



DIRECTORS GENERAL OF CIVIL AVIATION CONFERENCE ON A GLOBAL STRATEGY FOR AVIATION SAFETY

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Theme 2: Improving aviation safety

Topic 2.2: Management of aviation safety

MANAGEMENT OF AVIATION SAFETY

(Presented by New Zealand)

SUMMARY

This information paper describes the policy activity currently being undertaken by the Civil Aviation Authority of New Zealand (CAA) with respect to safety management systems (SMS) including a review of New Zealand's existing safety regulatory framework, issues being addressed and actions the CAA of New Zealand anticipates as it continues the assessment of SMS implementation and application.

1. INTRODUCTION

1.1 In the early 1990's New Zealand was one of the first countries to implement a safety regulatory approach based on effective safety management. Many countries subsequently adopted the quality management approach employed at that time. Fifteen years on it is timely for the CAA of New Zealand to be reviewing international best practices for managing safety regulations, and New Zealand's international obligations to ensure it is not only meeting but, where appropriate, exceeding those Standards to enhance safety. This is happening at a time when the world is increasingly focussed on SMS.

1.2 New Zealand's current regulatory regime is based on a clear division of safety responsibility between the regulator and participants in the civil aviation system, with the emphasis on the CAA having a systems oversight role, rather than a purely inspection-based regulatory role. These principles are reflected in the Civil Aviation Act 1990 (the Act), with Civil Aviation Rules (the Rules) providing regulatory detail in specific areas.

1.3 A key principle in New Zealand civil aviation legislation is the acknowledgement that effective safety management responsibility should rest with those exercising privileges within the aviation system - the “aviation document holders”. In order to effectively monitor this responsibility, the Act and Rules expressly provide for aviation organizations to have an appropriate management system as a prerequisite for entry to the aviation system, which creates the basis for entry assessment.

1.4 Section 12 of the Act states, in part:

“(4) *Every participant who holds an aviation document that authorises the provision of a service within the civil aviation system—*
(a) shall, if so required by rules made under this Act, establish and follow a management system that will ensure compliance with the relevant prescribed safety standards and the conditions attached to the document”.

1.5 From the outset of the enabling legislation in 1990, the Rules have required such management systems for the certification of organizations conducting activities across the whole civil aviation system.

1.6 In New Zealand this was achieved through the concept of internal quality assurance (based on ISO 9000 principles) being promoted amongst operators as a tool for managing safety as an integral part of their business. The CAA of New Zealand also holds ISO 9001:2000 certification as an organization.

2. **ISSUES AND ACTIONS IDENTIFIED DURING RESEARCH**

2.1 The CAA of New Zealand, as part of its policy work programme, is assessing its existing regulatory framework relating to management systems in light of advances in SMS application, investigating issues needing detailed analysis and identifying an appropriate timeframe and task schedule for implementation of any revised Rule requirements. Also, the CAA is fully aware of the International Civil Aviation Organization’s (ICAO) proposed amendments to Annex 6 — *Operation of Aircraft*, Annex 11 — *Air Traffic Services* and Annex 14 — *Aerodromes* specifying SMS requirements due to take effect in November of this year. The changes being considered in New Zealand are based on these latest amendments and also reflect the latest thinking on safety management.

2.2 The existing internal quality assurance process specified in the Rules for the aviation system does not address all SMS components. Using an ISO 9001:2000 quality management system is not necessarily directly applicable or effective in the SMS sense.

2.3 The CAA of New Zealand recognizes that maximum benefit of SMS implementation will be gained through the associated State development of a safety programme (as per incoming ICAO Annex amendments) setting safety targets and desired outcomes, with operators developing SMS to achieve those goals.

2.4 The CAA of New Zealand is studying the implementation of SMS across all safety-related aspects of the civil aviation system, not only where required by ICAO, as the application of SMS across all safety activities can only benefit the whole industry. This reflects the current application of internal quality assurance requirements to organizations throughout the civil aviation system.

2.5 Analysis of SMS principles includes a review of CAA New Zealand's internal management systems to ensure its Standards are consistent with those applied to industry organizations. The CAA has always advocated setting a good example to the industry in carrying out its regulatory role (as demonstrated by its current ISO 9001:2000 certification) and will ensure that example continues. A separate project is aimed at ensuring the CAA of New Zealand safety regulatory programme integrates with the SMS approach adopted.

2.6 Part of the analysis that the CAA of New Zealand is undertaking includes development of an SMS definition. This will reflect not only generic international SMS requirements but include aspects particularly relevant to SMS application within CAA New Zealand's safety philosophy and legislative framework.

2.7 The Act does not specify the type of management system to be used but does state the purpose and effect of such a system (paragraph 1.4 refer). This allows the CAA to move from an ISO 9000 based quality management system to SMS easily. A range of rule amendments will be required to update the current internal quality assurance requirements, incorporating additional SMS components not presently addressed in legislation in a consistent manner. How this is achieved has not been decided but options include developing a generic SMS rule that applies across all types of organizations, or amending individual rules with equivalent SMS requirements tailored to the specific type of organization. The approach CAA of New Zealand takes on this is being developed in conjunction with other legislative considerations.

2.8 Careful consideration of the costs and benefits to the industry participants, the State as regulator and the public are necessary to ensure that the adoption of SMS is carried out in an effective manner without imposing undue costs on any sector.

2.9 Education of the industry will be a key factor in the implementation phase, as will educating and training the CAA's own staff. However, it also readily acknowledges that a number of certificated organizations in New Zealand are actively moving towards SMS of their own accord having recognized the safety and efficiency benefits themselves.

3. CONCLUSION

3.1 Effective safety management has been a key part of the New Zealand civil aviation safety regulatory framework since the existing legislation came into effect in 1990.

3.2 The present environment is based around the ISO 9001:2000 standard demonstrating compliance with requirements for entry to the civil aviation system.

3.3 New SMS requirements will need to conform to ICAO Standards, but will also apply throughout the domestic aviation system and reflect international best practice in this area.

3.4 The policy assessment for proceeding with SMS and an implementation timeframe continue to be developed, with a decision on further action to be made by the CAA of New Zealand later in the year.