# YouGov Phase One Forums Feedback Report

Stage 2 Develop and Assess

MAG East Midlands Airport

July 2022

# East Midlands Airport Future Airspace Research: Stage 2 – develop & assess

## Contents

# Background, aims and objectives

## Background

As part of Government proposals to modernise the way UK airspace is managed, UK airports have been tasked to undertake extensive engagement and consultation with stakeholders and local communities. From 2018 onwards, East Midlands Airport together with NATS, the CAA and other airports will work together to shape the airspace design on which it will formally consult. Before this, it will be important to speak to individuals that have an interest in the airspace around the airport to provide feedback on principles that will be used to redesign the airspace, and the new routes generated, as part of the overall programme. Following the completion of Stage 1, there is now a need to test the design envelopes with the stakeholders before final routes are designed.

## Aims / objectives

The aims and objectives of the research are outlined below. Ultimately, the research seeks to identify:

- Whether participants understand the rationale for the design envelopes (e.g., design considerations, arrivals and departures boundaries, and constraints).
- Whether the design envelopes meet the design principles established by East Midlands Airport.
- Whether there are additional local factors that East Midlands Airport must consider in their design envelopes.
- Whether the ‘do nothing’ or ‘do minimum’ scenarios are accepted, and what could be done to improve these if they were taken forwards.

# Method and sample

The research involved 2 x 3-day online communities with members of the public living in the area surrounding East Midlands Airport. Research took place between 27th June and 6th July 2022. A total of 61 were recruited to take part, with 50 completing all 3 days of the community. Participants were recruited by YouGov drawn from the YouGov Panel and local members of the public who had engaged on the East Midlands Airport programme previously.

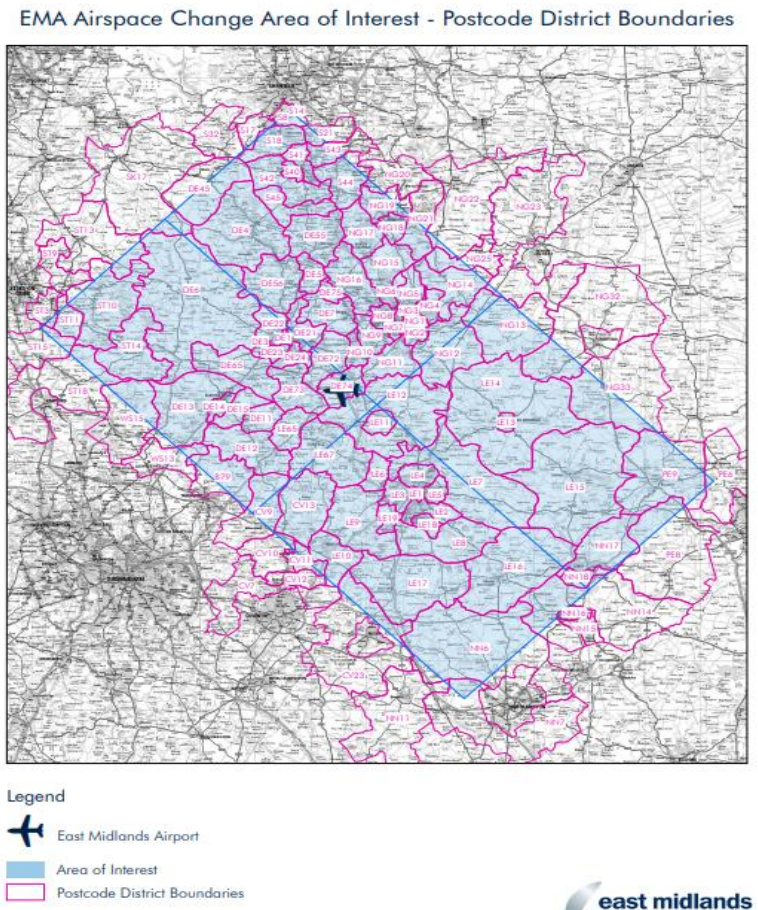
Participants were recruited to the following specification:

- Mix of locations (under departure / arrivals routes) from zones defined by East Midlands Airport
- Mix of age and gender
- Mix of social group
- Mix of views on East Midlands Airport

The communities took a light-touch deliberative approach as we 'drip-fed' information to participants across the 3-days, building up their base level understanding of the programme, and the development of the design envelopes. Each day participants completed questions to test their comprehension of the rationale for designs, and the design envelopes.

East Midlands Airport provided technical support, feeding back on any technical questions raised by participants

## Areas of interest




### Community 1 – East

Community conducted 27th – 29th June

### Community 2 – West

Community conducted 4th – 6th July

# Airspace Modernisation review

# Most agree with the need to modernise the airspace, and understand the overall process

- Based on the pre-read information, participants understand that East Midlands Airport aims to modernise their current flight routes in line with principles developed in Step 1B. They understand that technology is going to play a key role in this process, particularly to reduce emissions and improve the efficiency of the airport's operations.
- However, some participants seemed to initially focus on specific outcomes of the programme such as noise pollution, environmental impact, potential increase in air traffic and potential impact on the local communities. Only after watching the *Future Airspace at East Midlands Airport* video and learning about the programme timeline, did they seem to better understand the overall objective.
- They think that the programme timeline is reasonable considering the complexity of the process and how many different parties are involved in it. They agree that consultations with stakeholders and the general public are needed but some would like to know how these would be managed – how the views of the public will be weighed against the professionals, how many people would be consulted, what format would the consultations take and how could the public keep up to date with the progress of the programme.

***"The key features of this stage are developing and assessing the definitions identified in Stage 1, hence the need for change and a way to make it happen with a plan. Stage 2 seems reasonable and achievable as the work to make new routes to reduce noise pollution for example has already been done it would seem."*** East

***"I've watched the video and read the accompanying information. The video was particularly useful to help understand what stage 2 entails. As I understand it, the route designers have come up with 'design envelopes' which give broad areas where routes could be placed - after consulting with us about these, more individual routes can be planned."*** West

***"Implementation of any new routes by 2026 does seem like a long time to wait for change but I understand, too, that detailed scrutiny of any change is essential and that change takes time. It is encouraging to hear that there will be many opportunities for stakeholders and members of the public affected by the airport to be heard and their opinions considered."*** West

# Design principles

## Step 1B – Our Design Principles

| | |
|---|---|
| Keeping the Skies Safe | Safety must take precedence over all other factors. Flight paths must be safe for airspace users, the airport and communities on the ground. |
| A joined-up approach | Any changes must align with the broader national airspace modernisation strategy, comply with national, international and industry regulations and legislation, and align with current and future Airspace Change Programme in the north of the UK through involvement in the Future Airspace Strategy Implementation group. |
| Meeting Demand | New flight paths must ensure the continuation of services offered today and meet any future demand, in keeping with local and national planning policy, and the Government's policy on 'making best use' of existing runway capacity. |
| Limiting Our Footprint | Flight paths that limit and, where possible, reduce emissions should be implemented. |
| Sharing the Load | Flight paths should, where practical, be spread out to avoid concentration of aircraft activity to share any noise impacts. |

| | |
|---|---|
| Responsive Flight Paths | Where flight paths have to overfly communities, we will consider existing noise in the local area, and will select flight paths to mitigate effects on areas with relatively low levels of ambient noise. |
| Limiting Disturbance | Flight paths should seek to limit and, where possible, reduce noise disturbance to communities – especially at night. |
| Noise Sensitive Locations | Flight paths should, where practical, avoid locations that are especially sensitive to noise. |
| Fit for the Future | Flight paths should be designed to futureproof our airspace and should not be constrained by existing arrangements. |
| Airspace for All | Our controlled airspace should be open to all authorised users; however, priority will be given to airport air traffic over other airspace users, except for emergency aircraft. |
| Embracing Technology | Flight paths should be designed using the latest, widely available navigational technology and flying techniques. |



***"Those design principles take into account safety, the community and the environment. They also dictate that it's not only about adding additional routes but also stipulate that where existing routes and be better utilised this should form part of the design, thus using existing routes more effectively."*** East

***"The design principles all seem sensible and well thought-out. Sometimes it might be difficult for them to co-exist, for example, the safest/greenest route might be the noisiest and most disturbing. I am interested to know which principles are being prioritised most highly."*** West

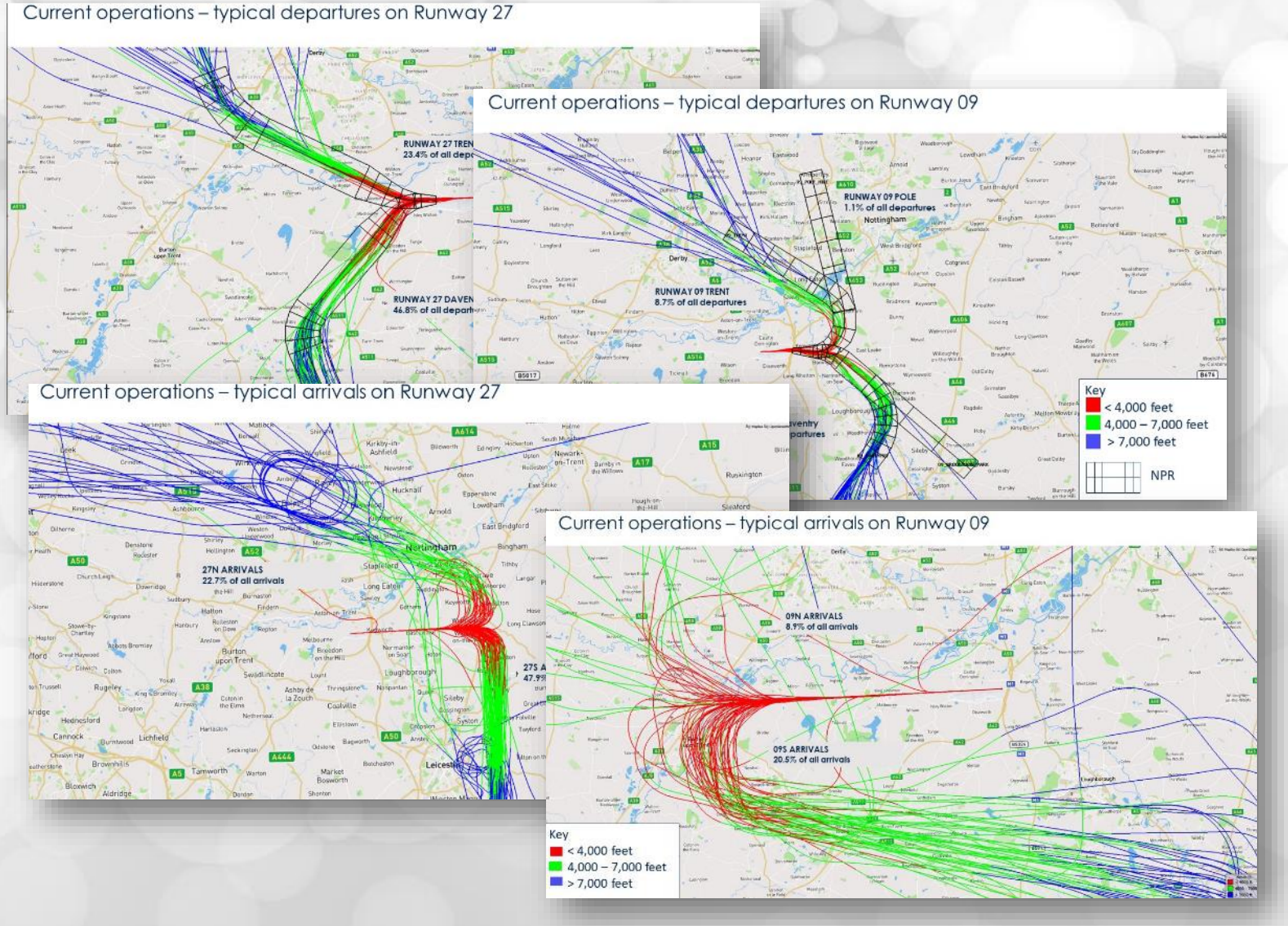
# Participants agree with the principles that feed into route design consideration and they understand that it is a balancing act trying to comply with all of them

- Participants think that the design principles are logical and comprehensive.
- They agree that safety should be the primary consideration and they appreciate that consideration is given to abate the noise on local communities and environment, but a few would like more details about these e.g., what are ‘noise sensitive locations’, how noise impacts local communities, with more consideration given to fuel use.
- At the same time some also raised questions how these principles are prioritized and weighted.
- ‘Sharing the load’ is understood to provide respite for those currently affected by noise but it also raises concern among some how this would be managed and how, if at all, the noise level will change once new routes are designed.
- Many participants also welcome that future demand is being considered but some worry that this, along with the overall modernisation and increased efficiency, would lead to an increase in air traffic, therefore more noise and pollution. At the same time, some others think that it is better to ensure at this stage that the plans are futureproofed.
- In contrast to research conducted for Stansted Airport and Manchester Airport, only a few mentioned that some principles seem to contradict each other and most seem to understand that not all principles could be fully met when designing new envelopes.

***“Design principles further makes provision that the future or potential future needs should be met in the design, thus ensuring proposed new designs are future proofed to an extent.“*** East

***“The 'meeting demand' comment suggested to me that flights would increase - I believe that the freight companies close to the airport have increased in recent years so this will surely have a bearing on the number of flights each day.”*** West

# Current operations




***"I am really quite shocked to see the maps showing how concentrated the current flight paths are and the enormous impact they must have on the areas and residents living underneath those flight paths."*** East

***"The maps are very clear, and quite fascinating. They definitely fit with my perceptions of flights near me - which are, according to the maps, generally in the 4,000-7,000 feet range so I am aware of them.*** West

# Information on the current operations is clear and many appreciate details on how they are managed

- Many find maps and supplementary information about current operations to be clearly presented and easy to understand. For some there are no surprises here as they live directly under those flight paths.
- At the same time, some commented that the corridors are rather narrow and very busy, which only further shows a need for airspace modernisation.
- Some were surprised to learn that arrivals do not have pre-determined routes.
- Some were very positive about the high proportion of aircraft that currently use Continuous Descent Approach (CDA) and they wondered if this proportion (90%) could be further increased.
- However, a few expressed their lack of trust towards East Midlands Airport and felt that the airport purposely presented data from 2019 rather than the latest one and that they seem to exclude details about night flights or gliders and other smaller planes to gain more favourable views towards their proposal.

***"I was not surprised by this information, although, I was surprised that there are no specified flight paths for incoming flights."*** East

***"It is interesting that such a high proportion arrive at CDA. Is there a target to improve on the 90% or is there any reason why it is not above this figure currently?"*** West

***"There appear to be repeat offenders in terms of straying from the routes (which won't be shown on a map of a typical day). In addition, since (as I understand it) some flights such as smaller aircraft and training flights don't follow the routes, the maps only show a partial picture of overflying aircraft."*** West

# Considerations for airspace modernisations


***"After reading all this information I would say that EMA have covered everything that I can think of as important. The process of stage 2 sounds very thorough and effective. I have no concerns, I think stage 2 has been very well planned and thought out, it considers everything."*** West

***"The considerations taking into account here takes account not only of the regulations and ensuring designs meet the regulations, both nationally and internationally, but the designs also considered the airlines and their equipment, again this is an example of inclusive design."*** East

# Participants find information presented clear and logical; they are impressed with the work put into it and they want to learn more how the whole process will be managed

- With more information presented to participants, they think that the process is complex but also comprehensive. The more they learn about the process, the more convinced they are that the airspace needs to be redesigned.
- Many said that they do not have any particular concerns about the process and they trust industry experts to work on it. They are glad to learn that many different parties are involved in the process, however, with so many of them, they wonder how the joined-up approach is coordinated, who manages it and how much cooperation between other airports and aviation bodies (domestic and international) there is.

***"The design process seems well thought out. The slides on the responsibilities of the different organisations are clear."*** East

***"It sounds like a lot of consideration has been put into future proofing the design consideration and providing the joining up approach works successfully between other airports alongside EMA it could have a huge positive impact on how streamlined airspace could be."*** East

***"As a process I can see it is logical and is designed to balance a complex network of interests, considerations and potential limitations. I am pretty impressed by it all, and by the quality of explanation in these documents. I don't have any concerns at this stage."*** West

***"The route design process seems logical but if other airports have used a different approach would this impact on EMA design forcing changes to be made?"*** West

# Participants are primarily interested in the impact of the programme on the local communities and environment

- Participants had only a few questions about the programme regarding:
  - The benefits of the satellite navigation system, and any potential issues with it and how these would be managed.
  - How further technological developments might impact EMA's plans.
  - How the principles co-exist and how they are being applied.
  - Why the 6% climbing gradient has been applied.
  - Could the 7000 ft upper limit of the lower airspace be increased?
- A few struggle to comment as to whether the design envelopes are comprehensive and would prefer to feedback on specific routes instead.
- It was also pointed out by a couple that the data presented do not seem to capture the whole picture as night flights are not included in them and they do not know if the data represent typical airport operations. They would prefer to see information about the volume of flights to help them to comment on the East Midlands Airport's plans.
- However, most do not have concerns about the process, but they are more interested in the potential impact of the airspace modernisation on local communities, particularly in terms of noise pollution, environment, night flights and local infrastructure.

> ***"The information on the "current" or as-is state is may be a little weak - I can't tell to what extent the data you have shown in terms of traces is or is not typical. (I am talking more about the approach data here rather than departure). More data on current state would be helpful e.g. numbers of aircraft per day / week and at what times - and to what extent they do or do not fit with the typical flight profiles shown. Only from that will it be fair to really assess changes in the new plan. Again the new plan would ideally be illustrated with forecast numbers of aircraft within / without the typical profiles."*** West

# Departures design envelopes

# Participants welcome that design envelopes give consideration to respite and reducing environmental impact by more efficient fuel use

- Participants found the information on how the route envelopes were put together clear and easy to understand.
- They were pleased to learn that spreading the aircraft out over a wider area would be beneficial and offer flexibility to reduce noise and fuel consumption. As mentioned previously, the impact on the local communities is unsurprisingly a priority for them and they would welcome any other suggestions to improve this. This is why some wonder if even a steeper climbing gradient could be introduced, particularly as technology is bound to improve in the coming years and they appreciated that CDA is widely used.
- The above seem to be the reasons why participants do not think that 'do nothing' or 'do minimum' scenarios are viable options.
- They are also keen to learn how new routes would be determined and the impact they would have on the local residents, including the level of consideration given to freight planes, housing and nature.

***"I think that design envelopes are a good idea - the more flexibility the better so as to reduce noise and fuel consumption and to spread the noise pollution around as widely as possible."*** East

***"I understand how the route envelopes have been put together but if a steeper gradient could be used with the potential to reduce noise and fuel burn plus reduce the length of the envelope then would this be the best option?"*** East

***"Do nothing seems a waste of time and effort given acceptance to progress from stage 1. I can see benefits in having design envelopes as this may allow for future changes."*** West

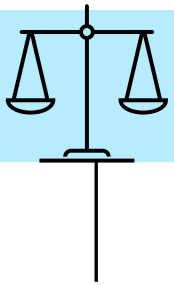
# Design envelopes seem to align with the design principles and should allow for reduced noise and pollution

- On the whole participants agree that design envelopes seem to align with the design principles. But it is often hard to judge, as no specific routes are visible.
- Participants appreciate that the airport aims to design futureproofed envelopes, consider safety as the upmost principle, aim for positive environmental impact by more economical fuel burn and sharing the load. However, the last point raised some concerns if distributing the noise means that new communities would actually be affected by it and if so, this would potentially mean increasing the number of people upset by noise.
- To understand this better, participants would like more information on how this would be managed e.g., what would be the volume of flights per route, how flights would be allocated or rotated to provide respite, and whether this approach would actually allow the airport to increase the number of flights in the future.
- Some would also like to learn how the principles have been incorporated into the proposed envelopes, and whether they give consideration to freight planes.
- Even though the envelopes seem to avoid heavily populated areas, some worry that some places like Derby or Nottingham would still, if not even more, be heavily affected by noise.
- Though they can see the alternative (ALT) envelopes provide an alternative a few worry that this would require aircrafts to fly longer, thus increase noise and waste fuel.

***"These all seem good options, plenty more options and design envelopes compared to current designs at EMA. It provides options to air traffic, the design options also cover pretty much all potential directions, thus can be altered as need be to accommodate for communities, it gives the option to vary flight paths so that not the same community is permanently disadvantaged. Having different options also provide the ability to alter approaches and runways depending on wind directions in case of high winds."*** East

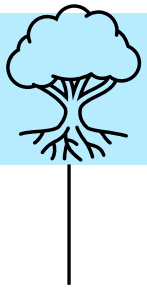
***"It's difficult as when you meet some of the design principles e.g., sharing the load, you endanger another design principle eg. limiting disturbance, as by spreading the load you're disturbing more people. I can see it's a fine balancing act.***
***On the whole, I think the design principles have been well considered."*** West

# Participants think that East Midlands Airport have well captured local factors in their envelopes and they would only further stress importance of some of them



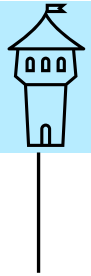
**Fairer distribution**

Some areas are already heavily overflown - desire to protect e.g., Derby, Nottingham, Leicester, Tamworth from any more disruption. Participants also think that places such as hospitals, schools, care homes as well as those already heavily affected by noise from aircrafts, rail and motorway should also be carefully considered. Attention should also be given to highly populated areas and those which are expanding e.g. Chellaston and East Leake.



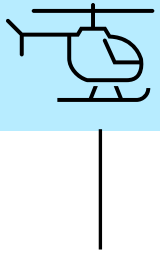
**Wildlife/green spaces**

…consideration should be given to minimising impact on areas that house local wildlife/flora/fauna (e.g., Attenborough Nature Reserve) or provide the community with respite e.g., country parks.



**Historic sites**

Some participants would like to ensure that historic sites are protected from noise and pollution e.g., National Trust and English Heritage sites have been mentioned in particular including Calke Abbey or Melbourne Hall.



**Airfields**

Few participants also mentioned the need to consider local airfields used by e.g., skydivers and smaller and military aircraft, presumably mainly due to safety reasons.

# When asked about respite, participants said that quiet time is crucial at night, followed by weekends and early mornings

- Participants would welcome respite at night as this is the time when noise affects them most and a few suggested that ideal times would be between 11pm-7am or around 00am-6am. However, some others pointed out that this may not work for everyone since people work varied patterns these days.
- If respite at night is not feasible, some participants mentioned that use of more noisy aircrafts (particularly the older ones) should be restricted at night as they cause most disturbance.
- Other important times when they would welcome some breathing space from aircrafts would be early in the morning when people are waking up and at weekends when they would like to relax. A few also mentioned evenings to enjoy quality time.
- Many also like the idea of sharing the load by having spread routes but a few wonder how this would be managed – how flight volume would be defined by route, whether population density would be taken into consideration here, as well as whether a route is under a rural or urban area.
- Some would also welcome fixed respite times so they can plan their activities, though others worry that this may not work for the majority. There was also uncertainty about how changes in those times due to, for example, flight changes or delays would be communicated.

***"I think the level of noise should be in line with the average member of the public schedule. Noise should be kept lower in evenings/early morning when people are sleeping. In addition to this, using multiple routes to share the burden of noise pollution would be preferred."*** East

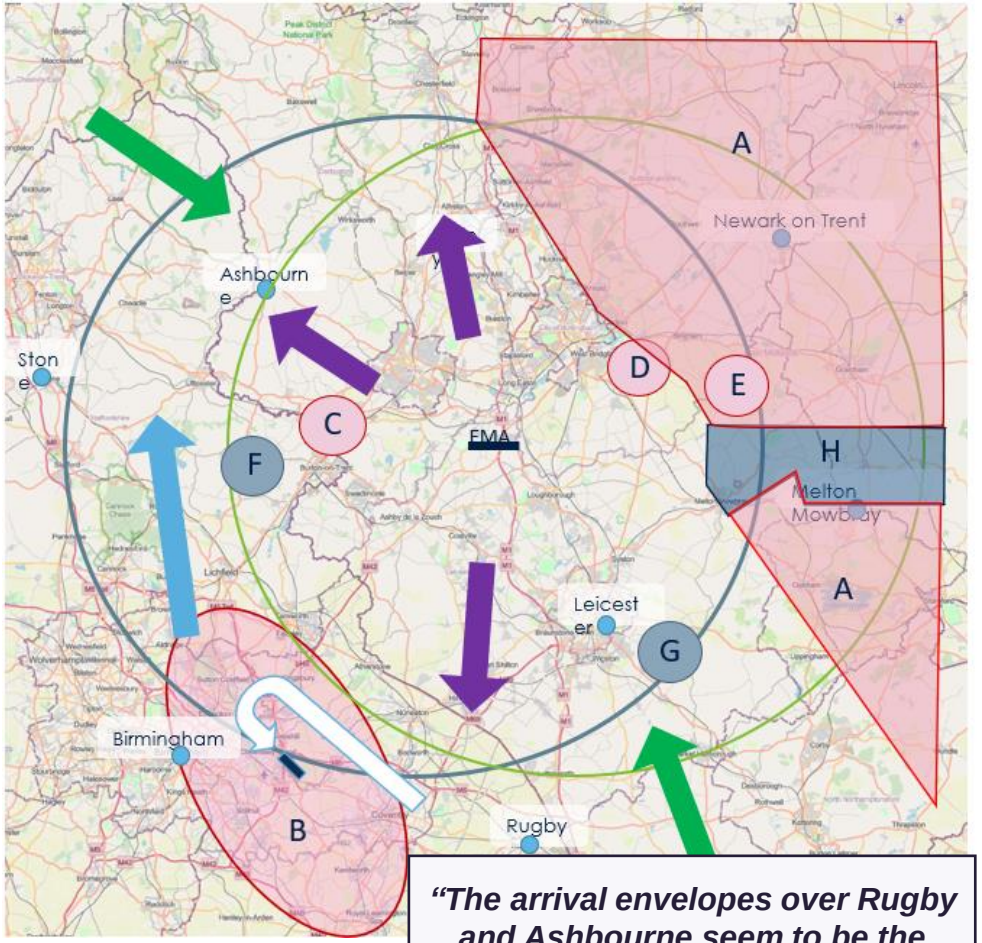
***"Although it seems obvious evening and Sundays with no / almost no flights would be a preferrable model for me if I was in a flight path. I would suggest that it is not an 'either / or' situation. Surely we could have a spread of envelopes AND have reduced time? That really would be the best of both worlds."*** West

***"I'm not saying all flights disturb me, but these older aircraft should not be flying at night when climbing out over residential areas, so for me it is important for periods of no aircraft noise at night... daytime I can just about cope with, especially if the noise is 'spread out' across other routes."*** East

# Arrivals design envelopes

# The constraints were understood, though there was some surprise that such large areas were technically out of bounds

- Participants were, on the whole, satisfied with the information presented to them, and understood that there were certain areas where arrival points could not be placed.
- They understood that this was primarily a safety consideration, and that not having flights from different airports interacting was for the best.
- However, there were some questions as to the large area of ‘uncontrolled’ airspace to the right – is this not ‘up for grabs’ as it is currently not overflown? For example, a few think that expanding to area H could be a good option allowing East Midlands Airport for more varied approaches and a few others wondered if areas C, D and E could also be considered as they think that local economy is more important than local airfields and parachute sites.
- Some wonder why aircraft that only fly up to 2000 ft cannot use the airspace of other airports.
- And there were numerous questions raised about the arrival ‘envelopes’ and how long and wide they will be, reflecting the departure envelopes already shown.



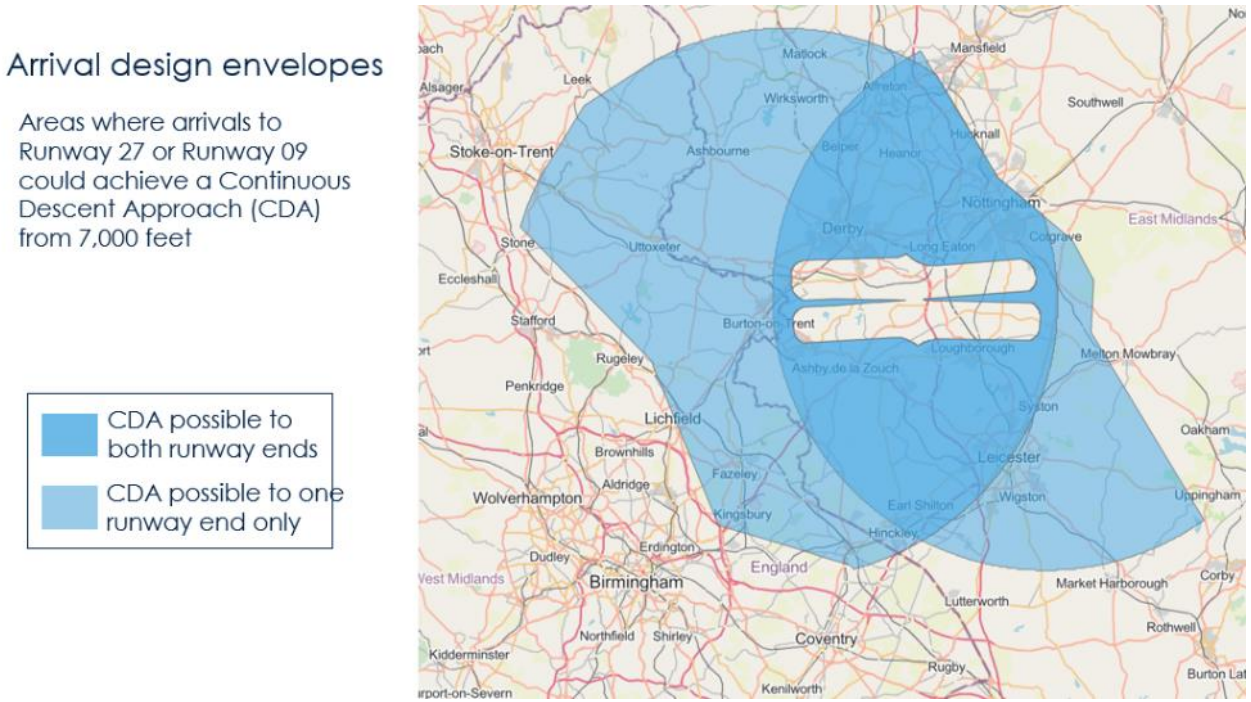

***“The Birmingham Airport area seems to have undue prominence - no Birmingham traffic will be at 7,000 feet overhead, so that would surely be an acceptable approach direction for EMA inbounds about to start a 21- or 25-mile descent?”*** East

***“The arrival envelopes over Rugby and Ashbourne seem to be the only logical conclusions, avoiding the main constraints and considerations.”*** West

YouGov

# The new landscape for arrivals was seen in positive terms, as well as the reliance on CDAs.

- As we have seen in other airspace research, participants were very positive towards the idea of CDAs, they feel that this will provide both noise reduction AND environmental benefits.
- There is an overriding perception that the large proportion of cargo planes arriving into EMA are older, noisier, and more polluting, and a sense that this ‘new’ technology will help to modernise the fleet and be better for local residents.
- Having a single arrival ‘point’ is less valuable for the public – links to efficiency but NOT to noise dispersal…




*“The descent approaches look to have considered ways to cut noise and pollution. It depends on the residents in the design boundary zones I suppose on when landings take place as to how this will affect them regarding noise.”* East

*“Providing that safety is the first principle, these could align with the design principles. They could reduce emissions, meet the technological demands, spread out the flight paths, comply with regulations, avoid noise sensitive locations and reduce noise by varying the flight paths.“* West

YouGov

# The breadth of the design envelopes is reassuring to some, but for others makes it difficult to judge

- On the whole there was enough information being presented to participants to reassure them that the arrivals envelopes do take into account the principles.
- But it is hard to judge for others, as no specific routes are visible.
- This support often came from a position of positivity – **participants see a huge area in which the arrival points could be placed, and they assume a much more dispersed set of arrival routes that currently exist.**

***"The Arrival Design slide makes clear how compromised is EMA for traffic originating anywhere North or East of us. I feel there should be some kickback to the CAA against the status quo which requires this gross inefficiency to our users inbound from those areas.***

***You declared "because they are on PBN routes, the arrivals will not be dispersed across this area as they are today" - why is that? Surely, PBN allows multiple entry points along an arc - do we want to vector all inbound aircraft to the same designated inbound point just because they now have superb navigation capability?***

***Apart from that, yes, you seem to have summarised the design envelopes well."*** East

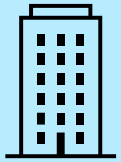
***"I can very much see how area constraints and technology have factored into these designs, and I understand how that relates to safety, PANS OPS rules, connectivity with NATS network, joined up working, and environmental issues. The one thing I remain slightly unclear on though, is how this will impact the local communities, as 'the aircraft will be more concentrated on a specific route or routes that lie within this boundary' seems contradictory to the discussions we had around departures and sharing the load to create less noise disturbance. I look forward to understanding more about what can be done to further limit disturbance on the ground."*** West

# In terms of other local issues there was an appetite for EMA's specific circumstances to be taken into account

**Fleet**
Participants were particularly concerned that particular consideration is given to larger, older, cargo planes – they must be included in the new design and respite provided where possible

**Empty space**
There was a concern that the large area of uncontrolled airspace was simply being written off – could some of it be used for respite?

.



**Densely populated areas**
There was an appetite for the most densely populated areas – namely Derby, Nottingham and Leicester, to be avoided as much as possible in the new flight paths.

**Wildlife/green spaces**
Areas such as the Peak District and Charnwood Forest were mentioned as of particular significance – but there are a number of sites of natural beauty across the East Midlands.

# Final thoughts

# Final reflections and thoughts

- From these two communities there is positivity towards the programme, perhaps more than we have seen in other areas, and a sense that most were happy to approach it with an open mind.
- Most did not consider themselves to be unduly affected by aircraft noise, it is not something they give a lot of thought to, therefore they are happy to take the information at face value, in the hope that it will lead to better outcomes for residents, and better, quieter, more technologically advanced aircraft.
- They see the work that has gone into the design of the principles and are happy to support the idea that EMA is applying the principles to the route design….

# Final feedback (2)

- However, much is still unknown and this positivity is very much provisional – there were some concerns that the information presented is not weighted towards the issues that concern them – night flights, and freight in particular.
- As with other airport residents, they want to be reassured that this is not simply a gateway to a busier airport.
- The information presented in terms of envelopes essentially shows a ‘blank slate’ – but when the canvas is populated and they see individual routes this goodwill and positivity may wane.

July 2022

# East Midlands Airport Future Airspace Research: Stage 2 – develop & assess