

CAA PIR Report

Airspace Change Proposal Title	Swanwick Airspace Improvement Programme - Airspace Deployment 6	
Airspace Change Proposal Reference	ACP-2018-065	
Change Sponsor(s)	NATS Enroute Ltd (NERL) and London Luton Airport Ltd (LLA)	
CAA Decision Date	24 th November 2021	
Implementation Date	24 th February 2022	
ACP Level	1 - <u>CAP1616 version 4</u>	

Instructions

In providing a response to each question and/or status, the following colour coding should be used:

- HAS RESULTED IN THE EXPECTED IMPACTS AND/OR OUTCOMES
- HAS NOT RESULTED IN THE EXPECTED IMPACTS AND/OR OUTCOMES See Part B.2
- POINTS TO NOTE/ISSUE TO HIGHLIGHT See Part B.3 if required

Executive Summary

CAA Decision

- This Post Implementation Review (PIR) Report is the final stage (7) of the CAP1616 process for ACP-2018-65
- The objective of the airspace change proposal (ACP) was to '... maintain a high standard of safety by reducing complexity, air traffic controller (ATC) workload and delays for London Luton (EGGW) arrivals, and consequential delays to London Stansted (EGSS) arrivals.' The CAA decided that to meet this objective the following changes to the airspace design should be implemented:
 - o 10 new STARs into EGGW removing the interdependency of the current STARs and shared holds with EGSS;
 - A new distinct EGGW hold (ZAGZO);
 - o Establish new Control Areas (CTAs) as Class C airspace to provide the requisite safe containment of the new STARS and;

 The re-classification, to Class G, of two volumes of existent controlled airspace (CAS) adjacent to EGSS, resulting in new vertical profiles for 8 EGSS standard instrument departures (SIDs).

PIR chronology

- The CAA received a revised <u>statement of need</u> (SoN) from NERL jointly with LLA (the sponsor) in December 2018, stating that they had identified a latent risk in a Terminal Control (TC) Sector and wished to consider changing the airspace design into London Luton Airport to mitigate this risk.
- As a result of this, the CAA held an assessment meeting (AM) with the sponsor on 8th January 2019, which concluded with a follow up meeting on 6th February 2019. The CAA agreed that an ACP was required to address the identified latent risk.
- On 24th November 2021 the CAA approved ACP 2018-65, with conditions. The CAA is satisfied that the conditions were met prior to implementation. The approved changes were implemented on 24th February 2022.
- The sponsor stated, in para 3.5 of the PIR Main Report Issue 1, that the Covid-19 pandemic 'had significant long-term impacts on UK aviation' and that the ongoing 'Russia-Ukraine conflict continues to impact UK aviation'.
- The change was promulgated through normal activity including an AIC (Y006/2022) published in the UK AIP two weeks before implementation.
- The CAA made its <u>data request</u> to the sponsor on 8th March 2022.
- The CAA was asked by stakeholders to delay the original proposed data collection period (1st June 2022 to 31st May 2023) to provide a more representative data set following the covid pandemic downturn. The CAA agreed that the data period be extended in accordance with CAP1616 v.4 para 290. The data period was agreed as 23rd September 2022 to 22nd September 2023, which would cover the summer 2023 period.
- The initial PIR document set was published by the sponsor on 11th July 2024 and a 'feedback window' was opened until 11th September 2024 to allow adequate time for stakeholders to respond given its publication during the summer holiday period.
- The CAA sought clarification on several points within the PIR submission and requested additional data from the sponsor. A <u>response</u> to this request was uploaded to the portal on 25th March 2025.
- This additional data was not in the original PIR data request, and we were informed that there would be an extra cost to the sponsor
 to produce the data. Had the sponsor not provided the data the CAA would have had to make its determination on the outcome of
 the PIR based on the information provided originally. The sponsor elected to provide the CAA with the additional information.
- The CAA did not re-open a feedback window in response to the additional data being published. This was provided to the CAA to better understand the impacts of the change prior to the CAA's determination on the outcome of the PIR. The additional data was within scope of the original data request and not 'new' in terms of being a different data request.

- NATS suffered a technical failure on 28th August 2024 (external link), and as a result the CAA agreed that data for the 4-day period 28th-31st August 2024 would not be representative and was not included in the analysis.
- During the CAA PIR review process, the CAA considered the following published information:
 - o AD6 PIR Main Report Issue 1.0
 - o AD6-PIR Annex A Issue 1.0 traffic Dispersion and Environmental data
 - o AD6-PIR Annex B Issue 1.0 Operational Feedback
 - o AD6-PIR Annex C Issue 1.0 Stansted SID Climb Evidence
 - AD6-PIR Annex D issue 1.0 Stakeholder Feedback
 - o AD-PIR Annex A Issue 1.0 Appendix Noise Technical Report
 - o AD6-PIR CAA Clarification Questions and Sponsor Responses Issue 1.0
 - o AD6-PIR Annex A1 Issue 1.0 Supplemental Traffic Dispersion Data
 - o AD6-PIR Noise Technical Report Issue 2.0
 - Feedback received via the CAA Portal during the feedback period
- The CAA ATS Inspector also reviewed confidential human factors data relating to the potential impacts of the changes on the air traffic controllers involved with the changes to the airspace design implemented only as part of this ACP.

PIR conclusion

- The PIR data shows that the objectives of the ACP, as approved, have been met within acceptable tolerances. The change was driven by a need to address a latent safety risk and the data demonstrates that it has done so. The CAA is satisfied that the design and the operational vectoring practices seen following implementation of the airspace change maintain a high standard of safety. Notwithstanding that the changes in vectoring practices and the use of shortcut routes during the PIR period have led to more people exposed to a higher level of noise, and more net overflight, whilst generating a smaller increase in greenhouse gas emissions than was anticipated, the airspace change overall has resulted in the impacts and outcomes within expected tolerance limits. (see more detail in A.11.1).
 - The CAA has concluded that the implemented airspace change satisfactorily resulted in the expected impacts and outcomes (within acceptable tolerance limits) and the airspace change is confirmed.

Post implementation review data that the CAA has considered in reaching its PIR conclusions **Safety Data** A.1 A.1.1 The CAA has reviewed the PIR safety data, the service provision explanation, resourcing data and infringement data to ensure that a high standard of safety was maintained during the data collection period as a result of the airspace change. The sponsor has analysed the safety data they received as part of the processes under their safety management system (SMS). All mandatory occurrence reports (MORs) are shared with the CAA as part of the routine ongoing regulatory oversight. Meetings with the Swanwick Incident Investigations Team confirmed that there were no losses of separation and no Airprox¹ events related to the introduction of the SAIP AD6 airspace reported during the review period. The data also shows that there have been no serious incidents² and of the incidents that were reported that occurred in the associated airspace, the CAA is satisfied that the design of the implemented airspace was not the root cause of the event. The sponsor has explained how the splitting of the main air traffic 'flows' into EGGW and EGSS has permitted two different controllers to provide instructions to aircraft, therefore dividing the radio exchanges and resulting workload. The sponsor polled their air traffic control subject matter experts (ATC SMEs) during the PIR data collection period to determine whether the % of radio exchanges with aircraft had reduced following the ACP. The CAA is satisfied that the intended c.30% increase in resilience within the impacted sectors has been achieved. Following consideration of the information provided and the onsite visits, the CAA is satisfied that the controllers involved with the changes have not seen a degradation in their human performance as a result of the airspace changes. Furthermore, Operational Supervisors (OS), Group Supervisors (GS) and Air Traffic Controller Officers (ATCOs) all confirmed that the airspace changes associated with SAIP AD6 had maintained a high standard of safety. The CAA is satisfied that the implementation of ACP2018-65 (SAIP AD6) maintains a high standard of safety within the airspace sectors which the airspace changes intended to benefit. A.2 Service provision/resource A.2.1 The data shows that there was c.11% less arrival traffic during the data collection period when compared to the actual 2019 arrivals. The sponsor has provided data on the ATC delays in the airspace in which the airspace changes were made. The delays have been attributed to 9 air traffic flow and capacity management (ATFCM) regulations. These regulations are applied to prevent the overloading of traffic in a particular air traffic control sector. During the PIR period, no refusals of service were recorded. The delays that did occur during data collection period were overall lower than the comparison year of 2019. The CAA notes that there was an increase in staffing regulations during the PIR data collection period when compared to 2019, yet there was a 27% drop in overall delay minutes the PIR data collection period, highlighting that resilience has increased. The sponsor has shown that this ACP has delivered on reducing controller workload by allowing the traffic to be better distributed between the available controllers

¹ ICAO DOC 4444 – a situation in which [full text removed] the safety of the aircraft involved may have been compromised.

² CAP382 Para 8.3 - An incident involving circumstances indicating that an accident nearly occurred.

	in the sectors (see full explanation in A.1.1 above).			
A.3	Utilisation of continuous climb operations (CCO) and continuous descent operations (CDO)			
A.3.1	This ACP did not implement any new departures, therefore CCO data is not relevant to this PIR. The sponsor has elected analyse continuous descent approaches (CDAs) from 5000ft QNH³, which aligns with the definition in the UK AIP (AD2.21.3) ft EGGW. The data shows that as a percentage, on average c.2% more aircraft achieved continuous descents (as analysed) during the PIR data collection period. The sponsor acknowledges that there were less aircraft than expected in the data collection period. However, the changes made under this ACP altered aircraft behaviours at higher levels, resulting in aircraft remaining higher flonger, which is more efficient and has consequentially reduced the overall length of time that arrivals to runway 07 maintains an altitude of the less efficient c.5000ft altitude. The CAA noted that during the Define stage of the ACP, Design Principle 7 was stated as, 'should enable continuous descent from at least 7,000ft & facilitate continuous descent above that.' The CAA a satisfied that given the objectives of the ACP, the arrivals into EGGW saw an improvement in CDOs during the data collection period when compared to pre-change data.			
A.4	Infringements because of the change			
A.4.1	The CAA is satisfied that the data provided shows that changes to airspace classification, through the removal of or introduction of new CTAs as part of this ACP, did not increase the risk of infringements. The sponsor highlights that there was one report of an infringement of DTY CTA 21 during the PIR data collection period which was due to the pilot having a loss of situational awareness.			
A.5	.5 Traffic figures (air transport movements)			

³ An altimeter setting that will indicate an altitude. APR-AC-TP-040

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A.5.1 The sponsor is clear that there was no predicted flight growth for the year of implementation due to EGGW already operating at its 'planning capacity limit'. During the PIR data collection period the number of arrivals was 89.3% of the forecast; however, this is still considered representative. The CAA is satisfied that the monthly movement data shows no unexplained anomalies and provides a representative data set for considering traffic dispersion and operational data. The sponsor has been transparent in their analysis of the external factors that could have impacted the data during the collection period. The sponsor also references the planning applications that were in process at the time of the submission. The London Luton Airport Expansion Development Consent Order (DCO) 2025 was approved 24th April 2025, outside the data collection period for this PIR. The CAA is satisfied that the data collected shows that the forecasting remains valid; however, the sponsor is clear that as the DCO has been approved, there could be an increase in flights within the constraints of the current infrastructure at EGGW. The CAA is satisfied that despite the overall reduction in arrivals during the PIR data collection period when compared to 2019, the mix of aircraft utilising the airspace design has nevertheless remained within acceptable tolerances, especially in the 2-engine single aisle jet, which is the main aircraft type operating at EGGW.

A.6 Traffic dispersion comparisons

The sponsor provided the CAA with track data from 7 days in June 2023, as they used 7 days in June 2019 to illustrate the traffic A.6.1 flows for their public consultation materials. The sponsor states that these days in the month of June were chosen because they were considered to be representative of the typical traffic flows. The CAA did not consider that 7 days of data was a sufficient representation of the traffic data, considering the change had been implemented for over 12 months. The sponsor was asked to provide further traffic flow information in the form of density plots, to show how the change has actually performed (PIR requests 34a and 34b). The CAA asked to see traffic dispersion and level data for other periods during the PIR data collection period to determine if the traffic performed as expected as a result of the change (see CAP1616 (Ed4) para 276). The sponsor provided two further 7-day samples (one for each runway) taken from March 2023 and September 2023. The original data supplied and this additional data, illustrate over 5000 tracks into both runways at EGGW. The CAA is satisfied that this is a sufficient representation of arrivals into EGGW during the data collection period for the purpose of this review. The CAA also asked the sponsor to confirm the methodology for the colouring of the traffic density plots, which they did in para 2.18 of the Annex A1: Supplemental Traffic Dispersion Data document. The CAA is satisfied that this is clear and explains how the data was analysed. The CAA is satisfied that the diagrams and explanations provided by the sponsor regarding density, dispersion and descent of arrivals provides satisfactory evidence of the air flight behaviours directly impacted by the ACP. The sponsor is also clear that there were no weather anomalies that would have impacted the data during the PIR period.

The sponsor states that above 8000ft, the traffic flows from the south are more direct than predicted due to the reduction in holding at the LOREL hold (PIR Annex A Issue 1 Fig 7). The CAA is satisfied that this short-cutting above 8000ft is within acceptable tolerances given the ATC requirements of the airspace design. The sponsor has also highlighted an area where there was unexpected overflight below 7000ft for arrivals to runway 07 (PIR Annex A Issue 1 Fig 10, Fig 11 and PIR Annex A1 Supplemental

Fig 11, Fig 12). During the data collection period some aircraft were routed further north, below 7000ft when arriving on runway 07 as a result of the splitting of the arrival flows. However, arrivals into runway 07 during the data collection period stayed higher (above 5000ft) for longer than expected due to controllers having vectored aircraft further north and west than the sponsor expected as part of managing other ATC interactions. There is also more dispersion, than predicted, for arrivals to runway 25 descending from 8000ft from the northeast. The CAA is satisfied that the dispersion of arrivals that were not as predicted are within acceptable tolerances of the operation following implementation given the requirement for vectoring and the average runway usage split of 70/30 for 25/07.

A.7 Operational Feedback, including other airspace users

- A.7.1 The sponsor provided the CAA with <u>Annex B: Operational Feedback</u>. This document (table 1) lists 64 aviation stakeholders that were sent questionnaires to provide feedback on the changes. There were 20 responses. The sponsor has summarised the narratives from each stakeholder and provided qualitative responses as required. Overall, the CAA is satisfied that the operational feedback was positive. The CAA note the following key feedback points:
 - a) Easyjet reported increased fuel burn due to longer arrival routes. This was also mentioned in the feedback at the Flight Operations Committee (FLOPC), 7th June 2023. The CAA expected that the proposed changes might result in increased fuel burn on some of the new procedures, due to the original objectives of the ACP and are satisfied with the action/response from the sponsor.
 - b) Ryanair suggested some re-routing of arrivals into EGGW to shorten the arrivals. The CAA is satisfied that the sponsor maintains a high standard of safety in the provision of services and would not permit short-cuts unless it was safe to do so.
 - c) Cambridge airport reported a noticeable impact to their radar as a result of increased clutter⁴. The sponsor acknowledges the issue but that they are unable to reduce this consequential impact. The CAA notes that weather and traffic patterns will also generate clutter that might impact the radar at Cambridge airport. The CAA would expect Cambridge to monitor this impact and ensure mitigations are applied to minimise any risk it may pose to their operation. There is not an option for a proportionate modification to the implemented airspace design that would reduce this impact.
 - d) Stansted airport reported a reduction in holding and delays for their traffic and reduction in airspace infringements in the region where airspace was re-classified to G.
 - e) Feedback from the MoD via Defence Airspace and Air Traffic Management (DAATM) reported 2 minor impacts. An update to the LoA with 78 Sqn RAF Swanwick has resulted in a revised co-ordination procedure and discussions with United States Airforce Europe (USAFE) to improve procedures described in that LoA led to an update after the PIR data collection period.

The CAA is satisfied that the key impact points raised as part of the operational feedback period were within acceptable tolerance

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⁴ UK Reg (EU) 2017/373 - means the visual indication, on a situation display, of unwanted signals. APR-AC-TP-040

	limits.			
A.8	Denied access			
A.8.1	The CAA reviewed the FCS1522 ⁵ forms submitted to the CAA during the data collection period. There was no evidence of any refusals of services during that time period that were related to the CAS implemented under this ACP.			
A.9	Utilisation of standard instrument arrivals			
A.9.1	The data shows that there were slight increases in traffic flows from the southwest and the east. There was a more noticeable reduction in arrival flows from the south and southeast. As described in A.6.1, the data during the PIR period shows that there was less use of the STARs that avoid the LOREL hold by design than predicted. The CAA is satisfied that the main flows, utilisin the published STARs into EGGW, remain consistent and within acceptable tolerances.			
A.10	Letters of agreement			
A.10. 1	One of the sponsors (NATS only, LLA is not a party to the LoAs) has concluded and agreed signed LoAs with the required stakeholders prior to implementation. The sponsor has ensured ongoing engagement with signatories to the LoAs which support the safe and efficient operation of the airspace design. The sponsor has responded to feed-back from the MoD (78 Sqn Swanwick Mil) in order to ensure their LoA provided safe and efficient operations for all signatories. The sponsor has also updated their LoA with the USAFE to improved tactical descents for their operations. The CAA is satisfied that the agreed LoAs required to safely manage the changes implemented, are being utilised accordingly.			
A.11	Environmental factors			
A.11. 1	The ACP has resulted in more people exposed to a higher level of noise than anticipated and a net increase in overflight. Although an increase in greenhouse gas emissions was expected, post-implementation changes in vectoring practices have reduced the severity of the impact, which remains a disbenefit overall.			
	The sponsor assessed that the ACP would reduce the number of people adversely affected by aircraft noise (a noise benefit) and reduce the number of people overflown. The CAA anticipated no change in aircraft behaviour below 5,000 ft and therefore anticipated there would be no change in noise. The sponsor also assessed that the ACP would result in an increase in fuel burn and greenhouse gas emissions (a CO ₂ e disbenefit), and no change in other environmental factors.			
	In practice, post-implementation changes in vectoring practices have led to different outcomes. More people are now adversely affected by aircraft noise, more people are overflown, and while the increase in greenhouse gas emissions has been less severe			

⁵ A UK airspace access or refusal of ATS report APR-AC-TP-040 PIR Review Report

than originally forecast, it remains a disbenefit overall.

The CAA's PIR assessment compares the actual operational impact of the change with the forecasted impact in the formal proposal to determine whether the environmental impacts occurred as anticipated. The PIR noise and overflight analysis for the implementation of SAIP AD6 is based on Luton Airport radar data for the 92-day summer noise policy period from 15 June to 16 September 2023 inclusive. The CAA has based its assessment on the scenario that normalises post-implementation airspace to provide a consistent comparison with the ACP assessment.

- The ACP was not expected to result in any additional adverse impacts on local air quality, tranquillity or biodiversity. The PIR data has demonstrated that the ACP met these anticipated outcomes.
- The ACP was expected to generate an overall increase in greenhouse gas (GHG) emissions for Luton Airport of 6,831 tonnes CO₂e (Luton). The PIR indicates that Luton Airport emissions increased by 3,303 tonnes CO₂e.
- For Stansted Airport, the ACP was expected to lead to a reduction of 1,457 tonnes CO₂e. The PIR data indicates that Stansted Airport emissions reduced by 3,011 tonnes CO₂e during the PIR period.
- In respect of noise, the ACP was expected to increase the number of people adversely affected during the day and reduce those affected at night (i.e. people exposed to levels above the Lowest Observed Adverse Effect Level, LOAEL). However, the CAA concluded that no change was expected, on the basis that the sponsor anticipated no change in the way aircraft operate below 4,000 ft. In practice, the PIR shows a larger-than-expected impact: around 800 more people are adversely affected during the day, and an even greater increase of about 3,200 people at night.
- For the average summer daytime N65 contours, the airspace change has performed better than was anticipated, however, for the night-time N60 contours, the area exposed to 10 events or more is larger than expected.
- As anticipated, there are no changes to adverse noise impacts related to Stansted Airport traffic due to implementation of the ACP.
- The ACP was anticipated to result in an overall net reduction in the number of people overflown below 7,000 ft. (as per the CAA's definition of overflight in CAP 1498). The PIR indicates that there is an increase of 48,500 overflown during the day and a decrease of 42,700 overflown at night (based on 5 or more events). This equates to a net increase of 5,800 people overflown.
- As anticipated, aircraft approaching and utilising the new ZAGZO hold are above 7,000 ft. and are therefore out of scope for noise and overflight assessment.

A.12	International obligations		
A.5.1	There were no impacts on international obligations.		
A.13	Ministry of Defence operations		
A.13. 1	The sponsor has mitigated the impacts of the airspace change to MoD and USAFE operations through engagement and the amendment of the relevant LoAs.		
A.14	Stakeholder feedback		
A.14. 1	Were there any unintended outcomes that the feedback has highlighted? If so, are they within acceptable tolerance limits? Stakeholders provided feedback via three channels: feedback and complaints submitted to the sponsor; feedback submitted to		
	the CAA during an online 60-day PIR feedback period and feedback and complaints submitted to the CAA since implementation of the airspace change. The themes that emerged from the CAA's review of stakeholder feedback aligned with those identified by the sponsor in their Annex D Stakeholder Feedback and Complaints. The CAA notes the following key feedback:		
	• Some stakeholders stated that the AD6 operation had differed significantly from that expected, as consulted upon, with approaches hardly using the new ZAGZO hold, easterly approaches not reaching the COCCU waypoint as originally intended, and westerly approaches avoiding the AD6 arrival route. Instead, they stated that flights were being given shortcuts to expedite their descent, turning earlier, resulting in concentration of aircraft in areas of low baseline ambient noise. Tactical flows were said to have become the major flight path routes. Southerly approaches passing LOREL were said to have resulted in many properties being overflown twice by the same aircraft with just a few minutes separation. The CAA has found that aircraft are being given a higher proportion of shortcuts than initially anticipated. Due to the new location of the STARs and the hold, there is an inevitable change in overflights below 7,000 ft., due to aircraft exiting the STARs between 8,000 ft and 5,000 ft. Higher than anticipated use of shortcuts has resulted in a concentration of aircraft at lower altitudes. This outcome has been driven by the sponsor's intention to reduce the complexity in the TC Essex sector, which has been achieved.		
	 Respondents expressed anger that disturbance from overflight had resulted in loss of enjoyment of property and the local environment in villages that were previously peaceful. A detrimental impact on quality of life and physical and mental wellbeing was said to have occurred due to higher noise levels than anticipated, both during the day and at night. Severe noise impact was cited for some residents within Bedfordshire, Cambridgeshire, Hertfordshire, and Huntingdonshire. Concern was expressed that AD6 had not delivered CO₂ e improvements, when the UK are legally obliged to achieve net zero emissions by 2050. The CAA has found a smaller increase in Greenhouse gas emissions for Luton Airport than was 		

anticipated due to arrivals being given more shortcuts that predicted. The expected CO₂e benefit for Stansted Airport has been more than anticipated. This has been attributed to a greater than expected repositioning of Stansted arrivals.

- A frequently raised theme was the use of air brakes to enable a rapid descent from above 8,000 ft resulting in noise
 disturbance, in particular, late at night and in the early morning, in areas that were previously not typically overflown. The
 noise recordings submitted via stakeholder feedback have been reviewed by the CAA and two possible explanations have
 been identified. One is the Fuel Overpressure Protection System (FOPP), a known issue with a retrofit fix in progress for all
 aircraft. The other is speed braking using flaps on the wings to increase resistance and slow aircraft. Neither of these issues
 are specific to the AD6 airspace change.
- Feedback was submitted that the only way to minimise noise and CO₂e is first using optimum CDO from the top of descent (TOD) and that there was no significant improvement in the percentage of arrivals achieving CDO. Given the objectives of this ACP, arrivals into Luton Airport saw an overall improvement in CDOs during the data collection period when compared to prechange figures.
- There was criticism of the CAA's airspace change portal regarding ability to access the PIR report and feedback instructions.
 The CAA will explore if improvements can be made to the search functionality on the portal, especially regarding ease of locating PIR reports and information on how feedback can be submitted.

Stakeholder feedback is aligned with the impact and outcomes identified by the PIR data described above.

- A.15 Using the same 121-day period as in the supplemental data set to show how many aircraft utilising the 8 impacted EGSS SIDs are making the new vertical restrictions at the gates, plus relevant dispersion points to show any unexpected lateral deviations.
- A.15. Are any other PIR data requests within acceptable tolerances

The sponsor has provided analysis and data on how the amended EGSS SIDs have been flown. The CAA is satisfied that the data shows that greater than 94% of aircraft during the data collection period met or exceeded the vertical restriction which is considered within acceptable tolerances.

- A.16 How often have the new holds been used.
- A.16. The purpose of a hold at the end of a STAR is to mitigate against the risk of the arriving aircraft not being able to immediately continue to the runway. The data collected during the period shows that the new ZAGZO hold was flown (one complete pattern) 258 times. The total number of arrivals during the data collection period was 63190, this equates to 0.004% of all arrivals flying one complete hold pattern. As a consequence of this ACP, the PIR data shows that number of aircraft utilising the ABBOT and LOREL holds into EGSS reduced by c.20%. Both the contingency holds, MUCTE and WOBUN, were used 35 times in total during the data collection period. The CAA is satisfied that the holds implemented under this change have been utilised as intended and expected.

A.17	.17 Evidence to show that the claimed increase of c.30% resilience is met.				
A.17. 1	. See safety data above.				
A.18	Human Performance Monitoring information on controller performance				
A.18. 1	. See safety data above.				
PART	T B – CAA Confirmation of the Airspace Change Proposal				
B.1	Taking the above information into account, has the airspace change resulted in the expected impacts and outcomes?				
B.1.	If no, has it done so within acceptable tolerances limits?				
1	The evidence collected during the data collection period, shows that the key objective of the ACP, 'to maintain a high standard of safety by reducing complexity, air traffic controller (ATC) workload and delays for EGGW arrivals and consequential delays to London Stansted (EGSS) arrivals', has been met. The consequential operational impacts of vectoring, where not expected, are within acceptable tolerances, noting that the design has been reviewed with data over the summer of 2023, as this was considered to be a more representative period following the accepted impacts of the Covid pandemic on aviation.				
B.2	Regulator's Signature				
	nical Regulator / unt Manager		23 Sep 25		

B.6	Manager Airspace Regulation – PIR approver:			
Manager	Airspace Regulation			23 Sep 25