

International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Eleventh Meeting (ATM SG/11) (Abu Dhabi, UAE, 19 – 23 October 2025)

Agenda Item 5: Air Navigation Deficiencies in the ATM/SAR fields

POTENTIAL DEFICIENCIES RELATED TO ATM/SAR

(Presented by the Secretariat)

SUMMARY

This Working Paper provides additional tools to States to identify their potential of ATM and SAR deficiency.

Action by the meeting is at paragraph 3.

REFERENCE(S)

- ICAO Annex 11 and Annex 12
- ICAO PANS ATM, Doc 4444
- Global Air Navigation Plan, Doc 9750

1. Introduction

- 1.1 A deficiency is a situation where a facility, service or procedure does not comply with a Regional Air Navigation Plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.
- 1.2 The Basic Building Block (BBB) framework outlines the foundation of any robust air navigation system. It is nothing new but the identification of the essential services to be provided for international civil aviation in accordance with ICAO Standards. These essential services are defined in the areas of aerodromes, air traffic management, search and rescue, meteorology and information management. In addition to essential services, the BBB framework identifies the end users of these services as well as the assets (communications, navigation, and surveillance (CNS) infrastructure) that are necessary to provide them.
- 1.3 The BBB is considered an independent framework and not a block of the ASBU framework as they represent a baseline rather than an evolutionary step. This baseline is defined by essential services recognized by ICAO Member States as necessary for international civil aviation to develop in a safe and orderly manner. Once these essential services are provided, they constitute the baseline for any operational improvement.

2. DISCUSSION

2.1 In 2014, the ICAO Council approved a new template for the Regional Air Navigation Plans (ANPs) to better align global and regional planning. This template consists of three volumes. Volumes I and II list the regional facilities as well as the general and specific regional service

requirements, required for international civil aviation operations in accordance with regional air navigation agreements, in the areas of aerodrome operations, communications, navigation and surveillance, air traffic management, meteorology, search and rescue and aeronautical information management.

- 2.2 To set a baseline and to ensure a robust foundation for the global air navigation system, an effective process should be established to verify, pursuant to Article 37 of the Chicago Convention, that the essential ANS identified in the BBB framework are provided. If these essential services are not being delivered, ICAO, upon request of a State, provides the necessary technical assistance to address the needs as identified within the process.
- 2.3 Based on the above, the ICAO MID Office conducted a study on ATM and SAR fields to reiterate States commitment to Chicago Convention Article 28 (Air navigation facilities and standard systems), Article 37 (Adoption of international standards and procedures), related SARPs, PANS, and regional requirements in MID ANP Volume II to highlight the potential of deficiencies and support States to rectify related matters.
- 2.4 The requirements related to ATM are contained in Annex 11, ICAO DOC 4444: PANS ATM, MID ANP Volume II as well as MIDANPIRG Conclusions and Decisions. Further details regarding these requirements can be found in **Appendix A**.
- 2.5 The requirements related to SAR are contained in Annex 11, Annex 12 and ICAO DOC 4444: PANS ATM, MID ANP Volume II as well as MIDANPIRG Conclusions and Decisions. Further details regarding these requirements can be found in **Appendix B**.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review the list of basic requirements related to ATM and SAR fields at **Appendices** A and B;
 - b) urge States to comprehensive review by the MID States to identify this requirements status and report to ICAO MID for further review and actions; and
 - c) assist States in addressing the potential deficiencies through development of the action plan with necessary follow-up with the relevant State focal points to rectify the related issues and challenges.

State basic requirements checklist related to ATM																					
States	ATM																				
		ATS																			
	ATCU, FIC, AFIS	TWR					APP				ACC			ATCU, FIC, AFIS				ASM			States
	Alerting service	Control service				Control service				Control service			Flight Information Service								
		Ground control	Departure clearance	Landing clearance	Separation	Coordination	Arrival clearance	Approach clearance	Separation	Coordination	En-route clearance	Separation	Coordination	Traffic information	MET infromation	Operation infromation	Coordination	Procedure design	Route structure	Airspace segment	percentage
	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapter 7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapter 7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2,6,7	Annex 11, chapters 2, 4,6,7	Annex 11, chapters 2,7	Annex 11, chapters 2,7	Annex 11, chapters 2,7	Annex 11, chapters 2,6	Annex 11, chapters 2,6	Annex 11, chapters 2,6	
	Doc 4444, chapters 4,7,9,10	Doc 4444, chapters 4,5,6,10,11	Doc 4444, chapters 4,5,6,10,11	Doc 4444, chapters 4,5,6,10,11	Doc 4444, chapters 4,5,6,10,11	Doc 4444, chapters 4,5,6,10,11	Doc 4444, chapters 4,5,6	Doc 4444, chapters 4,5,6	Doc 4444, chapters 4,5,6	Doc 4444, chapters 6,10,11,16	Doc 4444, chapters 4,5	Doc 4444, chapters 4,5	Doc 4444, chapters 6,10,11,16	Doc 4444, chapters 4,7,9,11	Doc 4444, chapters 6,10	Doc 4444, chapters 6,10	Doc 4444, chapters 6,10	Doc 8168, Part 1, chapters 2,4	Doc 8168, Part 1, chapters 2,4	Doc 8168, Part 1, chapters 2,4	
Bahrain																					
Egypt																					
Iran																					
Iraq																					
Jordan																					
Kuwait																					
Lebanon																					
Libya																					
Oman																					
Qatar																					
Saudi Arabia																					
Sudan																					
Syria																					
UAE																					
Yemen																					
Regional Percentage																					

			St	ate basic	requirem	nents chec	klist relate	d to SAR			
States											
			neceive								
	INCE	RFA	ALE			cy Notification	Freedrand	į į			
	Coordination	Evaluation	Alert to be prepared	Design SAR Plan	Design SAR Plan	Develop SAR Plan for Incident		Impelement SAR Plan for Incident	Alerting service	States percentage	
		Emergency report					Task	Request Assistance	Notify		
	Annex 12, chapter 5	Annex 12, chapter 5	Annex 12, chapters 3,5	Annex 12, chapters 3,5	Annex 12, chapters 3,5	Annex 12, chapters 3,5	Annex 11, chapters 2,5				
			Annex 11, chapter 5	Annex 11, chapter 5	nex 11, chapter 5 Annex 11, chapter 5						
	PANS-ATM: Ch. 9.2 and Ch. 10.2										
Bahrain											
Egypt											
Iran											
Iraq											
Jordan											
Kuwait											
Lebanon											
Libya											
Oman											
Qatar											
Saudi Arabia											
Sudan											
Syria											
UAE											
Yemen											
Regional Percentage											