

International Civil Aviation Organization

MIDANPIRG/17 and RASG-MID/7 Meeting

(Cairo, Egypt, 15 – 18 April 2019)

Agenda Item 6.2: Air Navigation Planning and Implementation

COLLABORATIVE OPERATIONAL ENHANCEMENT MEETING OUTCOME (India/Oman/UAE/IATA)

(Presented by the United Arab Emirates)

SUMMARY

The purpose of this working paper is to share the outcome of the Regional meeting that was hosted by the UAE General Civil Authority in Abu Dhabi on the 28th of February 2019, between Airports Authority of India, Oman Public Authority for Civil Aviation, UAE General Civil Aviation Authority and International Air Transport Association to discuss and collaborate on operational enhancements over the Arabian Sea and the Indian Ocean.

Actions by the meeting are at paragraph 3.

1. Introduction

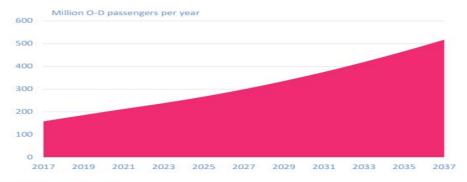
- 1.1 The main objectives of the meeting that was hosted by the UAE General Civil Aviation Authority were:
 - a) To discuss common ATM challenges and ways of collaboration in order to solve and improve air traffic flow over the Arabian Sea/Indian Ocean.
 - b) To provide collaboration opportunities to ATS providers and airspace users over the Arabian Sea/Indian Ocean.
 - c) To ensure that future traffic growth is sustainable and demand is accommodated.

2. DISCUSSIONS

- 2.1 The IATA Regional Director demonstrated and presented the following issues over the Arabian Sea/Indian Ocean, highlighting some of the ATM challenges that the Middle East and Asia Pacific (MID/APAC) Regions are facing.
 - a) the MID/APAC is experiencing significant challenges due to surging traffic demand;

b) the Middle East will have a Compound Annual Growth of 4.4% and the passenger market share of India will be 501 million by 2037; to cater for this growth, there are at least 1000 more aircraft on order;

Figure 37: India's forecast air passenger demand, 2017-37



Source: IATA/TE

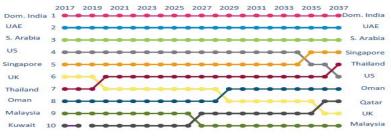
in terms of cargo, the MID/APAC Regions contain two airports in each Region which
are within the global top ten airports that have the highest growth rate of cargo
movements by volume; and



Source: ACI, IATA WATS

d) the traffic generated from/to the UAE and transiting via the Arabian Sea/Indian Ocean maintains steady growth and is number one with regards to international market share while traffic between India and Oman is on the rise.

Top 10 Indian air transport markets, 2017-37



Source: IATA/TE

2.2 Enabling Solutions/Proposals:

- a) **Performance Based Navigation (PBN)**: It is one of the major enablers and States need to align their activities in line with global and regional targets. The timeline needs to be aligned with GANP and GASP. The required aircraft equipage needs to be set with realistic timelines;
- b) **Performance-Based Communication and Surveillance (PBCS)**: Its requirements will complement the specifications for RNAV 4 application. The RNAV status over the Indian Ocean vary from one FIR to the other, for example, Mumbai and Chennai FIRs are RNP 10 with 50NM lateral separation and is open for improvement;
- c) Introduction of By-pass Routes: i.e. to deviate from the planned route in the en-route phase of the flight and take an alternative route to achieve optimum flight levels and then resume the planned route. The concept can be tried over the Arabian/Indian Sea; and
- d) **Segregation of CPDLC and non-CPDLC equipped aircraft**: This will reduce congestion and will pave the way for "Most capable best-served" principle.

2.3 **ATM Enhancement Initiatives**:

- 2.3.1 In order to increase efficiency and enhance safety, the following ATM enhancement initiatives were presented by Airports Authority on India (AAI):
 - enhancement of the ATM system to indicate overdue flights;
 - inclusion of further Radar and ADS-B/C data into the ATM system;
 - improve the radio communications coverage;
 - surveillance data exchange between ANSPs;
 - establishing an ATS Inter-facility Data Communications (AIDC) between ANSPs; and
 - PBN enhancement/upgrade in Mumbai FIR.
- 2.3.2 These enhancements will increase the Communication/Surveillance coverage, and consequently will allow the application of 30NM longitudinal separation on ATS routes L301/L639 increasing the availability of optimum flight levels for eastbound and westbound flights and improve safety and efficiency.
- 2.3.3 Oman PACA pointed out the initiative to establish AIDC with Karachi and Mumbai FIRs and the addition of direct circuit hotlines and communication lines between Muscat and Mumbai ACCs.
- 2.3.4 The participants stressed the need to identify the technical and operational challenges and to address them accordingly. IATA will be responsible to prepare an ATM enhancement proposal, including all such information that will enable authorities of India and Oman to properly assess the implementation requirements.
- 2.3.5 The UAE GCAA announced the initiative to implement an ATC Supervisors knowledge sharing programme that will include participants from UAE GCAA, Oman PACA and Airport Authority of India, the first of which will be held at GCAA Sheikh Zayed Air Navigation Centre during June 2019.

2.3.6 The discussions were concluded by seven agreed actions aiming at enhancing the Air Traffic Management efficiency and safety. All actions were circulated to all concerned in a MoM with reference GCAA/ANS/46220/0279 sent on the 12th of March 2019. IATA was assigned to carry out the coordination and implementation monitoring of the agreed actions with the concerned States.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note UAE's appreciation to India, Oman, IATA and Abu Dhabi Department of Transport for their active participation, effective discussions, willingness and commitment to enhance collaboration on resolving ATM issues over the Arabian Sea/Indian Ocean;
 - b) take note of the contents of this working paper;
 - c) request IATA to monitor the implementation of the agreed actions; and
 - d) task ATM sub-group to identify ATM priority areas and establish focus group(s) composed of the concerned States to study and resolve the identified concerns.