

CAA CAP 1616 Options Appraisal Assessment (Phase I Initial)

Title of Airspace Change Proposal:	Fast Jet Areas (FJA) (Permanent)		
Change Sponsor:	MoD		
ACP Project Ref Number:	ACP-2020-092		
Case study commencement date:	16/05/2022	Case study report as at:	27/05/2022

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 developed an Initial Options Appraisal (IOA) describing how the proposed option aligns with the Statement of Need (SoN) and the Design Principles (DPs)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.2	Does the list of options include a description of the change proposal?	Yes, the sponsor includes a description of the change proposal within the proposed change.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.3	Has the sponsor stated on what criteria the longlist of options has been assessed?	The sponsor follows the requirements as per CAP1616 and the options have been assessed following Table E2, Appendix E.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1.1.4	Where options have been discounted, does the change sponsor clearly set out why?	The sponsor proposes only one option, Option 1 – Establishing FJA(N) and FJA(S) as per previous dimensions, providing a robust justification for this choice. This is in line with CAP1616 requirements.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
1.1.5	Has the change sponsor indicated their preferred option in the Options Appraisal (Phase I - Initial)? [E8]	Option 1 – Establishing FJA(N) and FJA(S) as per previous dimensions, is the only proposed option, hence also the preferred one.	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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)?	The sponsor has identified Eurocontrol and NATS as stakeholders to be contacted for the environmental modelling requirements.	<input type="checkbox"/> <input checked="" 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]	Due to the nature of the proposed change, the plan provided is proportionate at this stage.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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 type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" 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			
2.1.3	Deployment	x			
2.1.4	Training	x			
2.1.5	Day-to-day operational costs / workload / risks				
2.1.6	Other (provide details)				
2.1.7	Comments: The sponsor states that the proposed change is not going to have additional impact on infrastructure, deployment and training costs.				
2.2	Are there direct beneficial impacts on air traffic control / management systems?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	If so, please provide details and how they have been addressed:				
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	N/A	N/A
2.2.4	Other (provide details)				
2.2.5	Comments: The sponsor highlights that the proposed airspace change might reduce the likeliness of accidently and mid-air collisions (MAC), since the proposed airspace replicates what has been used in the past 10 years. It is also stated that <i>“both airspaces are of a linear shape necessary for efficient air-to-air sorties, this reduced complexity increases the capacity of the pilots operating in the airspace and the weapons controller / ATC providing a service in that airspace”</i> .				
2.3	Where monetised, what is the net monetised impact on air traffic control (in net present value) over the project period? N/A				
2.4	Are the direct impacts on air traffic management analysed accurately and proportionately?			<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Not applicable	Qualitative	Quantified	Monetised			
3.1.1	Number of aircraft movements			Not provided				
3.1.2	Type of aircraft movement			x	N/A	N/A		
3.1.3	Distance travelled		x					
3.1.4	Area flown over / affected			x	N/A	N/A		
3.1.5	Other impacts							
3.1.6	Comments: The sponsor states that civil traffic might be impacted by the proposed change only when the MDAs are active but does not provide an indication of the consequential impact on the commercial traffic and/ or GA operating in the affected areas.							
3.2	<input checked="" type="checkbox"/>	Has the forecasting of traffic done reasonably using best available guidance (e.g. DfT WebTAG, the Green Book, Academic sources...etc?) The sponsor has not provided a ten-year traffic forecast at this stage.			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.3	<input checked="" type="checkbox"/>	What is the impact of the above changes (3.1) on the following factors below? The sponsor has provided high-level qualitative statements for the consequential environmental impacts this proposed airspace change might have on the civil pattern: <ul style="list-style-type: none"> - <u>Noise impact.</u> The proposed airspace change will take place at “FL 245, which will significantly reduce/ mitigate all noise effects on the ground”. In addition, it is stressed that noise impacts were not a concern in any of the stakeholders. - <u>Fuel burn.</u> The sponsor states that “Using FJA(N) rather than areas of D701 is likely to reduce fuel burn from commercial airlines and when using FJA(S) there might not be differences compares to the current situation when aircrafts use D701 because both of them are in roughly the same geographic areas”. - <u>CO2 emissions.</u> The sponsor states that the activation of the Military Danger Areas (MDAs) might generate an increase in greenhouse gas emissions, however, despite “an activation of FJA(S) is likely to result in higher CO2 emissions (due to its location i.e., disrupting Oceanic traffic) than the activation of FJA(N), some of these impacts might be balanced off by the suppression of other MDAs, allowing aircraft more directing routing through them.” - <u>Air quality.</u> The proposed airspace change takes place above 1,000ft, hence this impact is not required as per CAP1616, para B72. - <u>Tranquillity and biodiversity.</u> These impacts are not required being this a provisional Level M2 ACP. 						

		Not applicable	Qualitative	Quantified	Monetised
3.3.1	Noise		x	N/A	N/A
3.3.2	Fuel Burn		x	N/A	N/A
3.3.3	CO2 Emissions		x	N/A	N/A
3.3.4	Operational complexities for users of airspace	x			
3.3.5	Number of air passengers / cargo	x			
3.3.6	Flight time savings / Delays	x			
3.3.7	Air Quality		x	N/A	N/A
3.3.8	Tranquillity & Biodiversity	x			
3.4	Are the traffic forecast and the associated impacts analysed proportionately and accurately according to available guidelines (e.g. WebTAG or the Green Book?) The sponsor has not provided a traffic forecast.				<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" 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?				
		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	N/A	N/A
4.1.4	Airlines		x	N/A	N/A
4.1.5	Airports	x			

4.1.6	Local communities	x			
4.1.7	Wider Public / Economy	x			
4.1.8	Comments: The sponsor mentions that the proposed airspace change impacts commercial airlines and GA users that will need to re-route when the MDAs are activated.				
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				
4.2.6	Comments: N/A				
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? N/A				
4.5	What are the qualitative / strategic impacts described above? The aim of the proposed airspace change is to secure suitable segregated airspace to use during Ex Joint Warrior for highly complex, multi-domain collective training, and for preparing aircrews for operational service.				
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?				<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
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5. Other aspects	
5.1	

6. Summary of Assessment of Economic Impacts & Conclusions		
6.1	<p>The proposed airspace change aims to secure suitable segregated airspace for use by the UK and other NATO nations during the twice-yearly, large scale, strategic and tactical, collective training exercise called Ex Joint Warrior, Europe's largest annual exercise</p> <p>The sponsor has developed the Initial Options Appraisal (IOA) where only one option, Option 1 - Establishing FJA(N) and FJA(S) as per previous dimensions, has been qualitatively assessed against the baseline. The proposed airspace change will take place at "FL245, hence it is a provisional Level M2. The sponsor has provided a qualitative assessment of the impacts following CAP1616 requirement and Appendix E – Table E2.</p>	
Outstanding issues?		
Serial	Issue	Action required
1	Traffic Forecast	The sponsor has not provided an indication of the consequential impact that the proposed airspace change might have on the civil aviation traffic movements. If a quantification is not possible or available or if there are uncertainties due to the change introduced with the FRA, the sponsor should provide a justification.
2		

CAA Initial Options Appraisal Completed by	Name	Signature	Date
Airspace Regulator (Economist)	[REDACTED]	[REDACTED]	27/05/2022