12th Meeting of Arabian Sea-Indian Ocean ATS Coordination Group ASIOACG/12) & 8th Meeting of Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE/8)
New Delhi, India, 20 - 21 September 2017

AGENDA ITEM 9: Summary of Outcomes of BOBASIO, ASIOACG, ATM SG &Other MeetingsAffecting APAC/MID East/AFI Regions (e.g. Meetings of CANSO, ICAO,IATA etc.)

SUMMARY OF OUTCOMES OF THE TWO AAMA-SCM MEETINGS

(Presented by Secretariat)

SUMMARY

The paper provides brief summary of outcomes of the two Africa, Mid Asia, Asia– Special Coordination Meeting (AAMA-SCM) held in the month of January at Mumbai, India and then subsequently in the month of May at Cairo, Egypt.

1. INTRODUCTION

1.1 The African Region (AFI)-Asia/Pacific Region (APAC)-Middle East Region (MID)Air Traffic Management (ATM) Special Coordination Meeting (AAMA/SCM) was invited by ICAO APAC Office and was hosted by Airports Authority of India at Mumbai on 19th and 20th January 2017.

1.2 A subsequent AAMA-SCM meeting was invited by and hosted by ICAO MID Office in Cairo on 21st May 2017.

2. DISCUSSION

2.1 The first AAMA-SCM meeting was attended by 45 participants from four States and three InternationalOrganizations, including India, Kenya, Somalia, Seychelles, IATA, ICCAIA and ICAO. Mr. Len Wicks, Regional Officer - Air Traffic Management (ATM), ICAO Asia andPacific (APAC) Office, Mr. Elie El Khoury, Regional Officer - ATM, ICAO Middle East (MID)Office, and Mr. Seboseso Machobane, Regional Officer - ATM and Search and Rescue (SAR), ICAO Eastern and Southern African Office moderated the meeting. They were supported by Mr. Mike Boyd, ICAO Technical Officer, ICAO HQ (ANB/AMO).

2.2 The AAMA-SCM had been called primarily to discuss and plan about the serious ATM safety issues in Mogadishu FIR. The ICAO APAC Office presented relevant information from the Twenty-First Meetingof the Regional Airspace Safety Monitoring Advisory Group (RASMAG/21, Bangkok, Thailand, 14-17 June 2016), which is the Asia/Pacific's airspace safety monitoring body under the Asia Pacific AirNavigation Planning and Implementation Regional Group (APANPIRG).

2.3 RASMAG/21 had noted that a new hot spot had emerged during 2015 along the westernboundary of the Mumbai FIR, which interfaced with the Mogadishu, Sana'a, and Muscat FIRs. Thesurge in long duration Large Height Deviations (LHDs) in March and April 2015 coincided with thetemporary closure

of Sana'a FIR and redirected contingency traffic through the Mogadishu FIR. However, even though the spike in LHDs had abated since the mid-2015 reopening of the Sana'a FIR, reports still indicated a continued poor safety performance on both FIR boundaries

2.4 The Monitoring Agency for the Asian Region (MAAR) had noted that all the longduration LHDs in the western portion of the Mumbai FIR had been as a result of ATC breakdowns incoordination between Mogadishu and Mumbai, or Muscat and Mumbai.

2.5 India (Bay of Bengal Arabian Sea Safety Monitoring Agency, BOBASMA) providedWP03, which highlighted the risk of inter-unit coordination errors as a result of human factors issues,reported by Mumbai ACC. WP03 requested urgent action to mitigate the effect of these errors byutilizing the latest communication and surveillance technology, which would enhance the trafficsituational awareness and thus reduce safety risks.

2.6 The ICAO Technical Cooperation Bureau (TCB) shared information on the Somalia project for provision of ANS in Mogadishu FIR through the Flight Information Service for Somalia (FISS) Project. This included planned ATM and Communications, Navigation and Surveillance (CNS) improvements, support for the establishment of a Somalian ANS regulatory capacity and a transition process to the Somalia government. Somalia acknowledged that there had been delays in the delivery of the project. Nevertheless, the Government of Somalia remained confident that TCB would achieve the agreedgoals. However, Somalia stated that the government was prepared to engage a private ANSP in order to discharge its responsibilities as a State.

2.7 In a presentation to the meeting, the ICAO TCB detailed the following risk mitigation measures that were in place (in addition to the urgent CNS facility upgrades):

- revision of the ATS Standard Operating Procedures to ensure personnel were using correct procedures and radiotelephony phraseologies, and enhanced coordination procedures between Mogadishu FIC with adjacent FIRs were applied;
- implementation of Strategic Lateral Offset Procedures (SLOP) for the entire Mogadishu FIR in accordance with APIRG Conclusion 17/43 – as updated by Conclusion 20/19;
- encouraging the use of SATCOM by all aircraft transiting the Mogadishu FIR with the capability of satellite communication as promulgated through NOTAMA0029/16, for portions of the airspace where communication was unavailable or toopoor to support effective ATS;
- publication of NOTAM A0055/16 recognizing the fact that Mogadishu FIR is classG airspace where only Flight Information Services (FIS) is provided, and pilots areto maintain a high level of alertness when transiting through the Mogadishu FIRRVSM airspace and take appropriate action to ensure safety of flight by maintainingcontinuous listening watch on VHF emergency frequency 121.5 MHz and IFBPfrequency 126.9 MHz at all times;
- prompt investigation of reported Unsatisfactory Condition Reports (UCR) in orderto progress the investigation of air safety incidents and make further improvements;
- enhancement of Safety Management System (SMS) measures, AeronauticalInformation Management (AIM) and training with the appointments of SMS, AIMand Training Managers; and
- New staff being recruited for ATM and CNS supervision and quality assurance.

2.8 An LOA addendum for trails wherein FANS-1A capable aircraft would be asked to log on to Mumbai datalink system 30 minutes prior to crossing FIR boundary while still in Mogadishu FIR was

signed. FLAS would not be applicable to such flights. It was expected that this would serve the dual purpose of reduction in LHD's and better probability for flights to maintain optimum flight levels.

2.9 ICAO HQ provided WP09, which detailed considerations for a draft plan for'contingency' routes and procedures applicable to aircraft transiting the Mogadishu (HCSM) FIR. The draft was based on Annex 11 Attachment C, which emphasised the need for consideration of asimplified route network, FLAS and adjacent ACCs to establish longitudinal separation. An extensive discussion developed a draft simplified routing scheme and potentialapplication of FLAS if these measures were considered necessary to further reduce residual risk. ThePotential Mogadishu FIR Contingency Routing Scheme is detailed at **Appendix E** and **Appendix F** of the report of AAMA-SCM1.

2.10 The meeting also considered other issues including ATM system interface enhancement, new ATS routes and FLAS in Arabia Sea. AAI informed the meeting that FLAS has been practically removed from almost half the airspace. India stressed that LHDs due to coordination errors committed by FIRs adjacent to theMumbai FIR introduced an unacceptable level of risk within Indian oceanic airspace and therefore FLAS had been an important tool to maintain and improve safety. India urged the meeting to address the following improvements before the removal of FLAS:

a) Communications – enhance AIDC facilities and establish DSCs between Mumbaiand neighbouring States;

b) Equipage – mandate carriage of ADS-C/CPDLC by all aircraft using Arabian Seaairspace;

c) SATCOM – consider use of SATCOM for position reporting to Mumbai ACC(Mumbai is equipped but few flights used this communication facility for positionreporting); and

d) Space-based ADS-B – examine the feasibility of exploiting this technology for future seamless surveillance of the oceanic airspace.

2.10 AAI affirmed their readiness to consider a revision of levels reserved for eastbound flights from the AFI region in collaboration with stakeholders (AAI had proposed FL340/350 insteadof FL330/320).

2.11 The purpose of the AAMA SCM meeting at Cairo was to review the work undertaken by earlier meeting of AAMA-SCM held at Mumbai in January 2017 and to discuss coordination, safety and efficiency issues at Mumbai/Muscat, Mumbai/Sana and Mumbai/Mogadishu interface. The meeting was attended by Oman, India, Aden FIR-Yemen and Sana, Somalia, MID-RMA and ICAO officers. Coordination issues, LHDs, Traffic Flows, Reduced Longitudinal Separations, AIDC implementation, Proposals for new routes, system enhancement, sectorisation plans, AIDC implementation, surveillance/communication coverage were discussed between representatives of Oman and India.

2.12 The reported LHDs at Muscat Mumbai FIR boundary and the concerns over it were discussed in details. Oman and India informed the meeting about steps initiated for reducing the LHDs,

i) Sectorisation: Oman informed the meeting that an additional sector has been created in Muscat FIR at Mumbai/Muscat FIR boundary. AAI also informed that they have planned for additional sector in oceanic airspace. The ATM automation system has been upgraded to support the sectorisation plan. The trials for four sectors in oceanic airspace of Mumbai are in progress and by September 2017 with enhancement in human resources, four sectors in oceanic airspace will be operational round the clock.

ii) Communication Channels: The need for additional voice communication channels for the additional sectors was also discussed. Oman representatives opined that instead of another leased line if the current 64KB line is upgraded to 128 KB line it would serve the purpose. Both Oman and India agreed to discuss this issue in-house and then decide upon the plan for additional voice communication channel between Mumbai and Muscat FIRs.

iii) LHD TF: Oman informed the meeting a LHD taskforce has been formed in Muscat FIR with an objective to scrutinize LHDs and reduce the number of LHDs occurring. AAI stated that a similar LHD Task Force will be formed in Mumbai FIR also. The two TF can maintain close liaison and work together for reducing the number of LHDs at Muscat/Mumbai FIR boundary.

iv) Scrutiny Group: Mid RMA raised the issue that there is an absence of a formal scrutiny group and hence the report of APAC RMA MAAR have not been scrutinised. The MID RMA emphasised the need for a formal scrutiny group to study the LHDs. Indian representatives reported that the requirement of a scrutiny group has been identified and the informal coordination group BOBASIO (Bay of Bengal Arabian Sea Indian Ocean Coordination group) has been identified as the scrutiny group. AAI representatives informed the meeting that they will advise Indian RMA BOBASMA to provide updates to MID RMA on this issue.

2.13 AAI requested Oman to consider change of FLAS level to FL350 instead of FL330 for crossing routes as requested by AFI FIRs and airlines. Most of the eastbound flights departing from Middle East may prefer FL330 as they enter Mumbai FIR shortly after departure, whereas flights coming from Africa prefer FL 350 as they enter Mumbai FIR after more than two/three hours of flying. Oman agreed in-principle with the proposal; however they would hold in-house discussions and also discussions with stakeholders before proceeding further

2.15 Various coordination issues were discussed at first in the meeting on 23rd May 2017. Somalia expressed satisfaction over the implementation of trial addendum signed in AAMA SCM meeting at Mumbai. It was stated that they endorse that the trials have been successful and would look forward to revision of LOA with inclusion of addendum in LOA. Sana expressed some concerns over time taken for passing estimates to Mumbai. AAI proposed that a new dedicated number would be made available at Mumbai OCC for SANA to pass estimates. The PfA for new RNP10 route was discussed. Sana expressed some concerns over the new route. As time was short the discussion could not be concluded. India and Mid ICAO will revisit the proposal for amicable solution.

3. ACTION BY THE MEETING

3.1 The meeting is invited to,

a) Note the information contained in the paper regarding Special Coordination Meetings; and

b) Note that the SCMs helped to conduct focussed discussions on and helped to arrive at decisions for improvements in interfaces.
