



International Civil Aviation Organization

MIDANPIRG Airspace Management Working Group

Third Meeting (ASM WG/3)  
(Virtual, 21 – 22 January 2026)

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**Agenda Item 2:           ASM Developments**

**PROJECT 30/10 ROADMAP**

*(Presented by the Secretariat)*

**SUMMARY**

This paper presents the progress of development of Project 30/10 (reduction of longitudinal separation) roadmap in the MID region.

Action by the meeting is at paragraph 3.

**REFERENCES**

- AN-Conf/14 (26 August to 6 September 2024, Montréal, Canada)
- ASM WG/2 Meeting (Virtual, 27 January 2025)
- MIDANPIRG/22 (Doha, Qatar, 4-8 May 2025)

**1.       INTRODUCTION**

1.1           Separation is the generic term used to describe action on the part of ATS to keep aircraft operating in the same general area at such distances from each other that the risk of collision is maintained below an acceptable safe level. Such separation can be applied horizontally and vertically. Separation in the horizontal plane can be achieved either longitudinally (by spacing aircraft behind each other at a specified distance, which may be expressed in flying time) or laterally (by spacing aircraft side by side at a specified distance from each other, or by specifying the width of the protected airspace on either side of an air route center line). Vertical separation is achieved by requiring aircraft using prescribed altimeter setting procedures to operate at different levels expressed in terms of flight levels or altitudes.

1.2           Annex 11 specifies that the minima established by ICAO are published in the PANS-ATM and minima established by Regional Agreement are published in Doc 7030, Regional Supplementary Procedures (SUPPS). This material forms the initial source of reference material from which airspace planners may directly derive appropriate minima.

1.3           The AN-Conf/14 agreed that while uniform application of separation minima would reduce bottlenecks and improve air navigation safety and efficiency, akin to the goals of Project 30/10, modern ATM solutions should also be applied across large portions of airspace that have similar traffic flow characteristics. These included air traffic flow management (ATFM), flexible use of airspace (FUA), free route airspace (FRA) and civil-military cooperation (CMC). The Conference recognized

that such initiatives should be based on the needs of a wide cross-section of the aviation community, which may entail sending out surveys, as necessary.

## 2. DISCUSSION

2.1 The meeting may wish to note that regarding development of roadmap for Project 30/10 (reduction longitudinal separation between FIRs) in the MID region, the MIDANPIRG/22 meeting endorsed the following Decision:

*MIDANPIRG DECISION 22/10: PROJECT 30/10 ROADMAP*

*That, the ATM SG develop roadmap for the implementation of Project 30/10 in the MID Region, including the inter-regional aspects.*

2.2 Accordingly, the Secretariat, based on ICAO Doc 4444, Chapter 5, has extracted relevant longitudinal separation minima for aircraft operating on the same track and same level in non-surveillance environment and their corresponding requirements at **Appendix A**.

2.3 In order to develop roadmap for implementation of Project 30/10, the following criteria have been proposed to prioritize required actions.

- a) if a common FIR boundary point in non-surveillance environment (at least on one side) is subject to longitudinal separation of 10 minutes (equivalent to 80 NM) or greater; or
- b) if the extensive longitudinal separation over common FIR point imposes additional workload to ATCOs and flight crew which may have an impact on safety of traffic operation; or
- c) if the common FIR point carries the main flows in the MID region and/or at interface with adjacent region(s) in accordance with MIDRMA report; or
- d) if the common FIR boundary point is utilized for unidirectional operation and amount of movement reaches 90,000 or more per year; or
- e) if the common FIR boundary point is utilized for bidirectional operation and amount of movement reaches 50,000 or more per year; or
- f) if traffic movement at the common FIR boundary point significantly increases during contingency situations; or
- g) where decided by both concerned States.

2.4 Also, the Secretariat drafted action plan in **Appendix B** regarding development of Project 30/10 roadmap.

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the longitudinal separation minima at **Appendix A** for implementation of reducing longitudinal separation in non-surveillance environment;
- b) note the criteria in para 2.3 and draft action plan at **Appendix B** to develop roadmap; and
- c) establish Action Group to develop draft roadmap and present it in ASM WG/4.

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### Longitudinal Separation Minima and requirements in non-surveillance environments

Type of longitudinal separation	Minima	Requirements			
Based on Time	15 minutes	No NAVAID to permit frequent determination of position and speed		Communication: voice reports, CPDLC or ADS-C	
Based on Time	10 minutes	NAVAID permits frequent determination of position and speed		Communication: voice reports, CPDLC or ADS-C	
Based on Time	5 minutes	NAVAID permits frequent determination of position and speed	preceding ACFT maintain TAS 20 <sup>+</sup> kt faster than succeeding ACFT		Communication: voice reports, CPDLC or ADS-C
Based on Time	3 minutes	NAVAID permits frequent determination of position and speed	preceding ACFT maintain TAS 40 <sup>+</sup> kt or faster than succeeding ACFT		Communication: voice reports, CPDLC or ADS-C
Mach Number Technique Based on Time	10 minutes	True Mach number approved by ATC			Communication: voice reports, CPDLC or ADS-C
Mach Number Technique Based on Time	9 to 5 minutes	Mach number difference (0.02 to 0.06) as explained in para 5.4.2.4.3			Communication: voice reports, CPDLC or ADS-C
Mach Number Technique Based on Distance Using RNAV	80 NM	Separation established & maintain 80 <sup>+</sup> NM between ACFT positions by assigning Mach number	RNAV-equipped aircraft		Operating on designated RNAV routes or on ATS routes defined by VOR Direct controller-pilot communications
Based on Distance Using RNAV where RNP 10	50 NM	Separation established & maintain 50 <sup>+</sup> NM between ACFT positions by using speed control techniques, including assigning Mach number	This separation was developed in accordance with a collision risk analysis, so implementation requires safety risk assessments. Refer para 5.4.2.6.3.1 and notes		Distance verification at least every 24 minutes as well as procedure in 5.4.2.6.3.2 Direct controller-pilot communications shall be voice or CPDLC
Performance-Based Longitudinal Separation	50 NM	RNP 10	RCP 240	RSP 180	Max ADS-C periodic reporting interval 27 minutes considering para procedures in 5.4.2.9.6 & 5.4.2.9.7
Performance-Based Longitudinal Separation	50 NM	RNP 4	RCP 240	RSP 180	Max ADS-C periodic reporting interval 32 minutes considering para procedures in 5.4.2.9.6 & 5.4.2.9.7
Performance-Based Longitudinal Separation	30 NM	RNP 2 or 4	RCP 240	RSP 180	Max ADS-C periodic reporting interval 12 minutes considering para procedures in 5.4.2.9.6 & 5.4.2.9.7
Performance-Based Longitudinal Separation	20 NM	RNP 2 or 4	RCP 240	RSP 180	Max ADS-C periodic reporting interval 3.2 minutes considering para procedures in 5.4.2.9.6 & 5.4.2.9.7
Performance-Based Longitudinal Separation	5 minutes	RNP 2 or 4 or 10	RCP 240	RSP 180	Max ADS-C periodic reporting interval 14 minutes considering para procedures in 5.4.2.9.6 & 5.4.2.9.7
Based on Distance Using DME and/or GNSS	20 NM	ACFT positions report by reference to DME in conjunction with other appropriate navigation aids and/or GNSS			Direct controller-pilot VHF voice communication and frequent intervals to ensure that the minimum will not be infringed
Based on Distance Using DME and/or GNSS	10 NM	ACFT positions report by reference to DME in conjunction with other appropriate navigation aids and/or GNSS as well as the leading ACFT maintains a TAS 20 <sup>+</sup> kt faster than the succeeding ACFT			Direct controller-pilot VHF voice communication and frequent intervals to ensure that the minimum will not be infringed

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## Action Plan for implementation of Project 30/10

### Priority factors:

- a) if a common FIR boundary point in non-surveillance environment (at least on one side) is subject to longitudinal separation of 10 minutes (equivalent to 80 NM) or greater; or
- b) if the large longitudinal separation over common FIR point imposes additional workload to ATCOs and flight crew which may have an impact on safety of traffic operation; or
- c) if the common FIR point carries the main flows in the MID region and/or at interface with adjacent region(s) in accordance with MIDRMA report; or
- d) if the common FIR boundary point is utilized for unidirectional operation and amount of movement reaches 90,000 or more per year, or
- e) if the common FIR boundary point is utilized for bidirectional operation and amount of movement reaches 50,000 or more per year, or
- f) if traffic movement at the common FIR boundary point significantly increases during contingency situations. or
- g) where decided by both concerned States.

Main action	Sub action		Target date	Deliverable	Champion	Reference	Status / RMK
	No.	Description					
Collection of data and Gap analysis	1.1	Develop template to collect data and information from States based on LoAs		Template for collection of data	ICAO MID	MIDANPIRG Conclusion 22/10	
	1.2	Follow up with States to submit required data and share with MID office		State Letter to MID States	ICAO MID		
	1.3	Consolidate States input and conduct Gap analysis		Draft Gap Analysis	MID States and ICAO MID		
	1.4	Prepare and present Gap analysis report to ATM SG for decision		Gap Analysis report	ICAO MID		
Prioritization of the project	2.1	Develop draft priority criteria		Draft list of priority criteria	ICAO MID	MIDANPIRG Conclusion 22/10	
	2.2	Review and approve priority criteria		list of priority criteria	ATM SG		
	2.3	Prioritize common FIR boundary points based on approved criteria in two phases		list of priority common FIR boundary points in two phases	ICAO MID		

Main action	Sub action		Target date	Deliverable	Champion	Reference	Status / RMK
	No.	Description					
Development of Roadmap	3.1	Develop comprehensive list of actions for each common FIR boundary point to identify requirements related to performance improvement area, target, timeline, safety assessment, training, amendment of Letter of Agreement, set effective date etc.		list of detailed actions for each common FIR boundary point	Concern States for each FIR boundary point.  ICAO MID to facilitate coordination between States as well as adjacent region(s), if requested	MIDANPIRG Conclusion 22/10  MIDANPIRG Conclusion 22/11	
	3.2	Consolidate actions provided by States in coordinated manner to develop Draft Roadmap		Draft Roadmap	States and ICAO MID	MIDANPIRG Conclusion 22/10	
	3.3	Review Draft Roadmap by ATM SG		Mature Draft Roadmap	ATM SG	MIDANPIRG Conclusion 22/10	
	3.4	Present Mature Draft Roadmap to MIDANPIRG for review and endorsement		Approved Project Roadmap	MIDANPIRG	MIDANPIRG Conclusion 22/10	
Implementation of Phase One	4.1	Based on roadmap, focus on priority 1 common FIR boundary points for implementation of required actions and provide periodic feedback and progress report to ICAO MID		Progress report by States	MID States	Roadmap	
	4.2	Based on the feedback and request from States, provide required technical assistance and support.		ICAO Implementation Support initiative(s)	ICAO MID	Roadmap	
	4.3	Provide consolidated report as well as operational impact analysis to ATM SG and MIDANPIRG until successful implementation of Phase One.		Consolidated progress report with impact analysis	ICAO MID	Roadmap	

Main action	Sub action		Target date	Deliverable	Champion	Reference	Status / RMK
	No.	Description					
Implementation of Phase Two	5.1	Based on roadmap, focus on priority 2 common FIR boundary points for implementation of required actions and provide periodic feedback and progress report to ICAO MID		Progress report by States	MID States	Roadmap	
	5.2	Based on the feedback and request from States, provide required technical assistance and support.		ICAO Implementation Support initiative(s)	ICAO MID	Roadmap	
	5.3	Provide consolidated report as well as operational impact analysis to ATM SG and MIDANPIRG until successful implementation of Phase Two.		Consolidated progress report with impact analysis	ICAO MID	Roadmap	

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