

# FASI(N) ACP

## Response on Design Principles

Leeds Bradford Airport

26 January 2022

CPJ-5692-RPT-015 v1.0

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## Executive Summary

The Government has highlighted a strategic need to upgrade the existing United Kingdom airspace network and 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 usage across the region, using the latest available technology, with the aim of reducing 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 and are set out in CAP1616 which provides guidance on the regulatory process for changing airspace design and all stakeholder engagement requirements. 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 and 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
GASCo	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'

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## 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 survey<sup>1</sup>.
- 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 we identified some additional stakeholders for the engagement, they were 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. We provided a briefing to a local community group on the 06 December 2021 which consisted of a presentation<sup>2</sup> and a Q&A session.
- 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 respond to the Design Principles Survey and as such the survey was reopened for a week from 17 January 2022 to 24 January 2022.

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

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

## 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 2 and non-survey feedback in **Section 3**. The Final Design Principles, as determined through this targeted stakeholder engagement, are contained within **Section 4**.

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. The data from the Microsoft form was extracted from the Microsoft Excel output<sup>3</sup>. 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.

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<sup>3</sup> Survey Results (with personal details removed) can be found on the portal titled: ‘CPJ-5692-DOC-013 V1.0 Survey Results’

## 2. Survey Responses and Impact

### 2.1. Question 1

2.1.1. 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.

#### 2.1.2. Response

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

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

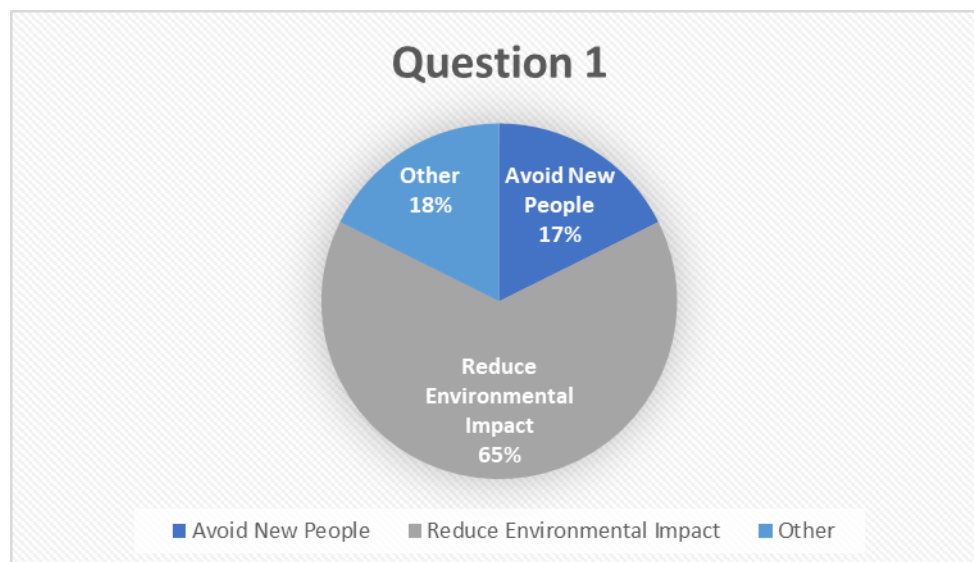


Figure 1: Question 1

### 2.1.3. 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.'

#### 2.1.4. Impact

Taking all the quantitative feedback and the many welcome comments into account, the avoidance of new people appears not to be a significant issue; the majority of the respondents chose to reduce environmental impact. The 'Environmental' DPs (DP2-6) capture the desire to 'Seek options that reduce environmental impact and have greater efficiency'.

## 2.2. Question 2

- 2.2.1. 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.

#### 2.2.2. 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'

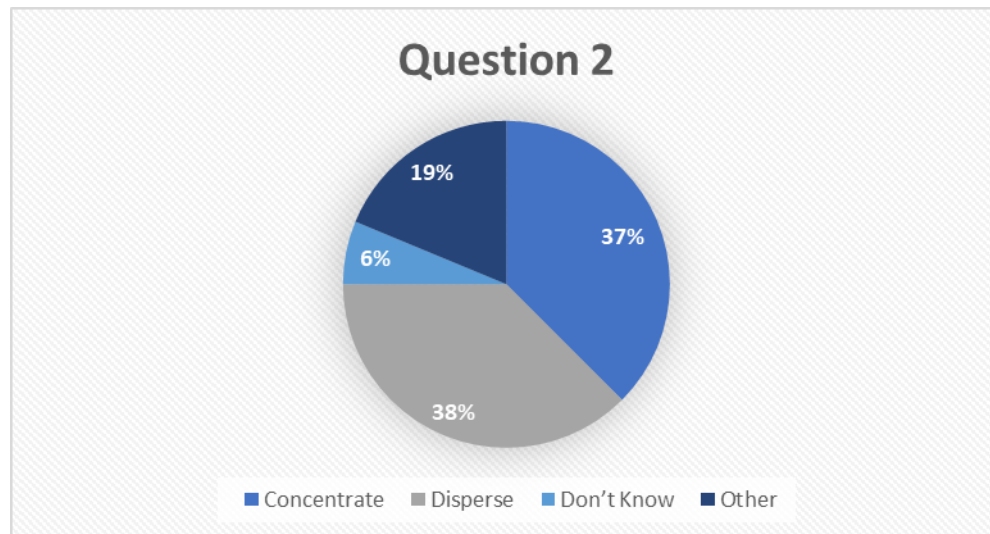


Figure 2: Question 2

### 2.2.3. 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 be 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.’

#### 2.2.4. Impact

A variety of options will be considered taking dispersal and adherence to procedures into account.

### 2.3. Question 3

- 2.3.1. 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.

#### 2.3.2. 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%

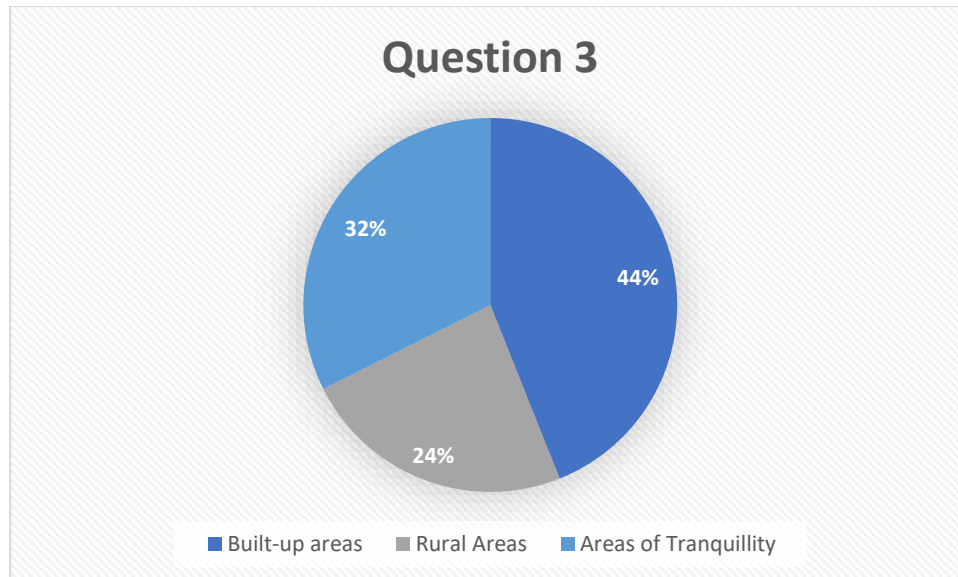


Figure 3: Question 3

### 2.3.3. 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
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.

### 2.3.4. 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.

## 2.4. Question 4

- 2.4.1. 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.

#### 2.4.2. Response

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

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

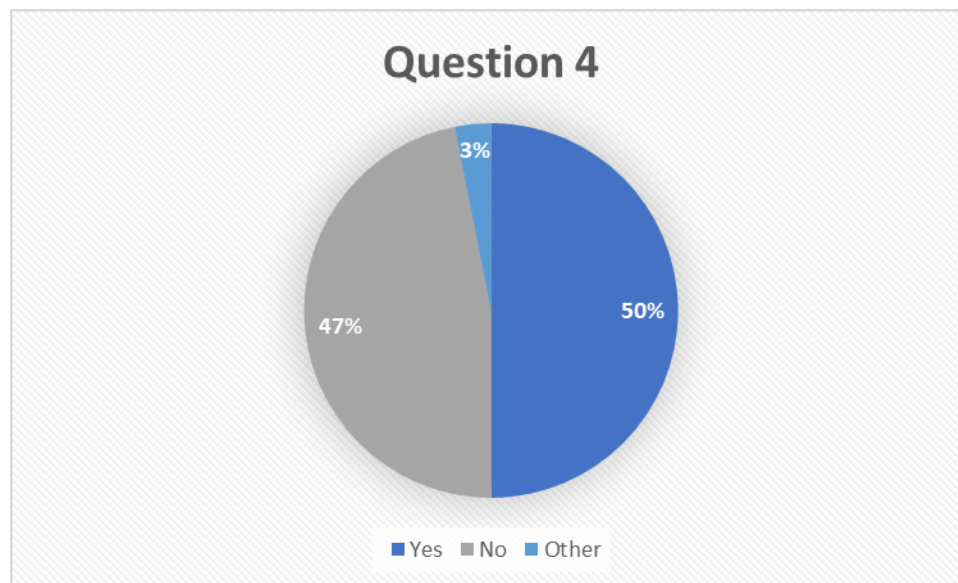


Figure 4: Question 4

#### 2.4.3. 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.

#### 2.4.4. 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).
- 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.

## 2.5. Question 5

- 2.5.1. 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.

#### 2.5.2. 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%

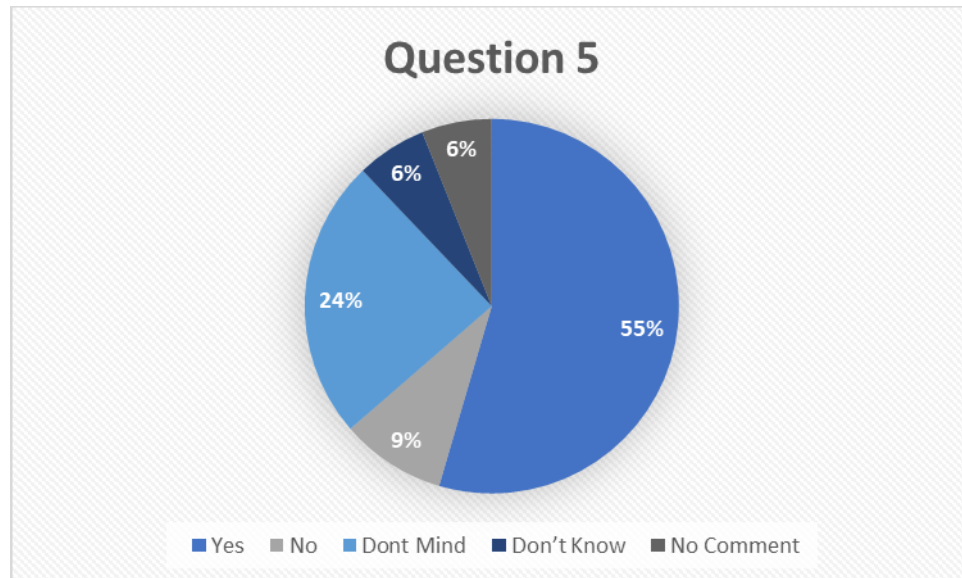


Figure 5: Question 5

### 2.5.3. 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 only 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"

#### 2.5.4. **Impact**

Over half of the responses stated they would like to see periods of built-in respite. Where possible options should be explored that consider periods of respite.

## 2.6. Question 6 – Design Principle 1

- 2.6.1. 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.

#### 2.6.2. **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%  |

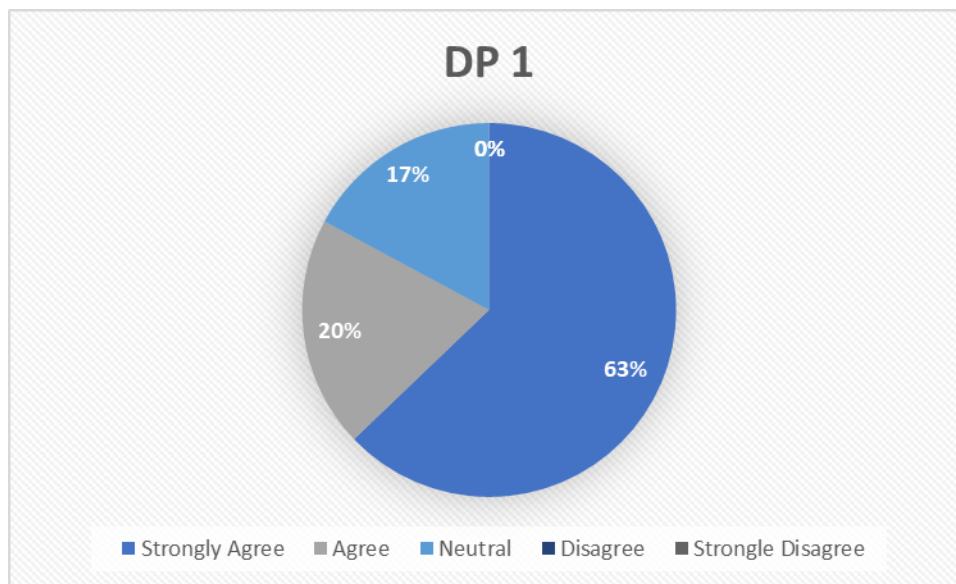


Figure 6: DP1

#### 2.6.3. 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 aswell 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.

#### 2.6.4. 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, this DP remains unchanged.

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

*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.*

## 2.7. Question 7 – Design Principle 2

- 2.7.1. 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

### 2.7.2. 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%

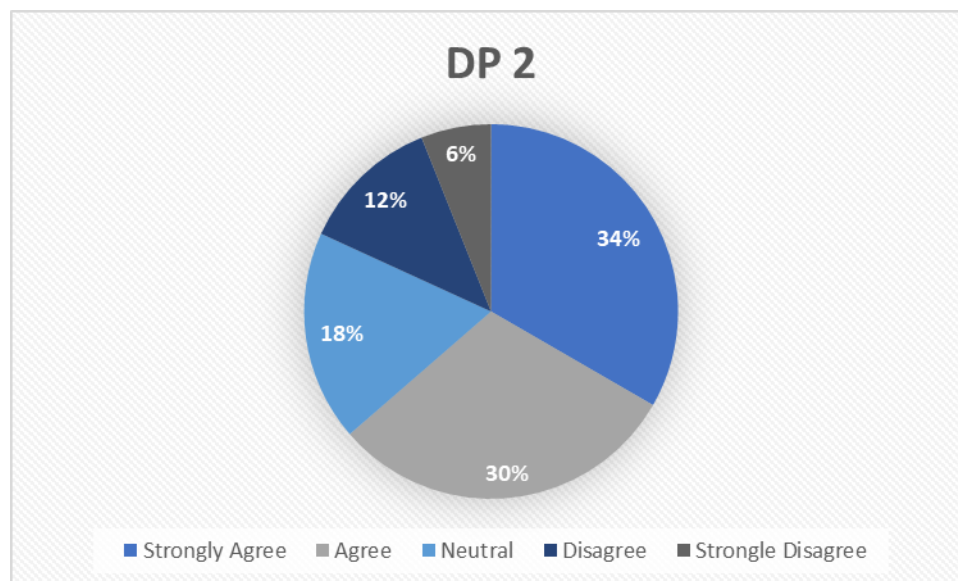


Figure 7: DP2

### 2.7.3. 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.

#### 2.7.4. Impact

Respondents were more concerned with the noise aspect rather than visual disturbance. To capture the visual element, this DP remains valid and unchanged.

## 2.8. Question 8 – Design Principle 3

- 2.8.1. 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.

#### 2.8.2. 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%



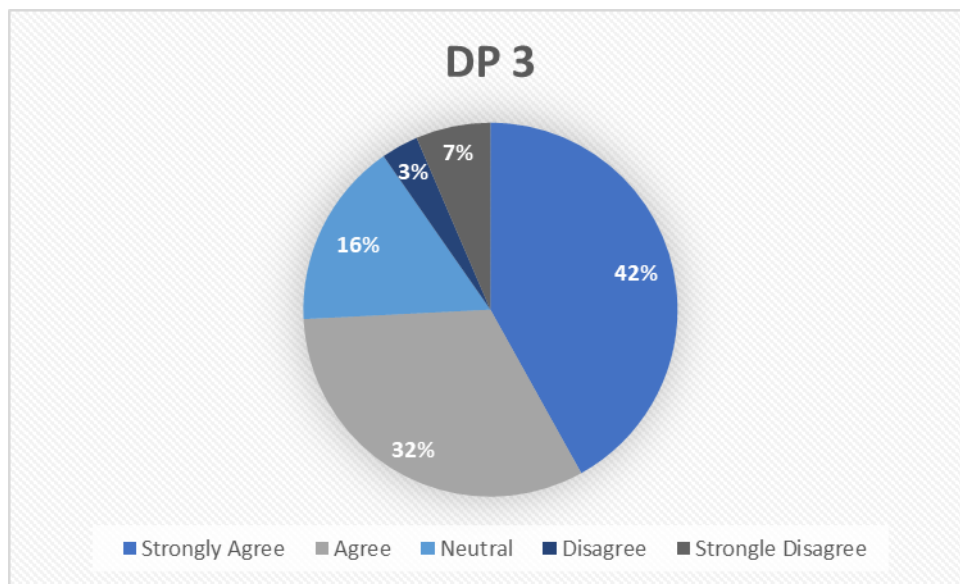


Figure 8: DP3

### 2.8.3. 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”.

### 2.8.4. 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.

The New Design Principle is as follows:



**DP 3- Noise** - The new procedures should not increase, and where possible seek to reduce, the noise footprint and the number of people overflown by aircraft using the Airport. Implementation should attempt to minimise impact and disturbance to the adjacent National Parks and the nearby Areas of AONB.

*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.*

## 2.9. Question 9 – Design Principle 4

2.9.1. 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)

### 2.9.2. 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%

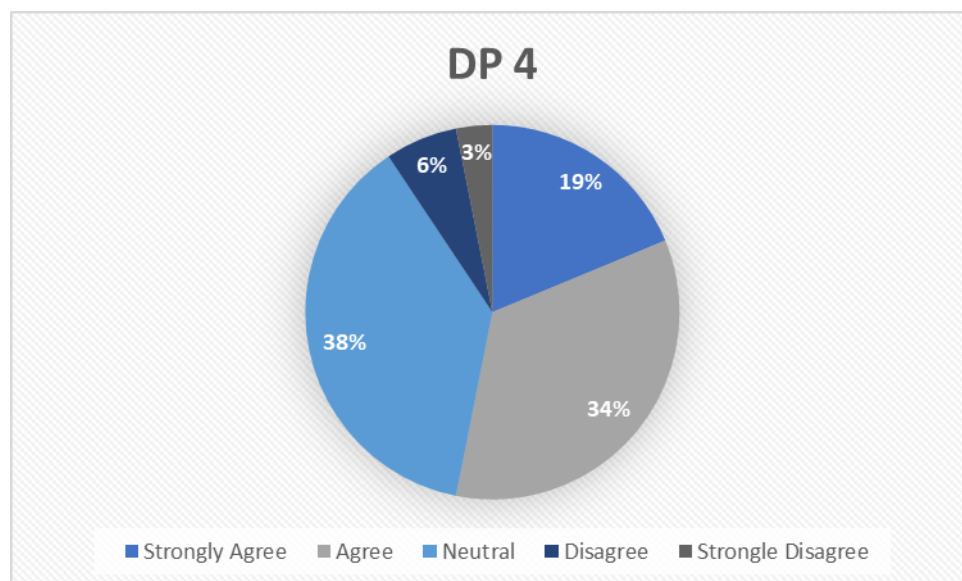


Figure 9: DP4

### 2.9.3. 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. 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
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”.

#### 2.9.4. Impact

Whilst this DP is largely supported, the decision has been made following the feedback to combine this DP3, as they both have Noise as an underlying theme.

The New Design Principle is as follows:

**DP 3- Noise** - The new procedures should not increase, and where possible seek to reduce, the noise footprint and the number of people overflowed by aircraft using the Airport. Implementation should attempt to minimise impact and disturbance to the adjacent National Parks and the nearby AONB.

## 2.10. Question 10 – Design Principle 5

- 2.10.1. 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.

#### 2.10.2. 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%

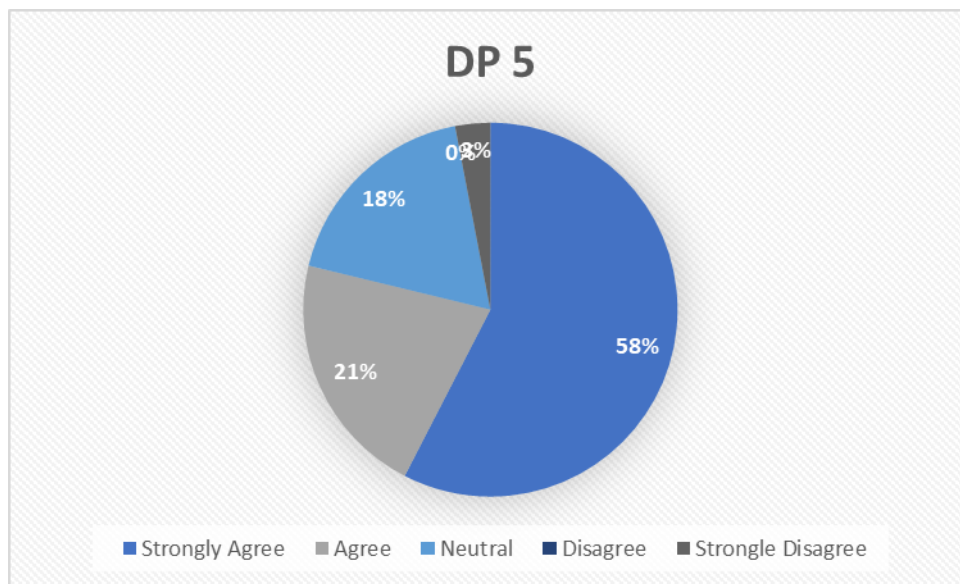


Figure 10: DP5

#### 2.10.3. 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.
3. 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”

#### 2.10.4. Impact

With nearly 80% in favour of this DP it remains largely unchanged, however, due to many comments the DP is revised to reflect an ambition to stabilise and, if possible, improve the situation.

The New Design Principle is as follows:

**DP4 – Emissions and Air Quality** – The new design should seek to minimise and where possible reduce aircraft emissions, further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change

## 2.11. Question 11 – Design Principle 6

2.11.1. 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.

### 2.11.2. 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%

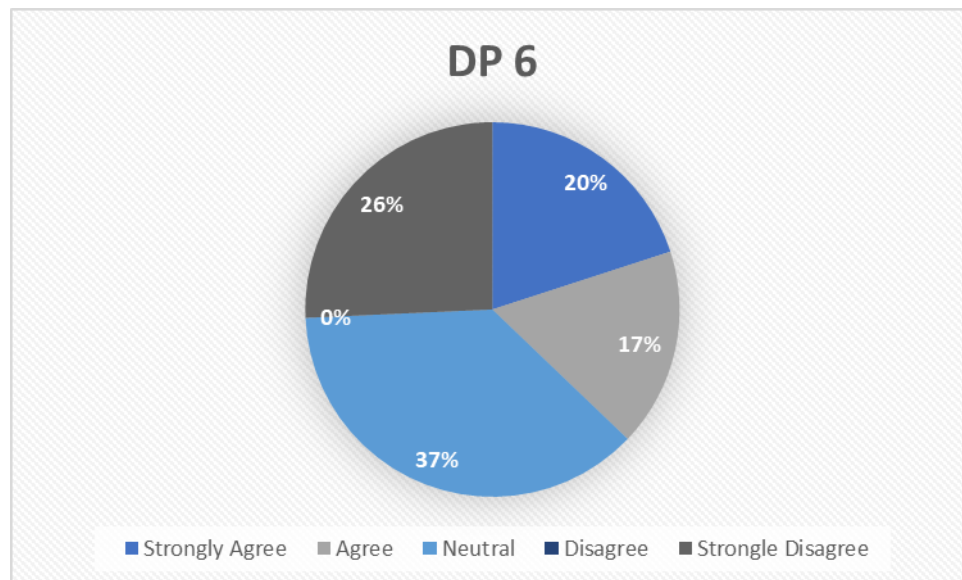


Figure 11: DP6

### 2.11.3. 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.

#### 2.11.4. **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 DP7

**DP7 – Technical Requirements** - 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.

## 2.12. Question 12 – Design Principle 7

- 2.12.1. 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.

#### 2.12.2. **Responses**

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

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

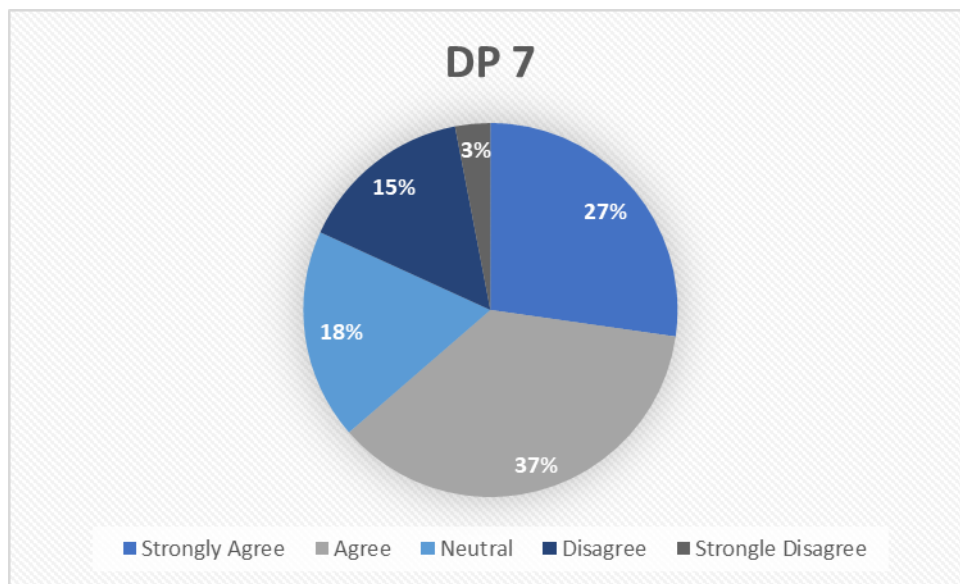


Figure 12: DP7

### 2.12.3. 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
2. 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 Runway 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.

#### 2.12.4. Impact

This DP was largely supported, however, the similarities, surrounding the design, between this and DP8 have led us to amalgamate the two DPs to form one overarching Airspace Dimensions DP.

The new Design Principle is as follows:

**DP5 – Airspace Dimensions** – Sufficient controlled airspace should be available and afford only the appropriate volume of controlled airspace to contain and support Continuous Climb Operations and Continuous Descent Operations by CAT whilst enabling safe, efficient access for other types of flying operation to support LBA operations independently.

### 2.13. Question 13 – Design Principle 8

2.13.1. 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.

#### 2.13.2. 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%



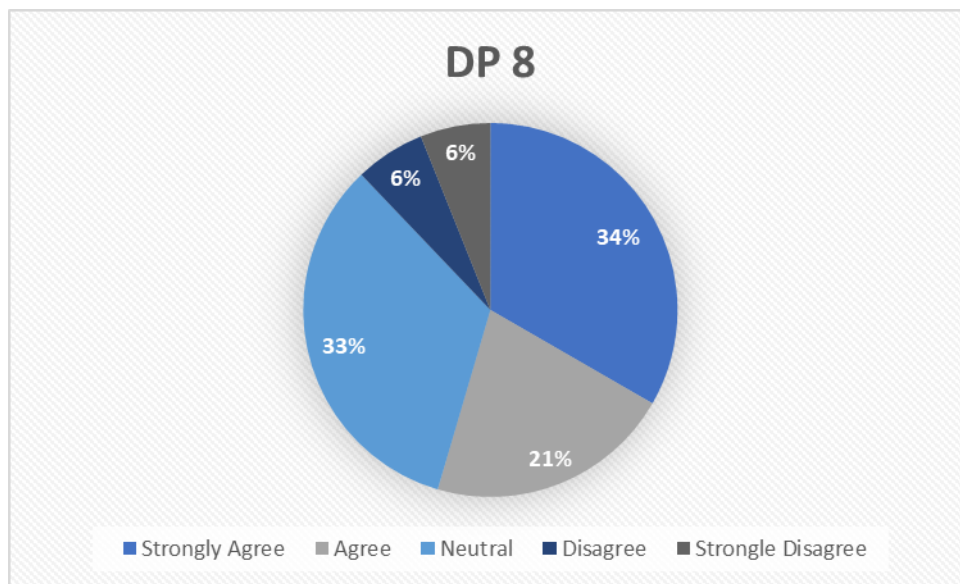


Figure 13: DP 8

#### 2.13.3. 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.

#### 2.13.4. Impact

This DP was largely supported, however, the similarities, surrounding the design, between this and DP7 have led us to amalgamate the two DPs to form one overarching Airspace Dimensions DP.

The new Design Principle is as follows:

**DP5 – Airspace Dimensions** – Sufficient controlled airspace should be available and 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 to support LBA operations independently.



## 2.14. Question 14 – Design Principle 9

2.14.1. 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.

### 2.14.2. 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%

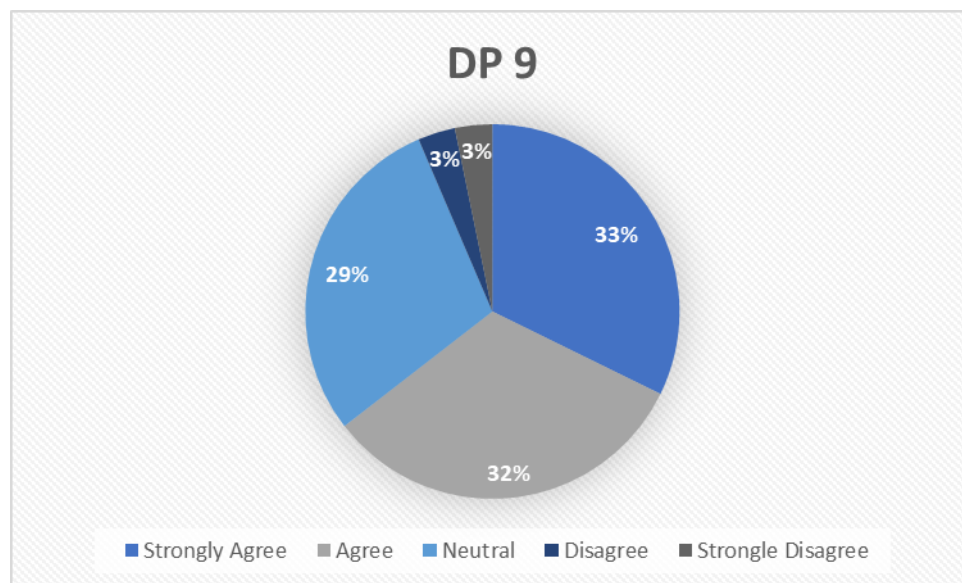


Figure 14: DP9

### 2.14.3. 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.

#### 2.14.4. **Impact**

DP was largely supported and remains unchanged.

**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.

## 2.15. Question 15 – Design Principle 10

- 2.15.1. 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.

#### 2.15.2. **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%  |

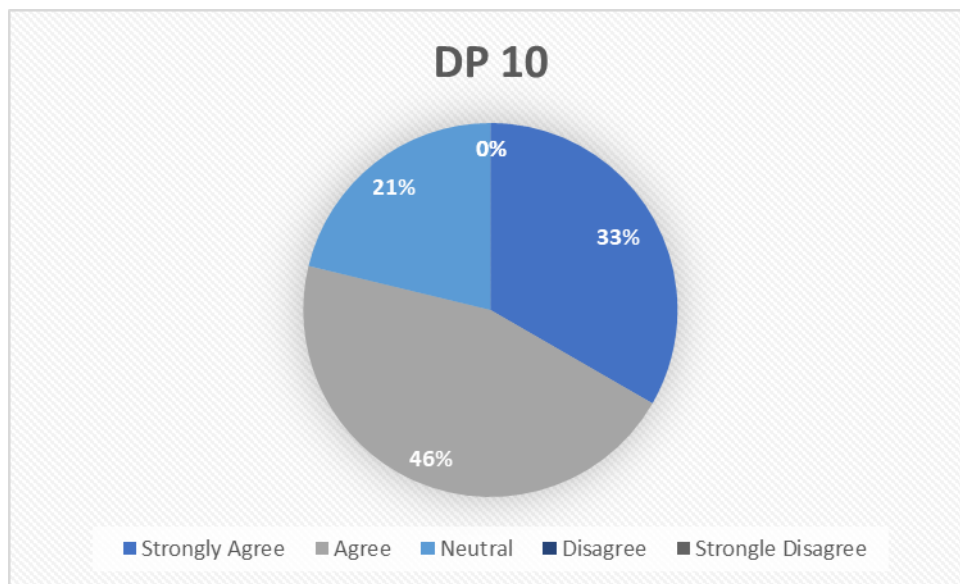


Figure 15: DP10

#### 2.15.3. 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!

#### 2.15.4. Impact

This DP was fully supported by the stakeholder. 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 DP11 and DP12 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows;

**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.

## 2.16. Question 16 – Design Principle 11

- 2.16.1. 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.

### 2.16.2. 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%

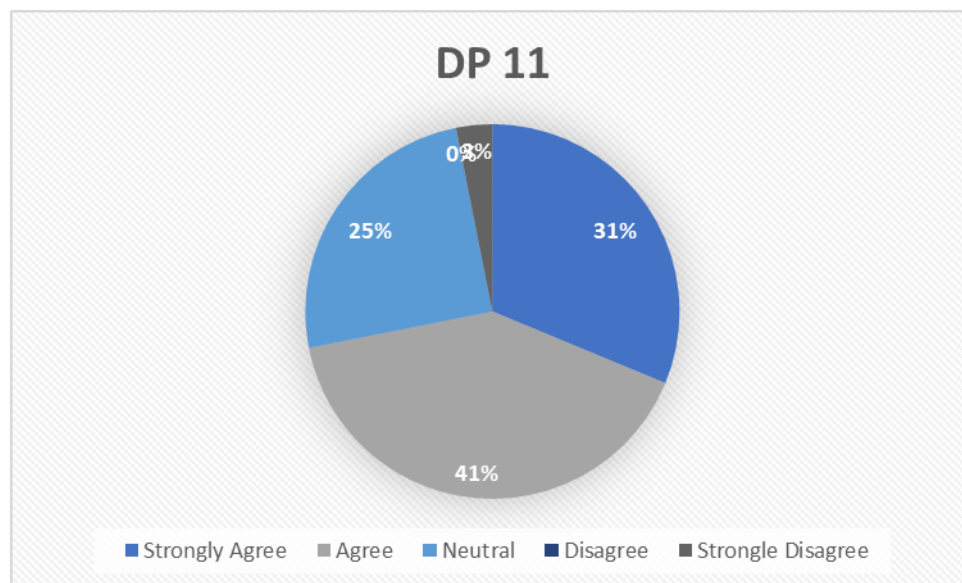


Figure 16: DP11

### 2.16.3. 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.

#### 2.16.4. **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 DP10 and DP12 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows:

**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.

### 2.17. Question 17 – Design Principle 12

2.17.1. 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.

#### 2.17.2. **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% |

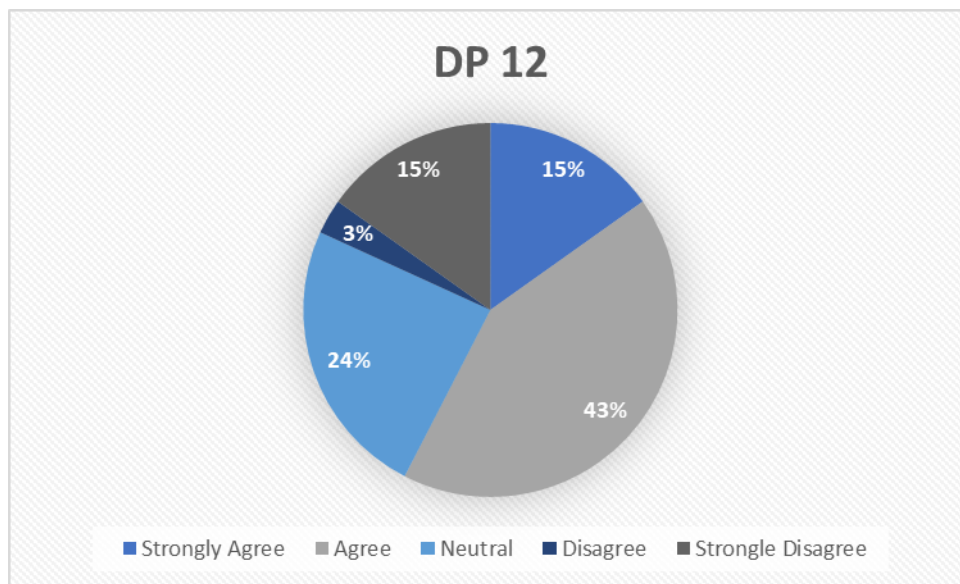


Figure 17: DP12

#### 2.17.3. 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.

#### 2.17.4. 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 DP10 and DP11 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows;

**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.

### 2.18. Question 18 – Design Principle 13

- 2.18.1. 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.

#### 2.18.2. 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%

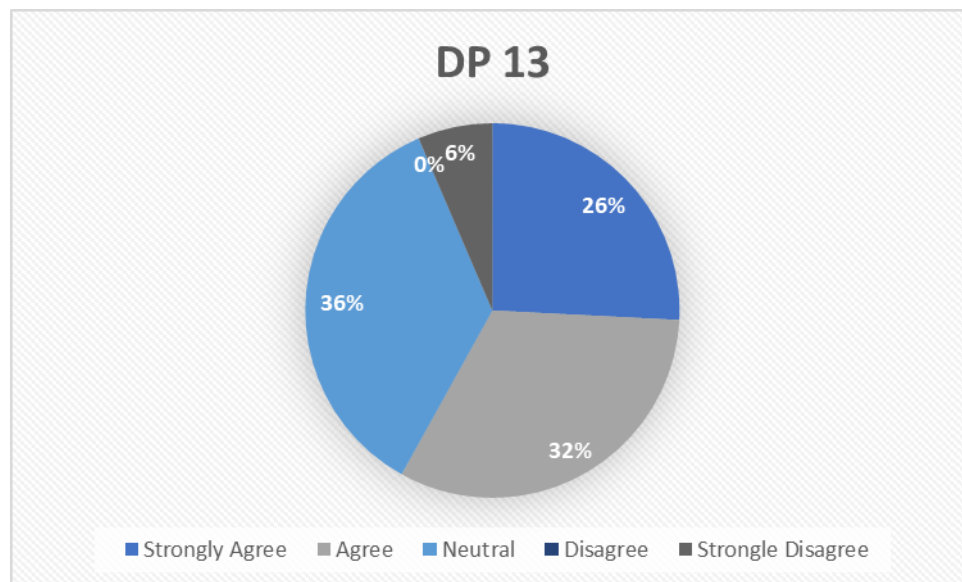


Figure 18: DP13

#### 2.18.3. 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.

#### 2.18.4. 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 DP14, DP15 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

**DP8 – Systemisation** – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

## 2.19. Question 19 – Design Principle 14

2.19.1. 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.

### 2.19.2. 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%

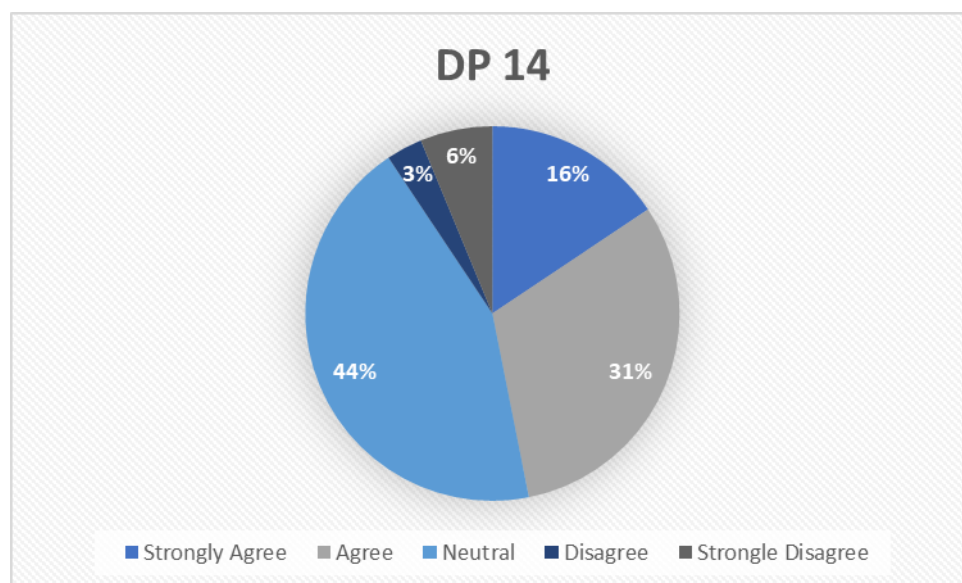


Figure 19: DP14



### 2.19.3. 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.

### 2.19.4. 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 DP13, DP15 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

**DP8 – Systemisation** – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

## 2.20. Question 20 – Design Principle 15

- 2.20.1. 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.

### 2.20.2. 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%

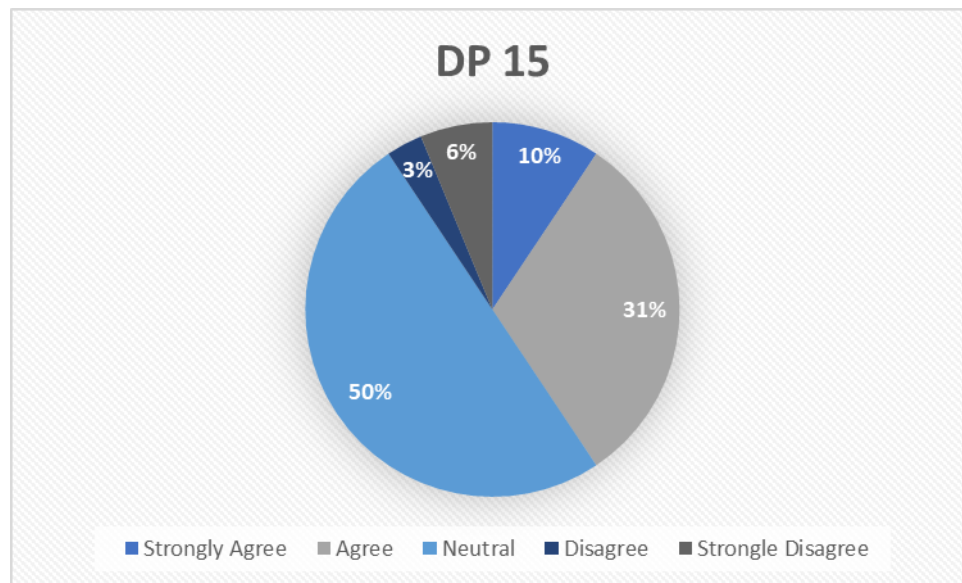


Figure 20: DP15

### 2.20.3. 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.

#### 2.20.4. 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 DP13, DP14 and DP16 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

**DP8 – Systemisation** – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

### 2.21. Question 21 – Design Principle 16

2.21.1. 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.

#### 2.21.2. 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%

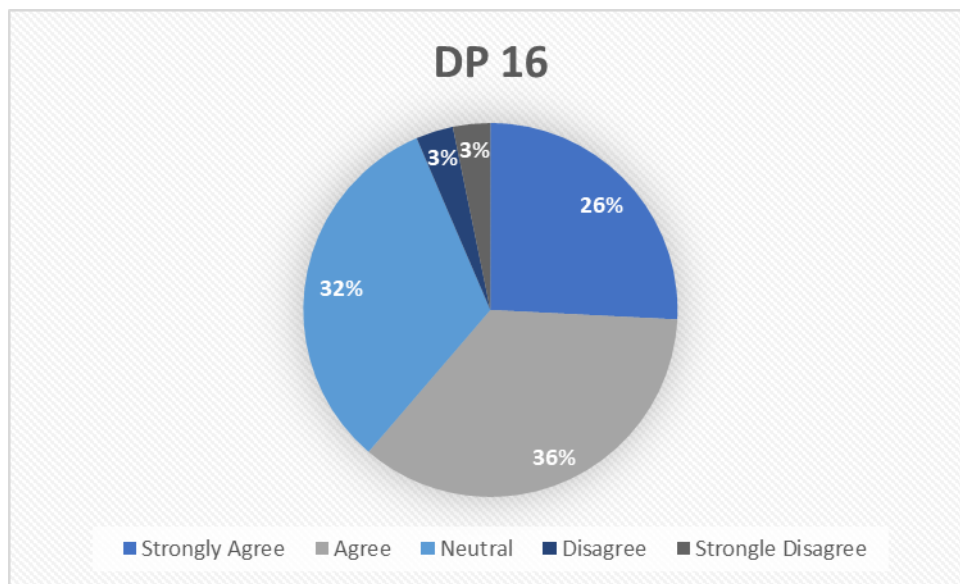


Figure 21: DP16

#### 2.21.3. 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.

#### 2.21.4. 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 DP13, DP14 and DP15 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

**DP7 – Systemisation** – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

## 2.22. Question 22 – Design Principle 17

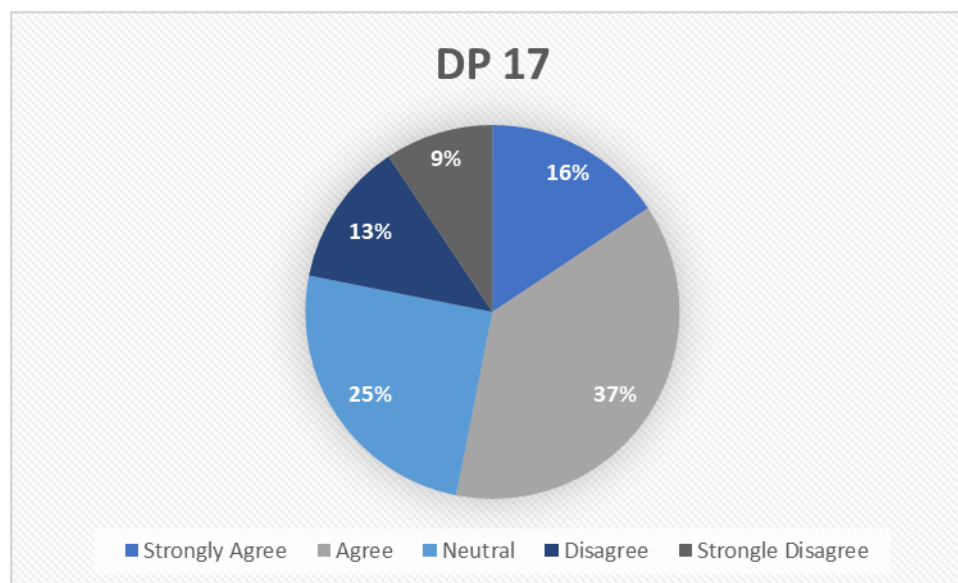
- 2.22.1. To what extent do you agree with each of the draft DPs? Please provide comment as to how you would prefer the Design Principle in question reworded or why you would like to see it removed altogether.

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

#### 2.22.2. 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**

#### 2.22.3. 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.

#### 2.22.4. 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.

## 2.23. Question 23 – Design Principle 18

2.23.1. 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.

### 2.23.2. 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%

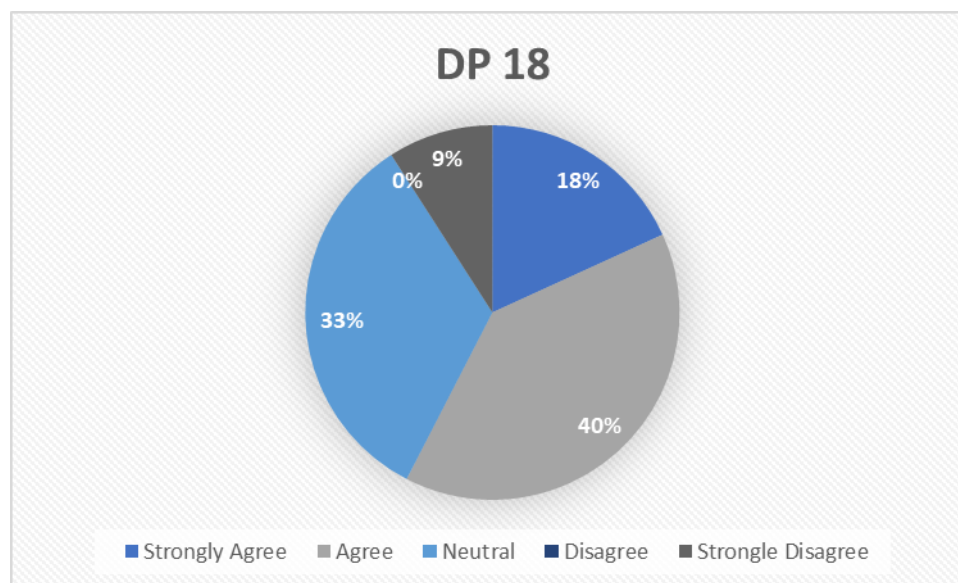


Figure 23: DP18

### 2.23.3. Comments

1. 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

#### 2.23.4. Impact

This DP was largely support and remains unchanged.

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

### 2.24. Question 24 – Design Principle 19

2.24.1. 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'.

#### 2.24.2. 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%

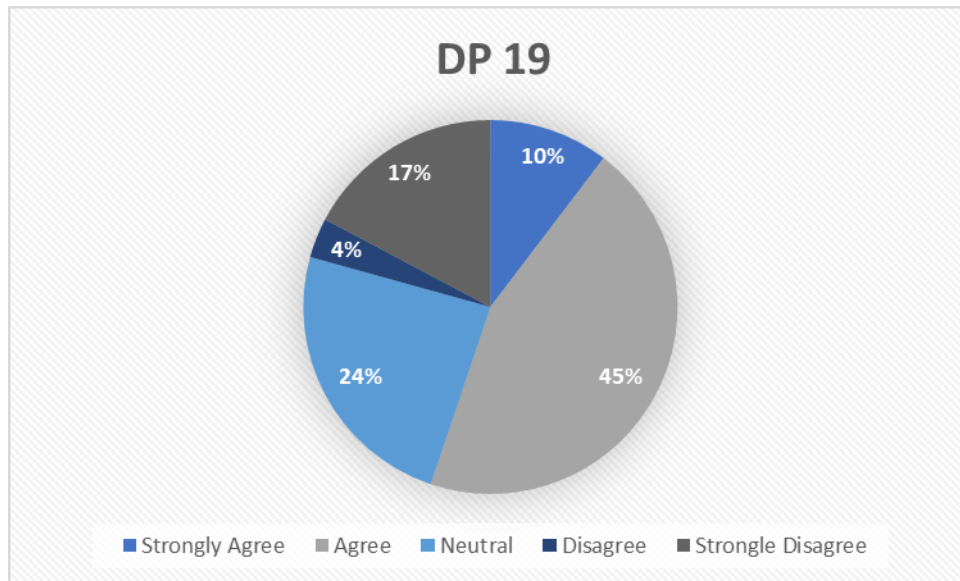


Figure 24: DP19

#### 2.24.3. 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.

#### 2.24.4. 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.

**DP10 – AMS Realisation** – This ACP must serve to further, and not conflict with, the realisation of the AMS.



## 2.25. Question 25 – Design Principle 20

- 2.25.1. 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.

### 2.25.2. 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%

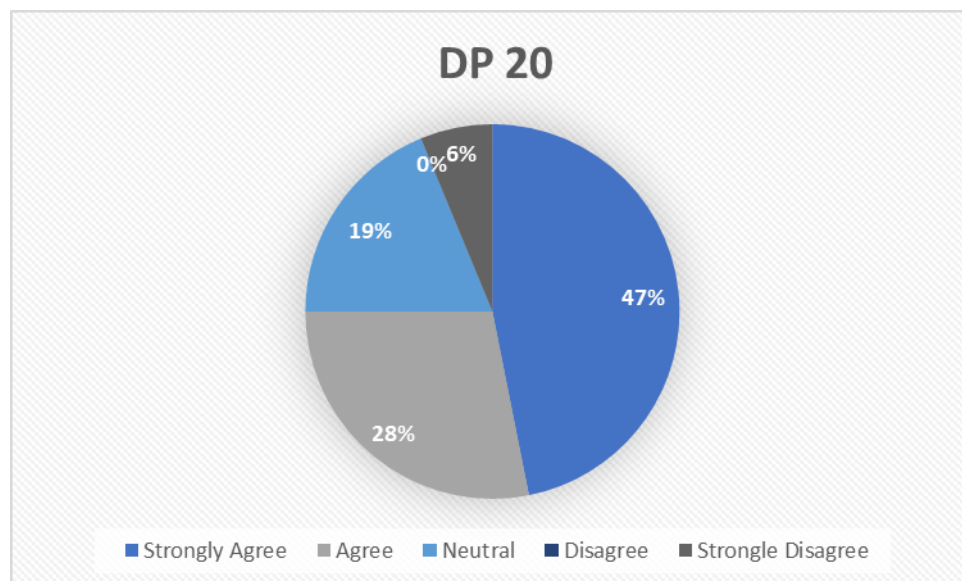


Figure 25: DP20

### 2.25.3. 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.

#### 2.25.4. **Impact**

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

**DP11 – 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.

## 2.26. Question 26

- 2.26.1. 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.

#### 2.26.2. **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.

#### 2.26.3. **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 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.

## 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.

## 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.

#### 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 DP 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, ie 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.

### 3. Non-Survey Feedback

#### 3.1. Overview

- 3.1.1. A number of responses were received outside of the survey. These responses have all be dissected and the relevant comments contained 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.

#### 3.2. Moor Lane Residents Association (MLRA)

- 3.2.1. *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'.*

- 3.2.2. **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.

#### 3.3. Regional Soaring Airspace Group (RSAG)

- 3.3.1. **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 soaring 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.

- 3.3.2. **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.

### 3.4. Burley Parish Council

- 3.4.1. 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.

### 3.5. Northwest Leeds Transport Forum (NWLTF)

- 3.5.1. *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.*

- 3.5.2. **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.

### 3.6. Former ACC rep for Menston

- 3.6.1. *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.*
- 3.6.2. **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.

## 4. Final Design Principles

### 4.1. Overview

- 4.1.1. 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.
- 4.1.2. 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.
- 4.1.3. Certain DPs have been reworded to show further clarity and intent following the stakeholder feedback.
- 4.1.4. 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.

### 4.2. Safety

- 4.2.1. **DP1 – Importance of Safety** – The airspace design and its operation must be as safe or safer than today.

### 4.3. Environmental

- 4.3.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:
- DP3 and DP4 have been consolidated into DP3- Noise.
- 4.3.2. **DP2 – Overflight** – The new procedures should not increase the number of people overflown by aircraft using the Airport
- 4.3.3. **Combined - DP 3- Noise** - The new procedures should not increase, and where possible seek to reduce, the noise footprint and the number of people overflown by aircraft using the Airport. Implementation should attempt to minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding National Beauty (AONB).
- 4.3.4. **Amended - DP4 – Emissions and Air Quality** – The new design should seek to minimise and where possible reduce aircraft emissions, further degradation in local air quality and adverse

ecological impacts to address growing concerns about the impact of aviation on climate change

#### 4.4. Operational

4.4.1. 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 DP5 – Airspace Dimensions

4.4.2. **Combined – DP5 – Airspace Dimensions** – Sufficient controlled airspace should be available and 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 to support LBA operations independently.

4.4.3. **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.

#### 4.5. Technical

4.5.1. 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 DP7.
- DP13, DP14, DP15 and DP16 are consolidated into DP8.

4.5.2. **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

4.5.3. **Combined – DP8 – Systemisation** – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

#### 4.6. Economic

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

#### 4.7. Strategic Policy

4.7.1. 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.

- 4.7.2. **DP10 – AMS Realisation** – This ACP must serve to further, and not conflict with, the realisation of the AMS.
- 4.7.3. 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’.
- 4.7.4. **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

Brighton Aerodrome	Humberside Airport Flying School
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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)	



## B. Final Design Principles Summary Table

Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
1	<b>Importance of Safety</b> - The airspace design and its operation must be as safe or safer than today.	Unchanged	1	<b>Importance of Safety</b> - The airspace design and its operation must be as safe or safer than today.
2	<b>Overflight</b> – The new procedures should not increase the number of people overflown by aircraft using the Airport.	Unchanged	2	<b>Overflight</b> – The new procedures should not increase the number of people overflown by aircraft using the Airport.
3	<b>Noise Footprint</b> – 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 DP4	3	<b>DP 2- Noise</b> - The new procedures should not increase, and where possible seek to reduce, the noise footprint and the number of people overflown by aircraft using the Airport. Implementation should attempt to minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding Natural Beauty (AONB).

Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
4	<b>Tranquillity</b> – Implementation should minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding National Beauty (AONB).	Consolidated with DP3	3	<b>DP 2- Noise</b> - The new procedures should not increase, and where possible seek to reduce, the noise footprint and the number of people overflown by aircraft using the Airport. Implementation should attempt to minimise impact and disturbance to the adjacent National Parks and the nearby Areas of Outstanding National Beauty (AONB).
5	<b>Emissions and Air Quality</b> – 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	<b>Emissions and Air Quality</b> – The new design should seek to minimise and where possible reduce aircraft emissions, further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change.
6	<b>Operational Requirements</b> – 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	<b>Airspace Dimensions</b> – 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	<b>Airspace Dimensions</b> – Sufficient controlled airspace should be available and 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 to support LBA operations independently.
8	<b>Airspace Availability</b> – Sufficient controlled airspace should be available to support LBA operations independently.	Consolidated with DP7	5	<b>Airspace Dimensions</b> – Sufficient controlled airspace should be available and 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 to support LBA operations independently.
9	<b>Airspace Complexity</b> – 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	<b>Airspace Complexity</b> – 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	<b>Compliance</b> – 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	<b>Technical Requirements</b> – 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	<b>Aircraft Category</b> – The new procedures shall be technically flyable by all aircraft types in approach Speed Categories A through D.	Consolidated with DP10 and DP12	7	<b>Technical Requirements</b> – 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	<b>Equipage and Approval</b> – The new procedures shall be flyable by the majority of LBA commercial aircraft operators.	Consolidated with DP10 and DP11	7	<b>Technical Requirements</b> – 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	<b>Arrival Transitions</b> – 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	<b>Systemisation</b> – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

Design Principle number	Draft Design Principle	Amended, Removed or Consolidated?	New Design Principle number	Final Design Principle
14	<b>Departure Procedures</b> – 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	<b>Systemisation</b> – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.
15	<b>Approach Procedures</b> – The Instrument Approach Procedures (IAPs) shall replicate the existing conventional approach procedures as closely as possible.	Consolidated with DP13, DP14 and DP16	8	<b>Systemisation</b> – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.
16	<b>Coordination</b> – The new procedures should result in a reduction in the amount of tactical coordination required by ATCOs.	Combined with DP13, DP14 and DP15	8	<b>Systemisation</b> – The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(N) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.
17	<b>Cost of Change</b> – The new procedures shall be implemented in a cost-effective manner.	Removed	-	-

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



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