Agenda Item 6:   ATM Safety Matters

CANSO INITIATIVE FOR CHAMPIONING A SAFETY ENHANCEMENT IMPLEMENTATION RELATED TO SMS IMPLEMENTATION FOR ATM

(Presented by Civil Air Navigation Services Organization (CANSO))

### SUMMARY

This paper presents the CANSO Safety initiative for championing a safety enhancement implementation (SEI) related to SMS implementation for ATM.

Action by the meeting is at paragraph 8.

### REFERENCES

- CANSO Website : https://www.canso.org/safety
- MIDANPIRG/16
- MID-SST/1
- RASG-MID/2
- RASG-MID/5
- RSC/4
- RSC/5

1. INTRODUCTION

1.1 Among the RASG-MID objectives is to enhance safety in the MID Region; ensure that all safety activities at the regional and sub-regional level are properly coordinated to avoid duplication of efforts; encourage/ensure effective coordination and cooperation between all stakeholders; and encourage resource sharing.

1.2 RASG-MID encouraged the engagement of states and stakeholders enabling them to have a platform to voice tier issues and concerns; take part in the decision making process; and contribute as experts in their field.

1.3 The MID-SST was established by RASG-MID/2 in November 2012 to support the RASG-MID in the development and monitoring the implementation of the Safety Enhancement Initiatives (SEIs) related to important regional issues; to handle the identified safety issues not directly linked to the agreed focus areas such as Safety Management System.

1.4 RASG-MID/5 Meeting in May 2016 revised the MID-SST terms of reference and reflected a new way of doing business, with a focus on targeted assistance, sharing of expertise,
experience and best practices in order to agree on recommended actions and provide assistance related to the implementation of the Safety Enhancement Initiatives (SEIs).

2. **DISCUSSION**

2.2 **CANSO Championing a Safety Enhancement Implementation Plan Related to SMS Implementation for ATM**

2.2.1 **CANSO** – the Civil Air Navigation Services Organization – is the global voice of air traffic management. The Safety Standing Committee (SSC) oversees CANSO’s Safety Programme and aims to: continually improve safety performance in air traffic management (ATM) operations; further enhance safety management and culture among CANSO Members; and provide global leadership on safety management issues. CANSO’s safety work programme helps ANSPs improve safety through elements such as safety management systems, best practices and benchmarking, and the SEAN-Safety initiative.

2.2.2 **CANSO** through its safety workgroups SMS and Best Practices Workgroup (SMS and BPWG); Safety Performance Measurement Workgroup (SPMWG); Future Safety Development Workgroup (FSDWG); and Human Performance Management Task Force (HPMTF) provides advice to ANSPs on complying with existing or proposed regulations, and how to improve the way that ANSPs identify risks and manage safety. CANSO has produced guidance to standardize risk evaluations and assessments conducted by ANSPs. It also provides guidance and advice to ANSPs on developing their safety management system that is fully aligned with ICAO’s industry wide annex on safety management (Annex 19).

2.2.3 **CANSO** mission is supported by three ‘Pillars’ based on three core vision elements: being a strong partner; creating value for members and stakeholders; and optimizing the efficiency and effectiveness of the organization. Establishing strong partnership and collaboration with industry partners is essential to improving safety performance. CANSO cooperates with ICAO to exchange safety information on a whole range of safety issues; and with other partners across the industry to develop, launch and implement the CANSO runway safety initiative [www.cansosafety.com](http://www.cansosafety.com) to reduce unstable approaches and runway excursions; and with other stakeholders to develop guidelines on ensuring a just culture whereby ANSP staff can report potential incidents without fear of consequences.

2.2.4 **CANSO** Safety activities includes the Standard of Excellence in SMS, CANSO SMS Implementation Guide; CANSO Top Contributing Factors for IFR-IFR Loss of Separation (LOS) and Runway Incursions (RI) Survey; and SMS Maturity Survey.

3. **STATUS OF SAFETY ATM SAFETY MANAGEMENT SYSTEM IN THE MIDDLE EAST**

3.1 Air traffic management (ATM) faces many challenges including increasing traffic demand; the implementation of new technology; the growth in unmanned aircraft; increasing automation; and others. The ATM industry must address these while maintaining and improving safety. ATM related Safety activates are so limited in the Middle East. Safety implementation level varies from ANSP to another (depending on resources, human factors, and financial issues). SMS personnel from the ANSPs have limited participation in RASG/MID meetings and activities.

3.2 RASG/MID invited CANSO to champion a SEI related to SMS implementation for ATM. CANSO accepted the invitation, and started coordination with ICAO/MID, where it has been agreed that CANSO to develop a plan with a clear objective, goal and detailed actions with clear deliverables and targets that will lead to the achievement of the SEI.
4. **CANSO ME FIRST SAFETY SURVEY**

4.1 CANSO ME Safety-first Survey was prepared in coordination with GACA of Saudi Arabia in 2010; it was distributed for all ME ANSPs and not only CANSO members. Level of respond to Survey was weak. Most important results from the survey:

- Safety culture not mature enough in the Middle East.
- The ME Safety WG will not develop any regional guidance material but will use the global material.
- Promoting CANSO Global SSC Guidance.
- Creating awareness for SMS.
- Organizing Seminars or Workshops based on the global Guidance.
- The ME Safety Standing Committee will need the support of the Global Safety Manager and members to hold the Seminars/Workshops.

5. **CANSO ME SECOND SAFETY SURVEY**

5.1 In 2016 CANSO developed and sent out a second SMS survey to assess and gather a better understanding of the ATM SMS implementation needs in the region including (policy, SRM, safety assurance, and promotion/safety culture).

5.2 The survey distributed to all ME ANSPs, where 10 replies received (Jordan, Qatar, Iran, Egypt, Saudi Arabia, Sudan, Oman, Sharjah, Iraq, and Bahrain). The responses have been used by the CANSO Safety Programme Manager to evaluate the status of SMS in the Middle East region to assist in developing targeted, regional SMS training.

5.3 The results were deidentified; therefore, no organization name has been shown. The specific impressions of the results were:

- Promotion/safety culture was the biggest gap area across the board.
- The most mature area was a tie between safety policy and safety assurance.
- Initial recommendations were to devote the most resources and training to safety promotion, with a focus on safety culture, followed by Safety Risk Management.

5.4 The Fifth meeting of the RASG-MID Steering Committee (RSC/5), took place on 23-25 January 2017 at Amman, and MIDANPIRG/16, took place on 13-16 February 2017 at Kuwait noted that CANSO, as the Champion of the initiative to improve SMS implementation in ATM, will develop a Third detailed survey to be sent to all ANSPs in 2017 to identify needs to improve SMS implementation for ATM in the MID Region. After which an action plan would be developed based on the results of the survey to address specific ATM/SMS needs.

6. **EUROCONTROL/CANSO SMS MATURITY SURVEY**

6.1 For improving SMS implementation by ANSPs EUROCONTROL in cooperation with CANSO have developed an SMS Standard of Excellence. The standard aims to facilitate the practical implementation of ICAO safety management requirement’s by ANSPs, built on the experience of the CANSO Member organizations, and provided a framework for continually improving the management and oversight of safety within air navigation service providers (ANSPs).
6.2 The Standard has been updated to assure it is compliant with Annex 19 while also addressing feedback received from ANSPs and other industry bodies, and evolving safety management thinking and practice. As with the first version of the CANSO SoE in SMS, the second version goes beyond the requirements of current domestic and international regulatory practices and allows ANSPs to build a system, which is appropriate to their size and operational complexity.

6.3 The SoE in SMS supports the clear message from the Global Aviation Safety Plan (GASP), and promoted by the ICAO Safety Management Manual, that achievement of the highest level of SMS maturity is a long-term process that must proceed in a very deliberate step-wise manner.

6.4 The SMS Standard consists of a ‘system enabler’ (Safety Culture), and a framework of four components - Safety Policy, Safety Achievement, Safety Assurance, and Safety Promotion. The interaction between these areas is shown below. Together, they are considered to constitute a mature and systematic safety framework.

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Safety culture

Element: Development of a positive and proactive safety culture

Safety policy and objectives

- Safety Policy
- Organisational and Individual Safety Responsibilities
- Compliance with International Obligations
- Coordination of Emergency Response Plan
- Safety Management System Documentation

Safety risk management

Elements: Risk Management Process

Safety achievement

- Safety Interfaces
- Safety by Design
- Fatigue-related Risk Management

Safety assurance

- Safety Performance Monitoring and Measuring
- The Management of Change
- Continual Improvement of the SMS
- Safety Reporting, Investigation and Improvement
- Operational Safety Surveys and SMS Audits

Safety promotion

- Safety Communication
- Training and Education

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6.5 As part of CANSO Championing to ATM/SMS in the middle east, it has been agreed with ICAO to distribute an SMS Maturity questionnaire, where it is believed that the Middle East would benefit. The Questionnaire comprises of 17 study area’s based on the Standard of Excellence in Safety Management Systems, and built on the best practices of other ANSPs from around the globe and fully aligned with Annex 19. The 325 possible questions will enable self-assessment in identifying areas of SMS that need to be improved and voluntary inclusion for CANSO members in the annual benchmarking.

6.6 The survey will be sent out by the end of May 2017 to all CANSO members and Regional Directors, deadline for receiving replies will be 30 Jun 2017. CANSO Director Middle East affairs will share the survey with ICAO MID and coordinate sending it to all Middle East states/ANSPs, deadline for receiving replies for non CANSO members will be 10 July 2017.

6.7 CANSO Members and States can either: use the survey as a stand-alone tool to do their own self-assessment of their ANSP’s SMS Maturity level - in which case they just fill it out when they can and don’t worry about the deadline in June; or if they are CANSO Members that can participate in the global benchmarking with CANSO / Eurocontrol and submit their results by June 30 for inclusion in the report.
6.8 ANSPs can answer YES to the question they have that component. If they say "NO" they may need to ask themselves if they need to build that component into their own SMS. It is important for the person who fills out the survey to ask others in the organization who do safety management for help if they don’t know the answer. Therefore, this can take some time depending on the size of the ANSP. For every YES answer, ANSP want to be able to cite the policy, paper, or chapter of your SMS manual that deals with that requirement.

6.9 The Survey measures the maturity of ANSPs’ safety management systems; establishes the extent of progress made by ANSPs with respect to the introduction of ATM safety management systems and how the SMS framework relates to safety in operations and engineering; it is a tool for ANSP to prove that its SMS have everything in place and to assist to continue to improving all areas of SMS.

6.10 Kindly hosted by PACA of Oman, CANSO intends to hold a SMS workshop in 25-27 NOV 2017 in Muscat, where this SMS maturity assessment will be the center of our support for the SMS ATM Safety Enhancement Initiative for the Middle East.

7. CANSO FUTURE SAFETY ACTIVITIES IN THE MIDDLE EAST

7.1 CANSO fully aware off obstacle might face its championing of the SMS in the Middle East such as (the availability of the required human resources from the identified organisations; availability of financial resources; and low response rate to surveys) but still committed to achieve its goals and to finalise what have been started to achieve the following:

a) Better engagement with ICAO, other organizations, and member states to plan and implement the related ATM SMS activities, e.g partnership the MID Safety Summit, SMS Workshops, and SMS training as appropriate;

b) Create awareness for SMS by conducting national and regional Workshops and Seminars;

c) Conduct a 3-day workshop in 25-27 November 2017 in Muscat. Where we will be covering SMS overview, Just Culture, and explaining the SMS Maturity survey (how it works); and

d) Use as applicable, and tailor the available CANSO global safety material to the region needs.

8. ACTION BY THE MEETING

8.1 The meeting is invited to:

a) note the information provided in this Paper;

b) urge States and ANSPs to support CANSO championing the safety enhancement implementation plan related to SMS Implementation for ATM as appropriate;

c) request the ICAO MID Office to circulate the SMS Questionnaire to the MID States;

d) urge States and ANSPs to participate in the EUROCONTROL/CANSO Standard of Excellence in SMS Questionnaire when it is released, and on timely manner; and

e) urge States ANPSs to attend the intended ATM/SMS workshop in 25-27 November 2017 in Muscat.