

# Glasgow Airport

# FASI-N Airspace Change Proposal

## Gateway Response Document

Date: July 2022

Document Version: V1.0

Status: Final document for CAA Submission (Public)

# 1. Introduction

Following the Stage 2 'Develop & Assess' Gateway meeting on 24 June 2022, the CAA concluded that the Glasgow submission did not meet two of the five criteria required to progress to Stage 3 of the CAP1616 process.

The CAA published a statement regarding their decision on the CAA Portal [here](#).

Glasgow Airport have updated the Stage 2 Submission Documents in accordance with the feedback received from the CAA for submission on 28 July 2022, with a Gateway meeting to be held on 23 August 2022.

# 2. Purpose of this document

This document is a supplementary Change Record document to accompany Version 1.1 of the Glasgow FSI-N Airspace Change Proposal Stage 2 submission.

It is intended to show the feedback received via email and verbally from the CAA and the subsequent actions taken by Glasgow Airport, highlighting the areas of the main submission documents which have been updated since Version 1.0 (26 May 2022).

You said			We did	
Develop & Assess Criteria	#	CAA Feedback	Glasgow Airport Response	Where to find in our updated documents
(3) The change sponsor must have produced a DPE that the CAA has accepted showing how its design options have responded to the design principles	1	<b>DPE Consistency and discounting criteria.</b> The DPE is not consistent in terms of how options are evaluated. It does not set out a discounting methodology to support the discounting of options, i.e., assigning priorities or ranking options would have helped in supporting the selection of options to take to Stage 2B. The DPE appears to include references to elements of Options that are not discussed earlier in the submission. [CAP1616 Para 128, E19, Page 208]	<p>Following conversations with the regulator to clarify this feedback, we now understand that this point does not refer to the fundamental outcome of the design principle evaluation or the consistency of the evaluation, however it does refer to:</p> <ul style="list-style-type: none"> <li>i. the methodology used for some parts of the Design Principle Evaluation partly linked to feedback (2) and (3) below and, <ul style="list-style-type: none"> <li>a. The methodology applied to the design principles concerned with controlled airspace (CAS) DP3 &amp; DP 9. Specifically, clarification on why we chose to evaluate these design principles when elsewhere in the Stage 2 documents we have noted that it is very difficult to articulate precise benefits and impacts at this early stage.</li> </ul> </li> <li>ii. details of the discounting methodology used when shortlisting the options to proceed to Stage 2B (partly linked to (2) below),</li> <li>iii. The use of technical language to describe the evaluation of some technical design principles, and</li> <li>iv. The word count of some evaluations being larger than others, suggesting that options have been evaluated inconsistently.</li> </ul> <p>In response to the CAA's feedback to Glasgow's Stage 2 submission, we have:</p> <ul style="list-style-type: none"> <li>i. Provided additional clarification around some of the methodology used to evaluate each option. <ul style="list-style-type: none"> <li>a. In the case of the Controlled Airspace Design Principles as we have articulated throughout our Stage 2 documentation, although we cannot be sure of exact CAS dimensions at this time, we know there are some options that will require changes, or more changes than others, and some that could require less change or increase chances of CAS release. We feel it is important to consider these aspects at this stage in the process, rather than not evaluate them at all, and we have updated the document to clarify this and the methodology that has been used.</li> </ul> </li> <li>ii. Provided further information about how we have taken the outcomes of the Design Principle Evaluation and included these as part of the methodology which was used when shortlisting options. As our Design Principles were not ranked (other than DP1: Safety, and DP15: AMS), we do not feel it is appropriate to assign a ranking, however we will show how we have come to the conclusions around which options proceeded to the Initial Options Appraisal.</li> <li>iii. Provided additional clarification around some of the technical terms used when evaluating some of the technical design principles. We've reviewed this throughout all the documents and aimed to explain acronyms or provide additional explanation where appropriate. We've also added a glossary to both submission documents.</li> <li>iv. Added an explanation to the DPE document which explains that some evaluations will be longer than others given that some options may have more areas of impact than others, and how in the case of respite configurations there is an assessment for each configuration.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Page 99 – 104 of Stage 2A submission document (Design Principle Evaluation Methodology section)</li> <li>(ii) Page 110 - 111 of Stage 2A submission document (Discontinuing methodology and DPE outcome)</li> <li>(iii) Glossary to Stage 2A and Stage 2B document.</li> <li>(iv) Page 105 of Stage 2A submission document</li> </ul> <p><b>Note:</b> These updates do not change the outcome of the Design Principle Evaluation however provide the CAA with the clarification they require.</p>
	2	<b>DPE and options performance.</b> The DPE does not clearly state how options perform against those DPs that have sub-DPs. This means that the information provided around these DPs' outcome is incomplete, leaving room for interpretation on how the option could possibly meet, not meet or partially meet the objectives set out in the DPs. Moreover, the assessment of the options against DP15 (AMS), which is a 'priority' DP (as stated on the submission), is the combination of the outcome of nearly all the other DPs and again the crucial information around the performance of this DP (if met, partially met or not met), is missing. [CAP1616 Para 128, E19, Page 208].	In response to the CAA's feedback to Glasgow's Stage 2 submission, we have created a methodology for balancing the component outcomes of the DPE and providing an overall outcome for those Design Principles which are broken down into components. The methodology is shown as part of the methodology section, and the overall outcome of the performance against each DP is shown as part of the DPE summary tables within the Stage 2A document. Annex A details the component performance as per the previous submission.	<p>Page 104 of Stage 2A submission document (Assessment of Design Principles with multiple components)</p> <p>Page 106 – 109 of Stage 2A submission document (Summary of Design Principle Evaluation)</p> <p><b>Note:</b> These updates do not fundamentally change the outcome of the Design Principle Evaluation however provide the CAA with the clarification they require.</p>
	3	<b>DPE and High-level criteria.</b> The high-level criteria developed do not always deliver the intended outcome i.e., using the word "maintain" to explain how options partially meet a DP that intends growth and improvements (DP2 and DP12). [CAP1616, Appendix E, para E17-19].	In response to the CAA's feedback, we have removed the partially met criteria from Design Principle 2. Any options that were previously classified as 'partially met' will now fall into 'not met'. In the case of Design Principle 12, the wording of the Design Principle is around 'minimising growth' and 'further degradation' therefore we have chosen to leave the assessments as originally submitted; any options that achieve a similar level of impact to the baseline would partially meet these statements, as they would not contribute to increased growth or increased degradation compared to the baseline.	<p>Page 99 of Stage 2A submission document.</p> <p>Annex A: Design Principle Evaluation</p> <p><b>Note:</b> In some cases some options move from amber to red however these updates do not change the overall outcome of the Design Principle Evaluation nor the specific</p>

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				qualitative evaluation undertaken for each option.
(4) The change sponsor must have produce an Initial Options Appraisal (Phase I)	4	<b>IOA Consistency.</b> There are some inconsistencies within the IOA when options' performances are compared to those stated in the DPE.	<p>Following conversations with the regulator to clarify this feedback, we now understand that this does not reflect the consistency of the Initial Options Appraisal or the Design Principle Evaluation however it does refer partly to feedback 7 below and to:</p> <ul style="list-style-type: none"> <li>i. Additional clarification around why options have been progressed into Stage 3</li> <li>ii. The use of the summary tables in the conclusion of the IOA and in addition, the language of 'benefits' and 'impacts' when the word 'impacts' can be used to describe a positive.</li> </ul> <p>In response to the CAA's feedback to Glasgow's Stage 2 submission, we have:</p> <ul style="list-style-type: none"> <li>i. provided additional clarification to that already provided around some of the rationale for discontinuing or progressing options into Stage 3.</li> <li>ii. Provided clarification that the use of the term 'benefits' is in relation to positives when compared to the baseline, and 'impacts' is used to describe negatives when compared to the baseline. The summary tables help to provide a useful overview of an options' overall performance to stakeholders given the very detailed qualitative nature of the full assessment tables and therefore we have chosen to keep these within the IOA document and we have reviewed the colour coding for consistency.</li> </ul> <p>We have also included some additional clarification within some of the assessments in Section 4 of the IOA.</p>	<ul style="list-style-type: none"> <li>(i) Section 5, Stage 2B IOA document (IOA Summary and Conclusion)</li> <li>(ii) Section 4 and 5, Stage 2B IOA document</li> </ul>
	5	<b>Traffic forecast.</b> The sponsor does not include the traffic forecast for the proposed change at this stage. [CAP1616 – Appendix B, para B32]	<p>Within section 3 (movement numbers and schedule) of the Initial Options Appraisal, we provided details of 2019 movement numbers and how this applies to the forecast for 2025. We explained that 2019 is considered the year that most reflects a scenario where Glasgow Airport has recovered from the impacts of COVID-19. We expect this recovery to have occurred by 2025 and therefore, as part of the IOA, we do not currently expect any fundamental changes to the movement numbers outlined within the document at the year of implementation. We also noted that as part of our Stage 3 Full Options Appraisal, we will fully quantitatively appraise the pre-implementation baseline and options for the year of implementation and future scenarios (plus 10 years).</p> <p>Following the CAA's feedback, we have updated the 'movement numbers and schedule' section title to include 'traffic forecast'. We will explain that owing to the uncertain nature of the aviation sector, this approach to forecasting is considered proportionate at this stage of the CAP1616 process. We will also explain why it is not proportionate at this stage to appraise the 10-year future traffic forecast and we will re-emphasise that this will be included in the Stage 3 Full Options Appraisal. Within Section 3.3 of the IOA, we have added clarification around the CAP2091 statement.</p>	<p>Section 3.1 of the Initial Options Appraisal (Baseline and Year of Implementation)</p> <p>Section 3.3 of the Initial Options Appraisal (CAP2091)</p>
<b>(Indicator 5)</b> Evidence that the change sponsor's Design Principle Evaluation (DPE) includes an assessment of how the different Design Options respond to the relevant AMS Design Principle (i.e. achieve network optimisation). This can only be based on available evidence and assumptions about the outcome of integrating different ACPs, as there are various risks and unknowns until, at least, the change sponsor has carried out the Full Options Appraisal (i.e. the quantitative work) during Stage 3. Additionally, evidence that the change DPE and Initial Options Appraisal (IOA) include a qualitative (high-level) assessment of how the Design Options perform against the vision and parameters / strategic objectives of the AMS.	6	<p>See the Design Principal Evaluation and High-Level Criteria section above.</p> <p>In addition, without a clear methodology that sets out how sub-DPs will influence the outcome of the underlying DP it is difficult to understand how the sponsor has made its conclusions on options to be discounted after the DPE and on the ones progressed to the IOA.</p>	See (2) above for details about additional information incorporated into the updated Stage 2A submission.	See (2) above.

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<p><b>Indicator 6:</b> Evidence that the change sponsor has justified, based on available evidence, why certain Design Options have been discounted, noting that the Design Option may need to be re-introduced after “integration” occurs in Stage 3 for masterplan reasons.</p>	7	<p>The change sponsor has developed a discounting mechanism at the end of the IOA and decided not to take forward to Stage 3 these same options that could have already been discounted at the end of the DPE because partially met or did not meet some DPs (i.e., DP1 on safety and DP2 on accommodating future traffic demand).</p>	<p>The CAP1616 process is a deliberative concatenated process where information about each option builds in detail as the options progress through the process. As required by the process, the Design Principle Evaluation (DPE) at Stage 2A was undertaken before the Initial Options Appraisal (IOA) at Stage 2B.</p> <p>The DPE is a qualitative high-level evaluation of the options performance against each of the Design Principles. As part of the DPE, subject matter experts (SMEs) undertake this initial analysis. In the case of some options, this evaluation suggested that there may be some safety or capacity concerns that would require further investigation should the option progress to the next stage of the process.</p> <p>At the IOA, there were opportunities for more detailed appraisal of each option. This involved speaking to a wider group of SMEs (for example ATC) and following this appraisal we then learnt more about the option which enabled a more thorough assessment.</p> <p>Although with the information available following the Initial Options Appraisal it would have been possible to go back and discount an option at the DPE, we believe this goes against the step-by-step CAP1616 process. CAP1616 describes the purpose of the Design Principle Evaluation as setting out how a sponsor’s ‘design options have responded to the design principles’ and, although shortlisting of options often occurs at this stage, CAP1616 does not specifically set any expectation that any options will be discounted through the DPE.</p> <p>Where appropriate, we’ve added clarification to some of the evaluations in the DPE to reflect that some options required further investigation should the option progress to the Initial Options Appraisal. We’ve also added clarification about the CAP1616 process to the DPE conclusion section of the main submission document along with further information about how we treated options that partially met some design principles such as DP1 Safety.</p>	<p>Annex A: Design Principle Evaluation</p> <p>Page 110, Stage 2A submission document. (Discontinuing Methodology and DPE Outcome)</p> <p><b>Note:</b> These updates do not change the Design Principle Evaluation or any outcomes</p>