

## Brecon (BCN) DVOR ACP – Stage 2

### Stakeholder Evidence for Stage 2 – as summarised in Annex F of Stage 2 Documentation

#### 1. Email exchange with Bristol Airport

**From:** [REDACTED]

**Sent:** 06 July 2020 16:49

**To:** [REDACTED]

[REDACTED]

**Cc:** [REDACTED]

**Subject:** BCN DVOR - en-route dependency removal

Hello all

I hope you're all well and keeping safe (and busy) in these strange and frustrating times.

Just to let you know that not only am I back from furlough but that we have a CAA Case Officer for the BCN DVOR Removal.

We have an Assessment Meeting lined up for the 16<sup>th</sup> July and the current plan is to make the changes in May 2021 – if we can bring it forward to February 2021 we certainly will do.

The plan at the moment is to RNAV the two STARs that route via BCN to CDF & BRI and to RNAV the CDF and BRI Holds at the very minimum – this will remove/reduce your dependency on these two NDBs. If we are going to RNAV the little used 1E we may as well do the 1A but I have asked the Swanwick Development Team if they want us to RNAV the 1C or whether they will do that as part of their work when they resume after CV19. With regard to the 2D this is still up for discussion – certainly we would like to truncate them – I know everyone said leave as they are but at the end of the day they are NERL procedures albeit they are in the AD section of the AIP and it would certainly help if we could truncate them to start at different points to differentiate between the two airport ie Bristol start maybe at TIVER and Cardiff at ATWEL as an example. BHD seems a crazy place to start the STAR especially as there is no level restriction associated with it.

Another email re the STARs to follow shortly.

Will be in touch.

Cheers

[REDACTED]

**From:** [REDACTED]  
**Sent:** 06 July 2020 16:50  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** FW: DVOR Rationalisation - BCN STARs coded end levels

Dear All

Are you able to provide some thoughts on the question below from NATS Design please?

Cheers

[REDACTED]

**From:** [REDACTED]  
**Sent:** 06 July 2020 16:31  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** DVOR Rationalisation - BCN STARs coded end levels

Hi [REDACTED]

Hope all is well with you. I am re-starting the BCN work package that was started by [REDACTED] early this year.

The end of all the STARs are currently coded at 2500ft. Prior to this there are not many level restrictions; for instance CPT 1B (previously BRI 1C) has a level restriction at CPT of FL220 and no other restriction until BRI. In this situation we would have to assess for obstacles for the entirety of the STAR. For the others assessment would need to be carried out from TIVER, UMOLO, TALGA and RILES. Assessing obstacles out to this distance would require a lot more obstacle data including AD Surveys from EGTE, EGTU, EGBS etc.

The holds at BRI and CDF are coded between 2500ft and FL100. It would be preferable that the end of the STARs be coded at a minimum level of FL70. Obstacle Assessment would then carried out on the two holds with only Bristol and Cardiff surveys required.

Can you let me know if coding BRI and CDF at FL70 for all the STARs is acceptable?

Thank you

Regards

[REDACTED]



[REDACTED]  
Procedure Designer

**From:** [REDACTED]

**Sent:** 13 July 2020 07:54

**To:** [REDACTED]

[REDACTED]

**Cc:** [REDACTED]

[REDACTED]

**Subject:** BCN DVOR Removal - Scope for the STAR Changes

Morning All

I hope you had a good weekend.

Last week I met with the Swanwick Development Team and we considered the viability of RNAVing the D & C STARs into your airports. We agreed then there was little point in changing these now only for them to change again in c2023. However, this morning I notice the SLP on the CDF 3D is defined by BCN and so in order to remove the en-route dependency from BCN we will need to RNAV the CDF 3D and if we are doing Cardiff then we may as well do Bristol. However we will not be doing the 1C STARs from CPT which will continue to be Conventional for the foreseeable.

I have asked Sector 6 controller [REDACTED] the following questions and your thoughts would be useful too:

- a) Is there any Level by restriction for Descent Planning that needs to be included on these STARs – it doesn't appear there is according to the current STAR Charts
- b) Would you want a Descent Planning Level imposed on the STAR? eg do some of them come across 'high' or have trouble descending?
- c) I note from the Mats Pt.2 that TINAN is common to both routeings but although TIVER is published on the STAR it does not form part of the routeing in the Mats Pt.2 – is there a reason for this?
- d) The SLP on the CDF 3D is 7.3nm before EXMOR; MULIT is 10nm before EXMOR – would it be appropriate to make MULIT the SLP? If not we would need to add another point 7.3nm before EXMOR
- e) Could the STAR into EGFF actually start at MULIT?
- f) Could the STAR into EGGD actually start at EXMOR? (the SLP into EGGD is EXMOR)

I appreciate in the past there has been a preference to level the STARs unchanged starting at BHD but what is the justification for such a long STAR?

On point (f) if the STAR to the BRI began at EXMOR it would be designated as EXMOR 1B: the two RNAV1 STARs that currently commence at EXMOR are incorrectly designated by their end fix and not their start fix as per ICAO. We would be happy to amend them as part of this work but then you would have 3 STARs all called EXMOR:

- 1) EXMOR 1B to BRI
- 2) EXMOR 1X(?) to BAXUN
- 3) EXMOR 1Y(?) to ADVED

Would this be acceptable or would you prefer the STAR to BRI to start at a different way point (TIVER or TINAN)?

Do you want us to re-designate the RNAV1 STARs correctly as part of this work?

Wrt the other STARs we plan to truncate the 1A to begin at AMRAL and amend the level at RILES to FL150 to the level confusion issue raised by [REDACTED] the last FLOPSCC I attended whereby when they are descending FL160 AMRAL they then get given descent to FL150 but the FMS is showing not below FL160 at RILES as per the current STAR Chart. Please confirm this is acceptable?

As always – nothing is as straightforward as it first appears!!

You have my number!!

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[REDACTED]

## 2. Email exchange with Cardiff Airport

**From:** [REDACTED]  
**Sent:** 06 July 2020 16:49  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
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