



Phase Two Discussion Sessions Feedback Report

Stage 2 Develop and Assess





STAGE 2 – PHASE TWO ENGAGEMENT

Stakeholder discussion sessions feedback report

December 2022



Background, aims and objectives

Phase two engagement followed on from the first engagement in the summer of 2022 where we shared our initial design work as part of Stage 2, for feedback.

In the second phase of engagement we set out to;

- Share the route options and details of how they had been developed.
- Share the summary of stakeholder feedback received in phase one and outline how this influenced the developed options.
- Seek feedback on the route options, asking whether:
 - It's clear how options have been identified
 - It's clear how feedback from phase one engagement has influenced the development of the options
 - It's clear how the options align with the design principles.
 - There are any additional local factors to consider.
 - There are any improvements or additional options to consider.

WHAT WILL WE BE ASKING?

- Is the process we have followed to identify route options for arrivals clear and logical?
- Is it clear how feedback from our earlier stakeholder discussion sessions in June have influenced the development of the route options?
- The extent to which the route options align with the design principles?
- Are there any further options or improvements that could deliver additional benefits that you feel we haven't included? If so, please explain.
- Aside from those already mentioned, are there any additional local factors we should be aware of when evaluating these route options?

Engagement outline - Stakeholder discussion sessions

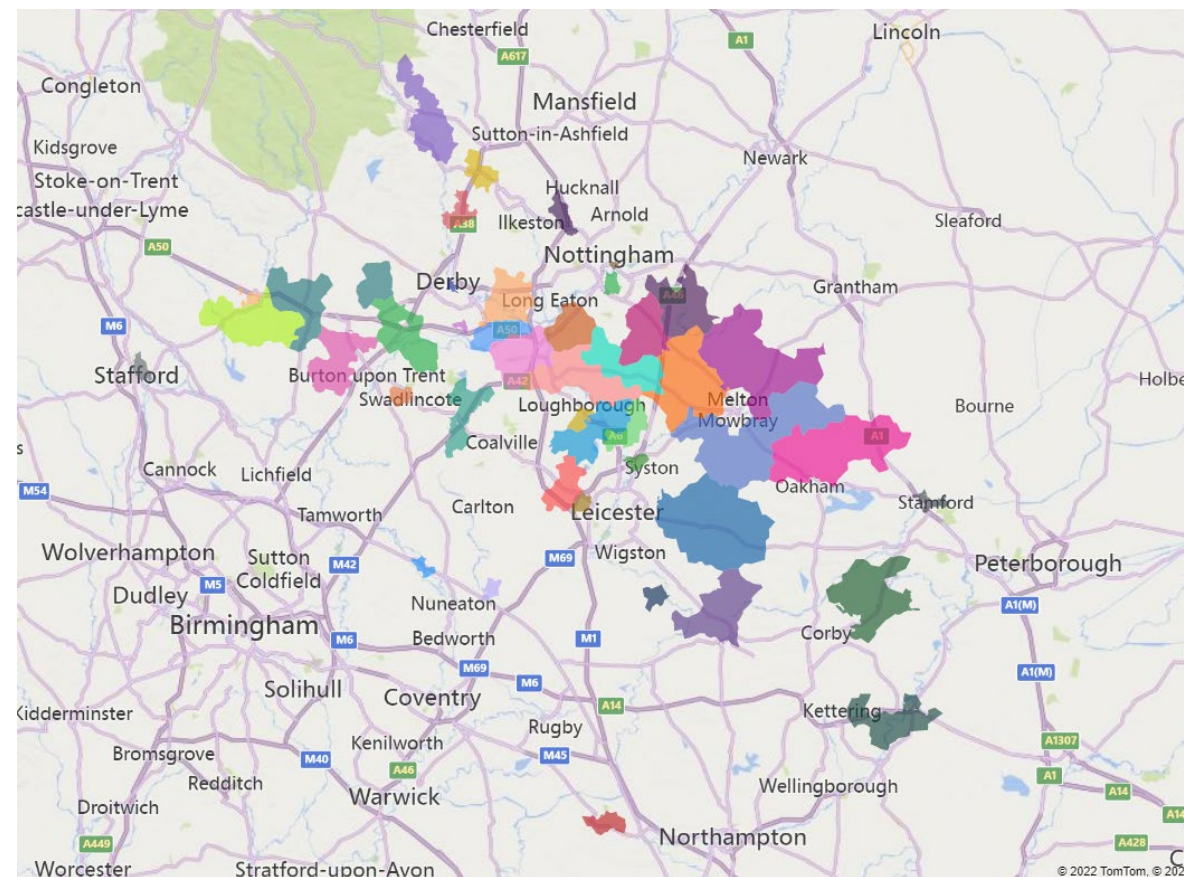
- The airport carried out stakeholder sessions using two different methods (online or in person), stakeholders were able to choose which suited them best.
- 12 x 1.5 hour online sessions were held via Microsoft Teams.
- 4 x 2 hour face to face events were held.
- Due to the level of complexity and volume of material to be shared, stakeholders were invited to attend two sessions, one covering departures and one covering arrivals.
- Pre read information and links to the information shared at phase one was provided before the session.
- The format of the sessions was a presentation, including a Q&A session, led by East Midlands Airport (EMA) airspace team.
- Stakeholders provided feedback throughout and sessions were recorded for post event feedback analysis.

<p>7th November 22</p> <p>AM</p>  <p>Aviation Representatives</p>	<p>7th November 22</p> <p>PM</p>  <p>Council / Elected Representatives</p>	<p>7th November 22</p> <p>PM</p>  <p>Council / Elected Representatives</p>	<p>8th November 22</p> <p>AM</p>  <p>Council / Elected Representatives</p>	<p>8th November 22</p> <p>PM</p>   <p>Community Groups Professional Bodies</p>  <p>National & Regional Organisations, & Environmental</p>	<p>9th November 22</p> <p>AM</p>  <p>Independent Consultative Committee (ICC)</p>	<p>9th November 22</p> <p>PM</p>  <p>Airline Representatives</p>	<p>10th November 22</p> <p>AM</p>   <p>Community Groups Professional Bodies</p>  <p>National & Regional Organisations, & Environmental</p>
<p>14th November 22</p> <p>AM</p>  <p>Aviation Representatives</p>	<p>14th November 22</p> <p>PM</p>  <p>Council / Elected Representatives</p>	<p>14th November 22</p> <p>PM</p>  <p>Council / Elected Representatives</p>	<p>15th November 22</p> <p>AM</p>  <p>Council / Elected Representatives</p>	<p>15th November 22</p> <p>PM</p>   <p>Community Groups Professional Bodies</p>  <p>National & Regional Organisations, & Environmental</p>	<p>16th November 22</p> <p>AM</p>  <p>Independent Consultative Committee (ICC)</p>	<p>16th November 22</p> <p>PM</p>  <p>Airline Representatives</p>	<p>17th November 22</p> <p>AM</p>   <p>Community Groups Professional Bodies</p>  <p>National & Regional Organisations, & Environmental</p>

Stakeholder coverage

We invited all stakeholders on our stakeholder list developed at Stage 1. This included participants that had engaged at Step 1B and phase one engagement, with regular reminders being sent leading up to the sessions to encourage participation. In total, 106 attendees representing 87 organisations attended the stakeholder briefing sessions.

Aviation representatives	29
• Airline	12
• Airport	10
• NATMAC (the National Air Traffic Management Advisory Committee)	7
Community Representatives	7
Council/ Elected representatives	63
• County Council	4
• District Council	5
• Town and Borough Council	10
• Parish Council	44
Environmental group	6
Special interest (consultative committees)	1



The above map only shows the location of the stakeholders that could be geographically defined (County, District, City and Parish Councils) who attended the discussion sessions. The remaining stakeholders cannot be mapped due to not being geographically defined. Colour coding represents different boundaries.

Feedback collation

- Stakeholder feedback was shared through:
 - The chat function during the online discussion sessions.
 - Q&A during the face to face discussion sessions
- In addition, all attendees received links to online feedback surveys after the sessions. This was a simple way for participants to provide responses to a number of multiple choice and free text questions.
- All feedback was logged and analysed by the airport's airspace team. Findings from the survey responses are summarised in this report with examples of feedback received.
- Attendees were also able to provide feedback by post or email.
- In total we collected 84 lines of session feedback, 71 lines of feedback received via email and 84 feedback surveys/ post event email feedback:
 - 42 stakeholder departure feedback surveys
 - 36 stakeholder arrivals feedback surveys
 - 6 email feedback responses

East Midlands Airport Phase Two Arrivals Feedback

Arrivals route options survey

* Required

Welcome

We are very grateful to you for completing this feedback survey!

1

What is your name? *

Enter your answer

2

What organisation are you representing? *

Please add N/A if this is not applicable

Enter your answer

STAKEHOLDER FEEDBACK

Feedback received in the discussion sessions
and online survey responses



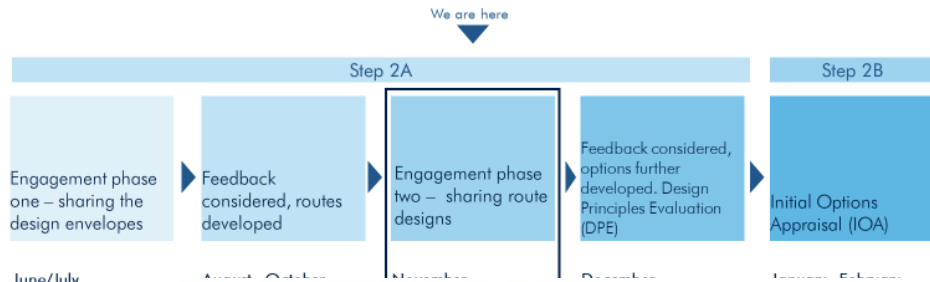


DEPARTURES STAKEHOLDER ENGAGEMENT



Background and phase one recap

Stage 2 process – gathering views



June/July

We shared the design envelopes together with details of how these have been developed, for feedback and input.



Departures – phase one design process recap



Phase one feedback – general themes

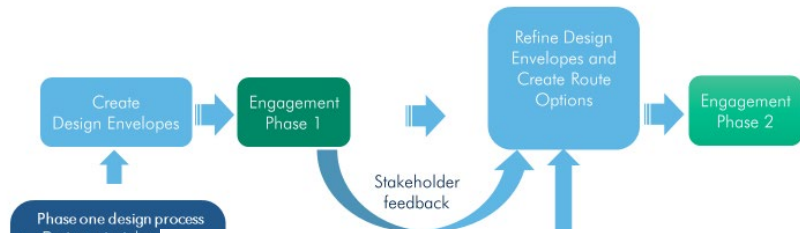
	Feedback	Response
4 Design envelopes This process created a set of design areas where we could place route arrivals.		
Respite	The alternative departure envelopes do not appear to present the most efficient means of delivering respite.	The alternative departure envelopes have been removed. New envelopes have been created and some envelopes have been extended to create further opportunities to create respite. Design principle link, Sharing the Load.
Community noise impacts	Managing noise impacts on communities close to the airport is a key concern. Many stakeholders asked us to avoid overflying specific villages, towns and cities.	Options have been included in each envelope that seek to avoid direct overflight of areas of population, including those specifically mentioned, wherever possible. Design principle link, Limiting Disturbance.
Community noise impacts	Routes should be placed in areas where they cause the minimum noise disturbance to communities.	Options have been included that aim to follow non residential areas, for example by following the path of major road networks, where possible. Design principle link, Responsive Flight Paths.
Community noise impacts	Consideration should be given to varying the initial departure to minimise noise impact on communities that are particularly close to the airport e.g. through tighter turns.	Opportunities to create respite are featured in various ways through the design, for example, by creating as many design envelopes as possible with varied options within them. In addition, some options have been developed that depart with an offset to potentially provide respite to communities that are particularly close to the runway centreline. Design principle link, Limiting Disturbance.
Community noise impacts	Consider steeper climb gradients	We know from engagement with our airlines that a 6% climb gradient is suitable for the fleet of aircraft in operation at EMA, which is consistent with our technology design principle which outlines our commitment to support technology that is widely available. However, 6% will be a minimum and it is likely that our designs will allow those aircraft that can climb more quickly to do



- The first section of the presentation recapped the Stage 2 requirements, phase one design process and explained stakeholder feedback from phase one engagement and how we had responded to it.
- Overall, most stakeholders who responded to the feedback form could see how feedback from the first phase of engagement had influenced the next stage of design.
- Of the stakeholders that answered either no or don't know to the question regarding how the phase one feedback was considered, most were unsure as they had not attended phase one engagement (note – phase one materials had been provided to attendees in advance).

Phase two design process

The phase 2 design process



- Phase one design process
- Design principles
 - Rules and procedure route design
 - Aircraft capabilities
 - The network above CONOPS

The staged approach to refining our options

UNVIABLE	VIABLE BUT POOR FIT	VIABLE AND GOOD FIT
Options that do not meet PANS OPS 8168 (the rules for designing instrument approach and departure procedures) or have a justifiable safety case.	Options that would not meet one or more of the three design principles with which routes 'must' comply (Keeping the Skies Safe, A Joined-up Approach, Meeting Demand)	Options that would be expected to meet the three design principles with which routes 'must' comply (Keeping the Skies Safe, A Joined-up Approach, Meeting Demand)
<p>For example, this could be due to:</p> <ul style="list-style-type: none"> • The position of the first turn or the turn radius • Not meeting obstacle clearance requirements • Descending at a gradient recommended maximum 	<ul style="list-style-type: none"> • This will exclude any options that conflict with our identified safety constraints, or complex airspace. • Alternatively it may exclude options that do not comply with policies such as the UK 	<ul style="list-style-type: none"> • These are the subject of our discussion today

Creating departure options

The foundation for the options is the design envelope we shared with you at phase one.

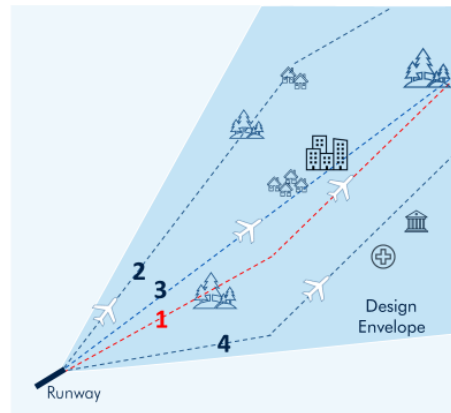
Where the envelope contains an existing route, this has been replicated as far as possible to Performance Based Navigation (PBN) standards. This is our 'do minimum' option. Shown on our illustration here in red.

Additional options have been created that could provide a benefit which aligns with one or more of the design principles.

The examples show options that:

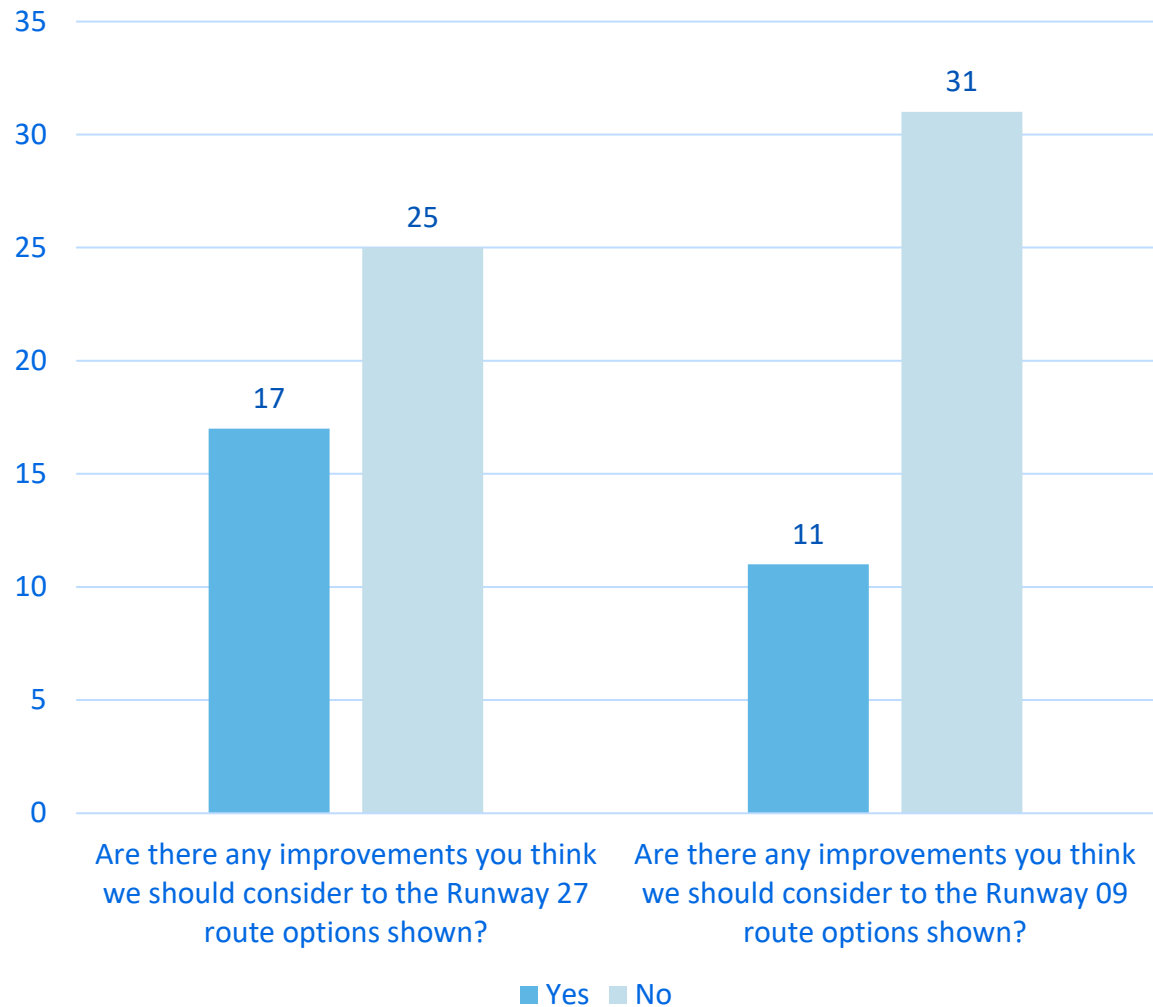
1. Do minimum
2. Route to reduce the number of people overflown (Limiting Disturbance), or
3. Provide a more direct routing to reduce fuel burn (Limiting our Footprint), or
4. Reduce the number of noise sensitive sites overflown (Noise Sensitive Locations).

Where a design envelope did not contain an existing route, a new set of route options were developed using the same concept.



- Next we explained the process we had followed to create the route options.
- Almost all stakeholders felt the process we had followed was clear and logical.
- The stakeholders who felt it was unclear gave their reason as either being unsure why the alternative envelopes had been discounted (although they were supportive of this change) or found the concept complex.
- On the whole, stakeholders could see how the design principles had been applied however a small number of stakeholders were keen to see the detailed evaluation of this.

Proposed route options



- The final part of the session outlined the route options. These were presented by runway end with the selection of options being described by individual envelope.
- In the sessions themselves, most comments at this point focused on requests for further information (e.g. how many routes would be taken forward, how many flights would use each route). It was explained that this information is not available at this stage of the process.
- The majority of stakeholders who responded to the feedback survey did not suggest improvements for consideration. Those that did largely fell into two categories, the first gave very detailed feedback on specific routes (largely parish councils and community groups). These respondents on the whole focused solely on the position of routes that would pass close to them. The second focused on the more general topics that were discussed in the engagement events such as efficiency and noise.

"Just trying to understand whether certain routes would be expected to be used frequently or rarely - clearly, if a certain route would only be used a couple of times a day, higher levels of community noise might not be unacceptable."

Elected representative



ARRIVALS STAKEHOLDER ENGAGEMENT



Background and phase one recap

Arrivals – phase one design process recap

- 1 Design Boundary**
Determine where we could fly between 7,000 feet and the runway. Using guidance we created a 'design boundary'.
- 2 Constraints**
Consider the airspace around us to identifying constraints within the design boundary.
- 3 Design Principles**
Using our design principles to consider what options are possible within the design boundary.
- 4 Design Envelopes**
This process created areas where we could achieve a Continuous Descent Approach (CDA) from 7,000 feet.

Arrival design envelopes
Areas where arrivals to Runway 27 or Runway 09 could achieve a Continuous Descent Approach (CDA) from 7,000 feet

Feedback	Action
<p>Respite</p> <p>Creating routes that could provide options for respite for areas that are overflown is important as a means of minimising local noise impacts.</p>	<p>For arrivals, we have created a range of options within the design envelope. In addition, we have created options that provide different joining points onto final approach which could create a level of noise relief. ATC vectoring onto final approach will also provide some respite. Design principle link, Sharing the Load.</p>
<p>Community Overflight</p> <p>Managing noise impacts on communities close to the airport is a key concern. Many stakeholders asked us to avoid overflying specific villages, towns and cities.</p>	<p>Options have been included in each envelope that seek to avoid direct overflight of specific areas of population, wherever possible. Design principle link, Limiting Disturbance.</p>
<p>Route placement</p> <p>Routes should be placed in areas where they cause the minimum noise disturbance to communities.</p>	<p>The CAPI616 process requires us to consider routes that respond to all design principles, not just noise. However, options have been included that aim to follow non residential areas, for example by following the path of major road networks, where possible. Design principle link, Responsive Flight Paths and Sharing the Load.</p>
<p>Descent gradients</p> <p>Consider steeper approaches for arrival routes.</p>	<p>Stakeholders asked us to consider steeper descent gradients. There is a trade off between descent gradient and noise, so in line with our design principles Limiting our Footprint and Limiting Disturbance we have designed CDAs from 7,000 feet at a gradient that minimises both noise and fuel burn. However for the final approach, landings in poor weather require the ILS to be calibrated at a fixed gradient in line with UK and international regulations. Design principle link, Keeping the Skies Safe.</p>
<p>Housing development</p> <p>Consideration should be given to new/ proposed housing development within Local Plans.</p>	<p>The CAPI616 process requires us to consider local plans. All known committed local plan allocations and large sites with planning consent will be included as part of the overflight analysis that will form part of the Initial Options Appraisal (IOA). Design principle link, Limiting Disturbance.</p>

- The first section of the arrivals presentation was to recap the Stage 2 process, phase one design process and explain stakeholder feedback from phase one and how we had responded to it.
- Again, the majority of stakeholders could see how feedback from the first phase of engagement had influenced the next stage of design.
- Those that answered no or don't know to the question relating to how the phase one feedback had been considered, gave similar reasons to those relating to departures.
- One stakeholder felt their phase one feedback had not been taken on board. This related specifically to the concept of curved approaches. It was explained in the presentation and the sessions and Q&A document that this concept had been considered but determined to be viable but poor fit which was why it didn't feature in the route options presented.

Phase two design process

The staged approach to refining our options

UNVIABLE

VIABLE BUT POOR FIT

VIABLE AND GOOD FIT

Options that 8168 (the rule approach) and have a justification

For example, the

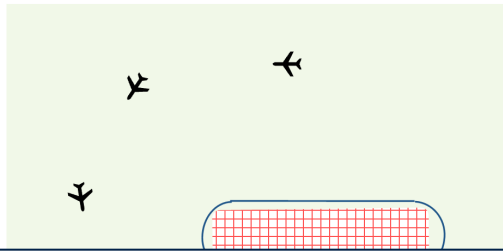
- The position radius.
- Not meeting requirements
- Descending recommendations

Unviable options Design Options developed in the Principles Evaluation

Unviable arrival options

PANS-OPS 8168 (Procedures for Air Navigation Services – Aircraft Operations) sets out criteria such as when an aircraft can turn onto final approach, how tightly and at what speed.

Applying these rules creates a hatched area within which it is not viable to design an arrival procedure. This is defined by a combination of the turn radius, speed and the minimum height for final approach.

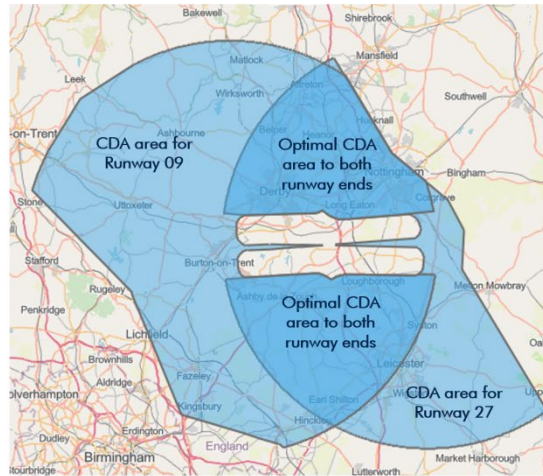


The viable design envelope

The blue areas are where we can put the start of our arrival routes, this will be at 7,000 feet.

The lighter blue areas show where a CDA could start to one runway end.

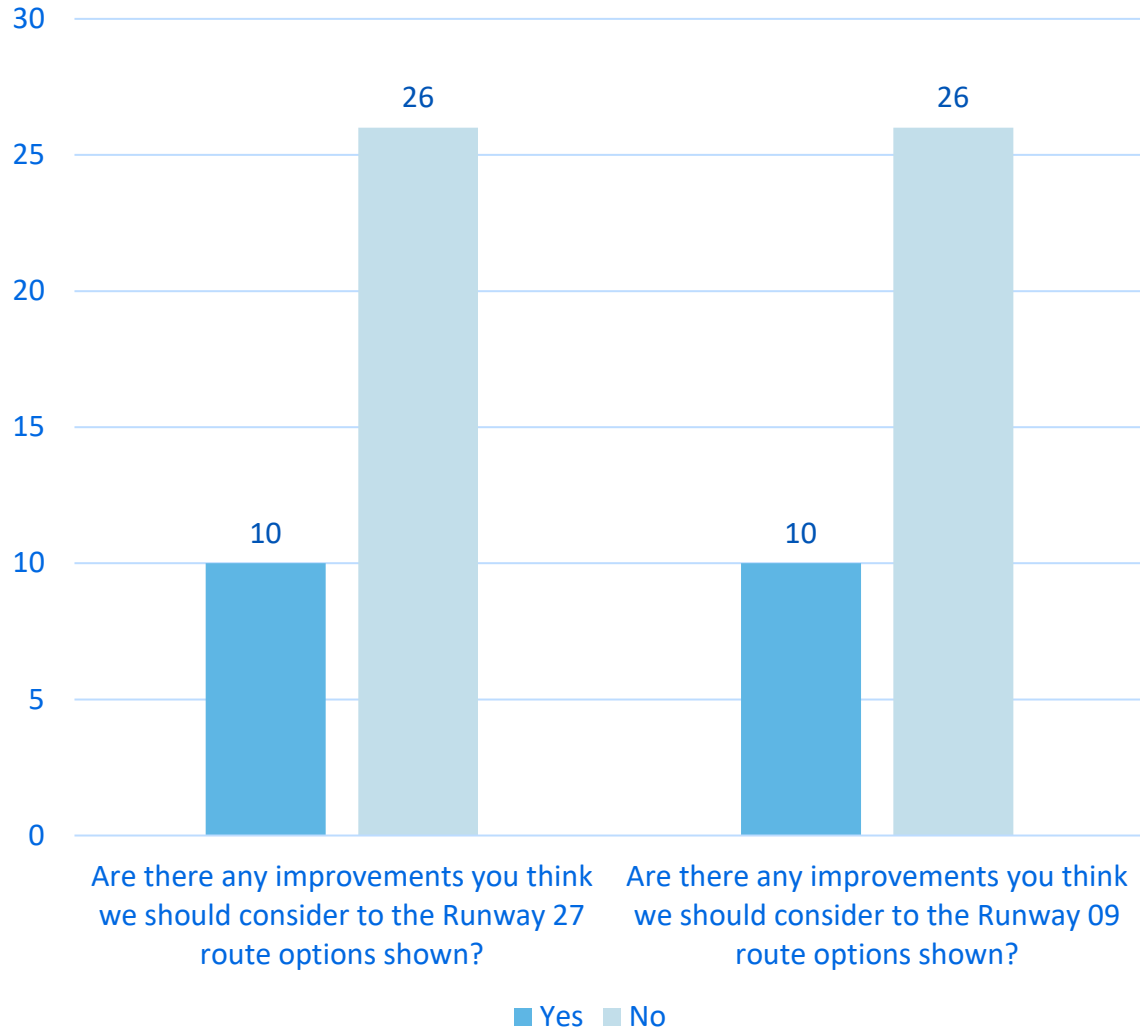
The darker blue area of overlap demonstrates where we can be assured an optimal CDA to both runway ends can start.



- 89% of responses confirmed stakeholders understood how the route options have been developed.
- Some stakeholders questioned the need for a Continuous Descent Approach.
- Others highlighted the use of controlled airspace to the east and viability of placing arrival routes within this area.
- Again, a number of stakeholders queried how communities impacted by both operations (arrivals and departures) would be taken into account.

“It is environmentally unacceptable to accept the geometry of the proposed CDA starting points given the additional track miles that this creates when more imaginative reconfiguration of airspace could provide significant optimization”
Aviation stakeholder

Proposed route options



"The CDA envelopes for arrivals are contained within the current airspace. Consequently your common starting point on the southern outskirts of Leicester seems very constraining. Many of our arrivals only come in from the south because there is no airspace to the east. is there no scope for optimising arrivals more directly from the east where population intensity is also much lower"
 Aviation stakeholder

"Any new departure routes on runway 09 should avoid this approach to runway 27 to give respite. Moving the approach slightly north to come in at a slight angle could be explored?"
 Elected Representative

"As long as the controlled airspace requirements do not expand further to the East, as detailed in the brief, then I have no real concerns. However, if it transpires, as a result of commercial pressure, that a 'long straight in' to Rwy 27 was being advocated, we will object strongly as this would have a markedly detrimental effect on GA with the inevitable encroachment into Class G airspace and the consequential 'squeeze' on GA and hence risk to flight safety"
 Aviation stakeholder

"I believe that the most direct routes, being the most fuel efficient should be used. You have produced several options that are both direct and reduce the amount of disturbance through noise over less densely populated areas. these should be used for the majority of journeys with utilisation of other routes for short periods of time to provide respite."
 Elected representative

Alignment with the design principles

- Stakeholders were asked to what extent the route options aligned with the design principles. The majority of those that answered this question felt they aligned well or satisfactorily.
- Those that answered no made comments about specific route options that did not meet their interpretation of one or more of the design principles (usually sharing the load or limiting disturbance).
- Some stakeholders felt that more detail would be required in order to assess the extent to which the design principles were being met.

"As always, different routes align to different extents and offer trade-offs between DPs. There was clear articulation of how the DPs have been used to shape the route designs and how the criteria are being applied."

Aviation stakeholder

"See answers to other questions - more could be done to share the load"

Elected representative

"Satisfactory alignment other than as previously noted with regard to Training Flights."

Elected representative

"Sharing the Load - This cannot be assessed until the routes and traffic volumes are defined. We hope that every route selected will have a respite alternative."

Elected representatives

"At this stage consideration is being given to area overflow, but more weight should be given to alleviating problems for the communities that are closest where the impacts are greatest. I understand that this noise analysis will be done at the next stage and when the data is available the greater impact on some communities should be given most weight in designing options."

Elected representative

"I believe that you have complied with your design principles in designing the routes for evaluation. I would like to see a more detailed analysis of compliance to your principles later on."

Aviation representative



FEEDBACK THEMES



General Feedback

- On the whole, stakeholders were keen to be involved and understood the purpose and potential benefits of the wider programme and our part in it.
- Stakeholders understood the background and the design process information presented.
- Many stakeholders were eager for more granular detail such as likely noise levels and route usage. It was explained that this not available at this stage.
- Noise and respite continued to dominate the discussions.
- There remains frustration that key concerns such as training flights are not within the scope of airspace change. It was explained in the session and in pre read material, that these are covered in the Noise Action Plan

"Extremely thorough route options"

Elected representative

"I thought the sessions and information provided were excellent..."

Elected representative

"Thank you for the presentation - that was very clear."

Elected representative

"Routes and their explanations were clear."

Aviation stakeholder

"Well presented and good interactive discussion"

Elected representative

Headlines

- Many stakeholders wanted to discuss arrivals from the east and the uncontrolled airspace.
- Interest was shown in the climb and descent gradients, and stakeholders wanted to know more about how design principles will be weighted.
- There is some frustration around key concerns being out of scope (training flights, night noise, cargo)
- Some stakeholders are interested in the evaluation criteria that will be used.
- There is some support shown for the 'Do Minimum' route options that were presented.
- Elected representatives and community groups stressed the importance of new housing developments and providing respite for communities close to the airport.
- Stakeholders are keen to hear more detail surrounding the operation of these new route options in the future which included comments on route usage percentages, the number of routes to be implemented in each envelope and the scope to increase 09 usage.

"If we are proposing some ambitious changes to departure routings then why are we not trying to replicate similar efficiency with the arrivals"

Aviation stakeholder

"Communities closest to the airport will suffer most from all departures before aircraft routes spread depending on destination. It therefore seems right to optimise 'offset' departures as much as possible in line with safety and regulation to give those communities least harm"

Community group

"Rural communities suffer most from air traffic noise because of the lack of ambient noise. Routing over these communities, especially now that approach and departure routes will be much more consistent, will be much more disturbing to human sleep patterns and the well-being of livestock."

Elected representative