ICAO 80

SAFE SKIES.

SUSTAINABLE FUTURE.

Air Navigation Services (ANS) Safety Oversight Inspector Workshop

Module 3

State Safety Program (SSP)

ICAO

Module Objective

That participants will be able to understand the relation between SSO and the SSP, importance of the implementation of the State Safety Program from the air navigation services perspective and how this will help on the SMS surveillance of ATS service providers, including its integration with other management systems already established or required.

Introduction

The objective of the chapter (4) is to provide information to support or complement the initiatives for the establishment of the SSP, from the perspective of ANS. It can be taken only as general information or specific reference for the establishment of the authority processes to manage the Safety Management System (SMS) of the ATS service provider, according to the requirements established by the State.

The SSP is nothing more than an integrated set of regulations and activities aimed at managing safety in a comprehensive manner.

Although the ICAO standards and guidance material for safety management are taken as a reference, it is important to highlight that the requirements established by the State in its legislation are those applicable to the Authority itself, as well as to service providers.

Module Content

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02 Objective of the SSP

03 SSP Framework

04 SMS of ATS Providers

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Relation between SSO and SSP

With the approval and publication of the first edition of Annex 19, States were expected to establish and implement two sets of provisions, the eight CEs of the SSO and the four components of the SSP.

SSO

Ensure the EI by the aviation industry of prescriptive regulations

Both closely related in terms of the safety objectives that each seeks to achieve.

SSP

Represents the incorporation of safety management principles.

Relation between SSO and SSP

Safety oversight and safety management, are interdependent and constitute an integrated approach leading to effective safety management.

The CEs of the SSO are the foundation of the SSP.

The second edition of Annex 19 underlines the importance of a safety oversight system by maintaining the provisions related to the eight CEs at the standard level.

Most SSP framework requirements have been upgraded to Recommended Practices, with some upgraded to Standards.

When beginning to implement an SSP, most States find out that they already have existing processes and activities that cover many aspects of the SSP.

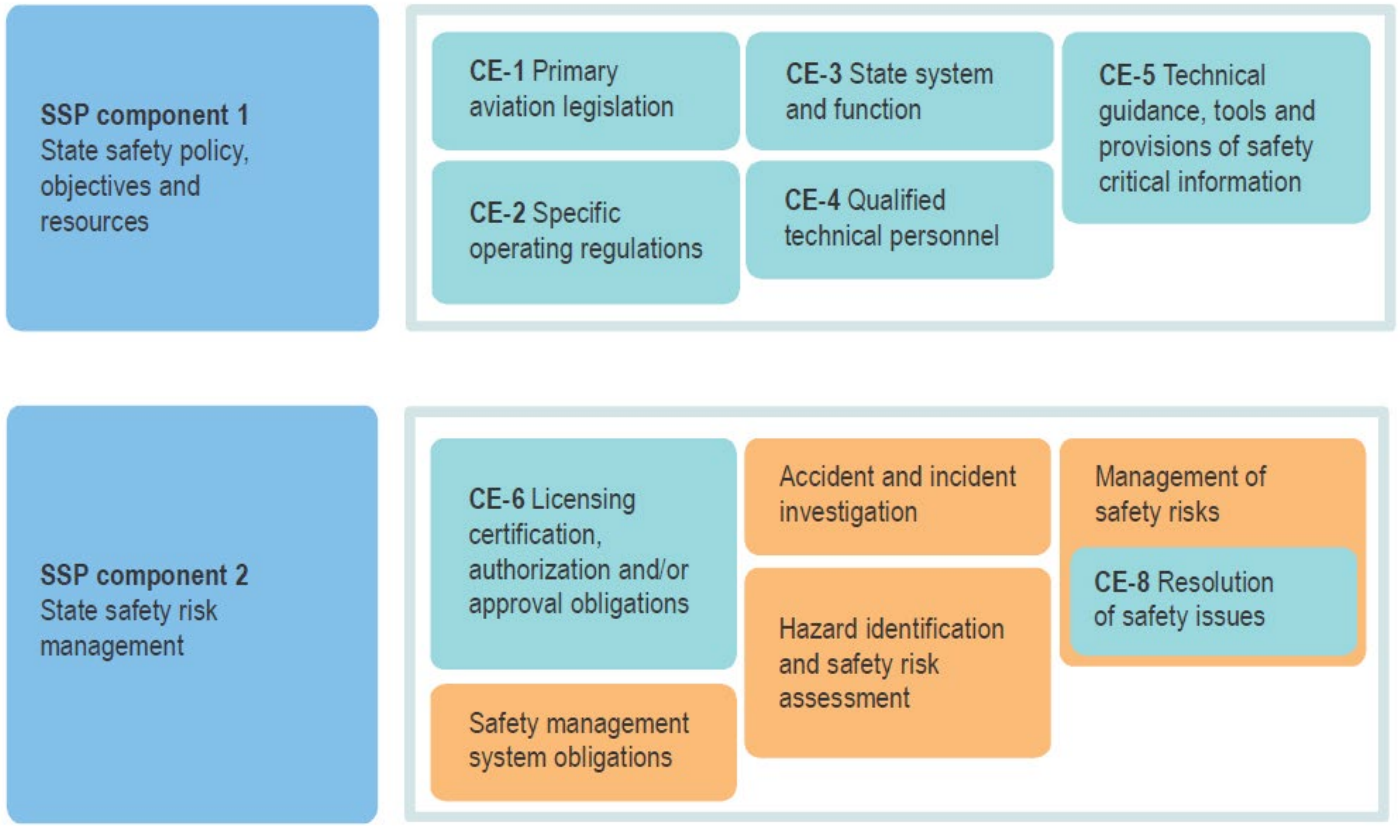
Objective of the SSP

The implementation of the SSP is aimed at enhancing those processes with additional performance and safety risk-based elements, as well as facilitating the effective implementation of the SMS by the State's aviation industry.

the SSP has the objective of:

- Ensure that the State has an effective legislative framework to support the specific operating regulations,
- Ensure coordination between the risk management system and the safety assurance and establish synergy between the relevant state aviation authorities,
- Support the EI and appropriate interaction with the SMS of the service providers,
- Facilitate the observation and measurement of the State's aviation industry safety performance,
- Maintain or continuously improve the State's general performance in terms of safety.

SSP Framework



SSP Framework

- **Safety management system obligations**

3.3.2.1 States shall require that the following service providers under their authority implement an SMS:

e) air traffic services (ATS) providers in accordance with Annex 11;

- **Accident investigation**

3.3.3 States shall establish a process to investigate accidents and incidents in accordance with Annex 13, in support of the management of safety in the State.

SSP Framework

- **Hazard identification and safety risk assessment**

3.3.4.1 States shall establish and maintain a process to identify hazards from collected safety data.

3.3.4.2 States shall develop and maintain a process that ensures the assessment of safety risks associated with identified hazards.

- **Management of safety risks**

3.3.5.1 States shall establish mechanisms for the resolution of safety issues in accordance with section 8 in Appendix 1.

SSP Framework

SSP Framework

- **State safety performance**

3.4.2.1 States shall establish the acceptable level of safety performance to be achieved through their SSP.

- **Internal communication and dissemination of safety information**

Recommendation.— States should promote safety awareness and the sharing and exchange of safety information to support, within the State aviation organizations, the development of a positive safety culture that fosters an effective SSP.

- **External communication and dissemination of safety information**

Recommendation.— States should promote safety awareness and the sharing and exchange of safety information with the aviation community to foster the maintenance and improvement of safety and to support the development of a positive safety culture.

SMS of ATS Providers

Annex 19 establishes that States will require service providers under their authority to implement an SMS, which will be acceptable to the State responsible for designating the provider, and in accordance with the framework contained in Appendix 2 to the aforementioned Annex.

The purpose of a SMS is to provide service providers with a systematic approach to managing safety. It is designed to continuously improve safety through hazard identification, data collection and analysis, and continuous assessment of safety risks.

The SMS seeks to proactively contain or mitigate safety risks before they lead to aviation incidents and accidents. The system enables service providers to effectively manage their activities, their safety performance and their resources, while achieving a better understanding of their contribution to aviation safety.

An effective SMS demonstrates to States the service provider's ability to manage safety risks and addresses effective safety management at the State level.

SMS of ATS Providers

The framework consists of four components and twelve elements that constitute the minimum requirements for the implementation of an SMS, which are:

1. SAFETY POLICY AND OBJECTIVES

    1.1 Management commitment

    1.2 Safety accountability and responsibilities

    1.3 Appointment of key safety personnel

    1.4 Coordination of emergency response planning

    1.5 SMS Documentation

SMS of ATS Providers

2. SAFETY RISK MANAGEMENT
    - 2.1 Hazard identification
    - 2.2 Safety risk assessment and mitigation
3. SAFETY ASSURANCE
    - 3.1 Safety performance monitoring and measurement
    - 3.2 The management of change
    - 3.3 Continuous improvement of the SMS
4. SAFETY PROMOTION
    - 4.1 Training and education
    - 4.2 Safety communication

ATS-SMS Oversight

With the implementation of an SMS for ATS within the airspace of its jurisdiction, and in the aerodromes in which the provider provides services, the CAA must implement activities to monitor these systems.

The SMS acceptance and supervision process must be established in the corresponding aeronautical regulation, where the implementation phases, times and compliance requirements for each of the phases are described. Consequently, the authority must develop procedures to verify the progress made by the service provider in the implementation of the corresponding SMS.

The oversight will be carried out using the SMS oversight guidelines or protocols that will be developed by the CAA (a guide for the verification of the SMS implementation phases is included in Attachment I of the manual)

To evaluate the implementation and effectiveness of the SMS, interaction with the ATS provider is necessary, including discussions and face-to-face interviews.

ATS-SMS Oversight

The two oversight activities that are considered as vital with respect to ATS SMS are:

a) SMS initial acceptance: This is characterized by being a mostly documentary review of the system, it is carried out with the purpose of verifying that the SMS that the ATS provider proposes to implement complies with the minimum requirements defined within the framework of the SMS established in the national regulations, based on the SARPs of ICAO, and assess whether compliance and performance indicators are adequate.

b) SMS continuous monitoring: This is carried out in order to verify continuous compliance with the requirements demonstrated in the initial acceptance and, in addition, monitor the processes related to the identification of hazards, risk management and continuous improvement. Continuous monitoring should include verification of performance agreements by the service provider that serve as input for setting and monitoring state performance goals.

ATS-SMS Oversight

The initial acceptance of the SMS would be recommended to be carried out in parallel with its implementation by the provider, making it necessary for both the CAA and the ATS provider to establish an implementation plan that involves both parties.

Once the documentation review of the system is completed, an inspection visit must be carried out as part of the initial acceptance.

Among the essential characteristics that must be considered in an initial acceptance of SMS are, but not limited to:

a) Verify the SMS documentation system proposed by the ATS service provider, comply with policies, written procedures, the existence of an organizational structure where the responsibilities and competencies of key personnel for SMS management are clearly established.

ATS-SMS Oversight

b) Verify the internal processes established for risk management and mitigation, this includes verification of compliance with the actual processes and their results in comparison with the written processes and other established elements.

c) Identify and propose corrective actions where deficiencies have been identified.

The inspection visit can be carried out by an inspection team, and in the case of small aviation administrations it could be carried out by a single inspector accompanied by specialist to support the evaluation if necessary.

ATS-SMS Oversight

Although the SMS established by the provider must include safety assurance processes to demonstrate that safety is being managed, and these processes allow internal verifications to detect and correct safety issues, the continuous monitoring of the SMS by the CAA must verify these safety assurance procedures and focus their attention on those areas where safety-related issues have been detected.

In addition, the SMS established by the ATS provider must be continuously evaluated through safety audits or inspections and focus on the following aspects:

a) To monitor the SMS prioritizing the areas where verification of compliance is required,

b) verify the actual processes and their results, compared with the written procedures,

ATS-SMS Oversight

c) focus on the mechanisms implemented to detect and correct safety issues in the operations of the ATS service provider,

d) request corrective actions where deficiencies are found,

e) follow up on the implementation of corrective action plans where necessary, verifying their effective implementation; and

f) the verification of safety performance by the ATS service provider, evaluating the achievement of safety performance goals, as well as compliance with performance agreements or the establishment of corrective action plans in the event of failure to comply with these agreements.

ATS-SMS Oversight

At this point, it is important to clarify why SMS oversight is included in this chapter of the manual. This is because the safety oversight of air navigation services is an obligation that must be fulfilled even without an SMS being implemented by the ATS provider.

This surveillance process may be managed independently, or jointly if necessary, depending on the capabilities of the CAAs and their individual needs.

The CAA personnel that would be designated to carry out the surveillance of the SMS of ATS providers must have specific training and competencies to fulfil the functions and responsibilities derived from the supervision of the SMS.

It is likely that within its workforce, the CAA has personnel with the necessary training and capabilities for the surveillance of the ATS service provider's SMS. If not, it becomes necessary to address this situation either by providing additional skills to existing staff or by hiring additional staff. The combination of technical skills with system management skills is a frequently used strategy.

ATS-SMS Oversight

The Safety Management International Collaboration Group (SMICG) has developed guidance material to establish the competencies required by SMS inspection personnel, which is available at the following link: https://skybrary.aero/articles/sms-inspector-competency- guidance.

Questions?

THANK YOU