CAA CAP 1616 Options Appraisal Assessment (Phase I Initial)

Title of Airspace Change Proposal:	Modernising Midlands Airspace		
Change Sponsor:	NATS		
ACP Project Ref Number:	ACP-2025-013		
Case study commencement date:	13/02/2026	**Case study report as at:**	27/02/2026

Instructions

To aid the SARG project leader's efficient project management, please highlight the "status" cell for each question using one of the four colours to illustrate if it is:

Resolved - GREEN Not Resolved – AMBER Not Compliant – RED Not Applicable - GREY

Guidance

The broad principle of economic impact analysis is **proportionality**; is the level of analysis involved proportionate to the likely impact from that ACP There are three broad levels of economic analysis; qualitative discussion, quantified through metrics, and monetised in £ terms. The more significant the impact, the greater should be the effort by sponsors to quantify and monetise the impact.

1. Background			**Status**
1.1	Has the change sponsor considered the initial options appraisal against the statutory factors and where applicable, government policy that the CAA is required to consider? [CAP1616f: 3.50-3.53]	Yes, the change sponsors IOA considers the government's ANG 2017 during both DPE and IOA exercises, ensuring that impacts that are assessed are aligned with the altitude-based priorities and the overall options being cognisant of the future MTMA / LTMA modernisation projects.	☒ ☐ ☐ ☐

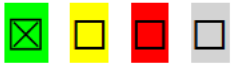
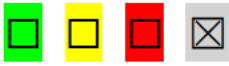
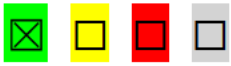
1.2	Has the change sponsor ensured that the initial options appraisal is objective (unbiased and evidence based), repeatable and consistent? [CAP1616f: 3.54-3.57]	Yes, the change sponsor has used the same criterion for the appraisal of the design options. The options appraisal is qualitative and fairly applied without bias. Only one option was carried through into the IOA following the DPE.	☒ ☐ ☐ ☐
1.3	Has the change sponsor identified criteria for the initial options appraisal and applied these to narrow down the design options to a selected shortlist? [CAP 1616f: 3.55]	Yes, the change sponsor has provided a methodology to assess the design option in chapter 5 – these consider impacts on both aviation and non-aviation stakeholders and where necessary have been scoped in/out as per altitude-based priorities in ANG 2017. The methodology is appropriate, and the range of impacts considered for a stage 2 assessment are of a proportionate nature. The assessment has been applied to only one design option following DPE, where baseline and 2 design options were	☒ ☐ ☐ ☐
1.4	Do the criteria set out clearly why options have been discontinued? [CAP 1616f: 3.55]	The IOA does not discount any options, but two options (baseline/DN and Option 2, 9 parallel routes) are rejected at DPE. The DPE is qualitative and assesses each of the options and DN against the design principles, and commentary is provided on how each design principle is met, partially met or not met.	☒ ☐ ☐ ☐
1.5	Has the change sponsor undertaken a qualitative and where possible, a quantitative assessment according to the scale of the design options and the nature of the potential impacts? [CAP1616f: 3.58-3.59]	Yes, the sponsor has undertaken a qualitative DPE and IOA for the two design options proposed. This is a proportionate approach given impacts are expected to occur over ground below 7000ft. No quantification has been undertaken given this ACP is currently at Stage 2. The change sponsor has not considered non-aviation impacts such as tranquillity, biodiversity or air quality given the altitude-based priorities set out in ANG 2017 and is a proportionate and reasonable approach.	☒ ☐ ☐ ☐
1.6	Is the initial options appraisal included in the change sponsor's subsequent consultation material?	Stage 2 – N/A.	☐ ☐ ☐ ☒

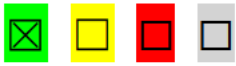
	[CAP 1616f: 3.59]		
1.7	Has the change sponsor conducted an initial options appraisal of the potential impacts of each design option against the baseline scenarios? [CAP1616f: 3.60-3.62]	Yes, the sponsor has compared the design options against the baseline / "do nothing" scenario which has been developed in detail. The IOA compares the DN against each design option at implementation and at 10-years post.	☒ ☐ ☐ ☐
1.8	Does the initial options appraisal for each design options include, as a minimum: - A qualitative assessment of the likely environmental impacts, including all direct and consequential impacts - A high-level assessment of all reasonable costs and benefits involved - A qualitative assessment of the potential impacts on safety [CAP 1616f: 3.61]	- The sponsors IOA provides a qualitative appraisal of the likely environmental impacts. Given that changes are anticipated to be over 7,000ft, impacts on tranquillity, biodiversity, noise and AQ have not been scoped in. The range of impacts considered is proportionate and in line with CAP1616 guidance. - The sponsor has made a qualitative appraisal of potential costs and benefits on Airport/ANSP and CAT training costs. These are deemed to be minimal or neutral in scale of impact. - A qualitative safety assessment has been undertaken and reported on in chapter 6 of the IOA for both Options 1 and 2 and the baseline.	☒ ☐ ☐ ☐
1.9	Has the change sponsor provided an indication of the preferred design option(s)? [CAP1616f: 3.63]	Yes – Option 1 (10 parallel routes).	☒ ☐ ☐ ☐
1.10	Has the change sponsor used the most up-to-date, credible, and clearly referenced sources of data to assess the impacts of the baseline scenarios and design options? [CAP1616f: 3.65]	Yes, the change sponsor has used up to date data when developing the baseline scenario. Summer 2024 one week data (1st-7th Aug 2024) was used to illustrate current airspace usage over the midlands. The sponsor has also provided a 10-year forecast of future air traffic in the change area and intermediate years. The sponsor has also provided current day (2024) and 2028 (implementation year) forecasts. 2024 traffic has also been used to provide a split between weight categories for aircraft using the airspace, with medium	☒ ☐ ☐ ☐

		weight category predominately using the airspace.	
1.11	Has the sponsor explained the methodology it adopted to reach its input and analysis results? [CAP 1616f: 3.65]	Yes, the change sponsor has provided a methodology to assess the design options in chapter 5. Within the IOA and DPE sufficient narrative around why options were not progressed or how the design principles were met has been provided by the sponsor.	☒ ☐ ☐ ☐
1.12	Has the change sponsor identified any evidence gaps in the initial options appraisal and described what evidence will be collected, and how, to fill such gaps and develop the full options appraisal? [CAP1616f: 3.66-67]	Evidence gaps have not been explicitly identified within the IOA, and there is limited commentary on what the next steps are in terms of monetising and quantifying impacts at stage 3. **Requirement:** Sponsor to add information of evidence gaps identified at Stage 2, and what is going to be undertaken at Stage 3 when developing the FOA. **Updated 27/02/2026** – Sponsor has added in new section on evidence gaps, in section 5.4, v1.1 of the IoA. RAG status changed to green.	☒ ☐ ☐ ☐

2. Potential Impacts					**Status**
2.1	Has the change sponsor conducted an initial options appraisal of each of the design options using the following metrics and level of analysis? [CAP 1616f: 3.40]				☒ ☐ ☐ ☐
2.1.1	Communities	Not applicable	Qualitative	Quantified	Monetised
	- Noise	X			
	- Local air quality	X			
2.1.2	Airport/ANSPs	Not applicable	Qualitative	Quantified	Monetised
	- Infrastructure		X		
	- Operational		X		

	- Deployment		X		
	- Other(s)		X		
2.1.3	Commercial Airlines/General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Training		X		
	- Increased effective capacity		X		
	- Fuel burn		X		
	- Other(s)		X		
2.1.4	General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Access		X		
	- Increased effective capacity		X		
	- Fuel burn		X		
2.1.5	Wider society	Not applicable	Qualitative	Quantified	Monetised
	- Greenhouse gas emissions		X		
	- Tranquillity	X			
	- Biodiversity	X			
	- Capacity/resilience		X		
2.1.6	Military	Not applicable	Qualitative	Quantified	Monetised
	-	X			
2.1.7	Other	Not applicable	Qualitative	Quantified	Monetised
	-	X			

2.2	Has the change sponsor set out why it has not undertaken specific quantified and monetised analysis as part of its assessment? [CAP 1616f: 3.41]	Not explicitly – but the sponsor has made reference within the IOA that it would be disproportionate to quantify certain impact streams at this stage. This is acceptable for a Stage 2 submission in the interests of proportionality. **Recommendation:** Sponsor should clearly outline why certain impact streams have not been quantified; this is particularly important at Stage 3 where assessments should be quantified if possible and justification should be provided if unable to do so.	
2.3	Has the change sponsor discussed their methodology with the CAA when quantifying and monetising impacts in the groups 'Commercial airlines' and 'Airport/air navigation service provider'? [CAP 1616f: 3.42]	N/A – impacts have not been quantified at this stage.	
2.4	Has the change sponsor included an initial indication of safety implications in the initial options appraisal? [CAP 1616f: 3.52]	Yes – the sponsors qualitative safety appraisal (Chapter 6 of the IOA) refers to the introduction of systemised routes improving safety and reducing the need for ATC tactical intervention. The sponsor does not currently foresee any pertinent safety issues as a result of the introduction of the design options. The safety appraisal of the current day scenario notes that the current airspace structure is historically predicated on ground-based NAVAIDS and notes that the airspace is outdated, requiring tactical deconfliction.	

3. Economic Indicators			**Status**
3.1	Has the change sponsor provided traffic forecasts for year 1 and year 10? [CAP 1616f: 3.22]	Yes. As the ACP does not seek to alter the current level of demand, the one forecast is applicable for current day / DS scenarios.	

<table>
<tr><td></td><td></td><td>Forecast Traffic
3.1.10 Table 2 shows the forecast traffic growth for the change area across the 10-year reference period. Actual traffic throughput during 2024 has been included for comparison purposes.
Table 2: Forecast traffic for the change area - NATS NCV25 Long Term Forecast Extended
<table><tr><th>Year</th><th>Traffic levels</th></tr><tr><td>2024 (current day)</td><td>484,856</td></tr><tr><td>2028 (implementation)</td><td>515,043</td></tr><tr><td>2029</td><td>520,194</td></tr><tr><td>2030</td><td>523,315</td></tr><tr><td>2031</td><td>528,025</td></tr><tr><td>2032</td><td>529,609</td></tr><tr><td>2033</td><td>531,727</td></tr><tr><td>2034</td><td>535,449</td></tr><tr><td>2035</td><td>539,733</td></tr><tr><td>2036</td><td>544,051</td></tr><tr><td>2037 (10 years post-implementation)</td><td>548,403</td></tr></table></td><td></td></tr>
<tr><td>3.2</td><td>Has the change sponsor valued all relevant costs and benefits of the design options using:
- Net present value (NPV)
- Benefit cost ratio (BCR)
- Cost benefit analysis (CBA)?
[CAP 1616f: 3.43]</td><td>N/A – Stage 2 IOA.</td><td>☐ ☐ ☐ ☒</td></tr>
<tr><td>3.3</td><td>When appraising costs and benefits of a design option, has the change sponsor assessed them incrementally against the baseline scenarios?
[CAP 1616f: 3.45]</td><td>Yes, the change sponsor has complied with the CAP1616 requirement to assess impacts incrementally against the baseline. The submission defines the “Do Nothing” baseline in Table 16 and then appraises Option 1 relative to that baseline in Table 17. For example, under Greenhouse gas emissions, the IOA states that the option is expected to deliver similar impacts to the baseline at implementation and 10 years post, demonstrating a clear baseline-anchored comparison. This is not the case for all impacts (such as</td><td>☒ ☐ ☐ ☐</td></tr>
</table>

		some ANSP cost impact streams, where impacts are more descriptive rather than a direct comparison to the baseline) however it is proportionate and acceptable for the purposes of CAP1616f compliance.	
3.4	Has the change sponsor expressed the values derived for the costs and benefits set out above in 'real' rather than 'nominal' terms? [CAP 1616f: 3.46]	N/A – Stage 2 IOA.	☐ ☐ ☐ ☒
3.5	Have values been reported in the base year for the assessment? [CAP 1616f: 3.47]	N/A – Stage 2 IOA.	☐ ☐ ☐ ☒
3.6	As well as taking account of inflation in real prices, has the change sponsor used a social time preference rate? [CAP 1616f: 3.48]	N/A – Stage 2 IOA.	☐ ☐ ☐ ☒

4. Summary of the Initial Options Appraisal			
4.1	What are the qualitative/strategic impacts of the design options?	The preferred design option, option 1 (10 routes) provides: - Improved capacity and resilience - Similar environmental impacts to the baseline (GHG and fuel burn, qualitative assessment) - Potentially reduced GA access depending on size of any additional CAS required - Enhanced operational predictability and systemisation - Reduced need for tactical deconfliction by ATC and reduced ATC workload.	☒ ☐ ☐ ☐
4.2	What are the overall non-monetised (quantified) impacts of the design options?	N/A – impacts have not been quantified or monetised at this stage apart from description of the baseline scenario or traffic forecasts. Aligns with expectations from a stage 2 submission under CAP1616f.	☐ ☐ ☐ ☒

4.3	Where impacts have been monetised, what are the overall net present values (NPV) of the design options?	N/A – no monetisation of impacts has been undertaken at Stage 2.	☐ ☐ ☐ ☒
4.4	Has the change sponsor used the economic assessment to progress/discontinue design options and/or support the choice of the preferred design option(s)? If the preferred design option(s) does not have the highest NPV or benefit cost ratio (BCR), then has the change sponsor justified the reasons to progress this design option(s)?	N/A – one option progressed through IOA from DPE. Economic assessments have not been used to discount design options. No monetisation or quantified assessments have been undertaken at Stage 2.	☐ ☐ ☐ ☒
5. Other Aspects			
5.1	N/A.		

6. Conclusions	
6.1	The change sponsor has undertaken a Stage 2 IOA broadly in accordance with CAP1616f, detailing design options to systemise the airspace structures that interface between the LTMA and MTMA. The submission itself provides a comprehensive description of the current day/baseline scenario and undertakes a DPE and IOA. The sponsor has progressed one option through to IOA (and subsequently FOA). **Requirements for Stage 2:** - Sponsor to add information of evidence gaps identified at Stage 2, and what is going to be undertaken at Stage 3 when developing the FOA. **Recommendations for Stage 3:** - Sponsor should clearly outline why certain impact streams have not been quantified; this is particularly important at Stage 3 where assessments should be quantified if possible and justification should be provided if unable to do so. **Updated 27/02/2026** – Sponsor has added in new section on evidence gaps, in section 5.4, v1.1 of the IoA. All outstanding requirements addressed.

CAA Initial Options Appraisal Completed by	**Name**	**Signature**	**Date**

Airspace Regulator (Economist)	[redacted]	[redacted]	27/02/2026