Airspace Change Process Post Implementation Review Data Request



ACP Project Reference:	ACP-2019-12	ACP-2019-12			
Title of Airspace Change:	Free Route Airspac	e Deployment 2			
Change Sponsor:	NATS				
CAA Decision Document:	https://airspacechar	nge.caa.co.uk/documents/download/5220			
CAA Decision Date:	26 October 2022	26 October 2022 AIRAC Date(s): AIRAC 03/2023 23 March 2023 23 March 2023			
PIR Data Submission Requested:	23 March 2023	PIR Data Submission Required by ¹ :	22 April 2024 (1 yr + 28 Days)		

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¹ A 28-day period to collate the data is usually requested, however an extension to the 28-day response period may be granted if sufficiently justified.

Introduction

- The CAA's airspace change process is a seven-stage mechanism that is set out in detail in CAP 1616. Stage 7 of this process is a Post Implementation Review (PIR) that normally begins one year after implementation of the change. The PIR is an assessment of whether the anticipated impacts and benefits in the approved change and published decision are as expected and where there are differences, what steps (if any) the CAA requires to be taken.
- 2. Irrespective of whether the CAA decision to approve the change was made under the previous process (set out in CAP 725), all PIRs should normally be in accordance with the process requirements of CAP1616. However, when assessing the expected impacts against the actual impacts, the methodology adopted at the time of the original CAA decision should be used.
- 3. Once the change sponsor's PIR data submission is published on the portal, there will be a 28-day window during which any stakeholder may provide any feedback when carrying out this review about whether the impacts of the change are those expected, 12 months on.

What does this activity entail?

- 4. Before the CAA can commence the PIR of an airspace change, the change sponsor must provide the CAA with a PIR submission that includes data pre-requested by the CAA. This data would normally be stipulated within the decision document at Stage 5 although this is not the case for changes pre-2018 (CAP 725). This PIR data request form sets out that list of data required in order for the CAA to complete the PIR assessment. If required, the CAA may request data additionally to the data that was requested within the regulatory decision.
- 5. This list is not exhaustive, and some requirements will not apply in every case. Where a data request is required, it will be clearly marked with a cross in the relevant 'Yes' field.

Data requests

- 6. Where the data illustrates impacts other than those anticipated, the change sponsor is to provide (and evidence) their analysis of why this is the case.
- 7. If certain data is unavailable or is disproportionately burdensome to provide, the CAA will consider any justifications explaining the reasons for not providing the data and the CAA may adjust the requirements on this basis. Additionally, the CAA reserves the right to follow up with additional requests for data throughout the review period.
- 8. Any other data that would provide evidence of other benefits or impacts should also be included in an appropriate format.

Format of data

- 9. The format of each data request required will be stipulated below in the associated column.
- 10. Where data is provided to the CAA as part of the change sponsor's PIR submission, it must be in a format that is consistent with, and comparable to, data provided as part of the original consultation and formal ACP, if possible. Scaling of the data should be consistent throughout to enable a like-for-like comparison.
- 11. The PIR submission must be in a suitable format for publishing onto the CAA's Airspace Portal.

Instructions for the Change Sponsors

- 12. The change sponsor is required to commence monitoring and gathering of data on the impacts of the change as soon as the change has been implemented². On receipt of this data request form, the change sponsor should begin to collate the data required, analyse each data request (summarising the conclusions of the analysis), and submit it via email to the assigned AR Project Officer in a Post Implementation Review Submission. The date on which the CAA requires the data to be submitted is stipulated at the top of this document.
- 13. If for any reason, the change sponsor is unable to support this data request at the time requested by the CAA, justification as to why must be submitted to the AR Project Officer. Such requests for a delay in submitting the data must be agreed with the CAA, including an agreement of an appropriate time that this activity can take place.

General Observations

- 14. The following general observations are to enable an overview of the effectiveness of the airspace change.
- 15. The change sponsor is required to submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 16. The CAA will review the analysis of the data submitted to ensure the anticipated impacts and benefits in the approved change were as expected.

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	An overview statement on whether, in the change sponsor's view, the original proposal met the intended objectives as described on the	Yes⊠	Narrative.	

² Subject to the impacts of COVID-19 pandemic: <u>Airspace Change Proposals Post-Implementation Reviews (PIRs)</u> impacted by COVID 19 - Update February 2021

Safety and Airspace Regulation Group

	CAA's decision to approve the		
	change.		
b)	On overview statement on	Yes⊠	Narrative.
	whether, in the change		
	sponsor's view, the original		
	proposal met any conditions		
	described on the CAA's decision		
	to approve the change (if		
	applicable).		
c)	Confirm that implementation	Yes⊠	Narrative.
~,	occurred on the dates identified	Tes	Hundive.
	in the Decision Letter. If no		
	implementation date was		
	specified in the Decision, please		
	state so.		
d)	If there was a significant delay	Yes⊠	Narrative.
ч,	between the planned and actual	res	Nallative.
	implementation date, please		
	provide an explanation.		
e)	Identify whether any other	Yes⊠	Narrative.
<i>c</i>)	issues of significance have	res	Nallative.
	occurred during the period 12		
	months after date of		
	implementation ³ .		
f)	Other than normal promulgation		Narrative.
"		Yes⊠	Nallalive.
	activity (e.g. NOTAM, AIC etc.),		
	identify what steps were		
	undertaken to notify local		
	aviation stakeholders that the		
	airspace change was about to		
	be implemented.		

Safety Data

- 17. The following safety data is required to enable an assessment that the new airspace design is at least as safe as the original design, if not safer.
- 18. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 19. The CAA will review the statistics submitted concerning these events and assess whether the revised airspace design is a contributory factor in any incidents which have occurred. If there have been no reported events, the sponsor should articulate this in their PIR submission.

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data concerning any recurring instances of Instrument Flight Procedures (IAPs, SIDs, STARs, Holds) not being flown correctly. ⁴	Yes⊡ No⊠	Narrative evidenced by data (flight data).	

³ CAP 1616 Part 1 The Airspace Change Process: Paragraph 270.

⁴ Any instances of IFPs not being flown correctly must be notified to the assigned CAA Project Officer.

b)	Report concerning any known Mandatory Occurrence Reports (MORs).	Yes⊠ No⊡	Narrative supported by copies of the original MOR Report(s).	
c)	Report concerning any known AIRPROX reports.	Yes⊠ No⊡	Narrative supported by copies of the original AIRPROX Report(s).	
d)	Report concerning any known Air Safety Reports (ASR) ⁵ .	Yes⊠ No□	Narrative supported by copies of the original ASR Report(s).	

Service provision/ resource issues

- 20. The change sponsor will need to demonstrate that adequate resources are in place to facilitate the operation of the new airspace design, and that air traffic services are being provided as forecast in the approved change without unanticipated negative impact on other airspace users.
- 21. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 22. The CAA will assess whether there is adequate resource in place to support the operation comparing the change sponsor's data with the approved change.

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data on refusals of service.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	
b)	Data regarding air traffic delays.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	
c)	Details of additional resource allocated, considering daily and seasonal traffic patterns.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	

Utilisation of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO)

- 23. Where the original change cited improvements in CCO/CDO utilisation, the change sponsor will need to provide data to demonstrate any subsequent improvement.
- 24. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.

⁵This may include relevant reports submitted through CHIRP.

25. The CAA will assess whether the anticipated benefit has been delivered by comparing the change sponsor's data against the approved change.

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	The % of traffic achieving CCO and/or CDO, compared monthly before and after the change (e.g. comparing the month of July before and after the change).	Yes⊡ No⊠	Narrative evidenced by supporting data (flight data).	

Infringement statistics

- 26. Where the revised airspace design changes the dimensions of controlled airspace, the change sponsor will need to provide an analysis of airspace infringements.
- 27. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 28. The CAA will assess whether the airspace design was a contributory factor in any increase in infringements⁶. Was an infringement risk identified in the approved change and has it been mitigated?

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data on the % change in infringements, compared on a monthly basis before and after the change.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	

Traffic figures (air transport movements)

- 29. Traffic figures over the period will give a general overview of the nature of the operation following the implementation of the change. In addition, where the change was predicated on a forecast increase in traffic numbers, the change sponsor will need to confirm whether or not the increase forecast in the approved change has been realised.
- 30. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 31. The CAA will consider the extent of any difference between the predicted and actual traffic figures and the extent to which the impacts of the change can be explained by those differences.

⁶ A review of any relevant data from the CAA's safety intelligence database will also be conducted.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data on the actual vs predicted figures.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	
b)	Data on the % change compared monthly before and after the change.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	
c)	Reconfirmation that there have been no factors that would cause a material change to the traffic forecasts provided in support of the original proposal, i.e. that the original forecasts are still reasonable. ⁷	Yes⊠ No⊡	Narrative.	

Traffic dispersion comparisons

- 32. It is necessary to establish whether aircraft are flying routes and/or utilising airspace forecast in the CAA's decision to approve the change. A key part of the CAA's post-implementation review will be to analyse the 'before and after' dispersal of aircraft to understand whether the new airspace design is being operated as anticipated.
- 33. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 34. The CAA will assess whether there have been any unforeseen or unintended operational impacts of the approved change.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Density plots that show concentration.	Yes⊡ No⊠	Narrative supported by heat plots showing where aircraft have concentrated within the acceptable tolerances of the procedure design.	The density plots should be overlaid on the same maps/charts as the lateral vertical plot analysis. The maps/charts should be suitable such that they can be understood by non-aviation stakeholders.
b)	Lateral and vertical analysis.	Yes⊡ No⊠	Narrative supported by traffic density plots, that shows aircraft dispersion along with height gained or lost for each plot.	The individual lateral plots will be governed by the data. The vertical plots can be colour coded and broken down into 1000, 2000 or 3000ft swathes depending on the procedure being considered and can be combined with the individual track plots.

⁷ Includes the impacts of COVID-19 pandemic.

c)	Weather/MET impacts.	Yes⊡ No⊠	Should be considered if there was a significant weather event	
d)	Any changes to operating fleet mix.	Yes⊡ No⊠	Narrative evidenced by supporting data (table format).	

Operational Feedback

- 35. The change sponsor will have to present any feedback directly received by aviation stakeholders operating in, or affected by, the revised airspace design.
- 36. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 37. The CAA will assess whether there have been any unforeseen or unintended operational impacts of the approved change.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Any direct feedback from airlines/ air traffic controllers.	Yes⊠ No⊡	Narrative supported by a table showing the feed-back in relation to the change and explaining what the change sponsor has done to address the feed-back.	This is not just negative feed-back. The presented format must make it clear that the change sponsor has dealt with the feed-back within the context of the implemented change.
b)	Any additional feedback from relevant flight operation sub- committee (sub-group of airport consultative committee).	Yes⊡ No⊠	Narrative supported by evidence of minutes or notes of actions from meetings.	

Denied Access

- 38. This links to service provision/resources mentioned above. The change sponsor should provide data on refusals of access to the revised airspace design and any underlying factors.
- 39. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 40. The CAA will assess whether other airspace users are being impacted other than as anticipated as a result of the change⁸.

⁸ A review of any relevant data from the CAA's safety intelligence database will also be conducted.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data concerning the refusals of access (month on month/ before and after the change).	Yes⊠ No⊡	Narrative evidenced by logged refusals. (table format).	
b)	Reasons for individual refusals of access.	Yes⊠ No⊡	Narrative evidenced by logged refusals. (table format).	

Utilisation of SIDs/STARs/IAPs

- 41. Information concerning the utilisation of the various procedures implemented as part of the change. The information may highlight areas of unforeseen consequence, for example where a particular procedure is being used more than anticipated with a subsequent impact.
- 42. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 43. The CAA will assess whether the utilisation data is other than expected.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data on the % of flights that actually flew the procedure(s) vs the total number of flights (departing or arriving), compared for the relevant time periods before and after the change.	Yes⊡ No⊠	Narrative evidenced by supporting data (table format).	The utilisation figures must match the figures in the density, lateral and vertical plots in order to see only the aircraft that flew the new procedures; the data would be skewed by VFR departures for example.

Letters of Agreement (LoAs)

- 44. Where a Letter of Agreement detailing specific procedures was a specific condition of the CAA approval, the change sponsor will need to evidence the level of use of that agreement.
- 45. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 46. The CAA will assess whether the LoA is being utilised and that it is working as expected.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Evidence of usage of operational agreements between ANSPs and airspace users.	Yes⊠ No⊡	Narrative.	
b)	Data concerning the activation/ utilisation of LoA procedures.	Yes⊠ No□	Narrative evidenced by supporting data (table format).	

Impact on environmental factors (including noise)

47. Typically, change sponsors will undertake an updated assessment of the environmental impacts that informed the approved change proposal. This updated assessment will be informed by actual flight behaviours following implementation and presented in a comparable format to that used for the change proposal. All updated assessments must be consistent with those presented in the consultation and the submission to the CAA. When using data samples to represent periods of operation, sample periods after implementation must be comparable with any sample periods used before the change.

Depending on the scaling level of the change, updated assessments may include:

- Local air quality
- Noise
- Fuel and CO2 emissions
- Tranquillity
- Biodiversity

The change sponsor will have to either;

- a) Provide supporting evidence to confirm that the impacts presented in the approved airspace change proposal are as anticipated and the conclusions remain unchanged; or
- b) Undertake an updated assessment of the impacts presented in the airspace change proposal using actual data collected post-implementation.
- 48. Should the change sponsor be required to undertake an updated assessment and depending on the scaling level, the change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 49. The CAA will review and assess the change sponsor's assessment and determine the extent to which the CAA agrees.

	I							
		Required for the review?	Format of the data required.	Any information of relevance in support of the request.				
Loc	Local Air Quality – required where:							
	 there is a change in aviation emissions (by volume or location) below 1,000 feet; and the location of the emissions is within or adjacent to an identified AQMA. 							
a)	Ambient air quality limit concentrations (in µg.m-3).	Yes⊡ No⊠	Narrative describing impact on AQMA with supporting concentration data (table format).					
b)	TAG Local Air Quality workbook outputs.	Yes□ No⊠	Workbook outputs (table format).					
c)	TAG Air Quality Valuation Workbook outputs.	Yes⊡ No⊠	Workbook outputs (table format).					
d)	Description of prediction model and version number.	Yes□ No⊠	Narrative.					
e)	Supporting input data (for example movement logs).	Yes⊡ No⊠	Narrative evidenced by supporting data (table format).					
Nois	se – required where:							
	There is a change which alters late (above mean sea level) over an inl			es aircraft height, below 7,000 feet				
f)	N60 (night-time) / N65 (daytime) contours.	Yes□ No⊠	Noise contour figures overlaid on Ordnance Survey maps (or similar).					
g)	Leq contours (down to 51 dB LAeq,16h / 45 dB LAeq,8h).	Yes□ No⊠	Noise contour figures overlaid on Ordnance Survey Maps (or similar).					
h)	Leq contour population counts (in thousands), area counts (in km2) and noise sensitive area counts.	Yes□ No⊠	Table format.					
i)	TAG Noise Workbook – Aviation outputs.	Yes⊡ No⊠	Workbook outputs (table format).					
j)	Operational diagrams (for example, radar track diagrams and track density diagrams).	Yes⊡ No⊠	Operational diagrams overlaid on Ordnance Survey maps (or similar).					
k)	Confirmation of CAA CAP 2091 noise modelling category.	Yes⊡ No⊠	Narrative.					
I)	Description of prediction model and version number.	Yes⊡ No⊠	Narrative.					
m)	Description of modelling assumptions, for example modal split, route utilisation and respite.	Yes□ No⊠	Narrative evidenced by supporting data (table format).					

n)	Supporting input data (for example movement logs).	Yes⊡ No⊠	Narrative evidenced by supporting data (table format).	
Fue	I and CO2 emissions:			
0)	Annual fuel and CO2 usage (tCO2).	Yes⊠ No□	Table format or narrative, as required.	As per the assessment requirements for an ACP scaled as Level 2B, if the post
p)	Per flight fuel and CO2 usage (tCO2).	Yes⊠ No□	Table format or narrative, as required.	implementation impact for fuel/CO2 is positive, a qualitative explanation supplemented with
q)	TAG Greenhouse Gases Workbook outputs.	Yes⊠ No⊡	Workbook outputs (table format) if impacts are negative (i.e. an increase in fuel/CO2).	appropriate evidence is sufficient (narrative format). Appropriate evidence could include the impact of indicative routes used by the most frequent
r)	Supporting input data	Yes⊠ No□	Narrative evidenced by supporting data (table format).	operators.
s)	Description of prediction model and version number.	Yes⊠ No⊡	Narrative.	
Trai	nquillity:			
t)	Operational diagrams clearly identifying AONBs, National Parks, designated quiet areas and noise sensitive areas identified during Stage 1 (1B Design Principles).	Yes⊡ No⊠	Narrative and Operational diagrams overlaid on Ordnance Survey maps (or similar).	
Bio	diversity:			
u)	Assessment of biodiversity factors including those identified during Stage 1 (Step 1B Design Principles).	Yes□ No⊠	Narrative.	

Impact on International obligations

- 50. The change sponsor will need to demonstrate that any international obligations identified at the time of the change have been discharged.
- 51. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 52. The CAA assesses whether the obligations have been met.

	•		Any information of relevance in support of the request.
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a)	Details on any feedback from operators or neighbouring States.	Yes⊠ No□	Narrative.		
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Impact on Ministry of Defence operations

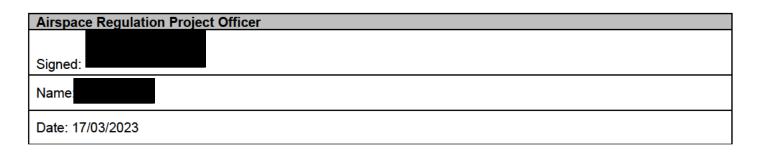
- 53. The change sponsor will need to demonstrate that there has been no unforeseen impact on Ministry of Defence operations.
- 54. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 55. The CAA assesses whether there has been any unforeseen impact on the Ministry of Defence that would need rectifying.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Details on any feedback from Ministry of Defence.	Yes⊠ No⊡	Narrative.	

Stakeholder feedback

- 56. Feedback is needed to identify any issues from a community perspective that were not anticipated a part of the approved change; monthly data over the course of a year is needed so that seasonal traffic changes are taken into account.
- 57. The change sponsor must collate the data requests below, analyse and submit a qualitative statement against each data request which supports the conclusion reached in each case.
- 58. A review is made by the CAA of the change sponsors conclusions in identifying any unforeseen or unintended impacts of the change.

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Feedback/complaints received by the change sponsor and CAA in the period between implementation and post- implementation review.	Yes⊠ No⊡	Narrative evidenced by supporting data (table format).	Reference point B, the PIR data requirements specified in the Consultation Assessment included: Displaying a representative sample of:
b)	Details of location of complaints.	Yes⊠ No⊡	Ordnance Survey map identifying pinned locations.	 aircraft track data plots; and traffic density plots Reference point C, AR Project
c)	Feedback/complaints received via an FCS 1522 Form (UK Airspace Access or Refusal of ATS Report).	Yes⊠ No⊡	Copies of the FCS 1522 Form relevant to the PIR being conducted.	Officer to liaise with Airspace Classification Team to ascertain applicability.



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