Reduced Night Noise (RNN) Trial

Industry Consultation Feedback

Date: August 2019

Introduction

The CAA's CAP1616 document describes the process to be undertaken for permanent and temporary airspace changes and airspace trials. As such, the trial sponsor (Gatwick Airport Ltd, GAL) is required to demonstrate to the CAA that it has **'consulted with aviation stakeholders (specifically, that is airspace users, air navigation service providers and airports only) to establish that the proposed trial is safe and operationally viable'** (CAP1616a, para 311).

This document summarises the consultation process undertaken, the feedback received, and how the aviation stakeholder consultation feedback has been taken account of in the trial.

Consultation Process

GAL prepared an Industry Consultation Document (see Annex A of this document) aimed at aviation stakeholders impacted by the trial, i.e. airlines, air navigation service providers, and airports. The consultation document provided details of the trial including the trial objectives and principles, parameters, operations and proposed routes.

The Consultation Document was circulated to members of GAL's Flight Operations and Performance Safety Committee (FLOPSC[1]) and the National Air Traffic Management Advisory Committee (NATMAC[2]). Industry consultation was formally launched at the FLOPSC meeting on 29th May 2019. Members were informed that the consultation would run for 4 weeks and would end on Friday 28th June at 23:59. Consultation with NATMAC commenced one week later than that with FLOPSC, lasting also for four weeks.

A period of four weeks is shorter than a typical public consultation period. It was agreed for the following reasons: the consultation population was limited to relevant aviation stakeholders directly targetable through FLOPSC and NATMAC; the scope of consultation was limited; and, there had been considerable pre-consultation engagement with industry stakeholders.

Aviation stakeholders were invited to review the Consultation Document and to provide feedback to GAL principally on whether the trial is **safe and operationally viable**, but also asked other pertinent questions. A feedback form (see Annex B of this document) was provided within the consultation document, along with a dedicated email address set up to receive responses.

Industry Feedback

In total, nine responses were received from the following representatives:

[1] The FLOPSC Committee includes representatives of Gatwick Airport, the CAA, Air Traffic Control service providers and airlines operating at the Airport.

[2] NATMAC constitution can be found here.

Company	Position
Airline	Flight Operations Manager LGW
Airline	B737 fleet Support Pilot
Airline	Base Chief Captain
Airline	Base Captain
Airline	Head of Regulatory Affairs
ANSP	Manager ATM Procedures Swanwick
Aviation representative from NATMAC	CEO
Aviation representative from NATMAC	Director of Aviation Affairs
Ministry of Defence (MOD)	SO2 Airspace Plans

A detailed review of the feedback received through consultation was undertaken to determine its impact, if any, on the trial. The tables below capture the feedback received and summarise how this feedback has been taken account of in the trial.

ANNEX A

Question 1 *Is the Gatwick Airport RNN trial Safe?*

Yes	No	Other
6	0	3

Feedback

Respondent	Comment	Response to Feedback
ANSP	*A yes/no answer is not an applicable response to this question. From an ATC perspective our initial risk analysis has shown that the introduction of the trial does not introduce any non-tolerable risks to our operation, however, this will be formally confirmed once all Trial Conditions/Management criteria are confirmed and taken account of within our formal Safety Assessment.*	A formal Safety Assessment is planned later on in the year, once the trial routes and procedures have been developed. The assessment will be included in the Trial Pack submission to the CAA.
MOD	*No comment at this stage – welcomes continued engagement from LGW.*	We will continue to engage.
Aviation representative from NATMAC	*We believe, as already reflected in airline comments, this will be safe provided flight deck workload is not increased by requiring crews to update routinely FMS parameters during the approach.*	The final approach will not change from current operations and will be either an ILS or RNAV approach dependent on Southern or Northern operations. The PBN transition will be coded in the FMS as per normal procedures. Crew will not be required to routinely update FMS parameters during the transition.

Question 2 *Is the Gatwick Airport RNN trial Operationally Viable?*

Yes	No	Other
6	0	3

Feedback

Respondent	Comment	Response to Feedback
ANSP	*Based on the engagement between Gatwick and NATS over the last 12 months, we have agreed acceptable time bandings where we believe that there will be acceptable traffic levels for our controllers to accommodate the trial. However, NATS reserves the right, should there be an overbearing safety or operational reason for doing so, suspending the trial at any point.*	Trial suspension and reporting procedures will be developed for the trial in conjunction with NATS. These will be described in the Trial submission pack.
MOD	*No comment at this stage – welcomes continued engagement from LGW.*	We will continue to engage.
Aviation representative from NATMAC	*We believe, as already reflected in airline comments, this will be operationally viable*	As above (Question 1).

	provided flight deck workload is not increased by requiring crews to update routinely FMS parameters during the approach.	

Question 3 *Do you have any additional comments?*

Feedback

Respondent	Comment	Response to Feedback
Airline	*The trial will need to be validated in the simulator to ensure new Airbus procedures requiring the Approach mode to be armed only after passing ARPIT are valid (this shouldn't be a problem).*	Trial routes will be validated in a simulator using Airbus and Boeing aircraft types. This requirement will be confirmed in the Airbus simulations.
	A better way of constructing the approach is to make IBGAT/YOTAG/TAGOF/TAGCO/ PETAG/GATZA the FAF (final approach fix) coded as a 3-degree approach path from this point onwards with the level segment inserted just prior to these points.	The trial will not change the Final Approach procedures at all. This is out of scope of the trial.
	An even better way of constructing it would be to start the approach from FL70 with the level segment at this height to ensure the level segment was flown at a height which won't impact those on the ground.	In low pressure conditions, FL070 is not an available level. Therefore, the procedure will begin at 6,000ft. The first waypoint will be defined as not below 6,000ft to allow aircraft to stay higher than 6,000ft and descend gradually. This will ensure that the aircraft can fly the optimum profile into the procedure in all pressure conditions.
Airline	*Will require suitable lead in time to ensure we can get the procedures to our Navigation Database suppliers, so that they can code the approach for us.*	Feedback noted and this lead-in time is built into the RNN timeline.
Airline	*Procedures should use the ability to fly a radius to fix and avoid vectors from end of RNAV STAR to final approach.*	The trial routes are based on RNP1 with RF legs. There is no vectoring between the transition and the final approach of those aircraft in the trial.
	Final Approach fixes should be a 2,000' on non-ILS NPA approaches to avoid having to slow down too early IAW Boeing flight crew training recommendations.	The trial will not be changing the Final Approach procedures at all. This is out of scope of the trial. The transitions will be coded to ensure that no slow down is required and this will be checked in the simulators.
Airline	*My only comment would be that mirrored in the main document by others. In certain environmental conditions, the vertical profile may be more difficult to achieve (significant tailwind). In these circumstances, the profile will need to be managed more directly with the use of speed brake in order to maintain the profile whilst trying to manage the speed. This will obviously not result in a low drag/noise approach.*	The simulator will be used to test the procedures in tailwind conditions to ensure they can still be flown quieter.
ANSP	*NATS welcomes the positive engagement from Gatwick Airport in support of the designing,*	Feedback noted. Engagement will continue.

	assessment and planning of this trial and wish this to continue.	
Aviation representative from NATMAC	*Operators should be able to supply you with FDM data to confirm whether having a late centre line intercept leads to unstable approaches.*	All intercepts are at 10NM minimum to comply with Gatwick Airport night-time operating procedures in the AIP. A late centre line intercept should not occur with the PBN transition that joins the centre line in compliance with this. It is expected that operators will be asked to complete a questionnaire in case there are other lessons to be learned.
Aviation representative from NATMAC	*We fully support the principle of using steeper approaches to reduce noise levels around an airport and recommended same to the Airports Commission. The only caveat is that assumes that they can be designed so the configuration/power settings needed to follow the steeper approach do not generate additional noise at lower altitudes.*	The transitions are not steeper than those used today. However, they should remove the incidences of aircraft flying unnecessarily low (outliers). The simulator will be used to confirm the suitability of the descent angle.

Summary

A number of important points were raised through the consultation which we believe have now been addressed and/or will be addressed further on into the CAP1616 process. Based on the feedback received, no changes to the trial procedures or IFP designs, presented as part of the consultation, are necessary. However, several questions have been identified that will be addressed in the simulator sessions and reported back to FLOPSC.

Annex B: Industry Consultation Feedback Form

Aviation stakeholders were invited to complete the following feedback form and to send their responses to an independent email address, set up solely for RNN trial responses.

1. **Name:**

2. **Company:**

3. **Position:**

4. **Is the Gatwick Airport RNN trial Safe? Please indicate A or B**

   a. Yes

   b. No

      i. If no, please give details.

5. **Is the Gatwick Airport RNN trial Operationally Viable? Please indicate A or B**

   a. Yes

   b. No

      i. If no, please give details.

6. **Do you have any additional comments?**

7. **Your information**

   The information you provide to us will be submitted to the CAA, but will be anonymised in the Consultation Summary Report when it is published. If you would like to discuss anything about how to respond to the consultation or have any questions, please contact the email address above.