FASI(S) Airspace Change Proposal

Response on Design Principles

Bournemouth Airport

30 September 2022

CPJ-5663-RPT-016 V3.0

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Version	Date	Description of Changes
Version 1	28/10/21	-
Version 2	29/04/22	
Version 3	30/09/22	Updates due to rework of Stage 1. Version 1 of this document remains on the ACP Portal for transparency. • Executive Summary - *Updated* • 1.Introduction – *Updated to reflect first and second rounds of engagement* • 2. Survey Responses & Impact – '*Inc.Individuals' Charts included for transparency and wording amended to reflect first and second rounds of engagement.* • 3. Design Principle Changes - *Updated to reflect first and second rounds of engagement and not final DPs* • 4. Revised Draft Design Principles – *New Section* • 5. Summer 2022 Engagement - *New Section* • 6. Survey Responses and Impact – Second Round of Engagement – Summer 2022 – *New Section* • 7. Final Design Principles - *Updated* • 8. Summary – N*ew Section* • A. Stakeholder List (Updated July 22) - *Updated*

Executive Summary

The Government has highlighted a strategic need to upgrade the existing United Kingdom Airspace Network and has highlighted the importance of continued and sustainable growth within the Aviation Sector to benefit: Trade, Tourism, and Investment. As part of the Airspace Modernisation Strategy the Civil Aviation Authority has written to 18 airports in the South of England (including Bournemouth) to advise them that it is essential that they participate in a programme of Airspace Modernisation. This programme consists of a coordinated attempt to improve the efficiency of airspace across the region. The latest technology should be used to reduce the environmental impact associated with aviation, while continuing to improve safety standards.

Airspace Change projects must follow the process defined by the Civil Aviation Authority. CAP1616 provides guidance on the Regulatory process for changing airspace design and stakeholder engagement. The document requires Bournemouth 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 on 25 August 2021. Its aim was to provide a background understanding of what Bournemouth Airport needs to address in this Airspace Change Proposal. It included the drafting of a comprehensive document which sets out the Design principles titled “Introduction to Design Principles”. This document included a short survey on the establishment of ‘Design Principles’ that will ultimately shape the development and assessment of ‘Options’ for change.

The survey was active for a period of 37 days ending on 30 September 2021 which included several reminders prior to closing.

A second round of consultation was held, running from the 17 February 2022 to the 16 March 2022. It included reminders throughout the process, encouraging responses and feedback from stakeholders prior to closing.

Following on from Bournemouth Airport’s Stage 1 submission, the CAA concluded that ACP-2019-43 Bournemouth Airport (FASI – ‘LTMA Cluster’) had not progressed through the Stage 1 Gateway. It was decided we would return to our stakeholders with our revised draft design principles for a third and final round of engagement. This ran from 2nd August 2022 until 5th September 2022 inviting stakeholders to, once again, contribute towards our design principles development.

This document is a record of the responses received on the Draft Design Principles and describes how they shaped the final Design Principles. The responses were largely supportive or offered no alternatives. The Draft Design Principles have become the Final Design Principles that will be submitted to the Civil Aviation Authority ‘Define’ Gateway assessment.

We would like to thank the 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

ACC	Airport Consultative Committee
ACP	Airspace Change Proposal
AMS	Airspace Modernisation Strategy
ANSP	Air Navigation Services Provider
AONB	Areas of Outstanding National Beauty
ATC	Air Traffic Control
ATCO	Air Traffic Control Officer
BOH	Bournemouth Airport
CAA	Civil Aviation Authority
CAT	Commercial Air Transport
DP	Design Principle
FASI(N)	Future Airspace Implementation North
FASI(S)	Future Airspace Implementation South
GA	General Aviation
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organisation
IFP	Instrument Flight Procedure
ILS	Instrument Landing System
LAeq	Equivalent A-weighted Continuous Sound Level
MS	Microsoft
NATMAC	National Air Traffic Management Advisory Committee
NATS	National Air Traffic Services
NAP	Noise Action Plan
NERL	NATS En-Route Limited
PANS-OPS	Procedures for Air Navigation Services – Aircraft Operations
PBN	Performance Based Navigation
RNP	Required Navigational Performance
SIDs	Standard Instrument Departures

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1. Introduction

1.1. Engagement – First and Second Round

1.1.1. A document titled 'Bournemouth FASI(S) ACP: An Introduction to Design Principles' was issued to the stakeholders (detailed at Annex A) on 25 August 2021. Contained within this document was an explanation of what was being asked along with a link to an online survey[1].

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 initially asked to provide feedback by 30 September 2021.

1.1.4. The Bournemouth Airport Consultative Committee (ACC) was briefed prior to the engagement period by the Airport management team in July 2021. The briefing consisted of an overview of the reasoning for the project as part of the ACC presentation.

1.1.5. The response to the survey was deemed insufficient (a total of 9) to adequately develop our Design Principles, and we lacked responses from some key Stakeholders (e.g. Southampton Airport). The decision was made to conduct a second round of engagement.

1.1.6. On the 17 February 2022 an in-depth brief was given to the ACC at Bournemouth Airport, this detailed the Design Principles[2] and what was needed from the Stakeholders. Paper copies of the survey were handed out and the online survey reopened until 16 March 2022.

1.1.7. A subsequent briefing was given online to a local councillor who requested further information on the 24 February 2022.

1.1.8. After the second round of engagement, we had 56 responses to the online survey and a further 6 handwritten responses from attendees at the ACC brief on the 24 Feb 2022. These responses were scanned at the end of the meeting and emailed by the secretary for inclusion in the analysis.

1.1.9. During our analysis of the survey results it became apparent that many of the respondents were individual residents rather than representative groups. Whilst we appreciate the time and consideration all these individuals put into their responses, unfortunately Stage 1 of the

[1] Hosted on MS Forms and available on the portal titled 'CPJ-5663-SUR-019 BOH ACP Design Principles Survey'.
[2] The full presentation can be found on the portal titled 'CPJ-5663-PRE-018 V1.0 Design Principles Presentation'.

Airspace Change Proposal (ACP) stipulates that this is targeted stakeholder engagement and not general consultation.

1.1.10. The responses from individuals were removed from the survey results and the analysis of the Design Principles. **However, for transparency, we have included a smaller graph alongside the survey questions titled 'Inc. Individuals', which shows the results including these responses.** There is little difference in the overall outcomes. All individuals are thanked for their participation and their comments.

1.2. Responses – First and Second Round

1.2.1. A total of twenty-four (24) responses were received through the online survey and six (6) additional responses. They are divided into the following categories:

- 15 Local Aviation, Airports and Operators;
- 8 Community bodies;
- 4 Statutory (NATMAC);
- 2 Environmental bodies; and
- 1 Technical (ATM) stakeholder.

1.2.2. The Survey results are included in Section 2. The Revised Design Principles following the first and second rounds of engagement, are included in Section 4. These form the Design Principles taken forward for our Summer 2022 round of engagement.

1.3. Methodology

Stakeholder Identification

CAP1616 requires a discussion with affected Stakeholders. Local Stakeholders normally include Local Authority elected representatives, Local Community groups, ACC, and representatives of Local General Aviation (GA) organisations or flying clubs. Stakeholders were also identified using the 'Potentially Affected Area' on the ACP Portal.

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

- Environmental Stakeholders.
- Technical Stakeholders (Air Traffic Control and Operators); and
- Local and Statutory (National) Aviation Stakeholders.

Analysis of Feedback

The data from the Microsoft (MS) Forms online survey was extracted into an excel document for analysis. This document[3] can be found in pdf on the ACP Portal. The extent to which stakeholders agreed/disagreed with each DP was analysed and comments are included in the narrative. This shows the evolution of the DPs based on the stakeholder feedback.

NB: The Survey Results document does not include the comments that were received from individuals outside the scope of this Stakeholder engagement detailed in **Section 1.1.9.**[3]

[3] Survey Results (with personal details removed) are found on the portal titled: 'CPJ-5663-DOC-020 V1.0 Survey Results'

2. Survey Responses & Impact – First and Second Round Spring 2022

2.1. Question 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 Bournemouth 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

Responses

30 Survey responses:

- 5 Avoid New People 17%
- 17 Seek options, Reduce Environmental Impact 57%
- 8 Other 26%

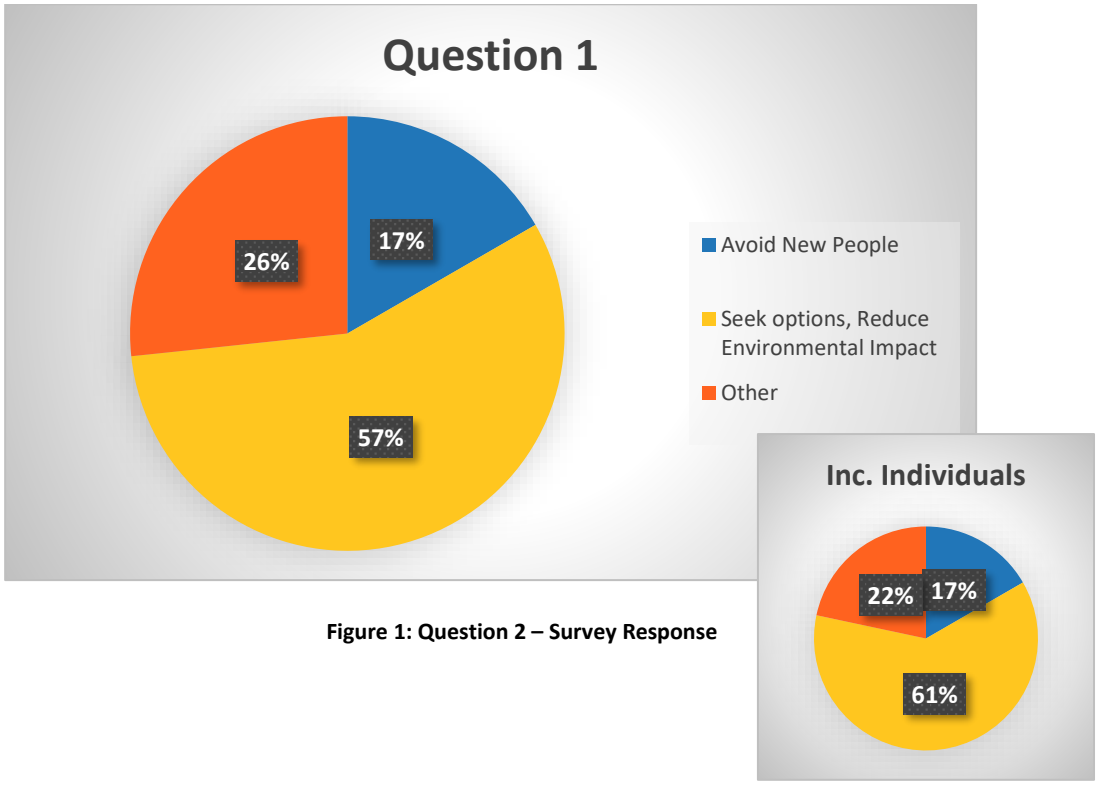

Figure 1: Question 2 – Survey Response

Feedback

The Chairman of Hurn Parish Council and BCP Council Ward Cllr. for "Commons" Ward including Bournemouth Airport:

- Ideally there will be no additional impact on those currently affected and no new communities affected either.

Poole People Party:

- This question is biased towards operational efficiency. Operational efficiency is less important than environmental and community concerns.

Residents of Burley:

- No night flights.

NATS:

- Understands the consideration of all of these issues in determining the future airspace design. However, we have no direct comment to make on which should be the priority.

BACC - Hurn Parish Council:

- Both are very important but environmental impacts should carry greater weight.

Impact

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

2.2. Question 2

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.

Response

30 Survey responses.

- 13 Concentrate 43%
- 12 Disperse 41%
- 1 Don't know 3%
- 4 Other 13%

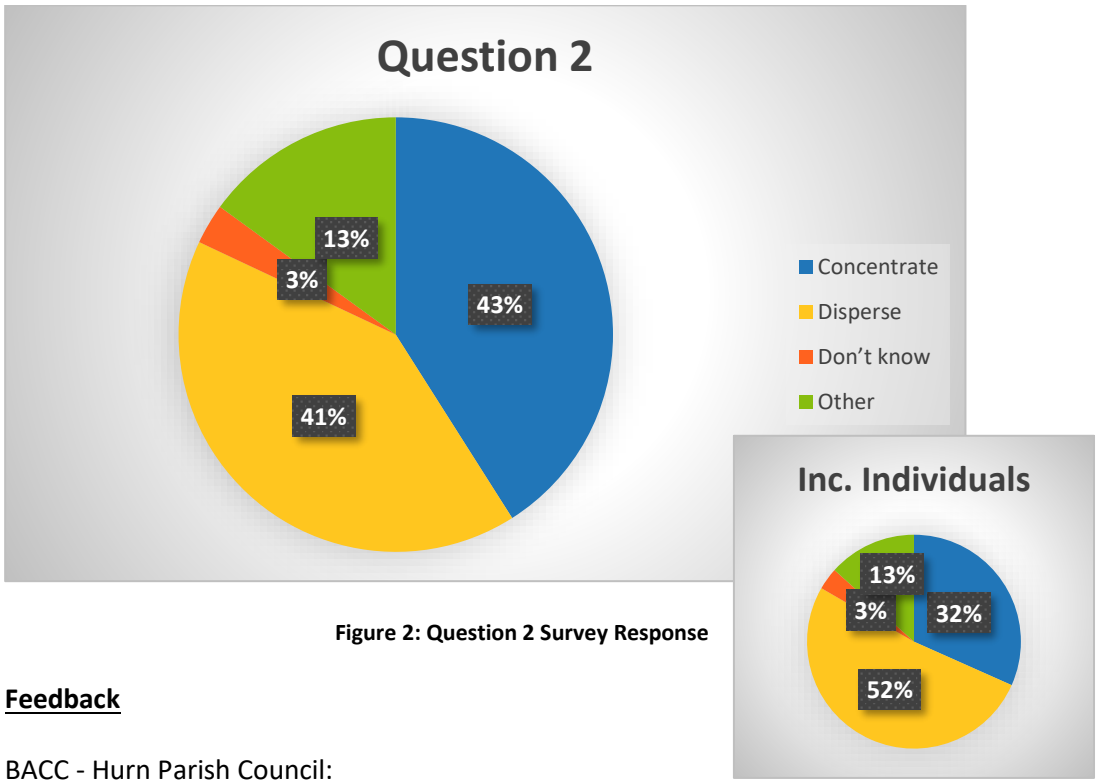

Figure 2: Question 2 Survey Response

Feedback

BACC - Hurn Parish Council:

- A system that can consider both options within the operations of the airport would perhaps give greater flexibility.

NATS:

- Understands the necessity of the question but feel it is better for the sponsor and other stakeholders to determine which should be the priority.

Draken Europe:

- Our primary concern is that of safety in the air and on the ground. For aircraft, simplicity is key.

Impact

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

2.3. Question 3

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, AONBs, recreational parks etc.)
- Optional open text field to provide amplification on your answer.

Response

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

- Built Up Areas (Score 67 = 41%)
- Rural Areas (Score 47 = 30%)
- Tranquillity (Score 46 = 29%)

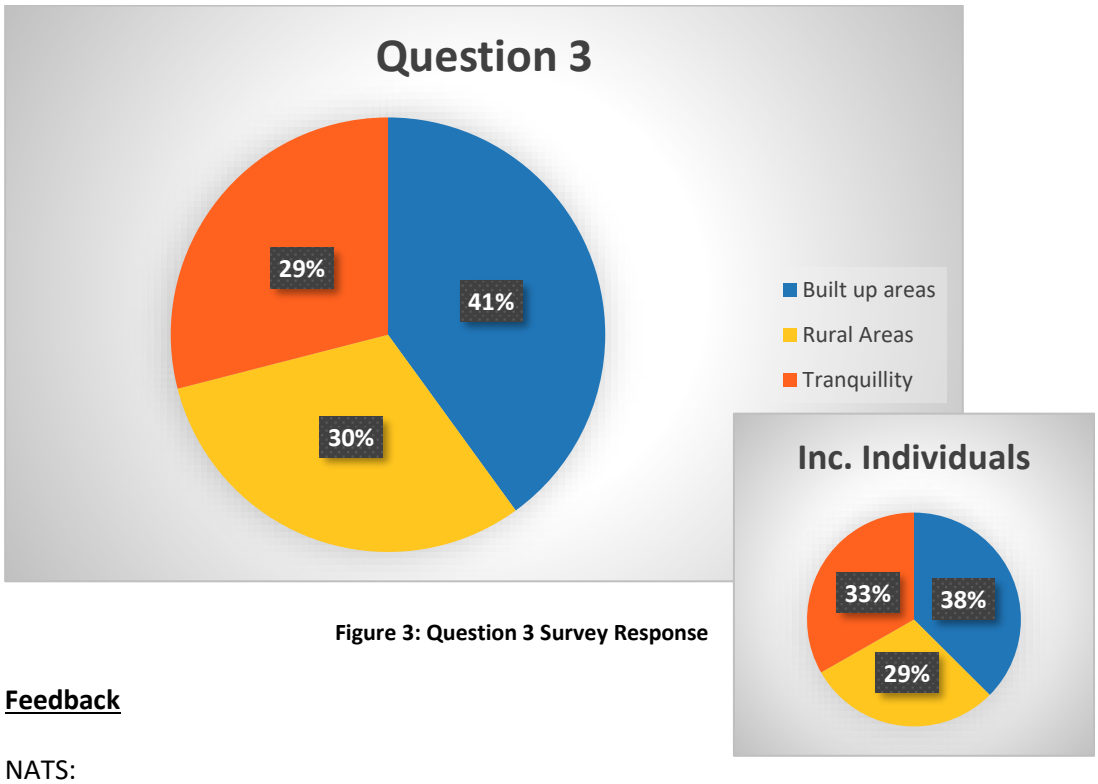

Figure 3: Question 3 Survey Response

Feedback

NATS:

- Understands the necessity of the question but feel it is better for the sponsor and other stakeholders to determine which should be the priority.

Impact

Whilst there is no strong 'winner' between the options, the areas of tranquillity appear to be of lesser importance to those who have responded albeit marginally. Although marginal, 'built up areas' appear to be of a higher importance to the responders.

The feedback to this question is inconclusive and shows no distinct preference. The avoidance of built-up areas and areas of tranquillity are captured within the Noise DP and the Tranquillity DP.

2.4. Question 4

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.

Response

30 Survey responses.

- 2 YES 6%
- 23 NO 77%
- 5 OTHER 17%

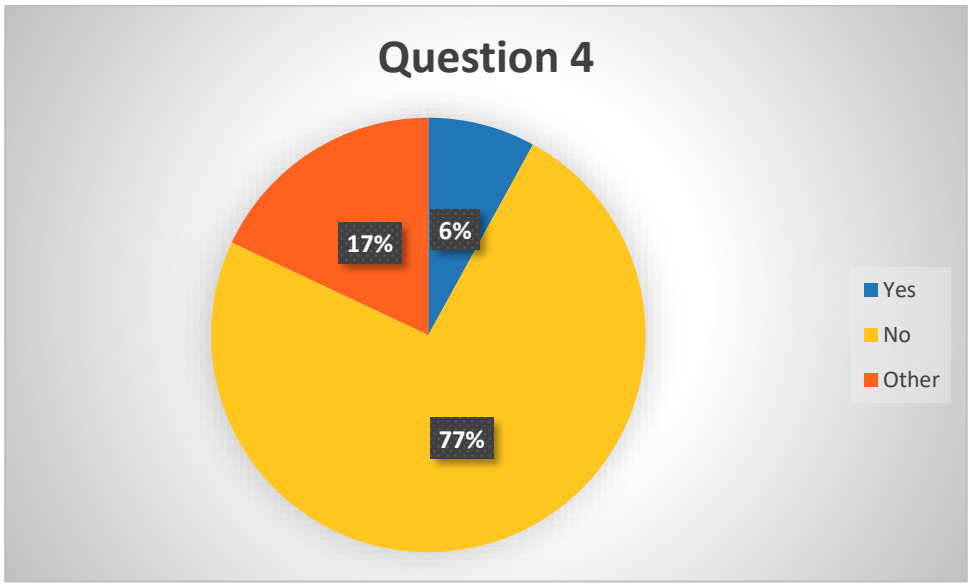

Figure 4: Question 4 Survey Response

Feedback

Broadstone Forum:

- Continuous descent over high ground.

National Trust:

- Kingston Lacy, Brownsea Island, Corfe Castle, Studland beaches.

Poole People Party:

- Historic buildings in Poole and Christchurch town centres.

Additional comments from individuals:

- Schools
- Hospitals
- Residential care homes
- St Catherine's Hill

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:

- Kingston Lacy.
- Brownsea Island.
- Corfe Castle.
- Studland beaches.
- St Catherine's Hill
- Historic buildings in Poole and Christchurch town centres.

2.5. Question 5

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.

Response

30 Survey responses.

• 20	Yes	67%
• 3	No	10%
• 1	Don't mind	3%
• 3	Don't know	10%
• 3	No comment	10%

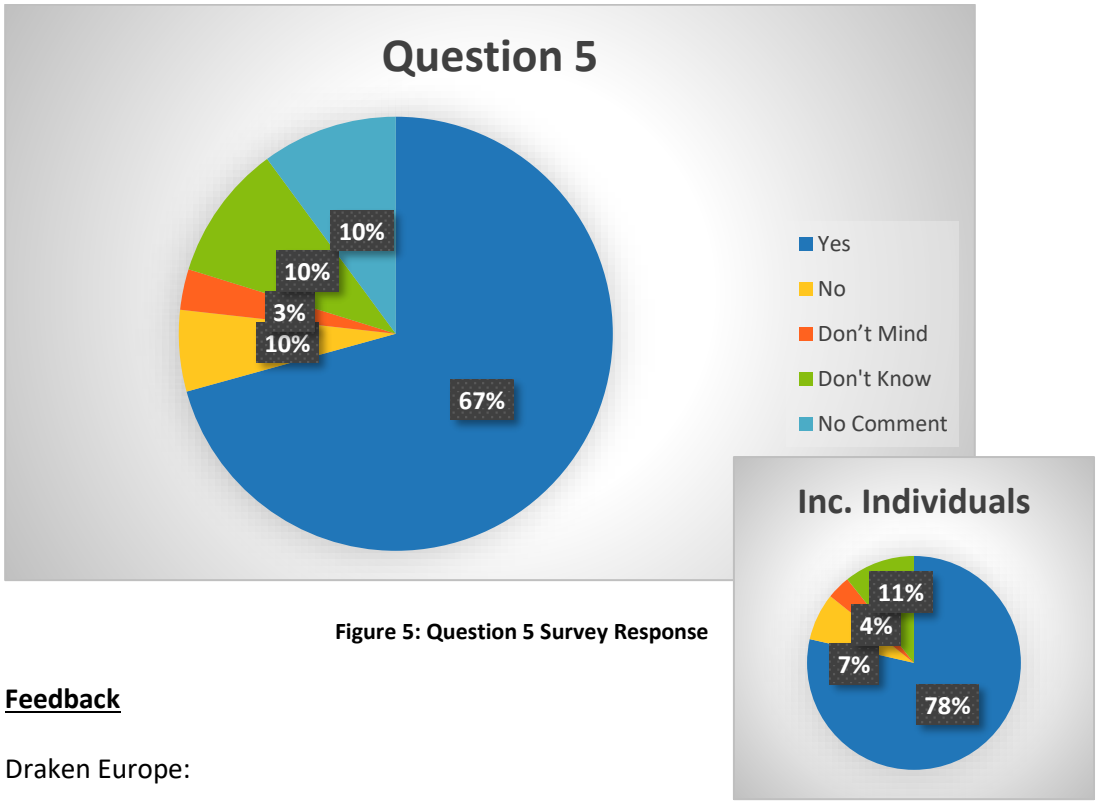

Figure 5: Question 5 Survey Response

Feedback

Draken Europe:

- Operationally, we would need to understand more the planned times and the restrictions before comment.

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. This is now captured within the New Noise DP.

2.6. Question 6: Design Principle 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.

Importance of Safety

The Airspace Design and its operation must be as safe or safer than today.

Response

30 Survey responses.

- Strongly Agree 26 87%
- Agree 1 3%
- Neutral 3 10%
- Disagree 0 0%
- Strongly Disagree 0 0%

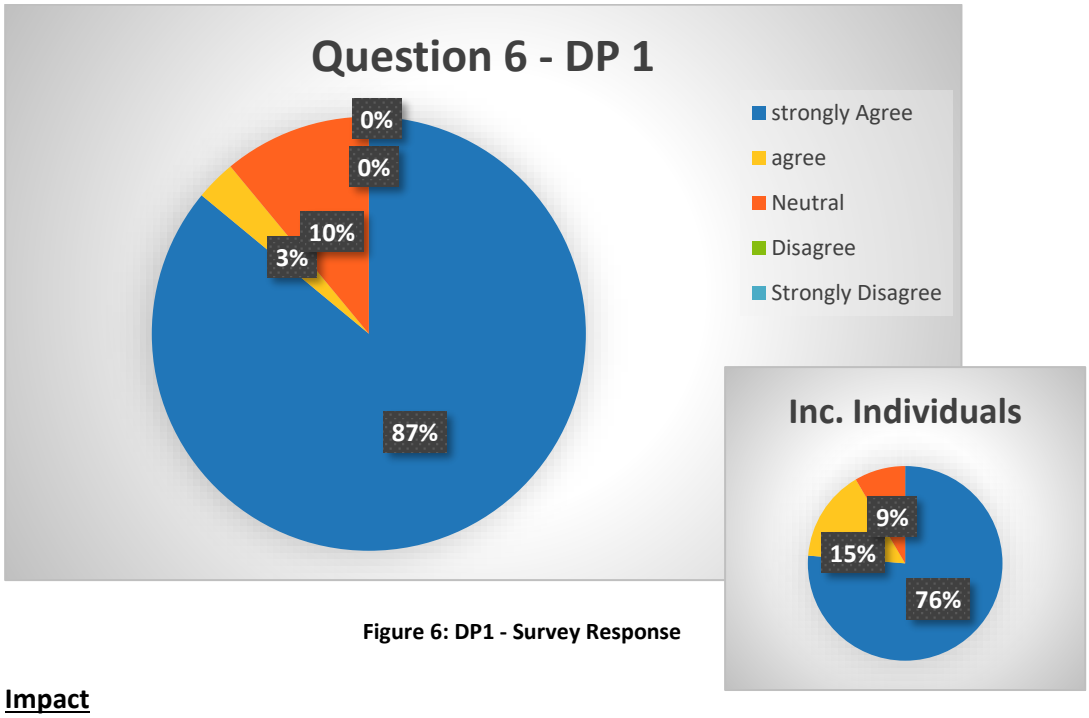

Figure 6: DP1 - Survey Response

Impact

With a total of 90% of responses stating they Agree/Strongly Agree with this DP and the overriding principle that the Safety of the operation is fundamental. Safety is at the forefront of everything Bournemouth Airport does. Safety will underpin any airspace change and where possible, enhance current safety standards. Bournemouth Airport also believes it is crucial that any proposed changes do not have a detrimental safety impact on other airspace users or communities. It was felt there is a desire to be more ambitious and this is reflected in the wording of the New DP.

New wording of Importance of Safety DP:

- The airspace design and its operation must maintain or where possible, enhance current levels of safety.

2.7. Question 7: Design Principle 2

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.

Overflight

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

Response

30 Survey responses.

- Strongly Agree 10 33%
- Agree 7 24%
- Neutral 8 27%
- Disagree 5 16%
- Strongly Disagree 0 0%

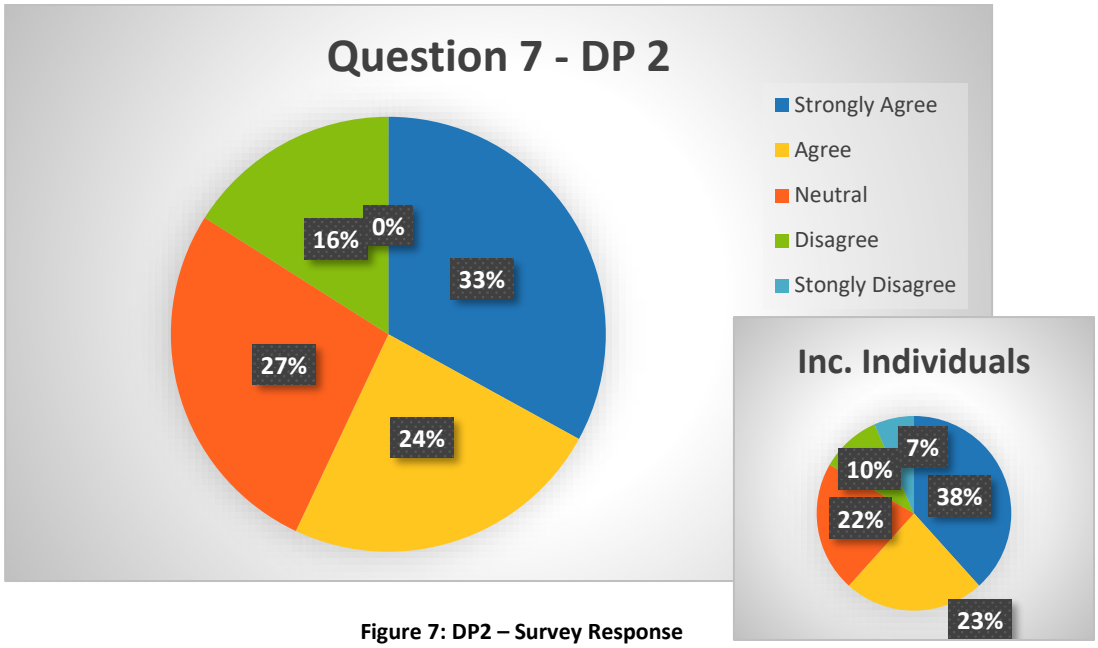

Figure 7: DP2 – Survey Response

Impact

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

New wording of Noise DP:

- The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground, in line with the

Bournemouth Airport Noise Action Plan, and where possible periods of built-in respite should be considered.

2.8. Question 8: Design Principle 3

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.

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 51 dBA Equivalent A-weighted Continuous Sound Level (LAeq) 16-hour contour.

Response

30 Survey responses, via email.

- Strongly Agree 16 54%
- Agree 7 23%
- Neutral 4 13%
- Disagree 3 10%
- Strongly Disagree 0 0%

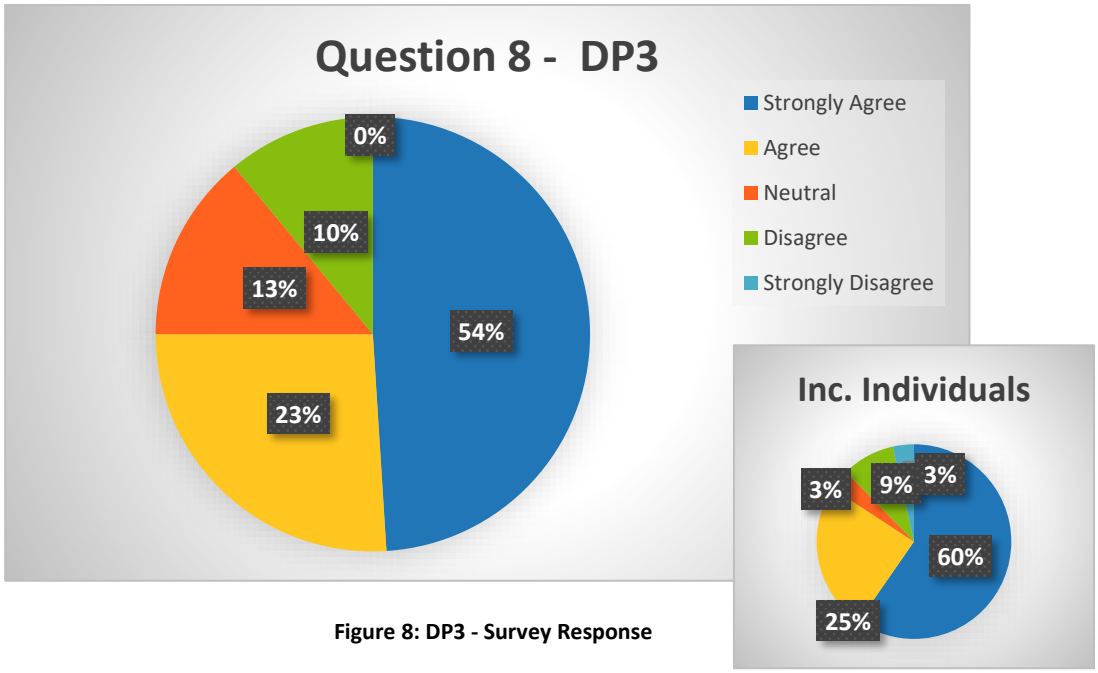

Figure 8: DP3 - Survey Response

Feedback

Southampton Airport:

- Consider wording, minimise and where possible reduce, more ambitious than to not increase.

Broadstone Forum:

- It goes without saying that noise is far less intrusive in a very densely built-up area with high levels of traffic, and I feel more thought should be given to those people who are subjected to intrusive noise from aircraft, especially at night. It seems that animals in the New Forest are given higher priority than is justified.

Chairman of Hurn Parish Council and BCP Council Ward Cllr. for "Commons" Ward Including Bournemouth Airport:

- Noise and disturbance from the airport should be kept to a minimum at all times especially during take-off and landing procedures both in the air and on the ground.

ACC Member:

- The airport noise action plan should be included in the design.

ACC Member:

- Not Sure, the airport noise action plan should be included in the design.

Impact

Whilst this DP is largely supported, the decision has been made following the feedback to combine this with DP3, as they both have Noise as an underlying theme. To minimise the noise impact to Stakeholders on the ground, Bournemouth Airport will consider mitigating options:

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

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

Reference was made by multiple Stakeholders to Bournemouth Airports Noise Action Plan. This document will be referenced and adhered to during the next stages of this ACP. It can be found on the Bournemouth Airport website titled:

Bournemouth Airport Noise Action Plan Review 2018

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

New wording of Noise DP:

- The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground, in line with the Bournemouth Airport Noise Action Plan, and where possible periods of built-in respite should be considered.

2.9. Question 9: Design Principle 4

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.

Tranquillity

Implementation should minimise disturbance to the Moors River System SSSI and, where possible, minimise the impact upon the New Forest National Park and the nearby Areas of Outstanding National Beauty (AONB).

Response

30 Survey responses.

• Strongly Agree	9	30%
• Agree	12	40%
• Neutral	8	27%
• Disagree	0	0%
• Strongly Disagree	1	3%

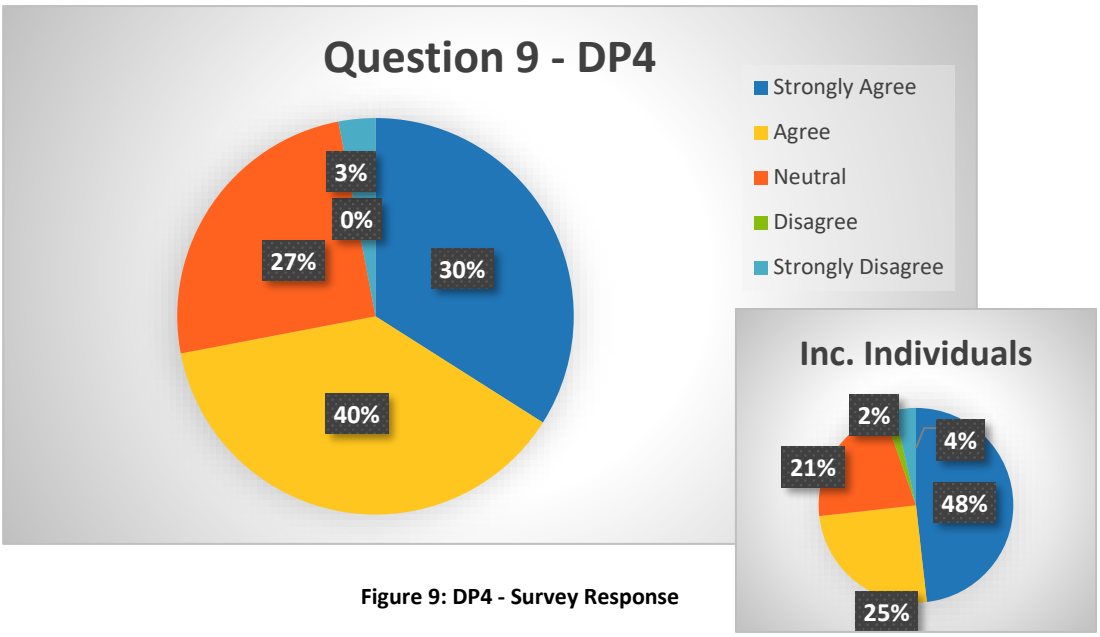

Figure 9: DP4 - Survey Response

Feedback

National Trust:

- As well as tranquillity, affects on places important for the tourism and visitor economy (although the places we've mentioned in our responses are all in AONBs).

Impact

CAP1616 states that 'where practicable, it is desirable that airspace routes below 7,000 feet should seek to avoid flying over Areas of Outstanding Natural Beauty (AONB) and, National Parks'. Following the response to Stakeholder feedback and Question 4 of this survey this DP will be amended to include sites of cultural and environmental interest as well as tourism.

This DP is reworded in keeping with the Government's Air Navigation Guidance. Options will be developed which avoid overflight of AONBs, National Parks, sites of cultural and environmental interest and tourism

Specific areas will be considered by the Designers. The Stage 2 Concept Options Development following stakeholder feedback and areas originally identified within this DP:

- Moors River System SSSI.
- New Forest National Park.
- Kingston Lacy.
- Brownsea Island.
- Corfe Castle.
- Studland beaches.
- Historic buildings in Poole and Christchurch town centres.

New wording of Tranquillity DP:

- Where practical, route designs should limit effects upon sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of tourism and AONB's.

2.10. Question 10: Design Principle 5

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.

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

Response

30 Survey responses.

- Strongly Agree 15 50%
- Agree 10 33%
- Neutral 5 17%
- Disagree 0 0%
- Strongly Disagree 0 0%

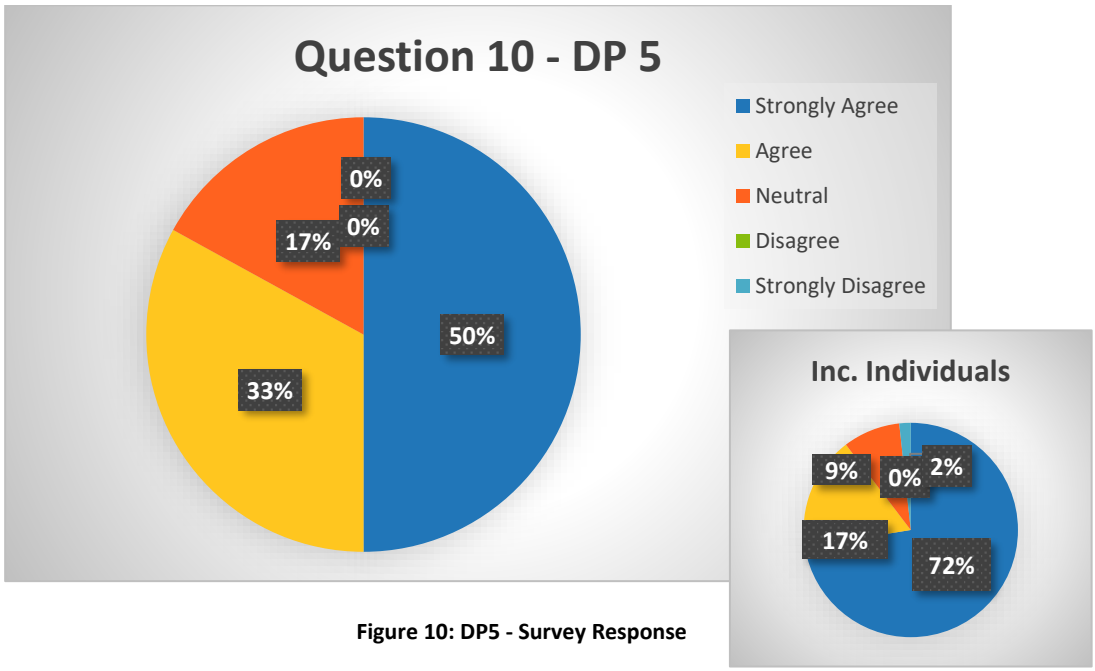

Figure 10: DP5 - Survey Response

Feedback

Southampton Airport:

- Consider wording, minimise and where possible reduce, more ambitious than to not increase.

Poole People Party:

- The design should seek to reduce air travel and transport through Bournemouth to meet net-zero commitments.

Impact

As a result of stakeholder feedback, the DP is revised to reflect an ambition to stabilise and, if possible, improve the situation with respect to air quality and emissions.

Bournemouth Airport is committed to minimising the environmental impact through the most efficient airspace and procedure design. This covers both CO2 emissions and associated fuel burn. Improvements in air quality and ecological impact require a concerted approach from stakeholders which Bournemouth Airport is unable to measure. Reference to air quality and ecological impact has therefore been removed and a commitment made to what Bournemouth Airport does have control over. The DP has been amended to reflect this ambition.

New wording of Emissions and Air Quality DP:

- The proposed design should minimise and where possible reduce CO2 emissions per flight.

2.11. Question 11: Design Principle 6

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.

Operational Requirements

The new procedures should address the needs of most operators at Bournemouth Airport.

Responses

30 Survey responses.

• Strongly Agree	7	24%
• Agree	14	46%
• Neutral	7	24%
• Disagree	0	0%
• Strongly Disagree	2	6%

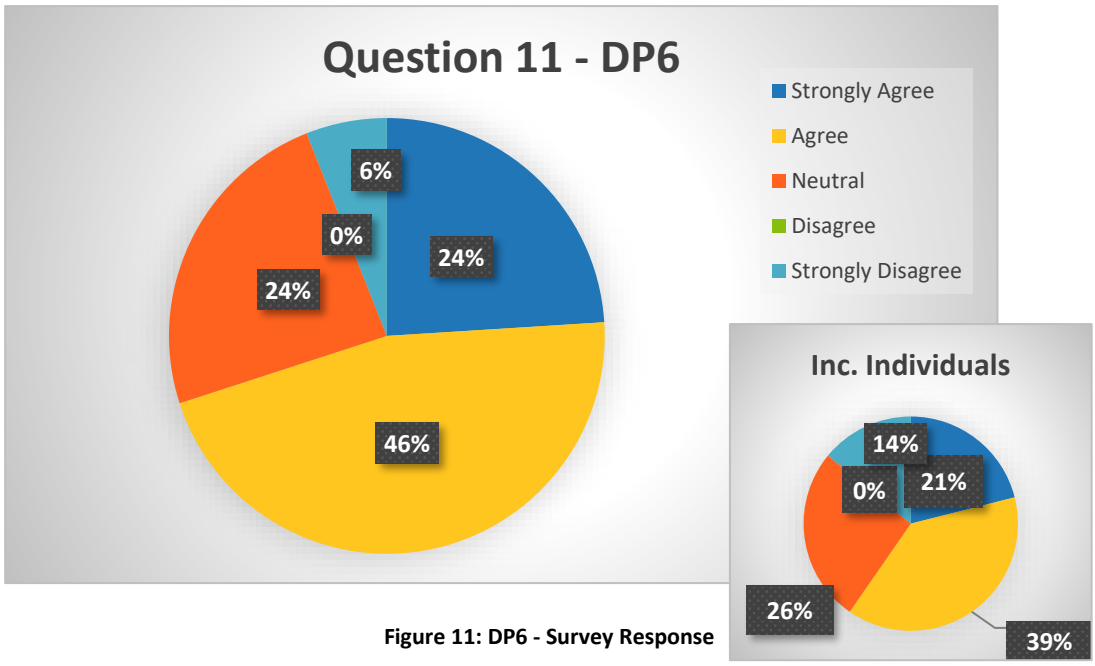

Figure 11: DP6 - Survey Response

Impact

The decision was made following the assessment of the intent of this DP to consolidate it with other DPs of a similar theme. This will make the final DPs more succinct and quantifiable to aid analysis against the options development in the next stage of this CAP1616 ACP.

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

New wording of Technical Requirements DP:

- The Design shall be fully compliant with Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) and United Kingdom (UK) CAA criteria to meet the technical capability requirements of aircraft using the airport.

2.12. Question 12: Design Principle 7

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.

Airspace Dimensions

The airspace design should afford the appropriate volume of controlled airspace to contain and support Commercial Air Transport (CAT) for both runways, enable safe, efficient access for other types of operation and release controlled airspace that is not required.

Responses

30 Survey responses.

- Strongly Agree 8 27%
- Agree 12 40%
- Neutral 8 27%
- Disagree 0 0%
- Strongly Disagree 2 6%

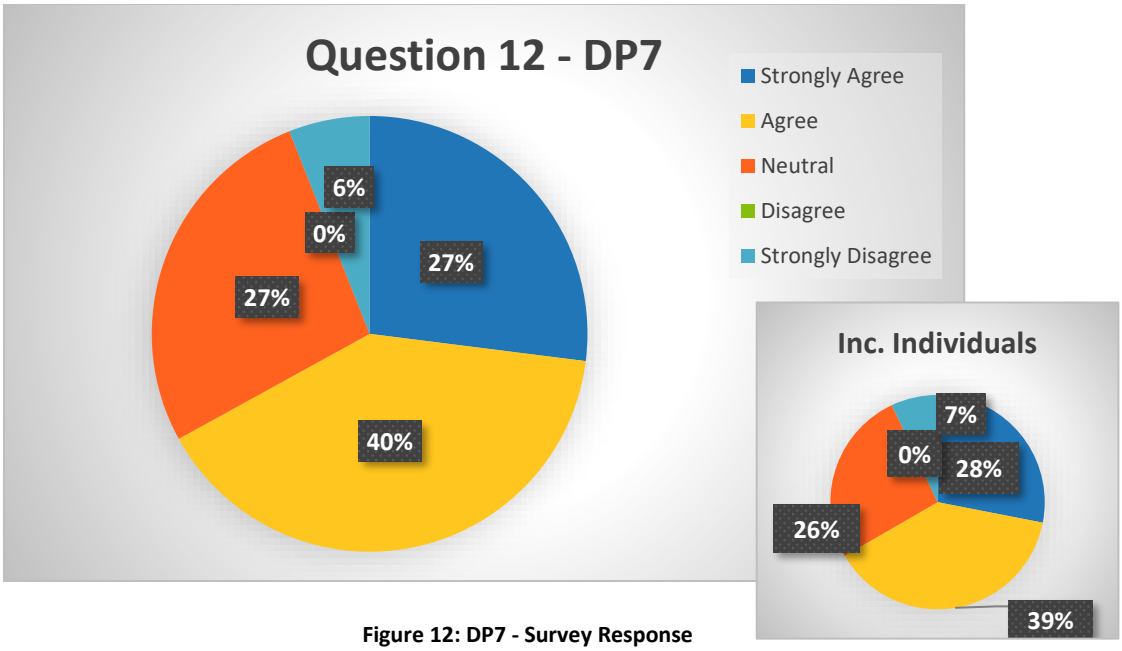

Figure 12: DP7 - Survey Response

Impact

This DP and the original DP8 have been amalgamated to form one overarching Airspace Dimensions DP. This was done as the Continuous Climb and Descent Operations DP also forms part of the drive for efficiency.

New wording of Airspace Dimensions DP:

- The volume and classification of Controlled Airspace required for Bournemouth Airport should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.

2.13. Question 12: Design Principle 8

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.

Airspace Availability

Sufficient controlled airspace should be available to support Bournemouth Airport operations independently.

Responses

30 Survey responses.

- Strongly Agree 8 27%
- Agree 9 31%
- Neutral 11 36%
- Disagree 0 0%
- Strongly Disagree 2 6%

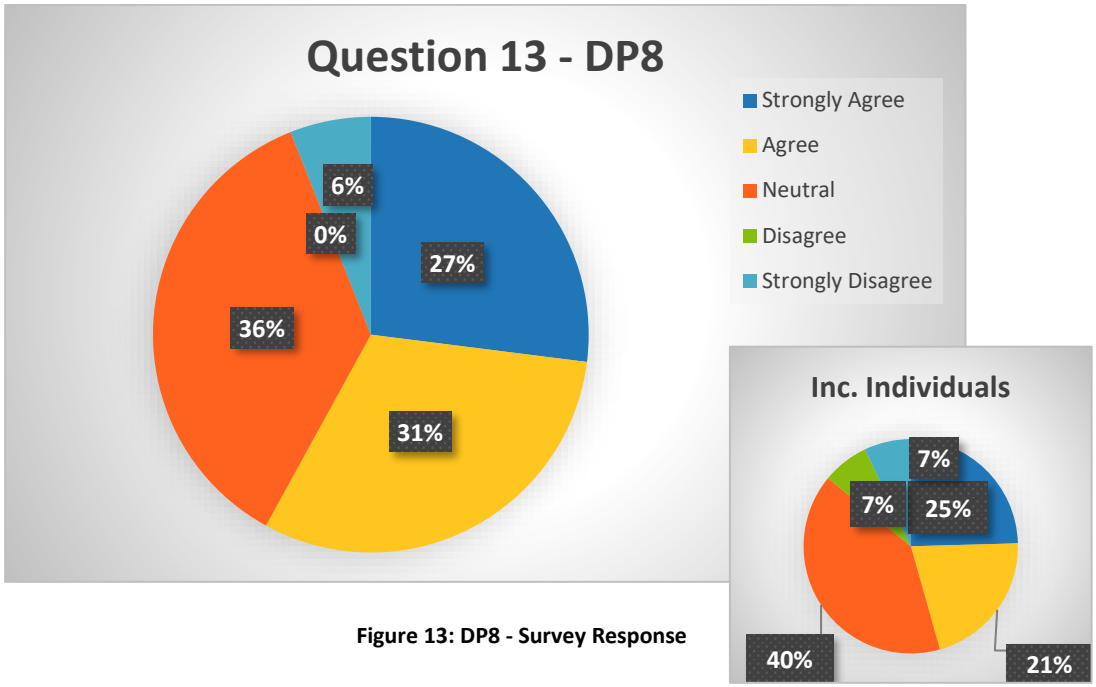

Figure 13: DP8 - Survey Response

Impact

This DP and the original DP7 have been amalgamated to form one overarching Airspace Dimensions DP. This was done as the Continuous Climb and Descent Operations DP also forms part of the drive for efficiency.

New wording of Airspace Dimensions DP:

- The volume and classification of controlled airspace required for Bournemouth Airport should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.

2.14. Question 14: Design Principle 9

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.

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.

Responses

30 Survey responses.

- Strongly Agree 10 33%
- Agree 16 54%
- Neutral 3 10%
- Disagree 1 3%
- Strongly Disagree 0 0%

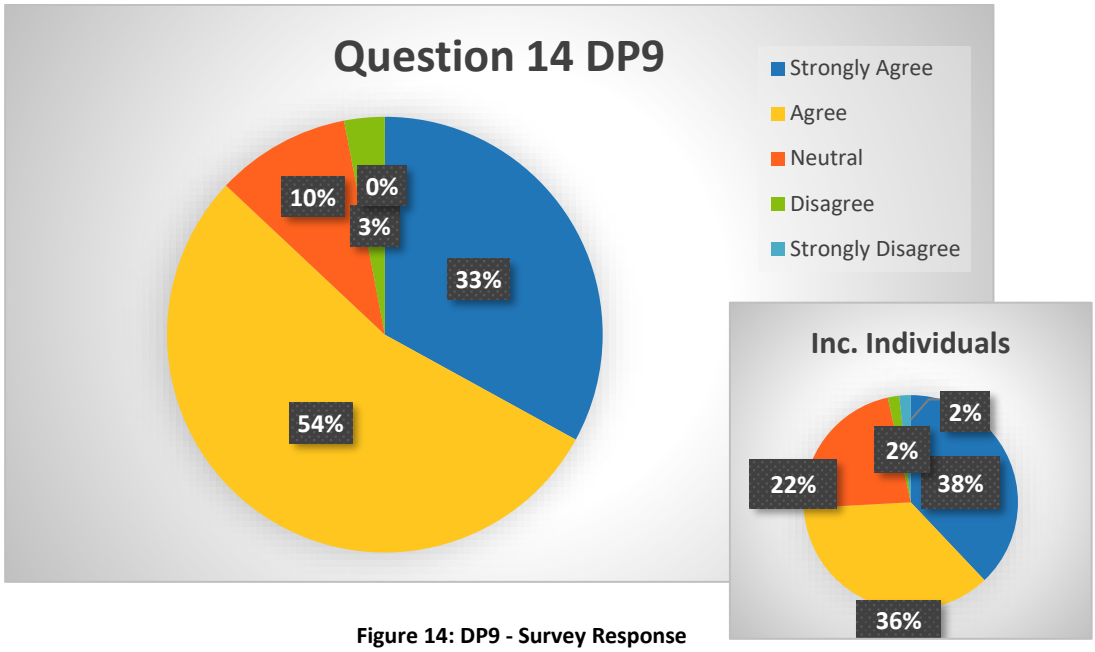

Figure 14: DP9 - Survey Response

Impact

DP was largely supported and remains unchanged.

New wording of Airspace Complexity DP:

- The airspace design should seek to reduce complexity and bottlenecks in Controlled and Uncontrolled Airspace and contribute to a reduction in airspace infringements.

2.15. Question 15: Design Principle 10

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.

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.

Responses

30 Survey responses.

- Strongly Agree 15 50%
- Agree 11 36%
- Neutral 4 14%
- Disagree 0 0%
- Strongly Disagree 0 0%

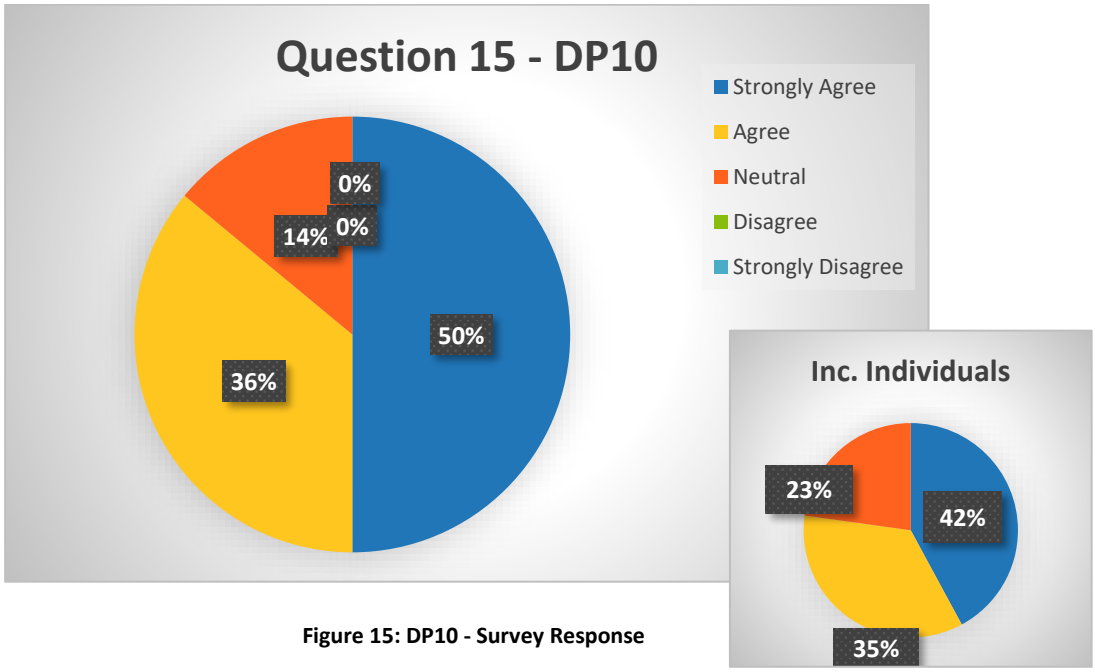

Figure 15: DP10 - Survey Response

Feedback

Southampton Airport:

- Perhaps should be fully compliant, any non-compliance to be acceptable to the CAA.

Impact

This DP was fully supported by the Stakeholders. With the desire to make the DPs more manageable to take forward to the options development phase, it has been decided to

combine this DP with the original DP11 and DP12 into a consolidated Technical Requirements Design Principle.

The new Design Principle is as follows:

New wording of Technical Requirements DP:

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

2.16. Question 16: Design Principle 11

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.

Aircraft Category

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

Responses

30 Survey responses.

• Strongly Agree	9	30%
• Agree	7	23%
• Neutral	13	44%
• Disagree	1	3%
• Strongly Disagree	0	0%

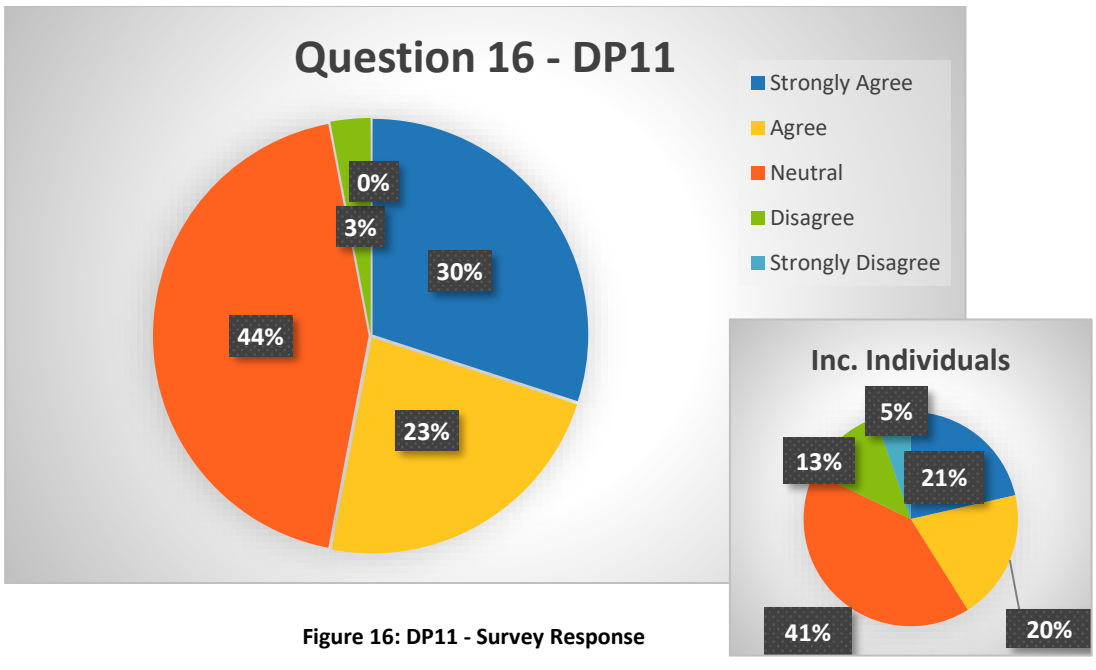

Figure 16: DP11 - Survey Response

Feedback

Southampton Airport:

- We believe this DP is covered by Instrument Flight Procedure (IFP) Validation Policy or if wish to retain use all aircraft families (rather than every type).

Impact

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

New wording of Technical Requirements DP:

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

2.17. Question 17: Design Principle 12

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.

Equipage and Approval

The new procedures shall be flyable by the majority of Bournemouth commercial aircraft operators.

Responses

30 Survey responses.

• Strongly Agree	15	50%
• Agree	5	17%
• Neutral	8	27%
• Disagree	2	6%
• Strongly Disagree	0	0%

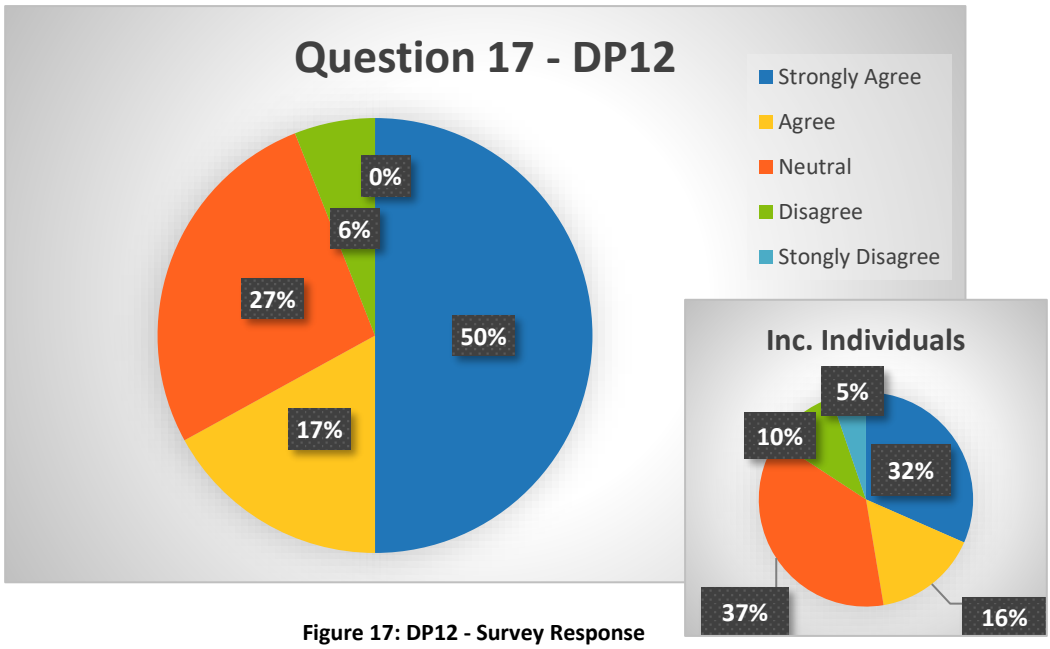

Figure 17: DP12 - Survey Response

Feedback

Southampton Airport:

- Could be combined with DP6?

Impact

DP10, 11 and 12 have been combined into a consolidated Technical Requirements Design Principle. This has been done to make the DPs more manageable to take forward to the options development phase.

New wording of Technical Requirements DP:

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

2.18. Question 18: Design Principle 13

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.

Arrival Transitions

The Arrival Transition Designs shall seamlessly integrate with the new Required Navigational Performance (RNP) Instrument Approach Procedures (IAP) at Bournemouth Airport and if possible, the existing Instrument Landing System (ILS) approach procedures.

Responses

30 Survey responses.

- Strongly Agree 14 46%
- Agree 8 27%
- Neutral 7 24%
- Disagree 1 3%
- Strongly Disagree 0 0%

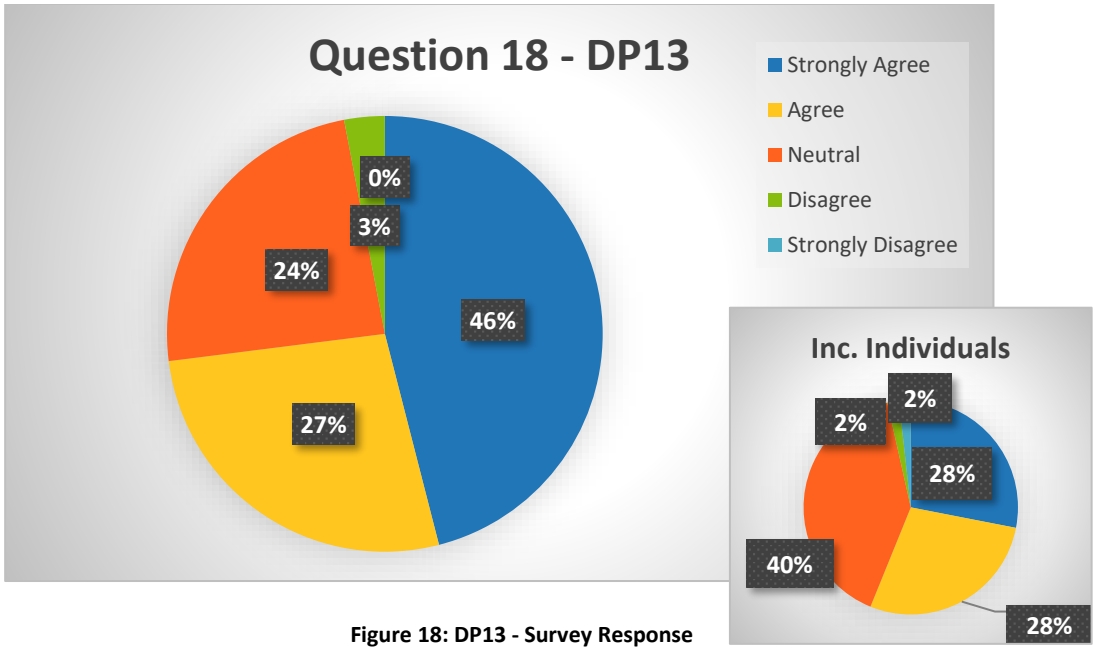

Figure 18: DP13 - Survey Response

Impact

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

New wording of Systemisation DP:

- The new procedures will integrate with the en-route network, as per the Future Airspace Implementation South (FASI(S)) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.

2.19. Question 19: Design Principle 14

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.

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.

Responses

30 Survey responses.

- Strongly Agree 11 37%
- Agree 11 37%
- Neutral 8 26%
- Disagree 0 0%
- Strongly Disagree 0 0%

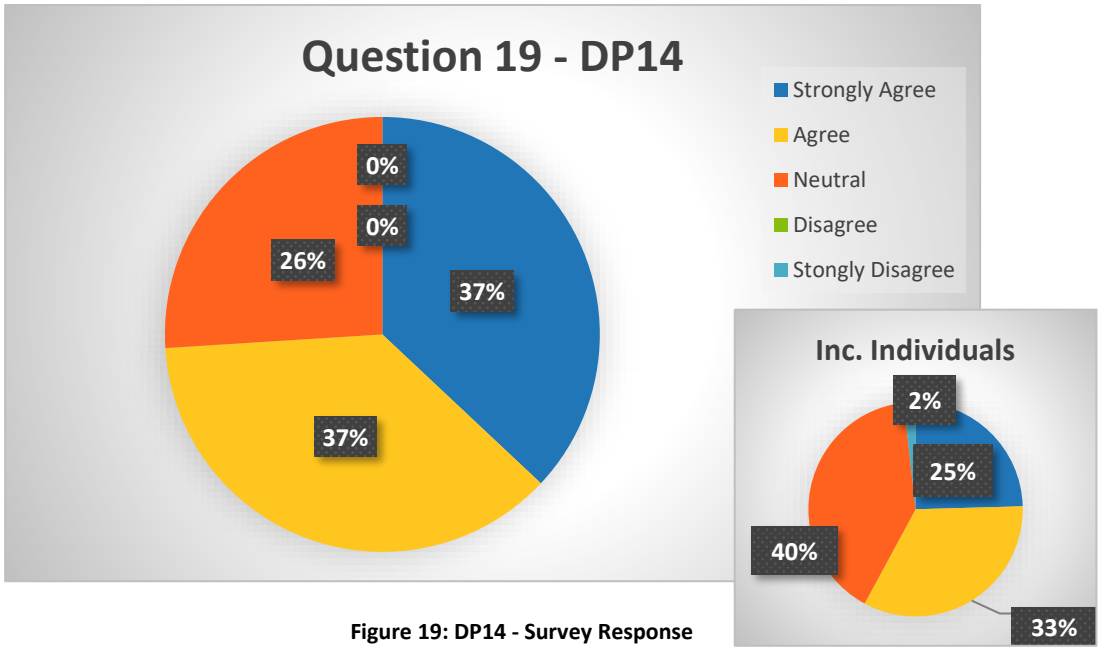

Figure 19: DP14 - Survey Response

Feedback

Southampton Airport:

- Gateways are no longer the method of design in FASI(S). Perhaps the SIDs should be deconflicted from arrivals transitions.

Impact

DPs 13, 14 and 15 have been amalgamated into an overarching Systemisation Design Principle. This has been done to make the DPs more manageable to take forward to the options development phase. The suggestion to reword this DP to better reflect current methods of design has also been captured in the new DP.

New wording of Systemisation DP:

- The new procedures will integrate with the en-route network, as per the FASI(S) programme. If required, the arrival transitions shall integrate with the IAPs,

deconflict with the departure procedures, reducing the requirement for tactical coordination.

2.20. Question 20: Design Principle 15

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.

Coordination

The new procedures result in a reduction in the amount of tactical coordination required by Air Traffic Control Officers (ATCOs).

Responses

30 Survey responses.

- Strongly Agree 10 34%
- Agree 6 20%
- Neutral 13 43%
- Disagree 0 0%
- Strongly Disagree 1 3%

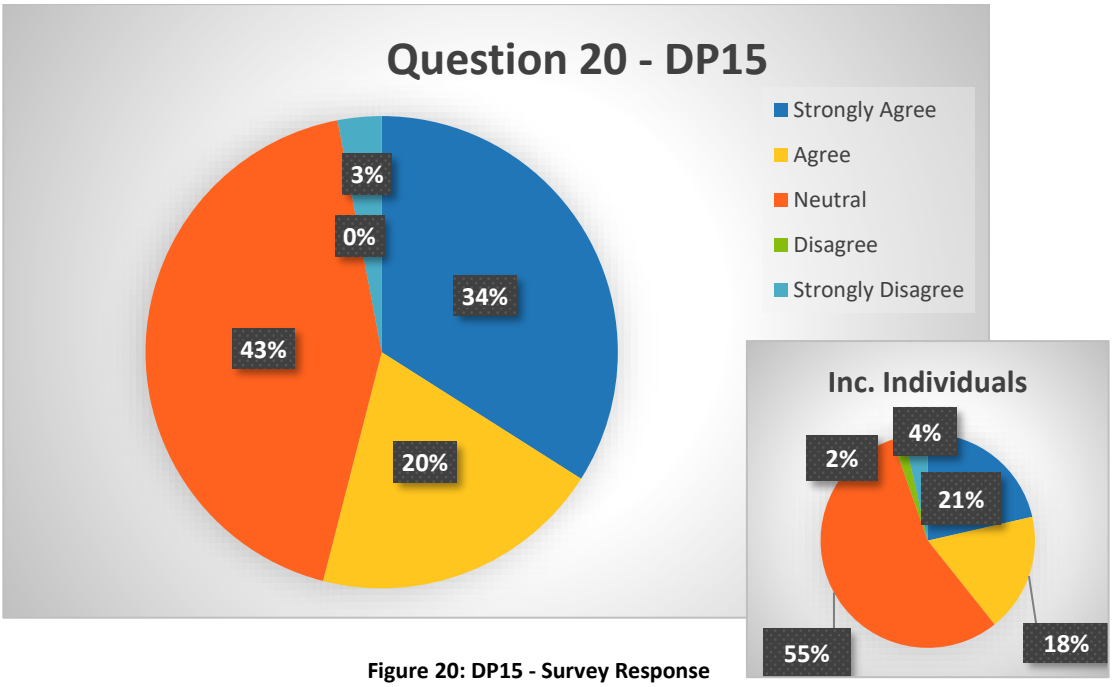

Figure 20: DP15 - Survey Response

Impact

DPs 13, 14 and 15 were amalgamated into an overarching Systemisation Design Principle. This has been done to make the DPs more manageable to take forward to the options

development phase. The suggestion to reword this DP to better reflect current methods of design has also been captured in the new DP.

New wording of Systemisation DP

- The new procedures will integrate with the en-route network, as per the FASI(S) programme. If required, the arrival transitions shall integrate with the IAPs, deconflict with the departure procedures, reducing the requirement for tactical coordination.

2.21. Question 21: Design Principle 16

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.

Independence

The new procedures and airspace configuration should enable Bournemouth Airport to operate independently of Southampton Radar.

Responses

30 Survey responses.

- Strongly Agree 11 37%
- Agree 6 20%
- Neutral 11 37%
- Disagree 1 3%
- Strongly Disagree 1 3%

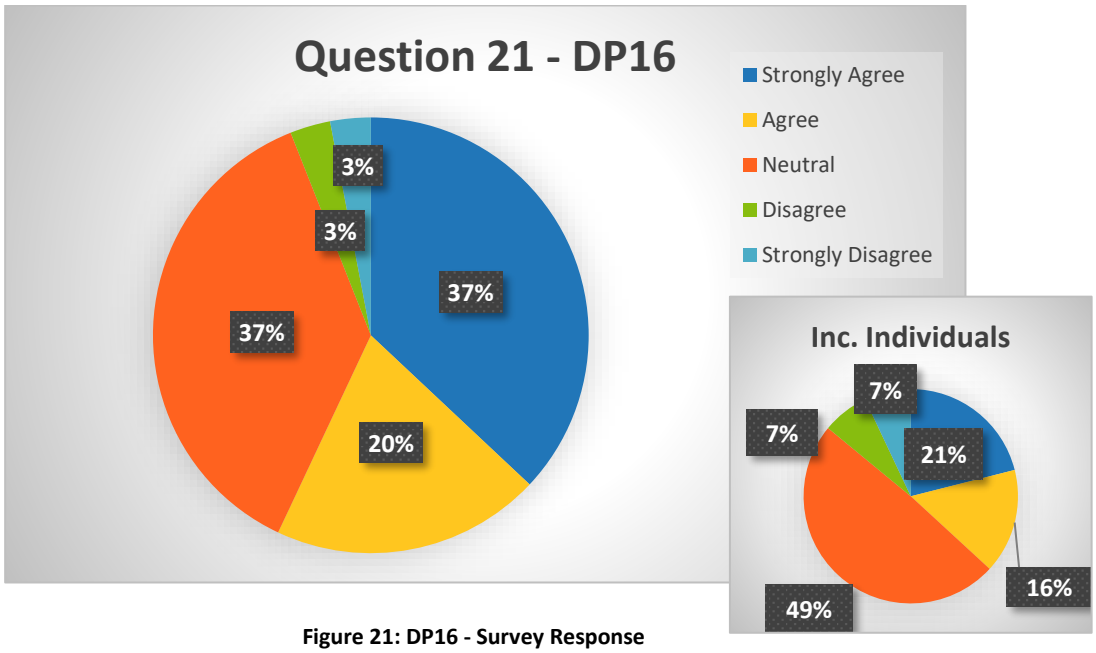

Figure 21: DP16 - Survey Response

Feedback

Southampton Airport:

- Potential new DP: Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

Impact

Following Stakeholder feedback, the wording of this DP has been amended as follows.

New wording of Independence DP:

- Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

2.22. Question 22: Design Principle 17

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.

Cost of Change

The new procedures shall be implemented in a cost-effective manner.

Responses

30 Survey responses.

• Strongly Agree	12	42%
• Agree	8	26%
• Neutral	8	26%
• Disagree	1	3%
• Strongly Disagree	1	3%

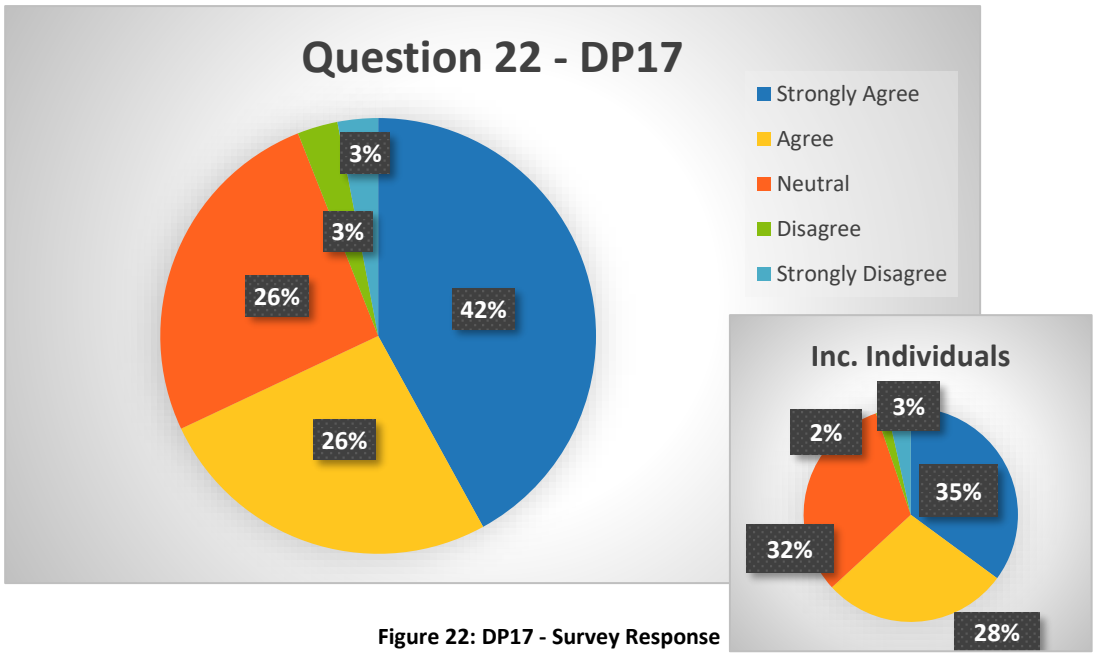

Figure 22: DP17 - Survey Response

Impact

Due to the obvious intent, and recent funding grants criteria and robust oversight, this DP is unnecessary, therefore we have removed this DP.

2.23. Question 23: Design Principle 18

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.

Operational Cost

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

Responses

30 Survey responses.

- Strongly Agree 14 47%
- Agree 11 36%
- Neutral 4 14%
- Disagree 0 0%
- Strongly Disagree 1 3%

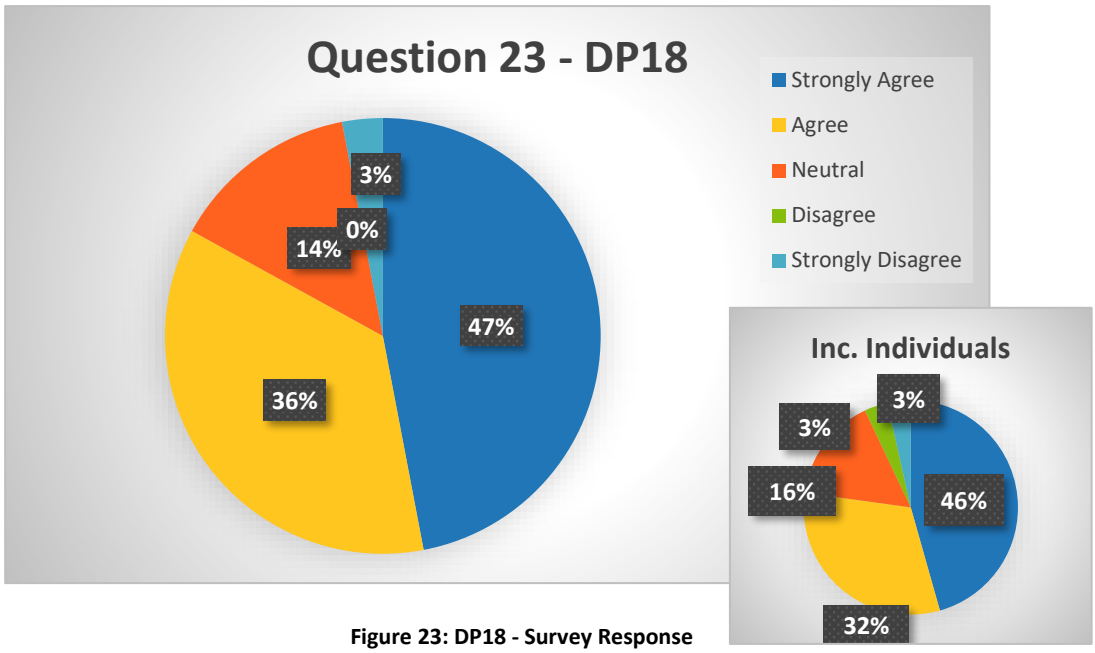

Figure 23: DP18 - Survey Response

Impact

This DP was largely support and remains unchanged.

New wording of Operational Cost DP –

- 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

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.

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'.

Responses

30 Survey responses.

- Strongly Agree 10 33%
- Agree 10 33%
- Neutral 10 33%
- Disagree 0 0%

- Strongly Disagree 0 0%

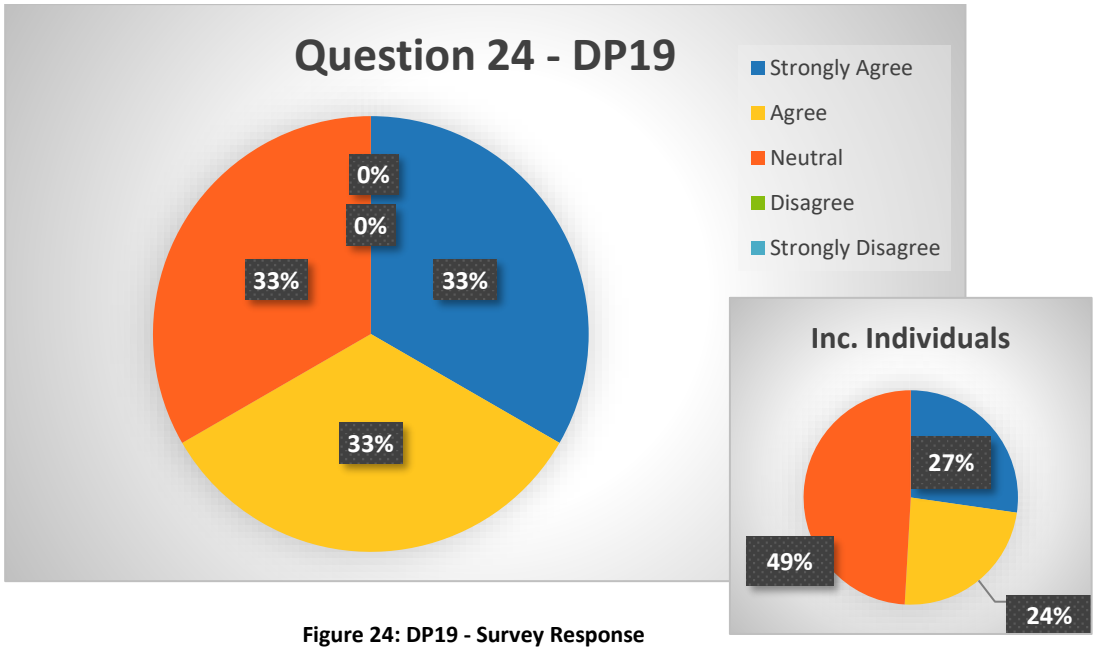

Figure 24: DP19 - Survey Response

Impact

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

2.25. Question 25: Design Principle 20

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.

Performance Based Navigation

The new procedures should capitalise on as many of the potential benefits of Performance Based Navigation (PBN) implementation as are practicable.

Responses

30 Survey responses.

- Strongly Agree 7 23%
- Agree 12 40%
- Neutral 10 34%
- Disagree 0 0%
- Strongly Disagree 1 3%

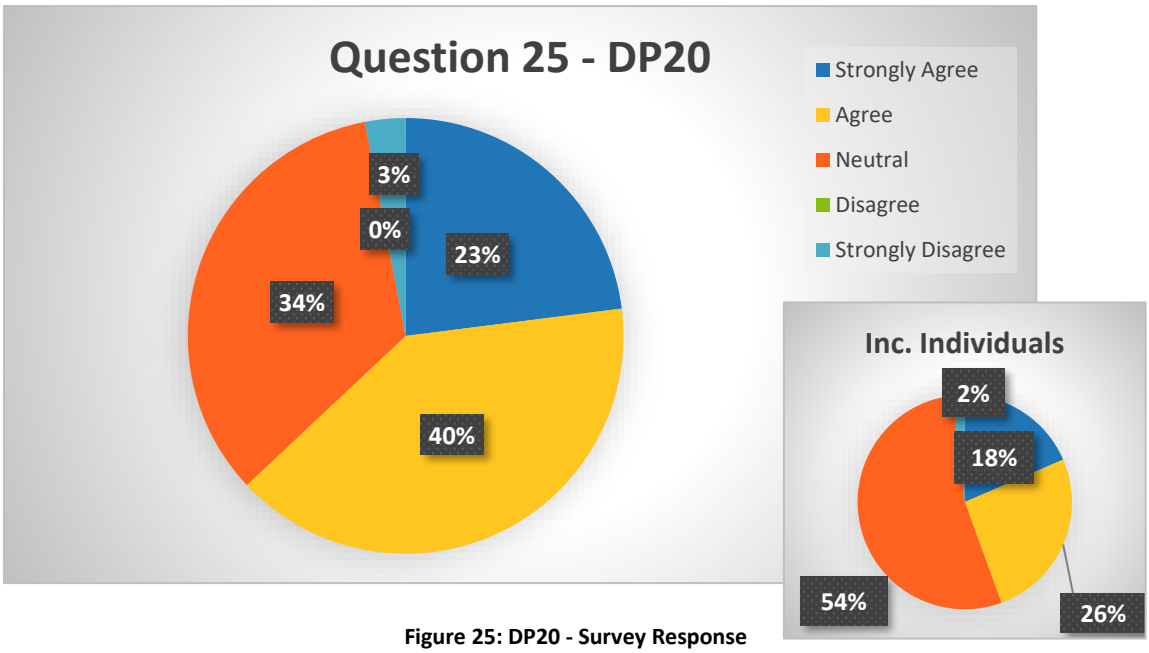

Figure 25: DP20 - Survey Response

Impact

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

New wording of PBN:

- The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.

2.26. Question 26

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.

Responses

76% 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 were extracted and incorporated in the assessment of that Design Principle.

Feedback

Broadstone Forum:

- It goes without saying that noise is far less intrusive in a very densely built-up area with high levels of traffic, and I feel more thought should be given to those people who are subjected to intrusive noise from aircraft, especially at night. It seems that animals in the New Forest are given higher priority than is justified.
- **Our Response** - Captured and addressed in Question 8 – DP3 – Noise.

National Trust:

- As well as tranquillity, affects on places important for the tourism and visitor economy (although the places we've mentioned in our responses are all in AONBs).
- **Our Response** - Captured and addressed in Question 9 – DP 4 - Tranquillity

Poole People Party:

- The design should seek to reduce air travel and transport through Bournemouth to meet net-zero commitments.
- **Our Response** - Captured and addressed in Question 10 - DP5 – Emissions and Air Quality.

Broadstone Residents - Ward Councillor and local resident of Broadstone:

- Some communities have been heavily impacted for many years and their needs often feel ignored. Some communities have suffered damage to cars, patios and noise pollution and the impact should be shared more fairly as long as this is environmentally suitable.
- **Our Response** - Question 5 which asks about periods of respite has captured the desire in this comment to 'share' the impact. The Noise DP and Emissions and Air Quality DP also cover the intent of this comment.

Chairman of Hurn Parish Council and BCP Council Ward Cllr. for "Commons" Ward Including Bournemouth Airport:

- Noise and disturbance from the airport should be kept to a minimum at all times especially during take-off and landing procedures both in the air and on the ground.
- **Our Response** - Captured and addressed in Question 8 – DP3 - Noise

ACC member:

- The airport noise action plan should be included in the design.
- **Our Response** - Captured and addressed in Question 8 – DP3 - Noise

ACC Member:

- No, I'm content your capture everything.

ACC Member:

- Not Sure, the Airport Noise Action Plan should be included in the Design.
- **Our Response** Captured and addressed in Question 8 – DP3 - Noise

GA Community (BGA):

Recognition that GA including sporting and recreational aviation has legitimate rights of access to airspace.
Sponsors must show how they are integrating their proposal within the overall UK airspace modernisation context (for example, proposals which do not connect efficiently between upper and lower airspace (potentially under different airspace "management") would only inhibit overall airspace efficiency and therefore not receive our support.
Reiteration that the UK airspace's default classification is G.
Reiteration that ICAO Class E airspace default is without the addition of a TMZ or RMZ
Expectation that data used, particularly forecasts, includes details of any and all assumptions and available supporting evidence re; - reasonably justified forecast traffic levels - analysis of overall airspace safety changes, ie based on modelling and evidence rather than subjective opinion
Minimum size of existing and any proposed controlled airspace.
Steeper and continuous climbs and descents for cost and environmental benefits as well as minimisation of controlled airspace footprint.
Use of Class E airspace as an alternative to class C and D airspace.
Optimisation of the development work above and below the 7,000ft NATS en-route split.
Flexible use of airspace.
Examine options for interoperability with existing e-conspicuity, eg ADS-B, FLARM and PilotAware.
Efficient consultation.
Plan GNSS approaches outside controlled airspace to minimise impact on GA including sporting and recreational aviation and to ensure their continued right of access to the airspace

- **Our Response** Although the table above appears to be generic A number of points have been addressed in particular:
    - Consultation.
    - Volume and classification of airspace.
    - Continuous climb/descent operations.
    - Use of technology.
    - Optimisation of development work with ACOG/LTMA and adjacent airports.

3. Design Principles Changes

3.1. After First and Second Round Engagement

3.1.1. 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 further suggestions.

3.1.2. We have removed the following DPs:

- **DP6 - Operational Requirements** - The decision has been made following the assessment of the intent of this DP to consolidate it with other DPs of a similar theme. This will make the final DPs more succinct and quantifiable to aid analysis against the options development in the next stage of this CAP1616 ACP. 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.

3.1.3. Certain DPs have been reworded to show further clarity and intent following the Stakeholder feedback.

3.1.4. Where possible certain DPs have been consolidated to ensure a manageable number of DPs are taken forward to Options Development and Appraisal phase. The rational is explained in detail in **Section 2** for each DP where this applies. Accordingly, the following paragraphs detail the DPs to be taken forward to our Third round of engagement during Summer 2022.

3.2. Safety

3.2.1. **DP1 - Importance of Safety** - The Airspace Design and its operation must maintain or where possible, enhance current levels of safety.

3.3. Environmental

3.3.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:

- DP2 and DP3 have been consolidated into DP2- Noise.

3.3.2. **Combined - DP 2 - Noise** - The design should limit, and where practicable reduce, the number of people overflown, the impact of noise to stakeholders on the ground, in line with the Bournemouth Airport Noise Action Plan, and where possible periods of built-in respite should be considered.

3.3.3. **Amended – DP3- Tranquillity -** Where practical, route designs should limit effects upon sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of tourism and AONB's

3.3.4. **Amended – DP4 - Emissions and Air Quality** - The proposed design should minimise and where possible reduce CO2 emissions per flight.

3.4. Operational

3.4.1. Some of the DPs under this heading have been consolidated into a single DP, the consolidated DPs are as follows:

- DP7 and DP8 have been consolidated into DP4 – Airspace Dimensions,

3.4.2. **Combined – DP5 – Airspace Dimensions** – The volume and classification of controlled airspace required for Bournemouth Airport should be the minimum necessary to deliver an efficient airspace design, considering the needs of all airspace users.

3.4.3. **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.

3.5. Technical

3.5.1. 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 and DP15 are consolidated into DP8.

3.5.2. **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

3.5.3. **Combined – DP8 - Systemisation** – The new procedures will integrate with the en-route network, as per the Future Airspace Implementation North (FASI(N)) programme. If required, the arrival transitions shall integrate with the IAPs, deconflict with the departure procedures, reducing the requirement for tactical coordination.

3.5.4. **Amended – DP9 – Independence** - Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

3.6. Economic

3.6.1. **DP10 - Operational Cost** - Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.

3.7. Strategic Policy

3.7.1. 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, which cannot be discounted, is that it accords with the CAA's published Airspace Modernisation Strategy (AMS) (CAP1711) and any future plans associated with it. Bournemouth Airport is expected to participate in the development of the AMS Masterplan, in conjunction with ACOG, NATS En-Route Limited (NERL) and the other identified airports. The following DP is therefore second only to maintenance of safety.

3.7.2. **DP11 - AMS Realisation** - This ACP must serve to further, and not conflict with, the realisation of the AMS.

3.7.3. 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'.

3.7.4. **DP12 - 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.

4. Revised Draft Design Principles

4.1. Post May 2022

4.1.1. Our DPs have been updated following the previous rounds of Stakeholder engagement on this ACP. Following feedback and assessment our DPs have evolved into the table below. These are the DPs we took to our Stakeholders for our Summer 2022 targeted Stakeholder engagement.

Design Principle Number & Title	Description
1- Safety	The airspace design and its operation must maintain or where possible, enhance current levels of safety.
2- Overflight	The new procedures should not increase the number of people overflown by aircraft using the Airport.
3- Noise Footprint	The design should limit, and where practicable reduce the impact of noise to stakeholders on the ground, in line with the Bournemouth Airport Noise Action Plan and where possible periods of built-in respite should be considered.
4- Tranquillity	Where practical, route designs should limit effects upon sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of care or education and AONB's.
5- Emissions and Air Quality	The proposed design should minimise CO2 emissions per flight.
6- Airspace Dimensions	The volume and classification of controlled airspace required for Bournemouth Airport should afford the appropriate volume to contain and support commercial air transport for both runways, enabling safe, efficient airspace design which considers the needs of all airspace users.
7- 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.
8- 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.
9- Systemisation	• The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(S) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination. • To streamline the interaction and co-ordination with Southampton Airport, routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.
10- Independence	The new procedures and airspace configuration should enable Bournemouth Airport to operate independently of Southampton Radar.

11- Operational Cost	Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.
12- AMS Realisation	This ACP must not conflict with, the realisation of the AMS.
13- PBN	The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.

Table 1: Draft Design Principles - Summer 2022

5. Summer 2022 Engagement (Third Round)

5.1. CAA Define Gateway – May 2022

5.1.1. Following on from Bournemouth Airports Stage 1 submission, the CAA concluded that ACP-2019-43 Bournemouth Airport (FASI – 'LTMA Cluster') had not progressed through the Stage 1 Gateway.

5.1.2. Full details of the CAAs decision can be found on the ACC Portal. The following reason was given;

5.1.3. *'The Design Principles report contained errors and inconsistencies which did not evidence clearly that the Design Principles were influenced through stakeholder engagement against the requirements in Appendix D'*

5.2. Engagement – Third Round

5.2.1. Following the gateway decision, it was decided that we would return to our stakeholders with our revised draft design principles for a third and final round of engagement. Our 'Introduction to Design Principles' report was updated and checked for accuracy and can be found on the ACP Portal titled 'Introduction to Design Principles V1.1'.

5.2.2. We emailed stakeholders on 2nd August 2022 inviting them to contribute towards our design principles development. The email is copied below.

5.2.3. *Dear Stakeholder,*

I am writing to you on behalf of Bournemouth Airport for the review and development of our airspace as part of the UK Airspace Modernisation Strategy (AMS). This project will be captured under the UK Civil Aviation Publication (CAP) 1616 as an Airspace Change Proposal (ACP), all documentation is publicly available on the CAA website - CAA Airspace Change Portal.

In May 2022 Bournemouth Airports ACP submission failed to pass the CAAs Stage 1 Gateway. The full breakdown of the CAAs Define Gateway Outcome- May 2022 can be found on the ACP Portal online. This outcome now requires the Change Sponsor to revaluate its approach and reengage with the stakeholders on the draft design principles in order for resubmission.

The ACP is currently in Stage 1 of the 7-Stage process, at this point we are required to establish a set of Design Principles to inform the proposal moving forward. To assist in the process, the Project Team have revisited and updated the attached document, "An Introduction to Design Principles", which sets out what we are doing, why and what is required from you as a stakeholder.

Your contribution in establishing the Design Principles is important, please read the attached document and review the draft Design Principles that the Project Team have compiled. A survey has been put together to determine whether the draft principles are valid and whether there are any additional considerations. If you have any specific questions or you need assistance in understanding some of the principles do not hesitate to contact us.

The survey will take approximately 6 minutes to complete and is contained within the document with guidance on how to complete it. The link is in the document or can be accessed HERE; there are instructions to assist you if you are unable to complete it electronically. The survey is available from today until 1700hrs 05 September 2022.

We appreciate for many of you this may seem like we are coming to you with the same questions once again, rest assured all your previous feedback has been used in the development of the Design Principles so far. Making sure we have the most accurate and concise Design Principles will aid the process during the latter stages of this ACP.

During this Summer 2022 Design Principles engagement period we are also offering two short online briefings on Bournemouth Airports Design Principles to assist in completion of the feedback Survey. Both sessions will have identical content. If you wish to attend one, please complete the attendance request form. We look forward to hearing from you.

Once again, we would like to thank you for your assistance and patience, we look forward to hearing from you.

Kind regards,

The Bournemouth Airport Airspace Team

5.2.4. Two separate online briefing sessions were offered to stakeholders on 16th August 2022 at 10:00 and 22nd August 2022 at 14:00. The presentation which was given is on the ACP Portal titled 'Design Principles Presentation V2'

5.2.5. A reminder email was sent to all stakeholders on 21st August 2022.

5.2.6. The online survey was open from 2nd August 2022 until 17:00 on 5th September 2022.

5.3. Responses – Third Round

5.3.1. Eight responses were received through the online survey. They were from;

- Verwood town council
- MOD
- BHA
- NATS (NERL)
- Bournemouth Airport Consultative Committee
- British Microlight Aircraft Association (BMAA)
- British Gliding Association
- Broadstone Neighbourhood Forum

5.3.2. The Survey results are contained with Section 6 with the impact to the Design Principle assessed. The Final Design Principles following this third and final round of engagement are contained within Section 7.

6. Survey Responses and Impact – Second Round of Engagement – Summer 2022

6.1. Question 1

During the initial rounds of Stakeholder engagement, a question was asked surrounding Respite (copied below).

"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?"

The results of this showed that 67% of respondents were in favour and this feedback has now been incorporated into DP3 - Noise Footprint.

Do you agree that respite still remains a valid consideration for this ACP?

Please provide any additional comments in the free text 'other' field.

Responses

8 Responses

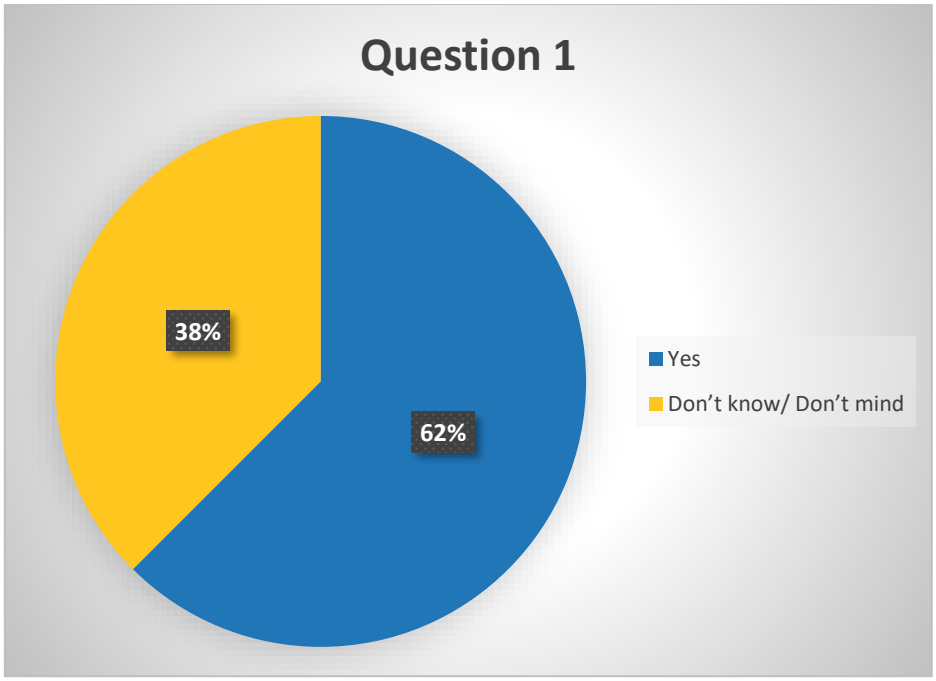

Figure 26: Question 1 - Survey Responses

Comments

'Don't know/mind; NERL has no preference as this would be below 7000ft'

'Yes; Providing respite periods do not require increased controlled airspace volume'

'Difficult to answer. 67% of how many respondents is probably relevant'

Impact

From the feedback to this question, it appears respite remains a consideration for the future planning stages of this ACP.

6.2. Question 2: Design Principle 1 - Safety

The Airspace Design and its operation must maintain or where possible, enhance current levels of safety.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Responses

8 responses.

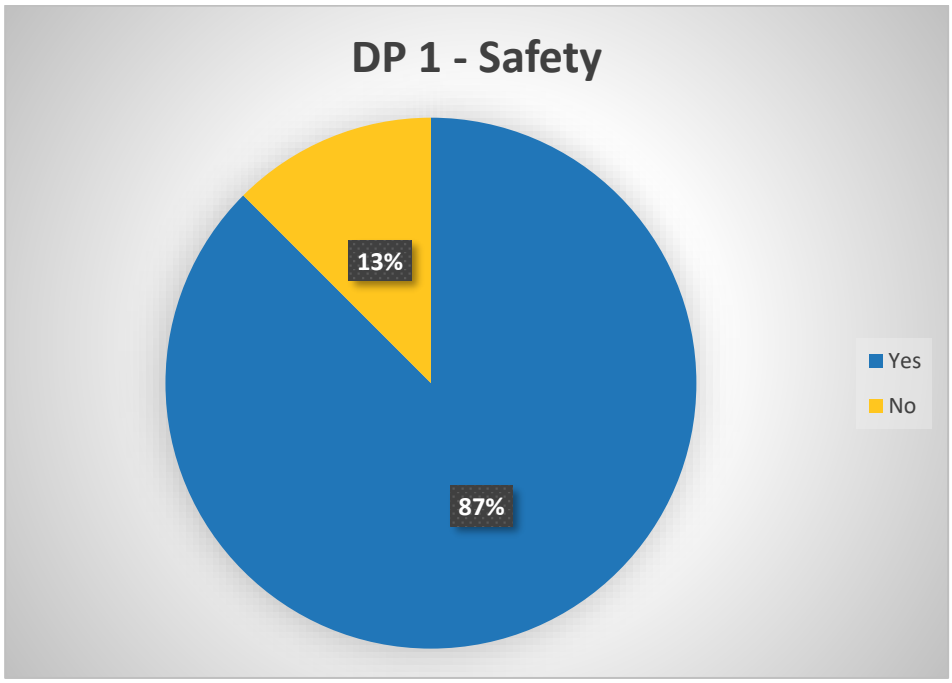

Figure 27: DP1 - Survey Response

Comments

'No -. It's not clear why if possible current levels of safety should be enhanced. Surely if the current operation is tolerably safe, that is an ongoing requirement'

Impact

This DP was fully supported and remains unchanged.

6.3. Question 3: Design Principle 2 – Overflight

The new procedures should not increase the number of people overflown by aircraft using the Airport.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

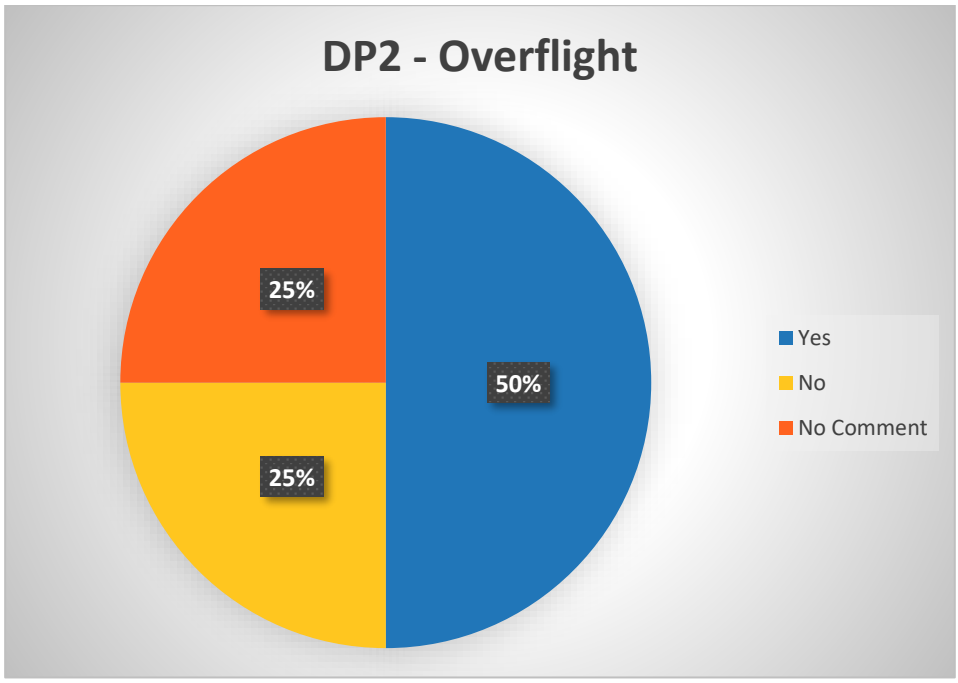

Figure 28: DP2 - Survey Response

Comments

'No - The principle (wording) suggests a movement or pax cap which as the airport continues to develop isn't possible.'

'No - This may be inevitable if respite periods are to be incorporated'

Impact

This DP was supported by the majority and remains unchanged

6.4. Question 4: Design Principle 3 – Noise Footprint

The Design should limit, and where practicable reduce the impact of noise to stakeholders on the ground, in line with the Bournemouth Airport Noise Action Plan and where possible periods of built-in respite should be considered.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

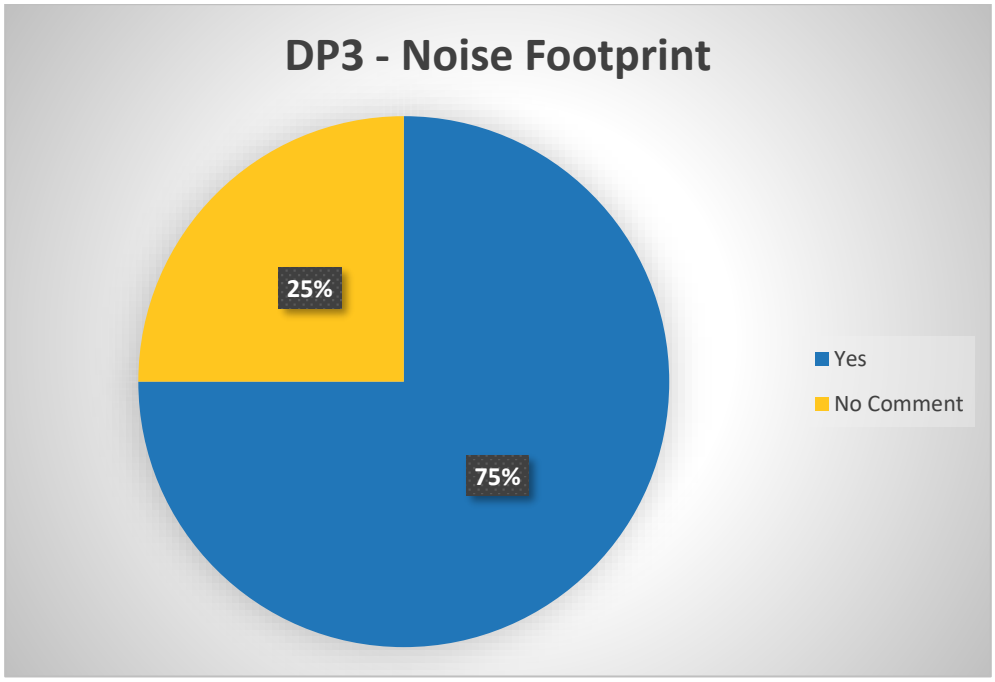

Figure 29: DP3 - Survey Response

Comments

'Yes - I agree with this Design Principle. Additional comment: As above, this would be below 7000ft, routes will however need to connect to the network'

'Yes - I agree with this Design Principle. Providing this does not require increased controlled airspace volume'

Impact

This DP was fully supported and remains unchanged.

6.5. Question 5: Design Principle 4 – Tranquillity

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

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

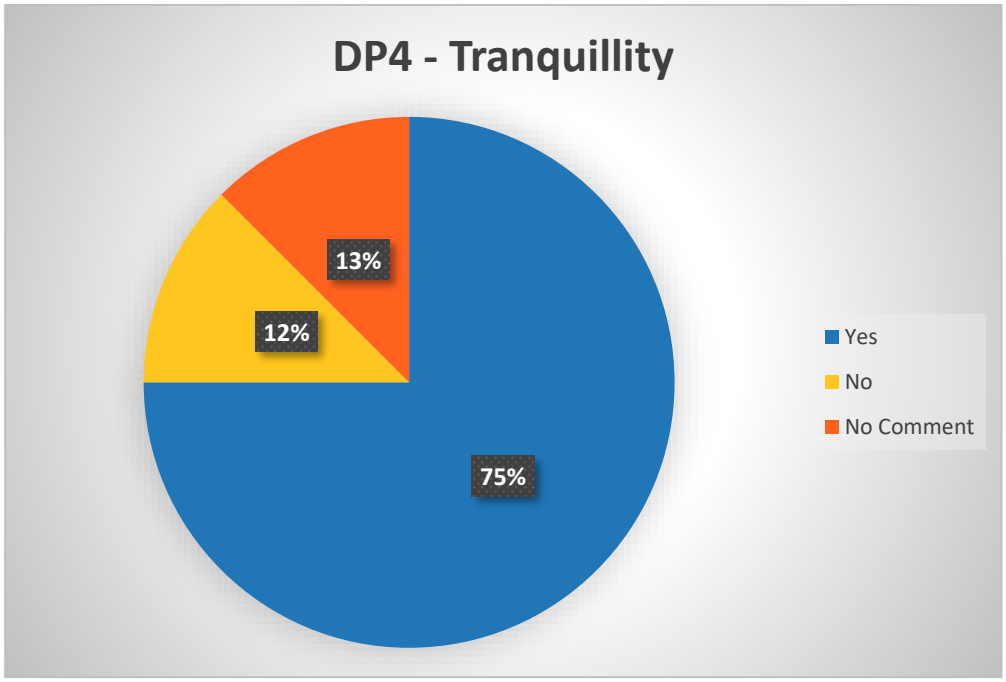

Figure 30: DP4 - Survey Response

Comments

'No - Because the alternative is to send aircraft over residential areas to the detriment of the health of residents'

Impact

This DP was largely supported so remains unchanged.

6.6. Question 6: Design Principle 5 – Emissions and Air Quality

The proposed design should minimise CO2 emissions per flight.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

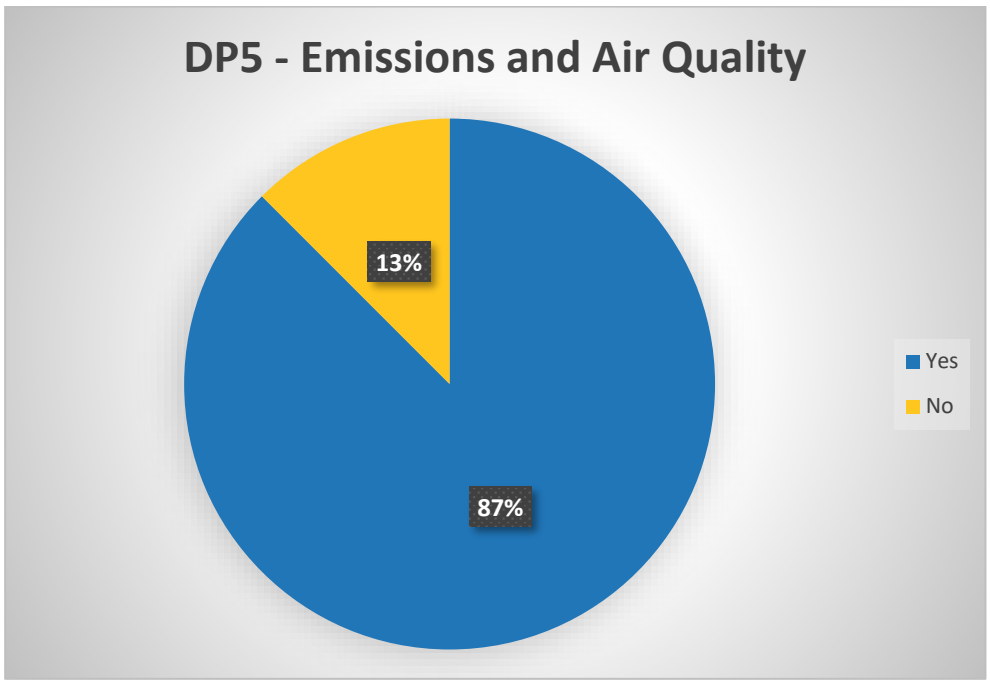

Figure 31: DP5 - Survey Response

Comments

No - Providing this does not require increased controlled airspace volume'.

Impact

This DP was largely supported so remains unchanged.

6.7. Question 7: Design Principle 6 – Airspace Dimensions

The volume and classification of Controlled Airspace required for Bournemouth Airport should afford the appropriate volume to contain and support CAT for both runways, enabling safe, efficient Airspace Design which considers the needs of all airspace users.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

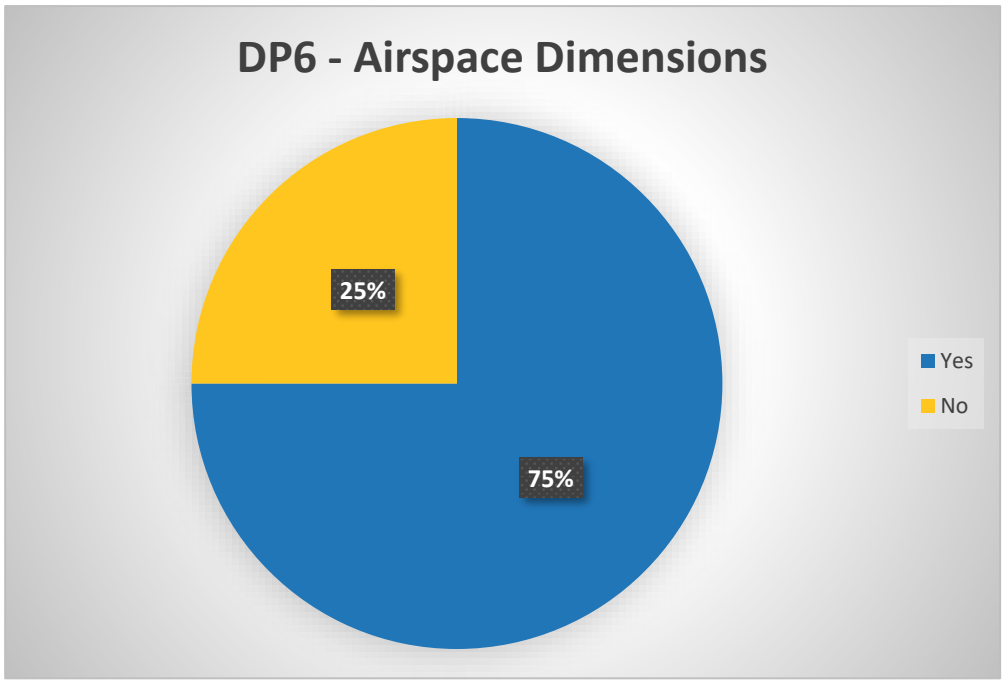

Figure 32: DP6 - Survey Response

Comments

'No - The designs should not increase the existing CAS volume'

'No - This would be appropriate if it also applies to all airspace users OUTSIDE any proposed controlled airspace'

Impact

This DP was largely supported so remains unchanged.

6.8. Question 8: Design Principle 7 – 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.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

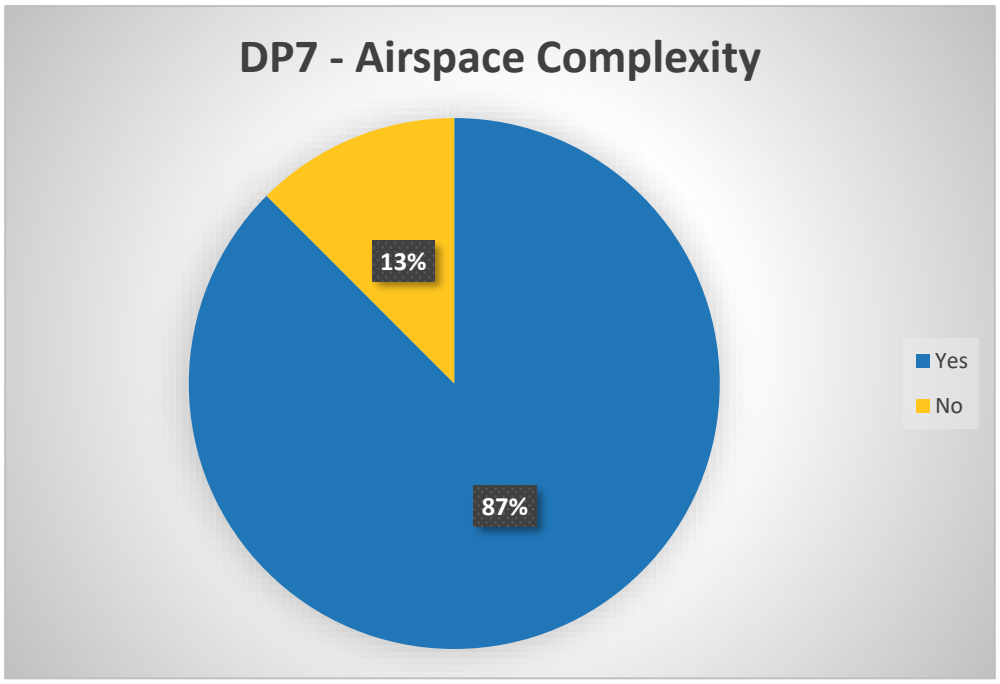

Figure 33: DP7 - Survey Response

Comments

'No - Complexity and infringements appear to be two separate things. Whilst the airspace can be simplified (complexity), NERL contend that Airspace Design per se does not cause airspace infringements.'

Impact

This DP was largely supported so remains unchanged.

6.9. Question 9: Design Principle 8 – 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.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

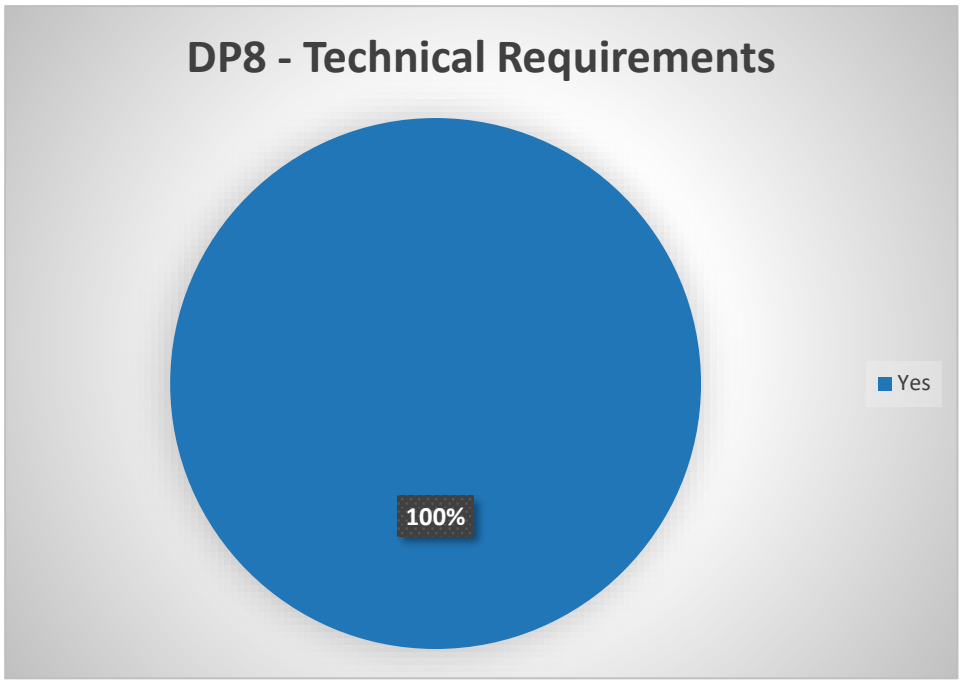

Figure 34: DP8 - Survey Response

Comments

'Yes - Providing this does not require increased controlled airspace volume'.

Impact

This DP was fully supported so remains unchanged.

6.10. Question 10: Design Principle 9 – Systemisation

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

To streamline the interaction and co-ordination with Southampton Airport, routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

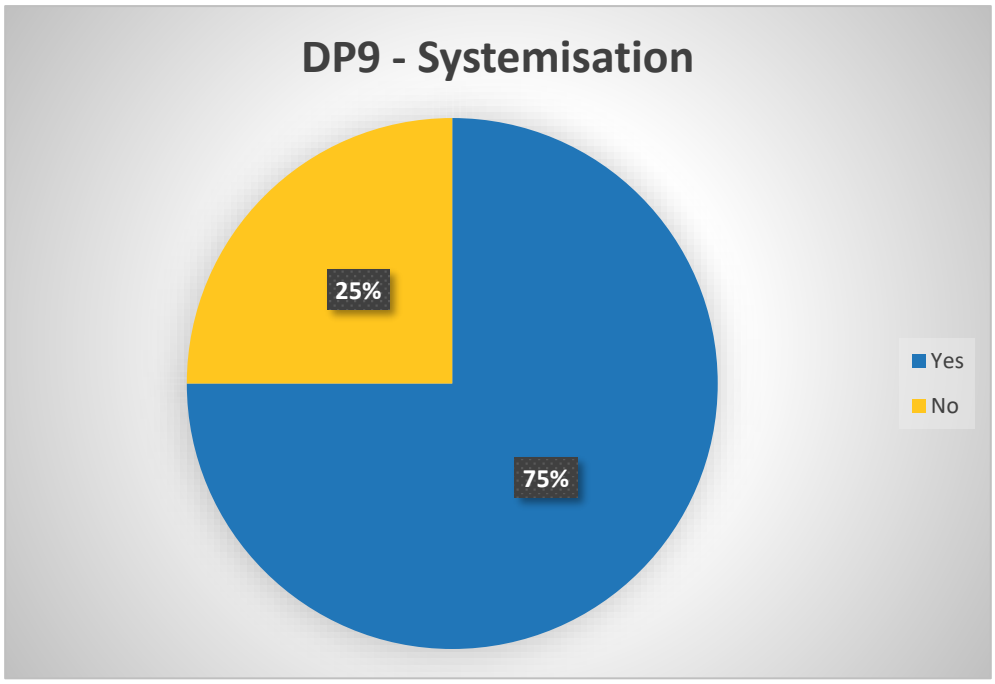

Figure 35: DP9 - Survey Response

Comments

'No - In bullet pt 2 NERL considers that the term 'Must' may limit possible options and would favour changing this to 'Should.'

'Yes - Providing this does not require increased controlled airspace volume.'

'No - Is bullet 2 relevant to this ACP?'

Impact

Due to the intent of DP10 – Independence, and the overall aims of the AMS, it was decided we would remove the second bullet point of this DP. Interdependencies between airports are considered and addressed as part of the FASI(S) programme.

New wording of DP9 – Systemisation

The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(S) programme. Arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.

6.11. Question 11: Design Principle 10 – Independence

The new procedures and airspace configuration should enable Bournemouth Airport to operate independently of Southampton Radar.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

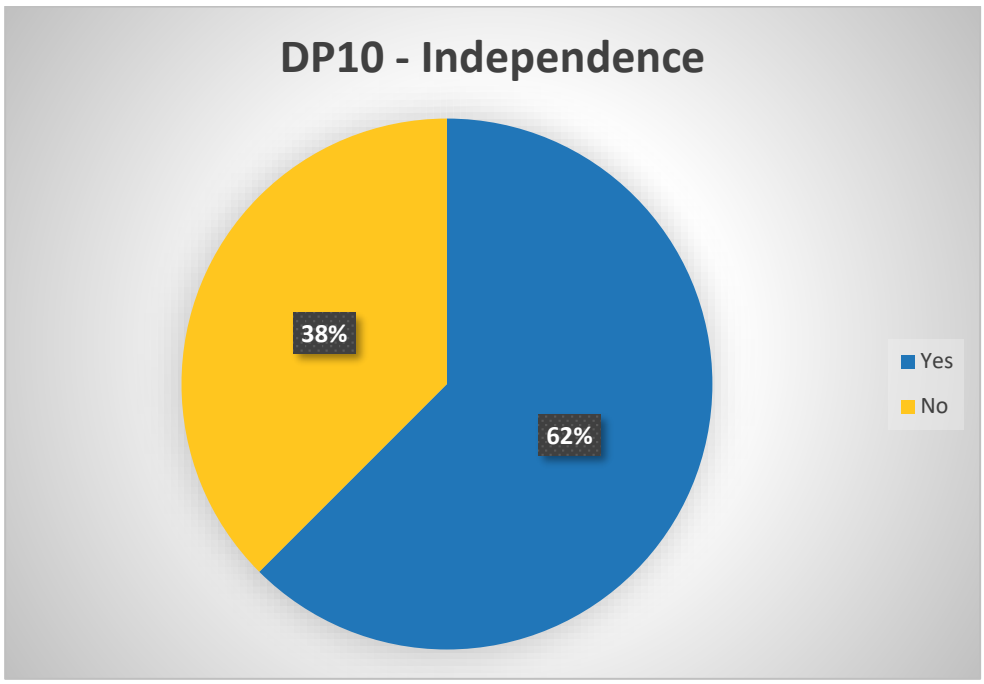

Figure 36: DP10 - Survey Response

Comments

'No - NERL does not, as written, agree with this wording. Is the intent of this DP to be time specific i.e., when Solent radar is closed? NERL would like more information.'

'No - FASI-S should require coordination between airports.'

'No - If other DPs can be achieved without this independent approach, then it isn't a priority'

Impact

It is a priority for Bournemouth Airport to access CAS independently of service provision from Southampton. This ACP provides an operational and safety opportunity to achieve this aim. Therefore, it has been decided to keep this Design Principle and amend the wording accordingly.

New wording for Design Principle 10 – Independence

The new procedures and airspace configuration should enable Bournemouth Airport to access controlled airspace independently of service provision from the Southampton Radar service.

6.12. Question 12: Design Principle 11 – Operational Cost

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

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

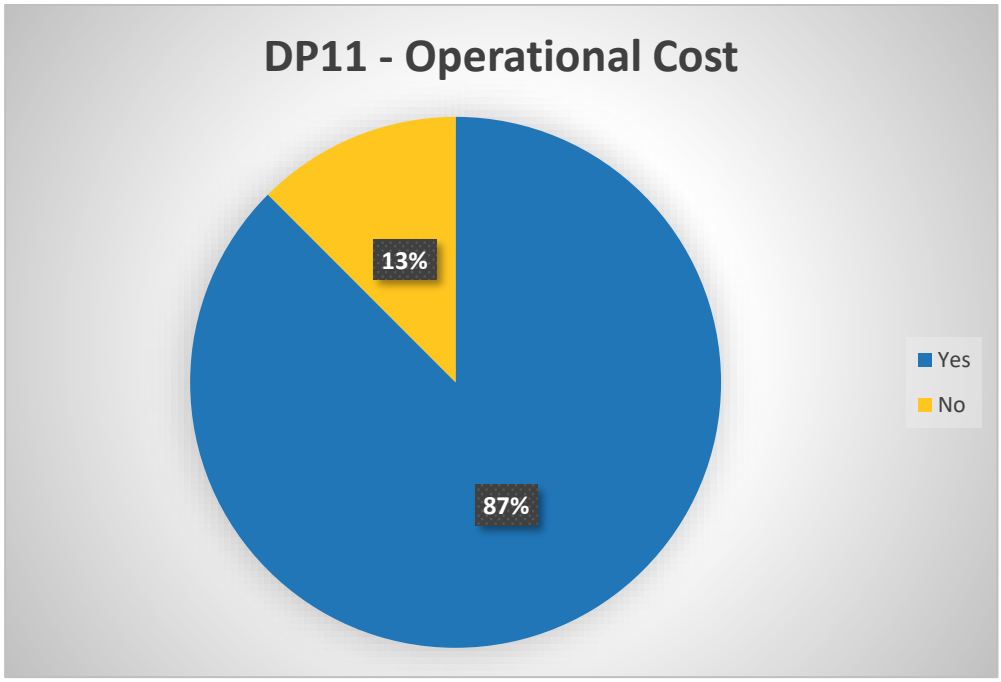

Figure 37: DP11 - Survey Response

Comments

'No - Adverse impact on other airspace users is relevant here too'

Impact

This DP was largely supported so remains unchanged.

6.13. Question 13: Design Principle 12 – AMS Realisation

This ACP must not conflict with, the realisation of the AMS

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

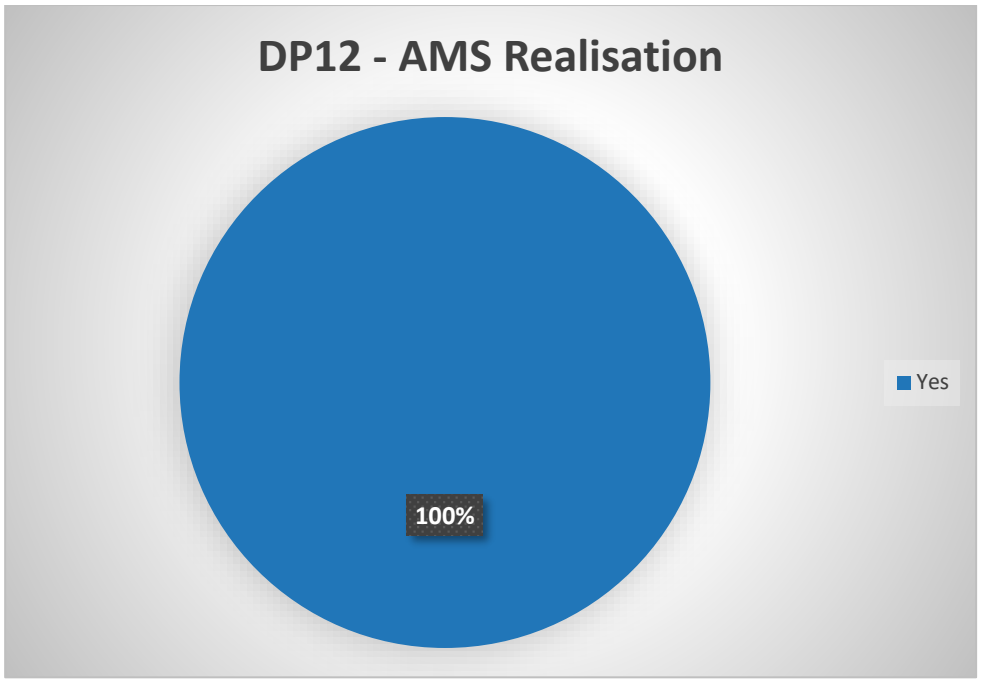

Figure 38: DP12 - Survey Response

Comments

'Yes - NERL agrees with the DP however would recommend using the definition/wording provided by the CAA.'

Impact

Comment from NERL agreed with, new wording for DP12 – AMS Realisation

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

6.14. Question 14: Design Principle 13 – PBN

The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.

Do you agree with this DP and its importance to be specified for this ACP?

If 'no'- please provide explanatory comments in the free text 'other' field.

Response

8 responses.

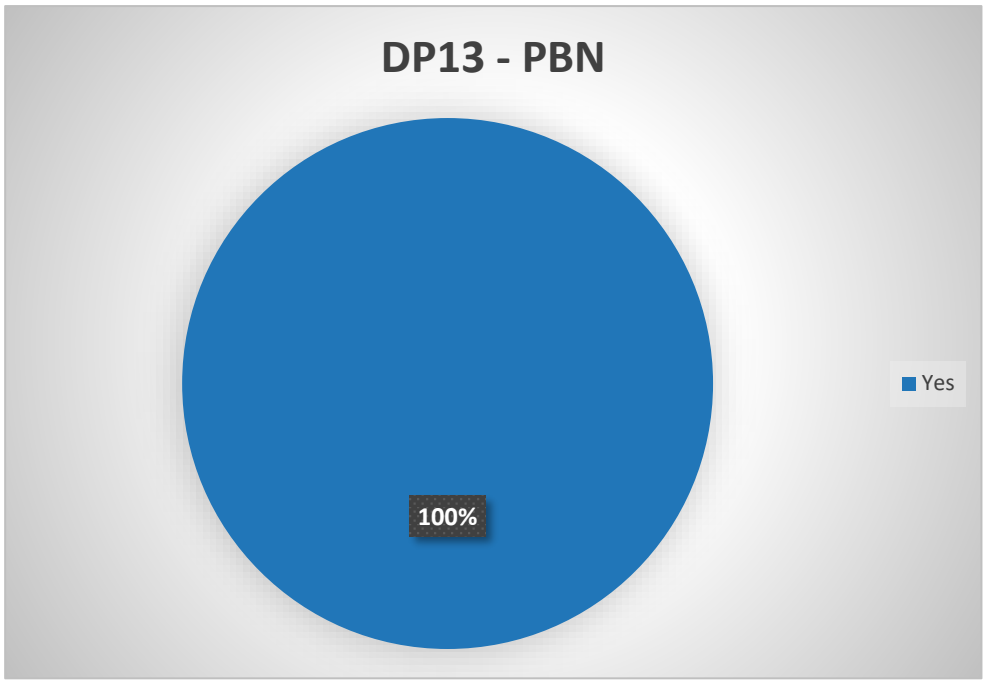

Figure 39: DP13 - Survey Response

Comments

Nil

Impact

This DP was fully supported and remains unchanged.

Question 15

Do you have any additional comments/feedback? Please provide them below.

Comment 'Yes - Survey should enable separate engagement responses by email, independent of this survey. See the BMAA general Design Principles document sent separately.'

Response We accept submissions via email; however, we encouraged stakeholders to respond via the survey so the responses and data could be tracked and managed more easily. We have received the BMAA general Design Principles document during the first round of engagement and this has been included earlier within this report.

Comment 'Yes - This ACP, along with similar ACPs under FASI south, have potential significant impacts on other airspace Stakeholders. We would urge the sponsor to engage meaningfully with those Stakeholders throughout the process. This should not be a box ticking exercise.'

Response Further, more inclusive engagement and consultation, will take place throughout this ACP process at each stage. This round of targeted Stakeholder engagement was simply

to gain opinion on the Design Principles we will take through to Stage 2 of the ACP. These will help us assess our options for viability.

7. Final Design Principles

7.1. Final Design Principles Table

Design Principle Number & Title	Description
1- Safety	The airspace design and its operation must maintain or where possible, enhance current levels of safety.
2- Overflight	The new procedures should not increase the number of people overflown by aircraft using the Airport.
3- Noise Footprint	The design should limit, and where practicable reduce the impact of noise to stakeholders on the ground, in line with the Bournemouth Airport Noise Action Plan and where possible periods of built-in respite should be considered.
4- Tranquillity	Where practical, route designs should limit effects upon sensitive areas. These may include cultural or historic assets, tranquil or rural areas, sites of care or education and AONB's.
5- Emissions and Air Quality	The proposed design should minimise CO2 emissions per flight.
6- Airspace Dimensions	The volume and classification of controlled airspace required for Bournemouth Airport should afford the appropriate volume to contain and support commercial air transport for both runways, enabling safe, efficient airspace design which considers the needs of all airspace users.
7- 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.
8- 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.
9- Systemisation	The arrival transitions and departure procedures shall be deconflicted and integrate with the en-route network, as per the FASI(S) programme, and in the case of the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs) reducing the requirement for tactical coordination.
10- Independence	The new procedures and airspace configuration should enable Bournemouth Airport to access controlled airspace independently of service provision from the Southampton Radar service.
11- Operational Cost	Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency.
12- AMS Realisation	This ACP must serve to further, and not conflict with, the realisation of the AMS.

13- PBN	The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.

Table 2: Final Design Principles

8. Summary

8.1. Stage 1

8.1.1. Bournemouth Airport has now completed their submission for their October 2022 Define Gateway and look forward to the CAAs response.

8.2. Stage 2 and Next Steps

8.2.1. If the CAA approves the Stage 1 Gateway, Bournemouth Airport will be commencing Stage 2 activities without delay. Stakeholders will be invited to a workshop early November 2022 where we will showcase our design options for discussion.

A Stakeholder List

A.1. Community Stakeholders

Bournemouth Airport Consultative Committee (ACC) Contact via ruth.osborn@bournemouthairport.com	
Christchurch Chamber of Trade & Commerce	New Forest District Council
Hurn Parish Council	Bransgore Parish Council
Christchurch Borough Council	Ferndown Town Council
Bournemouth Chamber of Trade & Commerce	Verwood Town Council
Crowhill Residents' Association	Dorset Chamber of Commerce & Industry
Burley Parish Council	Draken
Dorset County Council	Christchurch Tourism
Dorset Federation of Residents' Associations	New Forest National Park Authority
Bournemouth Christchurch & Poole Council	Broadstone Neighbourhood Forum
East Dorset District Council	Jumpers & St Catherine's Hill Residents Association
West Parley Parish Council	

A.2. Environmental Stakeholders

Environmental Bodies	
Natural England (SSSI Moors River System)	National Trust
Cranbourne Chase AONB Team (covers West Wiltshire Downs AONB also)	New Forest National Park Authority *

Dorset County Council (Dorset AONB) *	Hampshire County Council (New Forest National Park) *

* Represented on ACC

A.3. Technical Stakeholders

Air Navigation Services Providers/ATC	
NATS En-Route Ltd (NERL)	Bournemouth Airport ATC
NATS Southampton	NATS Farnborough

Aircraft Operators	
Draken	European Aviation / Maleth
EasyJet	Ryanair
Gama Aviation	TUI
Jota Aviation	Jersey Jet Centre
NetJets	FlexJet
Air Hamburg	JetFly Aviation of Luxembourg
BCFT	CAE Oxford
Bliss	

A.4. Local Aviation Stakeholders

Neighboring Airports/Airfields/Flying Clubs

Southampton Airport	Farnborough Airport
Lee on Solent	Newton Peveril
Eyres Field	Compton Abbas Airfield
Wessex Paragliding	

A.5. Statutory Aviation Stakeholders

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

National Air Traffic Management Advisory Committee	
Airspace4All	General Aviation Alliance (GAA)
Airfield Operators Group (AOG)	Honourable Company of Air Pilots (HCAP)
Aircraft Owners and Pilots Association (AOPA)	Helicopter Club of Great Britain (HCGB)
Aviation Environment Federation (AEF)	Isle of Man CAA
British Airways (BA)	Light Aircraft Association (LAA)
BAe Systems	Low Fare Airlines
British Airline Pilots Association (BALPA)	Military Aviation Authority (MAA)
British Balloon and Airship Club	Ministry of Defence - Defence Airspace and Air Traffic Management (MoD DAATM)
British Gliding Association (BGA)	NATS

British Helicopter Association (BHA)	PPL/IR (Europe)
British Microlight Aircraft Association (BMAA) / General Aviation Safety Council (GASCo)	UK Airprox Board (UKAB)

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