



**WORKING PAPER**

**ASSEMBLY — 36TH SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 30: Other safety matters**

**REPORT ON THE IMPLEMENTATION OF  
AERODROME CERTIFICATION REQUIREMENTS  
IN ANNEX 14, VOLUME I**

(Presented by the Council of ICAO)

**EXECUTIVE SUMMARY**

Pursuant to Resolution A35-14, this paper contains a report to the Assembly on the findings of a survey conducted by the Secretariat to assess the level of global implementation of aerodrome certification, including safety management systems (SMS) as required in Annex 14, Volume I. There are 1,280 international aerodromes listed in the Regional Air Navigation Plans.

Aerodrome certification regulations had been promulgated in sixty-seven of the eighty-seven Contracting States which responded to the survey. A total of 401 out of 680 international aerodromes in the responding States had been certified. SMS had been implemented by forty-five States and 258 aerodromes in these responding States. Initial results from the ICAO USOAP audits, under the comprehensive systems approach, also indicate that the level of implementation of aerodrome certification, including SMS, is low.

**Action:** The Assembly is invited to:

- a) note the low level of implementation of aerodrome certification, including SMS, among States;
- b) strongly urge States to undertake certification of aerodromes, as a matter of priority (Resolution A35-14, Appendix Q, resolving clause 3); and
- c) ensure that safety management systems are introduced at their aerodromes (Resolution A35-14, Appendix Q, resolving clause 4).

<i>Strategic Objectives:</i>	This working paper, which relates to Strategic Objectives A and D, is expected to enhance the level of awareness among States on the need for aerodrome certification and SMS and encourages further implementation of these requirements.
<i>Financial implications:</i>	No additional resources required as the activity presented can be accommodated within existing budget resource allocations.
<i>References:</i>	Annex 14, Volume I Doc 9859, <i>Safety Management Manual (SMM)</i> Doc 9848, <i>Assembly Resolutions in Force (as of 8 October 2004)</i> Doc 9774, <i>Manual on Certification of Aerodromes</i> Doc 7300, <i>Convention on International Civil Aviation</i>

## 1. INTRODUCTION

1.1 The ownership, operation and management of airports have seen a transition from government-owned entities to corporatized bodies with financial autonomy and, in many cases, to a fully privatized agency, in the interest of improved efficiency and bringing in new technology. Additionally, privatization relieves States of the burden of heavy capital investment often associated with airport projects and also facilitates the development of non-aeronautical aspects of the airport business. Global airport privatization programmes have continued to accelerate.

1.2 The obligation of States, under the *Convention on International Civil Aviation* (Doc 7300) to ensure the safety of aerodrome operations, remains unchanged. It is in this context that Annex 14 — *Aerodromes, Volume I — Aerodrome Design and Operations* requirements for certification of aerodromes by States are highlighted.

## 2. BACKGROUND

### 2.1 Annex 14, Volume I provisions

2.1.1 Annex 14, Volume I provisions specify that aerodromes open to public use be certified by States in accordance with the specifications in the Annex and other relevant ICAO Annexes as well as national regulations. Furthermore, aerodromes used for international operations are required to be certified as from 27 November 2003. As part of the certification process, a certified aerodrome shall have in operation a safety management system (SMS).

2.1.2 Applicable from 23 November 2006, the safety management requirement in Annex 14, Volume I, was harmonized with those of Annex 6 — *Operation of Aircraft* and Annex 11 — *Air Traffic Services*. A new Section 1.5 in Annex 14, Volume I requires States to establish a safety programme and an acceptable level of safety, as well as the implementation by the aerodrome operator of an SMS, at a certified aerodrome including defining lines of safety accountability.

2.1.3 To assist States in fulfilling the requirements of aerodrome certification and SMS, a total of eleven workshops had been organized in all ICAO regions, with assistance from States. These workshops were intended to disseminate information on the requirements for aerodrome certification including highlighting ICAO safety initiatives, providing clarifications on the guidance material in *Manual on Certification of Aerodromes* (Doc 9774) and sharing experiences of States in the implementation of aerodrome certification.

### 2.2 Resolution of the 35th Session of the Assembly

2.2.1 The 35th Session of the ICAO Assembly adopted Resolution A35-14, Appendix Q, which recognized that, whereas there is a growing trend for aerodromes to be operated by autonomous entities, the obligation of States to ensure safe aerodrome facilities and services remains unaffected (*Assembly Resolutions in Force as of 8 October 2004*) (Doc 9848). In this appendix, the Assembly resolved that States shall undertake certification of aerodromes and should ensure that SMS is introduced at their aerodromes.

### 2.3 Status of implementation of aerodrome certification

2.3.1 The Co-operative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs), established in the Asia and Pacific (APAC) Regions, revealed that the status of implementation of aerodrome certification and SMS in some States in the APAC Regions was low.

2.3.2 The 43rd Conference of the Directors General of Civil Aviation, APAC Regions (Bali, Indonesia, 4 to 8 December 2006), strongly urged States in the APAC Regions to allocate high priority and adequate resources in implementing the requirements of aerodrome certification and SMS at aerodromes, as well as encouraging further regional cooperation and collaboration in this regard.

2.3.3 In view of the above, and pursuant to Resolution A35-14, Appendix Q, a survey covering all States was carried out in August 2006, through the regional offices, to assess the level of global implementation of aerodrome certification, including SMS. The results of the survey are in the Appendix to this working paper.

### 3. FINDINGS AND CONCLUSIONS

3.1 Aerodrome certification regulations had been promulgated in sixty-seven of the eighty-seven Contracting States which responded to the survey. A total of 401 out of 680 international aerodromes in the responding States had been certified. SMS had been implemented by forty-five States and 258 aerodromes in these responding States. However, it should be noted that the results of the survey represent the situation in only 46 per cent of the Contracting States.

3.2 As indicated in paragraphs 2.3.1 and 2.3.2 above, the level of implementation of both aerodrome certification, and SMS as part of the certification process, in at least one region, has not been satisfactory. Furthermore, reports of the various Regional Planning Groups have highlighted the lack of progress in the implementation of the aerodrome certification provisions. Additionally, the low level of implementation has been corroborated by initial results from the ICAO Universal Safety Oversight Audit Programme (USOAP), under the comprehensive systems approach.

3.3 In view of the foregoing, it can be concluded that the level of implementation of aerodrome certification in States needs to be improved. Consequently, increased efforts by States are urgently required to undertake certification of aerodromes and ensure that safety management systems are introduced at their aerodromes.

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## APPENDIX

### RESULTS OF ICAO SURVEY ON AERODROME CERTIFICATION

#### 1. Introduction

1.1 The COSCAP projects in the Asia and Pacific (APAC) Regions had indicated that the aerodrome certification requirements were yet to be implemented satisfactorily. Consequently, a survey on the level of implementation of Annex 14, Volume I requirements was carried out in 2006 in all ICAO regions.

1.2 The survey elicited responses from eighty-seven States, representing 46 per cent of the total 190 ICAO Contracting States. There are 680 international aerodromes in these responding States representing 53 per cent of the global total of 1280 international aerodromes listed in the six ICAO Regional Air Navigation Plan Publications.

#### 2. States' Regulatory Framework – Aerodrome certification

2.1 Eighty-four States confirmed the existence of a basic aviation law that provides for the establishment of the Civil Aviation Authority (CAA), a key pre-requisite for undertaking the process of aerodrome certification.

2.2 Regarding the availability of States' aerodrome certification regulations, sixty-seven (77 per cent) of the responding States indicated they had developed and approved aerodrome certification regulations (see paragraph 2.3 below for details). Fourteen States had developed regulations and were awaiting various stages of approval, whilst another six States had not yet developed aerodrome certification regulations.

2.3 In the Middle East (MID) Region, nine out of nineteen States indicated that they had promulgated aerodrome certification regulations, followed by the South American (SAM) Region (six out of thirteen States), European and North Atlantic (EUR/NAT) Regions (twenty out of fifty-four States), North American, Central American and Caribbean (NACC) Regions (eight out of twenty-one States), APAC Regions (eleven out of thirty-six States) and Africa-Indian Ocean (AFI) Regions (thirteen out of forty-seven States) (*see Fig.1*).

2.4 In response to a question on the availability of appropriate aerodrome safety management regulations, forty-five (52 per cent) of the responding States had developed and approved the regulations (see paragraph 2.5 for details). In twelve States, the safety management regulations had been developed but not yet approved; in another thirty States, the regulations had not been developed.

2.5 Eight States in the MID Region had promulgated the appropriate safety management regulations, followed by seventeen States in the EUR/NAT Regions, eight States in the APAC Regions, seven States in the AFI Regions, two States in the SAM Region and three States in the NACC Regions (*see Fig.1*).

2.6 There have been several requests, in particular from States in the MID, AFI and NACC Regions, for more ICAO assistance in the development of technical guidance for certification and operation of aerodromes. Many States in the AFI Regions reported having difficulty with the legal aspects of implementation. Also, while some States have provided for the requirement of aerodrome certification at various levels of the legislative/regulatory system, there is as yet no formal certification process. Several civil aviation administrations cited lack of progress due to insufficient autonomy, inadequate structure and expertise. Some States are also in the process of changing their structures to become autonomous agencies.

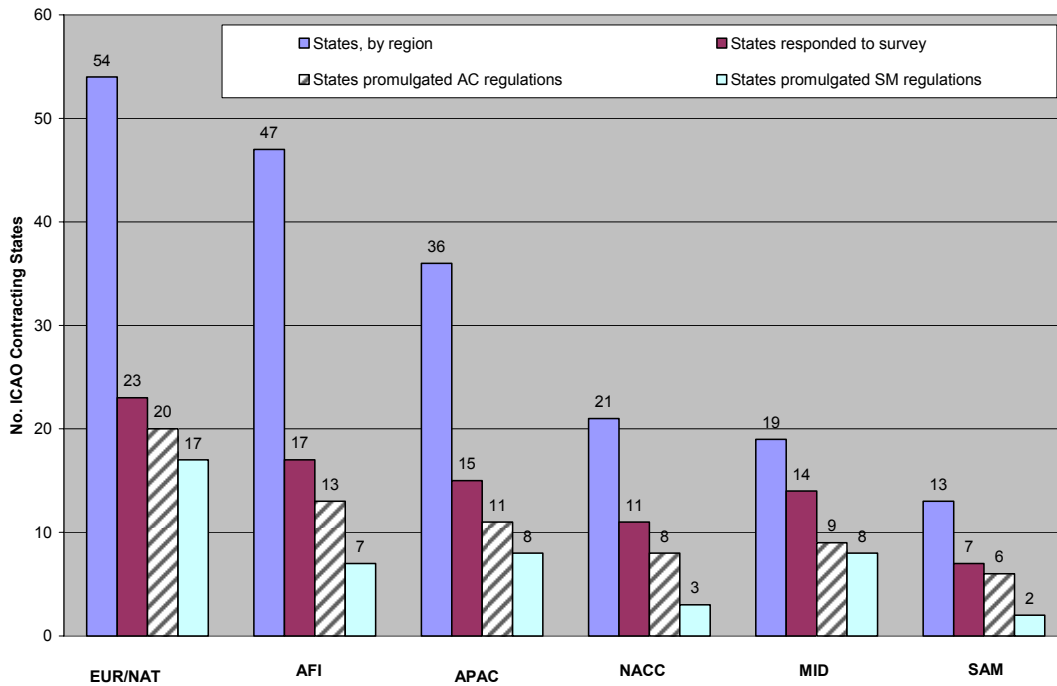
**3. Aerodrome certification and safety management systems at international aerodromes**

3.1 The breakdown for the 1280 international aerodromes listed in the six ICAO Regional Air Navigation Plans Publications are as follows: EUR/NAT (611), NACC (189), APAC (183), AFI (131), SAM (99) and MID (67).

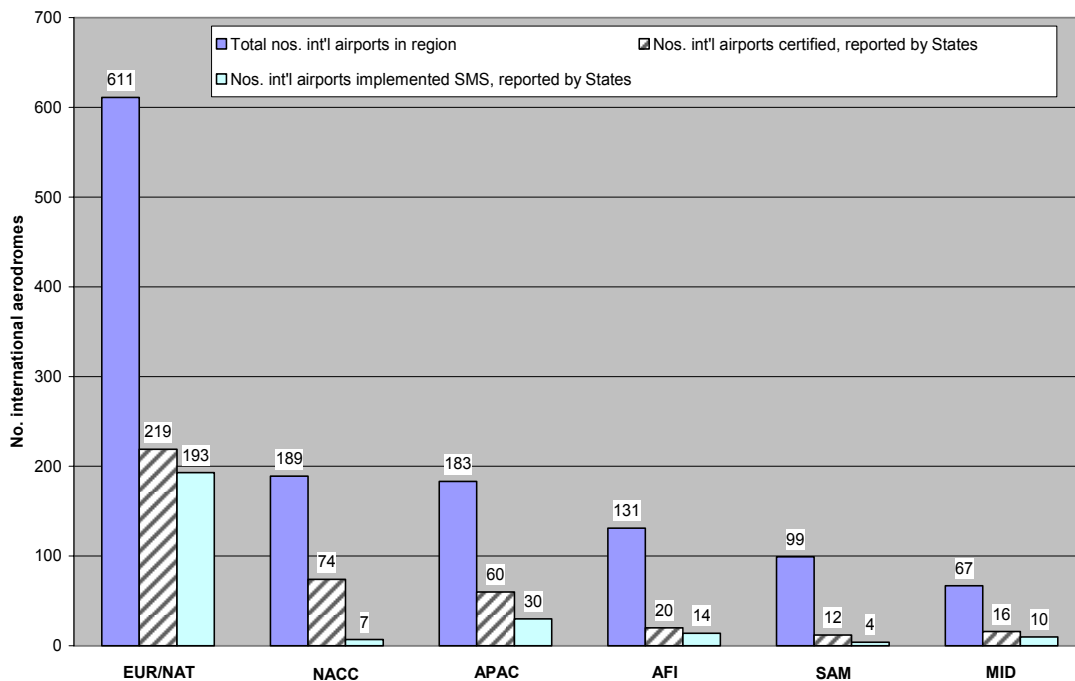
3.2 From the responses received, it is seen that 401 of the 680 international aerodromes (59 per cent) in the responding States had been certified with the regional breakdown as follows: EUR/NAT (219), NACC (74), APAC (60), AFI (20), MID (16) and SAM (12) (*see Fig.2*).

3.3 With respect to implementation of safety management systems at certified international aerodromes, 258 of the 680 international aerodromes (38 per cent) in the responding States had complied with the requirement. EUR/NAT Regions reported 193 international airports had implemented SMS followed by APAC (30), AFI (14), MID (10), NACC (7) and SAM (4) (*see Fig.2*).

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**Figure 1. – States’ promulgation of regulations for certification and safety management in aerodromes**



**Figure 2. – Implementation of aerodrome certification and safety management system at international aerodromes**