Glasgow Airport FASI-N Airspace Change Proposal

Step 2A
Annex A - Design Principle Evaluation

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Option Name	The airspace design and its operation must be as safe or safer than today.	Facilitate the growth in quicker, quieter and cleaner traffic by configuring the airspace to improve efficiency and meet the forecast demand for air transport.	Design the appropriate volume of controlled airspace to support commercial air transport, enable safe, efficient access for other types of operation and release controlled airspace that is not required.	Mitigate any future requirements for airborne holding for inbound traffic and holding on the ground pre-departure for outbound traffic.	Minimise the total adverse effects of aircraft noise and visual intrusion on physical and mental health and wellbeing.			Offer communities options for both noise concentration and noise dispersion through the use of predictable and transparent multiple route options and other respite methods that are possible within the technical ATC system, en-route network and procedural constraints.		The arrival and departure routes that serve Glasgow Airport below 7000ft should avoid noise sensitive areas and buildings, national parks, areas of outstanding natural beauty/National Scenic Areas and areas that are not currently affected by aircraft noise.		Mitigate the impacts on local communities that are currently affected by aircraft noise on final approach or the vicinity of the immediate climb out, where overflight is unavoidable.	Reduce complexity and bottlenecks in controlled and uncontrolled airspace and contribute to a reduction in airspace infringements.			Collaborate with other Scottish airports and NATS to ensure that the airspace design options are compatible with the wider programme of lower altitude and network airspace changes being coordinated by the FASI North programme.	Routes to/from Glasgow and Edinburgh airports should be procedurally deconflicted from the ground to a preferred level in coordination with NATS Prestwick.	Minimise the growth in aircraft emissions, the further degradation in local air quality and adverse ecological impacts to address growing concerns about the impact of aviation on climate change.			Aircraft operating at Glasgow Airport should climb and descend continuously to/from at least 7000ft with a preference for the most environmentally beneficial option to be chose, if both cannot be achieved simultaneously.	Routes should be designed to meet a RNAV1 specification as a minimum in order to gain maximum benefit of the performance capabilities of the modern aircraft fleet operating at Glasgow Airport in line with the guidance provided in CAA CAP1385 on enhanced route spacing for PBN and provide sufficient resilience and redundancy against Global Navigation Satellite System (GNSS) failure.	The GLA ACP accords with the CAA's published Airspace Modernisation Strategy (CAP1711), any current or future plans associated with it and all other relevant policies and regulatory standards.				
					Number of people overflown below 4000ft (centreline to centreline)	Number of people within the 65dBLAmax contour (from a typical aircraft overflight)	Affect on frequency of overflight for those under the extended centreline within 5nm of the runway	Use of multiple routes	Mechanisms for predictable respite	Noise sensitive areas and buildings, national parks, areas of outstanding natural beauty/National Scenic Areas	Overfly new areas		Complexity in CAS	Bottleneck outside CAS	Infringements			Local Air Quality	Ecological Impacts	Climate Change			Maintain and enhance high aviation safety standards	Secure the efficient use of airspace and enable integration	Avoid flight delays by better managing the airspace network	Improve environmental performance by reducing emissions and by better managing noise	Facilitate defence and security objectives
RWY 05 Dep Do Nothing																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option A																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option B																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option C																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option D																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option E																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option F																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option G																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Dep Option H																							See DP1 and DP10	See DP3 and DP10	See DP2, DP4 and DP12	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP14	
RWY 05 Dep Option I																							See DP1 and DP11	See DP3 and DP11	See DP2, DP4 and DP13	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP15	
RWY 23 Dep Do Nothing																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Dep Option A																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Dep Option B																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Dep Option C																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Dep Option D																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Dep Option E																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrv Do Nothing																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Option A																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Option B																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Option C																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Option D																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Vectors only																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 05 Arrival Vectors and PBN hybrid																							See DP1 and DP10	See DP3 and DP10	See DP2, DP4 and DP12	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP14	
RWY 23 Arrv Do Nothing																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option A	**DISCONTINUE**																						See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option B	**DISCONTINUE**																						See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option C																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option D																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option E																							See DP1 and DP9	See DP3 and DP9	See DP2, DP4 and DP11	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP13	
RWY 23 Arrival Option F	**DISCONTINUE**																						See DP1 and DP10	See DP3 and DP10	See DP2, DP4 and DP12	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP14	
RWY23 Arrival Vectors only																							See DP1 and DP10	See DP3 and DP10	See DP2, DP4 and DP12	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP14	
RWY 23 Arrival Vectors and PBN hybrid																							See DP1 and DP10	See DP3 and DP10	See DP2, DP4 and DP12	See DP2, DP4, D5, DP6, DP7, DP8, DP12 and DP14	

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