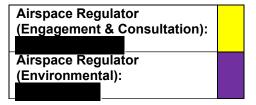


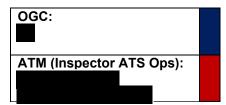
# **CAA CAP 1616 Options Appraisal Assessment (Phase I Initial)**

Title of Airspace Change Proposal:	MTMA FASI	MTMA FASI		
Change Sponsor:	NERL			
ACP Project Ref Number:	ACP-2019-77			
Case study commencement date:	27/01/2023	Case study report as at:	02/03/2023	

Account Manager:	
Airspace Regulator	
(Technical):	







### **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. Ba	ckground – Identifying the impact of the options (including	Do Nothing (DN) / Do Minimum (DM))		Stati	us	
1.1	Are the outcomes of the Initial Options Appraisal (IOA) (Ph	nase I) clearly outlined in the proposal?	$\boxtimes$			
1.1.1	Has the change sponsor completed an Initial Options Appraisal? [E12]	Yes, the Sponsor has completed a 69-page Initial Options Appraisal.	$\boxtimes$			
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	There is no explicit, comprehensive list of the viable options in the IOA. There is such a list in Tables 4-11 of the DOE. References to this table in the IOA would be useful in default of a full list of viable options.  The baseline scenario is not described in the IOA, though it is frequently referred to. It is described in the DOE (Section 4.7). To avoid needless repetition, a more explicit reference to this section could be included in the IOA.  The sponsor assesses the environmental impacts of each option in the assessment tables in Section 3 of the IOA. It includes an assessment of greenhouse gas impacts, air quality and noise.  The IOA assesses the costs and benefits involved for each option.				
1.1.3	Has the sponsor stated on what criteria the comprehensive list of viable options has been assessed?	The Sponsor does not explicitly state the criteria against which the list of options is assessed in the IOA. However it lists the criteria against which it is assessing the options in each table in the assessment. An explicit list of the criteria could be helpful for consultees.		$\boxtimes$		
1.1.4	Where options have been discounted as part of the IOA exercise, does the change sponsor clearly set out why?	Yes, the appraisal of each option in Section 3 makes it clear why the rejected options are rejected in the conclusion section. In addition, it makes reference to the tables in the same section for a more detailed description of why those options are rejected.	$\boxtimes$			

1.1.5	Has the change sponsor indicated their preferred option(s) as a result of the IOA (Phase I - Initial)? [E12]	No, the Sponsor states in paragraph 7.6 that "It is not proportional for NATS to state their preferred design at this stage as this is dependent on understanding the holistic system wide design. These options will be developed in greater detail in stage 3 and presented for consultation".			$\boxtimes$
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)?	No, beyond a vague statement that some quantitative analysis will be quantified for Stage 3 (paragraph 2.7).		$\boxtimes$	
1.1.7	Does the plan for evidence gathering cover all reasonable impacts of the change? [E12]	The Sponsor provides no such plan.		$\boxtimes$	

2. Im	2. Impacts of the proposed airspace change				Status
2.1	Are there direct impacts on the following:				
2.1.1	Examples of costs considered (please add costs that have been discussed, and any reasonable costs that the Airspace Regulator (Technic feels have NOT been addressed) All costs are qualitative at this stage and highly dependent on changes to CAS (increases). Training costs considered for ATC delivery, including the potential briefing requirements for Mil ANSPs.				
	Airport/ANSPs	Not applicable	Qualitative	Quantified	Monetised
	- Infrastructure		Х		
2.1.2	- Operation		X		
	- Deployment		X		
	- Other(s)	Х			
	Commercial Airlines/General Aviation	Not applicable	Qualitative	Quantifie	ed Monetised
2.1.3	- Training		Х		
2.1.3	- Economic impact from increased effective capacity		Х		
	- Fuel burn		X		

	- Other(s)	Х			
0.4.4	General Aviation	Not applicable	Qualitative	Quantifie	ed Monetised
2.1.4	- Access		Х		
2.1.5	Military	Not applicable	Qualitative	Quantifie	d Monetised
2.1.3			Χ		
	Wider society, i.e., wider economic benefits, capacity resilience	Not applicable	Qualitative	Quantifie	ed Monetised
2.1.6	- Greenhouse gas impact		X		
	- Capacity/resilience		Х		
247	Other (provide details)	Not applicable	Qualitative	Quantifie	ed Monetised
2.1.7					X
2.2	Are there direct beneficial impacts on air traffic control / management systems? Provide details.  Option 2 would provide an efficient deconflicted network where possible with added connectivity to Free Route Airspace (FRA) yielding capacity benefits and a reduction in air traffic control (ATC) complexity. This would increase the capacity and resilience of the ATC network through a reduction in controller workload.				
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 impacts? In most aspects of the assessment, the sponsor has provided an accurate proposed airspace change. However, it has not provided quantified or monother software, as required by CAP1616, nor has it provided a sufficient ju "Owing to the presentation of design options as high-level concepts, it works accurate quantitative assessment of each option". Either it should expand the analysis for each option it wishes to progress.	e and proportionate onetised CO2 NPV ustification for not c uld be disproportio	e assessment of the 's using WebTag of doing so, saying of nate to attempt ar	ne or nly:	

3.1	If the proposed airspace change has an impact on the following factors, have they been addressed in the proposal?			the		
		Not applicable	Qualitati	ve		uantified/ onetised
3.1.1	Number of aircraft movements	X				
3.1.2	Number of air passengers / cargo	Х				
3.1.3	Type of aircraft movements (i.e., fleet mix)	Х				
3.1.4	Distance travelled	Х				
3.1.5	Operational complexities for users of airspace		Х			
3.1.6	Flight time savings / Delays		Х			
3.1.7	Other impacts					
	Comments: It is disappointing that the Sponsor has made so little effort to address, e	ven in a relatively pe	erfunctory manne	er, the numbe	er of air	craft
3.2		nced source of data	to develop the 1	0 years	er of air	craft
3.2	It is disappointing that the Sponsor has made so little effort to address, e movements, passengers or cargo or fleet mix affected by its proposals.  • Has the sponsor used the most up-to-date, credible and clearly referer traffic forecast and considered the available guidelines (i.e., the Green	nced source of data Book and TAG mod	to develop the 1 dels) in a proport	0 years ionate	er of air	craft
3.2	It is disappointing that the Sponsor has made so little effort to address, e movements, passengers or cargo or fleet mix affected by its proposals.  • Has the sponsor used the most up-to-date, credible and clearly referer traffic forecast and considered the available guidelines (i.e., the Green and accurate manner? [B11 and E11]	nced source of data Book and TAG mod and analysis results	to develop the 1 dels) in a proport	0 years ionate	er of air	craft
	It is disappointing that the Sponsor has made so little effort to address, e movements, passengers or cargo or fleet mix affected by its proposals.  • Has the sponsor used the most up-to-date, credible and clearly referer traffic forecast and considered the available guidelines (i.e., the Green and accurate manner? [B11 and E11]  • Has the sponsor explained the methodology adopted to reach its input	nced source of data Book and TAG mod and analysis results	to develop the 1 dels) in a proport	0 years ionate		craft
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<b>3.3</b> 3.3.1	It is disappointing that the Sponsor has made so little effort to address, e movements, passengers or cargo or fleet mix affected by its proposals.  • Has the sponsor used the most up-to-date, credible and clearly referer traffic forecast and considered the available guidelines (i.e., the Green and accurate manner? [B11 and E11]  • Has the sponsor explained the methodology adopted to reach its input  Has the sponsor developed an assessment of the following environ  Noise	nced source of data Book and TAG mod and analysis results mental aspects?	to develop the 10 dels) in a proport s? [B11 and E11 Qualitative	0 years ionate		

3.3.5	Local air quality		Х	
3.3.6	Tranquillity		X (assessed as noise only)	
3.3.7	Biodiversity	Not assessed	•	
3.4	What is the monetised impact (i.e., Net Present Value (NPV)) of 3.3? (Not provided.	Provide commer	nts)	

4. E	conomic Indicators of the ACP	Status		
4.1	<ul> <li>What are the qualitative / strategic impacts described in the ACP?</li> <li>Option 0: could in turn lead to a negative economic impact due to increased delays from increased ATC workload.</li> <li>Option 1: Positive impact on GA from increased capacity following airspace change</li> <li>Option 1 has the potential to contribute positively to the AMS, enabling the safe and efficient growth in capacity and er economic improvements,</li> <li>The economic impact of the other options is not quantified.</li> </ul>	nvironmental and		
4.2	What is the overall monetised and non-monetised (quantified) impact of the proposed airspace change?  Likely to be slightly positive due to increased air traffic capacity, but not quantified at this stage. Quantification is promised for subsequent stages.			
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			
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] Not provided.			
4.4	Have the sponsors provided reasonable justification for the proportionality of analysis above?			

5. O	. Other aspects			
5.1				

### 6. Summary of the Initial Options Appraisal & Conclusions

Overall, most aspects of the IOA are well-presented and proportionate.

However, it is disappointing that there is so little quantitative analysis, even on the CO2 implications of the proposed options. The single-sentence justification, that it seems "disproportionate", is highly inadequate. It is certainly against the spirit, if not the letter, of the relevant part of CAP 1616. Either the lack of quantitative analysis should be address, or the justification should be significantly expanded.

## **Outstanding issues**

Serial	Issue	Action required
1	Lack of quantitative analysis for many of the impacts, in particular CO2/fuel burn.	Provide appropriate and proportionate quantitative analysis 02/03/2023: The change sponsor has satisfactorily addressed this post Gateway action.
2	Inadequate justification for issue 1 above.	Expand the justification provided. 02/03/2023: The change sponsor has satisfactorily addressed this post Gateway action.
3	There is no explicit, comprehensive list of the viable options in the IOA.	Provide such a list or refer to Table 4-11 in the DOE  02/03/2023: The change sponsor has satisfactorily addressed this post Gateway action.
4	The baseline scenario is not described in the IOA, though it is frequently referred to.	Refer to description in Section 4-7 of the DOE  02/03/2023: The change sponsor has satisfactorily addressed this post Gateway action.
5	No evidence gathering plan provided	Provide evidence gathering plan  02/03/2023: The change sponsor has satisfactorily addressed this post Gateway action.

CAA Initial Options Appraisal Completed by	Name	Signature	Date
Airspace Regulator (Economist)			02/03/2023
Airspace Regulator (Environmental)			24/02/2023