

Policy Statement

STANDARD INSTRUMENT ARRIVAL ROUTE (STAR) TRUNCATION POLICY

1 Introduction

- 1.1 The purpose of this Policy Statement is to present CAA policy and guidance regarding STAR truncation requirements and Air Navigation Service Provider (ANSPs) actions required to truncate existing STARs. Truncation may be undertaken when an ANSP determines that operational and/or environmental efficiencies can be achieved by reducing the length of the procedure without change to the existing track over the ground and actual vertical profiles below 7000' above mean sea level (amsl).
- 1.2 Changes to STARs are conducted in accordance with the Airspace Change Process and its supporting guidance ([CAP 1616 Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements](#)). Specific technical requirements for STAR truncations are contained in this policy document and should be used in conjunction with the process described in CAP 1616.

2 Background

- 2.1 UK STARs have traditionally ended at holding fixes serving aerodromes and, depending where these fixes are located, the STARs have either been distinct routes from the en route network, or have coincided with existing ATS routes.
- 2.2 Truncation of the longer procedures can deliver one or more of the following benefits:
- STARs that do not coincide with an aircraft's preferred descent profile result in aircraft having to plan to uplift more fuel than may be necessary. Truncating STARs to more closely reflect the actual descent profiles results in more optimal flight planning and less ATM impact.
 - Truncation additionally reduces the data requirements for each STAR adaptation within ATM flight data processing systems, thus increasing available ATM system capacity.
 - Truncated STARs increase the potential to use flight-plannable direct routings to points closer to the holding facility when such options are desirable and/or feasible.
 - Where multiple STARs serve the same destination, truncation to start points closer to the holding facility enables a reduction in the total number of STARs for that airport.
 - Application of ICAO PANS-ATM Amendment 7 phraseology for clearing aircraft along STARs is problematic for long STARs. Truncation will reduce the potential for misapplication of procedures by both aircrew and ATC.
 - In accordance with CAP 785, IFPs are required to be reviewed every 5 years.

3 Policy Applicability

- 3.1 This policy applies when that part of a STAR preceding the truncation point is either replaced by a new RNAV ATS route, or where the STAR is already aligned with an existing ATS route.

The STAR is truncated in order to start at a point that is later than its current start point. In all cases connectivity is retained with the ATS route structure and therefore an abbreviated proposal may be submitted to the CAA as outlined below and in accordance with Annex A.

- 3.2 STAR truncation proposals are to be undertaken in accordance with the requirements of the CAA's Airspace Change Process (CAP 1616), and its associated guidance. CAP 1616 sets out the specific requirements for airspace change proposals, scaled to the appropriate level of the change. As this policy applies to STAR truncations where the length of the STAR is reduced without change to the existing track over the ground and actual vertical profiles below 7000' amsl, the application of CAP 1616 will be scaled to the appropriate level, normally a Level 2C. The template at Appendix A to Annex A has therefore tailored to suit the nature of a Level 2C change and comply with CAP 1616.

4 STAR Truncation Proposal Submissions

- 4.1 STAR truncation proposals should adhere to the requirements set out in Annex A. Notification of a proposal must be submitted to the CAA using a DAP 1916 in accordance with CAP 1616. Following the Assessment Meeting, details of the proposed STAR Truncation request should be submitted to SARG Airspace (airspace@caa.co.uk) in accordance with Annex A.
- 4.2 STAR truncation proposal submissions are to include confirmation that the proposed truncation(s) will have no impact on the interactions with existing notified procedures, including the vertical profiles of SIDs, STARs and holds serving adjacent aerodromes.
- 4.3 Where a sponsor wishes to propose an RNAV or RNP replication of a truncated STAR, the sponsor should contact the IFP section of the CAA for further guidance.

5 CAP 785¹ Requirements

- 5.1 All instrument flight procedures are required to be reviewed at a maximum interval of every 5 years as specified in CAP 785. If a STAR which is to be truncated is not up to date with the 5 yearly review requirements, then the STAR shall be reviewed prior to the truncation being carried out. This is to ensure that the procedure remains safe and fit for purpose prior to any further developments.
- 5.2 Where truncation results in the removal of straight line segments at the beginning of a STAR which, other than the truncation itself, does not generate any change to the current design of the STAR and/or establishment of new ATS routes, there is no need for a formal design proposal to be submitted by an approved Instrument Flight Procedure Designer. Any new waypoints and/or track and distance values between the truncation and extant waypoints must be checked for navigation infrastructure coverage² and be verified by the appropriate CAA IFP regulator prior to formal approval.
- 5.3 Numerical data and information with ICAO integrity classification "critical", "essential" or "routine", are to be provided in accordance with the requirements on the quality of aeronautical data and aeronautical information specified in relevant ICAO Annexes, ICAO Data Catalogue and European Regulations (EU) No 73/2010, 2017/373 and 139/2014. For more information see [CAP 1054 Aeronautical Information Management](#).
- 5.4 All amendments submitted by a Data Originator or Air Navigation Service Provider for onward promulgation in the Aeronautical Information Publication are subject to the Aeronautical Data Quality Requirements. See [Commission Regulation \(EU\) No 73/2010](#) (updated by Regulation (EU) No 1029/2014) and [CAP 1054 Aeronautical Information Management](#) guidance material for further information.

¹ [CAP 785 Approval Requirements for Instrument Flight Procedures for Use in UK Airspace](#)

² Use of DEMETR is appropriate for DME/DME procedures.

6 STAR Naming and the Use of ICAO 5-Letter name codes (5LNCs)

- 6.1 The designation of any truncated STAR will need to be assigned in accordance with CAA STAR designation policy statement ['The designation of Standard Instrument Departures \(SIDs\) and Standard Approach procedures \(STARs\) in the UK Flight Information Regions'](#)³. The Route Indicator will be allocated by the SARG IFP section.
- 6.2 All other STARs (if any) which exist within the same chart as a truncated STAR will also be required to be re-designated in accordance with the latest policy statement detailed in 6.1.
- 6.3 The use of new 5LNCs should be limited to that considered essential. To offset any need to establish additional waypoints, consideration should be given to either truncating STARs at existing 5LNCs or cancelling those 5LNCs considered unnecessary as a consequence of the proposed change, or a combination of both.
- 6.4 The use of alphanumeric waypoints should be considered for all but the STAR commencement and termination waypoints.

7 Environmental Analysis Requirements

- 7.1 Details of the estimated enabled flight planned fuel saving and a CO₂ analysis is to be included in the STAR truncation proposal where the proposed truncation does not introduce changes to existing planned descent levels as annotated on procedure charts, or on ATM standing agreement levels, but may result in changes to the actual vertical profile flown before an aircraft reaches the point at which the STAR has been truncated.

8 Consultation

- 8.1 STAR truncation proposals must include evidence that the airport operator and where relevant, other ANSPs have agreed to the change and the appropriate Area Control Centre (ACC) has agreed to the change and that associated adaptation and flight planning requirements have been considered and changes can be accommodated on the AIRAC date required.

Annex: A

STAR Truncation Request Submission Process

³ See also ICAO Annex 11 'Air Traffic Services' Appendix 3 'Principles governing the identification of standard departure and arrival routes and associated procedures'.

Annex A

STAR TRUNCATION SUBMISSION REQUEST PROCESS - GUIDANCE ON THE APPLICATION PROCESS

1. The change sponsor must submit the DAP 1916 by e-mail to SARG Airspace (airspace@caa.co.uk) with a Statement of Need.
2. SARG Airspace will acknowledge the DAP 1916 and confirm that the application falls under the requirements of CAP 1616 and this policy. Once a Case Officer has been assigned to the task, the proposal as outlined in Appendix 1 is to be submitted to airspace@caa.co.uk, which is to include the details as described below.
3. The change sponsor is to:
 - a. Complete and submit Appendix 1.
 - b. State the anticipated operational and environmental benefits of the STAR truncation proposal being submitted. Such as operational and (if applicable) environmental benefits (e.g. fuel saving track distances, improved CAS containment, capacity enhancements (as applicable)).
 - c. Include information on the new STAR designator and any new associated 5-Letter Name Codes (5LNCs). 5LNC reservation and ATS route designation is to be in accordance with CAA Airspace Policy Statement [Significant Point Name Codes \(5LNC\) and ATS Route Designators](#). The CAA SARG AAA IFP Section will allocate the STAR Route Indicator.

Appendix 1 to Annex A

INSTRUCTIONS FOR COMPLETION

1. Stage 1.

1.1 In Appendix 1 paragraph 1, the sponsor is to complete the details as shown.

2. Stage 2.

2.1 In Appendix 1 paragraph 2, As the truncation point is either replaced by a new RNAV ATS route, or where the STAR is already aligned with an existing ATS route, to satisfy the options appraisal requirement the sponsor is to state if any other options were considered and whether they were discounted.

2.2 In the STAR truncation proposal analysis, the Case Officer will confirm the option appraisal (including any safety assessment) and design principles, which are constrained by the nature of the proposal, are appropriate and will confirm the scaling level of the proposal.

3. Stage 3

3.1 STAR truncation proposals are to include evidence that the appropriate airport operator has been informed of the proposal, and, where relevant, other ANSPs affected by the change (if applicable) have agreed to the change. In Appendix 1 paragraph 3.1, where applicable, a statement to confirm that consultation has been conducted with the relevant aerodrome authority, together with the aerodromes agreement to the proposal.

3.2 No other consultation material is required.

3.3 The final options appraisal and safety assessment must be included with the submissions as shown in Appendix 1 to Annex A

4. Stage 4

4.1 The following details are required for the “truncated” STAR:

- Revised STAR designator for the truncated STAR and any other STARs on the same chart.
- The position at which the STAR will be truncated should be annotated on the existing STAR chart and attached as Attachment 1 for subsequent UK AIP amendment (clearly annotated PDF copies of existing charts are acceptable).
- Proposals are additionally to demonstrate that appropriate adaptation and flight planning requirements have been considered and changes can be effected on the AIRAC date required

Note: If approved SARG will advise the sponsor to submit this chart to AIS using the AIP Change Request to the UK AIP.

- The new 5LNC, or existing point, indicating the start of the truncated STAR, will become the new STAR designator. The Route Indicator will be allocated by the CAA IFP Section. The STAR designator is to be confirmed with SARG. This enables compliance with *pending* EU legislation on the assignment of STAR designators.
- Changes to STAR truncation point to next waypoint; details are to be indicated on the AIP chart to be amended (comments in Adobe PDFs are acceptable).

- Change sponsors must confirm appropriate navaid infrastructure is available to support the revised STAR termination position. The STAR will need to be renamed in accordance with ICAO STAR naming convention and the CAA IFP section will allocate the route indicator.
- Confirmation of revised RCF procedures, if applicable.
- Confirmation that any interacting ATS routes / procedures are not affected.
- ATS Route Details. The change sponsor is not required to enter information in paragraph 3 if the portion of the STAR to be truncated already coincides with an ATS route and there are no changes to procedure containment. For those STARs that do not coincide, the truncated portion of the STAR from the original start point to the truncated position will become a new ATS route or flight programmable direct route. The following details are required for a new ATS Route:
 - An appropriate ATS Route designator assigned to the route.
 - New ATS route details in the required AIP format are to be attached to the request i.e. the complete AIP amendment.
- Operational and environmental benefits. The change sponsor is to include details of the potential benefits to be realised e.g. the STAR will now be more closely aligned with nominal aircraft descent profiles.
- Consultation Confirmation Statement. The change sponsor is to include a confirmation that there is no change to track over the ground and no impact on adjacent procedures.
- Final Options Appraisal. The sponsor must include a final options appraisal including the details listed at CAP 1616 table E2 of the environmental impacts including CO2 emission and fuel burn

5. Stage 5

5.1 The Case Officer will complete a detailed analysis of the proposal and will present a recommendation to the Gateway Panel at the first available gateway meeting. Given the nature of the proposal, the CAA is prepared to permit STAR truncation proposals to be confirmed and accepted at a single gateway meeting.

5.2 On receipt of the truncation request, the CAA will verify truncation position co-ordinates (if not at an existing waypoint), verify remaining track and distance data associated with the any new ATS route and check the navaid infrastructure.

6. Stage 6

6.19 Once verification is complete, the CAA will provide regulatory approval to the sponsor and advise that an AIP change request may be submitted to AIS. This will include a copy of the completed application form.

6.2 The sponsor is to copy the AIP change request to the appropriate SARG Case Officer.

7. Stage 7

7.1 If the proposal has complied and approved in accordance with this policy, there is no Post Implementation Review requirement.

Existing STAR Designator:

STAR Truncation Sponsor Details:

EN-ROUTE ANSP		AIRPORT ANSP	
Unit		Unit	
Name		Name	
Phone:		Phone:	
E mail:		E mail:	

1 Stage 1

1.1 Statement of Need:

For completeness and ease of reference, insert details from DAP 1916

1.2 Date of Assessment Meeting/Teleconference/E mail confirmation that the proposal can be submitted (insert date)

1.3 Design Principles. The STAR Truncations Design Principles are listed below. For completeness and ease of reference, insert details from DAP 1916.

Design Principles

Stage 2

2.1 Options Appraisal. The option proposed and options discounted (where applicable) are detailed below.

Options:

Options proposed and why:

Options discounted and why:

Stage 3

3.1 Consultation and Sponsor Confirmation Statement

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Stage 4.

4.1 STAR Truncation Change Summary:

REQUIREMENTS	DETAILS
Existing STAR Designator	
New STAR Designator (To be coordinated with SARG)	
New 5LNCs (if applicable)	
Truncation Start Position	
Truncation Start Position Co-ordinates	
Revised Track/Distance from Truncation Start Position to next position	
Navaid coverage (to ensure position is definable)	
Impacts of proposed change on extant RCF procedures.	
Confirmation interacting ATS Routes/STARs not affected.	
Airspace Containment confirmation.	
Revisions to affected AD2 chart(s)	Change sponsor to append chart illustrating the proposed revised procedure.
Any other amendments to STAR Chart	
Database Coding Table	

amendment instruction (RNAV STARs only if applicable)	
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4.2 ATS Route Details, to include:

- Start and end position.
- Confirmation ATS route is fully contained in controlled airspace.

Change sponsor to append draft AIP amendment to this form.

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4.3 Final Options Appraisal

Insert Details

4.4 Sponsor Confirmation Statement:

<p>As sponsor/co-sponsor I/we* confirm that that there is no change to track over the ground below 7000ft amsl and no effect on adjacent procedures.</p> <p>Date:</p> <p>* Delete as appropriate.</p>

When complete, please return with supporting attachments to airspace@caa.co.uk.

SARG REGULATORY APPROVAL USE ONLY

Serial	Design Check	Approved / Not Approved	Verified By
1a	STAR revised track and distance.		
1b	If errors evident, STAR revised track and distance entered below.		
2a	ATS Route track and distance.		
2b	ATS Route terrain clearance assured.		
2c	If errors evident, ATS Route revised track and distance entered below.		
3	Navaid infrastructure (adequate coverage for new start point).		
4	RCF procedures.		
5	Interacting procedures.		
6	Airspace Containment.		
7	RNAV STAR truncation		

Change approved by:

Name.....

Date.....

Change referred back to sponsor for the following reason (insert details):