



# All Phase two engagement Stakeholder Feedback Report

CAP1616 Stage 2 Develop and Assess

July 2022

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# Stage 2 process – Gathering views

Stage 2 has two steps - 2A and 2B. All engagement takes place in Step 2A and has been split in to two phases:

Manchester Airport Future Airspace  
Engagement Plan for Stage 2 – Develop and Assess



- **Step 2A phase one:** engagement followed the completion of the initial design work undertaken by Osprey. This work identified a set of broad geographical envelopes, where it would be possible to develop detailed route options, that meet the requirements of the identified design principles. Also, there were broadly defined areas within where it would not be possible to consider route options, for example no fly zones around armament deposits, as they would not meet the requirements of the identified design principles.
- **Step 2A phase two:** considered the route options that could be designed within the identified envelopes and responded to the agreed “must have” design principles.



# Stage 2 process – Stakeholders

Paragraph 121 of CAP1616 sets out the categories of stakeholders to be engaged in Step 1B, while paragraph 125 requires engagement at Stage 2 with the same stakeholders as at Step 1B. At Step 1B, in addition to engaging with the stakeholder categories specified, we went 'above and beyond' in choosing to engage with members of the general public.

This resulted in two groups of stakeholders that we engaged in Stage 2:

- Those falling within the CAP1616 categories.
- The general public we engaged in Step 1B that have requested to continue to be a part of the engagement process.

This report combines the feedback from both feedback groups.

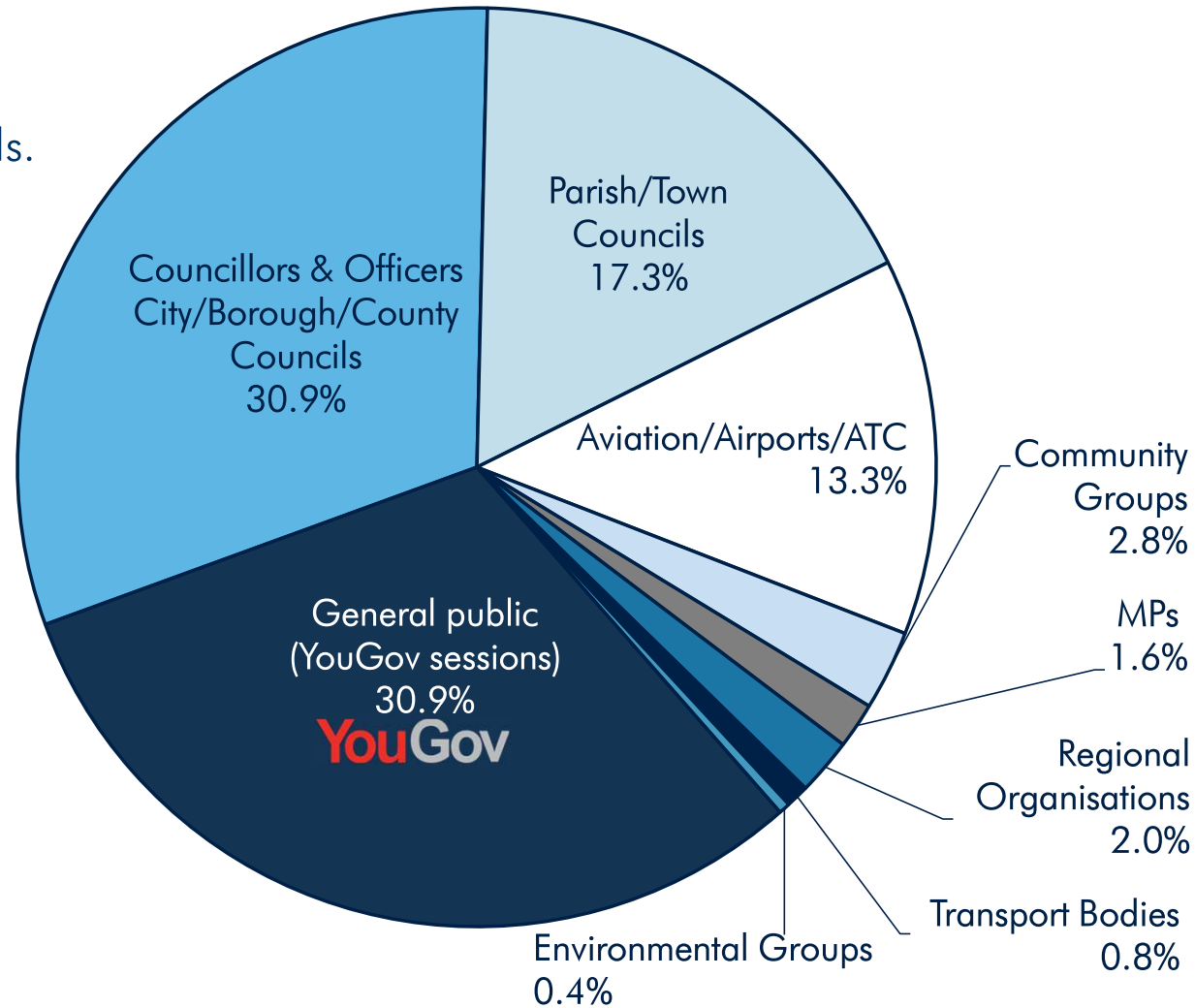
The stakeholders defined in CAP1616 were facilitated by the Manchester Airport Future Airspace team and YouGov facilitated engagement with members of the general public.

All engagement was carried out in May and June 2022.

# Who did we engage with in May and June 2022?

Over four weeks:

- 38 engagement sessions.
- Attended by 249 individuals.

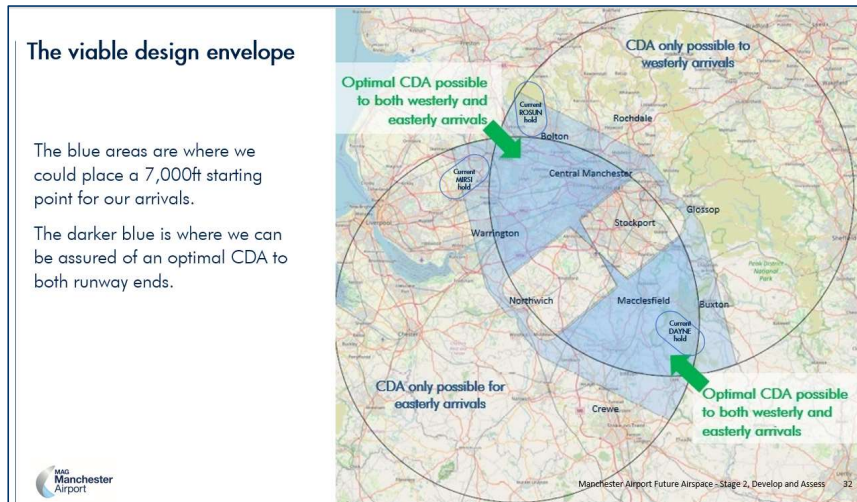


# ARRIVALS

Stakeholder feedback



# Arrivals – phase two design process



## What are Continuous Descent Approaches?

Continuous Descent Approaches (CDA) or Continuous Descent Operations (CDO) involve arriving aircraft using minimum thrust and avoiding prolonged level flight.

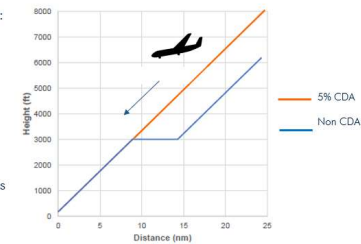
The objective of a CDA is to reduce the environmental impact of the arrival by:

- Ensuring aircraft are higher for longer (N1 -N3 Noise)
- Minimising engine thrust and noise (N1 Noise)
- Maintaining a fuel optimal profile and minimising CO<sub>2</sub> emissions (Emissions)
- Minimising airframe noise such as deploying air brakes (N1 Noise)

There are a range of descent gradients for a CDA which will provide the benefits. If outside of this range then:

- A very shallow gradient will require engine thrust which burns fuel and generates noise
- A very steep gradient requires aerodynamic braking which generates noise

There is an optimal range outlined in CAA and ICAO policy and all of the Viable and Good fit arrival options align with this.



- The importance of enabling Continuous Descent Approaches to both runway ends was understood and widely supported.
- It was acknowledged that for arrivals the proposals would make little difference to those most affected by arriving aircraft (those beneath the Instrument Landing System).
- Concern was expressed that the Performance Based Navigation system would concentrate traffic to a greater extent and most community stakeholders expressed concern about the noise impact of this.

“I think the range of options e.g. for flight path to avoid overflying settlements on take off is capable of sharing inconvenience and that trial and error could result in minimising inconvenience. With experience some of the bells and whistles could be set aside.”

Councillor, Stockport Metropolitan Borough Council

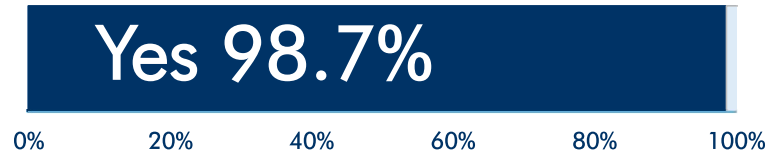
# Arrivals



## Engagement sessions

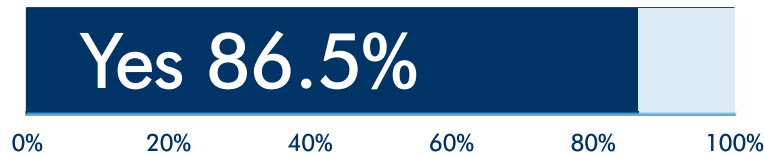


Is the process we have followed to identify route options for arrivals clear and logical?



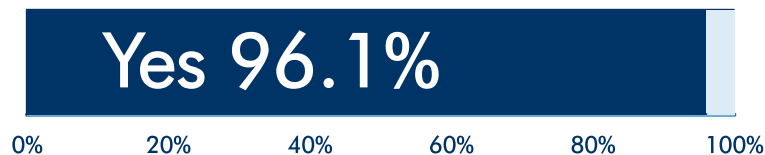
“A cautious ‘YES’. It looks to them as if a great deal of thought has gone into the process and multiple considerations are factored in”.

Can you see how feedback from our earlier stakeholder discussion sessions in November/December have influenced the development of the route options?



“Suggestion that the engagement is broad and that the feelings of local stakeholders are being considered and taken into account – also reassuring”.

Can you see how the route options align with the design principles?

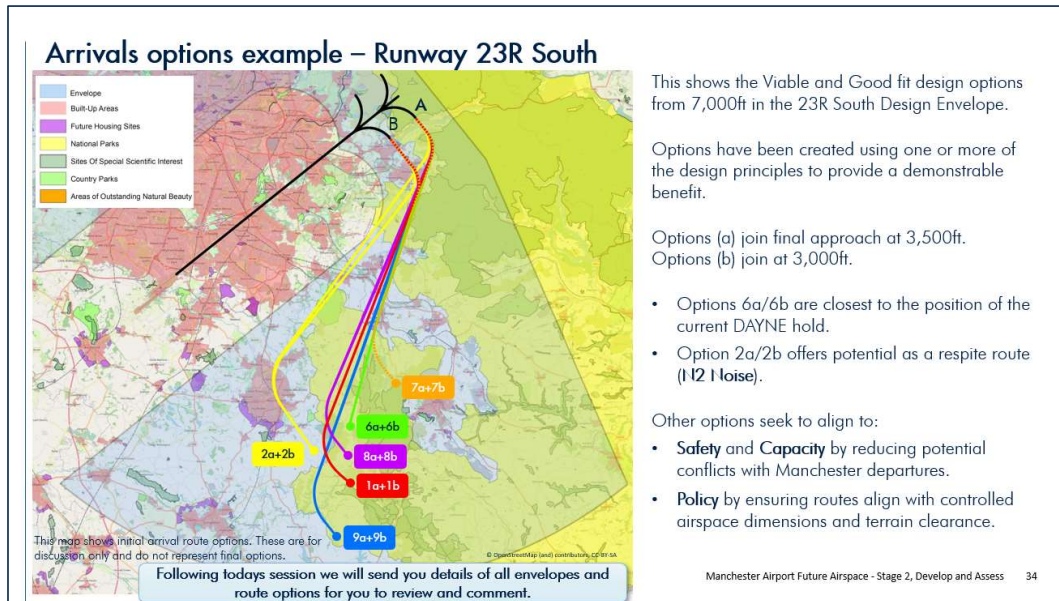


“As with last year’s forums there is a concern that Manchester Airport seem to focus mainly on addressing the three core [must have] principles but with less focus on noise”.





# Arrivals feedback – route options



- There was discussion about respite and the degree of concentration that could be expected. While some were keen to see this concentration of traffic, many (community) stakeholders were concerned about the noise impact on overflow communities and how much of a change this would represent.
- From the MAG sessions there was little specific comment, by community stakeholders, on the specific route options presented. Aviation/Air Traffic stakeholders had some comment but few preferences.
- From the YouGov sessions, the breadth of route options was welcome in as much as it provided opportunity for respite. There was a little disappointment that no options were possible for aircraft established on the ILS.

“So, it seems to me a bit illogical that a focus isn't being put onto the black lines to consider different options. I do appreciate that the runways are where they are...where the black lines are, yet we've been discussing the routes where it's 3500 feet, 3000, 2500 and above and it just seems a bit illogical to me that the focus is being put there.”

YouGov, Group 5

# Arrival specific route option feedback

(There were no specific points made by YouGov participants so below relates to MAG run sessions only)

The only comments received related to route options in the 23R South, 05R North and 05L North envelopes:

- Runway 23R South Envelope - design principle Safety relates to this feedback "...on easterlies, 8a and 8b would adversely affect a SID designed to go downwind and miss the arrival tracks - I'd go wider with the arrivals".
- Feedback from Liverpool John Lennon Airport cited interaction in the Runway 05L/05R North Envelopes with arrivals to Runway 27. Based on the design principles Safety, Capacity and Airspace only options 2a & 2b create no conflict. - It is suggested that new route options with different start points are established in these two envelopes.

# Arrivals feedback

## Are there any additional thoughts you would like to share?

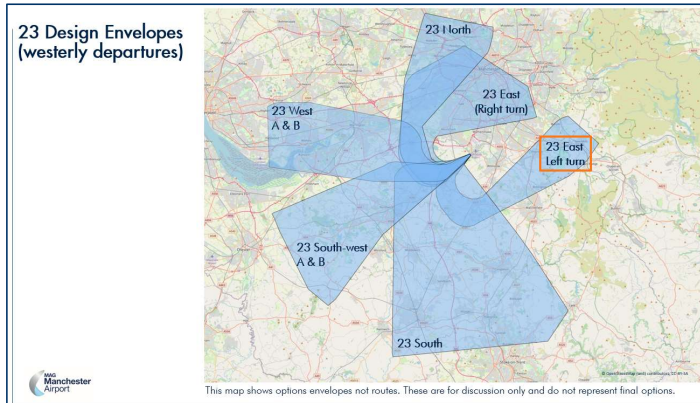
- You should increase [make steeper] the glideslope angle - If it does not increase the noise.
- Reduce the number of night flights by flying more in the day, to reduce disturbance.
- Increase the number of night flights and fly fewer in the day, to reduce disturbance.
- Concentrate aircraft over already noisy urban areas.
- Output from the YouGov sessions was that there was more positivity for avoiding built up areas – and the routes provided opportunities for respite so were welcomed. But the crucial consideration is the turn before the final descent and whether this variation currently available to arrivals?
- Impose financial penalties on 'noisy' arrivals.
- Route options that reduce the amount of controlled airspace required.
- As Stockport is most affected by westerly arrivals, greater consideration should occur when defining easterly departure routes.
- You could provide options that reduce overflight of National Parks.
- In some areas there is a combined [noise] impact of Liverpool John Lennon Airport and Manchester Airport overflight.
- In some areas there is a combined [noise] impact of overflight by Manchester arrivals and departures.
- You should increase the distance between individual Runway 05 arrivals.
- You should extend the area available to and create greater safeguarding for General Aviation.

# DEPARTURES

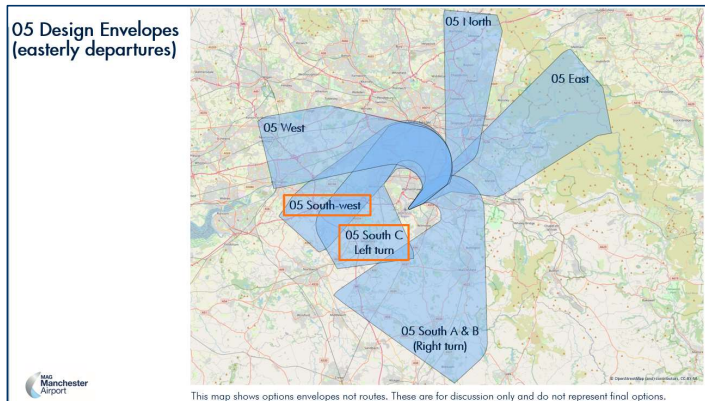
Stakeholder feedback



# Departures feedback – phase two design process



- PBN was understood and the use of this technology was generally welcomed, however there were concerns raised about the new 'concentration' over fewer people. Those concerned advocated respite and/or use of multiple routes to share the impact. YouGov participants expressed some concern that adoption of PBN was just a provision for more flights.
- There was a mixed response from stakeholders participating in the MAG stakeholder sessions to the additional envelopes presented (23 East Left Turn and 05 South C Left Turn). Although some could see the value from a respite perspective, dispersing noise impacts, many more were concerned about areas being impacted by multiple envelopes/routes and areas currently not affected being included. In the YouGov sessions these new envelopes were positively received with participants valuing the respite opportunities afforded.
- There was support for higher climb gradients from all stakeholders and concern that by advocating such a low gradient (6%) many more people, would be affected.





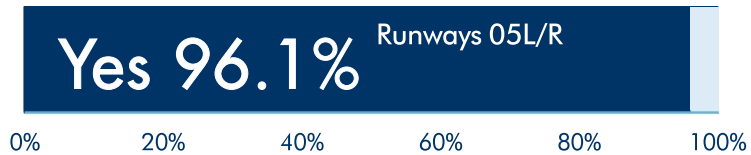
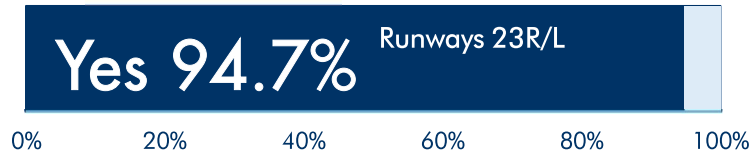
# Departures



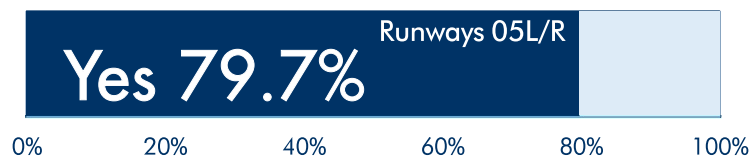
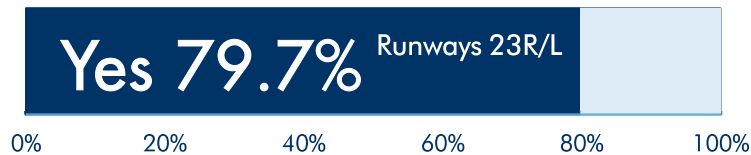
## Engagement sessions



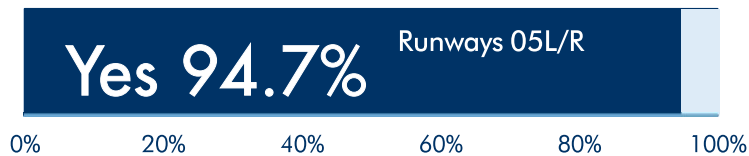
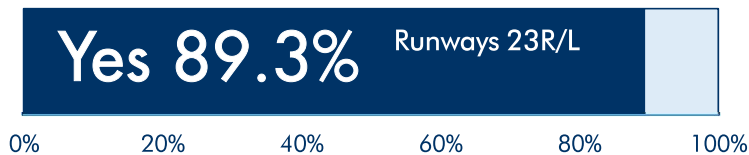
Is the process we have followed to identify route options clear and logical?



Can you see how feedback from our earlier stakeholder discussion sessions in November/December have influenced the development of the route options?



Can you see how the route options align with the design principles?

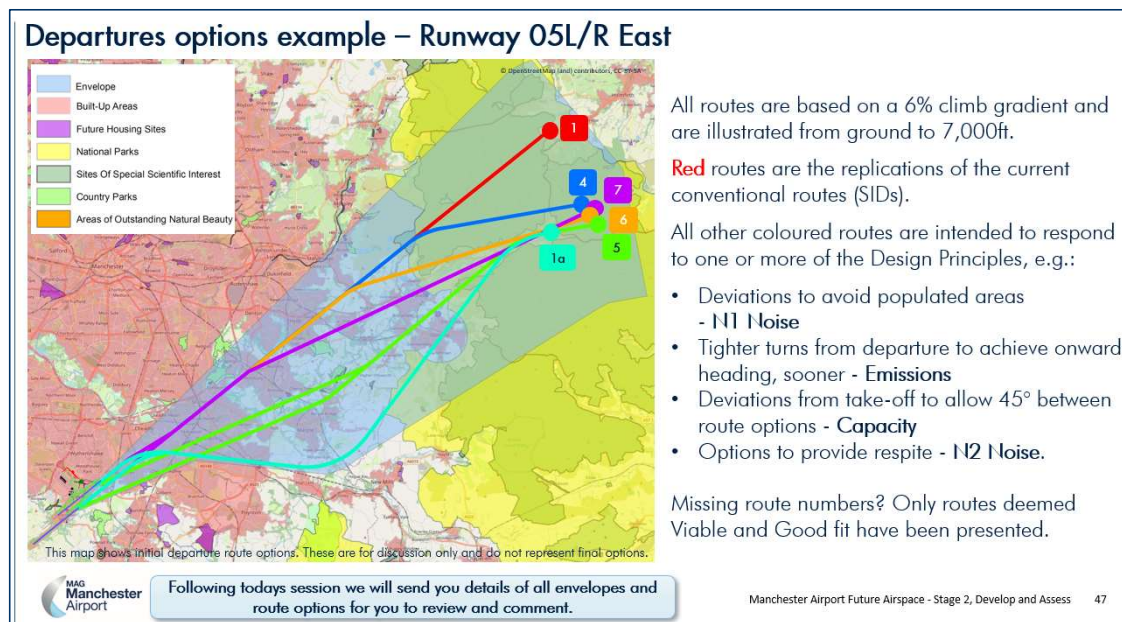


“They are satisfied with how thorough and detailed the presentation was and how it listed the various moving parts. The provision of certain aspects of information, particularly around technology and the impact on noise reduction, needs to be greater”.

“Concerns persist that the process is ‘tick box’, that stakeholder feedback will not be listened to and that the airport will just ‘plough on’ regardless”.

“...the conversation we were trying to have with them was not the one they wanted to have. They are eager for specifics – e.g. a ‘final list’ of flightpaths. Once these are available they will be much more able to test them based on the principles. As with last year’s forums there is a concern that Manchester Airport seem to focus mainly on addressing the three core principles but with less focus on noise”.

# Departures feedback – route options



- The greater detail in the maps and inclusion of coloured areas to show built-up areas and other features was welcomed.
- In the YouGov sessions “as a general rule, the more lines they saw on the map the happier they were (as was the case with arrivals). This indicates dispersal and respite are possible – it means that there are less people profoundly affected by noise. But they were also told that the routes would be trimmed down which is not what they seem to expect – they want the whole envelope filled with as many routes as possible...”
- In both the YouGov and MAG sessions respondents were keen for the details (that will follow in Stage 3) that would enable better comparison of the pros and cons of each route (such as height at various points, fuel burn, volume of traffic etc).

“We would favour options which reduce direct flights over Knutsford...the options which go around the town and over Tatton Park ...than the town.”  
 Clerk, Knutsford Town Council

“NERL considers a comprehensive long list set of beneficial options has been developed...”  
 Representative, NATS En Route

# Departure specific route option feedback

(There were no specific points made by YouGov participants so below relates to MAG run sessions only)

## Suggested new route options

- 23L/R South West envelope - use '2a' and then (at point of interception) follow path of '1a' or '1b').
- 23L/R East Right Turn envelope - follow path of '1a' to 4,000ft, then follow average of existing path @ 7% climb.
- 23L/R East Right Turn envelope - devise route options to the west of Mere.
- 23L/R North envelope - devise route options to the west of Mere.
- 05L/R South Right Turn - devise new route option to follow path of A34.
- 05L/R West - devise new route options with 15 degree offset to the north.
- 05L/R South-west - devise new route options with 15 degree offset to the north.

## Interaction with Liverpool

- 23L/R South-west envelope - only route options '5' and '6' route are far enough south to avoid Liverpool arrivals to Runway 27 - new route options required south of route options '4' and '6'.
- 23L/R West - all route options interact with Liverpool Arrivals to Runway 27 Arrivals. Nothing in this envelope seems possible to take forward.

## Comments on the use of certain design envelopes

- A number of people felt the combined effect of envelopes '05L/R West', 'South-west' and 'South Left Turn' would be negative - impacting the same people.
- Seven responses listed the '23R/L East Left Turn' envelope as unnecessary citing design principle Noise N1 and one response was supportive of the envelope citing design principle Capacity.
- One response listed the '05L/R South Left Turn' envelope as unnecessary citing design principle Noise N1 and one response was supportive of the envelope citing design principle Capacity.

# Departure feedback

## Are there any additional thoughts you would like to share?

- Flights should be more concentrated to reduce the number of people affected.
- Flights should be more dispersed to spread the 'impact'.
- Climb gradient should be greater than 6% [as high as possible] x3.
- As Knutsford is most affected by easterly arrivals, greater consideration should be given to it, when defining westerly departure routes.
- Restricting night flights would be better than respite.
- In the MAG session there were some voices encouraging a concentration of aircraft over already noisy urban areas.
- In the YouGov sessions they were, on the whole, more positive around routes that overfly more rural areas and avoid built up areas (especially Knutsford and Stockport).
- Review [increase] the financial penalties imposed on 'noisy' departures.
- Mitigation schemes need to be considered/reviewed/improved.
- Operation of the most modern/quietest aircraft types should be incentivised.
- Aircraft type should be considered in allocating departure routes [some routes should be restricted to quieter types].
- In the YouGov sessions comment was made that in many of the departure envelopes, the 'capacity' driven route options seemed to avoid the other routes altogether and overfly more sparsely populated ones. Participants felt that it seemed like these should be listed as having a noise benefits.

# RESPITE

Stakeholder feedback





# Respite – What do we mean?

## Design Principle – Noise

### N1 Noise

Our route designs should seek to minimise, and where possible reduce, the number of people affected by noise from our flights.

N2 Where practical, noise effects should be shared. The use of dispersion and/or respite, especially at night, will be considered to achieve this.

N3 Where practical, noise effects should be shared. The use of dispersion and/or respite, especially at night, will be considered to achieve this.

### Noise N2 – Using respite

Our definitions

**Relief:** break from or a reduction in aircraft noise.

**Respite:** a scheduled relief from aircraft noise for a period of time.

Do you agree?

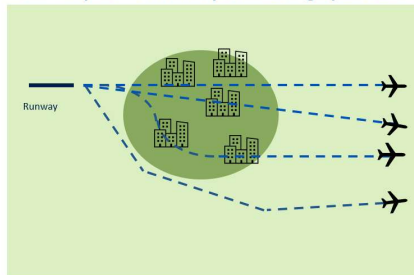
When considering the use of multiple routes to provide respite, what might constitute a sufficient period of respite?

Are there any times of the day or days of the week where it would be preferable to have a period of respite?

Is it important to you that periods of lower noise are scheduled and predictable? Or, do you just wish to see a sharing of noise?

Is respite different at different times of the week?

### Noise Respite – Possible/potential flightpath alteration



What are our best options for respite?

Alternate flight paths according to times of the day?

Days of the week?

Weekend or weekdays?

Using multiple paths through the day to spread over a wider area?

- The three design principles on noise were described before the focus changed to design principle Noise N2.
- A definition for respite was proposed and stakeholders were accepting of this.
- There was intensive discussion, and some disagreement, between stakeholders on the best way to deliver respite.
- Feedback was positive on the concept but some scepticism was apparent in the ability to deliver respite satisfactory to all.

# Respite – What do you think?



## Engagement sessions

- Stakeholders liked the idea of respite and relief but had doubts on how it would be delivered.

The overall consensus is stakeholders would prefer predictable noise respite/relief...

It is not possible to comment on respite...  
...The main effort should be designing routes that genuinely try to reduce overall noise...

Representative, CPRE Cheshire Branch

I think you have a real juggling act.  
Clerk, Great Budworth Parish Council

*...but there was no general agreement on how that should be delivered*

## YouGov

- We struggled to reach a consensus either in the groups or amongst groups about what form of respite would be best, in terms of time periods and lengths of time.
- The consensus was that participants find noise at night most disruptive - either late night as they are getting to sleep or at daybreak, waking them up. So, any variation that can be made here seems to be the one that would be most appreciated - the perception persists that night flights are increasing daily.

# OVERALL FEEDBACK

Stakeholder feedback



# Engagement feedback and comments



*"It looks really good. I think it's going from a messy spider's web to something a lot more precise, a lot more organised, a lot more direct which from an environmental point of view I think is really good news. I think that's a really good selling point on this. That's handy".*

YouGov Group 5

*"Thanks all - really useful".*  
British Gliding Association

*"Thank you, really informative session".*  
National Trust

*"I think it's taken into account the principles. I think the dispersal of the flight paths show that. I think it remains to be seen about residents, and I guess that's where stage three probably comes in, doesn't it, really?"*

YouGov Group 7

*"It was my pleasure to take part to this session. Looking forward to the next steps. Thank you".*

Salford City Council

*"Thanks for the session today and the detailed presentation".*

Hawarden Airport

*"Thanks for the invitation to participate in the feedback last week but I am disappointed in the lack of vision shown by the design team."*

YouGov Group 6

*"I'm more informed that something has been thought through and options are being looked at rather than just changes being arbitrarily implemented. So, yes, I feel more informed".*

YouGov Group 5

*"As a director in the travel sector for over thirty years I find this whole process is yet another rubber stamp exercise carried out just to show we followed due process".*

Henbury Parish Council

*"Thank you for inviting us to your recent Stage 2A online engagement session which we found extremely valuable and professionally produced & presented".*

NATS (NERL)

*"That's great, thanks to all, very helpful session".*

Warburton Parish Council

*"Thanks for the opportunity to participate in this".*

Pennine Soaring Club



# RECOMMENDATIONS





# Recommendations – *Departures Actions*

- Investigate new route option in **23L/R South-west** envelope that uses '2a' to point of interception and then follows path of '1a' and /or '1b'.
- Investigate new route option in **23L/R East Right Turn** envelope that follows path of '1a' to 4,000ft and then the average of the path of the currently experienced easterly traffic on a 7% climb.
- Investigate the feasibility of creating route options to the west of Mere in the **23L/R East Right Turn** and **23L/R North** envelopes.
- Investigate new route option in **05L/R South Right Turn** envelope to follow the A34 on point of interception.
- Investigate the feasibility of creating 15 degree offset route options within the **05L/R West** and **05L/R South-west** envelopes.
- Investigate additional route options within the **23L/R South-west** envelope that are deconflicted from Liverpool Airport Runway 27 arrivals and Runway 09 departures.
- Investigate the feasibility with continuing with any route options inside the **23L/R West** envelope given those identified conflict with all route options with Liverpool Airport Runway 27 arrivals and Runway 09 departures.
- There is an appetite for steeper, than 6%, climb gradients – the feasibility of providing them needs to be investigated.

# Recommendations – *Arrivals Actions*

- **Runway 23R South Envelope** - check interaction between route options 8a and 8b with the departure envelopes/options.
- **Runway 05R North and Runway 05L North Envelopes** - require the design of more route options that are deconflicted from Liverpool Airport Runway 27 arrivals and Runway 09 departures.

# Recommendations – *Respite & Noise Control*

## Respite

- The overall consensus is stakeholders would prefer predictable noise respite/relief and options should be included in our Stage 3 consultation.
- Stakeholders in Stockport and Knutsford believe that changes in runway direction already provide them some respite and this should be accounted for in any options taken forward.
- Overall multiple route options seem to be the most popular way of delivering some respite.
- National Trust have requested that their properties are accurately mapped. National Trust will be invited to provide details and coordinates of all their properties within the area concerned.

## Noise control and mitigation

- There is a clear belief that noise penalties and the Night Noise Policy should be reviewed. Both of these matters will be considered as part of the next Manchester Airport Noise Action Plan.
- Stakeholders are concerned that when enacted, Airspace change will alter noise levels and the areas that experience noise. New predicted noise contours will be produced as part of the Future Airspace project. These could be used to ensure any potential mitigation schemes target the right areas.