



WORKING PAPER

ASSEMBLY – 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 28: Aviation Safety - Standardization

PROPOSED ENHANCEMENTS TO ANNEX 19 - SAFETY MANAGEMENT

(Presented by the United States)

EXECUTIVE SUMMARY

The ICAO Council recently adopted a new Annex dedicated to Safety Management, Annex 19. This Annex was developed by the Safety Management Panel (SMP). The United States appreciates the development of this Annex, and applauds the SMP for its efforts. We note that many issues have been identified by the SMP and States that need to be addressed during the next phase of development. The United States believes that two major issues that must be addressed are the development of an integrated approach to safety management and criteria for acceptance of safety management systems in other States.

Action: The Assembly is invited to agree on the following recommendations:

- a) strongly recommend that ICAO and the international aviation community continue to support the development of the Annex 19 – *Safety Management* and ensure that State Safety Programme (SSP) and the State’s safety oversight capability requirements are integrated in Annex 19 and that ICAO auditing processes reflect this integration; and
- b) recommend that ICAO and the international aviation community propose a process on how to facilitate acceptance of safety management systems in other States.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	Expected that this is covered in the draft budget.
<i>References:</i>	Doc 9859, <i>Safety Management Manual</i> , Chapter 3 Annex 19 2010 High-level Safety Conference Recommendation 2/5a ICAO 37th Assembly Resolutions A37-4

1. INTRODUCTION

1.1 The ICAO Council recently adopted a new Annex dedicated to Safety Management, Annex 19. We note that many issues have been identified by the SMP and States that need to be addressed during the next phase of development. The United States recommends the following major issues be addressed: the development of an integrated approach to safety management and criteria for acceptance of safety management systems in other States.

1.2 The ICAO Universal Safety Oversight Audit Programme (USOAP) through the Continuous Monitoring Approach (CMA) provides data supported methodologies for monitoring and measuring States' safety oversight capabilities. More recently, ICAO has published safety management requirements for States by mandating that States establish a state safety programme (SSP) in order to achieve acceptable safety performance in their civil aviation systems. Furthermore, the SMP was tasked to develop a new Annex dedicated to safety management. Thus, in order to develop a cohesive system that is more effective and minimizes duplication, an integrated approach to safety oversight and safety management decision making is essential.

1.3 Safety Management System (SMS) is becoming the standard for aviation safety worldwide. As such, it is most beneficial for the international community to facilitate acceptance of other States' safety management systems through comparable SMS requirements, implementation expectations, acceptance criteria, performance measurement and continuing oversight processes. This will ensure that States do not require product/service providers to comply with similar SMS obligations through sets of dissimilar SMS requirements and processes that increase the administrative and financial burden for certificate holders without any significant safety value.

2. DISCUSSION – INTEGRATED SAFETY MANAGEMENT

2.1 As a result of previous ICAO Assembly resolutions, ICAO has developed the USOAP, which comprises eight critical elements (CE) of safety oversight. These eight critical elements establish the principal responsibilities and activities in the State's oversight of its aviation service providers. The implementation of these critical elements has been an effective indicator of a State's safety oversight capability. The next iteration of the USOAP is the CMA, which also includes the eight critical elements of safety oversight. The main focus of CMA is that the States perform regular assessments of their implementation of the critical elements of safety oversight and provide the results to ICAO.

2.2 ICAO Annex 19 defines the SSP as, “an integrated set of regulations and activities aimed at improving safety.” This suggests that the activities of the oversight system, as outlined in the eight critical elements, should be part of this “integrated system.” The SSP provides a systemic management framework for safety decision making on the part of the State's aviation authorities. Thus, while the eight critical elements establish a baseline set of responsibilities and activities for oversight, the SSP provides a systemic framework for managing them.

2.3 The eight critical elements of safety oversight define the foundational elements that enable effective oversight systems. Concurrently, the SSP Framework also includes many elements that are common with the eight critical elements of oversight. The table below illustrates the SSP framework and the critical elements of safety oversight. Although the listing is not exhaustive, it can be noted that most of the critical elements map closely to the components of the SSP Framework. Hence, without proper consideration of this integration, SSPs may be developed in a fragmented manner. This may result in redundant functionalities within the SSP which could lead to a less robust system and inefficient use of

resources. It may also result in the creation of an SSP that is not linked with the existing oversight systems.

SSP Framework	Critical Elements of Oversight
State safety policy and objectives	CE-1 Primary aviation legislation CE-3 State’s civil aviation system and safety oversight functions
State safety risk management	CE-2 Specific operating regulations CE-6 Licensing, certification, authorization and approval obligations
State safety assurance	CE-7 Surveillance obligations CE-8 Resolution of safety concerns
State safety promotion	CE-4 Technical personnel qualification and training CE-5 Technical guidance, tools and the provision of safety critical information

2.4 Consider the SSP framework component regarding safety policy. The SSP framework indicates that States should possess a State safety policy and objectives that include promulgation of a safety legislative framework and the identification of the State’s safety responsibilities and accountabilities. This SSP component ties directly to CE-1 and CE-3, which cover primary aviation legislation and the requirement for a State’s civil aviation system and safety oversight functions respectively.

2.5 Another example of commonality between SSP and critical elements of oversight can be observed with the State safety risk management component in the SSP. This component refers to developing appropriate risk controls and the typical instruments of risk control on the part of a State, including its regulations. Regulations that are based upon identified hazards give service providers clear targets for attainment of the risk control. Consequently, this function is comparably covered in CE-2.

2.6 The examples discussed above demonstrate some of the commonality that exists between the SSP and critical elements of safety oversight. Additionally, the State safety assurance component of the SSP also includes a requirement for safety oversight (Element 3.1). This SSP element requires a State to establish mechanisms to ensure effective monitoring of the eight critical elements of safety oversight. Thus, without proper alignment, States could be led to believe that they must show compliance with similar requirements twice, once as part of the oversight function within the SSP and again as part of its eight critical elements of safety oversight.

2.7 In conclusion, it is imperative that further development of Annex 19 ensures that States are not required to meet similar requirements in the elements of the SSP Framework and once again as part of the eight critical elements of oversight. Additionally, ICAO must ensure that this Annex is developed in an integrated and comprehensive manner, in which SSP and the States’ safety oversight capabilities are integrated and ICAO auditing activities reflect this integration.

3. DISCUSSION - ACCEPTANCE OF FOREIGN SAFETY MANAGEMENT SYSTEMS

3.1 Today, airlines operate globally and have formed strategic international alliances. They enter into contractual arrangements for maintenance services with organizations outside their State of certification. Additionally, aircraft parts and components are manufactured and sold across the globe. In this era of global aviation, there is a need for cooperation among States to assure that the service providers they oversee are effectively controlling risk.

Specifically, it is prudent to avoid the burden associated with the imposition of multiple SMS implementations by service providers and multiple acceptances by the States.

3.2 Complying with differing SMS requirements for multiple States would be a significant burden to the aviation industry as it would need to maintain multiple manuals, personnel requirements, and undergo multiple certifications and inspections from the various States whose product/service provider use its services. The burden to the aviation industry is not only costly, but it may also mean that a product/service provider's personnel may be required to use different processes depending upon the State. As a result, they may not rely on a single set of standard operating procedures, which may result in a safety concern.

3.3 A State's ability to accept SMSs approved by another State should eliminate the need for multiple SMSs as well as reduce the numbers of certifications/validations and inspections considerably. While ICAO standards outline requirements for SMS, the performance of any organizational system or process in practice depends not only on the requirements, but also the way in which those requirements are implemented. Acceptance is based on the recognition that the safety performance of a service provider's SMS will meet and continue to meet risk management expectations.

3.4 For States to be confident of the equivalence of the safety performance of product and service providers whose SMSs have been accepted by another State, the two States will need to agree on SMS standards, expectations for final implementation, SMS acceptance processes, performance measurement strategies, and processes for continued oversight. Assurance that these processes are adequate and capable of performing should be considered through the integrated oversight methodology that combines USOAP, CMA and SSP.

3.5 Recognition of another State's SMS acceptance and safety performance assessments would also require sufficient documentary evidence of the processes followed and the resulting authorizations by the originating State. Additionally, robust guidance material would be needed to support a system of recognition of SMSs by other States. Furthermore, the originating State must meet ICAO SMS requirements documented in ICAO standards and recommended practices.

3.6 In conclusion, recognizing that SMS is becoming the standard for safety worldwide, it is most beneficial for the States to initiate discussions on how to establish a means for harmonized acceptance of SMS. If States require similar safety management concepts through dissimilar SMS requirements and oversight processes, a significant burden to the industry could result; significant enough to potentially divert precious resources that may impact safety critical programs both within the States and industry. At the same time, States responsible for the oversight of the product/service provider cannot abrogate their responsibilities. Additionally, due diligence is required if States would recognize SMS approved by other States. Consequently, equivalency of not only requirements but also of processes for implementation and oversight, could provide States with confidence in other States' processes and the performance of their service providers.

4. CONCLUSION

4.1 In conclusion, ICAO's work thus far in completing the first phase of the new Annex 19 for Safety Management is a significant accomplishment and provides an excellent framework for States and the industry they oversee to adopt critical safety management systems. However, in the subsequent phases of Annex 19's development, the SMP must address the issues affecting the implementation of these requirements to ensure a harmonized approach throughout the global system, so as not to detract safety resources through duplicative requirements. Thus, the United States recommends States and ICAO to support the continued work of the panel, and specifically to focus efforts on the issues outlined above.

5. **RECOMMENDATIONS**

5.1 The Assembly is invited to agree on the following recommendations:

- a) strongly recommend that ICAO and the international aviation community continue to support the development of the Annex 19 (Safety Management) and ensure that State Safety Program (SSP) and the State's safety oversight capability requirements are integrated in Annex 19 and that ICAO auditing processes reflect this integration; and
- b) recommend that ICAO and the international aviation community propose a process to facilitate acceptance of safety management systems in other States.

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