

## CAA CAP 1616 Options Appraisal Assessment (Phase II Full)

<b>Title of Airspace Change Proposal:</b>	Northern LTMA Region Airspace Change (OFJES, CLN etc)		
<b>Change Sponsor:</b>	NATS		
<b>ACP Project Ref Number:</b>	ACP-2025-023		
<b>Case study commencement date:</b>	15/08/2025	<b>Case study report as at:</b>	28/08/2025

### 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 developed the initial options appraisal into a full options appraisal? [CAP1616f: 4.12-4.15]	The appraisal has not been updated at this stage. It would be disproportionate to do so, particularly as none of the impacts would have changed.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
1.2	Has the change sponsor provided a robust rationale supported with appropriate evidence, justifying why certain design option(s) were not progressed to the full options appraisal?	The driver for change presented for this airspace change was "If we do not do this now, traffic will continue to increase and ATC complexity will build, with the potential for a future increase in safety risk"	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>





















	[CAP 1616f: 4.13]	<p>but without presenting the forecast showing the traffic increasing in that area.</p> <p>Within the consultation presentation, option 1 was presented as having been discontinued as an option. This was largely due to the impact upon military stakeholders and consequential impact upon general aviation within the area.</p> <p>Airspace occupancy data in the volume of airspace due to be amended under the preferred option was presented for the past 12 months. This showed this was nil general aviation traffic, and assessed the impacts on other airspace users as a result of the change.</p>	
1.3	<p>Has this rationale plus the supporting evidence been clearly explained in any consultation/engagement materials?</p> <p>[CAP 1616f: 4.13]</p>	The rationale above has been set out in in the presentation slides for engagement. The rationale for discontinuing option 1 was done through engagement with the stakeholders who are being consulted.	   
1.4	<p>Has the initial options appraisal been developed into a detailed quantified and monetised assessment for the full options appraisal?</p> <p>[CAP 1616f: 4.14]</p>	The options appraisal presented at stage 2 has not been changed or updated. This is partly because it was agreed between the CAA and the sponsor that the gateway documents would be presented simultaneously, with a proportionate impact assessment.	   
1.5	<p>Does the full options appraisal include:</p> <ul style="list-style-type: none"> <li>- All evidence gaps identified at Stage 2 fully assessed</li> <li>- All reasonable costs and benefits quantified</li> <li>- All other costs and benefits described qualitatively</li> <li>- Reasons why costs and benefits have not been quantified</li> <li>- Detail on the preferred design option, setting out reasons for the preference (where relevant)</li> <li>- A more detailed assessment of the impacts on safety, if completed by the change sponsor</li> </ul>	The ACP did not have a full options appraisal. Key impacts were assessed qualitatively, which helped inform the preferred design option.	   

	- A quantified and monetised environmental assessment, including all direct and consequential impacts [CAP 1616f: para 4.14]		
1.6	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: 4.16]	The sponsor has taken account of updated data on airspace occupancy in this targeted bit of airspace to strengthen the evidence base for the qualitative assessments on other airspace users. It helpfully illustrates the magnitude of commercial flights that can benefit in the absence of forecast traffic data.	   
1.7	Has the sponsor explained the methodology it adopted to reach its input and analysis results? [CAP 1616f: 4.16]	All impacts were assessed qualitatively after a general examination of the evidence and engagement with stakeholders.	   

2. Potential Impacts					Status
2.1	Has the change sponsor conducted a full options appraisal of each of the design options which it intends to consult/engage on using the following metrics and level of analysis? [CAP 1616f: 4.14]				   
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			
2.3	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]	There was a general broader discussion as part of early engagement prior to the first gateway. The agreement was to focus primarily on a qualitative assessment of the impacts.			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

2.4	Has the CAA reviewed the safety implications to determine whether we agree that is the only potential design option, on the grounds of safety? [CAP 1616f: 4.15]	This matter has been left for our technical regulators.	   
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3. Economic Indicators			Status
3.1	Has the change sponsor provided traffic forecasts for year 1 and year 10? [CAP 1616f: 3.22]	No. Although these would be helpful to substantiate the rationale for why the ACP was required, this traffic forecast was not conducted.	   
3.2	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]	The impacts were not monetised.	   
3.3	When appraising costs and benefits of a design option, has the change sponsor assessed them incrementally against the baseline scenarios? [CAP 1616f: 3.45]	The impacts were generally assessed against the baseline scenario, although the narrative in the qualitative impacts in option 2 could have been more explicit about this.	   
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]	The impacts were not monetised	   
3.5	Have values been reported in the base year for the assessment? [CAP 1616f: 3.47]	The impacts were not monetised	   

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]	The impacts were not monetised	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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4. Summary of the Full Options Appraisal			
4.1	What are the qualitative/strategic impacts of the design options?	The key qualitative impacts in this ACP are the impacts upon other airspace users for whom access will be reduced (e.g. military/general aviation). However, this would be traded off against increased safety, improved capacity/resilience and consequential net benefits upon air traffic controllers and fuel burn/emissions by commercial airlines.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.2	What are the overall non-monetised (quantified) impacts of the design options?	None of the impacts have been quantified due to proportionality.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.3	Where impacts have been monetised, what are the overall net present values (NPV) of the design options?	The impacts were not monetised	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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?  If the preferred design option does not have the highest NPV or benefit cost ratio (BCR), then has the change sponsor justified the reasons to progress this design option?	The sponsor has used the appraisal as part of the rationale to discontinue the status quo as a potential option. Design principle evaluation were used to remove option 1 from the shortlist. The preferred design option benefitted from stakeholder support through early engagement ahead of consultation.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5. Other Aspects	
5.1	There is a tradeoff between airspace users in relation to capacity. The increase in controlled airspace increases the capacity for predominantly commercial flights to be managed safely, particularly as traffic volumes as assumed to increase in future. However, this is through a reduction in access to uncontrolled airspace primarily used by the military with consequential impacts upon general aviation.



## 6. Conclusions

6.1	<p>This ACP was submitted by the sponsor to help mitigate a potential risk identified although there wasn't evidence from underlying traffic forecasts as to when the risk was most likely to crystallise in order to necessitate an increase in volume of controlled airspace. At this stage, an updated options appraisal was not presented for consideration but the existing one was informed by better evidence on airspace occupancy and presented in an abridged form for stakeholders as part of consultation</p> <p>The baseline scenario could have been strengthened with supporting evidence. The design principles helped limit the evolution of possible design options to two alternatives of which one was taken forward in response to stakeholder feedback. The preferred option taken to consultation against the do-nothing scenario was assessed qualitatively as improving safety, capacity and resilience for flights coming in from the East. Consequential impacts upon fuel burn, GHG and air traffic control were not monetised and will not be ahead of consultation.</p> <p>However, the improved airspace occupancy assessment for the 12 months prior helps indicate the magnitude of airspace users likely to be affected by implementation of the airspace change proposal. Evidence of the impact upon other airspace users should be substantiated through consultation.</p>
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CAA Full Options Appraisal Completed by	Name	Signature	Date
Airspace Regulator (Economist)	[REDACTED]	[REDACTED]	19/08/2025