

# CAA CAP 1616 Options Appraisal Assessment (Phase I Initial)

<b>Title of Airspace Change Proposal:</b>	English Channel Search and Rescue Operations		
<b>Change Sponsor:</b>	Maritime and Coastguard Agency/Home Office		
<b>ACP Project Ref Number:</b>	ACP-2021-088		
<b>Case study commencement date:</b>	Click or tap to enter a date.	<b>Case study report as at:</b>	27/10/2023

<b>Account Manager:</b> ██████████	██████████	<b>Airspace Regulator (Engagement &amp; Consultation):</b> ██████████	██████████	<b>IFP:</b> N/A	██████████	<b>OGC:</b> N/A	██████████
<b>Airspace Regulator (Technical):</b> ██████████	██████████	<b>Airspace Regulator (Environmental):</b> ██████████	██████████	<b>Airspace Regulator (Economist):</b> ██████████	██████████	<b>ATM (Inspector ATS Ops):</b> ██████████ (re Lydd)	██████████

**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 – Identifying the impact of the options (including Do Nothing (DN) / Do Minimum (DM))		Status	
1.1	Are the outcomes of the Initial Options Appraisal (IOA) (Phase I) clearly outlined in the proposal?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
1.1.1	Has the change sponsor completed an Initial Options Appraisal? [E12]	The sponsor has submitted a report covering Stage 2B of the airspace change process. An Initial Options Appraisal has been conducted.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.2	Does the Initial Options Appraisal include: - a comprehensive list of viable options; - a clear description of the baseline scenario; - an indication of the environmental impacts; - a high-level assessment of costs and benefit involved	<p>Stage 2A submission provides a list of the initially drafted options in the <i>Draft Airspace Design Options Refinement</i> section. This has now also been copied across to Stage 2B.</p> <p>Only 2 “Do Something” options are taken through to Stage 2B. There is a full summary and initial options appraisal in of all three options (including a Baseline). The appraisal is qualitative at this stage.</p> <p>The Baseline is now explained following Gateway feedback.</p> <p>LH (Environment) - Following the Stage 2 Gateway, the change sponsor has provided the required information in respect of the baseline scenario.</p> <p>A qualitative description of the environmental impacts has been provided at Stage 2. Guidance has been provided to the sponsor on the information necessary for them to scope out or scale down the environmental assessment requirements at Stage 3. Guidance on the assessment of CO2 emissions at Stage 3 has also been provided to the sponsor.</p>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.3	Has the sponsor stated on what criteria the comprehensive list of viable options has been assessed?	In Stage 2B, the sponsor has provided the criteria in CAP1616 with which to assess the options.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

1.1.4	Where options have been discounted as part of the IOA exercise, does the change sponsor clearly set out why?	Stage 2A includes an options refinement, following community engagement. The outcome was the discounting of Option 2 on safety grounds.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.5	Has the change sponsor indicated their preferred option(s) as a result of the IOA (Phase I - Initial)? [E12]	The sponsor has stated Option 1B as the preferred option.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.6	Does the IOA (Phase I - Initial) detail what evidence the change sponsor will collect, and how, to fill in any evidence gaps and how this will be used to develop the Options Appraisal (Phase II - Full)?	The sponsor states that more evidence will be collected in Stage 3 for the Full options appraisal, including further stakeholder engagement. Following the initial gateway, the sponsor has included a more comprehensive edition evidencing what will be undertaken for Stage 3.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.7	Does the plan for evidence gathering cover all reasonable impacts of the change? [E12]	The sponsor has complied with the full set of impacts in CAP1616 Appendix E – and provided a qualitative assessment for each.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

2. Impacts of the proposed airspace change					Status
2.1	Are there direct impacts on the following:				<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.1.1	<i>Examples of costs considered (please add costs that have been discussed, and any reasonable costs that the Airspace Regulator (Technical) feels have NOT been addressed)</i>				
2.1.2	Airport/ANSPs	Not applicable	Qualitative	Quantified	Monetised
	- Infrastructure		Both options don't affect existing operations. There is expected to be some limited additional costs, though.		
	- Operation		Both options don't affect existing operations. There is expected to be some limited additional costs, though.		
	- Deployment		Both options don't affect existing		

			operations. There is expected to be some limited additional costs, though.		
	- Other(s)				
2.1.3	Commercial Airlines/General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Training	No change	.		
	- Economic impact from increased effective capacity		Expected negative as some reduced commercial airspace activity.		
	- Fuel burn		Marginal expected increase in fuel burn as commercial airlines may be required to take a higher altitude. Option 1A has a worse impact due to alternative routes required for GA traffic.		
	- Other(s)				
2.1.4	General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Access		Against the Baseline, Option 1A results in more negative access implications compared to Option 1B.		
2.1.5	Military	Not applicable	Qualitative	Quantified	Monetised
		x			
2.1.6	Wider society, i.e., wider economic benefits, capacity resilience	Not applicable	Qualitative	Quantified	Monetised
	<b>Qualitative:</b> Both Options have similar expected impacts. Safety benefit associated with reduced constraint on helicopter capacity. Secondary effect increased Search and Rescue capacity.				

	Positive GHG benefit through enabling UAS. Limited negative GHG impact on commercial air traffic GHGs due to higher altitudes and alternative routes, as explained in the associated impacts section, as well as capacity constraint effects.		
2.1.7	Other (provide details)		
2.2	Are there direct beneficial impacts on air traffic control / management systems? Provide details.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	no		
2.3	Where impacts have been monetised, what is the overall value (expressed in net present value (NPV)) of the project?		
	N/A		
2.4	Has the sponsor provided an accurate and proportionate assessment of the proposed airspace change impacts?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	For the initial options appraisal it meets the criteria.		

3. Changes in air traffic movements and projections				Status
3.1	If the proposed airspace change has an impact on the following factors, have they been addressed in the proposal?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Not applicable	Qualitative	Quantified/ Monetised
3.1.1	Number of aircraft movements		Potentially negative in terms of commercial airlines	
3.1.2	Number of air passengers / cargo		Potentially negative in terms of commercial airlines	
3.1.3	Type of aircraft movements (i.e., fleet mix)		Less commercial, more UAS to support coastguard.	
3.1.4	Distance travelled		Greater distance for commercial airspace.	

3.1.5	Operational complexities for users of airspace		No		
3.1.6	Flight time savings / Delays		Commercial flight times will marginally increase.		
3.1.7	Other impacts		More search and rescue capacity.		
	<b>Comments:</b>				
3.2	<ul style="list-style-type: none"> <li>Has the sponsor used the most up-to-date, credible and clearly referenced source of data to develop the 10 years traffic forecast and considered the available guidelines (i.e., the Green Book and TAG models) in a proportionate and accurate manner? [B11 and E11]</li> </ul> <p>Not applicable as the sponsor has only provided a qualitative assessment at this stage.</p> <ul style="list-style-type: none"> <li>Has the sponsor explained the methodology adopted to reach its input and analysis results? [B11 and E11]</li> </ul> <p>Yes</p>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
3.3	<b>Has the sponsor developed an assessment of the following environmental aspects?</b>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
		Not applicable	Qualitative	Quantified	Monetised
3.3.1	Noise		x		
3.3.2	Operational diagrams		x		
3.3.3	Overflight		x		
3.3.4	CO2 emissions		x		
3.3.5	Local air quality		x		
3.3.6	Tranquillity		x		
3.3.7	Biodiversity		x		
3.4	<b>What is the monetised impact (i.e., Net Present Value (NPV)) of 3.3? (Provide comments)</b>				
	N/A				

4. Economic Indicators of the ACP	
4.1	<p><b>What are the qualitative / strategic impacts described in the ACP?</b></p> <p>Both Options have similar expected impacts. Safety benefit associated with reduced constraint on helicopter capacity. Secondary effect increased Search and Rescue capacity.</p> <p>Positive GHG benefit through enabling UAS. Limited negative GHG impact on commercial air traffic GHGs due to higher altitudes and alternative routes, as explained in the associated impacts section, as well as capacity constraint effects.</p>
4.2	<p><b>What is the overall monetised and non-monetised (quantified) impact of the proposed airspace change?</b></p> <p>It is unclear what the net effects against the baseline would be.</p>
4.3	<p><b>What is the Net Present Value of the proposed options? Has the sponsor used this information to progress/discount options? Has the sponsor provided the benefits-costs ratio (BCR) of the proposed options and used it to support the choice of the preferred options? [E44]</b></p> <p>Not stated.</p>
4.3.1	<p><b>If the preferred option does not have the highest NPV or BCR, then has the sponsor justified the reasons to progress this option? [B50 and E23]</b></p> <p>The sponsor states: <i>“This initial options appraisal does not consider exact details and combinations of design options that may when organised into systems lead to a design that minimises impact on stakeholders whilst enabling the delivery of the airspace to meet the statement of need. Subject to passing the Stage 2 Gateway Assessment, this proposal will move on to Stage 3 Consult.”</i></p>
4.4	<p><b>Has the sponsor provided reasonable justification for the proportionality of analysis above?</b></p> <div style="text-align: right;"> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>
5. Other aspects	
5.1	
6. Summary of the Initial Options Appraisal & Conclusions	
6.1	<p>The sponsor has outlined the viable Do Something options and provided a compliant initial options appraisal for the two proposed options. Overall, the effect against the Baseline is unclear without quantified/monetised values. Generally speaking, both Options have similar</p>

expected impacts. Safety benefit associated with reduced constraint on helicopter capacity. Secondary effect increased Search and Rescue capacity.

Positive GHG benefit through enabling UAS. Limited negative GHG impact on commercial air traffic GHGs due to higher altitudes and alternative routes, as explained in the associated impacts section, as well as capacity constraint effects.

Post-Gateway, the sponsor has made the appropriate amendments to the baseline and provided a comprehensive list of options. This can therefore proceed to the next Stage.

**Post gateway requirements and/or recommendations**

**6.2**



**Decisions Pending – Post Gateway Actions Required**

Issue(s)	Corrective Action(s) for Sponsor	Gateway Recommendation Reference(s)	CAP 1616 Reference(s)
<p>No comprehensive list of viable options Baseline option unviable No details of evidence to be gathered in Stage 3</p> <p>Baseline not fully described.</p> <p>Scope for the assessment of environmental impacts has not been fully defined.</p> <p>No traffic forecast data provided.</p>	<ul style="list-style-type: none"> <li>• Inclusion of a comprehensive list of viable options</li> <li>• Re-assessment using a viable Baseline.</li> <li>• More details of quantitative analysis for Stage 3, including data requirements and methods used.</li> <li>• Fully describe the baseline scenario including operational diagrams.</li> <li>• Confirm likelihood of aircraft being rerouted over land as a result of the ACP.</li> <li>• Confirm the scale of the consequential impacts for other airspace users rerouting over land to inform the requirement for provision of traffic forecast data.</li> </ul>		<ul style="list-style-type: none"> <li>- E8</li> <li>- E12</li> <li>- E12</li> <li>- B27</li> <li>- B8, B26</li> <li>- B31</li> </ul>



<p>Insufficient evidence of what assessments will be required, or information that will be gathered to inform the assessments at Stage 3.</p>	<ul style="list-style-type: none"> <li>Provide clear statements on the evidence gaps and interdependencies that require further work and present plan for gathering information for development of the full options appraisal.</li> </ul>		<p>- E12</p>
<p><b>Sponsor Action(s) Taken</b></p>		<p><b>Requirement(s) Resolved?</b></p>	
<ul style="list-style-type: none"> <li>Further baseline information provided including operational diagrams.</li> <li>Qualitative estimate of the likely number of aircraft movements rerouting over land provided.</li> <li>Information provided on further assessment requirements for Stage 3.</li> </ul>		<p>Not Resolved <input type="checkbox"/> Resolved <input checked="" type="checkbox"/></p>	

CAA Initial Options Appraisal Completed by	Name	Signature	Date
Airspace Regulator (Economist)	[REDACTED]	[REDACTED]	07/11/2023
Airspace Regulator (Environmental)	[REDACTED]	[REDACTED]	08/11/2023