

CAA CAP 1616 Options Appraisal Assessment (Phase I Initial)

Title of airspace change proposal	Land's End Transit Corridor		
Change sponsor	Land's End Airport		
Project no.	ACP-2019-75		
Case study commencement date	19/10/2020	Case study report as at	29/10/2020

Account Manager: [REDACTED]	[GREY]	Airspace Regulator (Engagement & Consultation): [REDACTED]	[YELLOW]	IFP: [REDACTED]	[ORANGE]	OGC: [REDACTED]	[DARK BLUE]
Airspace Regulator (Technical): [REDACTED]	[GREEN]	Airspace Regulator (Environmental): [REDACTED]	[PURPLE]	Airspace Regulator (Economist): [REDACTED]	[LIGHT BLUE]	ATM (Inspector ATS Ops): [REDACTED]	[RED]

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	Are the outcomes of the options' scenarios 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 produced an Options Appraisal (Phase I - Initial) which sets out how they have moved from the Statement of Need to the airspace change design options? [E12]	Yes, the sponsor has produced the IOA which qualitatively and quantitatively assesses the impact for the long-list of options plus the do-nothing option.
1.1.2	Does the list of options include a description of the change proposal?	Yes, all long-list of options are described and explained thoroughly.
1.1.3	Has the sponsor stated on what criteria the longlist of options has been assessed?	The sponsor used the same criteria list available under CAP 1616 Appendix E Table 2.
1.1.4	Where options have been discounted, does the change sponsor clearly set out why?	The sponsor set out why the options were rejected in DPE document.
1.1.5	Has the change sponsor indicated their preferred option in the Options Appraisal (Phase I - Initial)? [E8]	The sponsor has indicated their preferred option in the Safety Assessment part of the IOA and stated the establishment of an RMZ/TMZ be the minimal option taken forward with the preferred being the establishment of a Combined RMZ/TMZ.
1.1.6	Does the Initial Options Appraisal (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)?	No, the sponsor has not mentioned any evidence they are planning to collect for the next phase of the options appraisal. This could be due to the scalability of the project; as the sponsor does not anticipate any environmental change or economic impact as a result of the change, their plan on the detailed options appraisal might be just neglected.
1.1.7	Does the plan for evidence gathering cover all reasonable impacts of the change? [E12]	Yes, the qualitative assessment has been carried out for all the impacts listed under CAP 1616 Appendix E2 Table 2.

2. Direct impact on air traffic control		Status			
2.1	Are there direct cost impacts on air traffic control / management systems? If so, please provide below details of the factors considered and the level in which this has been analysed.	<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>				
		Not applicable	Qualitative	Quantified	Monetised
2.1.2	Infrastructure changes		X	X	X
2.1.3	Deployment		X	X	X
2.1.4	Training				
2.1.5	Day-to-day operational costs / workload / risks		X	X	X
2.1.6	Other (provide details)				
2.1.7	Comments The sponsor provided their estimation on the probable infrastructure costs which was stated within the ranges of £60K-£120K. The estimation on the operational costs and deployment costs was mentioned respectively as £60K and £150K annually. These estimations only applied to the one viable option which is the implementation of a combined RMZ/TMZ. In terms of the other two viable options, no costs were anticipated for airport and ANSPs.				
2.2	Are there direct beneficial impacts on air traffic control / management systems? If so, please provide details and how they have been addressed:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2.1	<i>Examples of benefits considered</i>	Not applicable	Qualitative	Quantified	Monetised
2.2.2	Reduced work-load	X			
2.2.3	Reduced complexity / risk	X			
2.2.4	Other (provide details)	X			

2.2.5	Comments	
2.3	Where monetised, what is the net monetised impact on air traffic control (in net present value) over the project period? Please see the answer to Question 2.1.7.	
2.4	Are the direct impacts on air traffic management analysed accurately and proportionately? Yes, the sponsor provided the main impact analysis for the significant impacts anticipated to affect Airport and ANSP in line with the airspace change process.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

3. Changes in air traffic movements / projections				Status	
3.1	What is the impact of the ACP on the following and has it been addressed in the ACP 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	Type of aircraft movement	X			
3.1.3	Distance travelled	X			
3.1.4	Area flown over / affected		X	N/A	N/A
3.1.5	Other impacts	X			
3.1.6	Comments The proposed RMZ change will have an impact on access as aircraft would need to be 2-way radio communication before entering the airspace and there may be a small number of aircraft that do not use 2-way radio equipment and would not be permitted to enter the airspace. The capacity in terms of the number of aircraft that could utilise the airspace would not change as the physical dimensions would not change for implementation of a combined RMZ/TMZ. Changing the dimensions of the LETC would take into account any parts of the IAPs at Land's End airport that are currently outside of LETC. However, the sponsor doesn't anticipate the number of aircraft would increase even though the LETC size might change.				
3.2	Has the forecasting of traffic done reasonably using best available guidance (e.g. DfT WebTAG, the Green Book, Academic sources...etc?)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

	The sponsor reports that there are not expected to be any changes to air traffic patterns or volume as a result of this proposal therefore no traffic forecast is provided, this is acceptable given that this ACP is not expected to alter traffic patterns or volume.			
3.3	What is the impact of the above changes (3.1) on the following factors below?			
		Not applicable	Qualitative	Quantified
3.3.1	Noise	X		
3.3.2	Fuel Burn	X		
3.3.3	CO2 Emissions	X		
3.3.4	Operational complexities for users of airspace		X	X
3.3.5	Number of air passengers / cargo	X		
3.3.6	Flight time savings / Delays	X		
3.3.7	Air Quality	X		
3.3.8	Tranquillity	X		
3.4	<p>Are the traffic forecast and the associated impacts analysed proportionately and accurately according to available guidelines (e.g. WebTAG or the Green Book?)</p> <p>This proposal is not expected to alter current or future traffic volumes or patterns therefore no traffic forecast is provided, use of WebTAG is not applicable. The sponsor states: "This proposal is related to improving the safety of existing services and not about stimulating new traffic or altering any existing routes." in their initial options appraisal document.</p>			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.5	What is the total monetised impact of 3.3? (Provide comments)			
	N/A			

4. Benefits of ACP	Status
4.1	Does the ACP impact refer to the following groups and how they are impacted by the ACP?

	This proposed change mainly impacts on flights over the sea and is therefore classed as an ACP level 2C, with its associated assessment connotations. Therefore assessment has been limited to CO2 only accordingly, and does not include reference to local parameters such as noise and local air quality.				
		Not applicable	Qualitative	Quantified	Monetised
4.1.1	Air Passengers	X			
4.1.2	Air Cargo Users	X			
4.1.3	General aviation users		X	X	N/A
4.1.4	Airlines	X			
4.1.5	Airports		X	X	X
4.1.6	Local communities	X			
4.1.7	Wider Public / Economy	X			
4.1.8	Comments Please see the answer to Question 3.1.6 which indicates the impact on GA.				
4.2	How are the above groups impacted by the ACP, especially (but not exclusively) looking at the following factors below:				
4.2.1	Improved journey time for customers of air travel			N/A	
4.2.2	Increase choice of frequency and destinations from airport			N/A	
4.2.3	Reduced price due to additional competition because of new capacity			N/A	
4.2.4	Wider economic benefits			N/A	
4.2.5	Other impacts	Improvement on the airspace environment in which aircraft operate between Penzance, Land's End and the Isles of Scilly			
4.2.6	Comments				
4.3	What is the overall monetised impacts associated with 4.1 and 4.2 the above? N/A				

4.4	What are the non-monetised but quantified impacts of the above? (Insert details of description) The Sponsor quantified the number of aircraft movements that might be affected by the proposed changes which is estimated to be <1% of the current traffic.	
4.5	What are the qualitative / strategic impacts described above? The strategic aim of the sponsor is to introduce an improved airspace solution to the Land's End Transit Corridor that could provide mitigation to the current unknown traffic environment.	
4.6	What is the overall monetised benefits-costs ratio (BCR) of the policy? Is it more than 1? N/A	
4.7	Have the sponsors provided reasonable justification for the proportionality of analysis above? Yes, the sponsor indicated the changes mainly impact flights over the sea and hence it is not anticipated that there will have an adverse effect on CO ₂ emissions or noise impacts to stakeholders on the ground.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.8	If the BCR is less than 1, are the quantitative and qualitative strategic impacts proportional to the costs of the ACP? N/A	

5. Other aspects	
5.1	Nil

6. Summary of Assessment of Economic Impacts & Conclusions	
6.1	The sponsor provided the Initial Options Appraisal for the introduction of an improved airspace solution to the Land's End Transit Corridor that could provide mitigation to the current unknown traffic environment and hence improve the safety. They have considered ten options in the long-list of options and all options were assessed as part of the IOA. According to the Design Principle Evaluation activity, three of the proposed options are found viable and related costs and benefits for these are made available in the Initial Options Appraisal along with the other unviable options. The viable options are RMZ, implementation of a combined RMZ/TMZ and altering the size and dimensions of the LETC. From the outcome of the IOA activity, altering the size and dimensions of the LETC would be the most cost effective solution. However, the sponsor has indicated RMZ and Combined RMZ/TMZ will be carried forward to consultation with consideration given to combining 'Alter the dimensions of the LETC' with the successful option. It is concluded by the CAA that the sponsor has carried out the IOA in line with CAP 1616 process as it provides significant impact analysis for all options considered which were assessed qualitatively and where possible quantitatively with monetised impacts included.
Outstanding issues?	

Serial	Issue	Action required
1	-	-
2		

CAA Initial Options Appraisal Completed by	Name	Signature	Date
Airspace Regulator (Economist)	[REDACTED]	[REDACTED]	26/10/2020
Airspace Regulator (Environmental)	[REDACTED]	[REDACTED]	26/10/2020
Airspace Regulator (Technical)	[REDACTED]	[REDACTED]	28/10/2020
ATM – Inspector ATS (Ops)	[REDACTED]	[REDACTED]	Click or tap to enter a date.