All Phase one engagement Stakeholder Feedback Report

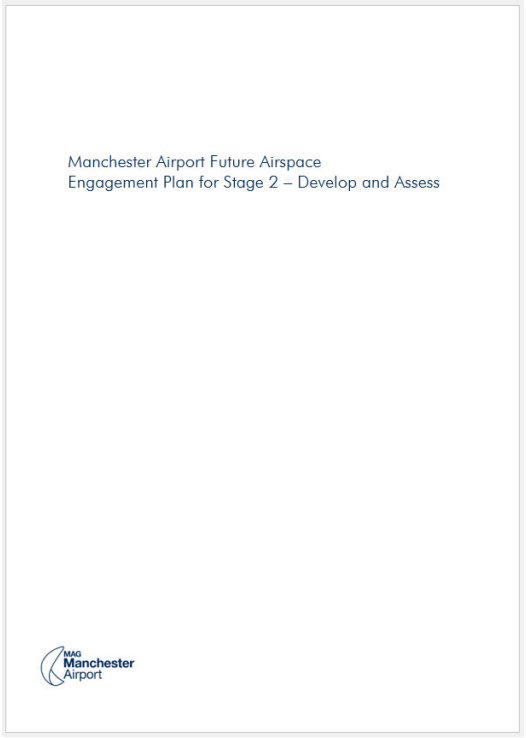
CAP1616 Stage 2 Develop and Assess

January 2022

MAG Manchester Airport

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:



- **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.

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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 the engagement undertaken by Manchester Airport Future Airspace team (with the stakeholders defined in CAP1616) and with that of YouGov (with the general public).

All engagement was carried out in November and December 2021.

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CONSTRAINTS

Stakeholder feedback

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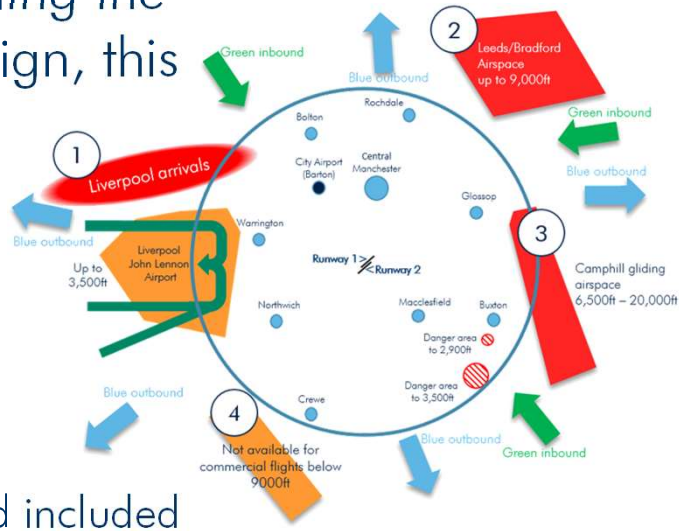
Constraints and Boundary – Feedback

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 raised 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 south-west marked '4' in the illustration above).

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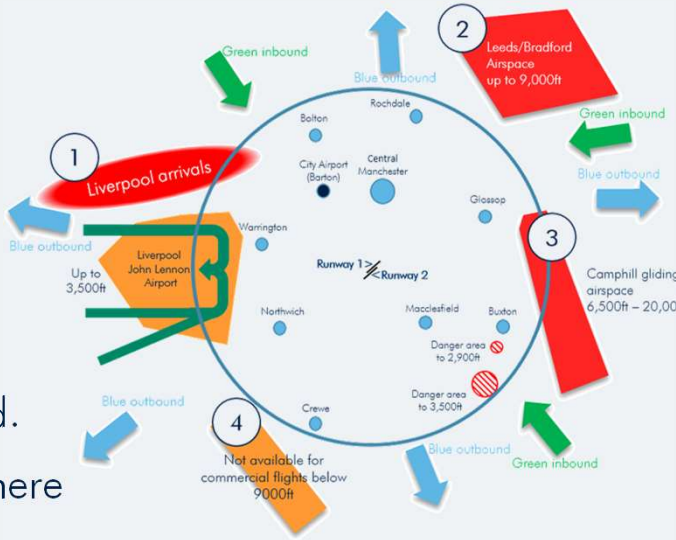
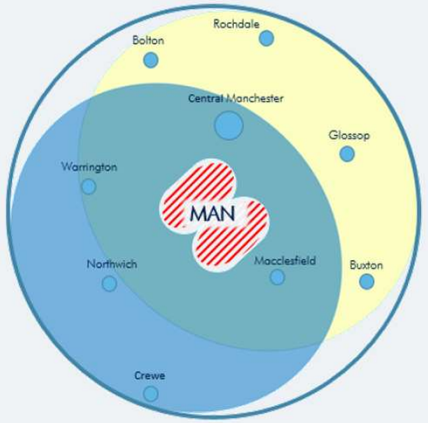
Taking account of the identified constraints and design considerations, have we identified design envelopes for departures and arrivals that align with our design principles?

- ✓ The majority of respondents felt that we had.

Concerns cited:

- ✈ It was accepted that the constraints/design considerations met the three 'must have' design principles. It was also accepted that there was cognisance of the remaining design principles but concerns have been raised as to the status (hierarchy) of the remaining principles and how options would be assessed against them. – Design principles Noise and Emissions in particular, were cited.
- ✈ Although design principles Safety and Policy were agreed to be 'must haves' there was disagreement as to whether design principle Capacity was a 'must have' (particularly if it meant increased capacity).
- ✈ Conflict with current and proposed Liverpool John Lennon Airport operations.





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

From NATS

- Bowland Forest Gliding Club and Denbigh Gliding (based at Lleweni Parc Airfield) fly cross-country tasks close to the areas proposed to be used. — from BGA British Gliding Association
- 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. — 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

"It's a given that safety is primary in the design process, but I am concerned about wider issues of safety e.g., emissions, noise pollution and an increase in air traffic in general… How will these issues be addressed in the longer term?".
–Zone 6 YouGov respondent

"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

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

"There are conflicts in the principles. i.e. "Our route designs should seek to minimize the number of people affected by noise" and "our route designs should avoid… tranquil or rural areas".
–Zone 1 YouGov respondent

"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

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

Geographical specific to be avoided	Types of area/place to be avoided	Geographical specific to be overflown	Types of area/place to be overflown
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	Schools Residential areas (rural and populated areas) Areas of Outstanding Natural Beauty, tranquil and rural areas Cultural & historic areas Hospitals New residential homes developments	Tatton Park	Use of routes in heavy traffic (motorway) & areas of no population Less populated rural areas

"I think it's important to consider where already gets a lot of air traffic and ensure that the air traffic isn't increased".
-Zone 4 YouGov respondent

"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

"....the design of any new envelopes should try to avoid flying over new areas as far as possible".
-Zone 5 YouGov respondent

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DEPARTURE & ARRIVAL ENVELOPES

Stakeholder feedback

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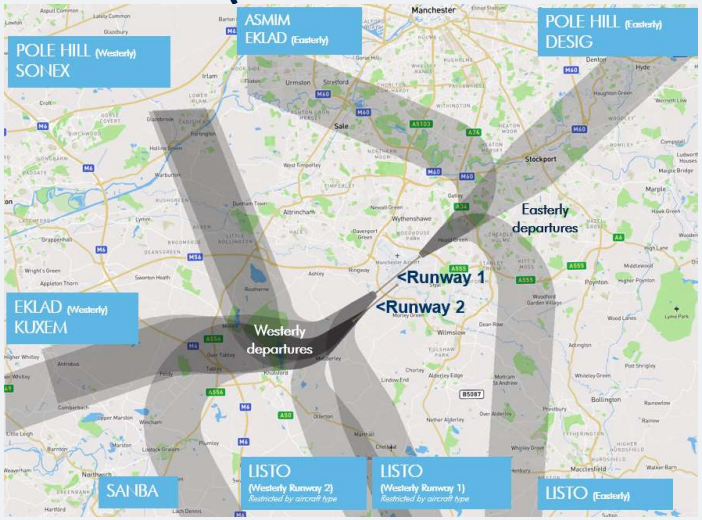
If we were to replicate our current departure routes (do-minimum scenario) how could we improve them?

- There is a strong desire to capture the environmental/efficiency benefits available from new technology. There is therefore a recognition that change is preferential to 'do-nothing' or 'do-minimum'.

If 'do-minimum' were the outcome below are the improvements suggested



Popular Responses

- ✓ "Increase the rate of climb"
- ✓ "Increase the size of aircraft permitted to use westerly LISTO routes"
- ✓ "Spread aircraft across PNR"
- ✓ "More fairly share traffic between Routes or provide respite"
- ✓ "Reduce spread across PNR"
- ✓ "Allow earlier turns where possible"
- ✓ "Return unused airspace to 'Class G'"

"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

"Only allow most up to date planes".
– Mere 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

Other Responses

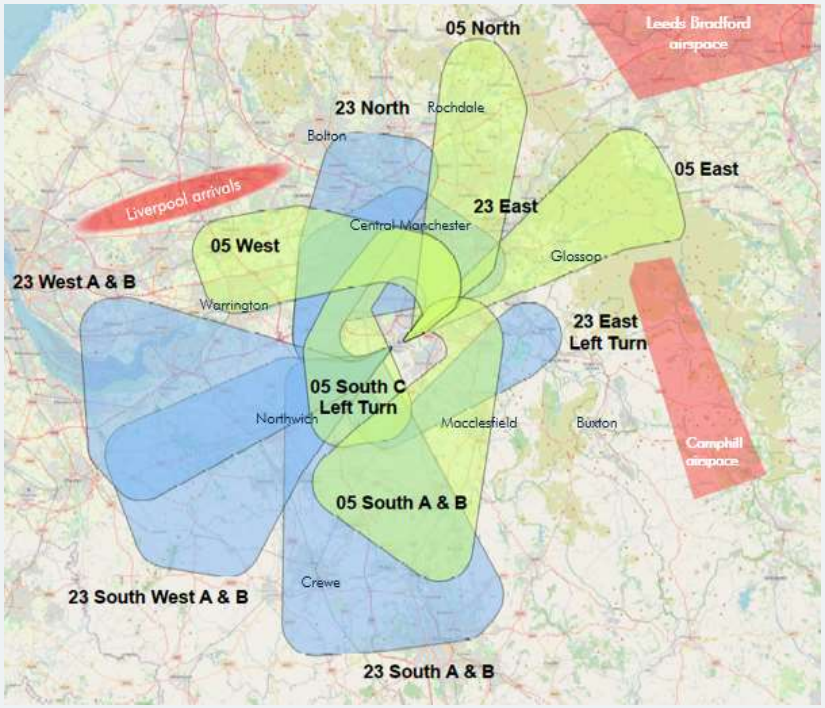
- ✓ "Widen the PNRs"
- ✓ "Use RNAV waypoints (overlay procedures)"
- ✓ "Review noise limits and sound insulation offered"

"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 are encompassed by these envelopes, particularly the easterly departure envelopes.
- ✈ It appears the 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?
- ✈ 'Respite' and options for a 'fairer' distribution of aircraft need to be included within the options developed.
- ✓ 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

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

- ✈ There is a strong desire to capture the environmental/efficiency benefits available from new technology. There is a recognition that change is preferential to 'do-nothing' or 'do-minimum'.

If 'do-minimum' were the outcome below are the improvements suggested:

- ✓ "Ensure all follow CDA procedures"
- ✓ "The locations of the holds could be amended to provide improved departure profiles"

"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 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".
– A Stockport Metropolitan Borough Councillor

"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".
– NATS

"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

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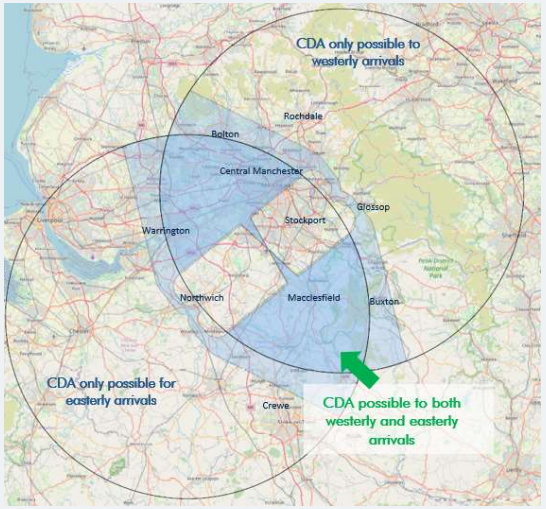
Is there any other feedback on the initial options of envelopes identified?

- ✈ 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

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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. — from LVP
- 05 East - the proposed departure swathe has a potential conflict with the DSA 'UPTON' departures for both Runway 02 and Runway 20. — from LVP but relates to DSA
- 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. — from LVP
- 23 South-west - 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 south-west as practical in the defined swathe. — from LVP
- 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. — from LVP
- 23 South - the proposed departure swathe has the potential to conflict with the current and proposed LVP arrivals from the south-east. — from LVP
- 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. — from EMA
- Ensure continued alignment between MAN westbound departures/eastbound arrivals and CEG Runway 22 arrival. — from CEG

> *"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*

OVERALL FEEDBACK

Stakeholder feedback

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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

"The proposed design envelopes comply with the objectives set out in the design principles".
–Goostrey Parish Council

"The key point is that the airspace needs to be modernized, routes will be redesigned, and emissions will be reduced, planes will be on time and not delayed either incoming or outgoing. Also, noise pollution has had to be looked at so residents close to the airport are inconvenienced as little as possible".
–Zone 5 YouGov respondent

"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 full 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

"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

"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

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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

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Areas outside the scope of the Manchester Airport Future Airspace project

A number of stakeholders raised concerns and suggestions that are outside the scope of the Manchester Airport Future Airspace project. These are listed here without comment, just an acceptance that they are outside the review of this project:

- A feeling that growth, in terms of numbers of flights, was being taken for granted and would be facilitated by the airspace change process without adequate scrutiny as to whether such growth was desirable from an environmental perspective.
- Concern about the hours of operation. A number of suggestions that flights should cease overnight.
- The Sound Insulation Grant Scheme should be reviewed and extended to more dwellings.
- Noise/environmental penalties should be reviewed and tightened.
- A desire (from some) for a curved approach when arriving from the south-west (to avoid Knutsford).

CONCLUSION

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Conclusion

The approach to the engagement piece was well received by the majority of stakeholders engaged by MAG and YouGov.

During the engagement concerns have been raised around the design principles:

- The 'hierarchy' of the design principles.
- Design principles Noise and Emissions have been cited, by many, as just as important as the 'must-have' design principles identified.
- There is recognition that at this 'envelope' stage it is only possible to ensure the three 'must have' design principles are met and simply recognise the others have been considered. - There is a lot of interest in how options will be evaluated against all design principles.

It is intended that addressing these issues become part of our 'you said, we did' actions (see overleaf).

Constraints and considerations:

- The DAVENTRY and CAMPHILL areas were listed as constraints to the Manchester Airport process, this has been challenged. As a result of this process these areas will now become considerations to Manchester Airport.
- Other gliding areas (and cross-country routes) have been highlighted, geographical areas, features have been brought to our attention for our airspace designers to consider to consider

It is intended that these issues will be addressed as part of our technical action list (see overleaf).

Conclusion continued

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:

- ✈ There is recognition that airspace needs to be revised.
- ✈ The consensus is for change over 'do-nothing/do-minimum'.

There is a great desire to see improvements realised in efficiency, safety, noise and aircraft emissions and recognition that airspace change will facilitate these improvements.

The engagement has generated two action lists:

1. A technical list of actions, considerations, changes and guidance to assist them develop route options.
2. A 'you said, we did' list. The 'you said, we did' is a recognised model of engagement. Using this model will provide a transparent reference that will enable action to be shown in phase two of our engagement and beyond.

The lists will have been formed; some actions will be resolved, some work completed and other issues carried forward as we move into phase two.