London Luton Airport

19 January 2017

RWY 26 MATCH (BPK) RNAV1 SID- PIR REQUIREMENTS TO LUTON

GENERAL

- The details below confirm those requirements previously provided to LLA on 16 & 19 August 2016 to enable a PIR of the revised RNAV 1 SID which will be implemented on 2 February 2017. The final data should be provided to the CAA as soon as practical after 2 August 2017. As previously alluded to, supplementary operational requirements have additionally been provided (paragraphs 16 & 17).
- 2. Any data provided to the CAA as part of the PIR assessment needs to be in a format that is consistent with, and comparable to data provided as part of the original consultation and formal ACP. Scaling should be consistent throughout to enable a like for like comparison between RNAV and conventional plots.

TRACK DATA PLOTS

- 3. In a PowerPoint format, provide monthly track dispersion plots and track density plots separately for:
 - RNAV SIDs,
 - Conventional SIDs, and
 - RNAV & conventional combined track plots

from February 2017 to July 2017 colour coded as previously supplied in data for autumn 2016.

- 4. Include RNAV waypoints on the maps showing the appropriate symbol and identification.
- 5. In a PowerPoint format provide track dispersion plots in altitude bands of 1000ft intervals from departure to 1000ft, then 1001ft to 2000ft and so on up to 7000ft for separate RNAV and conventional plots (as per Jul 15/16 sample).
- 6. The colour key on all diagrams should be visible somewhere such that it is not blanked out/obscured by the tracks on the diagram.
- 7. Using white as one of the track colours should be avoided if possible as tracks can disappear against the map, or lost against the OS background data and where the tracks switch to the next altitude band, the white tracks can be easily lost under the next altitude band colour.
- 8. For presentation of diagrams for all track plots, labelling should include the title specifying whether RNAV, conventional (or both) as appropriate, the sample period, altitude bands as appropriate and the number of aircraft in sample.
- 9. Illustrate the NPR swathes and the NPR. The NPR swathes should be a colour palette which does not obscure track plots, and the outline of the NPR swathes and the nominal track (the centreline) should be bold enough to stand out through the track plots if that can be achieved.

- 10. The SID nominal track and RNAV waypoints.
- 11. Please colour the palette so the NPR and the swathe extremities are visible through the track plots, and that we can see the background OS features of towns and villages etc.
- 12. For labelling track density diagrams, the same conditions as applicable for track plots apply.

OPERATIONAL DATA

- 13. Provide track dispersion plots by aircraft type per airline (in same format as above).
- 14. Provide a daily track dispersion plot to enable the CAA to look at particular weather implications (in same format as above). Please annotate surface winds and forecast 2000ft and 5000ft winds on these diagrams to assist analysis.
- 15. METAR data on a daily basis to be used in conjunction data plots as above. Please use the format attached in the spreadsheet. Also include the forecast 2000ft and 5000ft winds.

Note: we may only need the level of detail in paragraphs 13-15 for a month or two after implementation, then we can determine if further daily plots are required. The track-keeping performance will drive this requirement; therefore, subsequent month's data will be confirmed.

- 16. Details of any ATC operational issues from LTC Swanwick
- 17. Any flyability issues and / or any navigation database coding issues raised by aircraft operators as they arise from the outset should be to be fed back to LLA for investigation and onward disclosure to the CAA ASAP. It is recommended that LLA advise the FLOPSC / airlines to feedback this requirement prior to implementation on 2 February 2017.

SPEFICIFIC ENVIRONMENTAL DATA

- 18. LLA are to monitor noise levels in south Luton (the same location as used for the noise monitoring of the trials), to assess noise levels and compare them with preimplementation levels to ensure there has been no change and provide the details of this analysis for the PIR.
- 19. LLA are to provide an update on progress of the proposed NPR swathe penalty system, and details of any penalties issued.
- 20. LLA are to provide a report on the results of the proposed noise monitoring in Sandridge and an outline of any steps to redesign (or not) the SID in that location as a result of the findings.

GATE ANALYSIS DATA

21. A gate analysis diagram at positions at the railway line and at Sandridge. The gate should be drawn with the centre based on the Nominal Track (NT) of the SID and

drawn perpendicular to the SID NT and should be 3km wide (1.5km either side of the NT).

22. Please show a gate for the railway line vectoring restriction so it can be seen through the track plots.

COMPLAINTS DATA

- 23. Complete the attached spreadsheet with details of complaints received.
- 24. Provide an OS background map showing the NPR swathe and SID track with a plot of complaints derived from complainant's postcodes derived from the format shown on the attached spreadsheet. Any further requirements will be determined in due course.
- 25. A suitable explanation is also required to support the details shown on the map.

FURTHER INFORMATION

26. Additional information may be required as subsequently advised by the CAA depending on local circumstances.

PUBLICATION OF PIR DATA ON THE CAA WEBSITE

27. Whenever you submit the details after August 2017, please provide agreement for the CAA to publish this information on the CAA website.

