

DVOR Rationalisation  
Removal of Enroute Dependencies  
Manchester (MCT) Deployment

## **DVOR MCT Holds and STARs**

Reference 5: Stakeholder Evidence for Stage 2  
As summarised in Annex G of Stage 2 Documentation

V1.1

## Email exchange with Birmingham Airport

### 1. Email trail discussing options/changes to relevant procedures

**From:** [REDACTED]  
**Sent:** 14 May 2021 10:50  
**To:** [REDACTED]  
**Subject:** MCT DVOR Changes - EGBB

Good Morning [REDACTED]

I wanted to get in touch with regards the next round of NATS DVOR changes. We are targeting the May 2022 AIRAC for these to be implanted so they are still reasonably far away. We are just about to submit Stage 2 of the ACP, and part of that is providing the CAA the all the stakeholders are happy with the changes being proposed. The changes that impact Birmingham procedures are associated with the removal of the En-Route dependencies from the MCT VOR.

The impacted procedures are the CHASE 4B / CHASE 3F / CHASE 3G and CHASE 3H. The plan is to replicate these as close as possible to the existing procedures and to RNAV1 standard. Any RNAV5 aircraft will be able to file a series of DCT's to the hold that will mirror the STAR's and therefore still offer connectivity for those aircraft. There may be a new waypoint (ELEZE) to replace the existing Speed Limiting point, but I'm still in discussion with NATs design as to if this is actually required, as the RNAV STAR slows aircraft down due to the speed limit on CHASE, but that's detail I'm happy to discuss.

If you would like to discuss any of the proposals in more detail I'd be happy to set up a call. Otherwise if you could send me back an email stating you are happy with the proposals, I'll include that in the evidence back to the CAA.

Regards,

[REDACTED]

**NATS**

[REDACTED]  
Manager ATC Development

Systemised Airspace Delivery

M: [REDACTED]  
E: [REDACTED]

**From:** [REDACTED]  
[REDACTED] >  
**Sent:** 14 May 2021 11:44  
**To:** [REDACTED]  
**Subject:** RE: MCT DVOR Changes - EGBB

Hello [REDACTED]

Thanks for the information. I'm happy with the proposals.

Please keep me informed of the design once NATS Design have one that they are recommending.

Best regards

[REDACTED]



[REDACTED]

**Manager Air Traffic Services**

Birmingham Airport Limited

Tel: [REDACTED]

Mob: [REDACTED]

E-mail: [REDACTED]

Email from East Midlands Airport

1. Email response following Teams call detailing options and changes to relevant procedures

**From:** [REDACTED]  
**Sent:** 14 May 2021 14:11  
**To:** [REDACTED]  
**Subject:** RE: TNT DVOR Changes

Hi [REDACTED],

Thanks for your time today and your explanation of the changes proposed for the EMA STAR's.

I can confirm that EMA have no objections to these changes through TNT and MCT.

As discussed, it may be a good idea to have you give an overview of these changes around November time when I have our next Pilots Liaison Group meeting.

Kind regards

[REDACTED]

[REDACTED]

Air Navigation Services Manager

East Midlands Airport

Castle Donington

DE74 2SA

Tel: [REDACTED]

Mob: [REDACTED]

## Email trail from Manchester Airport

### 1. Email trail discussing options/changes to relevant procedures, with approval confirmation

**From:** [REDACTED]  
**Sent:** 11 May 2021 14:18  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** TNT DVOR Changes

Good Afternoon [REDACTED],

I wanted to follow up on previous discussions you've had with [REDACTED] around the DVOR project. We are due to submit the next stages of the ACP documentation for the TNT changes in the near future. I want to check you were happy with what's been discussed and what we have proposed in order that we can advise the CAA that all the impacted airfields have been engaged and are supportive of the changes. I will add there will be a similar email soon regarding the changes relating to the MCT DVOR ACP.

I'm sure you're aware but a brief summary of the changes for each is below:

#### TNT Changes

Current STAR Designator	New STAR Designator	Notes
DAYNE 2A	ELVOS 1M	STAR re-designated and extended to commence at ELVOS, incorporating existing level restriction. Created using RNAV design criteria to align as closely as possible with the existing conventional procedure.
DAYNE 1B	LESTA 1M	STAR re-designated. Created using RNAV design criteria to align as closely as possible with the existing conventional procedure.
DAYNE HOLD	DAYNE HOLD	Hold created using RNAV design criteria to match as closely as possible the existing conventional DAYNE hold.
TNT HOLD	TNT HOLD	Hold created using RNAV design criteria to match as closely as possible the existing ATC hold based on MATS Pt2 (SE Section).

If you could provide a response this week it would be greatly appreciated and as we proceed with the ACP I'll provide details of AIP amendments we need to make, with some possible changes to the EGCC section as well.

Regards,

[REDACTED]

**NATS**

[REDACTED]

Manager ATC Development

Systemised Airspace Delivery

M: [REDACTED]  
[REDACTED]

**From:** [REDACTED]

**Sent:** 17 May 2021 13:28

**To:** [REDACTED]

**Cc:** [REDACTED]  
[REDACTED]

**Subject:** RE: TNT DVOR Changes

**Importance:** High

Hi Again,

We submitted the Stage 2 documents on Friday for MCT and TNT. The CAA have come back already saying we need evidence that you are happy with the proposed changes. The ACP team had said we'd discussed it via TEAMS calls but they aren't happy with that.

Below are the changes for Manchester as a result of the MCT changes. They are as close to replication of the existing as they could be and made RNAV1. The RNAV5 aircraft will file a series of

DCT's to the holds. Again it doesn't impact handovers etc, and the MCT will still be operational for all the SIDs and other airport procedures.

If you are able to get back to me today with any questions/queries etc, I can answer them, and then if I could get an email stating you are supportive of the changes for both TNT and MCT (if you are!), that would be great. We'll upload that with the other paperwork and hopefully it will address the CAA's issues.

Manchester	STAR	ROSUN 2A	Not Dependent on MCT	RNAV1 replicated, SLP at new waypoint DIZZE and re-named LAKEY 1M
Manchester	STAR	ROSUN 2B	Dependent on MCT	RNAV1 replicated, and re-named SETEL 1M
Manchester	STAR	ROSUN 4D	Dependent on MCT	RNAV1 replicated, and re-named TILNI 1M
Manchester	STAR	ROSUN 2E	Dependent on MCT	Withdraw
Manchester	STAR	ROSUN 1F	Dependent on MCT	RNAV1 replicated, extended and re-named OTBED 1M
Manchester	STAR	ROSUN 1G	Dependent on MCT	RNAV1 replicated, extended and re-named LIBSO 1M
Manchester	Hold	ROSUN	Dependent on MCT	RNAV replicated, Levels reduced to FL70 – FL140
Manchester	STAR	DALEY 2A	Not Dependent on MCT	Withdraw
Manchester	STAR	DALEY 2B	Not Dependent on MCT	Withdraw
Manchester	STAR	DALEY 4D	Not Dependent on MCT	Withdraw
Manchester	STAR	DALEY 2E	Not Dependent on MCT	Withdraw
Manchester	STAR	DALEY 1F	Not Dependent on MCT	Withdraw
Manchester	STAR	DALEY 1G	Not Dependent on MCT	Withdraw
MANCHESTER	Hold	DALEY	Not Dependent on MCT	Withdraw

Kind Regards,



**NATS**



Manager ATC Development

Systemised Airspace Delivery

M: [REDACTED]  
[REDACTED]

**From:** [REDACTED]

**Sent:** 17 May 2021 17:20

**To:** [REDACTED]  
[REDACTED]

**Subject:** RE: TNT DVOR Changes

Hi [REDACTED], can you clarify that the DCT waypoints beyond the start of each STAR will remain as currently named? I have a concern with regard to EFPS as I believe it looks at the flight plan final waypoint and then appends it with the appropriate hold.

Regards,

[REDACTED]

**NATS**

[REDACTED]  
Manager ATC

D: [REDACTED]

M: [REDACTED]

E: [REDACTED]

**From:** [REDACTED]

**Sent:** 17 May 2021 18:12

**To:** [REDACTED]

**Cc:** [REDACTED]



[REDACTED]  
**Subject:** RE: TNT DVOR Changes

Hi [REDACTED]

I've not 100% on the EFPS adaptation to be honest, it's a few years now since I was an EFPS expert! Do you get the HOLD name and estimate for the Hold on the strip? (I haven't seen any airport who gets the STAR name so far as you tend to get it near the end of that). I suspect it will be sorted by the NAS adaptation, but I'll find out.

I do know I've had no feedback on previous changes at places like Birmingham, Edinburgh and Glasgow who are also on EFPS. If points already exist, they will remain in existence (probably except MCT which is renamed NUJOB) there may just be some new additional points as well for SLP's if required. I'll certainly look into it and get an answer for you from the engineering side of things.

That query aside are you happy with the proposals?

Regards,

[REDACTED]

**NATS**

[REDACTED]

Manager ATC Development

Systemised Airspace Delivery

M: [REDACTED]

E: [REDACTED]

**From:** [REDACTED]

**Sent:** 18 May 2021 09:46

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** Re: TNT DVOR Changes

Morning [REDACTED] having slept on it [REDACTED] and I are concerned about the MCT change, this has significantly more ramifications than those you have listed. I appreciate that [REDACTED] and I have had some conversations, but it feels like a lot of decisions have now been made.

You describe your list below as the changes for Manchester as a result of the MCT change however we have VOR/DME approaches to all 4 runways, all SID's have the MCT named in them, our ILS procedures include an option to use the MCT and the missed approaches also use it. Whilst I appreciate the MCT remains in service can you confirm the renaming to NUJOB(!) you mention below will be captured in all of our AIP entries and procedures or can we continue with MCT - will this remain on charts etc once it is also known as NUJOB?

You also say that routes are 'as close to replication of the existing as they could be' can you explain where there are any differences to the existing?

Sorry to sound obstructive and we do support the move to RNAV but we are very conscious that even a simple re-naming will create a huge amount of work.

If you could also get an answer about EPFS that would be appreciated.

Regards,

[REDACTED]

[REDACTED]

Manager ATC

Manchester Airport

D: [REDACTED]

M: [REDACTED]

e: [REDACTED]

**From:** [REDACTED]

**Sent:** 18 May 2021 12:08

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** RE: TNT DVOR Changes

Hi [REDACTED]

Thanks for getting back to me. I can absolutely put your mind at rest with the changes. I appreciate these are the first to impact Manchester but we have RNAV'd almost every STAR in the country prior to these. MCT/ TNT are in the last group in the whole country, so we have learned lots of lessons as a project, so from that point of view we have seen most of the issues that can arise.

The ACP is only at Stage 2 which is relatively early in the process. We are basically informing the CAA of what the plan is for the STAR's and why we have made the design decisions we have made. The project as a whole is set up to deliver the changes with the minimum impact to the operation, that's why we replicate the procedures, unless there is either a real reason to change something (safety/flyability issue or an easily deliverable saving for the airlines). I'm happy to set up another call to go over the changes if that would help, although I think my comments below will address your concerns.

**VOR/DME approaches to all 4 runways, all SID's have the MCT named in them, our ILS procedures include an option to use the MCT and the missed approaches also use it.**

-We are only changing the STAR's which are effectively En-Route procedures. Nothing changes in terms of your own procedures for the airport. VOR/DME apps, ILS procedures, Missed approaches will all still be available and flyable, as the MCT isn't being switched off at this time. We are only RNAV replicating the STAR's and part of that is to put a new point (NUJOB) right next to the MCT so that MCT isn't on the STAR chart any more.

**You also say that routes are 'as close to replication of the existing as they could be' can you explain where there are any differences to the existing?**

- I don't have the design report from NATS Design yet, but typically we may need to add a new point if the existing SLP is a distance from somewhere. RNAV procedures specify exact points rather than a distance from somewhere else. Additionally we often need to extend STAR's as they may have level restrictions noted which are before the Start point. In this case we extend the STAR back to ensure those levels can be captured. So whilst this replicates what is done today, the STAR is not exactly the same. When I have the exact detail of the STAR's I'm happy to brief your/ your team and as I have at other places the Flight ops meeting to cover the changes nearer the implementation time.

**Sorry to sound obstructive and we do support the move to RNAV but we are very conscious that even a simple re-naming will create a huge amount of work.**

- Its not obstructive at all, its easy as a project to assume everyone knows what you are doing and that's not the case. I'm more than happy to go in to detail to put your mind at ease. There should be no huge amount of work for Manchester to do. We've done this at every other major airport in the U.K and the changes are barely noticed! I'll take care of all the AIP changes and agreeing them with the CAA in consultation with yourselves. I can either submit them on Manchester's behalf with the relevant approval, or send them to the relevant authority at the airport for them to submit. Often its been the last day we can submit the

change to the AIS before the CAA have given us a decision and that's when its useful for the project to submit the AIP changes on behalf of the airport to ensure people are available and its done in time. [REDACTED]

Again, happy to set up a call to cover this if that's a better way to do it, just let me know,

Kind Regards,

[REDACTED]

**NATS**

[REDACTED]

Manager ATC Development  
Systemised Airspace Delivery

M: [REDACTED]

E: [REDACTED]

**From:** [REDACTED]

**Sent:** 25 May 2021 07:56

**To:** [REDACTED]

**Cc:** [REDACTED]

**Subject:** Re: TNT DVOR Changes

Hi [REDACTED] thanks for the comprehensive reply and the conversation last week. Based on all of that and as you say the ACP being at stage 2 then yes, we are content for you to continue with the process.

Thanks also for the regular meetings you have set up, these will be useful to be kept in the loop, the MCT change will need a lot of updates to our local documentation so we will gladly accept your offer of help with AIP updates etc.

Based on your reply it doesn't look like an update to EFPS will be required, I have asked our EFPS lead to confirm what waypoints the system looks at to determine the hold so should be able to confirm soon.

Regards,

[REDACTED]



**NATS**

Manager ATC

Manchester Airport

D: 

M: 

e: 