



International Civil Aviation Organization

MIDANPIRG Communication, Navigation and Surveillance Sub-Group

Thirteenth Meeting (CNS SG/13)
(Jeddah, Saudi Arabia, 20 – 23 October 2024)

Agenda Item 5: CNS Planning and Implementation Framework in the MID Region

OMAN EXPERIENCE AND CHALLENGES TO AIDC/OLDI IMPLEMENTATION

(Presented by Sultanate of Oman)

SUMMARY

This information paper presents the results of the recent testing efforts between Oman and India and provides recommendations for further collaboration and development. The goal is to foster the coordination between adjacent Air Traffic Control (ATC) Centers -ACCs and reduce coordination failures, thereby safety improves.

Action by the meeting is at paragraph 3.

REFERENCE(S)

- PANS ATM Doc 44444
- ICAO MID Air Navigation Strategy, MID Doc 002
- ICAO MID Region Guidance for the implementation of AIDC/OLDI, MID Doc. 006

1. INTRODUCTION

1.1 The OLDI/AIDC module is aimed at improving the traffic flow thru enabling neighboring ACCs to automatically exchange flight data in form of message coordination and transfer, therefore the workload associated with the flight coordination and transfer reduced.

1.2 Coordination failures among adjacent ACCs have been addressed as major contributors to the Loss of Separation (LOS) incidents at the MID regional level. The implementation of AIDC/OLDI is a crucial step towards addressing this issue by providing real-time data exchange and automation of routine tasks.

1.3 The recent Safety Protocol opened for the Muscat/Mumbai corridor highlights the specific challenges faced by MID region. Fostering the effective implementation of AIDC/OLDI improves the accuracy and timeliness of information sharing between the two ACCs, reduces the risk of coordination errors and enhancing safety.

1.4 According to the MID Region Guidance for the implementation of AIDC/OLDI, ICAO DOC 006, there are four AIDC/OLDI links that considered as Priority 1: Mumbai, Abu Dhabi, Jeddah, and Tehran. Furthermore, two links considered as priority 2: Pakistan and Yemen.

1.5 FICE B0/1 element represents a first automation step in the evolution of the coordination and transfer of control among neighboring ACCs to ensure the availability of all necessary information to the adjacent ACC.

1.6 As per ICAO MID Air Navigation Strategy, Doc 002, FICE B0/1 element is considered as Priority 1.

2. DISCUSSION

2.1 The below table shows the implementation status of AIDC/OLDI link with Muscat.

OLDI/AIDC implementation status in Oman				
State	Priority	OLDI	AIDC	Status
UAE	1	*		Fully implemented since 2018
India	1		*	Under testing stage
Saudi Arabia	1	*		Testing stage successfully passed, pending implementation
Iran	1	*		Pending
Pakistan	2		*	Pending
Yemen	2			Pending

2.2 In order to implement AIDC/OLDI link between Muscat and Mumbai ACCs, as an implementation to the ICAO MID Air Navigation Strategy, the last AIDC test has been conducted in April 2024.

2.3 The testing efforts between Oman and India highlighted the importance of ensuring compatibility and interoperability between different ATM systems when implementing OLDI and AIDC. The challenges encountered underscore the need for standardized data exchange formats and protocols.

2.4 Furthermore, the limitations of any ATM system demonstrate the importance of accelerating upgrades of ATM system to support the implementation of AIDC. These upgrades can also enhance the efficiency and safety of air traffic management operations.

2.5 This information paper demonstrates the critical need for AIDC/OLDI implementation in the MID Region to enhance safety and efficiency. The challenges encountered during the testing phase underscore the importance of:

- Interoperability: Ensuring compatibility between different ATM systems.
- Standardization: Adopting standardized data exchange formats and protocols.
- System Upgrades: Accelerating upgrades of ATM systems to support AIDC implementation.

2.6 The meeting may wish to note the following recommendations:

- The ICAO MID Office should facilitate the development of regional standards and guidelines for AIDC/OLDI implementation to ensure interoperability among different ATM systems in the MID Region.
- The ICAO MID office should work closely with APAC office to address regional-specific challenges and foster existing initiatives and best practices.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information within this Information Paper;
- b) note the challenges to the implementation of AIDC/OLDI within the MID Region, including the interoperability challenges between the systems, particularly at the interfaces of the MID Regions; and
- c) encourage States to implement AIDC/OLDI to enhance the safety

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