

PBN IMPLEMENTATION TOOLS

<p>_____ (State)</p> <p>NATIONAL PERFORMANCE OBJECTIVES AND ACTION PLAN OPTIMIZATION OF THE ATS ROUTE STRUCTURE IN TERMINAL AIRSPACE</p> <p>PERIOD: Long Term (2016 +) APPLICATION: Terminal Phase</p>						
<i>Benefits</i>						
<p>Environment:</p> <p>Efficiency :</p>						
<i>Strategy</i>						
PROCESS	TASKS	INPUT SOURCE	OUTPUT	TARGET DATE	ACTION PERSON/GROUP	STATUS
<i>Preliminary</i>						
	<ul style="list-style-type: none"> Review AFI PBN Implementation Plan Key Targets (Terminal) 	<i>AFI PBN Implementation Plan</i> Long Term: 2016 + [Ch. 25-26]				
	<ul style="list-style-type: none"> Review State PBN Implementation Plan Key Targets (Terminal) 	<i>State PBN Implementation Plan</i> Long Term: 2016 + [Ch. 5.3]				

PROCESS	TASKS	INPUT SOURCE	OUTPUT	TARGET DATE	ACTION PERSON/GROUP	STATUS
<i>Terminal Applications Implementation</i>						
Process 1 Determine Requirements	Step 1- Formulate airspace concept	PBN Manual, Vol. 1B Ch. B 2.3.1 ➤ ATM needs (civil/military)				
	Step 2- Assessment of existing fleet capability and available navaid infrastructure	PBN Manual, Vol. 1B Ch. B 2.3.2 ➤ IATA Survey ➤ State Survey				
	Step 3- Assessment of existing ATS surveillance system and communications infrastructure and ATM system	PBN Manual, Vol. 1B Ch. B 2.3.3				
	Step 4- Identify necessary navigation performance and functional requirements	PBN Manual, Vol. 1B Ch. B 2.3.4				
			<ul style="list-style-type: none"> ➤ Navigation functional requirements ➤ Fleet capability ➤ CNS/ATM capabilities 			

Process 2 Identifying ICAO navigation specification for implementation	Step 1- Review ICAO navigation specifications	PBN Manual, Vol. 1B Ch. B 3.3.1 ➤ Navigation functional requirements ➤ Fleet capability ➤ CNS/ATM capabilities				
	Step 2- Identify appropriate ICAO navigation specification to apply in the specific CNS/ATM environment ➤ RNAV 5 ➤ RNAV 2 ➤ RNAV 1 ➤ New specification?	PBN Manual, Vol. 1B Ch. B 3.3.2				
	Step 3- Identify trade-offs with airspace concept and navigation functional requirements (if necessary)	PBN Manual, Vol. 1B Ch. B 3.3.3				

➤ Navigation specifications

Process 3 Planning and implementation	Step 1- Formulate safety plan	PBN Manual, Vol. 1B Ch. B 4.3.1 ➤ Navigation specifications				
	Step 2- Validate airspace concept for safety	PBN Manual, Vol. 1B Ch. B 4.3.2				
	Step 3- Procedure design	PBN Manual, Vol. 1B Ch. B 4.3.3				
	Step 4- Procedure ground validation	PBN Manual, Vol. 1B Ch. B 4.3.4				
	Step 5- Implementation decision	PBN Manual, Vol. 1B Ch. B 4.3.5				
	Step 6- Flight inspection and flight validation	PBN Manual, Vol. 1B Ch. B 4.3.6				
	Step 7- ATC system integration considerations	PBN Manual, Vol. 1B Ch. B 4.3.7				
	Step 8- Awareness and training material	PBN Manual, Vol. 1B Ch. B 4.3.8				
	Step 9- Establishing operational implementation date	PBN Manual, Vol. 1B Ch. B 4.3.9				
	Step 10- Post-implementation review	PBN Manual, Vol. 1B Ch. B 4.3.10			DEC 2012	

- Training programmes
- RNAV STARs and SIDs