

RNP 4 JOB AID APPLICATION TO CONDUCT RNP 4

1. Introduction

This Job Aid was developed to provide operators, and inspectors with guidance on the process to be followed in order to obtain an RNP 4 approval. It should be used as an aid for the approval process but frequent reference to the ICAO PBN Manual (DOC9613) and CAAF SD-PBN (Operations Approval) will be required. Volume II, Part C, Chapter 1 contains detailed guidance on the implementation of RNP 4.

2. Purpose of the Job Aid

- 2.1 To give operators and inspectors information on the main RNP 4 reference documents.
- 2.2 To provide tables showing the contents of the application, the associated reference paragraphs, the place in the application of the operator where RNP 4 elements are mentioned and columns for inspector comments and follow-up on the status of various elements of RNP 4.

3. Actions Recommended for the Inspector and Operator

- 3.1 At the pre-application meeting with the operator, the inspector reviews the “basic events of the RNP 4 approval process” described in Section 1 of this Job Aid, in order to provide an overview of the approval process events.
- 3.2 The inspector reviews this Job Aid with the operator in order to establish the form and content of the RNP 4 approval application.
- 3.3 The operator uses this Job Aid as a guide to collect the documents of the RNP 4 application.
- 3.4 The operator inserts in the Job Aid references showing in what part of its documents are the RNP 4 elements located.
- 3.5 The operator submits the Job Aid and the application to the inspector (with the required documents).
- 3.6 The inspector indicates in the Job Aid whether an item is in compliance or needs corrective action.
- 3.7 The inspector informs the operator as soon as possible when a corrective action by the operator is required.
- 3.8 The operator provides the inspector with the revised material when so requested.
- 3.9 The CAAF provides the operator with the operational specification (air operators) or a letter of authorization (others) as applicable, when the tasks and documents have been completed.

SECTION 1 - INFORMATION ON THE IDENTIFICATION OF AIRCRAFT AND OPERATORS

NAME OF THE OPERATOR:

is applying for RNP 4 Operations Approval.

Aircraft manufacturer, model, and series	Aircraft Registration (required only if installed equipment varies between model and series)	List relevant make and model of related navigation equipment

DATE OF PRE-APPLICATION MEETING:

DATE ON WHICH THE APPLICATION WAS RECEIVED:

DATE ON WHICH THE OPERATOR INTENDS TO BEGIN RNP 4 OPERATIONS:

SECTION 2 – OPERATOR APPLICATION (ITEMS AND DOCUMENTS)

Item	Title of document	Indication of inclusion by the operator	Comments by the Inspector
1	Aircraft airworthiness documents showing RNP 4 compliance per ICAO PBN Manual, e.g., AFM, AFM Revision, AFM Supplement or Type Certificate Data Sheet (TCDS) showing that aircraft LRNS are RNP 4 eligible.		
2	Aircraft Modified To Meet RNP 4 Standards Documentation of aircraft inspection and/or modification. <u>If applicable</u> , maintenance records documenting installation or modification of aircraft/LRNS.		
3	Maintenance Program: For aircraft with established LRNS maintenance practices, provide list of document or program references. For newly installed LRNS, provide LRNS maintenance practices for review.		

4	Minimum Equipment List (MEL) if applicable showing provisions for LRNS		
5	Training programme for flight crews, and flight dispatchers, and maintenance personnel as applicable.		
6	Operating policies and procedures including relevant section of Operations Manuals and checklists attached to the application, applicable to RNP 4		
7	Navigation database Details of the navigation data validation programme.		

SECTION 3 – GUIDE FOR DETERMINING RNP 4 AIRCRAFT ELIGIBILITY

Item	Topics	Reference paragraphs ICAO Doc 9613 Vol II Part C 1	Location in the Documents of the operator	Comments
1	<u>Eligibility Group 1</u> – RNP Certification (RNP compliance documented in Airplane Flight Manual (AFM))	1.3.2.3.2 (a)		
2	<u>Eligibility Group 2</u> – Prior Navigation System Certification	1.3.2.3.2 (b)		
	Aircraft fitted with GNSS only: a) Approved long-range navigation systems for oceanic and remote airspace (with FDE) b) Approved dispatch FDE availability programme	1.3.2.3.2 (b)(i)		
	Multi-sensor Systems Integrating GNSS with integrity provided by RAIM	1.3.2.3.2 (b)(ii)		
	Multi-sensor Systems Integrating GNSS with integrity provided by AAIM	1.3.2.3.2 (b)(iii)		
3	<u>Eligibility Group 3</u> – New Technology	1.3.2.3.2 (c)		

4	Requirement for at least dual Long Range Navigation System equipage including GNSS	1.3.3		
5	Functional Requirements	1.3.3.6 1.3.3.7		

SECTION 4 - PROCEDURES FOR RNP 4 OPERATIONS

Item	Operating Procedures	Reference paragraphs ICAO Doc 9613 Vol II Part C 1	Location in the Documents of the operator	Comments
1	Pre-flight Planning			
	Verify aircraft long-range navigation systems (LRNS) required to meet minimum Navigation Specification (RNP) specified for the route or area is operational.	1.3.4.1.2		
	Annotate ICAO Flight Plan block 10 (Equipment) with "R" and "Z" and annotate Item 18 with "NAV/RNP4". Note: CPDLC and ADS-C will also be required when separation standard is 30 NM lateral and/or longitudinal.	1.3.4.1.1		
	Review applicable contingency procedures	1.3.4.1.2 (c)		
	Ensure navigation capability available including availability of FDE s applicable	1.3.4.2		
2	Pre-flight Procedures			
	Review of maintenance logs and forms for LRNS status	1.3.4.1.2 (a)		
	Confirm Navigation Database currency	1.3.4.1.1 (Note)		

Item	Operating Procedures	Reference paragraphs ICAO Doc 9613 Vol II Part C 1	Location in the Documents of the operator	Comments
3	En route Procedures			
	Before oceanic entry point, verify two LRNS meeting the minimum RNP specified are operating. If not, notify ATC and operate in accordance with policy applicable to the airspace.	1.3.4.3.1		
	Before entering oceanic airspace, perform navigation accuracy check and position update (if necessary) using accepted method.	1.3.4.3.2		
	Follow in-flight operating drills to prevent inadvertent deviation from cleared routes.	1.3.4.3.3		
	Use flight director or autopilot in lateral deviation mode	1.3.4.3.4		
	Advise ATC of loss of long-range navigation capability and operate in accordance with policy applicable to the airspace.	1.3.4.3.3		