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**ASSEMBLY — 36TH SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 30: Other safety matters**

**CHINA'S IMPLEMENTATION OF SMS AT AIRPORTS**

(Presented by China)

**EXECUTIVE SUMMARY**

This paper deals with measures taken to develop and implement SMS at airports in China, which can be used as references for other countries/regions.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective A: Safety – <i>Enhance global civil aviation safety</i>
<i>Financial implications:</i>	Not applicable
<i>References:</i>	Doc 9774, <i>Manual on Certification of Aerodromes</i>

<sup>1</sup> Chinese and English versions provided by China.

## 1. INTRODUCTION

1.1 Regulations on Civil Airports Certification (CCAR-139-R1, CAAC Order No.156, entering into force from Nov. 7, 2005) issued by the General Administration of Civil Aviation of China (CAAC) stipulate that Airport authorities should establish a Safety Management System (SMS) at civil airports in accordance with these Regulations and should be subject to supervision and inspection. One of the basic conditions for airports applying for airport certificate is “a SMS that meets the requirements of the operation in airports”. Amendment 8 to Annex 14 Volume I — *Aerodrome Design and Operations*, of the Chicago Convention provides that States shall require, as part of their safety program, that a certified airdrome operator implement a safety management system acceptable to the State. To meet the above requirement, CAAC has formulated detailed requirements to implement SMS at the airports in China.

## 2. MEASURES TAKEN TO IMPLEMENT SMS IN CHINESE AIRPORTS

2.1 Firstly, to have further understanding of SMS as a concept. Establishing a SMS can make it possible to implement a safety management featuring a transition from passive management to proactive management, from open-loop management to closed-loop management, from individual management to systematic management and from partial management to comprehensive management. Secondly, establishing SMS does not mean renouncing all original ways of safety management, but to attach more importance to “risk management, closed-loop management and information management” and to control risks in airport operations at an acceptable level. Thirdly, establishing and implementing SMS is the responsibility of airport authorities and CAAC will provide the guiding documents for the implementation of SMS in airports.

2.2 SMS is composed of 10 elements: safety policies, safety objectives, organizational structure and responsibilities, safety education and training, document management, safety information management, risk management, investigation and handling of unsafe incidents, emergency response and oversight and audit of airport safety. To demonstrate flexibility in implementing SMS, CAAC requires that safety management systems of all airports shall at least meet the requirements of the ten elements of SMS.

2.3 No SMS manual will be compiled and it will be incorporated in airport manuals. The reasons are as follows: firstly, safety is not independent from airport operations; secondly, many manuals have been developed for airports, such as the airport certification manual and the quality management system manual (almost all large airports in China have been certified). It is not appropriate to work out a SMS manual; thirdly, according to Doc 9774, SMS should be part of the airport certification manual.

2.4 CAAC developed guidelines on SMS for airport construction and organized the development of the model airport certification manual as references for airports. It also selected three airports from large, small and medium-sized ones, as experimental units to further improve SMS. It should be especially emphasized that CAAC has adopted two approaches in risk management: the first one is based on process, namely to analyze working process and identify and manage potential hazards. The second approach is to analyze different areas in airports such as runways and aprons.

2.5 Airport authorities should make efforts to establish and improve a long-term mechanism for SMS. They should explore different ways to integrate the SMS into daily work of ensuring safe operation and promote the development of SMS in a planned and gradual manner. Airport authorities are required to set up a SMS leading group, led by their legal persons and an office under it. Different analysis should be done in airports so as to analyze current situation, identify deficiencies according to the requirements of SMS, formulate specific and feasible SMS implementation plans and improve existing systems.

2.6 The “airport usage manual” has been duly revised, of which, the chapter on “safety management system” in the airport certification manual should cover at least the core content of ten elements of SMS. Other chapters related to safety operations should reflect the concept of SMS, focusing on system management, closed-loop management, risk management and information management, so that the concept and the elements of SMS can be reflected in all the airport documents on operation guarantee and be implemented in each position and business. After the revision of the airport certification manual, airport authorities should organize a comprehensive evaluation, which should be signed and submitted by their legal persons for approval according to CAAC Order No.156.

### 3. CONCLUSION

3.1 The establishment and implementation of SMS is a dynamic process of learning, researching, implementing, summarizing and continuous improving. Airport authorities should not only meet the requirements of SMS in terms of documents and systems, but also implement them in daily operation, which is more important. Airport authorities should constantly strengthen education and training programs, have a systematic and comprehensive command of all the connotation of SMS. They should work hard to cultivate a fair, reporting and learning safety culture and constantly improve SMS.