

ANNEX N TO PIR REPORT DATED APRIL 2017

Potential for Options for reducing the impact on local communities

SID Switching

Can traffic not be switched from Route 4 to other SIDs?

Route 4 carries a significant portion of the traffic when the westerly runway is in use for departures. GAL should consider whether it is possible to find alternative routes for aircraft into the London Terminal Manoeuvring Area airspace, but without causing an unintended consequence elsewhere. Consequently, the CAA has placed an undertaking on GAL to actively consider what can be done in this regard. When considering such an option GAL will need to engage with local communities that would be impacted by such a decision. If such an option were pursued GAL may need to request the CAA approve such a decision¹.

Respite SIDs

Can a second RNAV 1 SID be operated in conjunction with the modified RNAV 1 SID?

Options for a second RNAV 1 SID to be flown in conjunction with the RNAV 1 SID currently in use could be considered as a potential means to introduce respite to **some** communities overflowed by the current modified RNAV 1 SID. Segments 1 and 2 have been satisfactorily replicated as having a similar impact as the existing conventional SID, but there could be options to have an alternative eastbound track after the 180-degree turn is completed.

Options for respite, whereby use of SIDs is alternated have not been trialled or tested in terms of flying SIDs for respite purposes. Therefore, the CAA is unable to comment at this stage whether alternating different, but closely-spaced, RNAV 1 SID designs at different periods has any impact in reducing the impact of aircraft noise, as no guidelines have yet been published. However, the CAA believes that there is merit in examining this option further as the desire for a degree of genuine respite is apparent feedback from local communities.

¹ This is dependent upon the government's decision whether to introduce Tier 2 airspace change as set out in their 2017 consultation document.

Dependent upon the outcome of those investigations and any option progressed, modifications to Government sponsored NPR notifications may be required and therefore pursuing this investigation will require prior engagement with the Department for Transport.

All options will require engagement with affected communities.

Re-profiling the vertical profile of the Route 4 RNAV 1 SID

Can the aircraft follow a steeper climb profile to enable the aircraft to fly at a higher altitude during the departure phase of the SID?

The Route 4 RNAV 1 SID has a climb restriction of 4000ft until passing a position known as KKE 11 (just to the east of Salfords railway station), after which further climb to 5000ft and eventually 6000ft is possible. From the CAA's understanding, this restriction is due to other conflicting departure profiles. It may be possible for GAL to engage with the air traffic service provider NATS to examine options to remove this restriction so aircraft can climb to 5000ft without levelling off. This will need careful evaluation and consideration by NATS to ensure that there are no unintended consequences for other routes.

Any changes to the vertical profile have to be considered against other traffic patterns which are adjacent to the Gatwick departure procedures, and therefore it is not possible to do this without an appropriate in depth evaluation and risk assessment by NATS. Therefore, this is for GAL to examine, in conjunction with NATS, to determine what options (if any), may be feasible.

Noise Abatement Restrictions

It has become apparent that some residents of Horley have an expectation that air traffic cannot be vectored over Horley on departure at any altitude because of what is published in the UK AIP. However, in conflict with this interpretation of the published noise abatement procedure, it is evident that ATC operational procedures advise air traffic controllers they may vector traffic as soon as it has reached 4000ft.

This has been noted during the CAA PIR process and during our review, we have asked GAL to resolve this situation. However, following engagement with NATS, as previously advised, the amount of overflights have reduced following an air traffic controller engagement programme at LTC Swanwick.

To eradicate this issue, ATC's operational procedures would need to be amended. This possibility, together with the impacts of doing so, should be investigated by GAL.