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DVOR Rationalisation Removal of En-Route Dependencies – Brookmans Park (BPK) Stage 1 Assessment Meeting

19th May 2020

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- Summary of Procedures impacted
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- Summary

Brookmans Park (BPK) DVOR - Statement of Need



In order to facilitate the eventual removal of the Brookmans Park (BPK) DVOR, it is proposed to remove the enroute dependency from this facility. Any STARs that use this facility and not changed by previous DVOR removals will either be dis-established or made RNAV5 and designated by their start point in accordance with ICAO.

Where an important Descent Planning level would be removed by conforming to RNAV design criteria, some STARs may be extended or new ones established to ensure these levels remain in the AIP and on the STAR charts. Any alternate STARs and Holds no longer required will be removed.

In the event that the removal of the dependency results in truncation/ rationalisation of existing STARs, then any portions of those STARs will be replaced by an ATS Route or DCT.

Current situation: Aircraft currently fly conventional Holds and STARs which refer to the BPK DVOR. There are no ATS route dependencies on the BPK DVOR. <u>Issue or opportunity to be addressed, and the cause:</u> The BPK DVOR is planned to be removed from service to reduce costs and dependency on ground-based navigation aids. <u>Desired outcome:</u> Removal of en-route dependency on the BPK DVOR

<u>Specific challenges:</u>

N/A

Project Background



- NATS currently operates 46 DVORs around the UK (installed 1982-91)
- These are operating beyond their 15-year design life resulting in:
 - High maintenance costs
 - Airport development work being prevented due to safeguarding of DVORs
- RNAV5 mandate for ATS routes all 46 DVORs are no longer necessary to support the en-route ATS route network.
- NATMAC consultation (has already been undertaken)
- Supported by CAA, SARG, UK FAS and UK-Ireland FAB PBN Policy
- Reduction underway from 46 DVORs to 19 (removal from service of 27 DVORs)
- Removal of DVORs requires any flight procedures which currently refer to the VOR to be modified or replaced
- NDBs are also being removed where no longer required BEN, DCS, DVR, GAM, LIC, LYD, MAC, MID, NGY and WHI
- Overall DVOR Rationalisation Programme
 - Reduces NERL annual operating costs by c. £250k pa/ per DVOR; and avoiding replacement costs of circa £800k per DVOR and £100k per NDB
 - Removes excess duplication of coverage, retains appropriate redundancy
 - Removing the en-route dependencies from SAM, OCK, GWC, BIG, GOW, TRN, BNN, WCO, DTY, DET, LAM, MAY and BKY have already been submitted or are currently being progressed

Procedures

Summary of procedures Procedure detail



Summary of Procedures



8 procedures (2 Holds/ 6 STARs) in the AIP which reference the BPK DVOR on their charts, or are used when BPK DVOR is u/s. These 8 procedures serve Luton and Stansted airports.

6 procedures have a dependency on BPK DVOR. 2 procedures are not dependent on it but will be updated as part of this proposal as they feature on the same chart as BPK, and have similar routings to other STARs in this proposal. All of the procedures will be evaluated under the scope of this ACP, and appropriate changes will be proposed; such as including important Descent Planning Levels.

	Ref	Airport	Procedure	Dependency
Table 1provides asummary ofall affectedprocedures	1	Luton/ Stansted	ASKEY Hold	Dependent on BPK DVOR
	2	Luton/ Stansted	BARMI 1A STAR	Not dependent
	3	Luton/ Stansted	IDESI 1A STAR	Not dependent
	4	Luton/ Stansted	LAPRA Hold	Dependent on BPK DVOR
	5	Luton/ Stansted	BARMI 1Q STAR	Dependent on BPK DVOR
	6	Luton/ Stansted	IDESI 1Q STAR	Dependent on BPK DVOR
	7	Stansted	ABBOT 1F STAR	Dependent on BPK DVOR
	8	Stansted	CASEY 1F STAR	Dependent on BPK DVOR

Procedure Detail: STARs referencing BPK DVOR

Luton/ Stansted – ASKEY Hold (used when BPK DVOR u/s)

1) ASKEY Hold – dependent on the BPK DVOR



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Luton/ Stansted – BARMI 1A/ IDESI 1A STARs and LAPRA Hold



2) BARMI 1A STAR – not dependent on BPK DVOR BARMI - MEGEL - DITOB - LAPRA -ABBOT

3) IDESI 1A STAR – not dependent on BPK DVOR *IDESI - LAPRA - ABBOT*

4) LAPRA Hold – dependent on BPK DVOR



Luton/ Stansted – BARMI 1Q/ IDESI 1Q STARs

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5) BARMI 1Q STAR – dependent on BPK *BARMI - MEGEL - DITOB - LAPRA -CASEY*

6) IDESI 1Q STAR - dependent non BPK *IDESI - LAPRA - CASEY*



Stansted – ABBOT 1F STAR

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Stansted – CASEY 1F STAR

8) CASEY 1F STAR – dependent on BPK DVOR *BPK - KEMPY - CASEY*



Provisional Timescales and Next Steps

Provisional BPK DVOR rationalisation timeline Targeting February 2021 AIRAC (02/21)



Stage	Date	Doc Deadline
Assessment meeting	19/05/2020	
Stage 1 – Define	26/06/2020	12/06/2020
Stage 2 – Develop	31/07/2020	17/07/2020
Stage 3 – Consult	31/07/2020	17/07/2020
Stage 4 – Update and Submit	07/08/2020	
Stage 5 – Decide	30/10/2020 (12 week decision period)	
Stage 6 – Implement	AIRAC 02 (25/02/21)	

Engagement and next steps



- Engagement planned with: Airport operators which have STARs affected by the removal of the en-route dependency from the BPK DVOR; along with affected airline operators and Luton and Stansted ATC.
- No other consultation is planned
- Plan of work is submission for a CAP1616 Gateway Assessment on 26th June 2020; the document deadline for this gateway is 12th June 2020.
 - Awaiting CAA feedback on proposed timeline





- Expectation of a Level 2C Change
- Minimal operational impact and proposed changes which will take current usage into consideration
- Improves compliance with Eurocontrol/ ICAO/ CAA guidance

Questions?

