



International Civil Aviation Organization

**Aerodrome Operational Planning
Sub-Group (AOP SG)**

**Eighth Meeting
(Cairo, 13– 15 February 2012)**

Agenda Item 5: Implementation of SMS at Aerodromes in the MID Region

**ICAO SMS/SSP EVOLUTION AND CURRENT IMPLEMENTATION STATUS
IN THE MID REGION**

(Presented by the Secretariat)

SUMMARY

The evolution of safety concepts and subsequent implementation of Safety Management Systems (SMS) and State Safety Programmes (SSP) present challenges to the industry as well as to the regulators.

This paper provides a perspective on the evolution, challenges, current status and a few implementation issues that must be overcome as the migration process to the SMS/SSP environment is completed.

Action by the meeting is at paragraph 3.

REFERENCES

- Annex 14
- Certification of aerodromes Manual (Doc 9774)
- MIDANPIRG/12 Report
- Safety Management Manual (SMM) (Doc 9859)-2nd Edition -2009

1. INTRODUCTION

1.1 The concept of safety has followed an evolutionary path. During its early days, aviation was typically a developing technology without a proper oversight or structured approach aimed at maintaining acceptable safety levels. It was then believed that safety could be guaranteed as long as certain rules and regulations were put in place and subsequently followed.

1.2 In later years, as aviation matured and the concept of safety evolved, accident investigation became a valuable tool in helping to determine the cause of accidents with the aim of reducing their frequency. Although this reactive method for improving safety was shown to be effective, there was still a need for a method or system that would help identify latent conditions to accidents before they actually occurred. Thus, the concept of management of safety was conceived.

1.3 The Certification of Aerodrome framework required States to ensure that Aerodrome Operators are having in place a Safety Management System for Aerodromes Used for International Operations as of November 2003.

2. DISCUSSION

2.1 The meeting may wish to recall that the ICAO Safety Management SARPs address three distinct requirements:

- a) requirements regarding the State Safety Programme (SSP), including the Acceptable Level of Safety (ALoS) related to an SSP;
- b) requirements regarding Safety Management Systems (SMS), including the safety performance of an SMS; and
- c) requirements regarding management accountability.

2.2 ICAO Safety Management Provisions, require States to establish a State Safety Programme in order to achieve an Acceptable Level of Safety (ALoS) in Civil Aviation. In addition, States shall require, as part of their State Safety Programme (SSP), the Certified Aerodrome Operator to implement a Safety Management System (SMS).

2.3 ICAO defines an SMS as a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures. The ICAO Safety Management SARPs establish that the SMS shall be accepted by the State and shall, as a minimum:

- a) identify safety hazards;
- b) ensure the implementation of remedial action necessary to maintain agreed safety performance;
- c) provide for continuous monitoring and regular assessment of the safety performance; and
- d) aim at continuous improvement of the overall performance of the safety management system.

2.4 The four processes listed above constitute the core activities aimed at making continuous improvements to the Overall Level of Safety.

2.5 It is a basic premise that Service providers' SMS cannot work in isolation. In order for service providers to be fully successful in the implementation of their SMS programmes, they require an enabler on the part of the State to properly implement their activities. That enabler is the State Safety Programme (SSP) that provides an enabling platform for a State and its various Civil Aviation Organizations to apply two basic safety management principles to the discharge of their safety responsibilities: Safety Risk Management (SRM) and Safety Assurance (SA). The SSP also provides a structural framework that allows the State Safety Oversight Authority and Service Providers within the State to interact more effectively in the resolution of safety concerns.

2.6 A critical concept within the SSP is that of the Acceptable Level of Safety (ALoS) as an essential ingredient for the effective operation of an SSP. The introduction of the notion of ALoS responds to the need to complement the historical approach to the management of safety based upon regulatory compliance, with a performance-based approach. Unless the notion of ALoS is understood and properly developed and implemented, progress toward a performance-based regulatory environment will be difficult to achieve. In this context, an effective relationship between the Safety Performance of an SMS and the ALoS of an SSP has to be clearly defined and established.

2.7 The implementation of an effective SSP on the part of States will require a concentrated, structured, specific plan in order to be effective. As it is known, ICAO has developed an SSP framework made up of four components and eleven elements to assist States in the implementation of the SSP. The implementation of some of the elements may be challenging and will require specific efforts to be carried out.

2.8 One of those challenges is how States should develop regulations such as Safety Risk Controls as opposed to just administrative controls, which has been customary practice. This new approach requires that the process of rule-making be carried out utilizing risk management principles providing a platform in which service providers can collect and analyze data to monitor and report safety performance.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this working paper;
- b) urge States that have not already done so, to begin a SSP implementation in order to comply with ICAO SARPs;
- c) take any other action deemed necessary with regard to the implementation of SSP/SMS in the MID Region; and
- d) agree on the following Conclusion:

**CONCLUSION 8/X: *IMPLEMENTATION OF STATE SAFETY PROGRAMME
AND AERODROMES SAFETY MANAGEMENT SYSTEM***

That, States that have not yet done so, be urged to:

- a) take necessary measures to implement State Safety Programme according to ICAO SARP's and Guidance materials;*
- b) assure implementation of Safety Management System in Aerodromes as part of Certification requirements; and*
- c) update ICAO MID Office on status of Implementation.*