Truncation of Gatwick DVR 1M 1V SIDs ACP-2020-51

1. This paper relates to the Gatwick SID truncations which Gatwick, NATS and GAL wish to make concurrently with CAP 1912 implementation to 'smooth out' the impact.

SoN Extract

2. 'It is proposed that the conventional DVR 1M 1V SIDs will be truncated to a position very close to ADMAG, but not ADMAG itself as to do so would require a change to the radial to DVR for the DVR 1M 1V SIDs. The truncation position will be located at DVR D33 on DVR R278 and the truncated section will be replaced by Area Navigation Route Y312. It is anticipated that a minor realignment of the Y312 airway would be required to achieve this'

Issue

- 3. The current RNAV SID to DVR is the ADMAG 2X. This routes SUNAV ADMAG where Y312 begins. The current Conventional DVR SID (which post CAP 1912 implementation will have all traffic on it routing via DVR) is ACORN D33(6000ft point) DVR.
- 4. The SoN wants to truncate the Conventional DVR SID to D33 but currently no ATS route commences here. When the RNAV SID was created/replicated it became located 1.3nm away. This is the distance between ADMAG and DVR D33, and the distance the head of Y312 would need to moved to align an ATS route from the truncated point to DVR.

Argument

5. There will be no change to vertical or lateral tracks as post CAP 1912 all aircraft will be flying the conventional route of ACORN – DVR. However, there is no current existing ATS route to facilitate a truncation at D33. But, Y312 between ADMAG – DVR will become unusable as no aircraft will be able to fly the RNAV SID. For the people on the ground the aircraft will be flying ACORN – D33 – DVR regardless. Moving Y312 to commence at D33 – DVR means the SID can be truncated and this route flight planned from D33.

SID Truncation Policy vs SoN Analysis

- 6. Para 1.1 states: 'existing conventional and certain RNAV1 Standard Instrument Departure (SID) procedures where an ANSP determines environmental benefits (flight plan enabled fuel benefits) can be achieved by reducing the length of a SID without change to the existing track over the ground or SID vertical profiles'. **The proposal conforms with this**.
- 7. Para 1.2 states: 'SID truncations requiring a new ATS route designator should have a saving of at least 10NM to justify the acquisition/utilisation of a new route designator or 5LNC and the time taken to process the application'. **The proposal conforms with this**.
- 8. Para 3.1 states: This policy applies when it is proposed that:
 - the end segment of a SID is replaced by a new RNAV ATS route; or
 - where the end segment of a SID is already aligned with an existing ATS route; and
 - there is no change to the track over the ground or vertical profiles; and

• the SID is truncated at, or after, the final altitude/level attainment point is first reached and terrain clearance remains assured with the establishment of any ATS routes incorporated to replace the truncated section.

The SoN conforms to the first bullet, as a new ATS route is needed, and to the third and fourth bullets. The sponsor DOES NOT wish to truncate prior to final end altitude or affect lateral profile.

- 9. Para 4.1 states: 'CAP 1616 sets out the specific requirements for airspace change proposals, scaled to the appropriate level of the change. As a SID truncation involves no changes to aircraft track over the ground and vertical profile, and results in replacing the end of a SID with an ATS route segment, the application of CAP 1616 will be scaled to the appropriate level, normally 2C'. **The SoN conforms to this** as the policy DOES NOT state the end of the SID must be replaced by an existing ATS route.
- 10. Para 6.2 states: 'The use of 5LNCs should be limited to the essential required as 5LNC resource is scarce. Consideration should be given to the possibility of cancelling extant 5LNCs to offset the establishment of new points'. **The Sponsor is looking to cancel ADMAG**. (Confirmation being sought from NATS that there are no future/unknown plans/other uses of ADMAG.)
- 11. Appendix 1 Stage 4 Para 4.1 states: 'In paragraph 4.1 of Appendix 1, the following details are required for the revised 'truncated' SID:
 - The specific SID Truncation details together with co-ordinate and ATS route details in an accompanying WGS 84 spreadsheet and the draft AIP amendment as attachments to the Appendix.
 - Revised SID designator (see CAA policy statement 'The Designation of Standard Instrument Departures (SIDs) and Standard Approach Procedures (STARs) in the UK Flight Information Regions'4.
 - The position at which the SID will be truncated. This should also be indicated on the existing SID Chart and attached as an Attachment for subsequent UK AIP amendment (clearly annotated PDF copies of existing charts are acceptable). Note: If approved, SARG will advise the sponsor to submit this chart to AIS using the Formal Change Request to the UK AIP.
 - When a new waypoint is required, a validation check of co-ordinates is required in accordance with CAA policy statement 'Significant Point Name Codes (5LNC) and ATS Route Designators' 5. This validation request is to be submitted in the WGS84 spreadsheet to be provided with the SID Truncation application.
 - If the truncation is at a newly established position, the new 5LNC of the truncation point or, if appropriate, the established position at the truncation point, will become the new SID designator. The SID designator is to be confirmed with SARG.
 - Changes to associated distance to truncation point from previous waypoint; details are to be indicated on the AIP chart to be amended (comments in Adobe PDFs are acceptable). Note: sponsors must confirm appropriate navaid infrastructure is available to support the revised SID termination position.

• The remaining portion of the existing SID subjected to truncation (from the truncation position) to the original termination position will become the new ATS route if there is no existing ATS route established.

The final bullet states a sponsor can truncate to a new 5LNC point and the truncated section becomes a new ATS route.

Opinion.

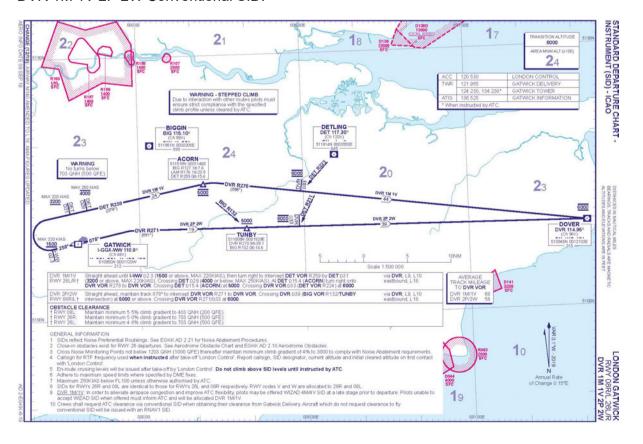
- 12. Sound argument that tracks over the ground are not impacted by the truncation, they are actually impacted by the implementation of CAP 1912 which forces all aircraft onto the Conventional route whereas the majority were flying the RNAV route. This will happen regardless.
- 13. The SID Truncation Policy does allow a new ATS route to replace a truncated section (Appendix 1 para 4.1).
- 14. Realigning Y312 from ADMAG to DVR D33 is the creation of a new ATS route for this SID truncation, and the move of 1.3nm is irrelevant as in essence old Y312 (ADMAG DVR) is deleted and new Y312 (D33 DVR) is created.

Recommendation

15. The SoN is approved as presented as a Level 2C ACP which can follow the SID Truncation Policy.

Charts

DVR 1M 1V 2P 2W Conventional SID.



ADMAG 2X RNAV1 SID

