



## 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 1 engagement followed the completion of the initial design work undertaken by Osprey. This work identified a set of broad geographical envelopes, from which it will be possible to develop more detailed designs, that will meet the requirements of the identified design principles. There were also broadly defined areas within which it would not be possible to consider detailed designs, for example no fly zones around a gas venting station, as they would not meet the requirements of the identified design principles.
- → Step 2A Phase 2 will consider the route options that can be designed based on the identified envelopes and that respond to the agreed 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 in CAP1616, we went 'above and beyond' in choosing to engage with members of the general public.

This has resulted in two groups of stakeholders that we need to engage 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.

In this report we will focus on the engagement by the Manchester Airport Future Airspace team, with the stakeholders defined in CAP1616, carried out in November/December 2021.



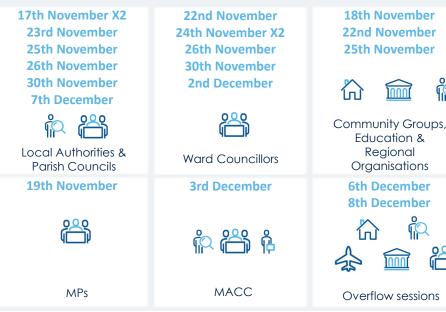
# STAKEHOLDERS ENGAGED





#### Stakeholder Briefing Sessions

- → We offered 26,1.5 hour sessions at 10:00, 14:00 and 18:00 hrs between Wednesday 17<sup>th</sup> November and Friday 10<sup>th</sup> December 2021.
- In all but three sessions, stakeholders were grouped with other persons of their representative area to encourage discussion around likely common themes.
- The sessions were led by the Manchester Airport Future Airspace team and held using the MS Teams platform.
- → Each session included a presentation and the opportunity to ask and receive answers to questions.
- → Stakeholders were able to provide feedback 'real time' through the MS Teams 'chat function' or post session using online surveys or by e-mail.









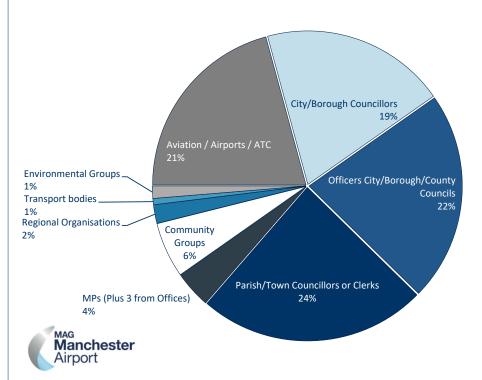


## Stakeholders Engaged

Over 38 hours of meetings, we met with:

- → 154 individuals,
- → Representing 88 organisations/groups.

The table (right) shows the organisations/groups represented.



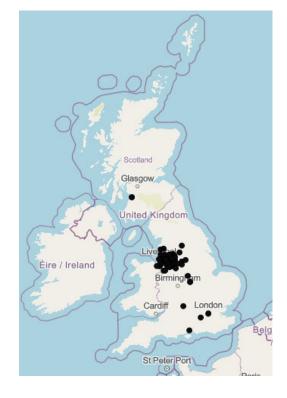
Aviation / Airports / ATC	Parish/Town Councillors or Clerks	MPs & their Offices
BAE Systems (Warton Aerodrome)	Antrobus Parish Council	Member of Parliament for Cheadle
British Gliding Association	Ashley Parish Council	Member of Parliament for Heywood & Middleton
British Helicopter Association	Bamford with Thornhill Parish Council	
City Airport Barton	Chelford Parish Council	Member of Parliament for Manchester Withington
East Midlands Airport	Goostrey Parish Council	
easyJet	Great Budworth Parish Council	Member of Parliament for Wythenshawe and Sale East
Emirates	Great Warford Parish Council	
Federal Express	Henbury Parish Council	Office of the Member of Parliament for Altrincham and Sale West
Jet2.com	High Legh Parish Council	
Leeds Bradford Airport	Knutsford Town Council	
Liverpool John Lennon Airport	Lostock Gralam Parish Council	Officers/Councillors from
Lufthansa Group   Austrian Airlines, Lufthansa, SWISS	Lower Withington Parish Council	City/Borough/County Councils
	Lymm Parish Council	Bolton Metropolitan Borough Council
Mainair Flying School	Mere Parish Council	Cheshire East Borough Council
NATS	Millington Parish Council	Cheshire West and Chester Borough
Royal Air Force	Mobberley Parish Council	Council
Ryanair	Moore Parish Council	Flintshire County Council
Serco/ATC -Hawarden –Airbus	Mottram St Andrew Parish Council	High Peak Borough Council
Singapore Airlines	Nether Alderley Parish Council	Kirklees Council
TUI Airways	Ollerton with Marthall Parish Council	Liverpool City Council
Virgin Atlantic	Over Alderley Parish Council	Liverpool City Region Combined Authority
	Partington Parish Council	Manchester City Council
Community Groups	Plumley with Toft and Bexton Parish Council	Oldham Metropolitan Borough Council
Bowdon Conservation Group	Prestbury Parish Council	Peak District National Park Authority
Cheshire CPRE	Rostherne Parish Council	Rochdale Metropolitan Borough Council
Hale Civic Society	Shevington Parish Council	Salford City Council
Heald Green and Long Lane Ratepayers Association	Snelson Parish Council	Sheffield City Council
	Tabley Parish Council	St Helens Borough Council
Manchester Airport Consultative Committee	Warburton Parish Council	Staffordshire Moorlands District Council
	Wincham Parish Council	Stockport Metropolitan Borough Council
National Trust, Quarry Bank		Tameside Metropolitan Borough Council
	Environmental Groups	Trafford Metropolitan Borough Council
Regional Organisations	Cheshire Wildlife Trust	Warrington Borough Council
Halton Chamber of Commerce	Greater Manchester Green City Region	West Lancashire Borough Council
Marketing Lancashire	Partnership	
Stockport Youth Council		Transport Bodies

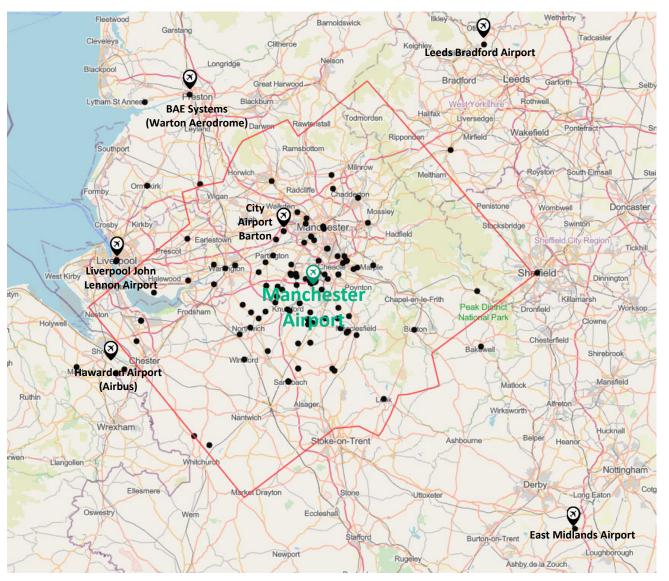
## Stakeholders Engaged

The red line shows the 'Potentially Affected Area' - the area which may be affected by this airspace change depending on its development.

The black dots mark the postcode of the representatives we met during this phase of

engagement.







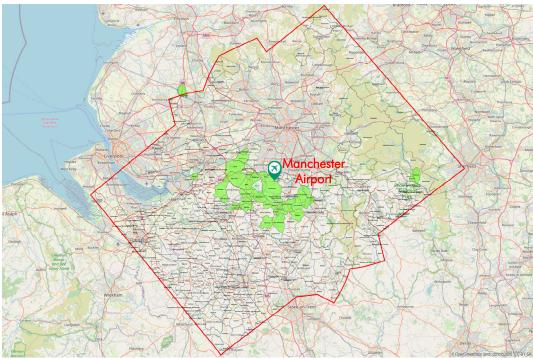
## Stakeholders Engaged

The red line shows the 'Potentially Affected Area' - the area which may be affected by this airspace change depending on its development. All District and Parish/Town Councils, within the red line, were invited to participate.

The District Councils whose Officers/Councillors participated in engagement are coloured green.

The Parish/Town Councils whose Clerks/Councillors participated in engagement are coloured green.



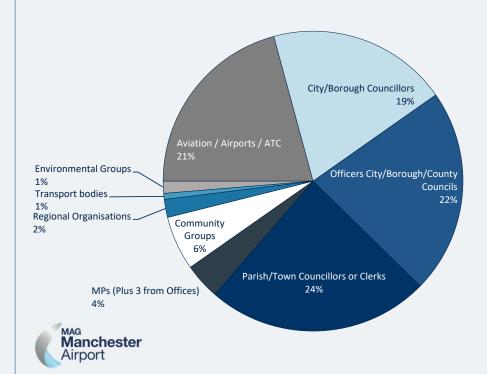


#### Stakeholder Responses

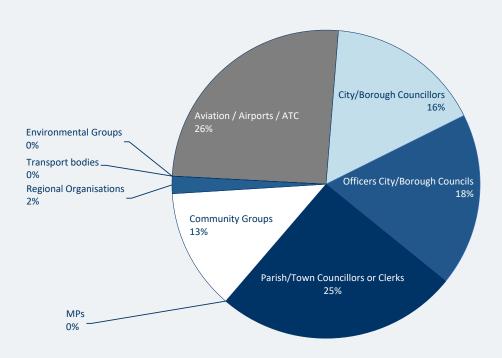
We took four feedback responses through 'chat' in the engagement sessions and received 52 replies through the online surveys and three e-mail responses.

In total, responses from 59 individuals were received.

#### Breakdown of Stakeholders Engaged



#### Breakdown of Stakeholders who Fed Back



# CONSTRAINTS





## Constraints and Boundary – Feedback

Stakeholders were shown visuals (like the one shown right) detailing the constraints that created the boundary for the route envelope design, this prompted the following feedback themes and questions:

- → Overall, stakeholders understood and accepted the constraints.
- → Queries included:
  - Have new developments and local plans been considered?
  - How have other airport's airspace change proposals been factored in?
  - How are you engaging with other change sponsors? Airports mentioned included City Airport (Manchester Barton), Liverpool John Lennon Airport, Leeds-Bradford Airport and Hawarden Airport.
  - Have other airspace users been considered? Such as general aviation, helicopters and emergency services?
  - However, some questioned if our approach was limited i.e. could some of the identified constraints be overcome?
    - ✓ Camphill gliding airspace (to the east marked '3' in the illustration above).
    - ✓ Daventry (to the southwest marked '4' in the illustration above).





Taking account of the identified constraints and design considerations, have we identified design envelopes for departures that align with our design principles?

✓ 87% of respondents felt that we had.

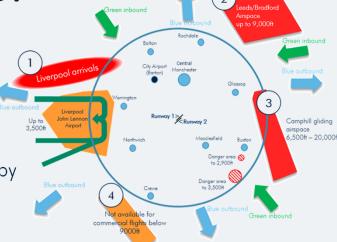
#### Those that felt we had not cited:

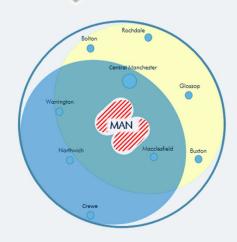
+ "I question whether more people aren't going to be impacted by noise".

\* "It looks like you're 'expanding routes' instead of 'following design principles' by keeping legacy airspace".

- \* "My observation is that the 'Noise' consideration has not been given sufficient focus".
- \* "The area above Moore (Parish Council, just east of Runcorn) is heavily used by arriving Liverpool traffic, your assessment located Liverpool arrivals further north, this is incorrect".
- → "Conflict with current and proposed Liverpool John Lennon Airport inbound".
- → "Conflict with Doncaster Sheffield Airport 'UPTON' Departures".





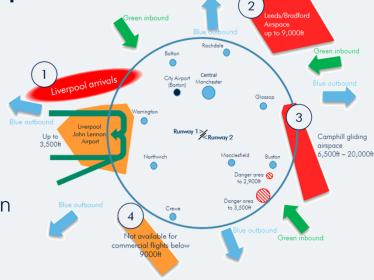


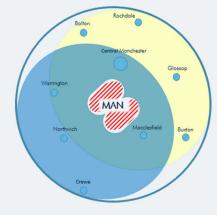
Taking account of the identified constraints and design considerations, have we identified design envelopes for arrivals that align with our design principles?

√ 95% of respondents felt that we had.

#### Those that felt we had not cited:

- → "Conflict with current and proposed Liverpool John Lennon Airport inbound".
- → "In many ways but there is no defining the constraint of overlapping the CDA areas as shown".

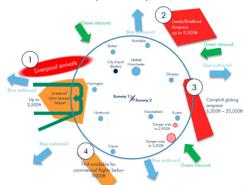






# Arrivals/departures constraints identified or commented upon in response to questions 1 and 5?

→ Other airports -particular concerns were raised relative to:



- ✓ Liverpool John Lennon Airport arrivals.
- ✓ Collaboration on MAN departures/LVP arrivals and NATS is essential.
  - However, rather than a constraint this should be a consideration.
- ✓ Doncaster Sheffield Airport 'UPTON' departures.
- ✓ Ensuring continued alignment between MAN westbound departures/eastbound arrivals and CEG Runway 22 arrivals.

from LVP

from NATS

from LVP

from CEG Hawarden Airport

- Area 2 (as shown above) The ability for departure routes above the Leeds airspace could be predicated on a continuous climb or a potentially a SID level which terminates above Leeds airspace and again should be considered as a NATS constraint but MAG having cognisance/consideration of the area.
- Area 3 (as shown above) Whilst unlikely to be of use for departures the main area of Camphill sits within the NATS airspace environment constraint and there are procedures which exist to accommodate the limited activation up to FL100 and extremely limited activation up to FL190.
- Area 4 (as shown above) There is also a parachute area (Tilstock) which is activated at regular periods (weekends) often up to FL 100 and occasionally FL110. From a NATS perspective we would suggest that area to the SW (Area 4) becomes a NATS constraint where either we will consider the use of new CAS or procedures which overfly this area. MAG should have cognisance of the area.
- → Bowland Forest Gliding Club and Denbigh Gliding (based at Lleweni Parc Airfield) fly cross-country tasks close to the areas proposed to be used.
- The revised departure envelopes are closer in proximity to East Midlands Airport but, at this stage, are outside of the EMA proposed red line boundary. The EMA departure and arrival routes may be a factor should the positioning of the 'DAYNE' arrivals stack be moved further to the southeast or closer in proximity to EMA.



from EMA

# Overall, have we identified design envelopes that align with the design principles?

"As the envelopes did not yet allow for environmental issues such as flying over built up areas, or heights and ground noise estimates we cannot comment on this overall compliance to design principles".

-The Campaign to Protect Rural England

"We suggest that you adopt a 'robust' approach going forward i.e. compliance with all the defined design principles".

- Goostrey Parish Council

"All seemed sensible and designed to reduce the overall impact to the same residents by option of selecting alternative pathways to share noise levels".

-Cheshire West & Chester Council

"Based on the presentation, video and other reference material we would agree that the design envelopes presented do align with your 'must have' design principles (Safety, Policy and Capacity)".

- The British Gliding Association

"Given the obvious constraints it appears to me that the design envelopes are aligned with the principles".

- Manchester Airport Consultative Committee





# Within the design envelopes, are there any local factors we should be aware of when designing routes?

## Geographical specific to be avoided

Tatton Park
Lyme Park
The Peak District National
Park
Tandle Hills Country Park
Cheshire Sandstone Ridge
Development of Partington
Royal Oldham Hospital
Jodrell Bank
Petrochemical sites in the
Wirral

## Types of area/place to be avoided

Schools
Residential areas
(rural and populated areas)
Areas of Outstanding
Natural Beauty, tranquil
and rural areas
Cultural & historic areas
Hospitals
New residential homes
developments

## Geographical specific to be overflown

Tatton Park

## Types of area/place to be overflown

Use of routes in heavy traffic (motorway) & areas of no population
Less populated rural areas

"the new Carrington Gas-fired Power Station".

-Warburton Parish Council

"Two of the envelopes go directly over Jodrell Bank Observatory which sits in the Goostrey Parish. We request that the Future Airspace Consultation team consult with the Manchester University (and actually receive a reply) to ensure the proposed design envelopes (and likely flight paths) do not impact the work they are doing".

-Goostrey Parish Council

"Ground rises to the East of MAN to 2,000ft amsl. Hence heights AGL are 2000ft less than those referenced in the documentation. This needs to be factored in when considering noise, particularly considering that noise levels are inversely proportional to the square of the height AGL".

-Community Group Representative



"The HS2 Route".

-Plumley with Toft & Bexton Parish Council and an Officer of Cheshire West and Chester Borough Council "Potential future developments of wind turbines".

-A Cheshire East Borough Councillor

## DEPARTURE ENVELOPES





If we were to replicate our current routes (do-minimum scenario) how could we improve them?

→ 13 responders felt no improvements needed/necessary.

#### Popular Responses

- ✓ "Increase the rate of climb".
- ✓ "Increase the size of aircraft permitted to use westerly LISTO Routes".
- ✓ "Spread aircraft across PNR".
- ✓ "Reduce spread across PNR".
- ✓ "Allow earlier turns where possible".
- ✓ "Return unused airspace to 'Class G'".

#### Other Responses

- ✓ "Widen the PNRs".
- ✓ "Use RNAV waypoints (overlay procedures)".
- ✓ "Review noise limits and sound insulation offered".

Manchester Airport "Only allow most up to date planes".

- Mere Parish Council

Easterly Gopartures

Runway 1

Runway 2

Runway 1

Runwa

"A key point, the design principles include a reduction in emissions initiative - these are not included in the 'do-minimum scenario'. Given the ambitions of COP-26, it is pivotal that the emissions initiative is included in any plans".

- Goostrey Parish Council

"Your current routes avoid areas of population. This should be retained. Technology/satellite guidance should be used to improve the flow within the existing routes".

- Moore Parish Council

"the new system should prioritise environmental considerations over everything else".

- Stockport Youth Council

"This (do minimum) remains a sub optimal approach. It is worth working through as a middling benchmark with which to compare the best option".

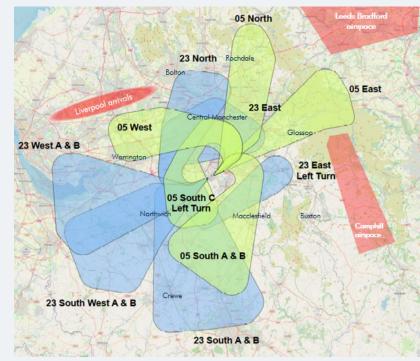
- A Stockport Metropolitan Borough Councillor

Is there any other feedback on the initial options of envelopes

identified?

→ A large number of respondents were concerned that the duplicate design envelopes (05 South C left turn and 23 East left turn) caused an unfair share of traffic.

- → Densely populated areas encompassed by these envelopes (Altrincham, Sale and Stretford).
- → It appears proposed envelopes cover more of the Manchester City Centre, South Manchester and parts of East Manchester than current typical flight paths.
- → The introduction of simultaneous departures to the same fixed base, such as the '23 East' and '23 East Left Turn', could lead to complexity 'en-route' as aircraft arrive at similar/same fix at the same time. Unless these were considered as a 'respite' options?
- ✓ Consideration should be made of 'High performance SIDs'.



"I think the areas have been identified. I would like to see how this fits in with Liverpool and Prestwick before more detailed design is undertaken".

- NATS



"The options were broadly as I anticipated, well researched and argued".

- A Stockport Metropolitan Borough Councillor

# Is there any other feedback on the initial options of envelopes identified? - Airport feedback.

- → 05 West the proposed departure swathe has the potential to conflict with the LVP current and proposed inbounds from the east.
- → 05 East the proposed departure swathe has a potential conflict with the DSA 'UPTON' departures for both Runway 02 and Runway 20.
- → 23 West the proposed departure swathe has the potential to conflict with all LVP Runway 27 arrivals and 09 departures. If the swathe is to be considered the more detailed design route should be as far south as practical within the defined swathe.
- → 23 Southwest the proposed departure swathe has the potential to conflict with all LVP Runway 27 arrivals from the south and 09 departures to the south. If the swathe is to be considered the more detailed design route should be as far southwest as practical in the defined swathe.
- → 23 North the proposed departure swathe has the potential to conflict with the current and proposed LVP arrivals. If the swathe is to be considered further the route needs to be to furthest east as practical within swathe.
- → 23 South the proposed departure swathe has the potential to conflict with the current and proposed LVP arrivals from the southeast.
- The revised departure envelopes are closer in proximity to East Midlands Airport but, at this stage, are outside of the EMA proposed red line boundary. The EMA departure and arrival routes may be a factor should the positioning of the DAYNE arrivals stack be moved further to the South East or closer in proximity to EMA.
- → Ensure continued alignment between MAN westbound departures/eastbound arrivals and CEG Runway 22 arrival.

"Given these serious concerns that we have expressed on several occasions Liverpool John Lennon cannot support the Manchester Airspace Change Proposal at this stage".

-Liverpool John Lennon Airport

from LVP

from LVP
but relates to DSA

from LVP

from LVP

from LVP

from LVP

from EMA

from CEG

# ARRIVALS ENVELOPES





Is there any other feedback on the initial options of envelopes identified?

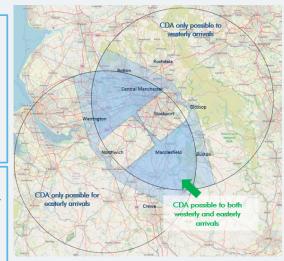
- → On the Peak District National Park Your presentation indicated arrival descents could be on shallower angle and this would be more fuel efficient. However this would reduce the height over protected landscapes potentially in conflict with CAP1616, which refers to height rather than ground level noise as the metric.
- → The CDA areas highlighted slide 36 of 40 suggests a tight turn to line up on the runway.
- ✓ Seems to be a logical spread of routes given the constraints posed by other airfields and protected airspace.
- ✓ Enable RNAV waypoints (overlay) option.

"There is no indication within the documentation of what type of arrival structure would be used although the use of existing holds and locations are referenced".

- NATS

"The only area of concern for me is the integration of Hawarden Runway 22 arrivals with Manchester Runway 05 arrivals".

- Hawarden Airport



"Prior to this phase of engagement, there were different assumptions on arrival delays which impacted the potential designs for departure options for EMA. Since MAN have restarted their ACP ahead of EMA, we can see that these assumptions have changed. This is a positive step as the former would have restricted current and future design options".

- East Midlands Airport

"Current procedures (particularly the ROSUN arrival & arrivals via L975) can force LBA arrivals from the south and west to be left far too high. It's vital that our subsequent procedures are co-ordinated thoroughly via ACOG to ensure that neither airport is adversely impacted".

Leeds-Bradford Airport



".....pleased with them and will be happy to commend them to our elected members and residents".

- A Stockport Metropolitan Borough Councillor

## Are there any comments/feedback on the do-nothing scenario? If we were to replicate our current routes (do-minimum scenario), how could we improve them?

- Two responders felt no improvements were needed/necessary.
- ✓ Many responders felt change was essential.
- ✓ "Ensure all follow CDA procedures".
- √ "The locations of the holds could be amended to provide improved departure profiles".

"The status quo has worked well for us in the past but is outdated. Tinkering with it denies us the full opportunity to mitigate climate change as much as possible. We should commit to improved technology and path management which will deliver a more streamlined and efficient service with benefits to the flying public, freight operators and residents on the ground".

"Doing nothing will leave the airport behind in terms of SESAR and the technologies it brings. I doubt it would be

an efficient operation for the customer if we do-nothing".

- A Stockport Metropolitan Borough Councillor

"I do not feel that replicating current arrival routes would be the best solution. This opportunity to amend the routes is one that should be taken to improve the use of airspace especially for arrivals".

- Manair Flying School

"Again, mitigate noise and fuel consumption as far as practicable".

- Stockport Youth Council

"This airspace change needs to be future proofed to take into account such innovations".

- Liverpool City Region Combined Authority

"The only area of concern for me is the integration of Hawarden Runway 22 arrivals with 05 arrivals. The existing arrangement works fine".

- Hawarden Airport

"I believe the do-minimum scenario is the right direction, given green policy going forward, we must reduce flights not expand them and I don't believe Manchester Airport needs extra capacity. The amount of business travel companies are doing is certainly being reconsidered".

- Ollerton with Marthall Parish Council

-NATS



# OVERALL FEEDBACK





#### General Feedback

"Current traffic structures keep the routes separated at Manchester and East Midlands Airports. Bilateral meetings will become an important factor to understand EMA constraints and identify where conflicts with MAN might occur, with the aim of reflecting solutions in both airports design options".

-East Midlands Airport

"We are supportive of the approach you are adopting with this Airspace Change Proposal both in terms of the stakeholder engagement you are facilitating and in your Design Principles".

-The British Gliding Association

"The Airport has identified priorities within the design principles (the 'must-have' principles of Safety, Policy and Capacity) however it is not clear the extent to which these have been prioritised over the principles of Noise (N1, 2, 3) and Emissions. This should be clarified and quantified to be able to make an informed response on how much the proposed design envelopes align with the principles, and any potential adjustments that could be proposed".

-An Officer Manchester City Council

"The proposed design envelopes comply with the objectives set out in the Design Principles".

-Goostrey Parish Council

"In general, as this is a highly technical matter and the information provided so far by the MAG is high level and in parts incomplete, it is not possible to fully comment on the proposals and we would therefore appreciate the opportunity to continue to be closely engaged by MAG in the development of the Future Airspace project. With more knowledge and information through a direct discussion, we would be able to then have a more informed position, including considering how and when residents, stakeholders, businesses and members should be engaged/briefed".

-An Officer Manchester City Council

"When property is purchased it comes with an amenity value- i.e. landscape or noise levels. A principle of planning law is that the "amenity" of a person's property cannot be affected by new infrastructure without compensation".

-The Campaign to Protect Rural England



#### General Feedback

"It is necessary in future consultations/presentations to state what in the past (and is estimated for the future) the % usage of the corridors has been or is likely to be. I.e. will the % utilizations of each corridor for take-offs be restricted in the future to control/spread out noise nuisance?".

-Bowdon Conservation Group

"-Balance of Noise/Fuel Efficiency:

CAP1616 para.B29 states

- 1) Fuel consumption is the priority above 7,000ft and noise not a priority
- 2) Noise is the priority below 4000ft and fuel is not a priority
- 3) Noise is the priority between 4,000 and 7,000ft except when there is a disproportionate increase in fuel usage

It is not clear that the current design reflects this and currently it appears that fuel efficiency or airport capacity is being prioritised rather than noise and disturbance".

-The Campaign to Protect Rural England

"In line with the Airspace Design Principle look at areas of underutilised CAS with a view to either returning them to Class G or adopting some sort of Flexible Use of Airspace approach where that is achievable. Areas that spring to mind from current usage are to the south west and north east. Explore ways that would allow a corridor of Class G between Manchester and LBA CAS of sufficient dimensions to allow NW/Peak District cross-country gliding transits".

-The British Gliding Association

"The proposed design envelopes comply with the objectives set out in the Design Principles".

-Goostrey Parish Council

"....as part of the Airspace project, MAG should demonstrate to stakeholders any potential impacts of the proposed airspace designs, the nature of these impacts on matters of interest to stakeholders (including but not limited to, noise, emissions, visual amenity, environmental matters such as ecology, biodiversity, habitat and wildlife, and Greater Manchester and Manchester plans for growth and development), and how the Airport Future Airspace Project will avoid negative impacts or mitigate any potential negative impacts in relation to these matters".

-An Officer Manchester City Council



# OUR APPROACH TO ENGAGEMENT





#### Comments

Overall feedback to the approach, description of process and level of detail was very positive, see chart right. Below are a selection of comments we received.

#### Positive feedback:

- \* "The presentation was an excellent summary and explained how safety and capacity factors created the options. The team is to be congratulated on making a highly technical subject understandable".
- \* "Thank you. I particularly appreciated the detailed explanations of what is quite complex information for a lay person".
- \* "I found your presentation on the future airspace project very interesting and also explained in a clear and understandable way".
- \* "Thank you for your time, it was very informative and I imagine difficult to get all the detail across".
- → "Details are very interesting and..... explained expertly".

#### Criticisms:

- \*I think its almost being blinded by science some of this stuff and I don't think you have broken it down enough for ordinary people to understand".
- \* "Whilst much of the session was useful, quite a bit of it was above my understanding and more suited to aviation professionals".
- \* "The information provided so far by the MAG is high level and in parts incomplete, it is not possible to fully comment on the proposals".

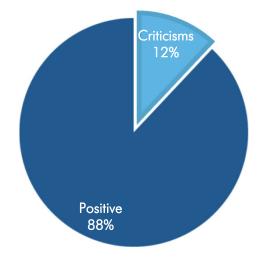
A Community Group Representative

A Parish Councillor

A City Council Officer

A Parish Councillor

A Town Councillor



A Community Group Representative

A Borough Councillor

A City Council Officer

# CONCLUSION





#### Conclusion

The approach to the engagement piece was well received by the majority of stakeholders that attended the sessions. We have received feedback from 38% of stakeholders engaged with.

During engagement we have noticed two particular trends with regards to the design principles:

- → Queries over the 'hierarchy' of the design principles.
- The design principles Noise and Emissions have been cited, by many, as just as important as the 'must-have' design principles identified.

#### Constraints and considerations:

- → New constraints and considerations have been identified by stakeholders. What is interesting is the difference of opinion between stakeholders on these considerations and constraints, it is very much dependent on who you speak to.
- → NATS have provided some useful guidance on what should be classed as a consideration and what should be classed as a constraint based on our original assumptions.

Liverpool John Lennon, Doncaster Sheffield, East Midlands, Leeds Bradford and Hawarden Airports:

This engagement has listed issues with LVP, DSA, EMA, LBA and CEG, but continuing to work bi-laterally with the airports, NATS and ACOG, these issues can be progressed collaboratively.

#### Do-Nothing/Do-Minimum:

→ The general consensus from stakeholders is for change over 'do-nothing/do-minimum'.

The engagement has generated a number of questions/actions to be resolved and for some work to be completed as we move into phase two. We have listed these points in an 'action list' and they will be attended to before and as we move in to phase two.