MINUTES OF ACP-2023-039 ASSESSMENT MEETING HELD VIA MS TEAMS ON 16 OCT 2023

Wednesday, 18 October 2023

Distribution: As below

Present		Appointment	Representing
	(DG)	Airspace Change Account Manager	CAA
	(SW)	Airspace Regulator (Technical)	CAA
	(SM)	CAA Regulator	CAA (observer)
	(JS)	Principal Airspace Regulator	CAA
	(NA)	Inspector ATS (Operations)	CAA
	(PA)	Airspace Regulator (IFP)	CAA
	(CG)	Future Airspace Design Specialist	MAG
	(JC)	Future Airspace Consultation Manager	MAG

CAA Assessment Meeting Opening Statement

CAA noted that the change sponsor's Statement of Need were received in advance of the Assessment Meeting and confirmed that the documents must be published by the sponsor, together with minutes of the meeting, on the Airspace Change portal page. CAA explained the purpose of the meeting and confirmed that the meeting was an Assessment Meeting and not a Gateway. The CAA reinforced that the sponsor was required to provide a broad description of their proposed approach to meeting the CAA's CAP1616 requirements, but the CAA was not deciding whether the proposed approach met the detailed requirements of the CAA's process at this stage. The purpose of the Assessment Meeting (set out in detail in CAP1616) was broadly:

- for the Sponsor to present and discuss their Statement of Need,
- to enable the CAA to consider whether the proposal concerned falls within the scope of the formal airspace change process, including determining whether the proposal falls within the scope of a scaled CAP 1616 ACP for the introduction of GNSS IAPs as described in CAP 1961,
- to enable the CAA to consider the appropriate provisional Level to assign to the change proposal.

Additionally, the sponsor was required to provide information on how it intended to proceed to fulfil the requirements of the airspace change process and to provide information on timescales. Lastly, the sponsor was required to provide information on how it intended to meet the engagement requirements of the various stage of the airspace change process.

Item 1 Statement of Need

✓ In order to reduce fuel uplift and consequent fuel burn and CO2 emissions it proposed to truncate the DTY 3N and 4P SIDs by 23nm at waypoint SAPCO and replace the existing portion of the SID between SAPCO and DTY by extending ATS Route Y53 south from SAPCO to DTY

ACTION

✓ This proposal is aimed at making the SIDs from East Midlands Airport via DTY
more representative of what is actually flown in the vertical plain and hence
reduce the required fuel uplift and consequential fuel burn and associated
emissions.

Current situation

- ✓ The current DTY SIDs from East Midlands are around 45-51nm long and end at FL90 (approx. 9,000ft). The vast majority of aircraft would be flying at around 4 miles/min and, notwithstanding the requirement to be at FL90 after 22-28nm, if they climbed at a typical and conservative rate of 1,500ft/min thereafter they would be at least FL150 by DTY but they could/would have fuelled to be FL90
- ✓ They then have to carry the fuel they had loaded assuming FL90 at DTY all the way to destination which is likely to be hundreds if not thousands of miles.

Issue to be addressed

- ✓ This proposal is aimed at making the DTY SIDs from East Midlands Airport more representative of what is actually flown in the vertical plain and hence reduce the required fuel uplift and consequential fuel burn and associated emissions.
- ✓ The DTY SIDs are the most heavily used at East Midlands Airport and hence the potential saving could be significant.
- ✓ The proposal is not aimed at developing the route and any growth of usage is expected to be in line with any general forecast growth for the airport.

Item 2 Options to address identified issues

Option considered Truncate at DTY D23

- ✓ Existing waypoint SAPCO is not quite on the DTY 3N/4P SIDs. In strict accordance with the SID Truncation policy/process the first point truncation could take place is at DTY D23. Truncating here and replacing with an ATS route would mean that the new route would end just 0.45nm from the current extremity of Y53 at SAPCO.
- ✓ This option would still provide the same fuel benefit, but it would look very strange on maps and charts and potentially encourage unusual flight planning/routeing options for traffic not originating East Midlands which would then need to be blocked by use of further additions to the UK Route Availability Document (RAD) and UK Standard Route Document (SRD).
- ✓ For these reasons this option has been discounted

Option proposed

Truncate at existing waypoint SAPCO

✓ Existing waypoint SAPCO, whilst not actually on the track of the currently published DTY 3N/4P SIDs themselves is only around 830 metres from DTY D23 and a small variance in track of just 0.6° degrees to DTY DVOR.

- ✓ The NPR on this SID ends 6,000ft ie around 30nm before DTY and 25nm before HON for the 3N and 4P SIDs respectively. The vast majority of aircraft reach 6,000ft long before then and are tactically routed/vectored by ATC and hence the point at which FL90 is achieved is seldom, if ever, DTY D23.
- ✓ Slightly realigning the SIDs and truncating them at existing waypoint SAPCO will enable Y53 to be extended south to DTY to replace the truncated portion of the SIDs and connect neatly to the extant UK ATS Route network.
- ✓ The actual SID Truncation point is largely irrelevant in terms of where aircraft track as it can be seen there is huge variance after they have passed 6,000ft this will not alter following the proposed truncation at SAPCO.

Benefits

- ✓ Flight plan enabled fuel benefits and reduced CO₂ emissions through reduced vertical profile SID constraints.
- ✓ Enable greater flexibility in future airspace designs and network improvements and facilitate greater reductions in flight plannable mileage subject to any proposals put forward by the en-route ANSP (NERL)
- ✓ Will remove the requirement for flight plannable DCTs between DTY and SAPCO or non-East Midlands originating traffic as Y53 will be usable and also visible on charts (RAD restricted to ensure no greater use than today)

Issues

- ✓ Very minor change in published track of the SID from Runway 27 after passing 5,500ft (ie below 7,000). But no change in ACTUAL track flown
- ✓ Very minor change in published gradient (steepening) of the SID from Runway 27 after passing 5,500ft (ie below 7,000ft). But no change in ACTUAL profile flown
- ✓ Does the revised proposed description of the SID meet IFP design criteria?
 - We believe it does it does as far as DTY D31 and HON D19 on the 3N/4P SID respectively.
 - Amending the procedure as proposed would make it only flyable for RNAV equipped aircraft despite it being a Conventional design.
 - Does this matter is given:
 - a) the mandate to be RNAV equipped on fly on the UK ATS Route Network and
 - b) the SIDs will be RNAV Substituted in accordance with CAP1781 making them only available to RNAV1 equipped aircraft?
- ✓ Can the CAA make their assessment in 5-weeks? If not, there will be a minimum 3-month delay to implementation.

Item 3 Provisional process and timescales

Provisional Scaling, Process & Timeline Discussion

- Subject to the IFP Periodic Review and SID Truncation policy dispensation being accepted, planned to be conducted under SID Truncation Policy.
- As indicated in this policy, Level 2C Change.

Proposed Timeline

Exact timeline to be proposed and agreed once the 5-yearly Periodic Review has been completed and submitted to the CAA.

Item 4 Next steps

Write Assessment Meeting minutes and submit to CAA for approval. Timeline confirmation Submit completed Appendix 1 of SID Truncation Policy at agreed date. Questions/AOB -A 5-yearly periodic review will be required to be completed to ensure the content of the DTY SIDs as currently published are correct. This may assist in determining in the exact difference in the end fix (DTY D23) of the truncated SID and the SAPCO Fix. -The introduction of any new Fixes will need to ensure the fixes are based on a CG ground based nav aid. CG -Unfortunately, there is no NAVAID that could reference if we truncated at SAPCO. Our rationale, for not complying in this regard should we truncate at SAPCO, would be included within our submission. Post meeting note from CG It will be relatively easy to define the position of SAPCO on a ground-based Navaid but impossible to define the procedure to get to SAPCO using a radial as there is not a suitably placed facility. Hence, if we agree that SAPCO can be used we would CG propose the final turns to SAPCO are based on track as opposed to a radial. We appreciate this can only be achieved by RNAV equipped aircraft but aircraft are mandated to be at least RNAV5 to fly beyond SAPCO. -From my understanding you are looking for a 'dispensation' to the SID Truncation Policy Statement? -If that is so you will need to outline your reasons in writing particularly why you believe that the change meets the 'policy applicability requirements' and the scope of the dispensation required. CG Post meeting note from CG -We are looking for a dispensation and we would include in our reasons in writing with our submission. Until the 5-yearly periodic review is complete, and the implications are clear it is difficult to make the assessment on how far from the CAA Policy Statement on SID Truncations the proposal will be. Post meeting note from CG -The 5-yearly periodic review will include an addendum detailing that any proposed truncation is equally 'terrain/obstacle safe' to the non-truncated route. Post meeting clarifications PA SAPCO is a FIX on the ATS network. As it is not on the DTY SID this is not a truncation of the current DTY SIDs. What is being proposed is a new SID design.

SW

If it is a re-design, use of the word 'Truncation' should not be used.

CW

We agree it's not on the SID as published but suspect that once upon a time it probably was albeit not denoted as a named fix and that maybe Mag Var changes over time have pulled them apart. That Said, SW did state that we are effectively asking for a dispensation away from the exact compliance with the SID Truncation Policy/Process and we confirmed that we are. On the basis that aircraft are radar vectored before this point on the SID is even reached.

Also when we used the word truncation we were unaware of the small deviation of the fix SAPCO from the SID so it was stated as truncation because we genuinely believed it was the same point