

CAA CAP 1616 Options Appraisal Assessment (Phase II Full)

















Title of Airspace Change Proposal:	London Biggin Hill Airport RNAV (GNSS) Rwy 21		
Change Sponsor:	London Biggin Hill Airport (LBHA)		
ACP Project Ref Number:	2019-86		
Case study commencement date:	18 July 23	Case study report as at:	





Account Manager: N/A		Airspace Regulator (Engagement & Consultation): [Redacted]		IFP: [Redacted]		OGC: N/A	
Airspace Regulator (Technical): [Redacted]		Airspace Regulator (Environmental): [Redacted]		Airspace Regulator (Economist): [Redacted]		ATM (Inspector ATS Ops): [Redacted]	

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 shortlist of options (including Do Nothing (DN) / Do Minimum (DM))		Status
1.1	<p>Are the outcomes of DN/DM and DS scenarios clearly outlined in the proposal? The impact of the Do Nothing Scenario is set out in the reproduced IOA Appendix A1.</p>	   
1.1.1	<p>Has the change sponsor produced an Options Appraisal (Phase II - Full) which sets out how Initial appraisal is developed into a more detailed quantitative assessment, moving from qualitatively defined shortlist options to the selected preferred option? [E23]</p>	<p>The Sponsor has produced a Full Options Appraisal. There is an indication of the preferred option, PE, and why it was chosen.</p>    
1.1.2	<p>Does each shortlist option include the impacts in comparison to the 'do nothing / do minimum' option, in particular: -all reasonable costs and benefits quantified -all other costs and benefits described qualitatively -reasons why costs and benefits have not been quantified</p>	<p>LBHA considers that a quantitative assessment is unnecessary as there would be no change to the current situation.</p> <p>All other costs and benefits are described qualitatively. The qualitative assessment conducted during the Initial Options Appraisal for the following elements, that was completed at Stage 2 of the CAP 1616 process will form the Full Options Appraisal for this proposal, and is included at Appendix A1 to this document</p>    
1.1.3	<p>Where options have been discounted, does the change sponsor clearly set out why?</p>	<p>No options besides the baseline have been discounted at this stage.</p>    

2. Impacts of the proposed airspace change		Status			
2.1	<p>Are there direct impacts on the following:</p>	   			
2.1.1	<p><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> The sponsor should consider the costs of producing the new procedure and any associated flight validation as part of the Final Options Appraisal. This has been addressed in the FOA.</p>				
2.1.2	Airport/ANSPs	Not applicable	Qualitative	Quantified	Monetised
	- Infrastructure		X		

	- Operation	X			
	- Deployment	X			
	Other(s)				
2.1.3	Commercial Airlines/General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Training		X		
	- Economic impact from increased effective capacity		X		
	- Fuel burn		X		
	- Other(s)		X		
2.1.4	General Aviation	Not applicable	Qualitative	Quantified	Monetised
	- Access		X		
2.1.5	Military	Not applicable	Qualitative	Quantified	Monetised
2.1.6	Wider Society, i.e., wider economic benefits, capacity resilience	Not applicable	Qualitative	Quantified	Monetised
	- Noise		X		
	- Air quality		X		
	- Greenhouse gas impact		X		
	- Capacity and resilience		X		
	- Tranquility		X		
	- Biodiversity		X		
2.1.7	Other (provide details)	Not applicable	Qualitative	Quantified	Monetised
	- Safety		X		

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"/>
2.3	Where impacts have been monetised, what is the overall value (expressed in net present value (NPV)) of the project? The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate. I agree with this assessment as this ACP is of relatively limited scope and impact.	
2.4	Has the sponsor provided an accurate and proportionate assessment of the proposed airspace change impacts? The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

3. Changes in air traffic movements / 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	X					
3.1.2	Number of air passengers / cargo	X					
3.1.2	Type of aircraft movements (i.e., fleet mix)	X					
3.1.3	Distance travelled		X				
3.1.4	Operational complexities for users of airspace	X					
3.1.5	Flight time savings / Delays	X					
3.1.6	Other impacts	X					
3.1.7	Comments:						
3.2	<ul style="list-style-type: none"> 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] Has the sponsor explained the methodology adopted to reach its input and analysis results? [B11 and E11] 			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<p>The sponsor had provided a 10-year traffic forecast from 2022 until 2034 in the <i>Stage 2 Gateway Clarifications</i> document, citing the airport's Masterplan 2022-2025 and business development studies as the reference sources (these are time bound). These estimate approximately 24-28 VOR aircraft movements within this period that will now use the new RNAV IAPs. The sponsor had also estimated that the MAPs will be used approximately 30 times per year. The sponsor has also provided historic use data from 2021 (the baseline year) obtained from Thames Radar ATC that shows that the conventional IAPs were used 8 times and 2 times in 2022. ANOMS data and ATC records also indicate that there were 17 MAPs in 2021 and 10 in 2022.</p> <p>Based on the above, the sponsor has stated that the new procedures are not expected to be used any more than twice a month and does not expect this usage to vary over the course of the 10-year appraisal period.</p>				
<p>3.3</p>	<p>Has the sponsor developed an assessment of the following environmental aspects?</p> <p>The sponsor has qualitatively described the environmental impacts for the following metrics. The sponsor has also used operational diagrams representing the RNAV IAPs and MAPs overlaid on current arrival swathes derived from ANOMS data to portray impacts in terms of areas overflown and impact upon AONBs.</p> <p>The sponsor has provided a rationale and evidence as per CAP1616 para B26 to scope out quantified assessments. The sponsor states that the new IAPs are expected to be flown less than 2 times per month now that Thames Radar have aligned their service hours with the airport's opening hours. Historic use data obtained for Thames Radar ATC records indicate that the conventional IAPs were only flown 20 times in 2020, 8 times in 2021 and 2 times in 2022. There were 17 MAPs in 2021 and 10 in 2022 based on ANOMS data and ATC logs. The sponsor expects that the new procedures will be flown with similar frequency in the future and that there will be no change in impacts over the ground. The sponsor has therefore scoped out quantified assessments for LAeq and TAG, 100% noise mode contours, Nx contours, difference contours, Lmax spot point contours, annual CO2, CO2 and TAG, local air quality and biodiversity. Operational diagrams provided by the sponsor may also be considered as indicators of overflight impacts.</p>				
		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	What is the monetised impact (i.e., Net Present Value (NPV)) of 3.3? (Provide comments) The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate.				<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

4. Economic Indicators of the ACP					
4.1	What are the qualitative / strategic impacts described in the ACP? The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate. the dispersion of traffic and therefore noise will be relatively similar to the baseline scenario no additional impact on emissions over today's operations no expected impact on capacity and resilience less impact on tranquility than the Do Nothing option. unlikely to have an impact upon biodiversity no direct impact on access no change to the impact on economic capacity no specific safety risks				
4.2	What is the overall monetised and non-monetised (quantified) impact of the proposed airspace change? The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate.				
4.3	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] The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate. By implication, given the low qualitative impacts, the NPV impact will be zero or minimal.				
4.3.1	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] The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate				
4.4	Have the sponsors provided reasonable justification for the proportionality of analysis above? The Sponsor has undertaken no quantification or monetisation of the impact of the proposal as it views this as disproportionate				<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5. Other aspects					
5.1	N/A				

6. Summary of the Full Options Appraisal & Conclusions			
6.1	The sponsor concludes that the proposed option will have very little impact. Accordingly it has undertaken no quantitative analysis and no monetisation of the change.		
Post gateway requirements and/or recommendations			
6.2	N/A		
Decisions Pending – Post Gateway Actions Required			
Issue(s)	Corrective Action(s) for Sponsor	Gateway Recommendation Reference(s)	CAP 1616 Reference(s)
Sponsor Action(s) Taken		Requirement(s) Resolved?	
		<div style="display: flex; justify-content: space-around; align-items: center;"> Not Resolved <input type="checkbox"/> Resolved <input type="checkbox"/> </div>	

[REDACTED]	Name	Signature	Date
Airspace Regulator (Economist)	[REDACTED]	[REDACTED]	Click or tap to enter a date.
Airspace Regulator (Environmental)	[REDACTED]	[REDACTED]	31/07/2023

[REDACTED]

[REDACTED]

[REDACTED]