

From: [REDACTED]

To: [REDACTED]

Cc: [REDACTED]

Subject: [REDACTED] Re: URGENT - Gatwick Rwy26 BOGNA HARDY SIDs -
Questionnaire on vectoring Practice

[REDACTED]

This response has been passed on to me to deal with as the best placed within the Airspace Development team [REDACTED]. I have formed an agreed unit response rather than circulating questionnaires to Group Supervisors as the short time window does not allow such action in the first instance and also the governance of the procedure and common practice is the same across all watches for departure management (it's also the case that the GS community may not be South valid and would therefore lack the detail required); it remains unaffected by the implementation of PBN replication. It's also the case that responses to the questionnaire would be a cavalcade of 'it depends' as a tactical environment is entirely dependent on resolving the evident conflict at that time.

The broad facts of the matter are that the rules intrinsic in the procedure remain unchanged, as such no vectoring is permitted (under standard practice – safety, unusual circumstances and weather requests will always over-ride this) below altitude 4000ft and we must also follow restrictions concerning Horsham. The details from the MATS Part 2 are below:

4.3.1 Noise Preferential Routes

4.3.1.1 Daytime (0600 – 2330 local)

Daytime NPRs for aircraft departing Gatwick cease when the aircraft is at or above 4000ft, with the following exceptions:

- Westerly Operations: KENET/SAM departures only may be deviated from the SID passing 3000ft.
- Easterly Operations: All departures other than SFD may be deviated from the SID passing 3000ft.

4.3.1.2 Nighttime (2330 – 0600 local)

Nighttime NPRs for all departures from Gatwick cease when the aircraft is at or above 4000ft.

4.3.1.3 Additional Noise Restrictions

Gatwick departures are not to be vectored over Horley, the outline of which is shown on the radar map.

In order to alleviate noise over Horsham, the following restrictions are imposed for specified westerly departures (a dotted line on the radar map marks the western boundary of Horsham, and departures are not to be routed to the east of this line):

- BOGNA/HARDY departures are not to be deviated from the SID track until beyond OCK D13 (the initial left turn).
- SFD departures are not to be deviated from the SID track until they have crossed SFD R320 (the initial right turn).

The Horsham Line referred to extends from (in OSGB format) 510704.9N 0002410.2W from the North to 510219.9N 0002000.3W to the South.

All watches must adhere to these rules in the same manner and typically the nuances and trends of departure behaviour are governed by the need to appropriately separate the departure flow from both the inbound flow to Gatwick through GWC and MID, inbound aircraft (typically to EGH/EGHH/EGLF) using Y8 to GWC from the East, and any other outbound departures seeking to use UN859, UL151, UL612 and UM605 airways to the South of the UK. Initial vectoring of 'continue present heading' and an initial turn wider (further West) than the published SID track are most common at peak times to achieve separation from these routes and the Gatwick hold at WILLO. Once again, there is nothing in the implementation of PBN replication that has had any tangible impact on these behaviours.

With reference to the slides of swathes you have offered for comment – my assessment would be that it is clear that core behaviour remains extremely consistent, with the known and expected effect of PBN concentrating the turning swathe of the published procedure. While there may be some adjustment of the outlying tracks indicated by the Blue swathe these do not appear significant in terms of traffic count or lateral position. A comparison of the conventional sample from August and the PBN sample from October may well be the deciding factor here as the airspace will be busier in the August period than that in October; as a result it may just be that the fewer conflicts are typically resolved earlier in the quieter period. It could also be that the October sample features more aggressive wind conditions or examples of weather avoidance which could be contributing. A more beneficial assessment may be to look at an equivalent period to compare 'like-with-like' and see if any changes are visible. The most important feature of the swathes that would enable appropriate assessment would be the vertical banding of the aircraft as this is intrinsically linked to patterns of lateral behaviour.

From experience of this route (which is dominated by Medium aircraft) most aircraft are well out of 4000ft prior to the initial left turn but again, level-banded swathes could highlight the issue in more appropriate detail.

I believe this covers the detail you require but I'll offer an answer to the two initial questions posed so you have a direct response in that area:

1. On the initial call to London Control when the crew state c/s, SID designator, alt, alt cleared to, what is the first reply / ATC instruction to the crew?
2. At what point are aircraft given their first radar vector and what is the ATC instruction?

In quiet periods with no apparent conflicts the aircraft will be instructed to 'squawk ident' and then issued a climb to the highest available Flight Level. At busier times the instruction could be a number of options but typically would be 'continue present heading, climb Flight Level 80/90/100'; this would be followed by an appropriate left turn once passed the vectoring restriction ranging from heading 225 to 145 degrees.

While I appreciate this isn't the format you first requested but I hope you find it helpful. I'm unfortunately unavailable for much of today but will be working over the weekend if you need anything further.

