



FASI(N) ACP

Response on Design Principles

Leeds Bradford Airport

04 May 2022

CPJ-5692-RPT-015 V2.0

www.cyrrus.co.uk info@cyrrus.co.uk

















Version	Date	Description of Changes		
Version 1	28/01/22	-		
		Expansion on methodology and stakeholder identification process. Reference to the Section 106 agreement addressed throughout the		
Version 2 31/03/22		report and in the Introduction. DP2 – Overflight consolidated with Noise DP due to similarities.		
		Rationalisation of wording of Final DPs. Stakeholder feedback addressed more clearly.		
	04/05/22	1.1.5 – Clarification on methodology applied to identify additional stakeholders.		
		1.1.7 – Clarification surrounding additional stakeholder briefing.		
Version 3		1.1.9 – Explanation on decision not to conduct an additional round of stakeholder engagement.		
		3.9. Question 9 – Design Principle 4 – This DP has ben reinstated following an oversite in the previous version. All references throughout the document have been updated and stakeholders have been informed.		





Executive Summary

The Government has highlighted a strategic need to upgrade the existing United Kingdom airspace network. It has made clear the importance of continued and sustainable growth in the aviation sector to benefit trade, tourism, and investment. As part of the Airspace Modernisation Strategy the Civil Aviation Authority has written to nine airports across the North of England and Scotland (including Leeds Bradford Airport) to advise them that it is essential that they participate. This programme consists of a coordinated attempt to improve efficiency of airspace across the region. The latest technology should be used to reduce the environmental impact associated with aviation, while continuing to improve safety standards.

Airspace change projects must follow the process defined by the Civil Aviation Authority. CAP1616 provides guidance on the regulatory process for changing airspace design and stakeholder engagement. The document requires Leeds Bradford Airport as change sponsor, at Stage 1b, to develop Design Principles through targeted stakeholder engagement.

Stakeholder engagement commenced with a briefing to the Airport Consultative Committee. To ensure stakeholder insights were responded to in the development of Proposed Design Principles we issued a comprehensive document to provide stakeholders with an understanding of what Leeds Bradford Airport needs to address in this Airspace Change Proposal.

The document, titled 'Leeds Bradford Airport Airspace Change Proposal: An Introduction to Design Principles', included a series of 'Draft' Design Principles together with a short survey on the establishment of the 'Final' Design Principles that will ultimately shape the development and assessment of 'Options' for change. The survey was active for a period of 53 days ending on 24 December 2021. It included reminders throughout the process, encouraging responses and feedback from stakeholders prior to closing.

This document acts as a record of the responses received on the Draft Design Principles and describes the evolution of the Design Principles. The Draft Design Principles have evolved into the Final Design Principles that will be submitted to the Civil Aviation Authority 'Define' Gateway assessment.

We would like to thank stakeholders for their time, consideration, and valuable input. We look forward to continuing to work with them to improve our system of flight procedures and our airspace configuration.





Abbreviations

AAIA Areas of Intense Aerial Activity

ACC Airport Consultative Committee

ACOG Airspace Change Organising Group

ACP Airspace Change Proposal

AIGA Areas of Intense Gliding

AMS Airspace Modernisation Strategy

ANSP Air Navigation Services Provider

AONB Areas of Outstanding National Beauty

ARARA Ash Road Area Residents Association

ATC Air Traffic Control

ATCO Air Traffic Control Officer

BGA British Gliding Association

BHA British Helicopter Association

BMAA British Microlight Aircraft Association

BPA British Parachute Association

CAA Civil Aviation Authority

CAT Commercial Air Transport

CCO Continuous Climb Operations

CDO Continuous Descent Operations

dbA A-weighted Decibels

DP Design Principle

EGNOS European Geostationary Navigation Overlay Service

FAS Future Airspace Strategy

FASI(N) Future Airspace Implementation North

FASI(S) Future Airspace Implementation South

FUA Flexible Use of Airspace

GASC General Aviation Safety Council

GAA General Aviation Authority

GHGs Greenhouse Gasses

HCAP Honourable Company of Air Pilots

HCGB Helicopter Club of Great Britain

ICAO International Civil Aviation Organisation

IAP Instrument Approach Procedure





LAeq Equivalent A-weighted Continuous Sound Level

LBA Leeds Bradford Airport

LAA Light Aircraft Association

MAA Military Aviation Authority

MLRA Moor Lane Residents Association

NATMAC National Air Traffic Management Advisory Committee

NERL NATS En-Route Limited

NPR Noise Preferential Route

PANS-OPS Procedures for Air Navigation Services – Aircraft Operations

PBN Performance Based Navigation

RNP Required Navigational Performance

RW Runway

RSAG Regional Soaring Airspace Group

SIDs Standard Instrument Departures

SNDP Single Noise Design Principle

VOR VHF Omni Directional Range Finder

UK United Kingdom

UKAB UK Airprox Board

UKFSC UK Flight Safety Committee





References

- [1] CJP-5692-DOC-16 V1.0 Design Principles Survey'.
- [2] CPJ-5692-PRE-011 V1.0 Design Principles Presentation.
- [3] CPJ-5692-DOC-013 V1.0 Survey Results'.





Contents

EXECL	UTIVE SUMMARY	2
ABBR	EVIATIONS	3
REFER	RENCES	5
CONT	ENTS	6
1.	INTRODUCTION	9
1.1.	Engagement	9
1.2.	Responses	10
1.3.	Methodology	11
2.	FINAL DESIGN PRINCIPLES SUMMARY TABLE	12
3.	SURVEY RESPONSES AND IMPACT	18
3.1.	Question 1	18
3.2.	Question 2	20
3.3.	Question 3	23
3.4.	Question 4	25
3.5.	Question 5	27
3.6.	Question 6 – Design Principle 1	29
3.7.	Question 7 – Design Principle 2	30
3.8.	Question 8 – Design Principle 3	32
3.9.	Question 9 – Design Principle 4	34
3.10.	Question 10 – Design Principle 5	36
3.11.	Question 11 – Design Principle 6	37
3.12.	Question 12 – Design Principle 7	39
3.13.	Question 13 – Design Principle 8	41
3.14.	Question 14 – Design Principle 9	43
3.15.	Question 15 – Design Principle 10	44
3.16.	Question 16 – Design Principle 11	46
3.17.	Question 17 – Design Principle 12	47
3.18.	Question 18 – Design Principle 13	49
3.19.	Question 19 - Design Principle 14	50
3.20.	Question 20 – Design Principle 15	52
3.21.	Question 21 – Design Principle 16	53
3.22.	Question 22 – Design Principle 17	55
3.23.	Question 23 – Design Principle 18	56





3.24.	Question 24 – Design Principle 19	57
3.25.	Question 25 – Design Principle 20	59
3.26.	Question 26	61
4.	NON-SURVEY FEEDBACK	65
4.1.	Overview	65
4.2.	Moor Lane Residents Association (MLRA)	65
4.3.	Regional Soaring Airspace Group (RSAG)	65
4.4.	Burley Parish Council	67
4.5.	Northwest Leeds Transport Forum (NWLTF)	67
4.6.	Former ACC rep for Menston	68
5.	FINAL DESIGN PRINCIPLES	69
5.1.	Overview	69
5.2.	Safety	69
5.3.	Environmental	69
5.4.	Operational	70
5.5.	Technical	70
5.6.	Economic	70
5.7.	Strategic Policy	70
Α.	STAKEHOLDER LIST	72
A.1.	Community Stakeholders	72
A.2.	Environmental Stakeholders	73
A.3.	Technical Stakeholders	73
A.4.	Local Aviation Stakeholders	73
List o	of figures	
LIST O	nigoros	
Figure :	1: Question 1	18
Figure 2	2: Question 2	21
Figure 3	3: Question 3	24
Figure 4	4: Question 4	25
Figure 5	5: Question 5	27
	6: DP1	
	7: DP2	
	8: DP3	
_	9: DP4	
i igui e S	J. UI 7	33



Commercial in Confidence





Figure 10: DP5	36
Figure 11: DP6	38
Figure 12: DP7	40
Figure 13: DP 8	42
Figure 14: DP9	43
Figure 15: DP10	45
Figure 16: DP11	46
Figure 17: DP12	48
Figure 18: DP13	49
Figure 19: DP14	51
Figure 20: DP15	52
Figure 21: DP16	54
Figure 22: DP17	55
Figure 23: DP18	57
Figure 24: DP19	
Figure 25: DP20	60





1. Introduction

1.1. Engagement

- 1.1.1. A document titled 'Leeds Bradford Airport (LBA) Air Change Proposal (ACP): An Introduction to Design Principles' was issued to the stakeholders (detailed at Annex A) on 02 November 2021. Contained within this document was an explanation of what was being asked along with a link to an online survey¹.
- 1.1.2. CAP1616 sets out the level of targeted stakeholder engagement expected at Stage 1 of the process. Change Sponsors are expected to engage with representative bodies that cover a range of opinions and viewpoints. Accordingly, the list of stakeholders at Annex A was compiled by consideration to each of the respective groupings as follows:
 - Community.
 - Environmental.
 - Technical.
 - Local Aviation, Airports and Operators; and
 - Statutory (i.e., National Air Traffic Management Advisory Committee (NATMAC).
- 1.1.3. Stakeholders were asked to provide feedback by 24 December 2021.
- 1.1.4. To ensure we provided everyone ample opportunity to respond, we allowed for a response period of greater than 30 days, we sent a reminder email on 01 December 2021.
- 1.1.5. During November it was highlighted to us by some local community and aviation groups that some key stakeholders had been missed from the initial engagement. This led us to reassess our list of stakeholders for this phase of the CAP1616 process. We went on to identify a further additional 14 stakeholders using the Potentially Affected Area on the Portal and reference to the VFR charts, they were all then invited to contribute to the survey in an invite sent out on 01 December 2021.
- 1.1.6. The LBA Airport Consultative Committee (ACC) was briefed prior to the engagement period by the Airport management team and Cyrrus on 09 September 2021. The briefing consisted of an overview of the project and the drivers behind it. The minutes of this meeting are available on the LBA website.
- 1.1.7. A local community group was briefed on the 06 December 2021 which consisted of a presentation ² and a Q&A session. The brief was given upon the request from one stakeholder (North West Leeds Transport Forum) and was not a part of the overall change sponsor's engagement approach employed (CAP1616 Paras 116, Para 118, D8).
- 1.1.8. To ensure we had responses from a wide variety of stakeholders we reengaged with two of LBAs aircraft operators, who had yet to respond, in January. They were again invited to

¹ Hosted on MS Forms and available on the portal titled 'CJP-5692-DOC-16 V1.0 Design Principles Survey'

² The presentation can be found on the portal titled: 'CPJ-5692-PRE-011 V1.0 Design Principles Presentation'





respond to the Design Principles Survey and as such the survey was reopened for a week from 17 January 2022 to 24 January 2022 for the aircraft operators to give their feedback.

- 1.1.9. The decision was made to not re-engage directly with all of the stakeholders on the final design principles as we felt we had sufficient evidence and comments surrounding the DPs to amend them accordingly, despite some negative comments surrounding the survey. Time constraints were also a minor factor. The stakeholders were emailed to update them of the final DPs and informed of the submission to the portal.
- 1.1.10. In response to varied feedback from the stakeholders surrounding the Section 106 agreement and associated NPRs, we engaged with Leeds City Council to gain some clarity on their position and ours. The response from Leeds City Council with respect to the NPRs is shown below;

'Whilst in principle, we support a review of the NPR any changes put forward are likely to include a variation in the departure/arrival routes and/or the rate of ascent/decent of aircraft. Such changes are likely to result in some areas experiencing greater noise impacts than they do currently, with the potential for properties to experience significant impacts either in terms of a noticeable increase in decibel level and/or awareness of an aircraft noise that currently doesn't exist. Conversely, some areas of the community will notice little change or could benefit from a reduction in noise intrusion.

In considering any proposals, there will be a need to take the net effect of any proposed changes into account in line with the design principals' (contained within this report).

Whilst any proposed changes to the NPRs and Section 106 are yet to be determined via stakeholder engagement and public consultation, Leeds City Council have made it clear that for any amendments to be considered a net benefit would need to be assessed.

1.2. Responses

- 1.2.1. A total of thirty-two responses were received through the online survey and two additional responses via email. They are divided into the following categories:
 - 9 Local Aviation, Airports and Operators.
 - 11 Community bodies.
 - 1 Statutory (NATMAC).
 - 1 Environmental bodies.
 - 3 Technical (ATM) stakeholder; and
 - 9 Submissions from local individuals.
- 1.2.2. Not all the participants gave a response to every question.
- 1.2.3. The survey results are contained with Section 3 and non-survey feedback in Section 4. The Final Design Principles, as determined through this targeted stakeholder engagement, are contained within Section 5.
- 1.2.4. A summary of the survey results, redacted to remove personal details and with associated graphs, is included in this submission and titled; "LBA ACP Summary Survey Results".





1.2.5. The survey results are in a summary format that cannot be manipulated, therefore specific responses are not viewable. This report has extracted those comments under the respective Design Principle (DP) review.

1.3. Methodology

1.3.1. Stakeholder Identification

CAP1616 requires that a discussion with affected stakeholders takes place. Local stakeholders normally include local authority elected representatives, local community groups, the Airport Consultative Committee (ACC) and representatives of local General Aviation (GA) organisations or clubs.

LBA believes that the ACC represents the local community. In addition, the Airport has included:

- Environmental stakeholders;
- Technical stakeholders (ATC and Operators); and
- Local and Statutory (National) aviation stakeholders.

The list of stakeholders engaged at this stage of the process can be seen at Annex A. There is nothing to stop those agencies from sharing this material with a broader audience. LBA will consider all the feedback it receives.

1.3.2. Analysis of Feedback.

The data from the Microsoft form was extracted from the Microsoft Excel output³. The degree to which stakeholders agreed/disagreed. Each DP was analysed such that a percentage of the responses was established. Amplifying information, where provided, was also considered, and is included in the narrative explaining the evolution of the DPs.

1.3.3. Stakeholder update.

For transparency, a copy of the final Design Principles with the amended wording was sent out to all stakeholders on 1st April 2022. They have been invited to view this submission document on the Airspace Change Portal which details how their inputs influenced the final Design Principles prior to the Stage 2 engagement workshops taking place.

³ Survey Results (with personal details removed) can be found on the portal titled: 'CPJ-5692-DOC-013 V1.0 Survey Results'





2. Final Design Principles Summary Table

Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
1	Importance of Safety - The airspace design and its operation must be as safe or safer than today.	Amended	1	Importance of Safety – The airspace design and its operation must maintain or where possible, enhance current levels of safety.
2	Overflight – The new procedures should not increase the number of people overflown by aircraft using the Airport.	Consolidated with DP3	2	Noise - The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground and where possible periods of built-in respite should be considered.
3	Noise Footprint – The new procedures should not increase the noise footprint of the existing airport operation, i.e. it should not increase the number of people affected within the 51dBA LAeq 16 hour contour.	Consolidated with DP2	2	Noise - The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground and where possible periods of built-in respite should be considered.

CPJ-5692-RPT-015 V3.0 Cyrrus Projects Limited 12 of 75





Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
4	Tranquillity – Implementation should minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding National Beauty (AONB).	Amended	3	Tranquillity - Where practical, route designs should limit effects upon noise sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of care or education and AONB's.
5	Emissions and Air Quality – The new design should seek to minimise the growth in aircraft emissions, the further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change.	Amended	4	Emissions and Air Quality – The proposed design should minimise CO2 emissions per flight.
6	Operational Requirements – The new procedures should address the needs of most operators at LBA.	Removed (captured in New DP7)	-	-





Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
7	Airspace Dimensions – The airspace design should afford only the appropriate volume of controlled airspace to contain and support Continuous Climb Operations and Continuous Descent Operations by Commercial Air Transport whilst enabling safe, efficient access for other types of flying operation.	Consolidated with DP8	5	Airspace Dimensions – The volume and classification of controlled airspace required for LSA should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.
8	Airspace Availability – Sufficient controlled airspace should be available to support LBA operations independently.	Consolidated with DP7	5	Airspace Dimensions – The volume and classification of controlled airspace required for LBA should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.
9	Airspace Complexity – The airspace design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.	Unchanged	6	Airspace Complexity – The airspace design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.





Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
10	Compliance – The design shall be fully compliant with the design criteria stated in ICAO Doc 8168 (PANS OPS), acceptable to the CAA and, the implementation shall follow all applicable legislation and regulations.	Consolidated with DP11 and DP12	7	Technical Requirements – The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.
11	Aircraft Category – The new procedures shall be technically flyable by all aircraft types in approach Speed Categories A through D.	Consolidated with DP10 and DP12	7	Technical Requirements – The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.
12	Equipage and Approval – The new procedures shall be flyable by the majority of LBA commercial aircraft operators.	Consolidated with DP10 and DP11	7	Technical Requirements – The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.
13	Arrival Transitions – The arrival transition designs shall seamlessly integrate with new RNP Instrument Approach Procedures at LBA and if possible, the existing ILS approach procedures.	Consolidated with DP14, DP15 and DP16	8	Systemisation – The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.





Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
14	Departure Procedures – The Standard Instrument Departures (SIDs) shall terminate at the agreed 'Gateways' into the route network and should be deconflicted from the arrival transitions.	Consolidated with DP13, DP15 and DP16	8	Systemisation – The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.
15	Approach Procedures – The Instrument Approach Procedures (IAPs) shall replicate the existing conventional approach procedures as closely as possible.	Consolidated with DP13, DP14 and DP16	8	Systemisation – The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.
16	Coordination – The new procedures should result in a reduction in the amount of tactical coordination required by ATCOs.	Combined with DP13, DP14 and DP15	8	Systemisation – The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.





Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
17	Cost of Change – The new procedures shall be implemented in a cost-effective manner.	Removed	-	-
18	Operational Cost – Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.	Unchanged	9	Operational Cost — Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency
19	AMS Realisation – This ACP must serve to further, and not conflict with, the realisation of the AMS.	Unchanged	10	AMS Realisation – This ACP must serve to further, and not conflict with, the realisation of the AMS.
20	PBN — The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.	Unchanged	11	PBN – The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.



Survey Responses and Impact

3.1. Question 1

- 3.1.1. It is possible that, during the options development phase, flightpaths may be identified that have a lower potential environmental impact and greater efficiency. These flightpaths may of course impact new people currently not overflown routinely. Would you prefer that any future Leeds Bradford Airport (LBA) flight procedures be designed to deliver the best possible routes in terms of noise, emissions and operational efficiency, or is the avoidance of impacting new communities of greater importance? Available answers:
 - Avoid affecting new people; or
 - Seek options that reduce environmental impact and have greater efficiency; or
 - Don't know; and
 - Optional open text field to provide amplification on your answer.

3.1.2. Response

31 survey responses, 2 responses via email/letter. 33 total.

6 Avoid New People 17%
22 Reduce Environmental Impact 65%
6 Other 18%

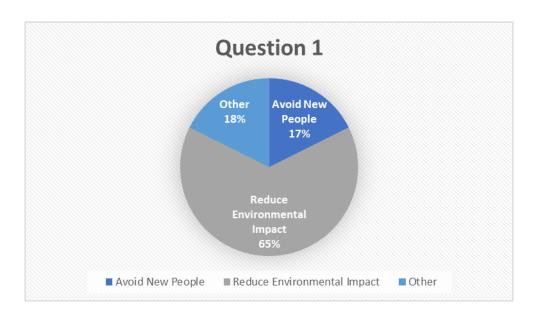


Figure 1: Question 1





3.1.3. **Comments**

- 1. **Gliding Club Collective** 'Seek to reduce environmental impact and improve efficiency while prioritising the safety and health of all communities and other airspace users.'
- 2. Former ACC Member- 'Avoid existing communities, not just new developments. It is essential that existing communities be protected by adherence to the Standard Instrument Departure (SID) which is agreed and not permitting unnecessary deviation. This is not an either/or situation. There are existing Noise Preferential Route (NPR)/SID routes already in place for LBA, designed to avoid noise and emissions for the communities of Menston and Burley-in-Wharfedale, and 80% of departures are from Runway 32, yet these routes are not being adhered to. LBA claims that the entire swathe may be used for departures, yet Civil Aviation Authority (CAA) guidance makes it clear that departures should follow the centreline of the swathe (i.e., the SID) unless specific conditions such as adverse weather or incoming traffic/safety causes Air Traffic Control (ATC) to advise differently. The existing communities should be protected absolutely, whereas any new communities (i.e., to be developed in future) should know or be advised where the SID is, so that would-be residents would be forewarned about the possible noise and emissions hazards. In any case, both existing and new communities should be protected from those recognised potential detriments by careful design of the SID and by adherence to that SID without exception.'
- 3. **MAG** 'From a Manchester Airport perspective we would wish flightpaths to not adversely impact our operations.'
- 4. NWLTF- 'Seek options that reduce environmental impact. We wish to reduce environmental impacts but are aware that there are many different environmental impacts. This question is confused. We do not consider that CO2 is a significant issue here as the flight route does not significantly change the overall CO2 emissions. We are however concerned about the toxic emissions (e.g., NOx and particulates) and the noise. We feel that these should be reduced overall, we do NOT prioritise avoiding impacting new communities as we consider it important that people in some areas are not differentially damaged.

The Question introduced the thought that the New Airspace Design should avoid impacting new communities. Whilst this is clearly desirable ceteris paribus, we do not think that it should be prioritised above the aims of reducing the overall number of affected people or the number of times that they are exposed to noise or pollutants associated with aircraft movements. The Question invites respondents to choose between avoiding impacting new communities and reducing "noise, emissions and operational efficiency". We do not think that is a valid formulation because the implications for noise, emissions and operational efficiency are each quite different and because there is no reason to ignore the impacts on communities who are already impacted by noise. We would applaud any efforts to design the airspace to reduce emissions of Greenhouse Gasses (GHGs) and see that as particularly relevant to high level routes. Our more local concern is with noise, particulates and other emissions associated with arrivals and departures. We suggest that the airspace should be designed to minimise the overall emission of GHGs while giving priority to minimising the exposure of local populations to noise and pollutants associated with arrivals and departures. If the result also promotes operational efficiency and avoids impacting new communities then all well and good, but these should not be the top priorities.'





- 5. MLRA (community)- 'LBA flight procedures should be designed "to deliver the best possible routes in terms of noise, emissions and operational efficiency". We would like to see LBA keep an open mind about all options including new routes that would minimise the impact on local communities, in particular Burley in Wharfedale and Menston who are most adversely affected by the departures from Runway 32. We strongly believe that there are other departure routes from Runway 32 that would mean far fewer people are affected by noise and emissions, and that could be more accurately flown than the current set up. This should be the key driver for LBA in their discussions when integrating these routes into the National Airspace Framework.'
- 6. Burley Parish Council- 'Burley Parish Council welcome the acknowledgement that "LBA flight procedures should be designed to deliver the best possible routes in terms of noise, emissions and operational efficiency". It is essential to the residents of the Burley in Wharfedale area, that during the CAP1616 ACP Stage 2 Options development, that there is an 'open mind' to all potential new routing options.

We further note that when being dictated to by other adjacent Air Navigation Service Providers (ANSPs), LBA ensure that the routes that prove to deliver the best possible routes are championed, and that any vetoes using "National Integration Policy" are robustly challenged.

The NATS En Route License (NERL) options for the positions of "Gateways" must form part of this process to all SID/NPR connections that are to be considered.'

3.1.4. **Impact**

Taking all the quantitative feedback and the many welcome comments into account, the avoidance of new people appears to be a less significant issue; the majority of the respondents chose to reduce environmental impact. The 'Environmental' DPs (DP2 & DP3) capture the desire to 'Seek options that reduce environmental impact and have greater efficiency'.

In the case of LBA, the NPRs are defined by the Local Authority under a Section 106 planning agreement as the swathe. The introduction of PBN in the future should improve the accuracy and compliance with the NPR and this ACP will look to address the Section 106 where necessary. Local communities and stakeholders will be kept updated throughout the CAP1616 process.

3.2. Question 2

- 3.2.1. It may be possible to concentrate or merge flightpaths in such a way that the environmental impact is always concentrated in certain areas (perhaps because the route is more efficient or affects less people). Conversely, it may be possible to design a system that disperses the environmental impact. Dispersion would affect more people but less often. Would you prefer to see a system of flight paths that concentrates the impact or disperses it? Available answers:
 - Concentrate; or
 - Disperse; or
 - Don't know; and





• Optional open text field to provide amplification on your answer.

3.2.2. Response

30 survey responses, 2 responses via email/letter. 32 total

•	12	Concentrate	37%
•	12	Disperse	38%
•	2	Don't know	6%
•	6	Other	19%

2 of the 6 'other' stated 'no comment'

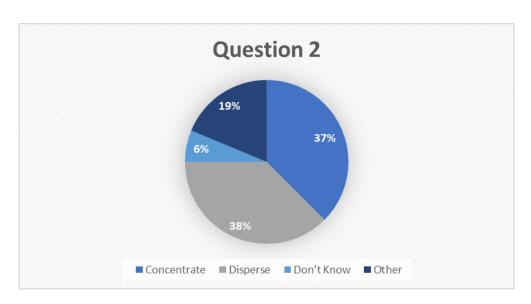


Figure 2: Question 2

3.2.3. Comments

- 1. **Gliding Club Collective** 'Flight paths that ensure an agreed maximum exposure (less than the statutory limit) to noise is never exceeded for any individual or community.'
- 2. **local resident** 'Flight paths should always be monitored, and detailed reports provided for purposes of accountability. The structure of the questions already limits accountability'
- 3. Former ACC member- 'Whilst the better option would be to disperse, currently around 80% of departures are from Runway 32 over Menston and Burley. The argument for this is based on "the predominant wind direction" and is completely specious. Dispersal is the better option but future PBN-based SIDs must follow the specified route, not disperse within the swathe in contravention of CAA stipulation. 'Many residents of both Menston & Burley feel they are unfairly disadvantaged by 75-80% of flights departing to the North-West. This is supposedly because the prevailing winds are North-Westerly, but it is NOT the case that 80% of the winds come from that direction. Residents of these villages feel that flights should be more evenly dispersed, with fewer flights departing to





the West only to subsequently turn South to proceed to their destination. However, when a SID is designed, developed, and implemented, it should be adhered to, and no opportunity permitted for unauthorised variation or departure (such as happens now by LBA allowing flights to use the whole of the swathe, falsely claiming that Leeds City Council will permit use of the whole swathe and not just the centre-line).'

- 4. NWLTF- 'The aim should be to minimize the overall exposure of people to aircraft noise (exposure being defined as the total number of person-exposures). We understand that, while "dispersal" may be fairer, it could increase the number of people adversely affected and would require more resources to be deployed to properly monitor the ongoing impacts. The Question seeks respondents' views on concentration versus dispersal. We understand that there will be limits to what is achievable in respect of arrivals and departures at LBA, but we think that the design principle should be that the routes should be concentrated as far as is possible over areas with low populations. However, where it is not possible to avoid overflying densely populated areas, provision should be made to avoid an unfair concentration of the misery on a subset of people. We are inclined to think that this is better achieved by provision of respite rather than by dispersal because dispersal might simply provide airlines with the option of taking a route which suits them but which might itself not vary.'
- 5. MLRA (community)- 'It is our understanding that the factors that prevented Aircraft turning to the East on Departure Routes from Runway 32 are no longer relevant. Therefore Runway 32 Departures that ultimately are flying to the east could be routed to the East of LBA instead of always using routes to the West over BIW and Menston. This would allow routes to disperse and affect far less people and less severely. One of the major issues with planes tracking over BIW and Menston departing from Runway 32, is that they do not adhere to the current SID and often deviate off course. Experts maintain that the current SID cannot be accurately flown, therefore leading to deviation from the SID and more noise pollution to residents in the settlements below. This has to addressed so that under the new PBN system, planes must stick to a strict track and not a broad 'swathe'.'
- 6. Burley Parish Council- 'Due to various changes in the operating environment to the East of LBA, a key component of ensuring the "best possible routes" are used, would be less reliance on all routes from Runway 32 initially routing west. The option of having those Aircraft that are ultimately routing east or south-east turning right when safe to do so from Runway 32 instead of left must form the basis of a dispersion option. This dispersed option should also however ensure that there is no possibility of Performance Based Navigation (PBN) routes that are designed to follow strict tracks over the ground to be permitted to "disperse" within a tighter NPR.'
- 7. Dales Hang gliding and Paragliding Club (DHPC)- I believe that routes (and noise & pollution) are better concentrated on existing areas rather than being dispersed for 2 reasons. Firstly, it should allow the amount of controlled airspace to be minimised. Secondly, people invested in property in the full knowledge of those routes. To change them now would be unfair.

3.2.4. **Impact**





The feedback to this question is inconclusive and shows no distinct preference. A variety of options will be considered taking dispersal and adherence to procedures into account in the Stage 2 options development phase.

Most of the comments relate to the preferential runway and the NPRs and adherence to this or lack thereof. In the case of LBA, the NPRs were defined by the Local Authority under a Section 106 planning agreement as the swathe. The NPR swathe, therefore, illustrates a containment area within which all departing jet aircraft should remain, until the end is reached (at 3.5 DME). Whilst NPRs are published in the Aeronautical Information Publication (AIP), at LBA the oversight of their effectiveness and any future changes falls under the remit of the Local Authority and not the CAA.

The introduction of PBN in the future will improve the accuracy and compliance with the NPR and this ACP will look to address the Section 106 where necessary.

A Noise and Track Monitoring System (NTMS) and associated infrastructure was installed in 2014. The NTMS provides a valuable noise management and complaint handling functions. There have been various upgrades and improvements to this system since the initial installation.

3.3. Question 3

- 3.3.1. It may be possible to avoid certain areas. In order of preference (1) being of greatest most importance and (3) being of least importance), please advise which of the following you would like us to protect from the impact of aviation noise and emissions. Available answers:
 - Built-up areas (i.e., densely populated).
 - Rural Areas (i.e., sparsely populated).
 - Areas of Tranquillity (e.g., National Parks, Areas of Outstanding National Beauty (AONB), recreational parks etc.)
 - Optional open text field to provide amplification on your answer.

3.3.2. Response

28 survey responses, 2 responses via email/letter. 30 total.

Responses were scored 3 points for 'Most Important', 2 points for 'Important' and 1 point for 'Least Important'.

•	Built Up Areas	Score 80	44%
•	Rural Areas	Score 43	24%
•	Tranquillity	Score 59	32%





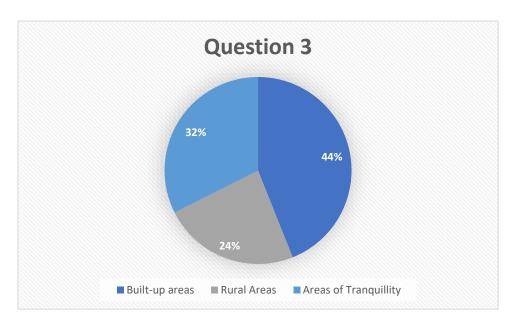


Figure 3: Question 3

3.3.3. Comments

- 1. MLRA- Our view is that the "best possible routes" should avoid areas where residents are unduly be exposed to noise and emissions, especially to the north and northwest of the Airport, who are taking the brunt of the noise currently. The settlements of Burley in Wharfedale and Menston could be easily avoided if new Performance Based Navigation (PBN) departure Routes are designed so that planes can accurately fly them. In fact, developments works are approved so that Burley and Menston will both be increasing by several hundred households over the coming few years.
- 2. Burley Parish Council Our preference is for all new "best possible routes" to avoid; at the levels LBA have influence over in the ACP, areas where residents can be exposed to noise and emissions. To the north and northwest of LBA there are concentrations of dwellings that fall between Built Up and Rural that could easily be avoided by well-designed and accurately flown PBN departure routes. All options put forward must take these areas into account.
- 3. **Dales Hang gliding and Paragliding Club (DHPC)-** The airport was built in an urban area for convenience. People who choose to live in rural areas sacrifice this convenience in order to obtain tranquillity. The airport was not built in the middle of the Yorkshire Dales National Park for good reason.

3.3.4. **Impact**

'Rural Areas (i.e., sparsely populated areas)' appear to be of lesser importance to those who have responded albeit marginally. 'Built up areas' appear to be of a higher importance overall to the responders.

The feedback to this question is inconclusive and shows no distinct preference. The avoidance of Built-up areas is captured within DP3 – Noise.





3.4. Question 4

- 3.4.1. Are there any specific areas or noise sensitive buildings you would like us to be made aware of where overflight should be avoided if possible? Available answers:
 - Yes (Please expand on answer); or
 - No; and
 - Optional open text field to provide amplification on your answer.

3.4.2. Response

30 survey responses, 2 responses via email/letter. 32 total.

16 yes 52%15 no 45%1 other 3%

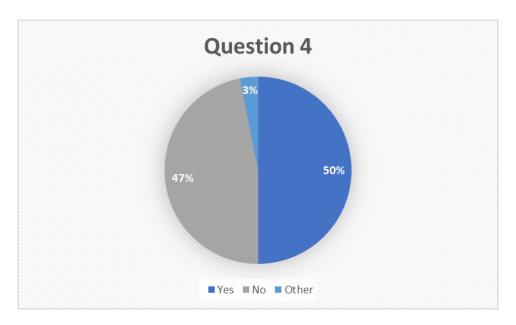


Figure 4: Question 4

3.4.3. Comments

- 1. Skyhigh skydiving 'Flying below 16k of Shotton Airfield Dh6 2nh'
- 2. Individuals:
 - No change to existing routes.





- The assumption is made in the questionnaire that a single solution is possible. We already know that the airport justifies variation by detailing exceptions. All aircraft movements must be monitored, and their impact reported.
- 3. **Gliding Club Collective** 'Areas of intense aerial activity such as the Vale of York' and 'Trough of Bowland, Ribble Valley' *Note these are not in close proximity to LBA*.
- 4. Former ACC member- 'The villages (note that definition!) of Menston & Burley were created long before air travel and the majority of dwellings were not constructed to contend with the noise they now experience. LBA, as it has developed, with volume air traffic and low-flying departures, has devastated the description of these communities as villages. They should be protected by (as a minimum) strict adherence to the NPR/SID, which is entirely possible with PBN, if management of LBA would demonstrate any responsibility to comply with CAA guidance.'
- 5. **NWLTF** 'The Leeds General Infirmary', 'schools, hospitals, care homes.'
- 6. **Bramhope & Carlton Parish Council** 'This requires a set of categories of noise sensitive buildings to be ranked. Outdoor summer drama and music events should be avoided. Difficult to define at present as such activities are in abeyance. Temple Newsam, and Kirkstall Abbey have hosted events in the past.'
- 7. Menston Parish Council, Climate Action Menston- 'Menston'
- 8. **RSAG** Areas of Intense Aerial Activity (AAIA) and Areas of Intense Gliding Activity (AIGA)
- 9. MLRA (community)- The village of BIW and associated dwellings to the west.
- 10. **Burley Parish Council** The village of Burley in Wharfedale and associated dwellings to the west.
- 11. Dales Hang gliding and Paragliding Club (DHPC) Yorkshire Dales National Park. Nidderdale Area of Outstanding National Beauty.

3.4.4. **Impact**

Below is a list of areas highlighted by the survey respondents, they will be considered by the designers during the Stage 2 Concept Options Development:

- AAIA e.g., Vale of York and Trough of Bowland, Ribble Valley.
- AIGA.
- The villages of Menston and Burley-in-Wharfedale. (Mentioned multiple times).
- Yorkshire Dales National Park
- Nidderdale Area of Outstanding National Beauty.
- The Leeds General Infirmary.
- Schools.
- Hospitals.
- Care homes.





• Outdoor music venues – without knowing the locations of these events, it is unlikely we will be able to design permanent routes avoiding these locations, however, consideration will be given to some popular locations.

3.5. Question 5

- 3.5.1. Some airports have sought opportunities to build into the system known periods of relief from the adverse effects of aviation noise. These known or scheduled periods are known as 'Respite' periods during which times aircraft are channelled onto 'Respite' routes relieving the burden on certain communities. It must be stressed that airspace constraints sometimes limit the art of the possible, however it is something that could be investigated. Given the option, would you like to see a system developed that had periods of known respite built-in? Available answers:
 - Yes, or
 - No; or
 - Don't mind; or
 - Don't know; and
 - Optional open text field to provide amplification on your answer.

3.5.2. Response

31 survey responses, 2 responses via email/letter. 33 in total.

•	18	yes	55%
•	3	no	9%
•	8	don't mind	24%
•	2	don't know	6%
•	2	no comment	6%

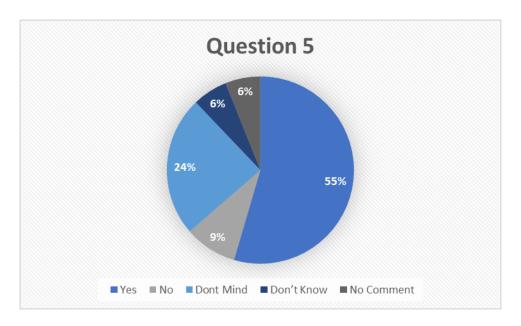


Figure 5: Question 5





3.5.3. **Comments**

- 1. Former ACC member- Yes, periods of respite would be advantageous. In fact, they were recognised when the original NPR and permitted flying-hours were specified. LBA has tried to stretch and abuse those permitted flying-hours and now has a plan to extend day-time flying-hours into what has been the relative tranquillity of the night, trying to pinch an extra 1½ hours every day. There is no justification for this when there are several hours every day (in day-time) when there are few departures or arrivals.
- 2. **Individuals** give night-time respite to as many people as possible (eg by overflying rural areas instead). Respite afforded to one built up area at the expense of another may be "fair" but will increase the total number of people affected in a given time period and so increase total annoyance and sleep loss.
- 3. **NWLTF-** 'Give night-time respite to as many people as possible (e.g., by overflying rural areas instead). Respite afforded to one built up area at the expense of another may be "fair" but will increase the total number of people affected in a given time period and so increase total annoyance and sleep loss. Respite would help to share out the misery, but our priority would be dispersal including over areas of lower population. It is critically important to maintain or improve compliance with existing noise abatement principles. The Question seeks respondents' views on the provision of respite. As noted above, we think that this would be the preferred method of sharing out any unavoidable misery, but we are adamant that the existence of this provision should not be taken as a reason to compromise on the guiding principle that the airspace should be designed to minimise the exposure of local populations to noise, and pollutants associated with arriving and departing aircraft. In particular, it should not take precedence over the existing noise abatement procedure which requires all departures to be on Runway 32 and all arrivals to be on Runway 14 unless this compromises safety.'
- 4. **MLRA-** All for Respite but <u>only</u> as an additional measure to support the primary goal of well-designed PBNs that already minimise the impact of noise on settlements on the ground. Respite does not negate that primary need.
- 5. **Burley Parish Council** The concept of respite is one that we would support. It must not however be used as an alternative to ensuring that the (DPs deliver the stated objective to "consider environmental performance and impact together with the interests of all stakeholders affected"

3.5.4. **Impact**

Over half of the responses stated they would like to see periods of built-in respite. The comments are also supportive, particularly during nighttime hours. Where possible options should be explored that consider periods of respite. This is now captured within the New **DP3 - Noise.**





3.6. Question 6 – Design Principle 1

3.6.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP1 – Importance of Safety – The Airspace Design and its operation must be as safe or safer than today.

3.6.2. Response

32 survey responses, 3 responses via email/letter. 35

•	Strongly Agree	22	63%
•	Agree	7	20%
•	Neutral	6	17%
•	Disagree	0	0%
•	Strongly Disagree	0	0%

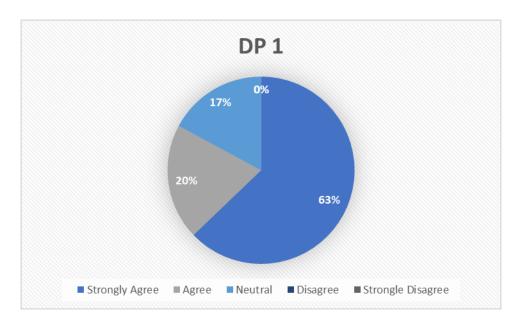


Figure 6: DP1

3.6.3. **Comments**

- 1. **RSAG** Priority 1. The wording of this DP should positively state that "safe or safer than today" is for the users of airspace outside, as well as inside, any proposed future CAS.
- 2. **MLRA** Importance of Safety. Please also consider Safety on the Ground as well as aircraft safety.





- 3. **Burley Parish Council-** There is an assumption that DP solely deal with Aircraft safety in the air which we consider paramount, however, the safety of those on the ground should not be neglected and should be considered in DPs.
- 4. Former ACC member- Needs qualification. There should be no compromise on airborne safety standards whether in design or in practice, but it is equally important to have regard to the issue of safety at ground level. Ever since the Lockerbie incident, many residents of Menston have been concerned that in the event of an airborne incident, the fact that aircraft now overfly the village (instead of sticking to the pre-defined NPR) it would be impossible to land on open ground and a disaster could happen in or very close to the village. Many people are also concerned, on the evidence of the WHO, about the effects of noise and emissions, particularly upon their children and elderly relatives/neighbours.

3.6.4. **Impact**

With a total of 83% of responses stating they Agree/Strongly Agree with this DP and the overriding principle that the Safety of the operation is fundamental. Safety is at the forefront of everything Leeds Bradford Airport does. Safety will underpin any airspace change and where possible, enhance current safety standards. LBA also believes it is crucial that any proposed changes do not have a detrimental safety impact on other airspace users or communities. The comments indicated a desire to be more ambitious and this is reflected in the wording of the Final DP.

Final wording of Importance of Safety DP – The airspace design and its operation must maintain or where possible, enhance current levels of safety.

Note- Several comments referred to safety on the ground. Whilst this of course should be of upmost importance, it is unfortunately outside the scope of this ACP.

3.7. Question 7 – Design Principle 2

3.7.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the DP in question reworded or why you would like to see it removed altogether.

DP2 – Overflight – The new procedures should not increase the number of people overflown by aircraft using the Airport

3.7.2. Response

30 survey responses, 3 responses via email/letter. 33 total.

•	Strongly Agree	11	34%
•	Agree	10	30%
•	Neutral	6	18%
•	Disagree	4	12%
•	Strongly Disagree	2	6%





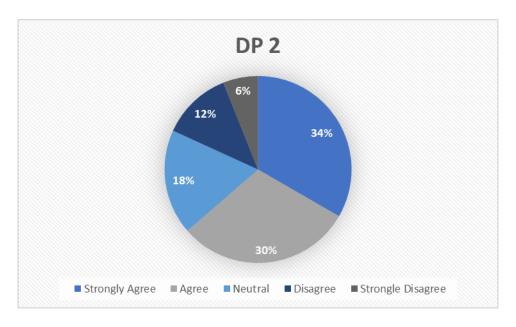


Figure 7: DP2

3.7.3. Comments

- 1. **RSAG** It could be incorporated into a Single Noise Design Principle SNDP. It should state "not increasing and where possible decreasing the noise footprint". This should positively state the design criteria that will be followed to develop noise preferential routes e.g., will dispersion and/or respite be used? Will existing routes be followed, will changes be made where problems have occurred with the current routes, etc
- 2. MLRA- Overflight Reducing the overflight of local residents has to be very high in the Design Principle Priorities, especially as one of the documented goals of the ACP is to minimise noise to Communities. Previously I had highlighted flaws in the current Departure Route Plan from Runway 32 as Expert Opinion says it cannot be consistently accurately flown. The new PBNs must address the fact that the current SID from Runway 32 cannot be flown accurately, whilst considering the options that the opening up of the Airspace to East has created more options for new departure routes in line with the stated Aims of the ACP, minimising the noise on the local communities.
- 3. **Burley Parish Council-** The Overflight of new people and dwellings is of course a significant driver for the DPs, however, the concept of reducing the overflight of local residents must appear high on the list for this DP, particularly with the stated goals of ensuring that the new procedures addresses "noise to communities".
 - The application of flyable, laterally accurate PBN procedures must be at the core of this DP. In addition, with the availability of areas of no concentration of dwellings to the north of LBA in the areas that Runway 32 departures could fly, PBN procedures that bisect any significant area of concentrated dwelling are clearly possible.
 - We also note that at Stage 2, point 139 that "Each 'people overflown' metric used in the appraisal must apply national policy and therefore include housing, hospitals, schools etc. that have planning permission. It must also have regard to local plans, such as what is anticipated under Local Development Frameworks, which will require the change sponsor to engage as needed with local authorities and local communities." This is highlighted in our response to Question 9 DP4.





4. **Former ACC member**- Agree. It should be fundamental to the design that there should be no increase in the number of people overflown, other than where this is inevitable if new development is not restricted (by Local Authorities) and construction takes place underneath the agreed flightpath.

3.7.4. **Impact**

The wording within **DP3 – Noise** adequately covers the intent of this DP, so it was considered appropriate to consolidate the two. The new wording is as follows;

Final wording of Noise DP - The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground and where possible periods of built in respite should be considered.

3.8. Question 8 – Design Principle 3

3.8.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP3 – Noise Footprint – The new procedures should not increase the noise footprint of the existing airport operation, i.e., it should not increase the number of people affected within the 51dBA Equivalent A-Weighted Continuous Sound Level (LAeq) 16-hour contour.

3.8.2. Response

29 survey responses, 2 responses via email/letter. 31 total.

•	Strongly Agree	13	42%
•	Agree	10	32%
•	Neutral	5	16%
•	Disagree	1	3%
•	Strongly Disagree	2	7%





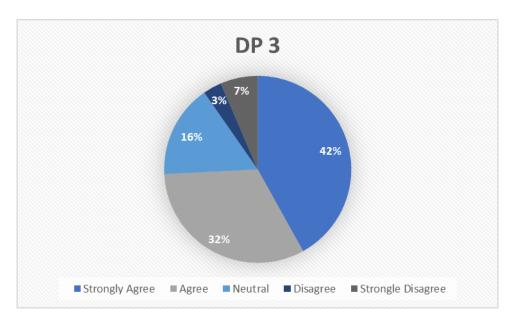


Figure 8: DP3

3.8.3. **Comments**

- 1. **RSAG** It could be incorporated into a single Noise design principle. It should state "not increasing and where possible decreasing the noise footprint". This should positively state the design criteria that will be followed to develop noise preferential routes e.g., will dispersion and/or respite be used? Will existing routes be followed, will changes be made where problems have occurred with the current routes, etc
- 2. **MLRA** Strongly Disagree-It would be great if LBA could extend the area of the enforceable 51 dBA LAeq 16-hour contour over BIW and Menston. Noise is a severe issue for those communities, and this would show that LBA are taking the Communities' concerns seriously and in the spirit of cooperating with Stakeholders.
- 3. **Burley Parish Council** Strongly Disagree Although the areas declared for the assessment of noise footprint conform to CAA and Government guidelines, there is an opportunity for LBA in the spirit of seeking the "support of our stakeholders to effect change" to extend the area of the enforceable 51 dBA LAeq 16-hour contour to the North and Northwest.
- 4. Former ACC member- Disagree. It should be entirely possible, without breaching the regulations (51dBA LAeq 16-hour contour), to extend the area to the North & North-West of the airport, whereby to reduce the impact on local communities such as Menston and Burley, and therefore facilitate some "dispersal" (per Q5) and equally allow periods of "respite" (per Q8).
- 5. **Menston Parish Council** DP 3 should be stronger "Must reduce" the noise footprint. That enforceable area should also be widened.
- 6. Climate Action Menston- DP3 Noise footprint needs to be re-worded to "must reduce".





3.8.4. **Impact**

Whilst this DP is largely supported, the decision has been made following the feedback to combine this DP4, as they both have Noise as an underlying theme. In order to minimise the noise impact to stakeholders on the ground LBA will take the following mitigating options into account where possible:

- Using more noise efficient operational practices
- Minimising number of people newly overflown
- Avoid overflying communities with multiple routes
- Maximise sharing through managed dispersal or respite
- Minimising total population overflown
- Designing flight paths over commercial and industrial areas_
- Adherence of the Section 106 agreement in relation to Noise Abatement.

The comments indicated a desire to be more ambitious with this DP and this is reflected in the wording of the Final DP. It was also suggested that we combine similar DPs into a single 'Noise' DP which we have addressed.

The feedback received from Question 5 of the survey encapsulates the stakeholders desire to provide built in periods of respite. In response to stakeholder feedback this DP has been amended to reflect a holistic approach to minimising noise and reworded as follows:

Final wording of Noise DP - The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground and where possible periods of built-in respite should be considered.

Note: Fortunately, the three responses that disagreed with this DP provided comments in justification. All three stipulated the desire to extend the area of the enforceable 51 dBA LAeq 16-hour contour to the North and Northwest. This will be highlighted to the designers during the stage 2 options development phase.

3.9. Question 9 – Design Principle 4

3.9.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP4 – Tranquillity – Implementation should minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding National Beauty (AONB)

3.9.2. Response

30 survey responses, 2 responses via email/letter. 32 total.

•	Strongly Agree	6	19%
•	Agree	11	34%
•	Neutral	12	38%
•	Disagree	2	6%





Strongly Disagree 1 3%

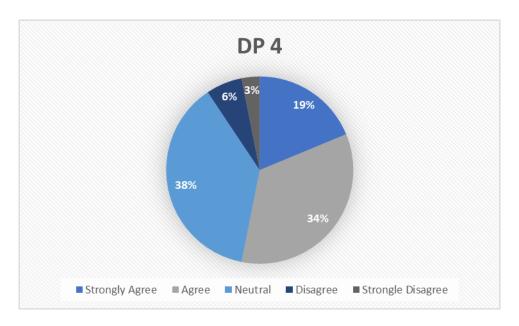


Figure 9: DP4

3.9.3. Comments

- RSAG- It could be incorporated into a single Noise design principle. It should state "not increasing and where possible decreasing the noise footprint". This should positively state the design criteria that will be followed to develop noise preferential routes e.g., will dispersion and/or respite be used? Will existing routes be followed, will changes be made where problems have occurred with the current routes, etc
- 2. Burley Parish Council- Neither agree nor disagree -The avoidance of National Parks etc should not compromise a DP or any option that would allow PBN procedures to avoid urban concentration close to the airport. It must be noted that throughout the Wharfedale Valley that thousands of new homes are to be built. Indeed, Burley in Wharfedale is to grow by more than 700 homes over the next few years, many of which are in the final stages of delivery and include a new school and a 70-bed nursing home.
- 3. **Former ACC member** Agree. For reasons similar to those in the preceding answer, noise and emissions over AONBs and National Parks should be minimised during the design process, but some compromise should be allowable if it facilitates the other objectives of "dispersal" and "respite".

3.9.4. **Impact**

Whilst the responses to this DP were mixed CAP1616 states that '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'. It was decided to retain this DP in keeping with the Government's Air Navigation Guidance and include other noise sensitive areas as highlighted by the stakeholders in Question 4.





In response to stakeholder feedback this DP will be amended to include sites of cultural and environmental interest as well as healthcare and education facilities.

Final wording of Tranquillity DP: Where practical, route designs should limit effects upon noise sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of care or education and AONB's.

3.10. Question 10 – Design Principle 5

3.10.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the DP in question reworded or why you would like to see it removed altogether.

DP5 – **Emissions and Air Quality** – The New Design should seek to minimise the growth in aircraft emissions, the further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change.

3.10.2. Response

30 survey responses, 3 responses via email/letter. 33

•	Strongly Agree	19	59%
•	Agree	7	19%
•	Neutral	6	19%
•	Disagree	0	0%
•	Strongly Disagree	1	3%

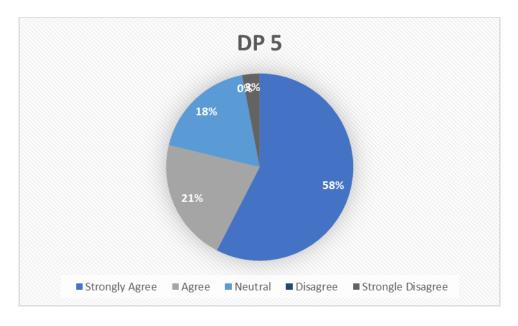


Figure 10: DP5

3.10.3. **Comments**





- 1. **RSAG** We would like to see "minimise and where possible reduce growth in aircraft emissions" and again some positive statement on how this might be achieved e.g., direct routing, etc
- 2. **MLRA** Strongly agree- We would hope that Emissions influence the design of the PBNs so they can be accurately flown consistently to minimise the effects on the Ground.
- Burley Parish Council- Strongly agree -The options must use PBN accuracy to ensure strict adherence to departure tracks, and the environmental condition of wind and drift must be taken into account to ensure emissions and Air Quality impacts are also addressed.
- 4. Former ACC member- Strongly Agree. This is an inescapable obligation, but if LBA continues to abuse the definition of the NPR/SID by inappropriately stating that it is the same thing as the swathe (which the CAA describes as a corridor within which the NPR/SID is located), then it's pointless spending time and resources on defining a SID which won't be followed. The accuracy of PBN must be applied to ensure that the defined SID is followed by departures, and if allowance is made for "dispersal" and "respite" that the conditions are specified, and the same degree compliance is assured.
- 5. **Menston Parish Council-** Similarly, in DP5, it should be "seek to reduce the growth in aircraft emissions..."
- 6. **Climate Action Menston** Strongly Disagree- DP5 Growth in aircraft emissions needs to be reworded to "must reduce"

3.10.4. **Impact**

As a result of stakeholder feedback, the DP is revised to reflect an ambition to stabilise and, if possible, improve the situation with respect to air quality and emissions. LBA is committed to minimise environmental impact through the most efficient airspace and procedure design. This covers both CO2 emissions and associated fuel burn. Improvements in air quality and ecological impact require a coordinated approach from a vast variety of stakeholders which LBA is unable to measure. Reference to air quality and ecological impact has therefore been removed and a commitment made to what LBA does have control over. The DP has been amended to reflect this ambition.

The New Design Principle is as follows:

Final wording of Emissions and Air Quality DP – The proposed design should minimise CO2 emissions per flight.

3.11. Question 11 – Design Principle 6

3.11.1. To what extent do you agree with each of the draft DPs Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.





DP6 – Operational Requirements – The new procedures should address the needs of most operators at LBA.

3.11.2. Responses

32 survey responses, 3 responses via email/letter. 35 total.

•	Strongly Agree	7	20%
•	Agree	6	17%
•	Neutral	13	37%
•	Disagree	0	0%
•	Strongly Disagree	9	26%

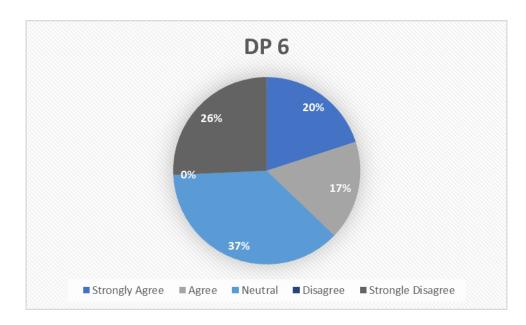


Figure 11: DP6

3.11.3. **Comments**

- 1. **RSAG** neutral- Very vague, almost meaningless. No idea whether this relates to operators' capacity or technology requirements
- 2. **MLRA** Strongly Disagree- Surprised by this question surely those local communities on the ground need to be top of the list when LBA are looking at options to reduce overflights that create significant noise and impact air quality.
- 3. **Burley parish council-** Strongly Disagree The needs of the stakeholders on the ground must be the uppermost consideration when options are considered with the principle of reducing overflights, noise, emissions, and air quality built into designs.
- 4. **Former ACC member** Operational Requirements: Strongly Disagree. LBA should not be bowing to the wishes of the airline operators which use the airport, but setting the priority for the people it serves and the community it resides in. Stakeholders in the area should be the priority.





3.11.4. **Impact**

The response to this DP was varied with no real show of support from the stakeholders. Comments allude to the vagueness of the DP and highlight that other priorities (captured in other DPs) are of higher importance.

The recommendation is to remove this DP, as the intent is captured within the new Technical Requirements DP.

Final wording of Technical Requirements DP - The design shall be fully compliant with Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS) and United Kingdom (UK) CAA criteria to meet the technical capability requirements of aircraft using the airport.

3.12. Question 12 – Design Principle 7

3.12.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP7 – **Airspace Dimensions** – The Airspace Design should afford only the appropriate volume of controlled airspace to contain and support Continuous Climb Operations and Continuous Descent Operations by Commercial Air Transport whilst enabling safe, efficient access for other types of flying operation.

3.12.2. Responses

31 survey responses, 2 responses via email/letter. 33 total.

•	Strongly Agree	j	9	27%
•	Agree		12	37%
•	Neutral	6	18%	
•	Disagree		5	15%
•	Strongly Disag	ree	1	3%





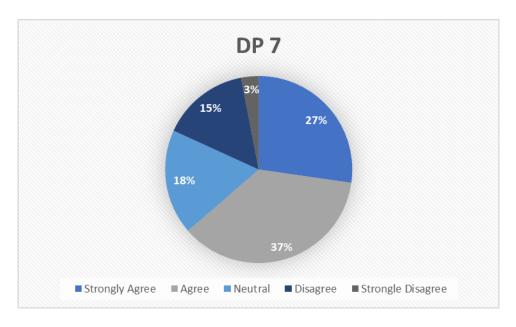


Figure 12: DP7

3.12.3. **Comments**

- 1. **RSAG** We would like to see "the airspace and route designs should minimise the impacts on other airspace users by limiting the amount of controlled airspace to the minimum required and, indeed, by reducing the amount of controlled airspace if the design(s) allow".
 - We would like to see a commitment to make the necessary changes in an area of controlled airspace no larger than the current area of controlled airspace.
 - There is no mention of Flexible Use of Airspace (FUA) and the possibility of releasing chunks of controlled airspace when it is not in use.
- MLRA Disagree The Airspace Design must look at all the Options as per the guidance
 of the CAP 1616 process which, using accurate PBN tracking, would surely promote new
 departure routes from Runaway 32 to the East that are now feasible and that provide
 better solutions that fit CAP1616 than the current Runway 32 departure route that is
 not consistently accurately flyable.
- 3. **Burley Parish Council** Disagree The Airspace design must be appropriate to allow all options that flow from the CAP 1616 process to be realized. The design must allow alternative departure routes from Runway 32 using accurate PBN tracks to allow dispersion of traffic to the east where aircraft are departing ultimately in that direction.
- 4. **Former ACC member** Disagree. The Design of the Airspace should be adequate for all the requirements of CAP1616 and allow for the considerations contained in the preceding answers, as relate to safety, the minimisation of noise, emissions and some opportunity for "respite".
- 5. **Menston Parish Council** In DP7, all options from this CAP1616 process should be able to be realised.
- 6. Climate Action Menston DP7 must allow for all options for CAP1616 to be realised.





- 7. **Pennine Soaring Club** Clearly safety is a primary concern, but the needs of those flying outside of ATC oversight need to be recognised. Paraglider and hang glider pilots may not have access to radio transponders or airband radio. All efforts should be made to minimise the volume of controlled airspace.
- 8. Dales Hang gliding and Paragliding Club (DHPC) Whilst the safety of those operating outside controlled airspace is as important as the safety of those within it; you should also consider the effects that you will have on those operating outside controlled airspace, particularly those of us who are not equipped with transponders or airband radios. Controlled airspace should always be the minimum necessary.

3.12.4. **Impact**

This DP was largely supported, however, the similarities, surrounding the design, between this and the original DP8 have led us to amalgamate the two DPs to form one overarching Airspace Dimensions DP. Continuous Climb and Descent Operations form part of the drive for efficiency and the DP reworded for simplicity.

The new Design Principle is as follows:

Final wording of Airspace Dimensions DP - The volume and classification of controlled airspace required for LSA should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.

3.13. Question 13 – Design Principle 8

3.13.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP8 - Airspace Availability - Sufficient controlled airspace should be available to support LBA operations independently.

3.13.2. Responses

31 survey responses, 2 responses via email/letter. 33 total.

•	Strongly Agree	11	34%
•	Agree	7	21%
•	Neutral	11	33%
•	Disagree	2	6%
•	Strongly Disagree	2	6%





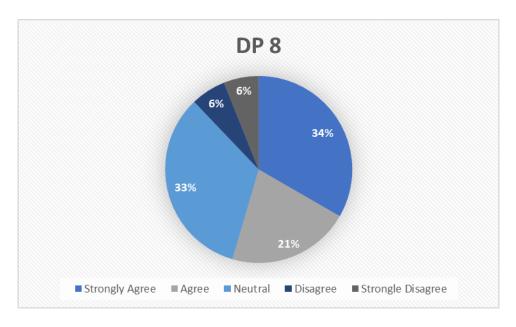


Figure 13: DP 8

3.13.3. **Comments**

- 1. **RSAG** We are not sure what the intent is of this principle.
- 2. MLRA Strongly Agree If LBA want to avoid repeating the mistakes of their last attempt to change the Airspace, they should put the local community at the Heart of their design procedures and promote the resulting design solutions robustly in the discussions with the National Airspace Framework stakeholders.
- 3. **Burley Parish Council** Strongly Agree -The availability of Airspace that LBA can use to design procedures which address "noise to communities" is crucial. LBA must stand with the local communities and resist any pressure from National or other ANSPs to restrict the flexibility required to meet the stated ACP goals.
- 4. **Former ACC member** Agree. The airspace should be designed to accommodate the needs of local stakeholders and LBA operations without (as previously) too many concessions to other airports and operators.

3.13.4. **Impact**

This DP was largely supported, however, the similarities, surrounding the design, between this and the original DP7 have led us to amalgamate the two DPs to form one overarching Airspace Dimensions DP. Continuous Climb and Descent Operations form part of the drive for efficiency and the DP reworded for simplicity.

The new Design Principle is as follows:

Final wording of Airspace Dimensions DP - The volume and classification of controlled airspace required for LBA should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.



3.14. Question 14 – Design Principle 9

3.14.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the DP in question reworded or why you would like to see it removed altogether.

DP9 - Airspace Complexity - The Airspace Design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.

3.14.2. Responses

28 survey responses, 3 responses via email/letter. 31 total

•	Strongly Agree	10	33%
•	Agree	10	32%
•	Neutral	9	29%
•	Disagree	1	3%
•	Strongly Disagree	1	3%

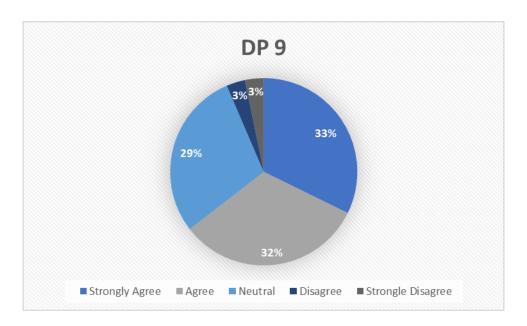


Figure 14: DP9

3.14.3. **Comments**

1. **RSAG** - We fully agree with the sentiment but regard it as a 'given' under the above recommended overarching Safety and Airspace principles.





- 2. **MLRA** Neither agree nor disagree Airspace complexity should not get in the way of LBAs stated goal of using appropriate, accurate PBN procedures to limit the impact of its operations on local communities on the ground.
- 3. **Burley Parish Council** Neither agree nor disagree -The airspace complexity must, in no way compromise LBAs stated goal of using appropriate, accurate PBN procedures to mitigate the impact of its operations on local communities.
- 4. **Former ACC member** Neutral. The statement as to this criterion is impossible for someone not fully conversant with air navigation to understand, but surely it must be designed NOT to be too complex to meet its purposes.

3.14.4. **Impact**

DP was largely supported and remains unchanged.

Final wording of Airspace Complexity DP - The airspace design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.

3.15. Question 15 – Design Principle 10

3.15.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP10 - Compliance - The design shall be fully compliant with the design criteria stated in International Civil Aviation Organisation (ICAO) Doc 8168 (PANS OPS), acceptable to the CAA and, the implementation shall follow all applicable legislation and regulations.

3.15.2. Responses

30 survey responses, 3 responses via email/letter. 33 total

•	Strongly Agree	11	33%
•	Agree	15	46%
•	Neutral	7	21%
•	Disagree	0	0%
•	Strongly Disagree	0	0%





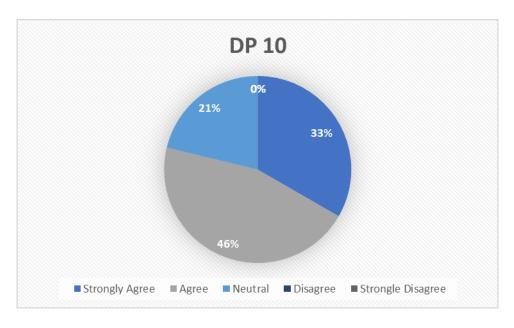


Figure 15: DP10

3.15.3. **Comments**

- 1. **RSAG** Agreed, but might this be better presented under a single 'Policy' DP (see MAN) covering international, and national legislation, regulation, and policies (also including AMS, Future Airspace Implementation North (FAS(N)), etc.)
- 2. MLRA- Strongly agree The design should be fully compliant with the ICAO Doc 8168. On departure routes, the PBN accuracy requirements should be used for the entirety of the route. There should be no tolerance of 'off track' flying in any SID or NPR.
- 3. **Burley Parish Council** Strongly agree -Any ICAO PANS OPS departure routes must be fully compliant and use PBN accuracy requirements for the entirety of the route. No latitude should be given for Dead Reckoning legs in any SID or NPR which would introduce "off track" flying.
- 4. **Former ACC member** Strongly Agree. What would be the point of spending time and money on the design of a system which is non-compliant? What a nonsense of a question!

3.15.4. **Impact**

This DP was fully supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, it has been decided to combine this DP with the original DP11 and DP12 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows;





Final wording of Technical Requirements DP - The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.

3.16. Question 16 – Design Principle 11

3.16.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP11 - Aircraft Category - The new procedures shall be technically flyable by all aircraft types in approach Speed Categories A through D.

3.16.2. **Responses**

30 survey responses, 2 responses via email/letter. 32 total.

•	Strongly Agree	10	31%
•	Agree	13	41%
•	Neutral	8	25%
•	Disagree	0	0%
•	Strongly Disagree	1	3%

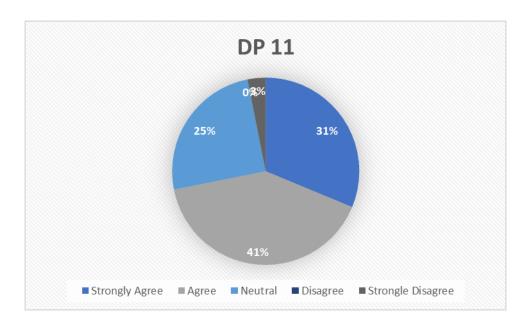


Figure 16: DP11

3.16.3. **Comments**

1. **RSAG** - This could be incorporated under a single overarching Technology Principle as identified at MAN: "Our route designs should be based on the latest aircraft navigational technology widely available"





- 2. MLRA- Strongly agree- LBA should ensure that the new design is flyable by all types of aircraft. In order to promote compliance, sanctions should be introduced for the Airlines so they are motivated to adhere to the design. Without sanctions then Airline compliance levels to the new design will suffer!
- 3. **Burley Parish Council** Strongly agree As well as being flyable by all types of aircraft, LBA shall ensure that any military or non PBN capable aircraft fly the new departure routes and that sanctions should be enforced for noncompliance. Currently, there's no enforcement being carried out at LBA, nor has it ever been carried out. Flying outside the swathe, noisy aircraft, etc are subject to financial penalties at other regional airports, and there must be no exemption at LBA. The Parish Council recognize that this is an area which LBA and Leeds Council will have to agree. Exemption is not an option; Leeds City Council must recognize that a policy needs to be enforced.

3.16.4. **Impact**

This DP was fully supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, it has been decided to combine this DP with the original DP10 and DP12 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows:

Final wording of Technical Requirements DP - The Design shall be fully compliant with PANS - OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.

3.17. Question 17 – Design Principle 12

3.17.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP12 - Equipage and Approval - The new procedures shall be flyable by the majority of LBA commercial aircraft operators.

3.17.2. Responses

31 survey responses, 2 responses via email/letter. 33 total.

•	Strongly Agree	5	15%
•	Agree	14	43%
•	Neutral	8	24%
•	Disagree	1	3%
•	Strongly Disagree	5	15%





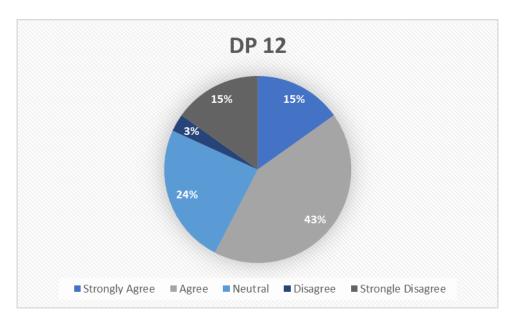


Figure 17: DP12

3.17.3. **Comments**

- 1. **RSAG** This could be incorporated under a single overarching Technology Principle as identified at MAN: "Our route designs should be based on the latest aircraft navigational technology widely available"
- 2. **MLRA-** Strongly disagree -This should not be the majority of LBA commercial aircraft operators but ALL commercial aircraft operators.
- 3. **Burley Parish Council** Strongly disagree The new PBN departure procedures shall be flyable by all aircraft operating from LBA. The exemption for turboprop aircraft must be removed.
- 4. **Menston Parish Council-** In DP12, it must be for all aircraft including turboprop.
- 5. **Climate Action Menston** DP12 must specifically include turboprops.

3.17.4. **Impact**

This DP was supported by the stakeholders, the majority of additional comments stated the need to move away from the turboprop exemptions, the rewording of the combined DP below addresses this. This DP has been combined with the original DP10 and DP11 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows;

Final wording of Technical Requirements DP - The design shall be fully compliant with PANS - OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport.





3.18. Question 18 – Design Principle 13

3.18.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP13 - Arrival Transitions - The arrival transition designs shall seamlessly integrate with new Required Navigational Performance (RNP) Instrument Approach Procedures (IAP) at LBA and if possible, the existing ILS approach procedures.

3.18.2. Responses

29 survey responses, 2 responses via email/letter. 31 total.

•	Strongly Agree	8	26%
•	Agree	10	32%
•	Neutral	11	36%
•	Disagree	0	0%
•	Strongly Disagree	2	6%

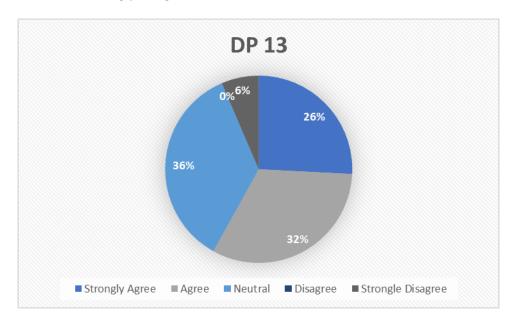


Figure 18: DP13

3.18.3. **Comments**

- 1. **RSAG** Might benefit from being grouped with 14, 15, 16, below as a single 'Route Design' DP and it should include a statement that says "will minimise and, where possible, reduce the impact of these routes on other airspace users outside the controlled airspace".
- 2. **MLRA** Strongly Agree Arrival transitions should be designed so as to take into the account the new departure Routes from Runway 32 that give the best possible outcome for stakeholders to the North West of LBA, ie Burley In Wharfedale and Menston.





3. **Burley Parish Council** - Strongly Agree - Arrival transitions should be designed to give lateral separation from the new departure routes from Runway 32 to ensure that these routes can be designed to ensure that they are the "best possible" for stakeholders to the Northwest of LBA.

3.18.4. **Impact**

This DP was supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, this DP has been combined with the original DP14, DP15 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

Final wording of Systemisation DP - The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

3.19. Question 19 - Design Principle 14

3.19.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP14 - Departure Procedures - The Standard Instrument Departures (SIDs) shall terminate at the agreed 'Gateways' into the route network and should be deconflicted from the arrival transitions.

3.19.2. Responses

30 survey responses, 2 responses via email/letter. 32 total.

•	Strongly Agree	5	16%
•	Agree	10	31%
•	Neutral	14	44%
•	Disagree	1	3%
•	Strongly Disagree	2	6%





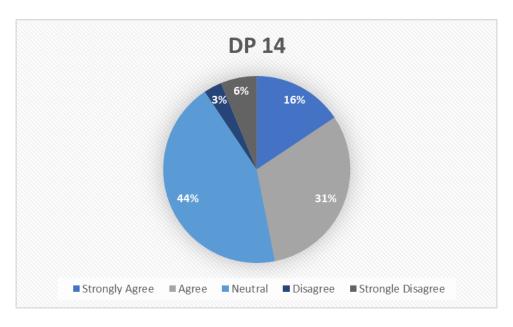


Figure 19: DP14

3.19.3. **Comments**

- 1. **RSAG** Might benefit from being grouped with 14, 15, 16, below as a single 'Route Design' DP and it should include a statement that says "will minimise and, where possible, reduce the impact of these routes on other airspace users outside the controlled airspace".
- 2. **MLRA** Neither Agree nor Disagree Departure procedures should deliver all the stated ACP objectives on Track Keeping, Noise, Nuisance, Emissions and Air Quality. Again this should drive the discussions with the National ANSPs especially to deliver the best solution for Departures on Runway 32.
- 3. Burley Parish Council Neither Agree nor Disagree Departure procedures must deliver all the stated improvements in Track Keeping, Noise, Nuisance, Emissions and Air Quality. These procedures must not be constrained by the requirement of adjacent or national ANSPs if they dictate gateways to which the Runway 32 Departure routes are connected. LBA; as we have previously stated, must resist any such constraints (as stated in Question 1). Approach procedures MUST also be designed to give lateral separation from the new departure routes from Runway 32 to ensure that the departure routes can be designed to ensure they are "the best possible" for stakeholders to the Northwest of LBA.

3.19.4. **Impact**

This DP was supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, this DP has been combined with the original DP13, DP15 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:





Final wording of Systemisation DP— The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

3.20. Question 20 – Design Principle 15

3.20.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP15 - Approach Procedures - The Instrument Approach Procedures (IAPs) shall replicate the existing conventional approach procedures as closely as possible.

3.20.2. Responses

30 survey responses, 2 responses via email/letter. 32 total.

•	Strongly Agree	3	10%
•	Agree	10	31%
•	Neutral	16	50%
•	Disagree	1	3%
•	Strongly Disagree	2	6%

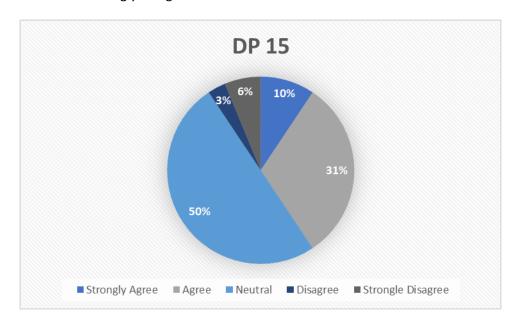


Figure 20: DP15

3.20.3. **Comments**

1. **RSAG** - Might benefit from being grouped with 14, 15, 16, below as a single 'Route Design' DP and it should include a statement that says "will minimise and, where possible, reduce the impact of these routes on other airspace users outside the controlled airspace".





- 2. NWLTF We have no opinion on procedural matters but we would oppose the adoption of any design principle which reinforced use of the existing ILS track in to RW32. This is because, since it overflies a much greater number of people than did the previous NDB route (and, since it follows a ridge of higher ground, it produces more noise at ground level), we consider the existing ILS route distinctly suboptimal in terms of its impact on the local communities. We understand that ILS is generally favoured by operators and that it provides the most direct route but we think that their preference should not override the increased impact on the thousands of people living under the ILS route. We would suggest that significant benefit could be gained by shifting the usual approach to RW32 to the south of the centreline of the existing ILS route (perhaps following the NDB route along Kirkstall Valley) with the ILS route only being used when required for safety reasons (e.g. during particularly adverse weather conditions).
- 3. MLRA Neither Agree nor Disagree- Approach procedures MUST also be designed to accommodate the new departure routes from Runway 32 that give the best possible solution to the communities of Burley in Wharfedale and Menston that are most affected by the current departure arrangement.
- 4. **Burley Parish Council** Strongly Agree The procedures when developed should give Air Traffic Control Officers (ATCOs) time to concentrate their efforts in ensuring that Aircraft attain and keep the new track compliance delivered by accurate PBN departure routes from Runway 32.

3.20.4. **Impact**

This DP was supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, this DP has been combined with the original DP13, DP14 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

Final wording of Systemisation DP – The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

3.21. Question 21 – Design Principle 16

3.21.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP16 - Coordination - The new procedures should result in a reduction in the amount of tactical coordination required by ATCOs.

3.21.2. Responses





29 survey responses, 2 responses via email/letter. 31 total.

•	Strongly Agree	8	26%
•	Agree	11	36%
•	Neutral	10	32%
•	Disagree	1	3%
•	Strongly Disagree	1	3%

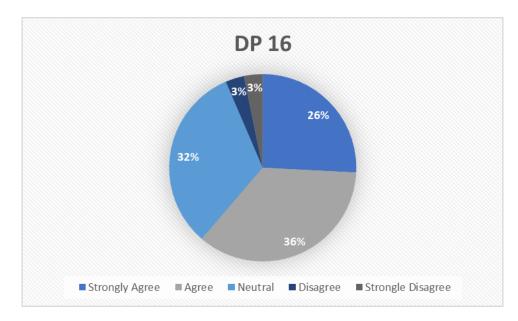


Figure 21: DP16

3.21.3. **Comments**

- 1. **RSAG** Might benefit from being grouped with 14, 15, 16, below as a single 'Route Design' DP and it should include a statement that says, "will minimise and, where possible, reduce the impact of these routes on other airspace users outside the controlled airspace".
- 2. **MLRA** Strongly Agree- The procedures should allow ATCOS the time to ensure that Aircraft can comply with the new tracks with accurate PBN departures routes from Runway departure routes from Runway 32.

3.21.4. **Impact**

This DP was supported by the stakeholders. From the comments and with the desire to make the DPs more manageable to take forward to the options development phase, this DP has been combined with the original DP13, DP14 and DP15 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

Final wording of Systemisation DP - The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate





with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

3.22. Question 22 – Design Principle 17

3.22.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP17 - Cost of Change - The new procedures shall be implemented in a cost-effective manner.

3.22.2. Responses

30 survey responses, 2 responses via email/letter. 32 total.

•	Strongly Agree	5	16%
•	Agree	12	37%
•	Neutral	8	25%
•	Disagree	4	13%
•	Strongly Disagree	3	9%

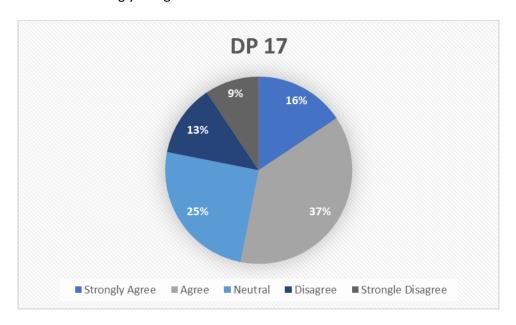


Figure 22: DP17

3.22.3. **Comments**

1. **RSAG** - We understand that cost will be a criterion, but we need more detail on what this really means. There must be a statement along the lines of "this should not be to the detriment to the ACP proposals". E.g., reducing costs restricts the use of more advanced technology or reduces the amount of airspace design consultancy.





- 2. **MLRA** Strongly agree- After the last experience of the previous Consultation, we would welcome transparency from LBA, including around the funding received for this ACP.
- 3. **Burley Parish Council** Neither Agree nor Disagree It should be considered by LBA, that local residents whilst supportive of an open culture in this ACP are exposed to cost when validating information produced by LBA and their consultants. LBA have a duty to disclose the amount of public funding which they are receiving from national funding from the Airspace Modernisation programme.

3.22.4. **Impact**

Due to the obvious intent, and recent funding grants made available, this DP is deemed unnecessary because of agreed funding criteria and robust oversight. Recommendation is to remove this DP.

3.23. Question 23 – Design Principle 18

3.23.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP18 - Operational Cost - Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.

3.23.2. Responses

31 survey responses, 2 responses via email/letter. 33 total.

•	Strongly Agree	6	18%
•	Agree	13	40%
•	Neutral	11	33%
•	Disagree	0	0%
•	Strongly Disagree	3	9%





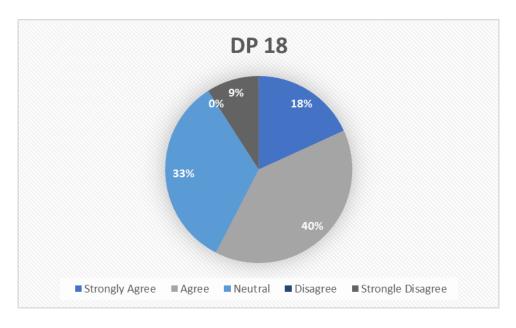


Figure 23: DP18

3.23.3. **Comments**

- MLRA- Neither Agree nor Disagree- The primary aim of operational procedures must be driven by the need to improve Track Keeping, noise limitation and air quality and its impact on the local residents from departure Routes, especially Burley and Menston who are most affected by the current design. Fuel Efficiency should be secondary
- 2. **Burley Parish Council** Neither Agree nor Disagree Operational costs **must** be fully borne by LBA or aircraft operators. In addition, the principles of improvements on Track Keeping, Noise, Nuisance, Emissions and Air Quality MUST be the uppermost considerations.

3.23.4. **Impact**

This DP was largely support and remains unchanged.

Final wording of Operational Cost DP - Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.

3.24. Question 24 – Design Principle 19

3.24.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

DP19 - AMS Realisation - This ACP must serve to further, and not conflict with, the realisation of the AMS.





Note: It is accepted by the CAA that adherence to this DP, in what is a coordinated modernisation programme, may impact upon the development of 'Options'.

3.24.2. Responses

28 survey responses, 1 response via email/letter. 29 total

•	Strongly Agree	3	10%
•	Agree	13	45%
•	Neutral	7	24%
•	Disagree	1	4%
•	Strongly Disagree	5	17%

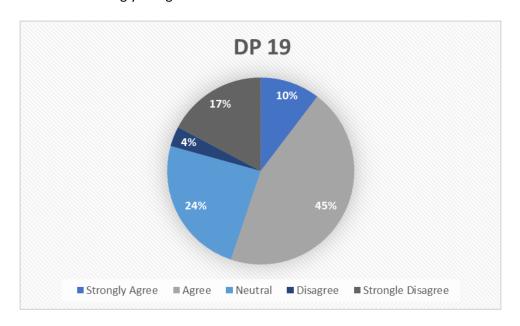


Figure 24: DP19

3.24.3. **Comments**

- 1. **RSAG** Agreed, but might this be better presented under a single 'Policy' DP (see MAN) covering international, and national legislation, regulation, and policies (also including AMS, FAS(N), etc)
- 2. MLRA- Strongly disagree- The primary ACP aims should be improving Track Keeping, Noise, Nuisance, Emissions and Air Quality. The needs of the local stakeholders should have primacy and not be influenced by the AMS project- LBA should resist procedure designs that negatively impact that.
- 3. Burley Parish Council- Strongly disagree The prime driver for the ACP must be the stated improvement of Track Keeping, Noise, Nuisance, Emissions and Air Quality. LBA must not be influenced by the (AMS) project, and LBA should resist at all costs any designs of procedures that compromise the stated goals that will be welcomed by local stakeholders.





3.24.4. **Impact**

Whilst just under a quarter of responses from the survey stated they were not in favour of this DP; the comments were mostly relating to the priority of driving factors. There is no desire to place the priority of this DP above other DPs. Due to the purpose of this ACP and the funding behind it we have chosen to retain this DP.

The DP remains unchanged, and updates are provided to Change Sponsors by the CAA in CAP1711.

Final wording of AMS Realisation DP - This ACP must serve to further, and not conflict with, the realisation of the AMS.

3.25. Question 25 – Design Principle 20

3.25.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the DP in question reworded or why you would like to see it removed altogether.

DP20 - PBN - The new procedures should benefit from as many of the potential benefits of PBN implementation as are practicable. This includes predictability, efficiency, continuous climb, and descent operations with the intention of reducing carbon emissions.

3.25.2. Responses

29 survey responses, 3 responses via email/letter. 32 total.

•	Strongly Agree	15	47%
•	Agree	9	28%
•	Neutral	6	19%
•	Disagree	0	0%
•	Strongly Disagree	2	6%





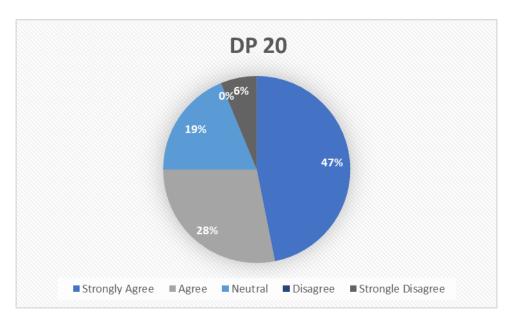


Figure 25: DP20

3.25.3. **Comments**

- 1. **RSAG** Agreed, but might this be better presented under a single 'Policy' DP (see MAN) covering international, and national legislation, regulation, and policies (also including AMS, FAS(N), etc)
- 2. NWLTF- Strongly Agree We found it difficult allocate a degree of importance to this because it did not distinguish between the various benefits which PBN might bring. We would, of course, like to see it being used to reduce the emissions of GHGs. But we think that it could also be used to reduce the exposure of the ground population to noise and pollutants associated with arriving and departing aircraft by allowing the adoption of approach and departure routes which avoid the most populated areas and by allowing continuous descent. We allocated an unqualified "strongly agree" to this item. We did not do so in our original response because there was no way for us to indicate a hesitation with respect to continuous climbs (we understand that a steeper ascent might increase noise close to the airport while reducing it slightly further away).
- 3. MLRA -Strongly Agree- The key goal (-and indeed the yardstick by which success should be judged by) should be designing routes that overfly the least number of dwellings to the Northwest. In-keeping with 'no preconceptions basis' of the ACP they should also look at all the potential options to the North East of the airport for Runway 32 Departure Routes to achieve this. Accurate track keeping should be part of this.
- 4. **Burley Parish Council-** Strongly Agree Accurate track keeping and routes that overfly the least amount of dwellings Northwest of LBA must be a key goal and measurement of success of this ACP.

3.25.4. **Impact**





This DP remains unchanged as it received a healthy level of support, and no comments to the contrary.

Final wording of PBN – The new procedures should benefit from as many of the potential benefits of PBN implementation as are practicable. This includes predictability, efficiency, continuous climb, and descent operations with the intention of reducing carbon emissions.

3.26. Question 26

- 3.26.1. Have we missed anything that should be incorporated as a Design Principle? Available answers:
 - Yes (please provide amplification); or
 - No, I'm content you've captured everything; or
 - Not sure; and
 - Optional open text field to provide amplification on your answer.

3.26.2. Responses

60% of the survey responses had no further comment. All comments provided are captured in their entirety below, where parts of the comments relate to specific DPs these have been extracted and incorporated in the assessment of that Design Principle.

3.26.3. **Comments**

1. The four Gliding Clubs in the Vale of York:- York (Rufforth West); Yorkshire (Sutton Bank); Wolds (Pocklington) and Burn Gliding Clubs-

The 'Yes'/ 'No' response requirement renders many of the questions 'leading'. A more open format would be more transparent.

Impact - Should the need for more surveys present itself during the next stages of this ACP this comment will be taken on board and questions constructed accordingly. To be able to extract quantitative date from the survey, certain limitations had to be put on the potential responses, however we feel that there was opportunity for stakeholders to expand on any of their answers should it have been required.00

2. Pennine Soaring Club

Clearly safety is a primary concern, but the needs of those flying outside of ATC oversight need to be recognised. Paraglider and hang glider pilots may not have access to radio transponders or airband radio. All efforts should be made to minimise the volume of controlled airspace.

Impact - This comment has been included in the responses to **DP7** – **Airspace Dimensions**. LBA will continue to follow the CAP1616 process and proactively engage with stakeholders throughout this ACP. The airspace ultimately needs to be fit for purpose and will potentially evolve as the procedures themselves evolve. LBA will endeavour to provide access to all airspace users.





3. Local resident

Accountability. Also, the consultation is already fundamentally skewed to permit non-compliance.

Impact - LBA will continue to proactively engage local stakeholders during this ACP and follow the CAP1616 process. This process will ensure that the development of the procedures is influenced by the preferences of local residents and other relevant stakeholders.

4. Northwest Leeds Transport Forum

The principles should ensure continuance of the longstanding requirement that all departures should be on Runway (RW)32, and all arrivals should be on RW14 unless it would be unsafe to do so. This is the most effective way to minimise the number of people affected by aircraft noise and so it is somewhat alarming that there is no reference to it in the draft design principles published In September 2021. The requirement is clearly stated in the EGNM pages of NATS' Aeronautical Information Service Document as a Noise Abatement Procedure. We understand that it dates back to Planning conditions set in 1993.

Impact - LBA will continue to proactively engage local stakeholders during this ACP and follow the CAP1616 process. This process will ensure that the development of the procedures is influenced by the preferences of local residents and other relevant stakeholders.

In the case of LBA, the NPRs are defined by the Local Authority under a Section 106 planning agreement as the swathe. The NPR swathe, therefore, illustrates a containment area within which all departing jet aircraft should remain, until the end is reached (at 3.5 DME). Whilst NPRs are published in the Aeronautical Information Publication (AIP), at LBA their ownership and enforcement is the responsibility of the Local Authority and not the CAA.

The introduction of PBN in the future will improve the accuracy and compliance with the NPR and this ACP will look to address the Section 106 where necessary.

5. Leeds City Council Inner Northwest Community Committee

An important design principle, noticeable by its absence from the Draft DPs published by LBA in September 2021, should be that the airspace change should in no way weaken the existing noise abatement procedures which were specifically designed to protect residents of the main built-up area near LBA. These procedures are clearly stated in the EGNM pages of NATS' Aeronautical Information Service Document (i.e., the pages relating specifically to LBA). They include a general requirement that aircraft operators "shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance practicable in areas surrounding the airport" and the more specific requirement that, unless it would be unsafe to do so, all departures should be on RW32 (i.e. towards the NW) and all arrivals should be on RW14 (ie from the NW). I understand that this requirement dates back to Planning Conditions set in 1993.

Impact - LBA will continue to proactively engage local stakeholders during this ACP and follow the CAP1616 process. This process will ensure that the development of the





procedures is influenced by the preferences of local residents, and other relevant stakeholders.

In the case of LBA, the NPRs are defined by the Local Authority under a Section 106 planning agreement as the swathe. The NPR swathe, therefore, illustrates a containment area within which all departing jet aircraft should remain, until the end is reached (at 3.5 DME). Whilst NPRs are published in the Aeronautical Information Publication (AIP), at LBA their ownership and enforcement is the responsibility of the Local Authority and not the CAA.

The introduction of PBN in the future will improve the accuracy and compliance with the NPR and this ACP will look to address the Section 106 where necessary.

6. Bramhope & Carlton Parish Council

Most of the design principles are clearly sensible principles. Asking respondents to rate them is the equivalent of asking respondents to agree to a statement that "Virtue is Good and Vice is Bad". The parish council planning committee after review said that they agreed with them all - as principles. The real problem comes when a further detailed stage of design shows that one design principle is in conflict with another. It is not clear how this rating of the DP will assist in resolving such a conflict.

Impact - The Final DPs that have been established following this stakeholder consultation are reduced and more succinct, enough to satisfy the concerns raised within this comment. All the DPs are awarded equal importance for the next stage of the CAP 1616 process where we will start to develop the concept design options.

7. Menston Parish Council

DP 3 should be stronger - "Must reduce" the noise footprint. That enforceable area should also be widened. Similarly, in DP5, it should be "seek to reduce the growth in aircraft emissions..." In DP7, all options from this CAP1616 process should be able to be realised. In DP12, it must be for all aircraft including turboprop.

Impact - This comment has been broken down and each element included in the specific DP feedback sections.

8. Climate Action Menston

DP3 Noise footprint needs to be re-worded to "must reduce". DP5 Growth in aircraft emissions needs to be reworded to "must reduce". DP6 must be reworded to include the needs of stakeholders. DP7 must allow for all options for CAP1616 to be realised. DP12 must specifically include turboprops.

Impact - This comment has been broken down and each element included in the specific DP feedback sections.

9. Regional Soaring Airspace Group (RSAG)

Too many DPs, more emphasis on the needs of other users of airspace - see our supplementary PDF submission





Impact - The comments from RSAG contained within the supplementary submission have been included with each DP and addressed in due course. We have also significantly reduced the number of DPs.

10. Liverpool John Lennon Airport

The LBA ACP should work holistically with other ACP sponsors to enable improvement for all.

Impact - This ACP is being progressed as part of the wider FASI(N) project. LBA is expected to participate in the development of the Airspace Modern Strategy (AMS) Masterplan, in conjunction with Airspace Change Organisation Group (ACOG), NERL and the other identified airports, which should address the concerns raised with this comment.

11. Ash Road Area Residents Association (ARARA)

We note with concern that the design principles are only asking us to take into account the number of people who are overflown. We consider that the number of flights, or the amount of nuisance per person /household are of equal if not greater importance than the number of people, le repeated exposure is more damaging than occasional exposure. This weakness in drafting means that this questionnaire is unable to generate useful information.

Impact - LBA will continue to proactively engage local stakeholders during this ACP and follow the CAP1616 process. This process will ensure that the development of the procedures is influenced by the preferences of local residents and other relevant stakeholders. This comment is also address within the Impact assessment for **DP2** and within the new **Noise DP**.





Non-Survey Feedback

4.1. Overview

4.1.1. A number of responses were received outside of the survey. These responses have all be reviewed and the relevant comments incorporated within the individual DP analysis sections of this report. Further comments outside of the scope of specific DPs are contained below in their entirety and responses given accordingly.

4.2. Moor Lane Residents Association (MLRA)

4.2.1. We don't think the local Communities of Burley and Wharfedale and Menston have been adequately represented in your list of Stakeholders, given that they are the most affected communities by noise from Runway 32 Departures.

The Online Survey is laid out so that it does not allow the respondent to expand upon their answers, merely a tick box exercise unless the respondent selects 'other'. This will dilute the ability of the ACP to get a full understanding of the issues that the stakeholders may wish to raise. In order to fully engage with stakeholders, we would suggest the online survey is altered and reissued to encourage free text from stakeholders so they can explain their answers rather than only allowing this if they select 'other'.

- 4.2.2. **Impact** We have had responses from:
 - Menston Parish Council;
 - Climate Action Menston;
 - Burley Parish Council.

Should the need for more surveys present itself during the next stages of this ACP this comment will be taken on board and questions constructed accordingly. To be able to extract quantitative data from the survey, certain limitations had to be put on the potential responses, however we feel that there was opportunity for stakeholders to expand on any of their answers should it have been required.

Another option available to stakeholder was to respond via a downloaded copy of the survey where they could further expand on their responses.

4.3. Regional Soaring Airspace Group (RSAG)

4.3.1. **Consultation Process** - We were surprised by the limited number of aviation stakeholders appearing on your initial Stakeholder List (B4). It was disappointing to see that whilst it identified stakeholders from as far afield as Cleveland & Humberside it omitted to include soaring and GA clubs from the Vale of York; those closest to and, potentially, most impacted by any changes resulting from this ACP. In addition, the British Hang Gliding & paragliding was not consulted, despite being a national body that is represented on NATMAC.

We are pleased to note that, subsequently, LBA has recognised that establishing effective two-way conversation with all affected stakeholders is the way forward; that engagement on developing and agreeing the DPs is the right place to start and that this can then be built





upon throughout the CAP 1616 process. We strongly believe that both LBA and stakeholders will reap the benefit of this early and ongoing comprehensive engagement and the common understanding on objectives and considerations that it will provide. It would be useful if LBA could publish an updated list of stakeholders that reflects the changes and additions that have now been made.

We are also grateful that LBA has extended the submission date for consultation on the DPs. This will allow the stakeholders that we represent, the wider community of GA stakeholders and LBA to have a better understanding of the design considerations that are important to us and, hopefully, to provide mutually acceptable proposals and solutions.

Objectives - We have some experience of engaging with ACPs in the past. Our interpretation is that the objectives of the proposal are defined in the Statement of Need (SofN) and that the key principles and considerations to be followed in the development of proposals to meet those objectives are laid out in the DPs.

We note the objectives to update airspace and route structures to allow for the implementation of Standard Instrument Departures (SIDs), Transitions and Instrument Approach Procedures (IAPs) and that this will be done in line with the CAA's Airspace Modernisation Strategy (AMS) and NATS Future Airspace Strategy Implementation - North (FASI(N)). We also note that the objective to update routes to cater for the removal of the Gamston VHF Omni-directional Range (VOR) Beacon. You state also that local airspace issues will be addressed. Whilst the first two objectives are self-explanatory, this third will need further clarification which will hopefully emerge as the ACP progresses.

Design Principles - We provide detailed comments on the individual DPs in the table below but here comment on LBA's overall approach to them, their structure and number.

It appears that the draft DPs cover the areas that we would expect. However, there are a large number and they do not appear to be in any order of priority, so are difficult to read and assimilate for stakeholders. We would suggest that it would benefit LBA to look at the way other sponsors have grouped and prioritised DPs in their ACPs. Manchester Airport (MAN) (ACP-2019-23) is a good example as it is addressing the same objectives as your ACP. The MAN approach of 'less is more' with regard to their DPs is effective as their seven structured and prioritised DPs cover everything that LBA does in twenty. They are much easier to read and understand.

Whilst it is recognised that the DPs will evolve further before finalising, we do believe that even now we could have seen more of the options or techniques laid out for how things might be achieved. A typical example relates to minimising or reducing the impact of noise where LBA might have suggested using dispersal or respite (or others) as techniques which could help to achieve that principle. We understand that nothing should be ruled "out of court" at this stage but more detail like this would help stakeholders to understand LBA's lines in thinking and would potentially reduce the risk of surprises further down the ACP process.

We would also refer LBA to the British Gliding Association's (BGA's) CAP1616 Engagement Principles, which we fully endorse and are attached as a PDF for your information.





Conclusion - We note that there is a gliding representative on the LBA Consultative Committee which, from our perspective, is very positive and we will continue to liaise with the gliding representative on that committee. However, the soaring clubs that we represent have, given our experience of and involvement in airspace change processes to date, requested RSAG to once again represent them on this ACP, which we are happy to do so.

RSAG will, therefore, continue to be a key stakeholder on this ACP for the regions souring community and, whilst it will continue to represent the generic issues its constituent clubs raise, there may well be a need for individual clubs as well as RSAG to be consulted as the ACP progresses. As an example, consultation on design options will have differing impacts on individual clubs which will each need to provide input. RSAG will help to coordinate that input.

Once again, we thank you for the opportunity to contribute and we look forward to being constructive in our future engagement with LBA on the development of this ACP.

4.3.2. Impact - We are pleased to hear that our level of stakeholder engagement at this stage satisfies an important stakeholder. This ACP is being progressed as part of the wider FASI(N) project. LBA is expected to participate in the development of the AMS Masterplan, in conjunction with ACOG, NERL and the other identified airports. The rationalisation of the GAM VOR is being considered as part of this ACP and LBA is also currently exploring other options. We have also significantly reduced the number of DPs.

4.4. Burley Parish Council

4.4.1. Burley Parish council elected to complete the survey detailed in the CAP1616 consultation, which is a downloaded copy of the online survey. All of Burley Parish Councils comments on each question have been included within this report under the relevant section.

4.5. Northwest Leeds Transport Forum (NWLTF)

4.5.1. As a community organisation comprising accredited representatives of eleven formally constituted Residents Associations (which together represent many thousands of individual residents), our immediate concern is that the airspace change should seek to reduce the exposure of residents to the noise and pollutants associated with aircraft arrivals and departures. We hope that the opportunities offered by Performance Based Navigation (PBN) can be used to offer a real improvement for the affected populations.

We experienced some difficulties with the questionnaire because, no doubt in a desire to reduce its complexity, distinctly different issues had sometimes been bundled together in a way that made it difficult to give an unambiguous answer. Similarly, some of the questions offered what we believe to be an overly constrained or misleading choice. We are concerned that responses from other respondents will be difficult for you to interpret because they will have been responding only to the "bundled" issues and constrained choices. This problem was particularly serious with questions 4 and 9.

Following what we learned at the meeting on 6th December, we would like to make an additional point in response to Question 10. Namely, that another useful design principle would be that, provided always that it does not lead to increased exposure to noise, the new airspace should be configured to facilitate monitoring of compliance with noise abatement





procedures (This might be implemented by extending the length of the NPR and the establishment of metrics for exposure to noise and the frequency of exposure to noise).

We understand that the design principles established at this stage of the ACP process will be used to guide the development of options, but it is, of course, likely that some of the principles will conflict with one another (e.g., the principle that noise nuisance should be minimised might well conflict with one which favoured the establishment of simple or economic routes). The questionnaire did not really provide us with an opportunity to rank the various principles, but had it done so, we would have suggested that, for the local airspace, promotion of safety and the minimisation of the exposure of local populations to noise nuisance and emissions should be prioritised over all other principles.

4.5.2. **Impact -** Where comments to the questions have been provided, they have been included within this report under the relevant section.

Should the need for more surveys present itself during the next stages of this ACP this comment will be taken on board and questions constructed accordingly. To be able to extract quantitative data from the survey, certain limitations had to be put on the potential responses, however we feel that there was opportunity for stakeholders to expand on any of their answers should it have been required. Another option available to stakeholder was to respond via a downloaded copy of the survey where they could further expand on their responses. The remainder of NWLTFs comments have been noted and applied to the relevant DP when assessing.

4.6. Former ACC rep for Menston

- 4.6.1. As the ACC Representative for Menston until very recently, and still a local resident, I feel I have some insights into the procedures and principles relating to the new Airspace Change Proposal. In particular, as the village of Menston did not enjoy the promised consultation and meetings during the previous ACP (which LBA concluded and submitted prematurely on 5 November 2017) I was one of those who complained to the CAA that due process had not been followed, and the CAA concurred, rejecting the ACP for lack of consultation. As a consequence, the subsequent proposals formulated by the HoATS appointed in 2018 and which led to acceptance by Menston's Parish Council, were not implemented and xxx mysteriously disappeared. The situation of intrusive noise, overflying and emissions has continued to this day and is NOT ACCEPTABLE to a majority of Menston's residents.
- 4.6.2. **Impact** Whilst this stage of the CAP 1616 process is targeted stakeholder engagement, and responses are expected to be from representatives of stakeholder group. LBA recognises the importance of giving due consideration to the comments made by this individual. Where comments to the questions have been provided, they have been included within this report under the relevant section.





Final Design Principles

5.1. Overview

- 5.1.1. We drafted DPs for consideration and review; they were not listed in priority order. The survey gave stakeholders the opportunity to comment on them and offer up further suggestions.
- 5.1.2. We have removed the following DPs:
 - DP6 Operational Requirements as there was with no real show of support from the stakeholders. Comments allude to the vagueness of the DP and highlight those other priorities (captured in other DPs) are of higher importance. It was thought that the new DP7- Technical Requirements captures the intent of this DP.
 - **DP17 Cost of Change** as it has been deemed unnecessary due to the recent grants and the robust funding criteria associated with this project.
- 5.1.3. Certain DPs have been reworded to show further clarity and intent following the stakeholder feedback.
- 5.1.4. Where possible certain DPs have been consolidated to ensure a manageable number of DPs is taken forward to Options Development and Appraisal. The reasonings are explained in detail in Section 2 for each DP where this applies. Accordingly, the following paragraphs detail the DPs to go forward to the CAA's 'Define' Gateway intended for use in Stage 2 of the process. A summary table is provided at Annex B.

5.2. Safety

5.2.1. **DP1 - Importance of Safety** - The airspace design and its operation must maintain or where possible, enhance current levels of safety.

5.3. Environmental

- 5.3.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:
 - DP2 and DP3 have been consolidated into DP2- Noise.
- 5.3.2. **Combined DP 2 Noise** The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground and where possible periods of built in respite should be considered.
- 5.3.3. **Amended DP3 Tranquillity** Where practical, route designs should limit effects upon noise sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of care or education and AONB's.
- 5.3.4. **Amended DP4 Emissions and Air Quality** The proposed design should minimise CO2 emissions per flight.





5.4. Operational

- 5.4.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:
 - DP7 and DP8 have been consolidated into DP4 Airspace Dimensions
- 5.4.2. **Combined DP5 Airspace Dimensions** The volume and classification of controlled airspace required for LSA should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.
- 5.4.3. **DP6 Airspace Complexity –** The Airspace Design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.

5.5. Technical

- 5.5.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:
 - DP10, DP11 and DP12 are consolidated into DP6.
 - DP13, DP14, DP15 and DP16 are consolidated into DP7.
- 5.5.2. **Combined DP7 Technical Requirements** The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport
- 5.5.3. **Combined DP8 Systemisation** The new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

5.6. Economic

DP9 - Operational Cost - Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.

5.7. Strategic Policy

- 5.7.1. The CAA has insisted that, subject to the overriding principle of maintaining a high standard of safety, the highest priority principle of this airspace change, that cannot be discounted, is that it accords with the CAA's published Airspace Modernisation Strategy (CAP1711) and any future plans associated with it. LBA is expected to participate in the development of the AMS Masterplan, in conjunction with ACOG, NERL and the other identified airports. The following DP is therefore second only to maintenance of safety.
- 5.7.2. **DP10 AMS Realisation** This ACP must serve to further, and not conflict with, the realisation of the AMS.





- 5.7.3. Note: It is accepted by the CAA that adherence to this DP, in what is a coordinated modernisation programme, may impact upon the development of 'Options'.
- 5.7.4. **DP11 PBN** The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable. This includes predictability, efficiency, continuous climb and descent operations with the intention of reducing carbon emissions.





A. Stakeholder List

A.1. Community Stakeholders

LBA Consultative Committee (ACC)	
Welcome To Yorkshire	Bramhope & Carlton Parish Council
Yorkshire Local Councils Association - Leeds Branch 1 of 2	Burley in Wharfedale Parish Council
Yorkshire Local Councils Association - Leeds Branch 2 of 2	Otley Town Council
Leeds City Council (CON)	Rawdon Parish Council
Leeds City Council (LAB)	Pool In Wharfedale Parish Council
Calderdale Council	Horsforth Town Council
Wakefield Council	Local Resident Rep - Horsforth End of Runway
North Yorkshire County Council	Baildon Town Council
Harrogate District Chamber of Commerce	Local Resident Rep – Yeadon
Trades Union Congress - Yorkshire & The Humber	City Of Bradford MDC
LBA Support Group	Aireborough Neighbourhood Forum
Menston Parish Council	ACC Chair

Local Councils	
Mayor of West Yorkshire	Craven District Council
Leeds City Council	Doncaster Council
Barnsley Council	Harrogate Borough Council
Bradford Council	Kirklees Council
Calderdale Council	Selby District Council
Pendle Borough Council	Wakefield Council





^{*}Some Councils are represented within the ACC.

Others Community Stakeholders	
Ledsham Parish Council	Northwest Leeds Transport Forum
Moor Lane Residents Association	Ash Road Area Residents Association

A.2. Environmental Stakeholders

Environmental Bodies	
Natural England	National Trust
Peak District National Park Authority	Yorkshire Dales National Park Authority
Climate Action Menston	

A.3. Technical Stakeholders

Air Navigation Services Providers/ATC	
NATS En-Route Ltd (NERL)*	Doncaster Sheffield ATC (ATCSL)
RAF Leeming ATC*	Teesside ATC
Manchester ATC	Liverpool John Lennon ATC (ATCSL)

^{*} Represented within NATMAC

Aircraft Operators	
Ryanair	Jet2
Eastern Airways	Multiflight

A.4. Local Aviation Stakeholders

Neighbouring Airports/Airfields/Flying Clubs	
Breighton Aerodrome	Humberside Airport Flying School





Neighbouring Airports/Airfields/Flying Clubs		
Burn Gliding Club	Humberside POM Flying Club	
City Airport and Heliport	LAC Flight School	
Cleveland Flying School	NPAS	
Crosland Moor Airfield	Sandtoft Airfield	
Doncaster Sheffield Airport	Sheffield Aero Club	
Flight Academy Manchester	Sherburn Aero Club	
Full Sutton Airfield	Warton Aerodrome	
Heli-Jet Aviation	West Yorkshire Police	
Humber Flying Club	Yorkshire Air Ambulance	
Leeds East Airport	Hields Aviation	
Skyhigh skydiving	Pocklington (Wolds Gliding Club)	
York Rufforth (York Gliding Centre)	Bagby	
Sutton Bank (Yorkshire Gliding Club)	Netherthorpe (Sheffield Aero Club)	
Retford Gamston Airport	Derbyshire Soaring Club	
Eddsfield	Eden Flight Training (Teesside International Airport)	
Yorkshire Aero Club (Doncaster Sheffield Airport)	Doncaster Sheffield Flight Training	
Teesside International Airport	Dales Hang gliding and Paragliding Club	
Pennine Soaring Club		

National Air Traffic Management Advisory Committee	
Airlines UK	British Parachute Association (BPA)





National Air Traffic Management Advisory Committee	
Airspace4All	General Aviation Alliance (GAA)
Airspace Change Organisation Group (ACOG)	Honourable Company of Air Pilots (HCAP)
Airfield Operators Group (AOG)	Helicopter Club of Great Britain (HCGB)
Aircraft Owners and Pilots Association (AOPA)	Light Aircraft Association (LAA)
Aviation Environment Federation (AEF)	Low Fare Airlines
British Airways (BA)	Military Aviation Authority (MAA)
BAe Systems	Ministry of Defence - Defence Airspace and Air Traffic Management (MoD DAATM)
British Airline Pilots Association (BALPA)	NATS
British Balloon and Airship Club	PPL/IR (Europe)
British Gliding Association (BGA)	UK Airprox Board (UKAB)
British Helicopter Association (BHA)	UK Flight Safety Committee (UKFSC)
British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo)	





This Page Is Intentionally Blank

COPYRIGHT © 2022 Cyrrus Projects Limited

This document and the information contained therein is the property of Cyrrus Projects Limited. It must not be reproduced in whole or part or otherwise disclosed to parties outside of Cyrrus Projects Limited without written consent.

Cyrrus Projects Limited is a company registered in England and Wales: Company Number 06828433. Registered Office: Cyrrus House, Concept Business Court, Thirsk, YO7 3NY.