

Response on Design Principles

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CPJ-5663-RPT-016 V2

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| Version | Date | Description of Changes |
|-----------|----------|------------------------|
| Version 1 | 28/10/21 | - |
| Version 2 | 29/04/22 | |

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Executive Summary

The Government has highlighted a strategic need to upgrade the existing United Kingdom airspace network. It has made clear the importance of continued and sustainable growth in the aviation sector to benefit trade, tourism, and investment. As part of the Airspace Modernisation Strategy the Civil Aviation Authority has written to 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 25th August 2021. Its aim was to provide a background understanding of what Bournemouth Airport needs to address in this Airspace Change Proposal (ACP). It included the drafting a comprehensive document which set 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 17th February 2022 to the 16th March 2022. It included reminders throughout the process, encouraging responses and feedback from stakeholders prior to closing.

This document acts as a record of the responses received on the Draft Design Principles and describe 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 CAA '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

ACOG Airspace Change Organising Group

ACP Airspace Change Proposal

AIP Aeronautical Information Publication

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

CTA Control Area
CTR Control Zone

dbA A-weighted Decibels

DfT Department for Transport

DME Distance Measuring Equipment

DP Design Principle

EASA European Aviation Safety Agency

EGNOS European Geostationary Navigation Overlay Service

FAS Future Airspace Strategy

FASI(N) Future Airspace Implementation North
FASI(S) Future Airspace Implementation South

GA General Aviation

GNSS Global Navigation Satellite System

IAP Instrument Approach Procedure

ICAO International Civil Aviation Organisation

IFP Instrument Flight Procedure

Leq Equivalent Continuous Sound Level

LAeq Equivalent A-weighted Continuous Sound Level

LOAEL Lowest Observed Adverse Effect Level

LPV Localiser Performance with Vertical Guidance

MTWA Maximum Take-Off Weight Authorised

NAP Noise Action Plan



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NERL NATS En-Route Limited

NMT Noise Monitoring Terminal

NPR Noise Preferential Route

NTK Noise and Track Keeping

PANS-OPS Procedures for Air Navigation Services – Aircraft Operations

PBN Performance Based Navigation

PDR Preferred Departure Route

RNAV Area Navigation

RNP Required Navigational Performance

SIDs Standard Instrument Departures

STARs Standard Arrival Procedures

VOR VHF Omni Directional Range Finder



References

- [1] CPJ-5663-SUR-019 BOH ACP Design Principles Survey.
- [2] CPJ-5663-PRE-018 V1.0 Design Principles Presentation.
- [3] CPJ-5663-DOC-020 V1.0 Survey Results.



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1. Introduction

1.1. Engagement

- 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 survey¹.
- 1.1.2. CAP1616 sets out the level of targeted stakeholder engagement expected at Stage 1 of the process. Change Sponsors are expected to engage with representative bodies that cover a range of opinions and viewpoints. Accordingly, the list of stakeholders at Annex A was compiled by consideration to each of the respective groupings as follows:
 - Community;
 - Environmental;
 - Technical;
 - Local Aviation, Airports and Operators; and
 - Statutory (i.e. National Air Traffic Management Advisory Committee (NATMAC).
- 1.1.3. Stakeholders were 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 (Southampton Airport). The decision was made to conduct a second round of engagement.
- 1.1.6. On the 17th February 2022 an in-depth brief was given to the ACC at Bournemouth Airportthis detailed the design principles² and what was needed from the stakeholders. Paper copies of the survey were handed out and the online survey was again reopened until 16 March 2022.
- 1.1.7. A subsequent briefing was given online to a local councillor who requested further information on the 24th February 2022.
- 1.1.8. After the second round of engagement, we had 60 responses to the online survey an 6 further responses.
- 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 ACP stipulates that this is targeted stakeholder engagement and not general consultation.

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'.



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1.1.10. The responses from individuals have been removed from the survey results and the analysis of the design principles. All individuals are thanked for their participation and their comments and their views have been noted. Stage 3 of the CAP 1616 is when the public are invited to comment on the ACP.

1.2. Responses

- 1.2.1. A total of twenty-five responses were received through the online survey and five 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 contained with Section 3. The Final Design Principles, as determined through this targeted stakeholder engagement, are contained within Section 4.
- 1.2.3. The survey results are in a summary format that cannot be manipulated, therefore specific responses are not viewable. This report has extracted those comments under the respective Design Principle (DP) review.

1.3. Methodology

1.3.1. Stakeholder Identification

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

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

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

1.3.2. Analysis of Feedback

The data from the MS Form was extracted from the MS Excel output³. The degree to which stakeholders agreed/disagreed with each DP was analysed such that a percentage of the responses was established. Amplifying information, where provided, was also considered,

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

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and is included in the narrative explaining the evolution of the DPs based of stakeholder feedback.

*please note- the Survey Results document does not include the comments that were received from individuals outside the scope of this stakeholder engagement – detailed in 1.1.9



2. Final Design Principles Summary Table

| DP number | Draft DP | Amended, Retained or Consolidated? | New DP number | Final DP |
|-----------|--|------------------------------------|---------------|---|
| 1 | Importance of Safety - The airspace design and its operation must be as safe or safer than today. | Amended | 1 | Importance of Safety – The airspace design and its operation must maintain or where possible, enhance current levels of safety. |
| 2 | Overflight – The new procedures should not increase the number of people overflown by aircraft using the Airport. | Combined | 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 | 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 LAeq 16-hour contour. | Combined | 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. |
| 4 | 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). | Amended | 3 | 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. |



| DP number | Draft DP | Amended, Retained or Consolidated? | New DP number | Final DP |
|-----------|--|------------------------------------|---------------|--|
| 5 | Emissions and Air Quality – The new design should seek to minimise the growth in aircraft emissions, the further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change | Amended | 4 | Emissions and Air Quality – The proposed design should minimise and where possible reduce CO2 emissions per flight. |
| 6 | Operational Requirements – The new procedures should address the needs of most operators at Bournemouth Airport. | Removed | - | |
| 7 | Airspace Dimensions – The airspace design should afford the appropriate volume of controlled airspace to contain and support commercial air transport for both runways, enable safe, efficient access for other types of operation and release controlled airspace that is not required. | Combined with DP8 | 5 | 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. |
| 8 | Airspace Availability – Sufficient controlled airspace should be available to support Bournemouth Airport operations independently. | Combined with DP7 | 5 | 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. |



| DP number | Draft DP | Amended, Retained or Consolidated? | New DP number | Final DP |
|-----------|--|------------------------------------|---------------|---|
| 9 | Airspace Complexity – The airspace design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements. | Retained | 6 | Airspace Complexity – The airspace design should seek to reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements. |
| 10 | Compliance – The design shall be fully compliant with the design criteria stated in ICAO Doc 8168 (PANS OPS), acceptable to the CAA and, the implementation shall follow all applicable legislation and regulations. | Consolidated with DP11 and DP12 | 7 | Technical Requirements - The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport. |
| 11 | Aircraft Category – The new procedures shall be technically flyable by all aircraft types in approach Speed Categories A through D. | Consolidated with DP10 and DP12 | 7 | Technical Requirements - The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport. |
| 12 | Equipage and Approval – The new procedures shall be flyable by the majority of Bournemouth commercial aircraft operators. | Consolidated with DP10 and DP11 | 7 | Technical Requirements - The design shall be fully compliant with PANS-OPS and UK CAA criteria to meet the technical capability requirements of aircraft using the airport. |

| DP number | Draft DP | Amended, Retained or Consolidated? | New DP number | Final DP |
|-----------|---|------------------------------------|---------------|--|
| 13 | Arrival Transitions – The arrival transition designs shall seamlessly integrate with the new RNP instrument approach procedures at Bournemouth Airport and if possible, the existing ILS approach procedures. | Consolidated with DP14 and DP15 | 8 | Systemisation – 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 Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination. |
| 14 | Departure Procedures – The Standard Instrument Departures (SIDs) shall terminate at the agreed 'Gateways' into the route network and should be deconflicted from the arrival transitions. | Consolidated with DP13 and DP15 | 8 | Systemisation – 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 Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination. |
| 15 | Coordination – The new procedures result in a reduction in the amount of tactical coordination required by ATCOs. | Consolidated with DP13 and DP14 | 8 | Systemisation – 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 Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination. |
| 16 | Independence – The new procedures and airspace configuration should enable Bournemouth Airport to operate independently of Southampton Radar. | Amended | 9 | Independence- Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS. |



| DP number | Draft DP | Amended, Retained or Consolidated? | New DP number | Final DP |
|-----------|---|------------------------------------|---------------|--|
| 17 | Cost of Change – The new procedures shall be implemented in a cost-effective manner. | Removed | - | - |
| 18 | Operational Cost – Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency. | Retained | 10 | Operational Cost – Provided it does not have an adverse impact of community disturbance, procedures should be designed to optimise fuel efficiency. |
| 19 | AMS Realisation – This ACP must serve to further, and not conflict with, the realisation of the AMS. | Retained | 11 | AMS Realisation – This ACP must serve to further, and not conflict with, the realisation of the AMS. |
| 20 | PBN – The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable. | Retained | 12 | PBN – The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable. |



3. Survey Responses and Impact

3.1. Question 1

- 3.1.1. It is possible that, during the options development phase, flightpaths may be identified that have a lower potential environmental impact and greater efficiency. These flightpaths may of course impact new people currently not overflown routinely. Would you prefer that any future 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

3.1.2. Response

30 Survey responses via email

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

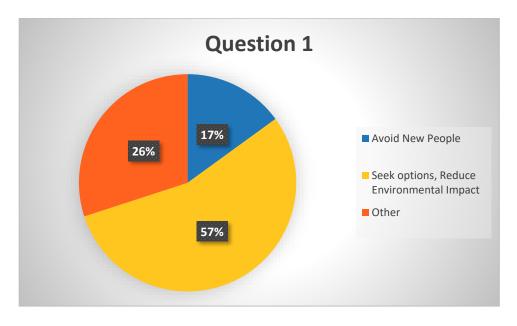


Figure 1: Question 1

- 1. 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.
- 2. **Poole People Party:** This question is biased towards operational efficiency. Operational efficiency is less important than environmental and community concerns.
- 3. Residents of burley: No night flights.



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- 4. **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.
- 5. **BACC Hurn Parish Council:** Both are very important but environmental impacts should carry greater weight.

3.1.3. **Impact**

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

3.2. Question 2

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

3.2.2. Response

30 Survey responses via email.

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

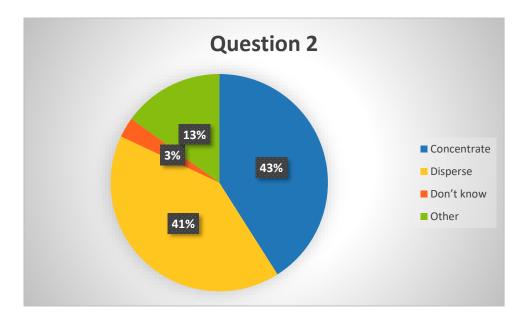


Figure 2: Question 2

- 1. **BACC Hurn Parish Council**: A system that can consider both options within the operations of the airport would perhaps give greater flexibility.
- 2. **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.
- 3. **Draken Europeour:** Primary concern is that of safety in the air and on the ground. For aircraft, simplicity is key.

3.2.3. **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.

3.3. Question 3

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

3.3.2. 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%)

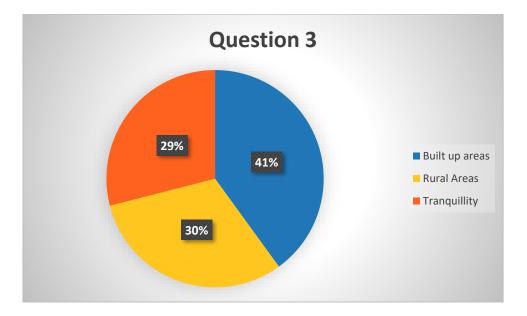


Figure 3: Question 3

1. **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.

3.3.3. **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. Again, although marginal, 'Built up areas' appear to be of a higher importance overall to the responders.

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

3.4. Question 4

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

3.4.2. Response

30 Survey responses via email.

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

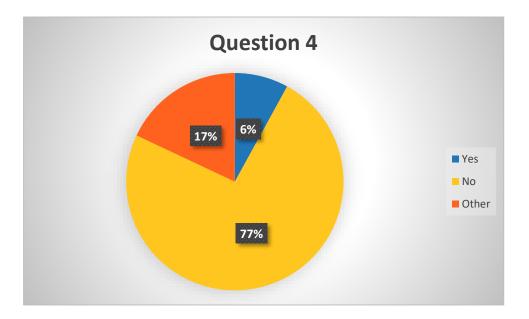


Figure 4: Question 4

- 1. **Broadstone Forum:** Continuous descent over high ground.
- 2. **National Trust:** Kingston Lacy, Brownsea Island, Corfe Castle, Studland beaches.
- 3. **Poole People Party:** Historic buildings in Poole and Christchurch town centres.

3.4.3. **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
- Historic buildings in Poole and Christchurch town centres

3.5. Question 5

3.5.1. Some airports have sought opportunities to build into the system known periods of relief from the adverse effects of aviation noise. These known or scheduled periods are known as 'Respite' periods during which times aircraft are channelled onto 'Respite' routes relieving the burden on certain communities. It must be stressed that airspace constraints sometimes limit the art of the possible, however it is something that could be investigated. Given the option, would you like to see a system developed that had periods of known respite built-in? Available answers:

- Yes, or
- No, or
- Don't mind; or
- Don't know, and
- Optional open text field to provide amplification on your answer.



3.5.2. Response

30 Survey responses via email.

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

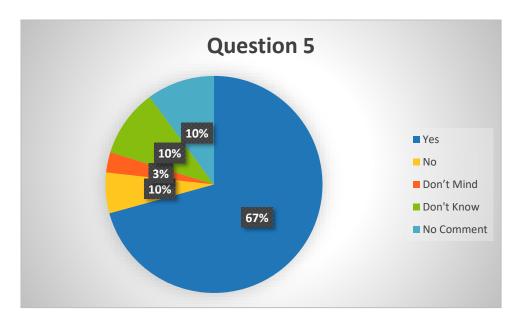


Figure 5: Question 5

1. **Draken Europe:** Operationally, we would need to understand more the planned times and the restrictions before comment.

3.5.3. **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.

3.6. Question 6 – DP 1

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

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

3.6.2. Response

30 Survey responses via email.

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

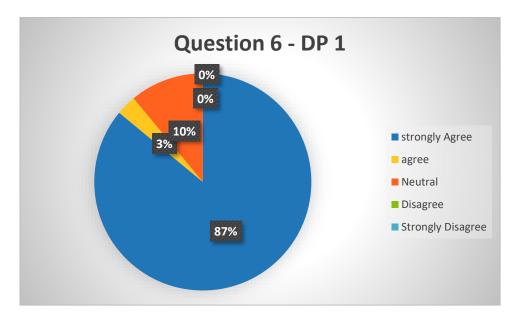


Figure 6: DP 1

3.6.3. **Impact**

3.6.4. 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. BOH 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 Final DP.

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

3.7. Question 7 – DP 2

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

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

3.7.2. Response

30 Survey responses via email.

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

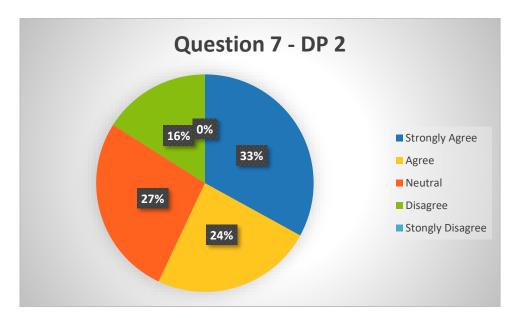


Figure 7: DP 2

3.7.3. **Impact**

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

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

3.8. Question 8 – DP 3

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

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

3.8.2. Response

30 Survey responses, via email.

• Strongly Agree 16 54%

| • | Agree | 7 | 23% |
|---|-------------------|---|-----|
| • | Neutral | 4 | 13% |
| • | Disagree | 3 | 10% |
| • | Strongly Disagree | 0 | 0% |

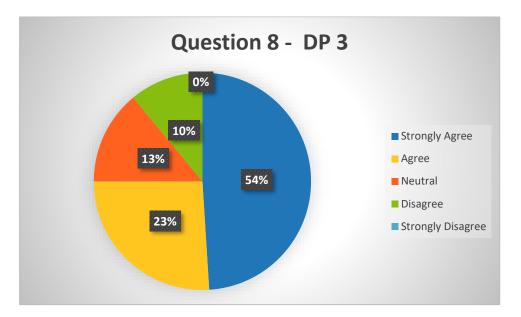


Figure 8: DP 3

- 1. **Southampton Airport:** Consider wording, minimise and where possible reduce, more ambitious than to not increase.
- 2. **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.
- 3. 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.
- 4. **ACC Member:** The airport noise action plan should be included in the design.
- 5. ACC Member: Not Sure, the airport noise action plan should be included in the design.

3.8.3. **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. In order to minimise the noise impact to stakeholders on the ground Bournemouth Airport will take the following mitigating options into account where possible:

- Using more noise efficient operational practices
- Minimising number of people newly overflown
- Avoid overflying communities with multiple routes
- Maximise sharing through managed dispersal or respite
- Minimising total population overflown



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- Designing flight paths over commercial and industrial areas
- Adherence of the Section 106 agreement in relation to Noise Abatement.

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

Reference has been 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:

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

3.9. Question 9 – DP 4

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

DP4 – Tranquillity – Implementation should minimise 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).

3.9.2. Response

30 Survey responses via email.

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

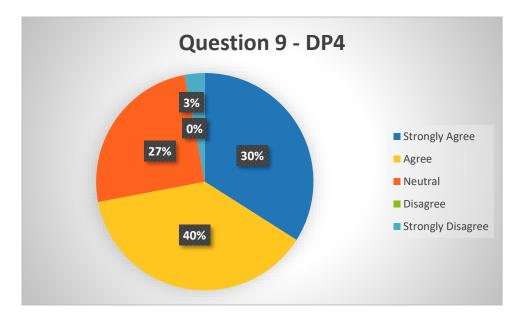


Figure 9: DP 4

1. **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).

3.9.3. **Impact**

Whilst 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 that seek to avoid overflight of AONBs.

Specific areas will be considered by the designers during 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.

Final 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.

3.10. Question 10 – DP 5

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

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

3.10.2. Response

30 Survey responses via email.

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

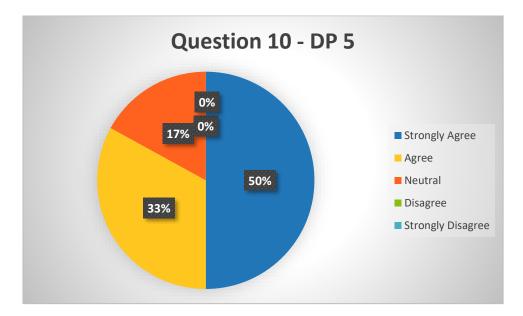


Figure 10: DP 5

- 1. **Southampton Airport:** Consider wording, minimise and where possible reduce, more ambitious than to not increase.
- 2. **Poole People Party**: The design should seek to reduce air travel and transport through Bournemouth to meet net-zero commitments.

3.10.3. **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 minimise environmental impact through the most efficient airspace and

procedure design. This covers both CO2 emissions and associated fuel burn. Improvements in air quality and ecological impact require a concerted approach from a vast variety of 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.

The New Design Principle is as follows:

Final wording of Emissions and Air Quality DP: The proposed design should minimise and where possible reduce CO2 emissions per flight.

3.11. Question 11 – DP 6

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

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

3.11.2. Responses

30 Survey responses via email.

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

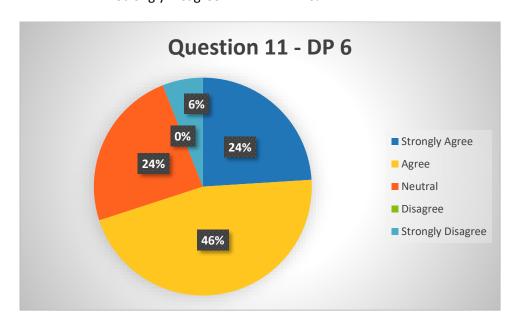


Figure 11: DP 6

3.11.3. **Impact**

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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.

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

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

3.12. Question 12 – DP 7

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

DP7 – Airspace Dimensions – The airspace design should afford the appropriate volume of controlled airspace to contain and support commercial air transport for both runways, enable safe, efficient access for other types of operation and release controlled airspace that is not required.

3.12.2. Responses

30 Survey responses via email.

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

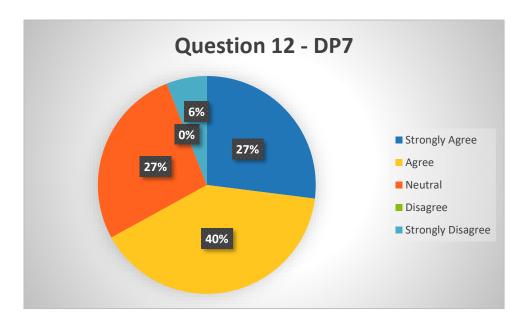


Figure 12: DP 7

3.12.3. **Impact**

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

The new Design Principle is as follows:

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

3.13. Question 13 – DP 8

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

DP8 – **Airspace Availability** – Sufficient controlled airspace should be available to support Bournemouth Airport operations independently.

3.13.2. Responses

30 Survey responses via email.

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

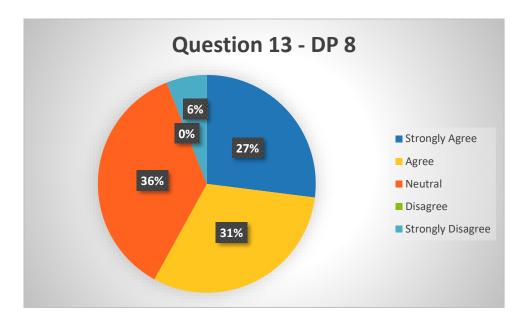


Figure 13: DP 8

3.13.3. **Impact**

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

The new Design Principle is as follows:

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

3.14. Question 14 – DP 9

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

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



3.14.2. Responses

30 Survey responses via email.

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

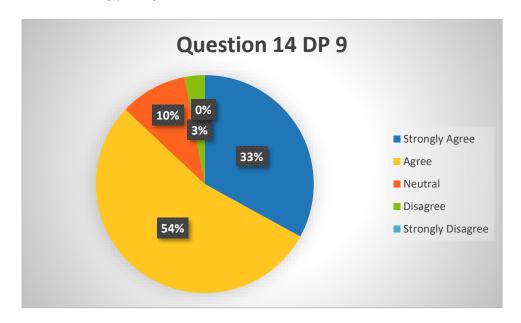


Figure 14: DP 9

3.14.3. **Impact**

DP was largely supported and remains unchanged.

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

3.15. Question 15 – DP 10

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

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

3.15.2. Responses

30 Survey responses via email.

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

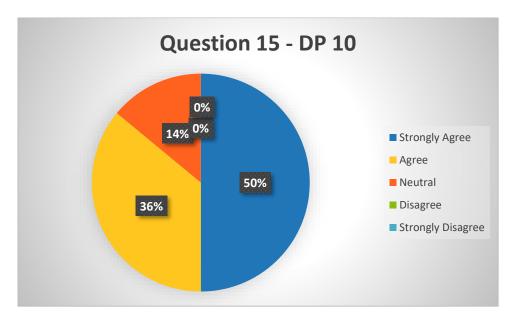


Figure 15: DP 10

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

3.15.3. **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;

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

3.16. Question 16 – DP 11

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

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

3.16.2. Responses

30 Survey responses via email.

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

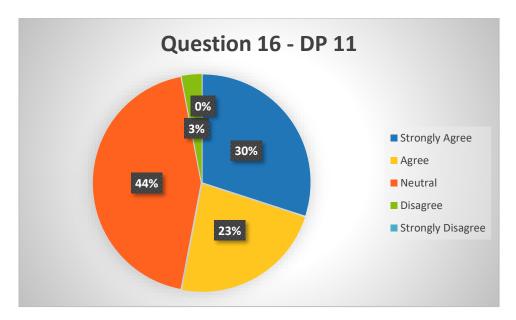


Figure 16: DP 11

Southampton Airport: We believe this DP is covered by IFP Validation Policy or if wish to retain use all aircraft families (rather than every type).

3.16.3. **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 has been decided to combine this DP with the original DP10 and DP12 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows:

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

3.17. Question 17 – DP 12

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

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

3.17.2. Responses

30 Survey responses via email.

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

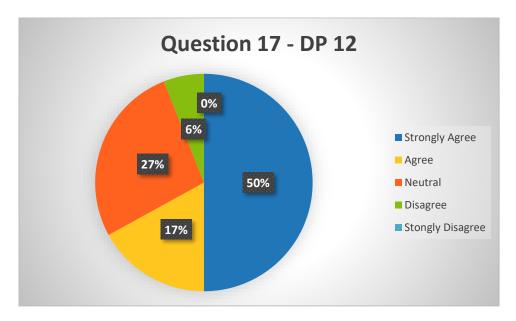


Figure 17: DP 12

1. Southampton Airport: Could be combined with DP6?

3.17.3. **Impact**

This DP was supported by the stakeholders, from the suggestion to combine this DP and with the desire to make the DPs more manageable to take forward to the options development phase, it has been decided to combine this DP with the original DP10 and DP11 into a consolidated **Technical Requirements** Design Principle.

The new Design Principle is as follows;

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

3.18. Question 18 – DP 13

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

DP13 – Arrival Transitions – The arrival transition designs shall seamlessly integrate with the new RNP instrument approach procedures at Bournemouth Airport and if possible, the existing ILS approach procedures.

3.18.2. Responses

30 Survey responses via email.

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

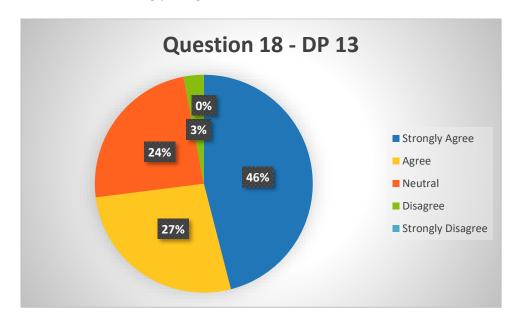


Figure 18: DP 13

3.18.3. **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.

The new Design Principle is as follows:

Final wording of Systemisation DP - The new procedures will integrate with the en-route network, as per the FASI(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.

3.19. Question 19 – DP 14

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

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

3.19.2. Responses

30 Survey responses via email.

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

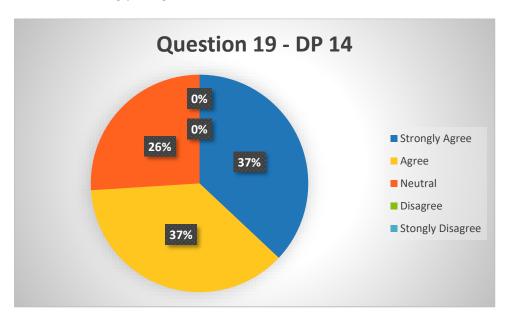


Figure 19: DP 14

1. **Southampton Airport:** Gateways are no longer the method of design in FASI(S). Perhaps the SIDs should be deconflicted from arrivals transitions.

3.19.3. **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 DP13 and DP15 into a consolidated **Systemisation** Design Principle. The suggestion to reword this DP to better reflect current methods of design has also been captured in the new DP.

The new Design Principle is as follows:

Final wording of Systemisation DP - The new procedures will integrate with the en-route network, as per the FASI(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.

3.20. Question 20 – DP 15

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

DP15 – Coordination – The new procedures result in a reduction in the amount of tactical coordination required by ATCOs.

3.20.2. Responses

30 Survey responses via email.

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

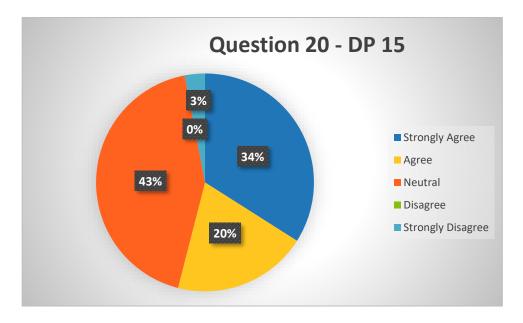


Figure 20: DP 15

3.20.3. **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 DP13 and DP14 into a consolidated **Systemisation** Design Principle.

The new Design Principle is as follows:

Final wording of Systemisation DP - The new procedures will integrate with the en-route network, as per the FASI(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.

3.21. Question 21 – DP 16

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

DP16 – Independence – The new procedures and airspace configuration should enable Bournemouth Airport to operate independently of Southampton Radar.

3.21.2. Responses

30 Survey responses via email.

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

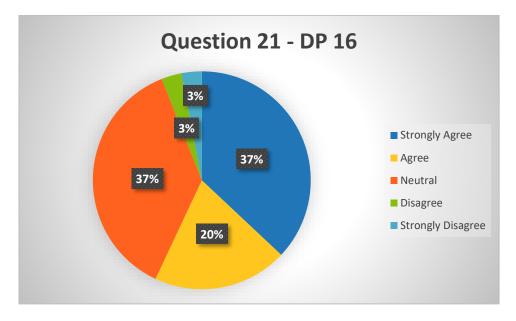


Figure 21: DP 16

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

3.21.3. **Impact**

Following stakeholder feedback the wording of this DP has been amended as follows;

Final wording of Independence DP - Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

3.22. Question 22 – DP 17

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

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

3.22.2. Responses

30 Survey responses via email.

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

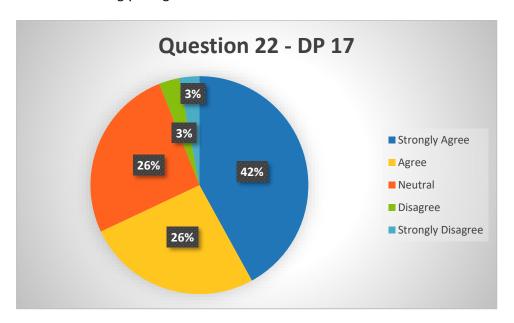


Figure 22: DP 17

3.22.3. **Impact**

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

3.23. Question 23 – DP 18

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

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

3.23.2. Responses

30 Survey responses via email.

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

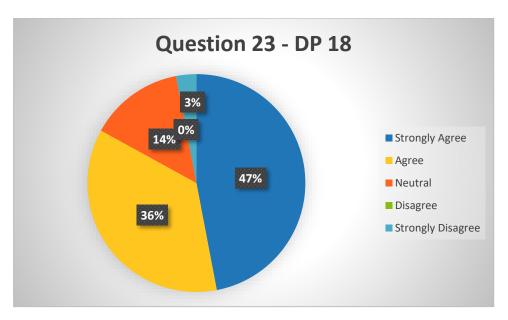


Figure 23: DP 18

3.23.3. **Impact**

This DP was largely support and remains unchanged.

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



3.24. Question 24 – DP 19

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

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

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

3.24.2. Responses

30 Survey responses via email.

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

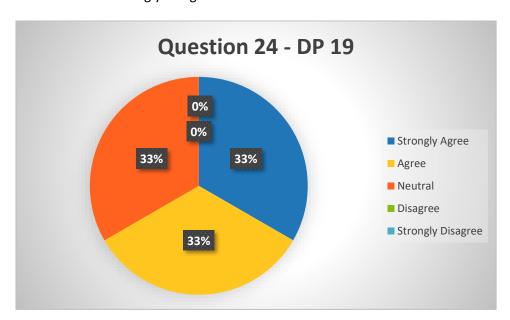


Figure 24: DP 19

3.24.3. **Impact**

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

3.25. Question 25 – DP 20

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

DP20 – PBN – The new procedures should capitalise on as many of the potential benefits of PBN implementation as are practicable.

3.25.2. Responses

30 Survey responses via email.

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

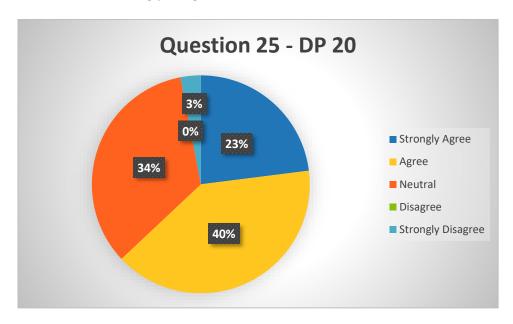


Figure 25: DP 20

3.25.3. **Impact**

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

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

3.26. Question 26

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

3.26.2. Responses

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 have been extracted and incorporated in the assessment of that Design Principle.

3.26.3. **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.

Comment: Captured and addressed in Question 8 – DP3 – Noise.

3.26.4. **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).

Comment: Captured and addressed in Question 9 – DP 4 - Tranquillity

3.26.5. **Poole People Party:** The design should seek to reduce air travel and transport through Bournemouth to meet net-zero commitments.

Comment: Captured and addressed in Question 10 - DP5 - Emissions and Air Quality.

3.26.6. **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.

Comment: 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.

3.26.7. 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.

Comment: Captured and addressed in Question 8 – DP3 - Noise

3.26.8. **ACC member:** The airport noise action plan should be included in the design.



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Comment: Captured and addressed in Question 8 – DP3 - Noise

3.26.9. **ACC Member:** No, I'm content your capture everything.

3.26.10. **ACC Member:** Not Sure, the airport noise action plan should be included in the design.

Comment: Captured and addressed in Question 8 – DP3 - Noise

3.26.11. **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

Comment: 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

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• Optimisation of development work with ACOG/LTMA and adjacent airports

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 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.
- 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 in Section 2.

4.2. Safety

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

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:
 - DP2 and DP3 have been consolidated into DP2- Noise.
- 4.3.2. **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.
- 4.3.3. **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

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

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 DP4 Airspace Dimensions
- 4.4.2. **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.
- 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 and DP15 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 new procedures will integrate with the en-route network, as per the FASI(N) programme. If required, the arrival transitions shall integrate with the Instrument Approach Procedures (IAPs), deconflict with the departure procedures, reducing the requirement for tactical coordination.
- 4.5.4. **Amended DP9 Independence** Routes to/from Bournemouth and Southampton Airports must be procedurally deconflicted in coordination with NATS.

4.6. Economic

DP10 - 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. BOH is expected to participate in the development of the

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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. **DP11 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. **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 with the intention of reducing carbon emissions.



A. Stakeholder List

A.1. Community Stakeholders

| Bournemouth Airport Consultative | Committee (ACC) |
|--|--|
| 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 |
| L3Harris | CAE Oxford |

A.4. Local Aviation Stakeholders

| Neighbouring Airports/Airfields/Flying Clubs | | |
|--|---------------------|--|
| Southampton Airport | Farnborough Airport | |
| Lee on Solent | Newton Peveril | |
| Eyres Field | | |

A.5. Statutory Aviation Stakeholders

| National Air Traffic Management Advisory Committee | |
|--|-------------------------------------|
| Airlines UK | British Parachute Association (BPA) |
| Airspace4All | General Aviation Alliance (GAA) |



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| National Air Traffic Management Advisory Committee | | |
|---|--|--|
| 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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