

Changes to London Luton Airport Arrivals

CAP1616 Stage 7 Post-Implementation Review Annex B: Operational Feedback and Letters of Agreement



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Roles

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References

Ref No	Description	Links
1	SAIP AD6 CAA web page – progress through the airspace change process, and the consultation website including responses	Link to CAA portal Link to consultation site
2	CAA Decision Document CAP2288	Link to document
3	CAA Data Request Document	Link to document
4	Airspace Change Consultation material (selection of documents)	Executive summary Link to abridged document Link to full document
5	Consultation virtual exhibition	Link to website
6	Stage 4 Step 4A(ii) The Final Airspace Design (technical map for use on computers, unsuitable for smartphones and tablets, open using the free Adobe Reader DC app to make use of switchable layers)	Link to downloadable map
7	Airspace change: Guidance on the regulatory process for changing the notified airspace design (Edition 4 in force for this review) CAP1616	Link to document (Edition 4, March 2021)
8	CAA Definition of Overflight CAP1498	Link to document Link to short animation
9	UK Government Department for Transport's 2017 Guidance to the CAA on its environmental objectives when carrying out its air navigation functions (abbreviated to ANG2017)	Link to website Link to document

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1. About this document: PIR items 37a, 37b, 46a, 46b, 55a, Other-d.

1.1 Introduction

- 1.1.1 This document is part of the NATS-London Luton Airport (LLA) co-sponsored airspace change proposal post-implementation review (ACP PIR). It should be read in conjunction with the PIR Main Document which provides the structure, the majority of the evidence, and details the regulatory requirements for the PIR.
- 1.1.2 This document summarises the responses received by NATS-LLA's request for engagement with aviation stakeholders, on their operational experience of the airspace change.
- 1.1.3 Most stakeholders are aircraft operators (such as airlines), aerodromes (such as large airports and smaller airfields), representative of the General Aviation (GA) community, and other professional aviation bodies or representative organisations.
- 1.1.4 It covers **PIR Item** 37a (Operational Feedback), 37b (Feedback from LLA and Stansted Flight Operations Committee), Item 46ab (Letters of Agreement), Item 55a (Impact on Ministry of Defence Operations) and Item Other-d (Stakeholder Feedback – received from other airspace users). Some feedback will apply to more than one **PIR Item**, for example where feedback is received from a military stakeholder with whom we operate a Letter of Agreement, covering both **PIR Items** 46ab and 55a.

2. Targeted engagement

2.1 With whom did we target this engagement?

- 2.1.1 We targeted the following aviation stakeholders and sent a short questionnaire:

Organisation	Type of stakeholder	Q'aire Response?	PIR Item(s)
DHL	Airline (Based at LLA)		
easyJet	Airline (Based at LLA)	Yes	37a
El Al Airlines	Airline (Based at LLA)		
MNG Airlines	Airline (Based at LLA)		
Ryanair	Airline (Based at LLA)	Yes	37a
TUI	Airline (Based at LLA)		
Wizzair	Airline (Based at LLA)	Yes	37a
Cambridge City Airport	Airport	Yes	37a, 46ab
Cranfield Airport	Airport	Yes	37a, 46ab
London Gatwick Airport	Airport	Yes	37a
London Heathrow Airport	Airport	Yes	37a
London Southend Airport	Airport		
London Stansted Airport	Airport	Yes	37a
London City Airport	Airport		
LLA Flight Operations Committee (FLOPC)	Airport (committee of pilots)	Yes	37b
Stansted Airport Flight Operations Committee (FLOPC)	Airport (committee of pilots)	Yes	37b
Airport Operators Association (AOA)	Airport Operator Professional Body		
Air Charter Scotland	Business Jet Operator		
Flair Jet	Business Jet Operator		
Gama Aviation	Business Jet Operator		
Harrods Aviation	Business Jet Operator		
Lux Aviation	Business Jet Operator		
NetJets	Business Jet Operator		
Pen Avia	Business Jet Operator		
Saxon Air	Business Jet Operator		
Signature Aviation	Business Jet Operator		
Vista Jet	Business Jet Operator		
British Business and General Aviation Association (BBGA)	Business Jet organisation		
Airfield Operators Group (AOG)	GA Aerodrome organisation		
Andrewsfield Aerodrome EGSL	GA Aerodrome	Yes	Other-d
Audley End	GA Aerodrome		
Duxford Aerodrome	GA Aerodrome		
Earls Colne Aerodrome	GA Aerodrome		
Elstree Aerodrome EGTR	GA Aerodrome		
Fowlmere Aerodrome EGMA	GA Aerodrome		
Halton	GA Aerodrome		
Henlow	GA Aerodrome		
Little Gransden Aerodrome EGMJ	GA Aerodrome		
Little Shelford	GA Aerodrome		
North Weald Flight Training	GA Aerodrome		
Rayne Hall Farm	GA Aerodrome		
Shuttleworth Old Warden EGTH	GA Aerodrome	Yes	Other-d

Organisation	Type of stakeholder	Q'aire Response?	PIR Item(s)
Stapleford Aerodrome EGSG	GA Aerodrome		
Academy Aviation North Weald	GA organisation		
Aircraft Owners and Pilots Association (AOPA)	GA organisation		
British Balloon and Airship Club	GA organisation		
British Gliding Association (BGA)	GA organisation	Yes	Other-d
British Hang Gliding and Paragliding Assoc (BHPA)	GA organisation		
British Microlight Aircraft Association (BMAA)	GA organisation		
British Skydiving	GA organisation		
East Anglian Rocketry Society (EARS)	GA organisation, LoA holder	Direct email feedback (not from q'aire)	46ab, Other-d
National Flying Laboratory (Cranfield)	GA organisation, LoA holder	Yes	46ab, Other-d
Cambridge Gliding Club at Gransden Lodge	Gliding club/site	Yes	Other-d
Essex Gliding Club at Ridgewell	Gliding club/site	Yes	Other-d
London Gliding Club at Dunstable Downs	Gliding club/site	Yes	Other-d
Nene Valley Gliding at Upwood	Gliding club/site	Yes	Other-d
General Aviation Alliance (GAA)	GA umbrella organisation		
Light Aircraft Association (LAA)	GA umbrella organisation		
PPL/IR (Europe)	GA umbrella organisation		
Ministry of Defence via Defence Airspace & Air Traffic Management (DAATM). Includes 78 Squadron RAF Swanwick and USAFE Lakenheath & Mildenhall	Military Air Navigation Service Providers, LoA holders	Direct email feedback (not from q'aire)	46ab, 55a
British Airline Pilots Association (BALPA)	Professional body		
British Helicopter Association (BHA)	Professional body		
Guild of Air Traffic Control Officers (GATCO)	Professional body		
Honourable Company of Air Pilots (HCAP)	Professional body		

Table 1 Targeted stakeholders for operational feedback

2.1.2 Additionally, a private pilot provided a response to the questionnaire using only the single word “positive”, but provided no further details. It is unclear from where they acquired the link, potentially from one of the GA stakeholders listed above.

3. Questions

3.1 What key questions did we ask?

3.1.1 In addition to administrative information, (name, email address, organisation etc) we asked three straightforward questions. Stakeholders could answer as briefly or as fully as they wished.

Question 1

Comparing your operation before and after the AD6 (London Luton Arrivals) airspace change, did the implementation occur as you expected? Please provide details on your organisation's experience of the implementation, and the period immediately after.

Question 2

Did your operation experience any unforeseen impacts due to the change, as traffic levels recovered post-pandemic? Please provide details on the impacts you experienced.

Question 3

Is there any additional feedback on this airspace change (positive or negative, general or technical), that you would like us to know? If you would like to supply diagrams or a large document, please email us.

4. Operational Feedback Results – PIR Items 37a, 55a and Other-d

4.1 Feedback collation and analysis

4.1.1 We are grateful to those who responded with feedback – thank you for taking the time.

4.1.2 The following tables summarise and address the main points received.

4.2 Airlines (PIR Item 37a)

Question 1 Implementation	NATS-LLA response
<p>easyJet Arrival routes were longer, increasing sector length, leading to increased fuel burn (more than expected). Took time to understand operationally what was required to expedite arrivals.</p>	<p>Arrival routes from the South and East have increased track mileage, but this is somewhat offset by the aircraft staying significantly higher for longer. Traffic from the north and west is handled similarly to before the change. There is also very little holding for LLA arrivals (see Annex A Traffic Dispersion and Environmental Data that includes information on holding at LLA and fuel data). NATS-LLA thanks easyJet for their feedback and will continue to attempt to tactically minimise flown distances, acknowledging the increase.</p>
<p>Ryanair Separation seems to work well, the only issue I can see is the arrivals from Cork and Kerry via SIRIC. We often get out behind STN traffic and made to fly more track miles. An arrival from that side via the North would be beneficial, but obviously needs to be north of the LHR departures. Usually efficient and provides improved fuel burn and reduced track miles.</p>	<p>NATS-LLA thanks Ryanair for their feedback. West of London there are four one-way high-level air traffic systems, two flowing east, the other two flowing west. Simplistically, eastbound air traffic towards London from Eire must follow one of two air routes, one south of (approximately), southern Bristol, and one south of the M4 motorway and Swindon. Westbound air traffic leaving London towards Eire must follow one of two air routes: one north of northern Swindon, and one around Cirencester. These one-way flows require Eire arrivals to stay on the southernmost eastbound air route (via waypoint SIRIC) until closer to LLA because placing them further north would oppose the westbound flow and disrupt the one-way system. This system was not part of the AD6 airspace change and is part of a much wider national network.</p>
<p>Wizzair No significant issues encountered.</p>	<p>NATS-LLA thanks Wizzair for their feedback, no response is required.</p>
Question 2 Unforeseen impacts	NATS-LLA response
<p>easyJet Increased sector lengths and subsequent delays to next sector.</p>	<p>NATS-LLA will continue to attempt to tactically minimise flown distances, acknowledging the increase.</p>
<p>Ryanair (none)</p>	<p>(no response required)</p>
<p>Wizzair (none)</p>	<p>(no response required)</p>
Question 3 Additional feedback	NATS-LLA response
<p>easyJet New arrivals meant for fuel required in flight planning stage [sic]. [We believe this is a typo error and infer it should probably read 'New arrivals mean more fuel required in planning stage'.]</p>	<p>NATS-LLA will continue to attempt to tactically minimise flown distances, acknowledging the increase.</p>
<p>Ryanair Maybe reconsider arrival from the South OVER THE TOP [sic] of LTN, would delegate [sic] us even more from STN arrivals?</p>	<p>The formal flightplanned arrival route must be designed to fit between Stansted's holding patterns known as LOREL and ABBOT and could not, therefore, be introduced as a formal route. Tactically, however, the majority of arrivals from the south are given shortcuts by controllers, to follow a version of the suggested track, typically to the east of LLA. This is possible partially due to the airspace change, where Stansted's LOREL holding pattern is used less frequently than before the change was implemented. "Over the top" arrivals from the south can only ever be handled tactically as it would otherwise create complex conflicts with outbound traffic from other airfields. See Annex A Traffic Dispersion for details of high-level arrival flows.</p>
<p>Wizzair The separation of LTN and STN traffic appears to be working quite well.</p>	<p>(no response required)</p>

Table 2 Feedback summary: Airlines

4.3 Airports (PIR Item 37a)

Question 1 Implementation	NATS-LLA response
<p>Cambridge City Airport The only aspect of AD6 which has had any noticeable impact on us is display clutter which was raised very early in the design phase. The route into and out of the ZAGZO hold from the East and South East takes aircraft very close to our overhead, going through the final approach to each runway. This creates clutter as it is increasing the volume of tracks in the crucial areas for us and is especially noticeable when Luton are busy and we are on Runway 05.</p>	<p>NATS-LLA thanks Cambridge City Airport for their feedback. The high-level overflight of Cambridge City Airport results from its relative geography within the eastbound flow constraints of this airspace change at network levels. This is unfortunate, however there are no practical steps NATS-LLA can take to mitigate the impact on Cambridge City Airport's radar display. See also Letters of Agreement Section 6 on p.13.</p>
<p>Cranfield Airport A part of the consultation, and in conjunction with an airport user (National Flying Laboratory Centre (NFLC)), a letter of agreement was drawn up in order to define coordination procedures in order to permit NFLC to access the new airspace. This Letter of Agreement was signed by NATS, Cranfield ATC and the National Flying Laboratory Centre [see later for NFLC response]. There appears to be a lack of familiarity with the LoA by the TC SWA; both of the existence of the agreement and processes that have been agreed. This has led to an increase in workload for the ATCA when notifying planned flights. The issue of lack of familiarity has been ongoing.</p>	<p>NATS-LLA thanks Cranfield Airport for their feedback. As a result, appropriate staff at the NATS Terminal Control centre were targeted with an Operational Notice (known as OPNOT) between 04 Nov 2023 and 04 Feb 2024. This OPNOT acted as a reminder of the coordination actions between Cranfield ATC and NATS Terminal Control regarding NFLC flights (see Letters of Agreement Section 6 on p.13).</p>
<p>Gatwick Airport Minimal impact; some departures from EGKK into SAIP AD6 have experienced deviation from original track, but changes are non-existent below 7,000ft and minor above, mainly resulting in divergent routeings, some shorter, some longer. We received no negative feedback from our airlines relating to this change.</p>	<p>NATS-LLA thanks Gatwick Airport for their feedback, no response is required.</p>
<p>Heathrow Airport No impact to London Heathrow operation at any stage</p>	<p>NATS-LLA thanks Heathrow Airport for their feedback, no response is required.</p>
<p>Stansted Airport There has been a simplification in the airspace and a reduction in airborne holding and delays for STN traffic. The raising of the controlled airspace levels East of Stansted and hence increasing low-altitude Class G in the region has reduced the amount of airspace infringements in this area (along with the associated safety risks and disruption these cause). This has been recently backed up by statements made at the September [2023] Stansted LAIT Meeting by representatives of Earls Colne flying community.</p>	<p>NATS-LLA thanks Stansted for their feedback. This qualitative information is consistent with other findings within this report. For infringement improvements see PIR Main Document section 7.2. For Stansted holding improvements see PIR Main Document section 16.2.</p>
Question 2 Unforeseen impacts	NATS-LLA response
<p>Cambridge City Airport Increased traffic levels in our overhead has meant we've seen additional clutter on the radar.</p>	<p>As above.</p>
<p>Cranfield Airport (none)</p>	<p>(no response required)</p>
<p>Gatwick Airport (none)</p>	<p>(no response required)</p>
<p>Heathrow Airport (none)</p>	<p>(no response required)</p>
<p>Stansted Airport (none)</p>	<p>(no response required)</p>

continued...

Airports (continued)

Question 3 Additional feedback	NATS-LLA response
Cambridge City Airport We'd be keen to see the overall feedback once the closing report is published.	This report is now published on the CAA's airspace change portal.
Cranfield Airport (none)	(no response required)
Gatwick Airport (none)	(no response required)
Heathrow Airport (none)	(no response required)
Stansted Airport By removing the co-dependent holds, the project has been a significant enabler to the airspace change at STN as part of FASl.	(no response required)

Table 3 Feedback summary: Airports

4.4 General Aviation Aerodromes¹ (PIR Item Other-d)

Question 1 Implementation	NATS-LLA response
Andrewsfield EGSL The raising of the CTA from 2,000ft to 2,500ft has had a positive impact on aircraft transiting our local flying area	NATS-LLA thanks Andrewsfield for their feedback. This qualitative information is consistent with other findings within this report. For infringement improvements see PIR Main Document section 7.2.
Old Warden (Shuttleworth Collection) EGTH Airspace to the North of the airfield was lowered from previous causing a concern when needing to conduct post maintenance flights requiring stall and spin evaluation and within glide performance of the airfield.	NATS-LLA thanks Old Warden for their feedback. The airspace base to the north (c.6nm from EGTH) was lowered to FL75. However, there was no change to the existing LTMA CAS volumes overhead and adjacent to EGTH with bases of FL55, which would've been the pre-change glide performance limiter. No further action is required.
Question 2 Unforeseen impacts	NATS-LLA response
Andrewsfield EGSL (none)	(no response required)
Old Warden (Shuttleworth Collection) EGTH Aircraft movements were reduced not necessarily due to the pandemic but possibly due to inflation.	(no response required)
Question 3 Additional feedback	NATS-LLA response
Andrewsfield EGSL All positive.	(no response required)
Old Warden (Shuttleworth Collection) EGTH (none)	(no response required)

Table 4 Feedback summary: GA Aerodromes

¹ This feedback was received from GA aerodrome operators that typically serve powered aircraft. Gliding clubs operating a gliding site are covered on the next page.

4.5 Gliding Clubs and Sites (PIR Item Other-d)

Question 1 Implementation	NATS-LLA response
Cambridge Gliding Club at Gransden Lodge Some issues ensuring that nav systems were up to date with the new airspace.	NATS-LLA thanks Cambridge Gliding Club for their feedback. No response required.
Essex Club at Ridgewell No significant change; possibly quieter at night?	NATS-LLA thanks Essex Gliding Club for their feedback. No response required.
London Gliding Club at Dunstable Downs The London Gliding Club has seen a period of change in terms of management and senior instructor positions around the time of the implementation, however as a member of the club over 16 years and a senior instructor my impression of the implementation was good. We were of course delighted that a variation that favoured our operation and did not infringe on our current letter of agreement was opted for.	NATS-LLA thanks London Gliding Club for their feedback. No response required.
Nene Valley Gliding Club at Upwood It had no effect.	NATS-LLA thanks Nene Valley Gliding Club for their feedback. No response required.
Question 2 Unforeseen impacts	NATS-LLA response
Cambridge Gliding Club at Gransden Lodge (none)	(no response required)
Essex Club at Ridgewell (none)	(no response required)
London Gliding Club at Dunstable Downs (none)	(no response required)
Nene Valley Gliding Club at Upwood (none)	(no response required)
Question 3 Additional feedback	NATS-LLA response
Cambridge Gliding Club at Gransden Lodge (none)	(no response required)
Essex Club at Ridgewell None, other than to thank NATS for the ease in which it was possible to make comment and give feedback etc.	(no response required)
London Gliding Club at Dunstable Downs (none)	(no response required)
Nene Valley Gliding Club at Upwood (none)	(no response required)

Table 5 Feedback summary: Gliding Clubs and Sites

4.6 GA Organisations (PIR Item Other-d)

Question 1 Implementation	NATS-LLA response
British Gliding Association (BGA), the sport's national governing body No issues we are aware of.	NATS-LLA thanks the BGA for their feedback. No response required.
National Flying Laboratory Cranfield (NFLC) The ability to access the northern stub of this airspace as per our Letter of Agreement has been very useful to our operation. Luton ATC has been helpful in enabling access and offering a radar service both inside and outside of this airspace.	NATS-LLA thanks the NFLC for their feedback.
Question 2 Unforeseen impacts	NATS-LLA response
BGA (none)	(no response required)
NFLC (none)	(no response required)
Question 3 Additional feedback	NATS-LLA response
BGA Effective engagement thanks.	(no response required)
NFLC We note that the Letter of Agreement is to be reviewed every 2 years and the first review date is Feb 2024 [during the drafting of, but prior to, publication of this document]. From an NFLC perspective, we would like the current arrangement to continue.	(See also Letters of Agreement Section 6 on p.13).
Direct narrative response via email, not via the questionnaire	NATS-LLA response
East Anglian Rocketry Society (EARS) To date there has only been one flight in which the AD6 agreement was activated (4/6/2023, 1506 - 1510 Zulu apogee 7772'). However, I should emphasise that there were more planned - there have been several occasions when >FL75 flights were planned, but then had to be cancelled due to unsuitable weather conditions (heavy cloud cover and winds aloft) or in a couple of cases technical problems with the rocket. This is normal for rocketry, in that we often plan flights and then have to cancel launches as the weather forecast worsens. The launch 4/6/23 went very smoothly, the staff at LC [sic] Swanwick were very helpful, both in finding us a window on what was clearly a very busy day (we had a Wizz Air flight at FL80 shortly before our window), and also giving us helpful live winds aloft reports prior to launch. The conditions were clear and calm, and we were able to maintain both visual and GPS contact with the rocket (a 4" diameter rocket with 1600Ns total impulse) to apogee. We briefly lost track when the drogue ejection charges fired (this is normal) but picked it up again on descent.	NATS-LLA thanks EARS for their feedback. The context behind the society's rocket launches is useful. No response required. (See also Letters of Agreement Section 6 on p.13).

Table 6 Feedback summary: GA organisations

4.7 Ministry of Defence via DAATM (PIR Item 55a)

Direct narrative response via email, not via the questionnaire	NATS-LLA response
<p>General Overall, the AD6 change went as expected and since implementation, only two minor impacts on MOD operations have been reported by 78 Sqn and USAFE. No other MOD airspace users have reported issues with the changes.</p> <p>78 Sqn RAF Swanwick 78 Sqn identified that there were issues with higher than normal refusals of Daventry Radar Corridor activation (CTA21 portion) immediately following implementation. However, following talks between 78 Sqn and NATS, improvements to the procedures were implemented in the MATS Pt 2/LoA and it now appears that the procedures are functioning smoothly.</p> <p>USAFE RAF Lakenheath and RAF Mildenhall USAFE have reported that they wish to discuss the agreements contained within the LoA with NATS regarding the flexibility and flight efficiency for military aircraft joining and leaving CAS.</p>	<p>NATS-LLA thanks the MoD for their feedback.</p> <p>A revised coordination procedure was agreed, to improve the DTY Corridor interaction with DTY CTA21 (see Letters of Agreement Section 6 on p.13).</p> <p>Lakenheath and Mildenhall ATC stated that airways arrivals from the south via BKY would prefer to be lower than currently typically presented to them by NATS at c.FL90, sometimes FL80. Meetings between NATS and USAFE were convened in November 2023 and again in April 2024. These will result in a revised LoA to bring some improvement to that interface before summer 2024 (FL80 the norm, with the possibility for USAFE to request lower subject to coordination). Also a further opportunity to amend the LoA was identified and is under discussion that should bring forward additional improvement in the longer term, subject to procedural study and negotiation. For LoAs see Section 6 on page 13.</p>

Table 7 Feedback summary: MoD

5. Feedback from LLA and Stansted Flight Operations Committee (FLOPC) PIR Item 37b

5.1 FLOPC and the PIR requirement

- 5.1.1 CAA PIR requirement 37b is for feedback from the Flight Operations Committee, a sub-group of the airport consultative committee. It is generally known as FLOPC, occasionally FLOPSC, and is common across most UK airports. Most airports with scheduled commercial operations have representatives of multiple airlines based locally, responsible for discussing operational, technical and environmental matters as part of that FLOPC.
- 5.1.2 The CAA PIR requirement was for both Stansted and LLA to provide additional feedback from their respective FLOPC.

5.2 Stansted Airport FLOPC feedback

- 5.2.1 Stansted Airport stated that they had checked their records and found no AD6 airspace-change related feedback from their FLOPC meetings.
- 5.2.2 Those meetings were held in November 2021, April/July/October 2022, January/May/August 2023.

5.3 LLA FLOPC feedback

- 5.3.1 LLA provided minutes from the biannual meetings. Extracts are on the following page.

LLA FLOPC airspace change related feedback (extract)	NATS-LLA response
<p>10th November 2021 (most recent pre-implementation meeting) Attending: LLA, NATS, DHL, Ryanair, easyJet, Signature Aviation We are currently waiting on CAA decision as we have to go through CAP1616 process. The proposal is for a new holding stack for Luton to reduce delay. As currently if there are issues at Stansted then Luton get delays as well. We consulted on this in November 2020 until February this year [2021]. LLA have co-sponsored this proposal with NATS. The airspace change was submitted in June this year and we should get a response this month. There is potential for the proposal to be called in by Secretary of State which would delay a February 2022 implementation if we get approval.</p>	<p>No response required. Implementation occurred as planned on 24th February 2024.</p>
<p>3rd May 2022 (first post-implementation meeting) Attending: LLA, NATS, DHL, Ryanair, easyJet, Signature Aviation, Air Charter Scotland This was implemented in February 2022 and operators should have all noticed the change in arriving at LLA. LLA and NATS are now in the last stage of this and in the post implementation review (PIR). If any operators have feedback or any clarification, please let us know. The new holding stack is near St Neots. This was preferred in communities to a PBN route.</p>	<p>No feedback was received from members of the committee.</p>
<p>30th November 2022 (second post-implementation meeting) Attending: LLA, NATS, DHL, Ryanair, Signature Aviation, Air Charter Scotland, Wizzair, NetJets, MNG LLA explained that LLA and NATS were co-sponsors of this airspace change. LLA are now in stage 7 of this process which is the Post Implementation Review (PIR) period. Part of this includes feedback from operators and therefore operators were advised that if there were any comments these could be emailed to [redacted] or discussed in the meeting. LLA showed recent AD6 maps of most recent tracks of aircraft to help supplement the discussions. Ryanair commented that the expectations from airlines were different than that from ATC, but overall believed the change was going well. Wizzair also commented that now the airlines know what to expect it does make things easier for pilots. NATS Airspace Change Implementation Manager (ACIM) explained that the information provided to airlines regarding the changes and the levels in which ATC expect was helpful. NATS and LLA recognised that this needs to be published more widely and that this could be incorporated into the arrivals code of practice that LLA were working on. Discussions to also be had with the business jet operators to see how this can be disseminated across their teams and pilots. NATS ACIM indicated that the map that was used for the public consultation had coloured areas on which could be used as part of the new pack and maps sent out. Overall NATS ACIM stated the change has had a significant impact for ATC and is a lot less complex which indicates the change implemented for safety purposes has been achieved. ACTION: LLA to include AD6 best practice in the Arrivals Code of Practice review.</p>	<p>The action on LLA to include AD6 in the Arrivals Code of Practice was completed and circulated to the members of the committee. It is a commercially confidential document that cannot be shared publicly.</p>
<p>7th June 2023 (third post-implementation meeting) Attending: LLA, NATS, DHL, Ryanair, easyJet, Signature Aviation, Wizzair, BALPA LLA explained that this change had been implemented and separated LLA's arrival routes from Stansted's, also giving LLA its own holding stack. This was implemented on the 24th February 2022, it has been over a year and the post implementation review period was a year, however following a debate in the House of Commons with MPs the review has now been extended to September 2023. During this period LLA is collecting data over the summer with noise track data, complaint data and pilot feedback. All this data will be sent to the CAA as part of the Post Implementation Review process (Stage 7 of CAP1616). LLA was able to show different heat maps showing the most concentrated, before and after AD6. NATS ATC attendee explained that he was one of the SME's that worked on the project from the NATS side. NATS had recently held a workshop to go through their own internal post implementation review with the controllers and asked for feedback from the operators to understand if it is achievable or difficult to achieve most of the time. The feedback from controllers is that there is nearly no delay with aircraft and most operators in and out of Luton rarely hold. The main points from the base pilots in the room was a concern due to congested frequency, there is a lot on the RT and the pilots are not being able to use the radio. NATS ATC attendee was able to explain, due to controlling a group of sectors it does get busy, however as there is a lot of milage at 5,000ft, other than a speed change there is very little that can be done in that period, and other aircraft are being contacted but reassured operators that they are not getting ignored. Other concerns the based captains had was the efficiency of AD6 as they are going further North they are burning more fuel and costing more. NATS ATC attendee agreed to look into this with operators and requested that they share some data on their fuel usage. ACTION: Operators to share how many tonnes of fuel they are typically using for an arrival into LLA, this will be compared to the prediction of fuel being used as part of the submission to the CAA. Ryanair asked a question about AD6 to find out if the noise complaints now focus traffic over certain areas, are there less complaints or are these concentrated in a certain area? LLA explained that areas newly overflown by AD6 have increased in complaints and complainants.</p>	<p>The action on aircraft operator members of the committee to share arrival fuel use did not result in any data being sent to LLA or NATS for further analysis.</p>

Table 8 Feedback summary: Extracts from LLA FLOPC

6. Letters of Agreement (LoA) – PIR Item 46ab

6.1 Usage evidence 46a and activation data 46b

46a Evidence of usage of operational agreements between ANSPs and airspace users.

46b Data concerning the activation/utilisation of LoA procedures.

6.1.1 These LoAs are held between the holder and NATS London Terminal Control as ANSP; LLA is not a party.

6.1.2 The table below lists the NATS-LoA holders, provides a qualitative assessment of how frequently the procedures therein are used, the amendment history, and NATS' comments.

6.1.3 Some information in this table is related to feedback from LoA holders in Section 4 from p.5.

LoA Holder	Usage	Amendments	NATS Comments
Cambridge City Airport	Daily	None since AD6 implementation	Training flights and some arrivals from the west work Luton Approach instead of Stansted Approach. Successful implementation. Feedback re: radar clutter is not related to LoA (see Table 3 on p.7).
Cranfield Airport ATC	Approx 2-4 per month	None since AD6 implementation	Feedback regarding apparent NATS LTC unfamiliarity with the process was actioned via reminder to relevant staff using the OPNOT system (see Table 3 on p.7).
East Anglian Rocketry Society (EARS)	Rarely (once in PIR period)	None since AD6 implementation	Successful first use of the new procedure (and, to date, the only use so far). Additional assistance to EARS was provided by NATS LTC staff (winds aloft to help rocket flight planning). Feedback from EARS was positive (see Table 6 on p.10).
National Flying Laboratory Cranfield (NFLC)	Approx 2-4 per month	None since AD6 implementation	Successful use of the new procedure, more frequent during university term time. Aircraft usually requests block clearances between FL75 & FL110. Has little impact on ATC Operations within DTY CTA-12, DTY CTA-21 & DTY-CTA 25. Aircraft is handled equally between TC NE & GW APP depending on requested level. Initial concern that aircraft may on occasion be refused entry to CAS has been assuaged. Feedback from NFLC was positive (see Table 6 on p.10).
RAF 78 Squadron (Swanwick Military Control)	Daily	31 st July 2023	Revised coordination procedure agreed, improving the DTY Corridor interaction with DTY CTA21/ZAGZO hold (see Table 7 on p.11).
United States Air Force in Europe USAFE (RAFs Lakenheath & Mildenhall)	Daily	In progress, expected implementation before Summer 2024	Aircraft inbound to EGUN & EGUL are often lower than the expected FL90 as laid out in the LoA, as this assists EGUL RAPCON – the procedures are understood by both parties and can be tactically adapted. Feedback from USAFE led to direct discussions and work in progress at NATS TC to see if it is possible to formalise lower levels and improved tactical descent in the LoA, this work is ongoing (see Table 7 on p.11).

Table 9 Letters of Agreement: Holders, usage and comments

6.1.4 The typical review period for LoAs is two years from first signing, which is approximately the time of writing this report. However, at any time, any party can request a review. Reviewing an LoA requires NATS, as the ANSP, to check with the holder that all parties are content with the procedures. If so, the LoA continues, with the confirmation recorded. If not, opportunities for improvement are identified and agreed as part of the review process.

7. Conclusion

- 7.1.1 We received feedback from each type of stakeholder. There were some technical comments as well as specific feedback.
- 7.1.2 One airline is experiencing greater than predicted fuel burn and sector lengths. We will continue to tactically minimise flown distances for all operators, where possible.
- 7.1.3 The GA organisations with which we have LoAs had a positive experience, and the potential impacts of new CAS have been mitigated.
- 7.1.4 The two MoD units each had minor procedural impacts as a result of the airspace change. One impact was addressed via an LoA procedural change. The other is under discussion in order to improve coordination levels and tactical options within the parameters of the original LoA procedures, and further improvement is being investigated.
- 7.1.5 From an operational feedback and LoA point of view, this was a successful implementation.

End of Annex B: Operational Feedback and Letters of Agreement