**SUMMARY**

This paper describes the activities and progress achieved on the implementation of SEIs and DIPS for the key safety focus areas identified by the Annual Safety Report Team (ASRT) report edition 4 namely; Runway Safety (RS), Loss of Control In Flight (LOC-I) and System/Component Failure or Malfunction (SCF).

Action by the meeting is at paragraph 3.

**REFERENCES**

- RSC/5 Report
- RASG-MID/5 Report
- RAST-MID/LOC-1/1,2/3

1. **INTRODUCTION**

1.1 The MID-RAST is one of three RASG-MID working groups, it has been established at the first meeting of the RASG–MID Steering Committee (RSC/1) held in Cairo in 18-20 June, 2012 and is responsible for identifying and developing Safety Enhancement Initiatives (SEIs) and associated DIPS for each of the three top risk areas identified by the fourth annual safety report that includes: Runway safety, Loss of Control In-Flight (LOC-I) and the System Component Failure or Malfunction (SCF).

2. **DISCUSSION**

2.1 MID –RAST has been following the progress of the approved DIPs and providing support to DIP champions.

2.2 MID-RAST, as a data-driven team, is utilizing the RASG-MID Annual Safety Report and statistical data to support the development of related SEIs/DIPS for the identified focus areas.
Runway Safety (RS)

2.3 Runway Safety (RS) DIPs status update will be covered by a separate working paper.

LOC-I

2.4 LOC-I was identified as a high risk category for MID Region to be addressed within the framework of Reginal Aviation Safety Group-Middle East (RASG-MID) due to its high non-survivability.

2.5 Three Safety Advisories (SAs) released by ICAO MID Regional office as a result of safety enhancement Initiatives launched by RASG-MID to reduce the risk of loss-of-control accidents. These advisories are distributed to MID States authorities for follow up with airlines registered in their respective countries:

   a. RSA 09 - Airplane States Awareness (ASA) - Low Speed Alerting. To improve flight crew awareness of low airspeed, manufacturers should develop and regulators should ensure implementation of systems that alerts flight crews when airplane reaches its minimum maneuvering speed. Airline operators to incorporate existing service bulletins from manufacturers that provides low speed alert functionality.

   b. RSA 07 - Standard Operating Procedures Effectiveness and Adherence. To ensure that all airline operators publish and enforce clear, concise and accurate flight crew Standard Operating Procedures (SOPs) to reduce the risk of LOC-I accidents.

   c. RSA 08 - Airplane States Awareness (ASA) - Training - Flight Crew training (Approach to Stall & Up Set Recovery) Verification and Validation. To improve flight crew proficiency in handling issues that can lead to loss of Airplane State Awareness (ASA). Airline operators should review, incorporate, and adopt the best practices with regards to upset prevention and recovery training and to comply with ICAO Amendment 38 to Annex 6 (operations of aircraft) to include upset prevention and recovery training.

2.6 IATA MENA office circulated the three advisories to MID member airlines (per e mail dated 23 August 2016). A second reminder send to MID member airlines on 4 October 2016 requesting them to provide an update on action or planned action to implement the recommendations of the safety advisories.

2.7 Five responses received from member airlines. Three airlines already implemented all the recommended practices referenced in the Safety Advisories. They did evaluate the effectiveness of implementation after receiving the Safety advisories recommendations, and they confirmed the full implementation and satisfactory effectiveness of the recommendations.

2.8 The other two airlines are in process of developing and implementing the recommendations of the Safety Advisories.

2.9 Two State Authorities amended the regulations to include the UPTR requirements per ICAO amendment 38 to Annex 6.

2.10 IATA will continue the efforts to get the status of the implementations of the safety advisories from the MID Region member airlines.
2.11 The status of the progress achieved on DIPs RAST-MID/LOC-I/1, RAST-MID/LOC-I/2 and RAST-MID/LOC-I/3 is at Appendix A.

**CIFT**

2.12 The DIP related to CIFT addresses the implementation of BPN Approach procedures to all runways not currently served by precision approach procedures. The status of the implementation is at Appendix B. Two PBN procedures implemented in Ras Al Khaima (UAE) and Najaf (Iraq) airports.

2.13 The RNAV approach procedures for OIMM (Mashad) and OISS (Shiraz) are designed by the related department in Iranian Airport Company (IAC). The procedures checked in Emirates Airlines simulators and pending flight verification by Civil Aviation Organization (CAO) of Iran. The procedures are expected to be published during September 2017.

**System Component Failure or Malfunction (SCF)**

2.14 RASG-MID /5 agreed that SCF-PP and SCF-NP be combined into one risk area (SCF). In addition, since only one CIFT accident occurred in the last five years which would not be considered anymore as one of the focus areas but rather as an emerging risk.

2.15 Based on the recommendation of RASG-MID/5 meeting, Boeing as a champion with was requested to develop new SEI and DIP to address the System Component Failure (SCF).

2.16 Boeing after coordination with Embraer could not substantiate and justify the development of SEI due to lack of data for the MID Region.

2.17 During the RSC/5 meeting IATA was requested to clarify the data related to In-flight Damage (IFD), which is considered as SCF according to the GSIE Harmonized Accident Categories, in order to support harmonization of safety information and analysis and facilitate the development of appropriate SEI and DIPs.

2.18 According to the common list developed by ICAO and IATA using GSIE categories, the SCF-NP and SCF-PP are classified as In-flight Damage (IFD).

2.19 **IATA definition of In-flight Damage (IFD)** is the damage occurring while airborne, including: **Weather-related events, technical failures, bird strikes and fire/smoke/fumes**

2.20 The meeting may wish to note that a total of four (4) accidents related to in-flight damage occurred in MID Region between the period 2012 and 2016 with top contributing threat factors of Aircraft Malfunction 39%; Wildlife/Birds/Foreign Object 27%; Fire/Smoke (Cockpit/Cabin/Cargo) 18% and Extensive / Uncontained Engine Failure 15%. Further analysis will be conducted to determine the required action/recommendations to address the identified contributing threat factors.

**RAST Activities**

2.21 RSC-5 meeting discussed the RAST activities and requested the RAST Rapporteur to organize a telephone conference with the RASG-MID Core Team.
2.22 A teleconference was organized on 8 May 2017, with the objective to discuss the current RAST activities. It was noted that IATA and Boeing were the only contributors to the RAST; active participation by all stakeholders is sought in order to complete the assigned SEI/DIPs. A Summary of the Teleconference is at Appendix C.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information in this working paper;

b) urge stakeholders to actively participate in MID-RAST, core activity; and

c) assign a champion to develop SEI/DIPs for the SCF Focus Area.
## LOC-I DIPs Status

<table>
<thead>
<tr>
<th>DIP</th>
<th>Description</th>
<th>Output</th>
<th>Deadline</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOC-I/1</td>
<td>Airplane State awareness (ASA)-Low airspeed alerting</td>
<td>1. Consulted with airframe manufacturers on status of mod on aircraft.</td>
<td>29 Sept. 2016</td>
<td>1 &amp; 2 Completed</td>
<td>1. Safety advisory RSA 09 issued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Track implementation</td>
<td></td>
<td>On going</td>
<td></td>
</tr>
<tr>
<td>LOC-I/2</td>
<td>Standard Operating Procedures effectiveness and adherence</td>
<td>1. Ensure Air Carriers SOPs updated.</td>
<td>31 Jan. 2016</td>
<td>Completed</td>
<td>Safety advisory RSA 07 issued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Assessments by air carriers to determine level of adherence current</td>
<td>31 March 2017</td>
<td>On going</td>
<td></td>
</tr>
<tr>
<td>LOC-I/3</td>
<td>ASA-Training-Flight Crew Training Verification and Validation</td>
<td>1. IATA to organize a seminar to promote and roll-out LOC-I programme</td>
<td>30 June 2016</td>
<td>Completed</td>
<td>1. LOC-I Seminar organized 3 March 2016 in Dubai</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Air carrier standard operating procedures (SOP) reviewed, and updated</td>
<td></td>
<td>Completed</td>
<td>2. Safety advisory RSA 08 issued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>as needed,</td>
<td></td>
<td>On going</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Track implementation</td>
<td>31 July 2018</td>
<td></td>
<td>3. Provided advanced maneuvers manual to MENA air operators</td>
</tr>
</tbody>
</table>
## CIFT DIP Status

<table>
<thead>
<tr>
<th>DIP</th>
<th>Description</th>
<th>Output</th>
<th>Deadline</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
</table>
| CIFIT/1 | The implementation of BPN Approach procedures to all runways not currently served by precision approach procedures | 1. Identify and prioritize the airports/runways which require specific PBN approaches.  
2. Concerned States, CANSO, IATA and ICAO to establish a Work Force to develop an appropriate detailed action plan for the implementation of PBN approaches at the identified airports/runways.  
3. Implementation of PBN approach procedures at the identified airports/runways in accordance with their associated action plans. | Long Term | 1. Completed  | Runway priorities  
1. OMRK 16/34 (Completed)  
2. OIMM 13 (in progress)  
3. OISS 11/29 (in progress)  
4. HEBA 14  
5. ORMM 14/32 (in progress)  
6. ORNI 10 (Completed) | 2. on going  
3. on going |
RAST Activities Teleconference, 8 May 2017

Attendance:
Mohammad Faisal Al Dossari-Director Air Navigation and Aerodromes/UAE
Jehad Faqir -Deputy Regional Director Safety and Flight; Operations, MENA; IATA
Mashhor Alblowi, Regional Officer, Flight Safety (FLS); ICAO
Rose Al OSTA - Manager, Safety & Flight Operations Africa & Middle East; IATA

Duration: 35 minutes.

Summary of Discussions:
• Jehad /IATA updated the group on the latest developments of RAST activities, the implementation of DIPs LOC-I (progressing well); CIFT DIP (development of RNAV approach procedures. (OIMM; OISS; HEBA and ORMM) is not progressing) .Reminders sent to Egypt and Iran to provide progress on developments of the procedures. ICAO support is required.
  o DRD indicated that the contribution from stakeholders is limited and the support needed to sustain the RAST activities.
  o RGS part of RAST is moving forward and achieving results; thanks to the lead of UAE and support of Egypt and Sudan.
  o Need to find champion to undertake the developments of SEI/DIPs to cover the SCF.

• Mr. Dossari/UAE
  o Provided an update on RGS activities. All recommended DIPs actioned or in progress. Safety advisories covering Safeguarding tool kit and Laser attacks; published. The wild life tool kit draft advisory sent to ICAO for further processing and publication- ICAO to follow-up
  o Asked to consider means to ensure implementation of the published RSAs.
  o Go team activities and planned visit to Doha Cancelled in absence of AGA expert to follow up with targeted airports. Mashhor/ ICAO advised that Mrs. Nawal Hadi was hired for a limited period to support AGA activities in MID office in absence of AGA regional officer.
  o Advised that Safeguarding WS is scheduled in December and will be hosted by Egypt. The WS will be supported by SM experts from UAE, Lebanon and Egypt) .The exact venue will be advised on a later date.
  o UAE is ready to support the development and implementation of SEI to address RPAS .RAST rapporteur to follow-up with Bahrain
  o Supported the idea to hold limited informal meeting of RASG/RAST the core team before the next meeting RASG. Mashhor/ICAO will consult with RD and provide feedback.

• Mr. Mashhor/ICAO
  o Reminded that the global activities on LOC-I & CIFT should always be addressed by RAST and not to consider developments of new DIPs.
  o More efforts needed to address the emerging risks.
  o Indicated no progress would be achieved to address Near Mid Air Collision (NMAC) tasked to AIA. Need to find an alternate champion.

• Ms. Rose / IATA .Requested to approach Chamsou/Boeing to provide a replacement to support the RAST activities.

I would like to thank the participants for their valuable contribution