



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

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

Agenda Item 3: Planning and Implementation issues related to ATM/SAR

**OPTIMIZED IMPLEMENTATION OF LONGITUDINAL SEPARATION MINIMA
IN MID REGION**

(Presented by Saudi Arabia)

SUMMARY

This working paper, presented by Saudi Arabia to outlines an optimized strategy for implementing reduced longitudinal separation minima across the MID Region, in alignment with the ICAO Project 30/10 mandate. The objective is to ensure regional separation practices-specifically the move to 10 NM separation where ATS Surveillance is provided-are fully consistent with the latest global standards articulated in ICAO DOC 4444 (PANS-ATM). To formalize this advancement, the paper proposes superseding the previous MIDANPIRG conclusion with a new draft that urges States to implement reduced separation where appropriate and tasks the ASM Working Group with developing comprehensive guidance material. This material will facilitate the technical implementation of various distance, time and performance-based separation methods, serving as a cornerstone for achieving the ICAO ANC Recommendation 3.1/1 objective and enhancing regional air traffic efficiency.

Action by the meeting is at paragraph 3

REFERENCES

- ICAO ANNEX 11 - AIR TRAFFIC SERVICES
- ICAO DOC 4444 – PANS-ATM
- DRAFT REPORT AN-CONF/14 RECOMMENDATION 3.1/1
- MIDANPIRG CONCLUSION 22/11
- ATM SG 14 FINAL REPORT

1. INTRODUCTION

1.1 ICAO Recommendation 3.1/1, originating from the draft AN-CONF/14 report, establishes the State responsibility to proactively engage with neighboring States via the PIRGs to execute Project 30/10. This critical implementation mandate requires the application of reduced longitudinal separation minima: specifically, 55.5 km (30 NM) or less in oceanic and remote airspace, and 19 km (10 NM) or less in non-oceanic/remote airspace.

1.2 Recall, MIDANPIRG 11 Conclusion 22 stipulated the following:

“ a) States that have not yet done so:

- i. be urged to implement reduction of longitudinal separation where appropriate:

- reduce longitudinal separation down to 10 NM; where ATS surveillance service provided; and
 - reduce longitudinal separation down to 30 NM, where no ATS surveillance service provided.
- ii. be invited to agree with their adjacent FIRs/States on the date of implementation and updating of the LoAs.
- a) the ATM SG monitors the progress of implementation and undertakes necessary measures to promote its advancement.”

2. DISCUSSION

2.1 MIDANPIRG Conclusion 22/11 stated that, the 30 NM separation minimum should be implemented in areas lacking Air Traffic Services (ATS) Surveillance capability. However, Project 30/10 subsequently classified the separation minima based only on whether the area is remote/oceanic (where 30 NM is proposed) or other (where 10 NM is proposed), without explicitly correlating the 30 NM implementation with the absence of ATS Surveillance service. Consequently, the current classification in Project 30/10 does not support the implementation of the 30 NM separation minimum solely based on the absence of ATS Surveillance service.

2.2 Reference: ICAO DOC 4444 (PANS – ATM), Sixteenth Edition - 2016, Amendment 12, dated 28/11/24, Chapter 5. The longitudinal separation minimum recommended for non-surveillance ATS is outlined as one of the horizontal separation methods suitable for cross-border separation provisions within MID Region. This minimum is determined exclusively based on time and distance parameters, as follows:

- a) Longitudinal separation based on time: 15,15, 5 or 3 Minutes*.
- b) Longitudinal separation based on distance using DME and/or GNSS: 20NM or 10 NM*.
- c) Longitudinal separation based on time using MACH number technique: from 10 minutes till 5 minutes*.
- d) Longitudinal separation based on distance using RNAV with MACH number technique: 80 NM*.
- e) Longitudinal separation minima based on distance using RNAV where RNP is specified where ADS-C not used as illustrated the following table:

Separation minimum	RNP Type	Communication requirement	Surveillance requirement	Distance verification requirements
50 NM	10	Direct controller-pilot communications	Procedural position reports	At least every 24 inutes

- f) Performance-based longitudinal separation minima subject to the following table:

Separation minimum	RNP	RCP	RSP	Maximum ADS-C periodic reporting interval
50NM	10	240	180	27 minutes
	4	240	180	32 minutes
30NM	2 or 4	240	180	12 minutes
20NM	2 or 4	240	180	192 seconds (3.2 minutes)

Separation minimum	RNP	RCP	RSP	Maximum ADS-C periodic reporting interval
5 minutes	2, 4 or 10	240	180	14 minutes

Note: * Compliance with the operational requirements outlined in ICAO Document 4444, PANS-ATM, detailed Section 5.4.2, is strictly required. It is mandatory that all specified conditions within this section are comprehensively implemented and validated against each individual distance/time values referenced therein.

2.3 Longitudinal separation minima based on distance using ADS-B in-trail procedure (ITP) may be recommended for oceanic separation provisions also recommended by ICAO ASBU (reference ICAO ASBU Thread: OPFL Block 0 element 1 (ITP) also considered as priority 2 by MID Region.

2.4 Based on the above, the meeting is invited to review and agree to replace MIDANPIRG Draft Conclusion 22/11 with the following Draft Conclusion:

***DRAFT CONCLUSION XX/X: IMPLEMENTATION OF REDUCED
LONGITUDINAL SEPARATION IN THE
MID REGION***

That,

a) States, that have not yet done so:

- i. be urged to implement reduction of longitudinal separation where appropriate:*
 - reduce longitudinal separation down to 10 NM; where ATS surveillance service is provided, and*
 - reduce longitudinal separation minimum subject to par. 2.2 ; where ATS surveillance service is not provided, and*

ii. be invited to agree with their adjacent FIRs/States on the date of implementation and updating of the LoAs.

b) the ASM Working Group to:

- i. monitor the progress of implementation and undertakes necessary measures to promote its advancement.*
- ii. Establish a guidance material to implement the different method of separation mentioned per para. 2.2 ((a) till (e)) in MID Region in addition, the possibility of implementation Performance-based longitudinal separation minima as a corner stone to achieve draft report an-conf/14 recommendation 3.1/ as well as study the needs for ITP in MID region.*

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) agree to supersede MIDANPIRG Conclusion 12/11 with Draft Conclusion in para 2.4.