Introduction

The International Civil Aviation Organization (ICAO (International Civil Aviation Organization)) requires SMS (safety management system) for the management of safety risk in air operations, maintenance, air traffic services and aerodromes. These requirements have been expanded to include flight training and design and production of aircraft. Furthermore, ICAO has published safety management requirements for States by mandating that States establish a State Safety Program (SSP (State Safety Programme)) in order to achieve acceptable safety performance in their civil aviation systems. As such, it is beneficial for civil aviation authorities (CAAs (civil aviation authorities)) to harmonize their SMS and SSP requirements and implementation activities and collaborate on common topics of interest.

Civil aviation authorities will benefit from collaboration and sharing of lessons learned and best practices. Such collaboration will help authorities to avoid duplication of efforts as well as enable them to better share information. Additionally, sharing methods and tools will assist in developing robust and affordable safety management systems. Aviation industry organizations will also greatly benefit from SMS requirement harmonization among regulators, since many companies own multiple certificate types in multiple nations.

ICAO Annex 19 – Safety Management

SMS requirements for the various sectors of the industry have existed in ICAO Annexes 1, 6, 8, 11, and 14 beginning in 2001. SSP requirements for States have existed since 2010. Most ICAO requirements address individual functions or types of aviation services. This allows for the Annexes to address the unique needs of each target audience but does not address the integrated nature of the modern air transportation system. The increasing complexity and tighter coupling among various aviation sectors have called for an approach that provides for a higher degree of integration of safety management functions.
To address this concern, the ICAO 2010 High Level Safety Conference called for the development of a new Annex dedicated to safety management responsibilities and processes that would address the safety management responsibilities of States framed under the SSP. The ICAO Council concurred with this recommendation and directed the formation of the Safety Management Panel (SMP (Safety Management Panel)) to develop this Annex (Annex 19). The panel is made up of 25 Member States including the United States, seven Industry representatives, and the European Aviation Safety Agency. Amer Younossi from the FAA Office of Accident Investigation and Prevention is the U.S. member of this panel.

Annex 19 is the first new ICAO Annex in over thirty years and was developed in two phases. The first phase involved the transfer of existing safety management related content, modifications to improve the language for clarity, and modifications to ensure standardization and harmonization across the Annexes. The SMP delivered the first phase of Annex 19 in early in 2012. It was adopted by the ICAO Council on February 25, 2013 and became applicable in November 2013.

The SMP addressed many issues raised by panel members, ICAO Member States, the ICAO Air Navigation Council (ANC), and other groups during the second phase, resulting in Amendment 1 to Annex 19. In particular, the Amendment links the Eight Critical Elements of Safety Oversight System and the 11 elements of the SSP framework to create a unified State-level Safety Management framework. It also addresses safety data/information protection.

The newly adopted Amendment to Annex 19 is effective in July 2016 and applicable in November 2019.

**Safety Management International Collaboration Group**

The European Aviation Safety Agency (EASA (European Aviation Safety Agency)), the FAA Office of Aviation Safety (AVS (Office of Aviation Safety)), ICAO, and Transport Canada Civil Aviation (TCCA (Transport Canada Civil Aviation)) held a meeting in February 2009 to discuss the potential for SMS and SSP cooperation. Meeting participants agreed that there was indeed value to collaborating on SMS and SSP topics of interest and established the Safety Management International Collaboration Group (SM ICG (Safety Management International Collaboration Group)). The SM ICG agreed to meet semi-annually in addition to regular teleconferences and form project teams to develop products collaboratively.

The SM ICG was established for collaboration and harmonization purposes and does not have authority over any of the participating organizations; each organization participates voluntarily. However, representatives are to make every effort to reach a common understanding when making SM ICG decisions/recommendations or to provide dissenting opinions. Representatives are also expected to speak for their organization and share their organization's position, rather than personal opinions.

It has also been agreed that the SM ICG will interface with various stakeholders in the aviation system, including: industry members and groups, Commercial Aviation Safety Team (CAST (Commercial Aviation Safety Team)), European Commercial Aviation Safety Team (ECAST (European Commercial Aviation Safety Team)), other comparable organizations, and civil aviation authorities that have implemented or are implementing SMS and SSP.
The SM ICG establishes short-term project teams to develop specific products. Product development focuses on creating a common understanding of safety management requirements; promoting alignment of safety management terminology; and providing implementation support, both for States (SSP) and service providers (SMS), in the form of guidance material, tools, promotional material, and training program guidance.

The current core membership of the SM ICG includes the Aviation Safety and Security Agency (AESA (Aviation Safety and Security Agency)) of Spain, the National Civil Aviation Agency (ANAC (National Civil Aviation Agency)) of Brazil, the Civil Aviation Authority of the Netherlands (CAA NL (Civil Aviation Authority of the Netherlands)), the Civil Aviation Authority of New Zealand (CAA NZ (Civil Aviation Authority of New Zealand)), the Civil Aviation Authority of Singapore (CAAS (Civil Aviation Authority of Singapore)), the Civil Aviation Safety Authority (CASA (Civil Aviation Safety Authority)) of Australia, the Direction Générale de l'Aviation Civile (DGAC (Direction Générale de l'Aviation Civile)) in France, the Ente Nazionale per l'Aviazione Civile (ENAC (Ente Nazionale per l'Aviazione Civile)) in Italy, the European Aviation Safety Agency (EASA (European Aviation Safety Agency)), the Federal Office of Civil Aviation (FOCA (Federal Office of Civil Aviation)) of Switzerland, the Finnish Transport Safety Agency (Trafi (Finnish Transport Safety Agency)), the Irish Aviation Authority (IAA (Irish Aviation Authority)), Japan Civil Aviation Bureau (JCAB (Japan Civil Aviation Bureau)), the United States Federal Aviation Administration (FAA (Federal Aviation Administration)) Aviation Safety Organization, Transport Canada Civil Aviation (TCCA (Transport Canada Civil Aviation)), and the Civil Aviation Authority of United Kingdom (UK CAA (Civil Aviation Authority of United Kingdom)). Additionally, the Civil Aviation Department of Hong Kong (CAD HK (Civil Aviation Department of Hong Kong)), the International Civil Aviation Organization (ICAO (International Civil Aviation Organization)), and the United Arab Emirates General Civil Aviation Authority (UAE GCAA (United Arab Emirates General Civil Aviation Authority)) are observers to this group.

Products

The SM ICG and its work groups have and continue to develop products to be shared with the wider aviation community. These products are available via SKYbrary.

Additional International Collaboration and Outreach

The FAA welcomes the opportunity to initiate SMS discussions with interested civil aviation authorities. The purpose of these efforts will be to harmonize SMS efforts, collaborate on topics of common interest, share lessons learned, and ensure the progression of SMS in a similar direction. Discussion topics will include: the SMS and SSP framework, organizational changes due to SMS implementation, cost and benefits of implementation, lessons learned, phased implementation, modifications to oversight programs due to SMS, rulemaking activities, industry buy-in, change management, international SMS interoperability issues, SMS collaboration, SMS tools, and training.

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