CAA Environmental Assessment and Statement

Title of airspace change proposal	Removal of En-Route Dependencies from the MCT DVOR
Change sponsor	NATS En-Route PLC (NERL)
Project no.	ACP-2020-018
Account Manager	[redacted]

Instructions

In providing a response for each question, please ensure that the 'status' column is completed using one of the following options:

- Yes
- No
- Partially
- N/A

Please highlight the 'status' cell for each question using one of the three colours to illustrate if it is:

resolved Green not resolved Amber not compliant Red

1. Introduction

This CAA Environmental Assessment and Statement describes the considerations relevant to NATS En-Route PLC's (NERL) airspace change proposal (ACP) for the removal of en-route references from the Manchester (MCT) Doppler Very High Frequency Omnidirectional Range (DVOR) navigation beacon. NERL (the 'sponsor') has submitted plans for the progressive rationalisation of elements of the UK's ground navigation infrastructure, including the MCT DVOR. This proposal is not anticipated to alter traffic patterns below 7,000 feet and is therefore scaled as Level 2C.

The MCT DVOR is located at Manchester Airport and the scope of this proposal includes amendments to Standard Terminal Arrival Routes (STARs) and Holds, which serve East Midlands Airport, Birmingham Airport and Manchester Airport. It is proposed to replicate the existing design of the STARs and Holds to Area Navigation 1 (RNAV1) specification. Additionally, some STARs will be extended back[1] to existing waypoints to provide flight plannable options and retain important decent planning levels. Due to the RNAV1 specification, any RNAV 5 aircraft unable to fly the RNAV1 replicated procedures, will either follow an Air Traffic Services (ATS) Route or a series of Directs (DCTs) which will replicate RNAV1 procedures.

[1] A process known as truncation

In summary, this proposal is seeking to:

Procedures with MCT Dependency

- Replicate and rename 3no. Birmingham STARs with a MCT dependency;
- Replicate, truncate[2] and rename 1no. Birmingham STAR with a MCT dependency;
- Replicate and rename 3no. East Midlands STARs with a MCT dependency;
- Replicate, truncate[3] and rename 1no. East Midlands STAR with a MCT dependency;
- Replicate and rename 4no. Manchester STARs with a MCT dependency;
- Withdraw 1no. Manchester STAR with a MCT dependency;
- Replicate 1no. Manchester Hold with a MCT dependency;

Procedures without MCT Dependency

- Replicate and rename 1no. Manchester STAR without a MCT dependency;
- Withdraw 6no. Manchester STARs without MCT dependency;
- Withdraw 1no. Manchester Hold without MCT dependency; and
- Add an additional waypoint[4] to 1no. Air Traffic Service (ATS) route which serves STARs for Birmingham, East Midlands and Manchester airports[5].

Procedures for RNAV5 Aircraft

- For the 13 STARs set to be RNAV1 replicated as part this ACP, a series of ATS Routes/DCTs will be created that replicate the RNAV1 STAR to enable connectivity for RNAV5 aircraft.

2. Nature of the Proposed Change		Status
2.1	**Is it clear how the proposed change will operate, and therefore what the likely environmental impacts will be?**	**No**

[2] Truncation of this STAR will lead to 2 new STARs; however, this is not anticipated to change aircraft flight behaviour.
[3] Truncation of this STAR will lead to 2 new STARs; however, this is not anticipated to change aircraft flight behaviour.
[4] Adding an additional waypoint to ATS Route UL975 is not anticipated to change aircraft flight behaviour.
[5] ATS Route UL975 serves the following STARs: CHASE 3H (Birmingham Airport), ROKUP 1G (East Midlands Airport) and ROSUN 1G (Manchester Airport)

	This ACP has been scaled as a Level 2C, therefore, in accordance with the Department for Transport's (DfT) altitude-based priorities[6], the environmental priority is to reduce aircraft CO_2 emissions in support of the objective to ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions. Due to this being a Level 2C ACP only an assessment of CO_2 is required and there is no explicit requirement for the sponsor to assess other environmental aspects, including impacts on local air quality, noise, tranquillity, and biodiversity. This ACP concerns 23 procedures which need to be updated to allow the MCT DVOR to be decommissioned. The sponsor does not anticipate a change to flight behaviours and therefore predicts a neutral environmental impact as a result of this ACP. However, it should be noted that the sponsor is proposing to introduce a new level restriction of FL250[7] for the ROSUN 4D STAR at the TILNI entry waypoint which could lead to an unintentional consequential change in aircraft behaviour. Currently aircraft using this STAR to arrive at Manchester Airport are required to be at FL230 by TILNI. Similarly, the sponsor is proposing to introduce an upper limit to the ROSUN Hold (an upper limit is not currently prescribed to this Hold) allowing aircraft to hold from FL70 – FL140. This is to ensure Manchester Airport traffic holding at ROSUN remain separated from the MIRSI hold; however, it is not clear from the submission whether the change to the ROSUN Hold will have an impact on flight behaviours. The CAA requested clarification from the Sponsor regarding the assertion that no changes to flight behaviour will occur, see the Stage 5 Clarification Questions Summary on the portal. The sponsor stated that it is common practice for aircraft to be at FL250 at TILINI and based on 2019 data no aircraft held above FL120, therefore, the Upper Limit of FL140 proposed for the ROSUN Hold was deemed appropriate by the sponsor to provide sufficient capacity. In a view of the CAA this statement does not confirm there will be no change in flight behaviour and therefore it is not clear how the proposed change will operate, and therefore what the likely environmental impacts will be. Additionally, regarding the impacted Birmingham Airport CHASE 4B / CHASE 3F / CHASE 3G /CHASE 3H STARS, the sponsor stated that "*the RNAV STAR slows aircraft down due to the speed limit on CHASE*". Upon further clarification from the CAA the sponsor responded to say that the airspeed will not change and therefore it is concluded that there will be no material impact on flight behaviour.
3. Secretary of State Call-in Noise Criterion	**Status**
3.1	**Is the proposal likely to meet the Secretary of State's criterion for call-in on noise impacts? If yes, has the additional assessment on that criterion been undertaken and what are the results? If no, what is the rationale for that conclusion?** **No**

[6] Department for Transport, Air Navigation Guidance 2017: Altitude-Based Priorities

[7] FL250 is approximately equivalent to an altitude of 25,000ft at standard air pressure (1013 hPa).

	The criterion, as set out in the DfT's Air Navigation Guidance (2017)[8] is that the proposed airspace change could lead to a change in noise distribution resulting in a 10,000 net increase in the number of people subjected to a noise level of at least 54 dB[9] as well as having an identified adverse impact on health and quality of life.[10]	
	The sponsor does not anticipate that the proposal will have any impact below 7,000ft above mean sea level (amsl). It is therefore considered unlikely that the proposal would affect noise exposure above 54 dB $L_{Aeq,16h}$ or have an identified adverse impact on health and quality of life.	
4. Statement of Need		**Status**
4.1	**Does the Statement of Need include any environmental factors?**	**Yes**
	The sponsor states that options will be explored to improve the alignment of ATS Routes M16 and (U)L28 and, if considered viable, (U)L28 will be re-designated as T420 which would allow for an "*improved climb profile for traffic climbing through FL245 north of TNT*". The viability of this route alignment has not been considered or addressed by the sponsor within the submission and therefore the ACP does not deliver the sponsor's stated need.	
5. Design Principles		**Status**
5.1	**Does the final set of Design Principles include any environmental objectives?**	**Yes**
	The sponsor developed a set of five design principles (DPs), two of which are considered to include an environmental objective: • Design Principle 2 (DP2) No change to flight behaviours – This design principle seeks to ensure there are no changes to actual flight behaviour, laterally, vertically or in dispersal. Therefore, this DP helps ensure that from the ground, aircraft are perceived to continue to behave as currently and therefore ground based environmental impacts are minimised, for example noise, local air quality, biodiversity, and tranquillity; and • Design Principle (DP5) Airspace Optimisation – This design principle aims to facilitate optimised airspace design and the sponsor states that this "*…could include* […] *environmental improvement*".	

[8] The DfT's call-in criteria are set out in The Civil Aviation Authority (Air Navigation) Directions 2017, Section 6, paragraph (5). These Directions are replicated in Annex D of the DfT's Air Navigation Guidance 2017,

[9] $L_{Aeq,16h}$ noise exposure.

[10] The assessment of the number of people affected and the associated adverse impacts on health and quality of life of the airspace change proposal should be carried out by the sponsor in accordance with the requirements set out in DfT's Guidance.

5.2	**Does the proposal explain how and to what extent the final airspace design achieves any environmental Design Principles?**	**No**
	The sponsor developed four options (including a do-nothing option) which were evaluated against the DPs at Stage 2. Option 2; "*Examine the use of existing STARs and Holds from a practical point of view, re-evaluate how they are used and how the network may be improved by rationalising/truncating/replicating them in a considered manner*", the proposed option, was evaluated by the sponsor to meet the two DPs with environmental objectives (DP2 and DP5 identified in Question 5.1). Options were evaluated to have met DP2 if "*none of the proposed changes would result in a change to flight behaviour*". It was considered that Option 2 met DP2 as there were "*no practical change to connectivity therefore, no change to lateral/vertical track patterns*". However, it is not clear from the submission how DP2 has been met for some procedures which propose a change to flight level restrictions (ROSUN 4D STAR) and holding altitudes (ROSUN Hold). The CAA requested an explanation regarding this to which NERL's response is provided in the Stage 5 Clarification Questions Summary. Considering NERL's response, it is considered that DP2 is not met as the introduction of the flight level restriction will impact all aircraft using the ROSUN 4D STAR. In addition, it is also not clear whether aircraft will hold above FL120 in the future when in the ROSUN Hold. With regard to DP5, Options were evaluated to meet this DP by individually evaluating procedures for the "*potential application of the DP, and minor changes are made, with justification provided*". It was considered that Option 2 met DP5 as the "*Design Option would evaluate current IFPs* [Instrument Flight Procedure] *and where appropriate, propose changes which would facilitate an optimised airspace design*". The sponsor provided an example of how this is met by stating that the RNAV replication of a STAR and extension back to an existing waypoint would retain important descent planning restrictions. However, the sponsor does not explain how this would enable an environmental improvement and therefore it is considered that a full explanation regarding how Option 2 meets DP5 is not provided.	
5.3	**Were there any proposed environmental Design Principles that were rejected from the final set? If so, is the rationale for rejecting those Principles reasonable?**	**No**
	The draft design principles included two design principles with environmental objectives (DP2 and DP5). Both draft environmental design principles were unchanged and therefore included within the final set of five design principles.	
5.4	**Were there any design options during the airspace change process that might have better met the environmental Design Principles than the final proposal as submitted to the CAA? If so, is the rationale for rejecting those options set out?**	**Partially**

	The sponsor developed a set of four Options (including the do-nothing option) and it is not possible to determine which option better met the environmental design principles as in the view of the CAA, DP2 did not consider all embedded criteria and DP5 was not fully evaluated.

6. Options Appraisal		**Status**
6.1	**Have environmental impacts been adequately reflected and assessed in the Options Appraisal?**	**No**
	This ACP is assigned as a Level 2C, therefore in accordance with CAP1616 and the Department for Transport's (DfT) altitude-based priorities, the environmental priority is to reduce aircraft CO_2 emissions in support of the objective to ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions. For a Level 2C change with an anticipated negative impact (i.e. an increase in fuel and CO_2 emissions), the sponsor must undertake a quantitative assessment of the fuel and CO_2 impacts using WebTAG. If the anticipated impact is positive, a qualitative assessment and explanation is adequate. Due to this being a Level 2C ACP, there is no explicit requirement for the sponsor to assess other environmental aspects, including impacts on local air quality, noise, tranquillity, and biodiversity. The anticipated fuel and CO_2 impact has been assessed to be neutral (i.e. no change in fuel burn and CO_2). It should be noted however that the proposed changes to the ROSUN 4D STAR and the ROSUN Hold has potential to change fuel burn and CO_2 emissions. The CAA requested an explanation regarding this to which NERL's response is provided on the portal. It is therefore considered that the sponsor has not taken account of the "*environmental benefit*" quoted for the ROSUN 4D STAR within the Options Appraisal assessment. In addition, it is not apparent whether aircraft will hold above FL120 in the future, which could also impact the sponsor's conclusion of no change to fuel and CO_2 emissions. In addition to the anticipated fuel and CO_2 impacts, high-level statements regarding the environmental impacts of the proposed option (Option 2) upon greenhouse gas emissions, local air quality and noise were provided within the Initial Options Appraisal at Stage 2. The following conclusion were made: • For greenhouse gas emissions, the sponsor concludes "*no impact*" as there are "*no changes to lateral or vertical tracks*. As stated above, the proposed changes to the ROSUN 4D STAR and the ROSUN Hold could impact upon fuel burn and CO_2 emissions, and hence other greenhouse gas emissions. NERL's response to the CAA's request to clarification is considered to undermine the greenhouse gas emissions assessment. It should be noted the level of analysis quoted by the sponsor is "*monetise and quantify*", however only a high-level qualitative assessment is provided. • For local air quality no conclusion is made by the sponsor; however, the sponsor does state "*no changes below 1,000ft*" and in the final submission states "no impact" upon local air quality. This conclusion is considered reasonable as the ACP does not propose a to change flight behaviour below 1,000ft. As detailed in CAP1616 [page 171]; "*due to the effects of mixing*	

	and dispersion, emissions from aircraft above 1,000 feet (amsl) are unlikely to have a significant impact on local air quality". • For noise, the sponsor concludes "*no impact*" as there are "*no changes to lateral or vertical tracks*". The option appraisal does not consider the impact upon tranquillity or biodiversity; however, due to the ACP being scaled as Level 2C these impacts do not require assessing. It is considered unlikely that any impacts upon tranquillity or biodiversity will arise as this ACP does not propose to change flight behaviour or traffic patterns below 7,000 ft.	
6.2	**Is the final proposal as submitted to the CAA the airspace design option that also produced the best environmental impacts as assessed by the Options Appraisal? If not, does the rationale for selecting the preferred option adequately explain this choice?**	**Yes**
	The sponsor developed a set of four options at Stage 2, however, none of the options were evaluated by the sponsor to deliver environmental benefits. Although not assessed by the sponsor within the Options Appraisal, it could be argued that the preferred option (Option 2); "*Examine the use of existing STARS and Holds from a practical point of view, re-evaluate how they are used and how the network may be improved by rationalising/truncating/replicating/altering them in a considered manner*", provides the best environmental impacts. This is due to the higher level restriction of FL250 for the ROSUN 4D STAR at the entry waypoint, TILNI, and the sponsor's response to the CAA's request to clarification stating "*that aircraft are often coordinated above the existing level of FL230 for environmental benefit*". The sponsor does not acknowledge this within the environmental assessment for this ACP.	
7. Noise [for Level 1 and Level M1 airspace change proposals]		**Status**
7.1	**Has the noise impact been adequately assessed and presented in both the consultation material and the final submission to the CAA, taking account of scalability and proportionality?**	**N/A**
	This ACP is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft. It has therefore been scaled as Level 2C meaning there is no requirement to assess noise. The sponsor has however provided a high-level statement regarding the impact upon noise, stating "*no impact*".	
7.2	**If a noise assessment has not been undertaken by the sponsor, has this decision been adequately explained and evidenced in both the consultation material and the final submission to the CAA, and is the rationale reasonable?**	**N/A**
	This ACP is scaled as Level 2C, therefore, there is no requirement for the sponsor to assesses noise.	
7.3	**Summary of anticipated noise impacts for the final proposed airspace change.**	
	This ACP is not anticipated to introduce any changes to flight behaviour below 7,000 ft and therefore there is unlikely to be an identified adverse impact on health and quality of life as a result of noise impacts. This is concluded on the basis that noise from aircraft flying at or above 4,000 ft is considered less likely to affect the key noise metrics used for determining adverse effects.	

8. CO_2 Emissions		Status
8.1	**Has the impact on CO2 emissions been adequately assessed and presented in both the consultation material and the final submission to the CAA, taking account of scalability and proportionality?**	**Yes**
	The sponsor has provided a high-level qualitative assessment of CO_2 impacts which is considered proportionate for this ACP. As identified in Question 2.1 the sponsor did not consider the full impacts of the change and neglected to assess the impact of the ROSUN 4D STAR and ROSUN Hold. The sponsor's response to the CAA's request for clarification stated "*that aircraft are often coordinated above the existing level of FL230 for environmental benefit*". The sponsor does not acknowledge this within the environmental assessment for this ACP. It is considered that these changes will not result in any additional adverse impacts and given that aircraft are often coordinated above FL230 today for "environmental benefit" it is considered proportionate that the sponsor did not provide a quantified CO_2 emissions assessment. As per CAP1616, for a Level 2C change with an anticipated negative impact (i.e. an increase in fuel and CO_2 emissions), the sponsor must undertake a quantitative assessment of the fuel and CO_2 impacts using WebTAG. If the anticipated impact is positive, a qualitative assessment and explanation is adequate.	
8.2	**If an assessment of the impact on CO2 emissions has not been undertaken by the sponsor, has this decision been adequately explained and evidenced in both the consultation material and the final submission to the CAA, and is the rationale reasonable?**	**No**
	The sponsor has provided a high-level qualitative assessment of CO_2 impacts which is considered proportionate for an ACP of this nature. The sponsor did not however consider the full impacts of the change and neglected to assess the impact of the ROSUN 4D STAR and ROSUN Hold. Based on the sponsor's clarification response it is considered that the any changes will not result in any additional adverse impacts.	
8.3	**Summary of anticipated impact on CO2 emissions for the final proposed airspace change.**	
	This ACP does not propose to impact upon flight behaviours, including adjacent IFPs; however, the sponsor does propose to change the vertical profile of the ROSUN 4D STAR and the ROSUN Hold which could result in an unintentional consequential impact to aircraft. Based on the sponsor's response to the CAA's request to clarification it is considered that these changes have potential to provide an environmental benefit and are unlikely to result in an increase in fuel burn and CO_2 emissions.	
9. Local Air Quality [for Level 1 and Level M1 airspace change proposals]		**Status**
9.1	**Has the impact on Local Air Quality been adequately assessed and presented in both the consultation material and the final submission to the CAA, taking account of scalability and proportionality?**	**N/A**
	This ACP is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft. It has therefore been scaled as Level 2C meaning there is no requirement to assess local air quality.	

9.2	**If an assessment of the impact on Local Air Quality has not been undertaken by the sponsor, has this decision been adequately explained and evidenced in both the consultation material and the final submission to the CAA, and is the rationale reasonable?**	**N/A**
	This ACP is scaled as Level 2C as it is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft; therefore, there is no requirement for the sponsor to assesses the impact upon local air quality.	
9.3	**Summary of anticipated impact on Local Air Quality for the final proposed airspace change.**	
	This ACP is not anticipated change flight behaviour below 7,000 ft; therefore, there is not expected to be any impact upon local air quality. As per CAP1616 [page 171]; "*due to the effects of mixing and dispersion, emissions from aircraft above 1,000 feet* [above mean sea level] *(amsl) are unlikely to have a significant impact on local air quality*".	
10. Tranquillity [for Level 1 and Level M1 airspace change proposals]		**Status**
10.1	**With specific reference to Areas of Outstanding Natural Beauty and National Parks - Has the impact on tranquillity been adequately considered and presented in both the consultation material and the final submission to the CAA, taking account of scalability and proportionality?**	**N/A**
	This ACP is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft. It has therefore been scaled as Level 2C meaning there is no requirement to assess the impacts upon tranquillity. The sponsor has however provided a high-level statement regarding the impact upon tranquillity, concluding "no impact".	
10.2	**If consideration of the impact on tranquillity has not been undertaken by the sponsor, has this decision been adequately explained and evidenced in both the consultation material and the final submission to the CAA, and is the rationale reasonable?**	**N/A**
	This ACP is scaled as Level 2C as it is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft; therefore, there is no requirement for the sponsor to assesses the impact upon tranquillity.	
10.3	**Summary of anticipated impact on tranquillity for the final proposed airspace change.**	
	This ACP is unlikely to have an impact upon tranquillity, with specific reference to Areas of Outstanding Natural Beauty (AONBs) and National Parks, as there are no proposed changes to flight behaviour below 7,000 ft.	
11. Biodiversity [for Level 1 and Level M1 airspace change proposals]		**Status**
11.1	**Has the impact on biodiversity been adequately assessed and presented in both the consultation material and the final submission to the CAA, taking account of scalability and proportionality?**	**N/A**

	This ACP is not anticipated to impact flight behaviour or traffic patterns below 7,000 ft. It has therefore been scaled as Level 2C meaning there is no requirement to assess the impacts upon biodiversity. As per CAP1616 [page 162] "*Most airspace change proposals are unlikely to have an effect upon biodiversity and therefore the inclusion within the design principles is expected to be the full extent of any consideration in most instances*".	
11.2	**If assessment of the impact on biodiversity has not been undertaken by the sponsor, has this decision been adequately explained and evidenced in both the consultation material and the final submission to the CAA, and is the rationale reasonable?**	**N/A**
	This ACP is scaled as Level 2C meaning there is no requirement to assess biodiversity. As per CAP1616, explicit consideration and assessment of biodiversity is only required where necessary.	
11.3	**Summary of anticipated impact on biodiversity for the final proposed airspace change.**	
	This ACP is unlikely to have an impact upon biodiversity as there are no proposed changes to flight behaviour below 7,000 ft. As per CAP1616 [page 162] "*Most airspace change proposals are unlikely to have an effect upon biodiversity and therefore the inclusion within the design principles is expected to be the full extent of any consideration in most instances*".	
12. Traffic Forecasts		**Status**
12.1	**Have traffic forecasts been provided, are they reasonable, and have these been used to reflect the anticipated environmental impacts of the proposal?**	**No**
	As this is a Level 2C change which is not anticipated to result in a negative impact there is no requirement for the sponsor to undertake quantitative assessments and therefore it is reasonable that no forecasts were provided.	
13. Consultation		**Status**
13.1	**Has the sponsor taken account of any environmental factors (noise, CO2 emissions, Local Air Quality, tranquillity, or biodiversity) raised by consultees or has evidence been provided to indicate why this has not been possible?**	**N/A**
	No consultation was required as part of this ACP, therefore, no environmental factors were raised by consultees. It should be noted that the National Air Traffic Management Advisory Committee (NATMAC) was consulted on the DVOR Rationalisation Programme in 2008. In 2018, the CAA Manager Airspace Regulation agreed with the sponsor that no further consultation was required for individual DVOR rationalisation ACPs where there were no changes to flight behaviour. However, a targeted stakeholder engagement exercise was undertaken with affected airports' ATC unit managers.	

13.2	**Has the sponsor taken account of any consultation response submitted by ICCAN? If so, what are the outcomes?**	**N/A**
	No consultation was required as part of this proposed airspace change and therefore ICCAN did not provide a consultation response to this ACP.	
14. Public Evidence Session (if held)		**Status**
14.1	**If a Public Evidence Session has been held, was any new evidence on potential environmental impacts presented?**	**N/A**
	A public evidence session was not held for this airspace change proposal.	
14.2	**If so, was the new evidence relevant and material to the CAA's consideration of the environmental impacts of the submitted airspace change proposal?**	**N/A**
	No public evidence session was held for this airspace change proposal.	
15. Compliance with policy and guidance from Government, ICCAN or the CAA		**Status**
15.1	**Has the sponsor satisfied all relevant policy and/or guidance from either the Government, ICCAN or the CAA, with regards to environmental impacts of the proposed airspace change?**	**Yes**
	The sponsor has satisfied all relevant policy and guidance for an ACP of this nature.	
15.2	**Has the sponsor adequately considered the DfT's Altitude-Based Priorities[11]?**	**Yes**
	The sponsor has adequately considered the DfT's Altitude Based Priorities. This ACP is not anticipated to impact flight behaviour below 7,000 ft; therefore, the environmental priority is the reduction of CO_2 as per Altitude-Based Priority D.	
16. Other aspects		**Status**
16.1	**Are there any other aspects of the airspace change proposal that have not already been addressed in this report but that may have a bearing on the environmental impact?**	**No**
	None.	

[11] Paragraph 3.3, DfT's Air Navigation Guidance 2017

17. Recommendations/Conditions/PIR Data Requirements		Status
17.1	**Are there any environmental recommendations which the change sponsor should address either before or after implementation?**	**No**
	There are no recommendations that the sponsor should try to address either before or after implementation (if approved).	
17.2	**Are there any environmental conditions which the change sponsor must fulfil either before or after implementation?**	**No**
	There are no environmental conditions that the sponsor must fulfil either before or after implementation (if approved).	
17.3	**Are there any environmental requirements in terms of the data to be collected by the change sponsor for the Post Implementation Review?**	**Yes**
	For this ACP it is recommended that the sponsor starts to collect the following information from the date of implementation for the Post Implementation Review: • Monitor and assess flight numbers and behaviour before and after the change, to ensure there are no changes to traffic patterns or flight behaviour; • Monitor and assess flight behaviours below 7,000ft to ensure there is no change; and • Engage with relevant airports to ensure that the proposal does not have an impact below 7,000ft.	

18. Summary of Assessment of Environmental Impacts & Conclusions
This ACP proposes to remove references to the MCT DVOR from 23 procedures in order to facilitate its rationalisation. This proposal is not anticipated to alter traffic patterns below 7,000 feet and is therefore scaled as a Level 2C. In accordance with the Department for Transport's (DfT) altitude-based priorities, for a Level 2C ACP the environmental priority is to reduce aircraft CO_2 emissions in support of the objective to ensure that the aviation sector makes a significant and cost effective contribution towards reducing global emissions. This proposal did not seek to reduce CO2 impacts. Due to this being a Level 2C ACP, there is no explicit requirement for the sponsor to assess other environmental aspects, including impacts on local air quality, noise, tranquillity, and biodiversity. The sponsor's environmental assessment is based on there being no anticipated changes to actual flight behaviours; therefore, concluding a neutral environmental impact. From the submission, it is noted that there is potential for flight behaviours to change for the ROSUN 4D STAR, ROSUN Hold and

Birmingham CHASE STARs. The CAA requested further clarification from NERL regarding this point[12]. Following NERL's response it is considered that any impacts as a result of these changes will be negligible and are unlikely to result in an adverse impact upon fuel burn and CO_2 emissions.

Environmental assessment and statement sign-off and approval			
	Name	**Signature**	**Date**
Environmental assessment and statement completed by:	[redacted]	[redacted]	30/11/2021
Environmental assessment and statement reviewed by:	[redacted]	[redacted]	22/12/2021

Principal Airspace Regulator – Approval		
Name	**Signature**	**Date**
[redacted]	[redacted]	15/02/2022

[12] CAA Stage 5 Clarification Questions Summary