet mix operating at Gatwick. Our assessment of newly overflown must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented (expected to be 2026 onwards). At the point of implementation (2026 onwards), it is expected that Gatwick will have recovered from the impacts of COVID-19 The 2019 data will be developed to reflect the known and anticipated factors when describing the pre-implementation scenario. (3) Although the data from the airspace design database did not suggest to locate a PBN route between 7 and 9mm, following the feedback we have explored this option. For more information, please see the feedback we have explored this option. For more informatio



Stakeholder org. You Said We Did understand the team's methodology it would be helpful if the project team could explain how these factors have been prioritised against each other as we believe the outcomes would vary considerably depending on the prioritisation applied. We would also welcome an insight into what dictated the prioritisation applied – government policy/guidance, project team choice. Although these options may be viable on the basis of the limited analysis carried out to date, they do not represent a truly "comprehensive" list of options. We would therefore encourage the project team to develop a suite of decision-making factors against which the full universe of route options can be benchmarked thus delivering a truly comprehensive list of viable options for further analysis and optimisation. With that in mind, GON would wish to see the following factors being part of this process: 1. Historic patterns of dispersal. As people historically overflown are likely to be more accustomed to aircraft noise and therefore not adversely impacted to the same extent as those newly overflown, we believe that the starting point for determining potential route options should be the historic patterns of dispersal. 2. Health impacts of noise. Exposure to aircraft noise is associated with a range of health responses including stress, sleep disturbance and annoyance. Long-term exposure is associated with increased risk of high blood pressure, heart disease, heart attack, stroke, dementia and impairment of learning in children. There is also evidence to suggest that aircraft noise may also lead to long-term mental health issues. A summary of evidence is in the AEF paper here: https://www.aef.org.uk/uploads/Aircraft-Noise-and-Public-Health-the-evidence-isloudand-clear-final-reportONLINE.pdf. The World Health Organisation strongly recommends reducing aircraft noise levels to below 45 dB Lden., as aircraft noise above this level is associated with adverse health effects. For night noise exposure, the WHO strongly recommends reducing aircraft noise levels to below 40 dB Lnight., as night-time aircraft noise above this level is associated with adverse effects on sleep. Gatwick does not produce noise contour maps down to these levels, but they extend many miles either side of the airport, covering 100s of sq km and 10s of thousands of people. As stated above there is a clear and long understood relationship between actual plane noise and health, but it is now acknowledged that health effects are also being determined by nonacoustic factors. Non acoustic factors such as individual perceptions of fairness, individual coping capacities and individual noise sensitivity will all play a key role in determining responses and must therefore be fully considered using appropriate metrics to accurately capture "total adverse effects". 3. Number of people impacted. Different aircraft dispersal options will affect different numbers of people. For example, a flight path over a town would, other things being equal, be likely to impact more people than a flight path over countryside (although perhaps less severely - see below). Some airports (but not Gatwick) are able to route some flights over areas that are entirely uninhabited, for example the sea or a river estuary. There might, of course, be other reasons not to fly over those areas. 4. Severity of impact. In addition to the number of people impacted, it is important to consider the severity of impact. In general, ambient noise in cities and large towns is higher than in countryside, meaning that aircraft noise is likely to have less impact in cities/towns. However, there are exceptions to this in both areas. Land height can also have an impact on noise. 5 "Fairness": The Gatwick area community noise groups have historically taken the view that aircraft noise should be dispersed rather than concentrated on the grounds that it is fairer for its impacts to be shared rather than imposed on one group of people. However, we are also mindful that views on what dispersal means in practice, particularly when satellite navigation technology is introduced, are likely to vary. 6. Frequency of overflight. With the airport already looking to expand and with the deployment of new technologies almost certainly leading to greater concentration, it is vital that changes to frequency of overflight



Stakeholder org.	keholder org. You Said We			
		are fully captured using appropriate metrics (see Point 7 of question 3 below) as part of the wider process to determine the total adverse effects of all potential flight path options.		
		7. Vertical profile of aircraft. Not surprisingly the focus has been on the lateral distribution of flight paths. However, we also feel that as part of this once in a generation airspace modernisation project the vertical profile of aircraft also requires analysis. For departures we would wish to see the likely impact of a Continuous Climb Operations (CCO) protocol being fully considered whist, from an arrival perspective, we would wish to see flight paths deployed which would facilitate increased arrival altitudes.		
Tunbridge Wells Anti Aircraft Noise Group – Acting Secretary (TWAANG)	No	TWAANG's concerns are primarily with the impact on Tunbridge Wells and the main source of disturbance comes from Westerly approaches. (1) Given the issues of historical and new overflying, the development process needs to be well aware of historical patterns of overflying. In the proposed options for Westerly arrivals, the absence of any track using a joining point between 6 and 9nm is very striking and difficult to understand. The NMB's recommendation that the minimum joining point should be reduced from 10 to 8nm was an important and welcome step as, in principle at least, it drew arrivals away from the westerly residential areas and town centre; the reservation was that the swathe itself did not follow the Westerly move to any great extent. Moreover, during the pandemic when low traffic levels made it more possible, much greater use was made of the 8nm joining point and with a more westerly swathe. This brought arrivals over less densely populated areas which nonetheless were already very familiar with being overflown. In contrast, the inclusion of many tracks joining the ILS at 10 to 12nm is incomprehensible as this brings arrivals inevitably over the populated western side of the town, overflying outlying suburbs such as Langton Green, Rusthall, Speldhurst and Bidborough. Experience has shown that high arrivals traffic with vector navigation forces arrivals eastwards, and although developments in traffic management may reduce this eventually the basic problem is fixed in some of the proposed options. It is noted that the TN3 postcode, which includes Langton Green, historically produced the highest number of noise complaints to Gatwick. From the above comments it is clear that technically possible options have been missed – very odd. (2) We wonder if the methodology used has fundamental weakness as a desktop exercise. The initial choice of a route as described in the presentation may inadvertently limit the subsequent choices and a sensitivity analysis needs to be done to ensure that there is not a prob	 Although the data from the airspace design database did not suggest to locate a route between 7 and 9nm, following the feedback we have explored this option. For more information, please see the feedback that influenced our final comprehensive list of options section above. As part of our methodology, when selecting high performing notional flight paths, if the initial group of paths suggested there were multiple directions which would result in fundamentally different options, then both were developed. This was particularly the case with some of the arrivals respite options, such as EAE/EAD and WAE/WAD; with these options there was the possibility of different configurations and therefore multiple options were created. Each notional flight path has been developed following PBN design criteria and is intended to be flown as a PBN route. This is because the Airspace Modernisation Strategy, the main driver of this ACP, requires airport's to implement PBN. We're aware that in some circumstances, there may be a requirement for aircraft to be vectored. In the case of arrivals, we have generated some initial indicative vectoring areas (Radar Manoeuvring areas (RMA)) using the outputs of the airspace design database. As the proposals mature, and when we have further information from NERL around the airspace above 7000ft, we will develop and refine our options and articulate the anticipated frequency and areas of vectoring that may occur. Our Initial, Full and Final Options Appraisal will analyse the benefits and impacts of the PBN options and any expected vectoring when compared against the 'do nothing' pre-implementation baseline. 	
Blank (Resident)	No	There is a lack of historic routes shown to enable residents and an elected body to see where the routes currently fly within Noise Preferential Routes and the arrival swathe. Without this information it is difficult to understand how any proposals can be accepted or commented upon.	At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. This included a heat map which	



Stakeholder org.		You Said	We Did
			shows 2019 overflight. Some options are based on existing nominal centrelines which include the NPRs currently flown at Gatwick. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps for stakeholders and the wider public alongside detailed appraisal of the benefits and impacts of each option.
Waverley Borough Council	Blank	It is not possible to answer this question without access to all the information Gatwick Airport has used to generate the route options set out in the powerpoint presentation.	Developing viable airspace change options is a complex process with many considerations that cannot be distilled to purely data. Therefore sharing of the data from the database alone would not illustrate the full process of generating the options, as the outputs from the database need to be combined with aviation regulation, safety knowledge, Air Traffic Control experience and movement data in order to create viable systems. As part of the presentation and as part of the verbal explanation at the workshops, we have aimed to provide a detailed overview of the methodology used to build the options and the metrics from the database applied. We also offered drop in question and answer sessions where we could clarify any questions around the development of the options and provide further information. We would encourage any questions to be directed to the FASI email address or please do attend the drop in Q&A sessions where we'd be happy to clarify.
Mole Valley District Council – Planning Policy Team	No	The list of options does not have a metric of the total population figures that live in a more rural location, and therefore a quieter location, which would be flown over more frequently as a result of the ACP.	Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the <u>feedback that influenced our final comprehensive list of options</u> section above.
Warnham Resident	No	There is a lack of historic routes shown to enable residents and an elected body to see where the routes currently fly within Noise Preferential Routes and the arrival swathe. Without this information it is difficult to understand how any proposals can be accepted or commented upon.	At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. This included a heat map which shows 2019 overflight. Some options are based on existing nominal centrelines which include the NPRs currently flown at Gatwick. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps for stakeholders and the wider public alongside detailed appraisal of the benefits and impacts of each option.
GATCOM member for Burstow PC and deputy lead member for noise on NATMAG.	No	 (1) But see below regarding DP10? (2) Some departure wrap around routes are not shown to be in conflict with arriving aircraft such as WDB & WDH. Is this correct? (3) On easterly departures from route 3 should there also be a dotted dotted line going NW to exit point? 	 Feedback covered in section below As the departure routes have been developed in isolation from the arrivals, there are some departure routes which may conflict with some arrival options. At this early stage where there are so many permutations, this is considered proportionate and as we progress through the process and start to shortlist options, and also when we have further information from NERL about the airspace above 7000ft, we will revisit potential departure/arrival conflicts where applicable.



Stakeholder org. You Said We Did			We Did
			(3) The dotted lines are intended to be indicative directions between 4-7000ft that will be reviewed once we have further information from NERL about potential network entry/exit locations so there may be a NW point in future; when further information is known we will update stakeholders.
NATS	Blank	NATS does not feel that this is a question which we able to adequately answer.	n/a
Tandridge District Council	Blank	 Unknown – As a neighbouring authority to Gatwick Airport, we are concerned by any new proposals to route designs that have the potential to harm communities within Tandridge. We remain concerned of any new proposals that could potentially impact residents and businesses in the area by reason of noise, air quality etc. above what is already felt by the current routes and request that the process be further simplified and clarified to enable all those wishing to be involved, to engage fully. The Council feel that as currently presented is not 'in real terms' but at the higher more complicated level which prevents the public and stakeholders from engaging. We would note that GAL currently have at least 3 separate processes ongoing; Route 4 redesign, FASI-S and Northern Runway DCO. Each of these projects overlap and will result in changes to airspace. It is not suitably clear to interested parties how these differ, the timescales for each, and the interdependencies and how they will be addressed. 	 (1) As part of Step 2B of the Airspace Change Process we will undertake an Initial Options Appraisal. This is where we define a 'do nothing' pre-implementation baseline scenario and use this to understand the relative benefits and impacts of each airspace change option. This will look at areas such as noise and air quality and identify whether there will be potential impacts or benefits and we will identify potential geographic locations where these impacts will be located. We understand that the subject is complex, and we endeavour to make our engagement material as accessible as possible. We would encourage any questions to be directed to the FASI email address or our drop in Q&A sessions where we'd be happy to clarify. At Stage 2, we are engaging with stakeholder representatives who are typically more familiar with the airport and noise/environmental considerations but at Stage 3 there will be full public consultation and as part of this, there will be an opportunity for all stakeholders and the public to provide feedback on the proposals. Our consultation material will be assessed by the CAA to ensure it is clear and accessible before we commence this consultation. (2) The FASI ACP is completely separate project and is not dependent on the Northern Runway DCO or Route 4 ACP although information from both of these projects may be required to be incorporated into the ACP at the appropriate stage. As part of our engagement presentation, we have provided a timeline for the FASI-S ACP.
People Against Gatwick Noise and Emissions (PAGNE)	No	We are extremely concerned with the so-called comprehensive list of options presented by the project team. From what we have seen so far, it would appear population levels are to be considered the predominant decision-making factor and that, as a result, the rural communities represented by PAGNE are very likely to be "thrown under the bus". In our view, it is completely inequitable for any single individual to be more adversely impacted than any other individual, simply because they live in a rural rather than in an urban environment. We fully appreciate that the establishment of an agreed Fair and Equitable Distribution protocol at Gatwick is challenging, but if a truly comprehensive list of options is to be established, all relevant factors must be considered, and considered collectively. Until this is done, the publication and discussion of a "comprehensive" list of options is premature and will, in our view, lead to confusion and frustration rather than the clarity and coherence required. At this stage, the options presented have only been driven by a relatively narrow set of decision criteria: total population overflown, number of people newly overflown and overflight of Areas of Outstanding Natural Beauty. Although these options may be viable they are very far from a truly "comprehensive" list of options. As a matter of priority, the project team must develop a suite of decision-making factors against which the full universe of route options can be benchmarked in order to deliver a truly comprehensive list of viable options for further detailed analysis and optimisation. The additional factors which the project team need to consider are as follows: (1) Ambient noise levels – ambient noise in cities and large towns is higher than in the countryside, meaning that	 (1) Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the feedback that influenced our final comprehensive list of options section above. (2) Our options have been developed using outputs from the airspace design database. This database includes metrics which are indicators of the primary and secondary metrics that will be assessed later in the airspace change process. This includes Sound Exposure Level (SEL), which forms part of the Laeq calculations. Data from the Laeq contours is used as a primary metric in the airspace change process to assess impacts to health and quality of life. The Initial Options Appraisal will analyse impacts to these contours as well as reviewing secondary noise metrics such as N60 and N65 data, and overflight. (1) Frequency of overflight will be evaluated as part of our Design Principle Evaluation and considered in further detail as part of the Initial Options Appraisal. As part of our Full Options Appraisal at Stage 3, we are required to quantitatively define the scenarios we will use to assess our Airspace Change Options for the planned year of implementation and 10 years following implementation. We expect this to include scenarios with and without the



Stakeholder org.		You Said	We Did
		aircraft noise is likely to have less impact in cities/towns. (2) Health impacts – including both acoustic and non-acoustic factors. Exposure to aircraft noise is associated with a range of health responses including stress, sleep disturbance and annoyance. Long-term exposure is associated with increased risk of high blood pressure, heart disease, heart attack, stroke, dementia and impairment of learning in children. Non acoustic factors such as individual perceptions of fairness, individual coping capacities and individual noise sensitivity will all play a key role in determining responses and must therefore be fully considered using appropriate metrics to accurately capture "total adverse effects". (3) Frequency of overflight – although traffic volumes have reduced dramatically because of the pandemic, there is no doubt that in the period leading up to 2019, Gatwick's busiest year, the increasing frequency of overflight led to growing resident annoyance. Inevitably, this trend will return as airport volumes recover and should Gatwick's DCO be approved will become even worse. The impact of increased frequency of overflight must therefore be fully considered in route option selection. (4) Concentration v Dispersal – in our view, aircraft noise must be dispersed rather than concentrated, on the grounds that it is fairer for its impacts to be shared rather than imposed on one group of people and it is on this basis that Gatwick's flight path strategy should be based. (5) Vertical Profile of Aircraft – Continuous Climb Operations (CCO) is widely considered to be an effective noise mitigation strategy for departing aircraft and must therefore be fully considered as part of option analysis. Likewise, a key factor in considering individual arrival flight paths must be their altitude and we would wish to see planes kept as high as possible for as long as possible. (6) ILS Join Points – notwithstanding the desire to avoid flying over new areas, future flight path design should consider the use of different ILS jo	northern runway DCO project as well as with and without the Airspace Change. Subsequently, a range of traffic forecasts based on these scenarios will be used which will enable stakeholders to understand the overall performance of the different airspace design options with different traffic levels. (3) The Government's Airspace Modernisation Strategy (AMS) requires airports to implement Performance Based Navigation which does potentially lead to concentration along flight paths but as part of the Air Navigation Guidance 2017 there's also a requirement for mitigation of this concentration to be considered. We're aware of the potential negative effects of concentration, and that's why there are proposed mitigations, such as alternative respite configurations, included within our Comprehensive List of Options. Design Principle 7 also requires us to consider respite arrangements. As part of this ACP, we have also committed to considering the outcome of the Fair and Equitable Distribution (FED) study should there be appropriate outcomes that could be incorporated into the ACP. (4) All of the options on the comprehensive list are designed to achieve CCO/CDO to/from 7000ft. As part of the Design Principle Evaluation and Initial Options Appraisal, we will introduce the information available from NERL about the network airspace above 7000ft and evaluate the potential for further CCO/CDO. The outcome may be that the options are refined in order to achieve optimal CCO/CDO where possible and balancing other considerations; this will be documented as part of our Stage 2 submission and communicated as part of stakeholder engagement workshops. (5) Our comprehensive list of options includes a variety of ILS joining points and following other stakeholder feedback, additional options have been added to the list. The benefits and impacts of each option will be evaluated and appraised as part of the next steps of the process.
Blank (Residents)	No	There is a lack of historic routes shown to enable residents and an elected body to see where the routes currently fly within Noise Preferential Routes and the arrival swathe. Without this information it is difficult to understand how any proposals can be accepted or commented upon.	At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. This included a heat map which shows 2019 overflight. Some options are based on existing nominal centrelines which include the NPRs currently flown at Gatwick. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps for stakeholders and the wider public alongside detailed appraisal of the benefits and impacts of each option.
Betchworth Parish Council	No	(0) The options have been derived from a very limited set of criteria – total population overflown, number of people newly overflown and overflight of Areas of Outstanding Natural Beauty. There are many other factors that would need to be taken into account to produce a really meaningful set of options. It is also not entirely clear how even these limited criteria have been prioritised against each other. Air Navigation Guidance 2017 places the highest priority on limiting and, where possible, reducing the total adverse effects on people. Although "total adverse effects" is not specifically defined, this cannot credibly be reduced to a simple measure of "total population"	(0) When developing options, we need to consider all the Design Principles as well as those focused on noise. At Stage 1 the Design Principles were prioritised. At Stage 2, we used a matrix structure, which we provided an overview of as part of our workshops and presentation, which outlines how we've considered the design principles when developing each option and also what noise metrics have been used to select the notional flight paths. The noise metrics within the airspace



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overflown". All factors contributing to "total adverse noise effects on people" should have the highest priority. As a second priority it says – where options for route design are similar in terms of the number of people affected by total adverse noise effects, preference should be given to that option which is most consistent with "existing published airspace arrangements" which is not exactly "would have been overflown in 2019 but for the pandemic". On the question of ANOBs it states – where practicable, it is desirable that airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty (AONB) and National Parks. All of the factors contributing to "total adverse noise effects on people" have the highest priority.

To produce a really comprehensive set of options there needs to be a comprehensive set of criteria against

To produce a really comprehensive set of options there needs to be a comprehensive set of criteria against which all potential options can be prioritised. Betchworth Parish Council believes that the following issues need to be considered as a part of that process.

1. Health impacts of noise

- In October 2018 the World Health Organisation strongly recommended reducing aircraft noise levels to below 45 dB Lden, as aircraft noise above this level is associated with adverse health effects. For night noise exposure, the WHO strongly recommends reducing aircraft noise levels to below 40 dB Lnight, as night-time aircraft noise above this level is associated with adverse effects on sleep. Current Gatwick noise contour maps only show noise contours considerably above these levels. The WHO criteria would cover many more people than the current criteria, and the effects on these people must be taken into account
- The recent FED study, whilst not producing the LGW specific framework that was hoped for, did raise many factors that have not been taken into account in this proposal so far. Aircraft noise is associated with many health issues including stress, sleep disturbance, high blood pressure, heart disease, heart attack, stroke, dementia, impairment of learning in children and long-term mental health issues. Additionally the FED study highlighted that many non-acoustic factors have a detrimental effect on health. All of the issues raised in the FED report should be progressed, with further research to be applied specifically to Gatwick.
- The frequency of overflights is a major issue that needs to be captured. Some areas, in particular to the north of Gatwick, suffer noise from more than one route and also from Heathrow aircraft. Whilst residents on the extended runway centre lines will suffer noise from both easterly and westerly operations, there is no reason why any other residents should suffer noise from both directions (for example residents under Routes 3 and 4).
- Therefore, in order to get a true measure of "total adverse noise effects" many more factors other than "total population overflown" must clearly be considered.

2. Newly overflown

- The current definition being used, modified 2019 flight paths, is far too narrow. Flight paths over the past 10-20 years are totally relevant. Using actual flight paths also captures many flights that deviated from the NPR swathes and to then use those as a baseline legitimises flightpaths outside of the NPR swathes. This would be totally unacceptable. We feel that the definition for "previously overflown" with reference to departures should be the NPRs. Betchworth Parish Council believes that routes should be dispersed within the existing NPRs and based on the NPR centre lines. This particularly applies to Route 4 where over the years the SIDs and actual flight paths, which have often diverged considerably from the SIDs, have affected most residents within the NPR swathe. The NPRs have been unchanged since their introduction over 50 years ago and were therefore in place well before the vast majority

design database are indicators of the primary and secondary metrics we will assess later in the CAP1616 process.

As we're required to explore all viable options, we've explored options that look at total population overflown (what would happen if we took a blank sheet approach) and population newly overflown (keeping laterally relatively similar to today, including the existing NPRs). This means that we have not prioritised total population overflown or population newly overflown; we've developed different options for each which are also influenced by the other design principles. When developing the options, we've considered a range of metrics including Sound Exposure Level (SEL), overflight contours, and areas of AONB overflown. 2019 data has been selected to define newly overflown due the way we will define the CAP1616 baseline (see (2) below).

As part of the next steps of the process, we will explore the benefits and impacts of each option as part of our Initial Options Appraisal. The noise assessment section of the appraisal will consider the information within the Air Navigation Guidance 2017 as part of the assessment. It's important to note that we expect the options to develop and evolve as we progress through the process; this means that after evaluation and appraisal, the options may be adjusted to be optimised; this will be informed by the outcomes of the assessment and will be documented.

(1) The Initial Options Appraisal assessment will provide assessment of the noise benefits and impacts of each option compared to the baseline. This will include Laeq contours, which are the primary measure of 'total adverse effects' of noise. At the options development stage, without combining thousands of permutations of arrivals and departure options, it is not possible to generate Laeq contours, therefore we have used Sound Exposure Level (SEL) contours as an indicator of Laeq. SEL data forms part of the calculation of Laeq. Later on in the process, data from the Laeq contours will be used to populate webTAG which monetises the health impacts of noise. For each one decibel change in average noise level, a monetary value is assigned for the change in the following health impacts: amenity (annoyance), acute myocardial infarction, dementia, stroke, and sleep disturbance. These values are based on the latest evidence from the World Health Organisation on the link between noise exposure and health impacts³.

<u>CAP1616</u> (Appendix B, page 162 -165) outlines the primary and secondary metrics which are required to be presented as part of the ACP. This includes Leq 16 hour (day) and 8 hour (night), N60/N65 contours and overflight contours. These metrics will include counts of the number of people impacted and the frequency of overflight.

(2) As part of Step 2A of the CAP1616 process, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. A requirement of CAP1616 is that our assessment of newly overflown must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026. At the point of implementation (2026 onwards), it is expected that Gatwick will have recovered from the impacts of COVID-19

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/669423/webtag-for-non-experts.pdf



Stakeholder org.		You Said	We Did
		of residents. NPRs have dictated where people have bought their homes, and are used to inform planning decisions about location of future homes, hospitals, schools etc. - If FASI eventually creates routes that are different to the NPRs, and therefore by our definition affecting "newly	therefore 2019 was chosen as it was a year which most reflected a scenario where the airspace, and traffic patterns, had recovered from the impacts of COVID-19. The 2019 data will be developed to reflect the known and anticipated factors when
		overflown" residents, this will need a totally separate ACP process under the auspices of the Secretary of Transport. To make the FASI process more transparent the existing NPRs should be clearly marked on all charts.	describing the pre-implementation scenario. As part of our comprehensive list of options, we've included options that look to
		- As LGW expands there will be a point where the noise burden on some existing NPRs, even with dispersal, will become untenable and further new routes will need to be explored. The FASI consultation process should also be transparent on this potential requirement.	minimise newly overflown and options that minimise total population overflown. Of these options, some retain the existing NPRs and others deviate from the existing NPRs.
		3. Vertical flight profiles	NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport
		Departure routes.	(DfT). The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements
		- The use of Continuous Climb Operations has a huge potential to reduce total adverse noise effects and this must be taken into account in this once in a generation airspace redesign opportunity. CCO is a win/win for residents,	and the Airspace Modernisation initiatives cannot bypass this.
		airlines, and the environment – less noise, less fuel burn and lower operating costs, and less pollution. With the proximity of Gatwick and Heathrow their route structures need to be developed jointly to facilitate CCO. The current approach of developing two separate structures and then setting about integration seems certain to generate a sub optimal solution.	As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the
		A meaningful consultation on vertical profiles needs to contain very detailed information on the noise effects of various profiles.	preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes.
		- The effect of CCO on noise levels due to altitude and engine power setting. Whilst most people will benefit from CCO there will be some residents who will suffer greater noise as aircraft climb through 4,000ft with climb power set. At what altitude does the reduction in noise due to increased altitude balance the increased engine noise.	(3) All of the options on the comprehensive list are designed to achieve CCO/CDO to/from 7000ft. As part of the Design Principle Evaluation and Initial Options Appraisal, we will introduce the information available from NERL about the network
		- The effects of the increased vectoring that will be facilitated by CCO. With all aircraft climbing continuously through 4,000ft vectoring could become almost routine. This will facilitate much greater dispersal but could also effectively create new "routes" between 4000ft and 7,000ft	airspace above 7000ft and evaluate an options' potential for CCO/CDO. The outcome may be that the options are refined in order to achieve optimal CCO/CDO where possible and balancing other considerations; this will be documented as part of our Stage 2 submission and communicated as part of stakeholder
		- The noise effects of potentially higher airspeeds facilitated by CCO.	engagement workshops.
		Aircraft could climb at maximum climb gradient or optimum fuel burn climb speeds. Both could have significant noise effects. An aircraft at higher speed has different aerodynamic and engine acoustic effects. The noise event from a faster aircraft lasts for less time.	
		Arrival routes.	
		- Routes should be developed to ensure that 100% of arrivals can utilise Continuous Descent.	
Salfords and	No	It does not include the very important question of newly overflown people.	As part of our comprehensive list of options, we've included options that look to
Sidlow Parish Council	o	We strongly hold the view flight paths within the NPRs must not be moved, even if this means fewer people are overflown, because this makes new people overflown. Existing and new people who have moved under an existing flight path have made this choice and they can't be counted as newly overflown. We recognise that once aircraft are	minimise newly overflown and options that minimise total population overflown. Of these options, some retain the existing NPRs and others deviate from the existing NPRs.
		outside the NPRs, either by distance or altitude, they can be vectored.	NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport (DfT). The process through which the DfT manage noise abatement procedures



Stakeholder org.		You Said	We Did
Plane Justice Ltd	Blank	Plane Justice represents communities currently affected by Route 4 departures. As such it is necessary to give due consideration to the reason why the CAA's 2017 Post Implementation Review was quashed, namely 'the value of preserving the existing pattern of traffic in 2012 was not given sufficient weight as part of the airspace change process'. It is imperative that this matter is considered fully in any design of the 'Westerly' departures. When	are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot bypass this. As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes. (1) All of the options on the comprehensive list are designed to achieve CCO/CDO to/from 7000ft. As part of the Design Principle Evaluation and Initial Options Appraisal, we will introduce the information available from NATS NERL about the network airspace above 7000ft and evaluate an options' potential for CCO/CDO.
		considering historic flight patterns (population heat maps) for Route 4 we recognise that Gatwick are correctly utilising the flight patterns of the 2012 Conventional route and not the 2019 patterns. Although Gatwick have stipulated that they are not seeking feedback on the positions of actual routes at this time, it	The outcome may be that the options are refined in order to achieve optimal CCO/CDO where possible and balancing other considerations; this will be documented as part of our Stage 2 submission and, communicated as part of stakeholder engagement workshops.
		 (1) It is hoped that consideration of continuous climb (getting higher quicker) is given sufficient priority as this will help reduce the noise pollution. (2) We note in the Statement of Need that Gatwick are considering routes up to 7000 feet, but it is not clear if the list of comprehensive options for easterly and westerly departures depicts altitudes from 0 – 7000 feet, 0 to 4000 feet or something else. Could this be clarified please? How will vectoring by NATS be affected by these designs? Will NATS be responsible for vectoring when the aircraft reach the NPR ceiling at 3000 or 4000 feet, or some other height (if of course NPRs are retained after this process is concluded)? (3) Although you have correctly stipulated that no 'new' overflight should be considered in all options, it is unclear what weighting will be applied to this issue in relation to other matters (total population overflown etc.). New 	(2) The options shown on the comprehensive list show a PBN route between 0-7000ft. Some options have been developed with noise prioritised between 0-4000ft and to fly a direct route between 4-7000ft; in the comprehensive list, that latter part of the route is shown with a green dashed line. We're aware that in some circumstances, there may be a requirement for aircraft to be vectored. In the case of arrivals, we have generated some initial indicative vectoring areas (Radar Manoeuvring areas (RMA)) using the outputs of the airspace design database. As the proposals mature, and when we have further information from NERL about the airspace change above 7000ft, we will develop and refine our options and articulate the anticipated frequency and areas of vectoring that may occur. Our Initial, Full and Final Options Appraisal will analyse the benefits and impacts of the expected vectoring when compared against the 'do nothing' baseline.
		communities, such as Westvale Park (North of Horley) will provide 1500 new homes when completed. These new populations must be categorised as 'not previously overflown' when considering route design. (4) We understand that the FASI-S and 2018 Route 4 Airspace Change Proposals are separate, but it would be helpful for the FASI-S team to consider the progress of the Route 4 ACP to avoid any wasted time or potential conflict later in the process.	 (3) When we define the 'do nothing' pre-implementation baseline, we will take into account local developments that have permission but that are yet to be built (and therefore will not be included in the standard population data). When we define the baseline, we have to describe the environment immediately prior to implementation (in around 2026), and therefore we will consider a development's location in relation to the baseline overflight swathe to understand whether it would be considered as 'newly overflown'. (4) As correctly stated, the FASI-S ACP and the route 4 ACP are separate processes however the FASI-S team are aware of the progress with the route 4 ACP and where appropriate to do so, information about the route 4 ACP will be incorporated into the FASI-S process.
Gatwick Area Conservation	No	0. As we understand it, the options presented have been driven by a narrow set of factors: total population overflown, number of people newly overflown and overflight of Areas of Outstanding Natural Beauty. In order that we can better	(0) When developing options, we need to consider all the Design Principles as well as those focused on noise. At Stage 1 the Design Principles were prioritised. At



Stakeholder org. You Said We Did

Campaign (GACC)

understand the team's methodology it would be helpful if the project team could explain how these factors have been prioritised against each other as we believe the outcomes would vary considerably depending on the prioritisation applied. We would also welcome an insight into what dictated the prioritisation applied - government policy/guidance, project team choice. Although these options may be viable on the basis of the limited analysis carried out to date, they do not represent a truly "comprehensive" list of options. We would therefore encourage the project team to develop a suite of decision-making factors against which the full universe of route options can be benchmarked thus delivering a truly comprehensive list of viable options for further analysis and optimisation. With that in mind, GACC would wish to see the following factors being part of this process:

- 1. Historic patterns of dispersal. As people historically overflown are likely to be more accustomed to aircraft noise and therefore not adversely impacted to the same extent as those newly overflown, we believe that the starting point for determining potential route options should be the historic patterns of dispersal. However, this does not mean that aircraft tracks that have consistently fallen outside NPR swathes should be considered an acceptable historic pattern of dispersal.
- 2. Health impacts of noise. Exposure to aircraft noise is associated with a range of health responses including stress, sleep disturbance and annoyance. Long-term exposure is associated with increased risk of high blood pressure, heart disease, heart attack, stroke, dementia and impairment of learning in children. There is also evidence to suggest that aircraft noise may also lead to long-term mental health issues. A summary of evidence is in the AEF paper here: https://www.aef.org.uk/uploads/Aircraft-Noise-and-Public-Health-the-evidence-is-loud-and-clear-finalreportONLINE.pdf

The World Health Organisation strongly reducing aircraft noise levels to below 45 dB Lden., as aircraft noise above this level is associated with adverse health effects. For night noise exposure, the WHO strongly recommends reducing aircraft noise levels to below 40 dB Lnight., as night-time aircraft noise above this level is associated with adverse effects on sleep. Gatwick does not produce noise contour maps down to these levels, but they extend many miles either side of the airport, covering 100s of sq km and 10s of thousands of people.

As stated above there is a clear and long understood relationship between actual plane noise and health, but it is now acknowledged that health effects are also being determined by non-acoustic factors. Non acoustic factors such as individual perceptions of fairness, individual coping capacities and individual noise sensitivity will all play a key role in determining responses and must therefore be fully considered using appropriate metrics to accurately capture "total adverse effects".

- 3. Number of people impacted. Different aircraft dispersal options will affect different numbers of people. For example, a flight path over a town would, other things being equal, be likely to impact more people than a flight path over countryside (although perhaps less severely - see below). Some airports (but not Gatwick) are able to route some flights over areas that are entirely uninhabited, for example the sea or a river estuary. There might, of course, be other reasons not to fly over those areas.
- 4. Severity of impact. In addition to the number of people impacted, it is important to consider the severity of impact. In general, ambient noise in cities and large towns is higher than in countryside, meaning that aircraft noise is likely to have less impact in cities/towns. However, there are exceptions to this in both areas. Land height can also have an impact on noise.
- 5. "Fairness": The Gatwick area community noise groups have historically taken the view that aircraft noise should be dispersed rather than concentrated on the grounds that it is fairer for its impacts to be shared rather than imposed

Stage 2, we used a matrix structure, which we provided an overview of as part of our workshops and presentation, which outlines how we've considered the design principles when developing each option and also what noise metrics have been used to select the notional flight paths. The noise metrics within the airspace design database are indicators of the primary and secondary metrics we will assess later in the CAP1616 process.

As we're required to explore all viable options, we've explored options that look at total population overflown (what would happen if we took a blank sheet approach) and population newly overflown (keeping laterally relatively similar to today, including the existing NPRs). This means that we have not prioritised total population overflown or population newly overflown; we've developed different options for each which are also influenced by the other design principles. When developing the options, we've considered a range of metrics including Sound Exposure Level (SEL), overflight contours, and areas of AONB overflown. 2019 data has been selected to define newly overflown due the way we will define the CAP1616 baseline (see (2) below).

As part of the next steps of the process, we will explore the benefits and impacts of each option as part of our Initial Options Appraisal. The noise assessment section of the appraisal will consider the information within the Air Navigation Guidance 2017 as part of the assessment. It's important to note that we expect the options to develop and evolve as we progress through the process; this means that after evaluation and appraisal, the options may be adjusted to be optimised; this will be informed by the outcomes of the assessment and will be documented.

- (1) See response (0) around the development of the options. As part of Step 2A, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. As part of this baseline we will define areas of existing overflight and this will be based on the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented (expected to be from 2026 onwards). This baseline scenario will then be used to compare against the benefits and impacts of each option.
- (2) The Initial Options Appraisal assessment will provide assessment of the noise benefits and impacts of each option compared to the baseline. This will include Laeq contours, which are the primary measure of the 'total adverse effects' of noise. At the options development stage, without combining thousands of permutations of arrival and departure options, it is not possible to generate LAeq contours, therefore we have used Sound Exposure Level (SEL) contours as an indicator of Laeq. SEL data forms part of the calculation of Laeq. Later on in the process, data from the Laeg contours will be used to populate webTAG which monetises the health impacts of noise. For each one decibel change in average noise level, a monetary value is assigned for the change in the following health impacts: amenity (annoyance), acute myocardial infarction, dementia, stroke, and sleep disturbance. These values are based on the latest evidence from the World Health Organisation on the link between noise exposure and health impacts⁴.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/669423/webtag-for-non-experts.pdf



Stakeholder org.	You Said	We Did
	on one group of people. However, we are also mindful that views on what dispersal means in practice, particularly when satellite navigation technology is introduced, are likely to vary. 6. Frequency of overflight. With the airport already looking to expand and with the deployment of new technologies almost certainly leading to greater concentration, it is vital that changes to frequency of overflight are fully captured using appropriate metrics (see Point 7 of question 3 below) as part of the wider process to determine the total adverse effects of all potential flight path options. 7. Vertical profile of aircraft. Not surprisingly the focus has been on the lateral distribution of flight paths. However, we also feel that as part of this once in a generation airspace modernisation project the vertical profile of aircraft also requires analysis. For departures we would wish to see the likely impact of a Continuous Climb Operations (CCO) protocol being fully considered whist, from an arrival perspective, we would wish to see flight paths deployed which would facilitate increased arrival altitudes.	 (3) CAP1616 (Appendix B, page 162 -165) outlines the primary and secondary metrics which are required to be presented as part of the ACP. This includes Leq 16 hour (day) and 8 hour (night), N60/N65 contours and overflight contours. These metrics will include counts of the number of people impacted. (4) Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the feedback that influenced our final comprehensive list of options section above. (5) The Government's Airspace Modernisation Strategy (AMS) requires airports to implement Performance Based Navigation which does potentially lead to concentration along flight paths but as part of the Air Navigation Guidance 2017 there's also a requirement for mitigation of this concentration to be considered. We're aware of the potential negative effects of concentration, and that's why there are proposed mitigations, such as alternative respite configurations, included within our Comprehensive List of Options. Design Principle 7 also requires us to consider respite arrangements. As part of this ACP, we have also committed to considering the outcome of the Fair and Equitable Distribution (FED) study should there be appropriate outcomes that could be incorporated into the ACP. (6) As part of our Full Options Appraisal at Stage 3, we are required to quantitatively define the scenarios we will use to assess our Airspace Change Options for the planned year of implementation and 10 years following implementation. We expect this to include scenarios with and without the northern runway DCO project as well as with and without the Airspace Change. Subsequently, a range of traffic forecasts based on these scenarios will be used which will enable stakeholders to understand the overall performance of the different airspace design options with different traffic levels. (7) All of the options on the c
Chichester No District Council	There does not seem to be consideration as to the impact of air quality from the communities overflown	The Design principles developed with stakeholders at Stage 1B did not include a principle based specifically about air quality however later in the process the Initial Options Appraisal (Step 2B) will include an appraisal of benefits/impacts to air quality compared to the 'do nothing' baseline.



Table 35 Q2. Design Principle 1 (DP1) Safety by Design – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You said	We did
Waverley Borough Council	Blank	Insufficient information has been provided to be able to assess whether or not this principle has been satisfied.	At this stage in the airspace change process, we've incorporated Safety into all parts of the options development process. As noted in our workshops, we haven't
Tandridge District Council	No	Options do not identify how this DP will be taken into account.	designed specific options that focus on safety as we have aimed for all options developed to be inherently safe. As part of the next steps of Stage 2, we will
Surrey Hills AONB Planning Manager	Blank	Do not feel able to respond to any of these specialist questions	undertake safety assessments which will be documented as part of our Design Principle Evaluation and Initial Options Appraisal.
Salfords and Sidlow Parish Council	Yes	This must apply to any routing	

Table 36 Q2. Design Principle 2 (DP2) Enhanced Navigational Standards – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You said	We Did
Communities Against Gatwick Noise and Emissions (CAGNE)	Yes	Without due consideration to the impact they have on communities on the ground	The Government's Airspace Modernisation Strategy (AMS) requires airports to implement Performance Based Navigation which does potentially lead to concentration along flight paths but as part of the Air Navigation Guidance 2017 there's also a requirement for mitigation of this concentration to be considered. We're aware of the potential negative effects of concentration, and that's why there are proposed mitigations, such as alternative respite configurations, included within our Comprehensive List of
Horsham District Council (Team Leader Environmental Protection)	No	The impact of concentration along new and established routes with respect to noise	Options. Design Principle 7 also requires us consider respite arrangements. As part of this ACP, we have also committed to considering the outcome of the Fair and Equitable Distribution (FED) study should there be appropriate outcomes that could be incorporated into the ACP.
NATS (NERL)	Yes	NATS is keen to understand the reduced departure divergence work further.	Investigation into reduced departure divergence is being led by ACOG and we will keep NATS NERL updated through the ongoing bilateral meetings around this.
Tandridge District Council	No	Although it states that DP2 is inherent in all notional flight paths developed, it does not provide detail as to how this will be achieved for each option.	At this stage in the airspace change process, we've incorporated enhanced navigation standards into all parts of the options development process. We haven't designed specific options that focus on this Design Principle as we have aimed for all options and notional flight paths developed to meet PBN standards. The only exception to this are the 4 arrivals options that are radar vectoring areas intended to be used alongside the PBN
Waverley Borough Council	Blank	Insufficient information has been provided to be able to assess whether or not this principle has been satisfied.	options. The remaining options are designed to a PBN standard called Required Navigation Performance 1 (RNP-1) other than 4 arrival options which use a specification called RNP-AR (Authorisation Required). As we progress through the process and we begin to
Surrey Hills AONB Planning Manager	Blank	Do not feel able to respond to any of these specialist questions	shortlist options and develop them further, we will investigate the PBN standard and Instrument Flight Procedure (IFP) design in further detail.
Salfords and Sidlow Parish Council	Yes	This must apply to any routing	



Table 37 Q2. Design Principle 3 (DP3) Limit Adverse Noise Effects – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We did
Communities Against Gatwick Noise and Emissions	No	We believe Gatwick seek to impact more communities especially those that are to be newly overflown	The Airspace Modernisation Strategy (AMS), is the main driver of modernising UK airspace coexists with the Air Navigation Guidance which outlines that one of the government's key environmental objectives is to 'limit and, where possible, reduce the number of people in the UK significantly affected by adverse impacts from aircraft noise'5
(CAGNE)			This is incorporated into Gatwick's Design Principles, particularly with Design Principle 3; The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise.
			All options within our comprehensive list have taken a data based approach that considers Design Principle 3 alongside our other DPs, and aims to reduce the impact of aircraft noise. As part of our approach to looking at viable options, we've explored some options which aim to minimise population newly overflown, as well as options that minimise total population overall overflown which may involve overflying new communities. At this stage, we haven't ruled out or favoured any options – shortlisting comes later in the process once we've had the opportunity to understand an options performance and it's benefits/impacts.
Horsham District Council (Team Leader Environmental Protection)	No	magnitude of change in noise levels should be reported areas of value to community amenity should be identified and considered.	 Our options have been developed using outputs from the airspace design database. This database includes metrics which are indicators of the primary and secondary metrics that will be assessed later in the airspace change process. This includes Sound Exposure Level (SEL), which forms part of the L_{Aeq} calculations. Data from the L_{Aeq} contours is used as a primary metric in the airspace change process to assess impacts to health and quality of life. The complexity of noise modelling and number of options permutations mean that it is not proportionate to generate Laeq or other noise metrics at the options development stage. The Initial Options Appraisal (step 2B) will qualitatively analyse impacts to these contours as well as reviewing secondary noise metrics such as N60 and N65 data, and overflight. The noise analysis that forms part of the Initial, Full and Final Options Appraisal will also consider impacts to noise sensitive buildings such as schools, hospitals and places of worship. The IOA also includes a tranquillity assessment which looks at areas such as AONB and historic parks and gardens.
Tunbridge Wells Aircraft Noise Study Group (TWANSG)	No	Many of the options seem to overfly relatively large numbers of homes, and significantly more than other potential options which are not listed. The metrics being used need greater scrutiny and modification.	The options developed have been generated using noise data from our Airspace Design Database which uses CACI population data. Different options aim to achieve different Design Principles to a lesser or greater extent and when developing options, we need to consider all the Design Principles as well as those focused on noise. Following feedback from TWANSG we have developed further arrivals options. For more information, please see the feedback that influenced our final comprehensive list of options section above.
Gatwick Obviously Not (GON)	No	The developed options may be in line with the design principles, however per response to Q1, there are other significant factors which must be considered to create a benchmark fully capable of determining which options best meet the design principles.	Please see response to question 1

⁵ Page 8 <u>https://www.gov.uk/government/publications/uk-air-navigation-guidance-2017</u>



Stakeholder org.		You Said	We did
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Complex issues to be resolved	Please see response to question 1
Waverley Borough Council	Blank	 Without access to Gatwick Airport's database (as covered in Section 4 of the powerpoint presentation) it is not possible to establish whether or not the route options shown represent the routes which minimise the impact of noise on communities and protected habitats. It is noted that under the Westerly Departures a number of villages in Waverley are shown to be overflown by several potential routes. The Council objects to the principle of this due to the impact of noise and disturbance caused by overflying aircraft. Under the Easterly Arrivals, the village of Wormley is also shown as being overflown and several other villages are shown to have routes within close proximity including Ellens Green and Rudgwick. The current options do not show or appear to factor in where stacks could be located in the future, and the Council is concerned that these may adversely affect more settlements and residents in Waverley. 	 (1) Developing viable airspace change options is complex process with many considerations that cannot be distilled to purely data. Therefore sharing of the data from the database alone would not illustrate the full process of developing options, as the outputs from the database need to be combined with aviation regulation, safety knowledge, Air Traffic Control experience, movement data etc in order to create viable systems. As part of the presentation and as part of the verbal explanation at the workshops, we have aimed to provide a detailed overview of the methodology used to build the options and the metrics from the database applied. We also offered drop in question and answer sessions where we could clarify any questions around the development of the options and provide further information. (2) The options shown on the comprehensive list consider flight paths between 0-7000ft as part of the next steps of the process, we will evaluate and appraise the benefits and impacts of each option compared to a 'do nothing' pre-implementation baseline. Above 7000ft, there is a separate ACP, sponsored by NATS NERL, which looks to modify the airspace and it is within this ACP that there will be information about the location of the holding stacks. More information can be found around this on the Airspace Change Portal.
Mole Valley District Council	No	Route 3 and 4 and respite not fully explained or covered	At this early stage, we have developed some potential respite configurations. Some options use some of the existing routes however they have been modified to remove some routes to account for modernisation of the airspace above 7000ft. As part of the Design Principle Evaluation and Initial Options Appraisal, we will introduce the information available from NATS NERL about the network airspace above 7000ft. The outcome may be that the respite options are refined; this will be documented and explained in further detail as part of our Stage 2 submission and, where timelines allow, communicated as part of stakeholder engagement workshops.
People Against Gatwick Noise and Emissions (PAGNE)	No	Per our response to Q1, there are many other significant factors which must be considered to create a benchmark fully capable of determining which options best meet the design principles.	Please see response to question 1
Surrey Hills AONB Planning Manager	Blank	Do not feel able to respond to any of these specialist questions	In future, please do request any clarification through the FASI email address or please do attend the drop in Q&A sessions where we'd be happy to clarify any information. We've incorporated overflight of AONB's into the metrics used from the Airspace Design Database so that, where possible, we will aim to reduce the overflight of AONBs.
Salfords and Sidlow Parish Council	No	Referred to Answer to Q1: It does not include the very important question of newly overflown people. We strongly hold the view flight paths within the NPRs must not be moved, even if this means fewer people are overflown, because this makes new people overflown. Existing and new people who have moved under an existing flight path have made this choice and they can't be counted as newly overflown. We recognise that once aircraft are outside the NPRs, either by distance or altitude, they can be vectored.	Please see response to question 1





Stakeholder org.		You Said	We did
Plane Justice Ltd	Blank	Referred to Answer to Q3: Plane Justice represents communities currently affected by Route 4 departures. As such it is necessary to give due consideration to the reason why the CAA's 2017 Post Implementation Review was quashed, namely 'the value of preserving the existing pattern of traffic in 2012 was not given sufficient weight as part of the airspace change process'. It is imperative that this matter is considered fully in any design of the 'Westerly' departures. When considering historic flight patterns (population heat maps) for Route 4 we recognise that Gatwick are correctly utilising the flight patterns of the 2012 Conventional route and not the 2019 patterns. Although Gatwick have stipulated that they are not seeking feedback on the positions of actual routes at this time, it is difficult to comment in any detail until the effects on the communities that surround the airport are known. It is hoped that consideration of continuous climb (getting higher quicker) is given sufficient priority as this will help reduce the noise pollution. We note in the Statement of Need that Gatwick are considering routes up to 7000 feet, but it is not clear if the list of comprehensive options for easterly and westerly departures depicts altitudes from 0 – 7000 feet, 0 to 4000 feet or something else. Could this be clarified please? How will vectoring by NATS be affected by these designs? Will NATS be responsible for vectoring when the aircraft reach the NPR ceiling at 3000 or 4000 feet, or some other height (if of course NPRs are retained after this process is concluded)? Although you have correctly stipulated that no 'new' overflight should be considered in all options, it is unclear what weighting will be applied to this issue in relation to other matters (total population overflown	Feedback duplicated; please see response to question 1
Gatwick Area	No	etc.). New communities, such as Westvale Park (North of Horley) will provide 1500 new homes when completed. These new populations must be categorised as 'not previously overflown' when considering route design. We understand that the FASI-S and 2018 Route 4 Airspace Change Proposals are separate, but it would be helpful for the FASI-S team to consider the progress of the Route 4 ACP to avoid any wasted time or potential conflict later in the process. The developed options may be in line with the design principles, however per response to Q1, there are	Please see response to question 1
Conservation Campaign (GACC)		other significant factors which must be considered to create a benchmark fully capable of determining which options best meet the design principles.	
Chichester District Council	Yes	Consideration of sound exposure levels & LAmax contours alongside LAeq contours is welcomed	The Initial Options Appraisal (step 2B) will qualitatively analyse impacts to the LAeq contours as well as reviewing secondary noise metrics such as N60 and N65 data, and overflight.





Table 38 Q2. Design Principle 4 (DP4) Time Based Arrival Operations – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We Did
Surrey Hills AONB Planning	Blank	Do not feel able to respond to any of these specialist questions	At this stage in the airspace change process, we've designed the notional flight paths and the arrivals options to be compatible with Time Based Arrival technology. The options have been generated using the Design Principles and outputs from the Airspace Design Database.
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have	We've noted that we anticipate at the point of implementation that the technology required from the upper network (NATS NERL airspace above 7000ft) to facilitate single track PBN arrivals during periods of high
Plane Justice Ltd	Blank	Unsure	traffic will not be available. This is why we've also developed some initial vectoring areas which we anticipate will need to be operated alongside the PBN options.
Tunbridge Wells Aircraft Noise Study Group (TWANSG)	No	Time based arrival technologies and processes should enable aircraft to join the ILS closer to the runway, yet most options have been moved further from the runway.	As we progress through the Airspace Change Process and further information becomes available from NERL, we will provide further information about the potential for Time Based Arrival Operations.
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Not enough information, and too many issues remain to be resolved.	
Waverley Borough Council	Blank	Based on the information provided it is impossible to know whether the options meet the requirements of this design principle.	
Tandridge District Council	No	Although it states that DP4 is inherent in all notional flight paths developed, it does not provide detail as to how this will be achieved for each option.	
Betchworth Parish Council	Blank	DON'T KNOW There is too little information to agree or disagree	
NATS (NERL)	Yes	Will need further development with NATS.	We will to work collaboratively with NERL via the bilateral meetings to integrate our options and the airspace above 7000ft.





Table 39 Q2. Design Principle 5 (DP5) Resilience Built In – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We Did
Communities Against Gatwick Noise and Emissions (CAGNE)	Yes	to the detriment of communities especially those that could be newly overflown (sic)	
Warnham Parish Council	No	This is not our concern as an elected body. Resilience is only applicable to the airport's commercial operations. We do not believe any data taken from Heathrow operations to seek to define respite is applicable to Gatwick nor the rural surrounding areas.	
Gatwick Obviously Not (GON)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle	At this stage in the airspace change process, we've incorporated resilience into all parts of the options development process. As noted in our workshops, we haven't designed specific options that focus on
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Not enough information, and too many issues remain to be resolved.	resilience as we have aimed for all options developed to be inherently resilient. Later in the process in stage 2, we will undertake assessments which will be documented as part of our Design Principle Evaluation and Initial Options Appraisal to understand an options resilience. When
Waverley Borough Council	Blank	Based on the information provided it is not possible to establish whether or not the options meet this design principle.	more information is available from NERL about the airspace above 7000ft we may have to revisit options and look at refinements; this will be incorporated into our assessments and will be fully documented.
Tandridge District Council	No	Options do not identify how this DP will be taken into account.	
Surrey Hills AONB Planning	Blank	Do not feel able to respond to any of these specialist questions	
People Against Gatwick Noise and Emissions (PAGNE)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle	
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have	
Plane Justice Ltd	Blank	Unsure	
Gatwick Area Conservation Campaign (GACC)	Blank	Don't Know – Insufficient information to determine whether options will meet this design principle	1
Betchworth Parish Council	Blank	DON'T KNOW There is too little information to agree or disagree	

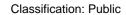




Table 40 Q2. Design Principle 6 (DP6) Optimise Use of Aircraft Capabilities – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We did
Horsham District Council (Team Leader Environmental Protection)	No	How is this to be weighted between operational efficiency and environmental performance?	As part of the comprehensive list of options we have designed some options that look to prioritise noise between 0-4000ft and then fly directly to the network exit points, with small lateral adjustments to consider noise, between 4-7000ft. This is guided by the altitude priorities outlined in the <u>Air Navigation Guidance 2017</u> . Operational efficiency for airlines and environmental performance are typically connected; airlines are looking for the shortest track mileage and optimum climb/descent gradients as this results in reduced
			fuel burn, which in turn reduces emissions and environmental impact. Later in the CAP1616 process, we will qualitatively and quantitatively appraise the options to understand the benefits and impacts of each option in terms of track mileage, fuel burn, and CO ₂ emissions.
Warnham Parish Council (Clerk & RFO to the Council)	No	This is not our concern. As an elected body we are concerned with the impact your route suggestions will have on our parish. We have a duty of care to our parish and not Gatwick Airport's commercial desire for gain.	-
Tunbridge Wells Aircraft Noise Study Group (TWANSG)	No	PBN allows for much tighter turns onto the ILS than used by most of the options. Options with tighter turns might reduce the numbers of homes overflown. Have such options been explored and rejected?	All notional flight paths have been designed to a PBN standard called required navigation performance 1 (RNP1). These have been designed by an approved procedure designer using the basic principles of PANS-OPS (the ICAO rules for designing flight paths).
			As part of the thousands of paths developed, we have looked at a variety of turn radius'. We then used the data from the airspace design database to identify high performing paths that could be used as part of our arrival options; our comprehensive list is formed of these high performing notional flight paths.
			PBN does not necessarily allow for tighter turns than vectoring onto the ILS; when designing turns a wide range of factors are taken into account including aircraft altitude, worst case wind conditions, speed and navigation specification.
Gatwick Obviously Not (GON)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle	We've incorporated DP6 (Optimise Use of Aircraft Capabilities; Should enable aircraft operators to optimise the use of their fleet capabilities to improve operational efficiency and environmental performance) into our Comprehensive List of Options by designing a set of options that use the
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Not enough information, and too many issues remain to be resolved.	altitude based priorities outlined in the <u>ANG 2017</u> . This means that we've used the Airspace Design Database to select high performing flight paths between 0-4000ft that prioritise noise, and then between 4-7000ft it is intended that aircraft would fly a relatively direct route to/from the network
Waverley Borough Council	Blank	Based on the information available and without access to the database it is not possible to establish whether this design principle has been met.	exit/entry point. The direct route would optimise track mileage and subsequently aim to reduce fuel burn and CO2 emissions. We may however make small lateral adjustments to optimise the route between 4-7000ft for noise. In order to be able to optimise the routes, we are dependent on
People Against Gatwick Noise and Emissions (PAGNE)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle	information from NERL about the airspace above 7000ft and therefore we expect these options to develop and evolve as further information becomes available. Later in the process in stage 2, we will undertake assessments which will be documented as part of
Surrey Hills AONB Planning	Blank	Do not feel able to respond to any of these specialist questions	our Design Principle Evaluation and Initial Options Appraisal to understand an options potential for track milage, fuel burn and CO2 savings.
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have	
Plane Justice Ltd	Blank	Unsure	



Stakeholder org.		You Said	We did
Gatwick Area Conservation Campaign (GACC)	Blank	Don't Know – Insufficient information to determine whether options will meet this design principle	
Betchworth Parish Council	Blank	DON'T KNOW There is too little information to agree or disagree	

Table 41 Q2. Design Principle 7 (DP7) Long Term Predictability & Adaptability – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We Did
Communities Against Gatwick Noise and Emissions (CAGNE)	No	By removing Noise Preferential Routes, we see Gatwick seeking to remove the predictability of departures to the detriment of communities below	As part of our comprehensive list of options, we've included options that look to minimise newly overflown and options that minimise total population overflown. Of these options, some retain the existing NPRs and others deviate from the existing NPRs. At this stage, we haven't ruled out or favoured any options – shortlisting comes later in the process once we've had the opportunity to understand an options performance and its benefits/impacts. NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport (DfT). The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot bypass this. As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes.
NATS (NERL)	Yes	PBN arrival concept will require further development with NATS.	Engagement will be ongoing through bilateral meetings.
Gatwick Obviously Not (GON)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle	We've incorporated DP7 (Long Term Predictability & Adaptability: Should offer long term predictability of flight paths and respite and offer adaptation for the future airport development scenarios outlined in our draft Masterplan) into our Comprehensive List of Options by designing some options to include
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Not enough information, and too many issues remain to be resolved.	respite configurations which could be predictably alternated. The use of PBN routes in most options also provides predictability of flight paths. Later in the process in stage 2, we will undertake assessments which will be documented as part of our
Waverley Borough Council	Blank	Based on the information available and without access to the database it is not possible to establish whether this design principle has been met.	Design Principle Evaluation to assess each option's performance against this design principle. As part of the Initial Option Appraisal (Step 2B), we will assess the benefits and impacts of the respite configurations vs fixed options.
Tandridge District Council	No	Options do not identify how this DP will be taken into account.	
Surrey Hills AONB Planning	Blank	Do not feel able to respond to any of these specialist questions	



Stakeholder org.		You Said
People Against Gatwick Noise and Emissions (PAGNE)	Blank	Don't know – Insufficient information to determine whether options will meet this design principle
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have
Plane Justice Ltd	Blank	Unsure
Gatwick Area Conservation Campaign (GACC)	Blank	Don't Know – Insufficient information to determine whether options will meet this design principle
Betchworth Parish Council	Blank	DON'T KNOW There is too little information to agree or disagree

Table 42 Q2. Design Principle 8 (DP8) Deconfliction by Design – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder org.		You Said	We Did
Horsham District Council	Blank	No comment. This will be informed by consultation with airspace users and other airports.	-
Warnham Parish Council	No	Lack of detail to the historic routes prohibits this	We've developed our Comprehensive List of Options to be a starting point that is most optimal for Gatwick's Design Principles. This is partially because at this stage, we do not have detailed information from neighbouring airport's about their proposals or NATS NERL for the airspace above 7000ft.
Gatwick Obviously Not (GON)	No	As the team have confirmed in their presentation pack "we haven't considered connectivity with the upper airspace network, other airports and how the departure options and arrival options might interact"	As and when information becomes available, we will incorporate this into our Design Principle Evaluation (DPE) or Options Appraisal. The next step of the CAP1616 process is the DPE and we will look at conflicts between overflight within option, potential overflight between arrival and departure options and potential overflight with neighbouring airports (informed by the ACOG Masterplan).
People Against Gatwick Noise and Emissions (PAGNE)	No	Upper airspace join-points remain unknown and flight path conflicts with other airports are yet to be analysed.	It's important to note that we expect the options to develop and evolve as we progress through the process; this means that after evaluation and appraisal, the options may be adjusted to be optimised; this will be informed by the outcomes of the assessment and will be documented. In doing this, we
Betchworth Parish Council	No	Many of these proposed options conflict with LHR flight paths. Developing options in isolation will create a sub optimal result.	may revisit the Airspace Design Database in order to identify suitable alternative routes that help us to optimise the option design.
Gatwick Area Conservation Campaign (GACC)	No	As the team have confirmed in their presentation pack "we haven't considered connectivity with the upper airspace network, other airports and how the departure options and arrival options might interact"	
Waverley Borough Council	Blank	Based on the comprehensive set of options it appears there will be overlapping routes and it is unclear how this will work in practice. It is noted that many of the options involve flying over areas of AONB which should be avoided to minimise the adverse impact on the tranquillity and character of the protected landscape. It is also unclear whether there would be any conflict with flight paths from surrounding airports and whether certain communities would be overflown by aircraft from more	



Stakeholder org.		You Said
		than one airport. This information should be provided to enable stakeholders to consider whether this design principle has been met.
Tandridge District Council	No	Options do not identify how this DP will be taken into account.
Surrey Hills AONB Planning	Blank	Do not feel able to respond to any of these specialist questions
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have
Plane Justice Ltd	Blank	Unsure
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	No	Not enough information, and too many issues remain to be resolved.

Table 43 Q2. Design Principle 9 (DP9) Locally Tailored Designs – Is the list of options sufficiently comprehensive? You said, we did

Stakeholder Org.		You Said	We Did
Communities Against Gatwick Noise and Emissions (CAGNE)	No	the tailoring is very much in favour of Gatwick and the noise groups that dominate the Gatwick noise forums and this process to benefit there areas whilst moving noise over new areas without consulting	The Airspace Design Database methodology aims to provide a fair and transparent way of identifying the initial comprehensive list of options that is driven by data. The next steps of the process involve a Design Principle Evaluation to shortlist options before an Initial Options Appraisal where further shortlisting may take place. This is then submitted to the CAA to ensure we have undertaken the assessments fairy and transparently, and if the CAA are satisfied, we will the progress to Stage 3 of the CAP1616 process. At Stage 3, we will prepare for and undertake a full public consultation on the proposals.
Horsham District Council (Team Leader Environmental Protection)	No	unclear what this means and what priority is accorded to this process	
Tunbridge Wells Aircraft Noise Study Group (TWANSG)	No	The options for providing respite have not taken account of local solutions, in particular work on marginal analysis for defining FED.	We've incorporated DP9 (Locally tailored designs: Airspace design should enable decision which affect
Tunbridge Wells Anti Aircraft Noise Group – Acting Secretary (TWAANG)	No	Not enough information, and too many issues remain to be resolved.	how aircraft noise is best distributed to be informed by local circumstances and consideration of different options including multiple routes and the management of overflights (as per Limit Adverse Nosie Effects), into our Comprehensive List of Options by designing a range of options using the outputs from the airspace design database which gives us lots of specific information about the areas around Gatwick. We've developed options that have multiple routes, respite configurations, single track
Head of Planning and Economic Development	Blank	Based on the information provided it is not possible to establish whether this design principle has been used when drawing up the options.	concentration and we will explore the benefits and impacts of these as part of the next steps of the process.





Stakeholder Org.		You Said	We Did
Waverley Borough Council			As part of this round of engagement, we have taken into account specific local stakeholder feedback to develop further options on our comprehensive list; for details please see the feedback that influenced our final comprehensive list of options section above.
Mole Valley District Council – Planning Policy Team	No	R3 and R4 turn-backs both affect MV villages (see Q3)	our infair comprehensive list of options section above.
Warnham Resident	No	How can this be the case if you failed to consult	
Tandridge District Council	No	Options do not identify how this DP will be taken into account.	
Surrey Hills AONB Planning Manager	Blank	Do not feel able to respond to any of these specialist questions	
Salfords and Sidlow Parish Council	No	Depends on what other, possible negative, effects this may have	
Plane Justice Ltd	Blank	Unsure	



Table 44 Q3. Are there any other considerations that we should take into account regarding the development of a comprehensive list of options for the ACP? You said, we did

Stakeholder		You Said	We Did
org.			
Communities Against Gatwick Noise and Emissions (CAGNE)	Yes	From attached email: Question 3 – NO (1) Noise is the number one consideration up to 4,000ft, not the saving of CO2 or fuel, and yet much of TRAX mapping does not take this into account when it comes to proposals submitted in this document. Mapping option G would seem to be the routing that minimises those to be newly overflown.	(1) Our comprehensive list of options includes options which focus on the noise design principles up to 7000ft as well as some options that look to balance noise and CO ₂ by prioritising noise between 0-4000ft and then balancing CO ₂ and noise beyond this. We've noted that these options that look to balance noise and CO ₂ will be adjusted laterally to account for noise, once further information is know from NERL about the airspace above 7000ft. Options on the list include concentrated PBN routes, and configurations that aim to mitigate the potential impact of concentration through respite. The options on the list, with the exception of those based on the existing centrelines, are not based on any route/trials at Gatwick.
		Mapping option H may avoid newly-overflown issues if Continuous Climb Operations (CCO) are successful in coming into play at 3,000ft to take the noise away from those to be newly-overflown. Westerly Departures – It is clear from mapping option E that Gatwick Airport has proposed a new	Gatwick's design principles do not make specific reference to avoiding overflight of new communities and therefore at this stage, we are required to explore all viable options; later in the process we will evaluate and appraise the benefits and impacts of each option compared to the 'do nothing' pre-implementation baseline before shortlisting.
		departure route (ADNID). The trial departure route in 2014 over new residents and because of this in 2014, CAGNE was formed. The imposition of a new route without any notice caused great anger due to the very low heights of aircraft and the significant noise created over our rural communities and new areas not previously impacted by aircraft noise. We believe ADNID (a westerly departure route that heads straight towards the southwest) would go against all DP as it would impact new communities and populated areas that have not been flown over before.	The comprehensive list of options includes options that aim to minimise population newly overflown i.e. avoid overflight of new areas, <u>and</u> options which look to minimise total population overflown which may overfly new areas. Both sets of options have been partially driven by DP3 The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise. Of these options, some retain the existing NPRs and others deviate from the existing NPRs. At this stage, we haven't ruled out or favoured any options – shortlisting comes later in the process once we've had the opportunity to understand an options performance and its
		(2) We do not see why the Noise Preferential Routes (that have served in dictating where departures fly) need to be removed, as homes purchased under NPR are reduced in value compared to those not under flight paths. With no compensation offered, we do not see how residents will accept new routes in giving respite to those currently-overflown. There is no compensation offered with FASIS for loss of house-value and decline in wellbeing due to new	benefits/impacts. NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport (DfT). The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot
		flight paths over our communities. Predictability is the whole point of an NPR and so these should remain, with dispersed movements. Easterly Departures – all mapping shows new routes to fly over new communities in the south instead of following the historic route 2 direct to the coast. This routing, and the routing of westerly departures, would ensure that these residents have a substantial increase in totality of noise endured by multiple	bypass this. As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes.
		routes. Options F and H have some grounds for consideration.	(2) The airspace design database includes overflight data which is calculated using the CAA's
		To join arrivals to the ILS at 5nm, is unacceptable as, at present, these residents already suffer the ILS but with reduced noise, as planes are able to glide in at idle power with a 2.5-degree angle because they join further out from the runway. All efforts such as CAP2302, low noise metrics, aim to benefit those further out. If this proposal to join the ILS at 5nm is considered, we will see this move as a retrograde step in seeking to significantly increase noise for those close to the runway and newly-flying over built-up areas closer to the runway. All arrival options (east and west) cannot be considered in their current form due to the arrival join to the ILS being brought so close to the runway. This must be seen as a direct request to Gatwick management	 (2) The airspace design database includes overlight data which is calculated using the CAA's 48.5° definition of overflight. (3) Stage 1 was completed in July 2019 when the CAA validated the engagement activities undertaken and passed the proposal through the Stage 1 Gateway. At Stage 2, Gatwick has to be consistent with the Stakeholders engaged at Stage 1 and these stakeholders are all listed on the CAA Airspace Change Portal within Gatwick's Stage 1B submission document page 55-61. Attendees at our Stage 2 engagement workshops are representatives of the local communities and the public. Wider engagement will take place as the ACP progresses and more people will be drawn in at the appropriate stage in the ACP process. Parish councils will



Stakeholder org.	You Said	We Did
	to appease noise groups that have the monopoly on Gatwick statutory and noise forums. Arrivals joining at 5nm – 8nm would fly planes over communities at less than 1,500ft whilst vectoring (turning), so increasing noise with flaps down, wheels down, (3-5 decibel increase) speed gear and nose lift to take speed off due to the short distance to go to landing. The GACC noise groups proposed study to remove the Secretary of State Noise Abatement Procedure (NAP) at night which looked to join the ILS at 6nm and a 50/50 split north and south. Without consulting outside of the noise forums, this study must be seen as flawed due to the monopoly on the noise forums at Gatwick who seek to move noise over those closer to the runway at far lower heights. The higher population count at 8nm illustrates the impact on the ground closer to the runway. We quote the findings of the NAP removal study — 'Overall, the study findings have confirmed that changes to the MJP will redistribute the noise generated by arriving aircraft according to the new distribution of flight tracks; reducing noise impacts in one geographic area and transferring noise to new areas.' What the ILS study missed in its conclusions is that the noise would be moved over new areas at far lower heights, compared to the join further out at 12.5nm, thus ignoring the fact that noise is the number one consideration up to 4,000ft. The study also missed CAP2302 on low metrics in that it recognised the current inability to monitor LP/LD performance and encourage development of automated systems to monitor landing gear deployment. Any reference to Fair and Equitable Distribution (FED) would be deemed flawed, as the study has not been FED to those who could be newly impacted by the report and FASIS, i.e. it is not FED to ignore those who could be significantly newly-impacted by Gatwick's airspace changes. CAGNE are concerned that key points are based on research conducted at Heathrow, which are not relevant to the rural areas that surround Gatwick. Respite, as de	We Did be engaged, in separate workshops, as part of the next round of engagement on the Initial Options Appraisal.



Stakeholder org.		You Said	We Did
		CAA defined overflight in order to aid decision making during airspace change proposals in the UK. This complements the DfT's Air Navigation Guidance (ANG)19, which recommends minimising the number of people overflown at low altitudes. CAA suggests the elevation angle as an appropriate parameter to define an overflight. Elevation angles of 60° and 48.5° are advocated as thresholds for the definition of an overflight (due to the link to noise attenuation). At angles above 60° aircraft noise on the ground is mainly influenced by the propagation distance between the source and the receiver. At angles below 60° other factors related to atmospheric scattering effects, engine shielding, and ground absorption (at very low elevation angles) come into action influencing aircraft noise on the ground.	
		At an elevation angle of 60°, the sound level from an aircraft will be 1.5 dB lower than an aircraft flying directly overhead at the same height. As a note of reference, it is widely considered that an increase or decrease of 3 dB (twice or half the acoustic energy respectively) is the lowest difference in sound level that the average person can perceive (when the two sounds are not heard directly one after the other). The angle of elevation which results in a decrease in level of 3 dB (compared to an aircraft flying directly overhead) is 48.5°.	
	V	(3) This whole process has lacked the input of a broad geographical spectrum of stakeholders and, as such, must be seen to be flawed.	
Horsham District Council	Yes	Please see response to question 1. As this text box does not expand. Areas of locally important amenity such as local nature reserves, ancient woodland, outdoor sports facilities should be considered along with AONB's.	Duplicate feedback: please see response to question 1
		The magnitude of predicted change in the noise climate should be reported. The majority of the areas to be overflown are rural and characterised by dispersed settlement rather than typically urban settings such as around Heathrow.	
		The impacts of concentration of flights along new or established routes should be considered.	
		Allocated large scale expansion of settlements and new neighbourhoods as set out in local authority development framework plans should be included in the allocation process. For Horsham District Council the West of Ifield, North Horsham or Billingshurst and Southwater expansions are not shown on the population heat maps.	
Warnham Parish Council	Yes	(1) It is clear from mapping E that Gatwick Airport has stipulated a departure route (ADNID) that they trialled in 2014 over our parish. This caused great anger due to the lowness of the route and the significant noise created over our rural parish and new areas not previously impacted by aircraft noise before.	(1) At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles.
		(2) We do not see why the noise preferential routes, that have served in dictating where departure fly, need to be removed as homes purchased under NPR are reduced in price compared to those not under flight paths. We believe ADNID (westerly departure route that head straight towards the southwest corner) would go against all DP as it would impact new communities that have not been flown over before	With the exception of the options that are based on Gatwick's existing route centrelines, the options developed for the comprehensive list are not based on any previous routes or trial routes; they have been developed using the Airspace Design Database and the Design Principles, or as outcomes from this round of stakeholder engagement.
		and populated areas. There is no compensation offered with FASIS to loss of house value and decline in wellbeing due to new flight paths over our parish. To join arrivals to the ILS at 5nm, not 8nm as historically flown, is unacceptable as our parish already feels the full impact of the instrument landing system and three departure routes (four if you include WIZAD as you do in some of your mapping) Our	(2) As part of our comprehensive list of options, we've included options that look to minimise newly overflown and options that minimise total population overflown. Of these options, some retain the existing NPRs and others deviate from the existing NPRs. At this stage, we haven't



Stakeholder org.		You Said	We Did
		parish would have no respite with any new routes directly over our parish as we are already sandwiched between routings in the west. Arrivals joining at 5nm – 8nm would fly planes over our parish at less than 1,500ft whilst vectoring (turning) so increasing noise with flaps down, wheels down (3-5 decibel increase) and speed gear, nose lift to take speed off due to the short distance to go to landing. This would not only fly over our parish but also significantly increase noise that goes against many of the design principles for newly impacted communities. Noise is the number one consideration and yet much of your mapping does not take this into account when it comes to our parish and your proposals. Mapping G would seem to be the routing that minimises those to be newly overflown. Any reference to Fair and Equitable Distribution would seem flawed as much of the report is based on findings researched at Heathrow as such are not relevant to the rural areas that surround Gatwick. Respite is not something we as a parish can entertain as there is no full house value compensation for those to be newly overflown. (3) We feel that it is fundamentally wrong that Gatwick Airport has not looked to consult our parish directly as we are a democratically elected body, a statutory tier of local government.	ruled out or favoured any options – shortlisting comes later in the process once we've had the opportunity to understand an options performance and its benefits/impacts. NPRs are treated as part of a suite of Noise Abatement Procedures that are covered under a separate policy and process with the Department for Transport (DfT). The process through which the DfT manage noise abatement procedures are separate and distinct, with dedicated stakeholder consultation requirements and the Airspace Modernisation initiatives cannot bypass this. As Gatwick progresses through the CAP1616 Airspace Change Process we will develop our understanding of the benefits and potential impacts of different airspace design options through the appraisal process. The potential impact of changes to the existing NPRs would be considered as part of this appraisal. If the preferred options arising from the appraisal process involve changes to the existing NPRs, evidence will need to be presented to the DfT for the Government to make a decision on whether to approve the changes. (3) This is not a consultation; this will take in Stage 3. At Stage 2 we are required to engage with the same stakeholders we engaged with during the development of the Design Principles (Stage 1B). Some Parish councils fall into our Stakeholder groups owing to their roles on other groups such as NATMAG and NMB. Gatwick will engage with Parish Councils as part of the third round of engagement at Stage 2 when appropriate. This is beyond the CAP1616 requirements but we recognise the importance for local parish councils to be involved in the ACP process. We plan to do this during the third round of stakeholder engagement when we have our shortlist of options and pertinent Parish Councils can be identified. It is planned that separate sessions will be held for these stakeholders so that we can explain the overall ACP process and our methodology to date, as well as present our shortlist of options.
Southdown Gliding Club	Yes	There is an emphasis on the noise impact, three areas we would also like to be considered within the options are 1) Raising the base of unnecessary lower level controlled airspace, particularly the 2,500ft base of class D which extends a considerable distance to the south of LGW and is unlikely to be used given the performance of modern aircraft. 2) Steeper climb profiles and steeper IAP's, this will help with noise and reducing the amount of CAS required. 3) A higher transition altitude (18,000ft) to help with continuous climbs reducing noise, reducing the CAS required and enabling more capacity to be available.	 (1) As part of the Step 2B Initial Options Appraisal we will review benefits and impacts to Controlled Airspace (CAS) and this will include looking at the potential to raise the base of controlled airspace where possible to do so. (2) The climb profiles used for our Comprehensive List of Options are relatively conservative to account for lower slower aircraft however we will examine this for the full fleet mix in further detail as part of the Step 2B work. Steeper IAPs could be explored at Stage 3 once shortlisted options are known. (3) We're aware of the constraints of the current Transition Altitude (TA) and have raised with this NATS. Unfortunately it is outside the scope of Gatwick's ACP as a change of TA would be required across the whole of UK airspace.
Tunbridge Wells Aircraft Noise Study Group (TWANSG)	Yes	The definition of "newly overflown" needs to be clarified so that it includes all those that have been overflown in the past ten years. This will reflect the impact of changes before and after the changes made in 2013. As far as westerly arrivals are concerned, any flights joining at more than 7 nautical miles should be not be classified as "newly overflown".	The Airspace Design Database contains 2019 data that has been adjusted to reflect the extant Route 4 procedure. This was selected as it aligned with the requirements of later parts of the CAP1616 process. As part of Step 2A, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. This scenario must take into account known or anticipated factors that might affect the baseline such as planned housing developments close to the airport, forecast growth in air traffic, or expected changes in airlines' fleet mix.



Stakeholder		You Said	We Did
org.			Our assessment of newly overflown must examine the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026. At the point of implementation (2026 onwards), it is expected that Gatwick will have recovered from the impacts of COVID-19 therefore 2019 was chosen as it was a year which most reflected a scenario where the airspace, and traffic patterns, had recovered from the impacts of COVID-19. The 2019 data will be developed to reflect the known and anticipated factors when describing the pre-implementation scenario.
Gatwick Obviously Not (GON)	Yes	As part of the FASt team's approach to the development of a comprehensive list of options capable of delivering effective noise dispersal, GON would wish the following general principles adopted: 1. Noise reduction obligation: The aviation industry should be required to ensure that all safe and reasonably practical measures to reduce noise emissions, exposure and impacts are expeditiously implemented. 2. Balance: A fair balance should be struck between the interests of the aviation industry and people adversely affected by its operations, including that growth is equitably and proportionately balanced by reductions in noise and other environmental impacts. 3. Capacity/noise trade off: Reduction in airport capacity should not be a reason to reject dispersal options that would reduce the noise burden imposed on communities. 4. Night flights: Flights should be banned at night, for a full eight-hour period. 5. Areas of Outstanding Natural Beauty: airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty: airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty: airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty: airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty; airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty; airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty; airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty; airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty; airspace routes and aircraft noise that affects an area (rather than considering individual flight paths separately). 7. Measurement: Aircraft noise should be measured and reported using metrics that fully reflect their impact on people. Both average noise an	(1) We've built our comprehensive list of options using the Design Principles (DPs) including Design Principles 3: The airspace design shall aim to limit and where possible reduce adverse impacts of aircraft noise. This aligns with current regulation. As part of the Initial Options Appraisal (IOA) at Step 2B we will compare the noise benefits and impacts of an option against the 'do nothing' pre-implementation baseline, to understand if we are able to achieve a reduction compared to current day. (2) (3) As part of the Initial Options Appraisal (Stage 2B) and the Full Options Appraisal (Stage 3) we are required to assess the benefits and impacts across a variety of groups including Communities, Airlines, General Aviation. Details of this are shown in table E2 of CAP1616. Those benefits and impacts will be balanced where determining which options are shortlisted and proceed to the next stages of the ACP. The FASI-S ACP must also meet the Airspace Modernisation Strategy (CAP1711). CAP1711 describes the objective as: Deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. The AMS includes objectives/parameters where we will be required to achieve a balance between capacity, noise, controlled airspace and emissions. (4) To ban night flights is outside the scope of the ACP. As part of our Comprehensive List of Options, we have developed some night time options using night based metrics/outputs from the airspace design database. The other options on the comprehensive list could also be operated at night. The Initial Options Appraisal will include analysis of the benefits and impacts of an option compared to the baseline, including during the night time period. (5) When developing options, we've used overflight data from the airspace design database to where possible avoid, or minimise overflight of AONBs. Overflight of AONBs and tranquil areas will be appraised in further detail as part of the Initial Options Appraisal. (6) This will be tak
		the ILS join (2013 ILS minimum join changed from 7nm to 10nm) and with the drop in volumes due to the	and this will be based on the populations that we expect will be overflown by the existing



Stakeholder	You Said	We Did
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	pandemic currently allowing aircraft to be routed closer to the runway, it is currently difficult to precision, which communities should be considered newly overflown. We would certainly sug project team's decision to use the 2019 overflight data is far too narrow a definition. (9) Any change to existing routes should require a full CAA Airspace Change process. This s quantified consideration of all route options (both concentration and dispersal) and consultation impacted and potentially impacted communities. Airspace change processes must recognise significant change to numbers of ATMs and/or fleet mix and/or times of day/night may have so community impacts. The process should incorporate properly designed and executed baseling assessments and regular post implementation reviews (say after 1, 3, 6, and 10 years or untite ACP) which assess actual noise reduction outcomes against the baseline, taking account of stechnology and other change, with powers to require remedial action, including the implement operating restrictions. (10) Finally, the aviation industry should be required to pay all external costs its activities impositely at large. This should include compensation for loss of property value caused by airspace or increases in the use made of airspace.	will then be used to compare against the benefits and impacts of each option. (9) This engagement forms part of Stage 2 of the CAP1616 Airspace Change Process for this FASI-S Airspace Change. (10) Step 2A of the CAP1616 process requires us to set out a list of viable options for the airspace change. Later on in Step 2B, we will start to explore the benefits and impacts of each option and, where appropriate and aligned with government policy, we will detail any anticipated costs. At Stage 3, as part of the full options appraisal, these costs will be fully quantified.
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	 (1) Health impact is especially significant when it comes to numbers overflown, due to the pulimplications. The metrics used in the analysis falls far short of the recommendations of the Welsewhere in the world. (2) The analysis acknowledges the impact on AONBs, but there is no mention of sensitive sit hospitals and Schools. (3) The issue of appropriate metrics needs to be thoroughly explored, present UK standards date and indulgent of the aviation industry. This is a highly significant and sensitive issue, pawhen PBN routes and increasing frequency of disturbance are to be considered. (4) We are concerned that arguments are put forward that the severity of impact is less in tow rural settings. We suggest that many residential areas in towns are suffer no more ambient rural settings, and the noise from fast moving traffic on main roads can carry far over the council. (5) Tunbridge Wells should be treated on a par with AONBs and National Parks because of it of recreational common land, woods and parkland which are heavily used because they are reaccessible to a large population. (6) The optimum height of arrivals needs to be discussed, it is no good encouraging increase when this may require greater use of noisy flaps and spoilers to increase the rate of descent, as newer aircraft are aerodynamically more efficient. It is very noticeable on the ground that can be disturbingly noisy, and lower aircraft can be comparatively quiet. (7) The presentation needs more and better information to be properly understood. We would clearer maps/ contour maps for the various levels of not overflown-ness/ markers on track markers on track markers on track markers on track markers. 	impacts of each option compared to the baseline. This will include Laeq contours, which are the primary measure of 'total adverse effects' of noise. At the options development stage, without combining thousands of permutations of arrivals and departure options, it is not possible to generate Laeq contours, therefore we have used Sound Exposure Level (SEL) contours as an indicator of Laeq. SEL data forms part of the calculation of Laeq. Later on in the process, data from the Laeq contours will be used to populate webTAG which monetises the health impacts of noise. For each one decibel change in average noise level, a monetary value is assigned for the change in the following health impacts: amenity (annoyance), acute myocardial infarction, dementia, stroke, and sleep disturbance. These values are based on the latest evidence from the World Health Organisation on the link between noise exposure and health impacts ⁶ . (2) When developing options, we have used population data which typically correlates with areas where noise sensitive buildings are located. We've used this methodology in order to achieve a proportionate approach when assessing the thousands of notional flight paths. Overflight of noise sensitive sites such as schools, hospitals and places of worship will be fully assessed as part of the Step 2B Initial Options Appraisal. (3) The metrics we've used within the Airspace Design Database are indicators of the primary and secondary metrics used as part of the CAP1616 process. The DfT and CAA are responsible for the regulation which we follow as part of this ACP. (4) Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the feedback that influenced our final comprehensive list of options
	clearer maps/ contour maps for the various levels of not overflown-ness/ markers on track ma	a morado.
	where 4,000ft is expected (change of priorities) for a start.	

 $^{^{6} \, \}underline{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment} \,\,\, \underline{\text{data/file/669423/webtag-for-non-experts.pdf}} \,$



Stakeholder		You Said	We Did
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		(8) All options should seek to reduce noise impact, never just mitigate any increase.	(5) As part of the Step 2B Initial Options Appraisal we will undertake assessment of benefits and impacts to tranquillity and biodiversity as well as noise; these assessments include areas designated as historic parks and gardens.
		(9) Night flights are a significant issue for the town, especially as the 10nm night-time joining point rule forces night arrivals in the direction of the populated areas.	(6) Detailed noise assessments and descent profile analysis will be undertaken as part of the Full Options Appraisal at Stage 3. The descent profiles of aircraft will be influence by the
		(10) The obligation to achieve a balance between the interests of the aviation industry and those adversely affected by its activities should be among the objectives.	airspace above 7000ft, which is currently covered under a separate ACP sponsored by NATS NERL. As more information from the NERL ACP becomes available, we will incorporate this into our Design Principle Evaluation and Options Appraisals.
		(11) The FASI(S) project should not proceed without WebTrak being brought fully up-to-date. Any changes are likely to have an uneven effect on outcomes which would alter decisions.	(7) At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside detailed appraisal of the benefits and impacts of each option.
			(8) We've built our comprehensive list of options using the Design Principles (DPs) including Design Principle 3: The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise. This aligns with current regulation. As part of the Initial Options Appraisal (IOA) at Step 2B we will compare the noise benefits and impacts of an option against the 'do nothing' pre-implementation baseline, to understand if we are able to achieve a reduction compared to current day.
			(9) The Step 2B IOA will include analysis of night time impacts.
			(10) As part of the Initial Options Appraisal (Stage 2B) and the Full Options Appraisal (Stage 3) we are required to assess the benefits and impacts across a variety of groups including Communities, Airlines, General Aviation. Details of this are shown in table E2 of CAP1616. Those benefits and impacts will be balanced where determining which options are shortlisted and proceed to the next stages of the ACP. The FASI-S ACP must also meet the Airspace Modernisation Strategy (CAP1711). CAP1711 describes the objective as: Deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. The AMS includes objectives/parameters where we will be required to achieve a balance between capacity, noise, controlled airspace and emissions.
			(11) The Department for Transport (DfT) publish the WebTag calculations and the associated guidance, therefore the DfT would be responsible for any updates to the guidance. The use of WebTag is a requirement of the CAP1616 process and therefore GAL are required to include this quantitative monetary analysis as part of our appraisals. Any outputs of WebTag however will be presented alongside other quantitative information and a qualitative conclusion, when determining the benefits and impacts of each airspace change option.
Waverley Borough Council	Yes	Comments: The information currently provided gives a partial picture of the process that Gatwick Airport have used to establish the route options. Without access to the database that Gatwick Airport have used it is impossible to establish if the options presented meet the design principles or if other options exist which have not been shown that more effectively meet the design principles.	Duplicate feedback, please see response to question 1.



Stakeholder		You Said	We Did
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Mole Valley District Council	Yes	 (1) The metrics of 'newly flown over' and 'total population flown over' do not differentiate between urban areas and rural areas. The perception of being flown over in a rural area will be greater than those in the urban area. Respite is mentioned but little evidence has been given about the benefits of this respite. (2) Mole Valley is underneath turn-backs for both Route 3 and Route 4 departures. Obviously these are at different times, but their paths are not that far apart. 30% of R3 departures fly over Brockham, Betchworth and South Holmwood below 6000ft and are also beneath a Heathrow track. 30% of R4 departures are turning right over Capel then Beare Green and South Holmwood below 4000ft. Taking into account the desire for Fair and Equitable distribution these turn-backs do not offer respite for these villages nor do they offer a fair and equitable distribution for dwellings under these turn-backs. 	 (1) Following Stakeholder feedback, we have developed options that aim to seek a balance between rural and populated areas, factoring in ambient noise from road and rail. For more information, please see the feedback that influenced our final comprehensive list of options section above. (2) As part of the Initial Options Appraisal (IOA) we will compare each option against a 'do nothing' pre-implementation baseline. This will allow us to understand the relative benefits and impacts of an option compared to current operations. As part of this, we will analyse the benefits and impacts of the respite configuration options. As part of this ACP, we have also committed to considering the outcome of the Fair and Equitable Distribution (FED) study should there be appropriate outcomes that could be incorporated into the ACP.
GATCOM member for Burstow PC and deputy lead member for noise on NATMAG.	Yes	Should there be a DP10 – Time based departure operations? To be inclusive to cover when aircraft reach the upper busy skies above 7000 feet when NATS are engaged. Admittedly, should be taken into account when ACOG are developing the Master Plan.	Our Stage 1 Design Principles have been agreed and the gateway approved by the CAA, therefore we're unable to go back and add in further principles. There is however technology that is being developed around time based departures which could be integrated into Gatwick's options should it be adopted by NERL.
NATS (NERL)	Yes	Whilst the options appear comprehensive these will need to be assessed against the options of other airport sponsors and network feasibility.	Agreed. This is also noted in the presentation and outlined in our next steps slide. We will continue to collaboratively work with NATS NERL as part of the bi lateral meetings.
Tandridge District Council	Yes	 (1) The approach to developing the comprehensive list of options includes taking into account the area of AONB that is overflown by a particular flightpath. Unlike other AONBs, the Surrey Hills has just embarked upon a review of its boundary, led by Natural England. This review will result in an expansion of the AONB and candidate areas for the extension of the AONB are already available and information regarding further study areas and additional candidate areas for expansion will be available imminently. From what has been presented to us, we do not believe this has been taken into account sufficiently. We wish to be reassured that this essential information will be considered in the approach of developing the list of options for the ACP. (2) We also wish to comment on how the information is presented in this slide pack. Although the illustrations of the differing flight paths are clear, for anyone unfamiliar with the map of the surrounding Gatwick area and wishing to scrutinise the individual approaches/take-offs, the slides are difficult to navigate the precise location of the flight path. This is particularly relevant for residents in the district wishing to see if any plans on potential flightpaths may affect their homes. (3) We are also concerned that this project is being considered in isolation from other projects, such as the Route 4 airspace change, the DCO northern runway proposals and any known London proposed airspace changes. All these projects will have an implication for all neighbouring authorities to the airport and the residents and businesses within these areas. As such, they need to be looked at collectively and the implications of them aligned into a comprehensive design of the future airspace. 	(1) We're aware of the ongoing consultation around the changes to the Surrey Hills AONB. At the time of developing the database the consultation was not underway however we've committed to taking into account the changes to the AONB when we undertake the Initial Options Appraisal at Step 2B. (2) At this stage in the process the purpose of the engagement is to understand if the Comprehensive List of Options have been developed in line with the design principles, and that we have accounted for stakeholder concerns related to those design principles. The information as part of the presentation has been provided to help stakeholders answer these questions. At Stage 3 of the process, our shortlisted options will proceed to public consultation. At this stage we will publish detailed maps and noise contours alongside detailed appraisal of the benefits and impacts of each option. (3) The FASI-S ACP, Northern Runway DCO, and the Route 4 ACP are separate processes however the FASI-S team are aware of the progress with the route 4 ACP and where appropriate to do so, information about the route 4 ACP will be incorporated into the FASI-S process. Quantitative appraisal of different scenarios with/without DCO will form part of the Full Options Appraisal at Stage 3. In terms of neighbouring airports, we've developed our Comprehensive List of Options to be a starting point that is most optimal for Gatwick. This is partially because at this stage, we do not have detailed information from neighbouring airport's about their proposals. As and when information from neighbouring airport's becomes available, we will incorporate this into our Design Principle Evaluation or Options Appraisals.

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Stakeholder		You Said	We Did
org.			
People Against Gatwick Noise and Emissions (PAGNE)	Yes	The FASI team should take account of the following key principles: 1. Noise reduction obligation: The aviation industry should be required to ensure that all safe and reasonably practical measures to reduce noise emissions, exposure and impacts are expeditiously implemented.	(1) We've built our comprehensive list of options using the Design Principles (DPs) including Design Principle 3: The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise. As part of the Initial Options Appraisal (IOA) at Step 2B we will compare the noise benefits and impacts of an option against the 'do nothing' pre-implementation baseline, to understand if we are able to achieve a reduction.
		2. Balance: A fair balance should be struck between the interests of the aviation industry and people adversely affected by its operations, including that growth is equitably and proportionately balanced by reductions in noise and other environmental impacts.	(2) (3) As part of the Initial Options Appraisal (Stage 2B) and the Full Options Appraisal (Stage 3) we are required to assess the benefits and impacts across a variety of groups including Communities, Airlines, General Aviation. Details of this are shown in table E2 of CAP1616. Those benefits and impacts will be balanced where determining which options are shortlisted
		3. Capacity/noise trade off: Reduction in airport capacity should not be a reason to reject dispersal options that would reduce the noise burden imposed on communities.	and proceed to the next stages of the ACP. The FASI-S ACP must also meet the Airspace Modernisation Strategy (CAP1711). CAP1711 describes the objective as: Deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are
		4. Night flights: The biggest single complaint that residents have is night flights and these should be banned for a full eight-hour period.	affected by UK airspace. The AMS includes objectives/parameters where we will be required to achieve a balance between capacity, noise, controlled airspace and emissions.
		5. Total impacts: Account should be taken of all routes and aircraft noise (departures and arrivals) that affects an area rather than considering individual flight paths separately.	(4) Policy measures that are intended to constrain demand, such as restrictions to night flights are outside the scope of the ACP. As part of our Comprehensive List of Options, we have developed some night time options using night based metrics/outputs from the airspace design database. The other options on the comprehensive list could also be operated at night. The
		6. Measurement of Noise: it's vital that the way that aircraft noise is measured fully reflects the impact on communities. We therefore believe that, in addition to using the more traditional average noise metric	Initial Options Appraisal will include analysis of the benefits and impacts of an option compared to the baseline, including during the night time period.
		(Leq), the noise event frequency metric (N>) should be used to fully take account of frequency of overflight and that both metrics should be given equal weighting in all circumstances.	(5) This will be taken into account qualitatively as part of the Design Principle Evaluation and Initial Options Appraisal, and quantitively as part of the Stage 3 Full Options Appraisal.
		7. Newly Overflown Areas – in our view aircraft noise should be dispersed within areas that have historically been impacted by aircraft and that the target disposition of traffic should take account of historical circumstances, with particular reference to the pre 2013 traffic profile. We feel new areas should not be overflown and material increases in concentration within areas previously overflown should be	(6) CAP1616 (Appendix B, page 162 -165) outlines the primary and secondary metrics which are required to be presented as part of the ACP at the Options Appraisal stage. This includes Leq 16 hour (day) and 8 hour (night), N60/N65 contours and overflight contours.
		avoided. However, if a significant increase in air traffic is forecast, and to such an extent that noise levels would breach WHO recommended limits (including increases in noise for communities that are already above those limits), then the option of flying over new areas should be considered. In these circumstances, a full airspace change process should be followed.	At this options development stage, we have used indicators of some of these metrics in order to proportionately analyse the thousands of notional flight paths. As part of the next steps of the process, where we undertake options appraisal, we will appraise the options qualitatively and quantitively using the primary and secondary CAP1616 metrics.
		Given the sensitivities associated with flying over new areas we would also suggest that a clear definition of "newly overflown" is required. With historic dispersal driven by ATC vectoring, with changes to the ILS join (2013 ILS minimum join changed from 7nm to 10nm) and with the drop in volumes due to the pandemic currently allowing aircraft to be routed closer to the runway, it is currently difficult to confirm, with precision, which communities should be considered newly overflown. We would certainly suggest that using 2019 overflight data is far too narrow a definition.	(7) As part of Step 2A of CAP1616, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. As part of this baseline we will define areas of existing overflight and this will be based on the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026. This baseline scenario will then be used to compare against the benefits and impacts of each option.
Betchworth Parish Council	Yes	As part of the development of a comprehensive list of FASI options, in addition to the issues raised in Q1 we would like the following comments to be considered.	(1) As part of the Initial Options Appraisal (Stage 2B) and the Full Options Appraisal (Stage 3) we are required to assess the benefits and impacts across a variety of groups including Communities, Airlines, General Aviation. Details of this are shown in table E2 of CAP1616. Those benefits and impacts will be balanced where determining which options are shortlisted and proceed to the next stages of the ACP. The FASI-S ACP must also meet the Airspace



Stakeholder		You Said	We Did
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		1. There needs to be a fair balance between the benefits of FASI to the airline industry and to the wider community. Whilst FASI will bring increased capacity to airlines and airports this must be balanced with all practical measures possible to reduce the impact of noise and emissions on the community. 2. With increased capacity, dispersal and respite are essential. There are many ways of delivering both dispersal and respite and consultation with the communities is essential. 3. Flights should be banned at night, for a full eight-hour period. FASI will facilitate increased capacity and predictability during the day and therefore an opportunity for airlines to increase their aircraft utilisation during the day. Any remaining shortfall in utilisation should be seen as a cost of the adverse health effects their industry imposes on residents. 4. Account should be taken of all routes from LGW and LHR and the total aircraft noise that affects an area as opposed to considering individual flight paths separately. 5. Aircraft noise should be measured and reported using metrics that fully reflect their impact on people. Both average noise and noise event frequency (N>) metrics should be used on all occasions and should be assigned equal weight in all circumstances. Noise measurement and reporting should cover all areas with noise levels above the limits recommended by the World Health Organisation. 6. Every opportunity should be taken to provide dispersal and respite. 7. FASI will facilitate very significant increases in ATMs for both LGW and LHR. Even with greater dispersal and respite this could have the effect of creating intolerable adverse noise effects, above those recommended by WHO, on some routes. There needs to be a plan to relieve that burden from those routes. 8. All charts published in relation to this consultation should have sufficient geographical data in order to relate route options and overflown paths accurately to the ground. NPR swathes, which are familiar locators, should also be indicated	Modernisation Strategy (CAP1711). CAP1711 describes the objective as: Deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. The AMS includes objectives/parameters where we will be required to achieve a balance between capacity, noise, controlled airspace and emissions (2) As part of this ACP, we have committed to considering the outcome of the Fair and Equitable Distribution (FED) study should there be appropriate outcomes that could be incorporated into the ACP. At Stage 3, there will be a full consultation and therefore an opportunity for the public to feedback on the proposals. (3) Policy measures that are intended to constrain demand, such as restrictions to night flights are outside the scope of the ACP. As part of our Comprehensive List of Options, we have developed some night time options using night based metrics/outputs from the airspace design database. The other options on the comprehensive list could also be operated at night. The Initial Options Appraisal will include analysis of the benefits and impacts of an option compared to the baseline, including during the night time period. (4) We've developed our Comprehensive List of Options to be a starting point that is most optimal for Gatwick. This is partially because at this stage, we do not have detailed information from neighbouring airport's about their proposals. As and when information from neighbouring airport's becomes available, we will incorporate this into our Design Principle Evaluation or Options Appraisals. (5) (6) (7) CAP1616 (Appendix B, page 162 -165) outlines the primary and secondary metrics which are required to be presented as part of the ACP at the Options Appraisal stage. This includes Leq 16 hour (day) and 8 hour (night), N60/N65 contours and overflight contours. At this options development stage, we have used indicators of some of these metrics in order to proportionately analyse the thousands of notional flight paths. As part of the next step
Salfords and Sidlow Parish Council	Yes	As explained in 1 above Salfords & Sidlow Parish Council strongly hold the view that flight paths within the NPRs must not be moved, even if this means fewer people are overflown, because this makes new people overflown. Existing and new people who have moved under an existing flight path have made this choice and they can't be counted as newly overflown. We recognise that once aircraft are outside the NPRs, either by distance or altitude, they can be vectored. The original review made it clear the 2012 flight paths should be respected. Salfords & Sidlow Parish Council accepted this so made no comment. When it transpired Route 4 was moved, and people who were not overflown in 2012 became overflown, the parish council decided this was unacceptable. (Much of the straight section of Route 4, ie after the 180 degree turn, is over the area represented by Salfords & Sidlow Parish Council.) This move led us and others to support Plane Justice, in their successful legal action to have the CAA's 2017 Post Implementation route quashed and the	



Stakeholder		You Said	We Did
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		legacy route reinstated. FASIS must recognise 'the value of preserving the existing pattern of traffic in 2012' when designing future routes for Gatwick and that FASIS and Route 4 are interconnected.	
Plane Justice Ltd	ce Yes	Plane Justice represents communities currently affected by Route 4 departures. As such it is necessary to give due consideration to the reason why the CAA's 2017 Post Implementation Review was quashed, namely 'the value of preserving the existing pattern of traffic in 2012 was not given sufficient weight as part of the airspace change process'. It is imperative that this matter is considered fully in any design of the 'Westerly' departures. When considering historic flight patterns (population heat maps) for Route 4 we recognise that Gatwick are correctly utilising the flight patterns of the 2012 Conventional route and not the 2019 patterns.	
		Although Gatwick have stipulated that they are not seeking feedback on the positions of actual routes at this time, it is difficult to comment in any detail until the effects on the communities that surround the airport are known.	
		It is hoped that consideration of continuous climb (getting higher quicker) is given sufficient priority as this will help reduce the noise pollution. We note in the Statement of Need that Gatwick are considering routes up to 7000 feet, but it is not clear if the list of comprehensive options for easterly and westerly departures depicts altitudes from 0 – 7000 feet, 0 to 4000 feet or something else. Could this be clarified please? How will vectoring by NATS be affected by these designs? Will NATS be responsible for vectoring when the aircraft reach the NPR ceiling at 3000 or 4000 feet, or some other height (if of course NPRs are retained after this process is concluded)?	
		Although you have correctly stipulated that no 'new' overflight should be considered in all options, it is unclear what weighting will be applied to this issue in relation to other matters (total population overflown etc.). New communities, such as Westvale Park (North of Horley) will provide 1500 new homes when completed. These new populations must be categorised as 'not previously overflown' when considering route design.	
		We understand that the FASI-S and 2018 Route 4 Airspace Change Proposals are separate, but it would be helpful for the FASI-S team to consider the progress of the Route 4 ACP to avoid any wasted time or potential conflict later in the process.	
Gatwick Area Conservation Campaign (GACC)	Yes	As part of the FASI team's approach to the development of a comprehensive list of options capable of delivering effective noise dispersal, GACC would wish the following general principles adopted: 1. Noise reduction obligation: The aviation industry should be required to ensure that all safe and reasonably practical measures to reduce noise emissions, exposure and impacts are expeditiously implemented.	(1) We've built our comprehensive list of options using the Design Principles (DPs) including Design Principle 3: The airspace design shall aim to limit and where possible reduce the adverse impacts of aircraft noise. As part of the Initial Options Appraisal (IOA) at Step 2B we will compare the noise benefits and impacts of an option against the 'do nothing' pre-implementation baseline, to understand if we are able to achieve a reduction.
		 Balance: A fair balance should be struck between the interests of the aviation industry and people adversely affected by its operations, including that growth is equitably and proportionately balanced by reductions in noise and other environmental impacts. 	(2) (3) As part of the Initial Options Appraisal (Stage 2B) and the Full Options Appraisal (Stage 3) we are required to assess the benefits and impacts across a variety of groups including Communities, Airlines, General Aviation. Details of this are shown in table E2 of CAP1616. Those benefits and impacts will be balanced where determining which options are shortlisted
		3. Capacity/noise trade off: Reduction in airport capacity should not be a reason to reject dispersal options that would reduce the noise burden imposed on communities.4. Night flights: Flights should be banned at night, for a full eight-hour period.	and proceed to the next stages of the ACP. The FASI-S ACP must also meet the Airspace Modernisation Strategy (CAP1711). CAP1711 describes the objective as: Deliver quicker, quieter, and cleaner journeys and more capacity for the benefit of those who use and are affected by UK airspace. The AMS includes objectives/parameters where we will be required to achieve a balance between capacity, noise, controlled airspace and emissions.



5. Anies of Outstanding Natural Beauty, (AONS) and National Places. 6. Total Impacts. Account should be taken of all rudes and arccal noise that affects an area (rather true considering included lifely parts appeared to proceed. But impacts of the considering included lifely parts appeared to proceed. But impacts or proced. But impacts or an ordinate or mill occasions and should be assigned equal weight in all crommanaes. We also believe that a pure ATM meths about the used to take full account of the responsery of world; that has been all the process or the process or the process of the process or the process of the p	Stakeholder	You Said	We Did
Areas of Outstanding Natural Beauty (AONB) and National Parks. B. Total impost: Account should be taken of all routes and aircraft noise that affects an area (rather than considering individual flight paths separately). 7. Measurement: Aircraft noise should be measured and reported using metrics that fully reflect their impact on pools. Both average noise and noise overal frequency of overlight his this likely to since a PNN technology is deployed. Likewise, the introduction of complimentary metrics such as intermittency state, within si or particular relovance to the consideration of the consideration of the particular relovance to be considered. Noise measurement and reporting should cover all geographic areas with noise levels above the limits recommended by the World Health Organization. 8. We would also suggest that, in most circumstances, noise should be deviced by the World Health Districts of the particular relovance to the target disposition of traffic should take account of historical circumstances, both before and after 2015. Furthermore, new areas should not be overflown and material increases in current afterior within areas that have historically been important by aircraft and that the target disposition of traffic should take account of historical circumstances, both before and after 2015. Furthermore, new areas should be activated. However, if all traffic is cardibly projected to increase both materially and to the point where currently impacted or charge process should be considered. Those opportunities would since the particular to the particular of the particular should be cardious of the approximant should be cardious of the particular should be formation of the particular should be formation of the particular should be formation of the particular should be accounted of the particular should be formatically and to the point with an easy provided the particular should be particular to the particular should be formation of the particular should be particular to the particular should be part			
		Areas of Outstanding Natural Beauty (AONB) and National Parks. 6. Total impacts: Account should be taken of all routes and aircraft noise that affects an area (rather than considering individual flight paths separately). 7. Measurement: Aircraft noise should be measured and reported using metrics that fully reflect their impact on people. Both average noise and noise event frequency (N>) metrics should be used on all occasions and should be assigned equal weight in all circumstances. We also believe that a pure ATM metric should be used to take full account of the frequency of overflight that's likely to arise as PBN technology is deployed. Likewise, the introduction of complimentary metrics such as Intermittency Ratio, which is of particular relevance for night noise should be considered. Noise measurement and reporting should cover all geographic areas with noise levels above the limits recommended by the World Health Organisation. 8. We would also suggest that, in most circumstances, noise should be dispersed within areas that have historically been impacted by aircraft and that the target disposition of traffic should take account of historical circumstances, both before and after 2013. Furthermore, new areas should not be overflown and material increases in concentration within areas previously overflown should be avoided. However, if air traffic is credibly projected to increase both materially and to the point where currently impacted communities would suffer noise above the limits recommended by the WHO (including increases in noise for communities that are already above those limits), other options should be considered. Those options should include flying over new areas. In these circumstances, a full impact assessment should be carried out, there should be full consultation with all impacted and potentially impacted communities and the appropriate statutory airspace change process should be followed. Given the sensitivities associated with flying over new areas we would also suggest that a clear	are outside the scope of the ACP. As part of our Comprehensive List of Options, we have developed some night time options using night based metrics/outputs from the airspace design database. The other options on the comprehensive list could also be operated at night. The Initial Options Appraisal will include analysis of the benefits and impacts of an option compared to the baseline, including during the night time period. (5) When developing options, we've used overflight data from the airspace design database to where possible avoid, or minimise overflight of AONBs. Overflight of AONBs and tranquil areas will be appraised in further detail as part of the Initial Options Appraisal. (6) This will be taken into account qualitatively as part of the Design Principle Evaluation and Initial Options Appraisal, and quantitively as part of the Stage 3 Full Options Appraisal. (7) CAP1616 (Appendix B, page 162 -165) outlines the primary and secondary metrics which are required to be presented as part of the ACP at the Options Appraisal stage. This includes Leq 16 hour (day) and 8 hour (night), N60/N65 contours and overflight contours. At this options development stage, we have used indicators of some of these metrics in order to proportionately analyse the thousands of notional flight paths. As part of the next steps of the process, where we undertake options appraisal, we will appraise the options qualitatively and quantitively using the primary and secondary CAP1616 metrics. (8) As part of Step 2A of CAP1616, we are required to define and assess a pre-implementation 'do nothing' baseline scenario. As part of this baseline we will define areas of existing overflight and this will be based on the populations that we expect will be overflown by the existing airspace design at the point when a change is implemented in 2026. This baseline scenario will then be used to compare against the benefits and impacts of each option and, where appropriate and aligned with government policy, we will detail any anticipated costs.



Table 45 Other feedback received from stakeholders. You said, we did

Stakeholder	You Said	We Did
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Tunbridge Wells Aircraft Noise Study Group (TWANSG)	Feedback contained in email: "We have completed the standard form as requested and have also attached a memorandum which should be treated as an appendix to the form and the two documents regarded as a whole. Our principal concern is that none of the westerly arrival options would appear to make use of the 8 nm ILS joining point. It was precisely the move from 7 to 10 nautical miles which precipitated the unrest which led to the Arrivals Review, and the restoration of the 8 nm join. It would be extraordinary if the same mistake were to be made again. Our secondary but related concern is the definition of "newly overflown" and how the tradeoffs are to be made with the overall numbers overflown. The consultation presentation appears to take 2019 as at the base year, despite the fact that prior to 2013, aircraft joined at 7 nautical miles. Those that escaped being overflow by the 2013 move to 10 nautical miles, cannot now be said to be "newly overflown". Furthermore the distinction between being overflown 10 or 50 times a day is at best questionable, and it is not clear which criterion has been applied to determine the route designs that are said to minimise those newly overflown. One small detail: westerly arrival option WAD is described as "avoiding AONBs". This is patently not the case as the map on the same page clearly shows. I know. I live in an ANOB!! Summary of detailed memorandum provided by TWANSG: • TWANSG offers this detailed memorandum in support of our conclusion that the proposed list of options cannot be described as COMPREHENSIVE. • The TWANSG analyses focuses on westerly arrivals to demonstrate that: 1. The list of options fails to consider any routes that join the ILS between 7 and 9 nautical miles. 2. Routes joining the ILS between 7 and 9 nautical miles do not threaten any homes that would be "newly overflown" and tend to affect relatively fewer homes. 3. During the pandemic, NATS chose to vector most westerly arrivals to join the ILS at points clustered around 8 nautical miles; in w	



Stakeholder org.	You Said	We Did
	(It is noted that the memorandum provided by TWANSG contains more detail in relation to the above, including charts and maps supporting comments. Following attending the Q&A session, TWANSG submitted revised feedback).	
Tunbridge Wells Anti Aircraft Noise Group (TWAANG)	Feedback contained in email: "I should start by stating that my interest lies solely in Western arrivals. TWAANG represents the conurbation of Tunbridge Wells which has not been subject to significant noise from other Gatwick aircraft movements, at least historically. (1) In your presentation you talk about 'tracks' but without defining what this means. Are these the centre lines of possible PBN routes, or do they also represent the centre lines of swathes flown as a result of vector navigation, the present navigation method used by NATS? If you are going to use the 48.5° definition of 'overflown' then your assessment will need to take into account the width of the track - not great in the case of PBN routes but significant where flights are over a swathe. It would be helpful to know what assumptions you use in the case of a swathe of arrivals flights in making your impact assessments. (2) Do you have any thoughts on the likely timescale for the introduction of PBN for arrivals, and how this relates to the introduction of FASI(S)? (3) While writing, I would be grateful if you could remind me of the date and, in the case of TWAANG, email address of the invitation to stakeholders to the February workshops. I seem to have missed them and am disappointed not to have attended. (4) I would also be interested to know the history of the methodology being used, whether it has been developed for this exercise, or is it well established and in widespread use?"	(1) The routes shown within each system option are the indicative centrelines of PBN routes. A standard PBN dispersion has been applied either side of the centreline when calculating overflight contours. Where we anticipate that vectoring may be required (particularly in the case of arrivals), we have highlighted this in the text description. As we progress through the ACP and more information about the airspace above 7000ft is known, we will describe how we expect the options to operate, including how we expect vectoring to feature. These assumptions will be incorporated into the assessments we undertake as part of the Initial, Full and Final Options Appraisals. (2) Initial indicative timescales for Gatwick's FASI-S ACP are suggesting an implementation date from 2026 onwards however this does depend on a number of factors outside of Gatwick's control. PBN arrivals may form part of the final airspace change proposal and if they do, we will investigate with NERL about the technology required to operate Time Based Arrivals. Information about this will be contained within our Ful and Final Options Appraisal. (3) TWAANG were contacted via two email addresses: (4) The methodology has been developed specifically for Gatwick however a number of other FASI airports are taking a similar data driven approach to developing airspace change options.
Mole Valley District Council - Planning Policy Team Chichester District Council	Feedback contained in email: "please note that the presentation slides and feedback form were circulated sometime after the last engagement session, reducing the amount of time available to formulate a response. Given the need for Officers to liaise with Members on such matters prior to submitting a response, please could you make sure that all future information is circulated in a timely manner." Feedback contained in email: The stakeholder briefing reads as a comprehensive review to redesign the airport's arrival and departure routes. It is noted that when referencing noise impacts upon the total population overflown and newly overflown population, that consideration shall be given to Sound Exposure Levels (SEL) and LAmax contours alongside LAeq contours. This is welcomed, as it gives a greater insight in to the impact of specific noise events from overflying aircraft. (1) There are nine Airspace Design Principles. Although it is stated that "the most beneficial enhanced navigation standards for new routes" should be adopted there is no specific mention of assessing the impacts upon air quality in the areas being overflown.	Thank you for this feedback; we will endeavour to share information as soon as possible after the last engagement workshop as part of the future rounds of engagement. In the case of this engagement, we provided a four week response period following circulation and then extended this feedback period for another two weeks. (1) Although the Design principles developed with Stakeholders at Stage 1B did not include a principle based around air quality, later in the process, the Initial Options Appraisal (Step 2B) will include an appraisal of benefits/impacts to air quality compared to a 'do nothing' baseline.