

International Civil Aviation Organization

## **Aerodrome Certification Implementation Task Force** (ADCI TF)

Second Meeting (Doha, Qatar, 12 – 14 May 2013)

### **Agenda Item 3:** Aerodromes Certification Requirement

#### OUTCOME OF THE FIRST MID SAFETY SUMMIT

(Presented by the Secretariat)

#### **SUMMARY**

This paper provides an overview of the outcomes of the Middle East Safety Summit (MID Safety Summit) which was held in Bahrain on 28-30 April 2013. The MID Safety Summit recommended a MID Safety Strategy draft that needs to be considered in various aviation areas. The paper focuses on actions that are related to the Aerodromes Certification.

Action by the meeting is at paragraph 3.

#### REFERENCES

- MID Safety Summit, Bahrain 2013
- RASG MID/2 Report

#### 1. Introduction

- 1.1 To ensure that continuous Safety Improvement, ICAO has developed a strategic approach that links and measures progress in both areas under complementary frameworks. This supports States and stakeholders in realizing the safe sustained growth and increased efficiency that societies and economies globally now require.
- 1.2 This strategic approach for improving safety and efficiency is reflected in the newly amended ICAO Global Aviation Safety Plan (GASP) as well as in its companion document, the ICAO Global Air Navigation Plan (GANP). These Global Plans jointly form a harmonized and interdependent framework to improve safety as well as Air Navigation Performance.
- 1.3 The Second Meeting of the Middle East Regional Aviation Safety Group (RASG-MID/2) held in Abu Dhabi, UAE, from 12 to 14 November 2012, agreed that a MID Region Safety Summit be organized on annual basis, under the framework of RASG-MID, to address Regional Aviation Safety concerns and focus on Regional Safety initiatives.

#### 2. DISCUSSION

- 2.1 In partnership with ICAO, IATA has organized the First MID Region Safety Summit which was hosted by Bahrain Civil Authority in Bahrain on 28-29 May 2013. The third day (30 April) was reserved to a RASG-MID Steering Committee (RSC) and High Level Meeting.
- 2.2 The first day included on Welcome opening, the Annual Safety Report, RASG activities, and Developing a Regional Safety Strategy.
- 2.3 The second day included four Break Out sessions on: How to enhance Runway Safety, Fatigue Risk Management, Performance Management & Safety, and Loss of Control (LOC-I) mitigation and prevention.
- 2.4 Based on the Break Out sessions and group discussions, the MID Region Safety Strategy Draft has been prepared as in **Appendix A** to this working paper. The draft included a target for MID Region Aerodrome Certification as follows:
  - a) 50% of the International Aerodromes certified by the end of 2015
  - b) 80% of the International Aerodromes certified by the end of 2016
- 2.5 The strategy has also included actions to reduce Runway Safety hazards as can be noted in **Appendix A** to this working paper.

#### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the information included in this working paper;
  - b) support the action plans and objectives of the MID Safety Strategy; and
  - c) consider Safety Strategy targets among the ADCI TF activities.

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## APPENDIX A



# **MID Region Safety Strategy**

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## **MID Region Safety Strategy**

## **Strategic Safety Objective:**

Continuous improvement of aviation safety through a progressive reduction of the number of accidents and related fatalities in the MID Region to be in line with the global average, based on reactive, proactive and predictive safety management practices.

## **Safety Objectives:**

States and regions must focus on their safety priorities as they continue to foster expansion of their air transport sectors.

The ICAO Global Aviation Safety Plan (GASP) establishes targeted safety objectives and initiatives while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.

The GASP includes a framework comprised of measurable objectives, supported by Safety Performance Areas and associated safety initiatives.

The MID Region safety objectives are in line with the global safety objectives and address specific safety risks identified within the framework of the Middle East Regional Aviation Safety Group (RASG-MID), based on the analysis of available safety data.

The enhancement of communication and information exchange between aviation Stakeholders and their active collaboration under the framework of RASG-MID would help achieving the MID Region safety objectives in an expeditious manner.

## *Near-term Objective* (2017):

In the near term, States will ensure that they have the resources as well as the legal, regulatory and organizational structures necessary to fulfill their safety oversight obligations and in collaboration with all stakeholders achieve the following near-term objectives:

- all MID States should establish an effective safety oversight system and progressively increase the USOAP-CMA Effective Implementation (EI) score with a baseline of 60% for all States by 2017, through, mainly the reinforcement of the entities responsible to carry out regulatory and safety oversight functions with qualified and trained technical staff, and/or the delegation of certain safety oversight functions to a Regional Safety Oversight Organization (RSOO):
- reduce Runway Excursions and Incursions accidents in the MID Region by 50% by 2017, through establishment and activation of Runway Safety Teams (RST's), Aerodromes Crtification, and implementation of Airport Safety Managmennt System (SMS);
- reduce In-flight Damage accidents in the MID Region by 50% by 2017, through the development of regional guidance, and awareness training;
- reduce Loss Of Control In-flight (LOC-I) related accidents in the MID Region by 50% by 2017, through appropriate Standard Operating Procedures (SOPs) related to mode awareness and energy state management, and Advance Manoeuvers Training;
- maintain the rate of Controlled Flight Into Terrain related accidents in the MID Region below the global rate, through pilot training, use of Fatigue Risk Management Systems (FRMS) framework, and implementation of PBN; and

States with an effective safety oversight score (EI) over 60% proceed to fully implement SSP following a phased approach supported by high-level management with the availability of necessary resources and safety promotion through the provision of appropriate training, communication and dissemination of safety information and improvement of the safety culture.

## Mid-term Objective (2022):

The mid-term objective is to achieve full implementation of State Safety Programme (SSP) by States and Safety Management Systems (SMS) by concerned service providers (namely air navigation service providers, airlines, airports and other aviation stakeholders) to facilitate the proactive management of safety risks. The mid-term objective therefore represents the evolution from a purely compliance-based oversight approach to one which proactively manages risks through the identification and control of existing or emerging safety issues. In addition, service providers will strive to gain safety benefits from the common implementation of the different modules of the Aviation System Block Upgrades (ASBUs). The target implementation date for the mid-term objective is 2022.

## Long-term Objective (2027):

The focus of the long-term objective is the implementation of proactive and predictive systems that ensure safety in a real-time, collaborative decision-making environment. Sustainable growth of the international aviation system will require the introduction of advanced safety capabilities (e.g. full trajectory-based operations) that increase capacity while maintaining or enhancing operational safety margins and manage existing and emerging risks. The long-term safety objective is intended to support a collaborative decision making environment characterized by increased automation and the integration of advanced technologies on the ground and in the air, as contained in ICAO's Aviation System Block Upgrades (ASBUs) strategy. The target implementation date for the long-term objectives is 2027.

## **Measuring and monitoring Safety Performance:**

The monitoring of safety performance and its enhancement is achieved through identification of relevant Safety Metrics and Indicators as well as the adoption and attainment of Aviation safety Targets.

The following are the MID Region Safety Metrics endorsed for the monitoring of safety performance:

- 1) Accidents and serious incidents;
- 2) Runway and Ground Safety (RGS);
- 3) In-Flight Damage (IFD)
- 4) Loss of Control In-Flight (LOC-I);
- 5) Controlled Flight Into Terrain (CFIT);
- 6) Safety oversight capabilities (USOAP-CMA, IOSA and ISAGO);
- 7) Aerodrome Certification; and

The MID Region Safety Indicators and Safety Targets are detailed in the Table below:



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	Metric Safety Indicator Safety Target		Action Plan	
1	Accidents and serious incidents	Number of accidents per million departures	Progressively reduce the accident rate to be in line with the global average by the end of 2017.	
		Number of fatal accidents per million departures	Progressively reduce the rate of fatal accidents to be in line with the global average by the end of 2017.	
2	Runway and Ground Safety (RGS)	Number of Runway excursion related accidents as a percentage of all accidents	Reduce Runway Excursions related accidents by 50% by the end of 2017	
		Number of Runway incursion related accidents as a percentage of all accidents	Reduce Runway Incursions related accidents by 50% by the end of 2017	
3	In-Flight Damage (IFD)	Number of In-flight Damage related accidents as a percentage of all accidents	Reduce In-flight Damage related accidents by 50% by the end of 2017	
4	Loss of Control In-Flight (LOC-I)	Number of LOC-I related accidents as a percentage of all accidents	Reduce LOC-I related accidents by 50% by the end of 2017	
5	Controlled Flight Into Terrain (CFIT)	Number of CFIT related accidents as a percentage of all accidents	Maintain CFIT related accidents below the global rate	
6	Safety oversight	USOAP-CMA Effective	Progressively increase the USOAP-CMA EI	- Availability of sufficient number of

	capabilities (USOAP-CMA, IOSA and ISAGO)	Implementation (EI) results:  a. Number of States with an EI score less than 60% for more than 2 areas (LEG, ORG, PEL, OPS, AIR, AIG, ANS and AGA)  b. Number of States with an overall EI over 60%  Number of Significant Safety Concerns	a. Max 3 States with an EI score less than 60% for more than 2 areas (i.e. Min 12 States having at least 60% EI for 6 out of the 8 areas) and an overall EI over 60%, by the end of 2015; and b. all the 15 MID States to have at least 60% EI by the end of 2016.  a. States resolve identified Significant Safety Concerns as a matter of urgency and in any case within 12 months from their identification  b. No significant Safety Concern by end of 2016	qualified and trained technical staff, to carry out regulatory and safety oversight functions in an effective manner;  - Establishment of Regional Safety Oversight Organization(s) (RSOOs) to enhance safety oversight capabilities of member States;  - ICAO assistance to States through the organization of Continuous Monitoring Approach (CMA) Workshops, mission to States, etc.
		Number of MID airlines certified according to IATA Operational Safety Audit (IOSA), as a percentage of all airlines	Require all airlines with an Air Operator Certificated issued by a MID State to obtain an IATA Operational Safety Audit (IOSA) certification: a. 50% of the MID airlines to be certified IATA-IOSA by the end of 2015 b. all MID airlines to be certified IATA-IOSA by the end of 2016	
		Number of Ground Handling service providers in the MID Region having the IATA Safety Audit for Ground Operations (ISAGO) certification, as a percentage of all Ground Handling service providers	<ul> <li>a. 50% of the Ground Handling service providers to be certified IATA-ISAGO by the end of 2015</li> <li>b. all Ground Handling service providers to be certified IATA-ISAGO by the end of 2016</li> </ul>	
7	Aerodrome Certification	Number of certified international aerodrome as a percentage of all international aerodromes in the MID Region	<ul> <li>a. 50% of the international aerodromes certified by the end of 2015</li> <li>b. 80% of the international aerodromes</li> </ul>	

			certified by the end of 2016	
8	SSP/SMS Implementation	Number of States having completed implementation of SSP Phase 1  Number of States having completed implementation of SSP Phase 2  Number of States having completed implementation of SSP Phase 3	a. 5 States by the end of 2014; b. 10 States by the end of 2015; and c. all the 15 MID States by the end of 2016.  a. 5 States by the end of 2016; and c. all the 15 MID States by the end of 2017.  a. 5 States by the end of 2016; b. 10 States by the end of 2017; and c. all the 15 MID States by the end of 2018.	<ul> <li>Improvement of safety culture;</li> <li>Establishment of effective reporting systems which include mandatory and voluntary reporting systems;</li> <li>Safety training and awareness (SSP, SMS, etc), including high-level management safety briefings;</li> <li>Internal &amp; external communication and dissemination of safety information;</li> <li>Sharing of safety data at national and regional level;</li> <li>Sharing of best practices;</li> <li>ICAO SSP, SMS and ECCAIRS trainings, including CBT;</li> <li>Regional Seminars and Workshops on safety management (SSP/SMS, Annex 19, etc);</li> <li>Establishment of Regional Safety Oversight Organization(s) (RSOO) to assist States in the implementation of SSP in an expeditious manner.</li> </ul>
		Number of Service Providers having completed implementation of SMS Phase 1, as a percentage of all service providers required to implement SMS  Number of Service Providers having completed implementation	<ul> <li>a. 40% of the service providers having completed implementation of SMS Phase 1 by the end of 2014;</li> <li>b. 75% of the service providers having completed implementation of SMS Phase 1 by the end of 2015; and</li> <li>c. all the service providers having completed implementation of SMS Phase 1 by the end of 2016</li> <li>a. 40% of the service providers having completed implementation of SMS Phase 2 by the end of 2015;</li> </ul>	<ul> <li>Improvement of safety culture;</li> <li>Establishment of effective reporting systems which include mandatory and voluntary reporting systems;</li> <li>Safety training and awareness (SSP, SMS, etc), including high-level management safety briefings;</li> <li>Internal &amp; external communication and dissemination of safety information;</li> <li>Sharing of safety data at national and regional level;</li> </ul>

of SMS Phase 2, as a percentage of all service providers required to implement SMS	b. c.	75% of the service providers having completed implementation of SMS Phase 2 by the end of 2016; and all the service providers having completed implementation of SMS Phase 2 by the end of 2016	-	ICAO SSP, SMS and ECCAIRS trainings, including CBT; Regional Seminars and Workshops on safety management (SSP/SMS, Annex 19, etc).
Number of Service Providers having completed implementation of SMS Phase 3, as a percentage of all service providers required to implement SMS.	a. b. c.	40% of the service providers having completed implementation of SMS Phase 3 by the end of 2016; 75% of the service providers having completed implementation of SMS Phase 3 by the end of 2017; and all the service providers having completed implementation of SMS Phase 3 by the end of 2018		

\*Note: The different phases of implementation of SSP and SMS as defined in the Safety Management Manual (Doc 9859)

#### APPENDIX A

## **Action Plans:**

RASG-MID through its activities under the various safety teams will continue to develop, update and monitor the implementation of Action Plans to achieve the safety targets.

A progress report on the implementation of the Action Plans and achieved targets will be presented to the MID Safety Summit.

#### **Governance:**

The MID Region Safety Strategy is to be endorsed by the MID States' Directors General of Civil Aviation.

The MID Region Safety Strategy will guide the work of RASG-MID and all its member States and partners.

The RASG-MID will be the governing body responsible for the review and update of the Strategy, as deemed necessary.

Progress on the implementation of the MID Region Safety Strategy and the achievement of the agreed Safety Targets will be reported to the ICAO Air navigation Commission (ANC), through the review of the RASG-MID reports; and to the stakeholders in the Region during the MID Region Safety Summits.

