ICAO State Safety Programme (SSP) Introduction

Aerodrome Safety Management System (SMS) Implementation Workshop – Activity of GREPECAS Project F1

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Eduardo Chacin

Flight Safety Officer
ICAO NACC Regional Office

State Safety Programme (SSP) Definition

State Safety Programme is an integrated set of regulations and activities aimed at improving **safety**.

It is a management system for the administration of **safety** by the State.

Concept of Safety

ICAO Doc 9859:

- Safety is the state in which the possibility of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of **hazard identification** and **risk management**
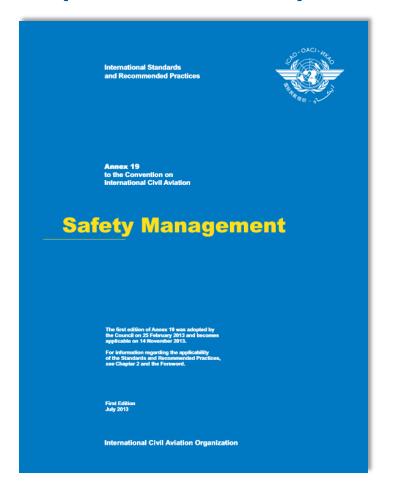
State Safety Programme (SSP)

- A platform for the State to apply the two basic safety management principles throughout its civil aviation organizations

  – Safety Risk Management (SRM)

  – Safety Assurance (SA)

- A framework that allows the State safety oversight authority and service providers to interact more effectively in the resolution of safety concerns

ICAO Requirement (Annex 19)

States shall establish a State Safety Programme (SSP), in order to achieve an Acceptable Level of Safety Performance (ALosP) in civil aviation
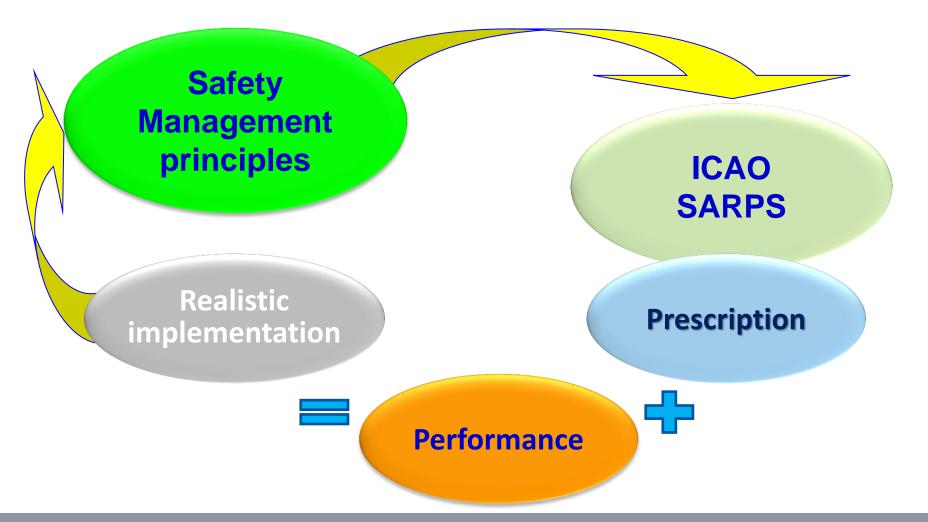

International Standards and Recommended Practices

Annex 19
to the Convention on International Civil Aviation

Safety Management

The first edition of Annex 19 was adopted by the Council on 25 February 2013 and becomes applicable on 14 November 2013.

For information regarding the applicability of the Standards and Recommended Practices, see Chapter 2 and the Foreword.

First Edition
July 2013

International Civil Aviation Organization

ICAO Safety Management SARPs
(Standard and Recommended Practices)

- Two audience groups
  - States
  - Service providers

- Three distinct Standards
  - State Safety Programme (SSP)
    - Acceptable Level of Safety Performance (ALosP)
  - Safety Management System (SMS)
    - Safety performance of the SMS
  - Management accountability

Prescription and Performance

Prescription and Performance cont.

- ## Prescriptive regulations

  – Prescribe what the safety requirements are and how they are to be met

- ## Performance based regulations

  – Specify the safety requirements to be met, but provide flexibility in terms of how safety requirements are met

Prescriptive based environment

Regulations as administrative controls

Rigid regulatory framework

- Inspections

- Audits

Regulatory compliance

Performance based environment

Regulations as safety risk controls

Dynamic regulatory framework

- Data based identification

- Prioritization of safety risks

Effective safety performance

State Safety Programme (SSP)

- SSP provides the means to combine prescriptive and performance-based approaches to:
  1. Safety rulemaking
  2. Safety policy development
  3. Safety oversight

Civil Aviation Authority Activities

1. **Safety rulemaking**

   – Based on comprehensive analyses of the State's aviation system

2. **Safety policies**

   – Developed based on hazard identification and safety risk management

3. **Safety oversight**

   – Focused towards the areas of significant safety concerns or higher safety risks

State Safety Programme in Context

The implementation of an SSP must be commensurate with the size and complexity of the State's aviation system

SSP Framework

The following four components of the SSP framework were elevated to the status of Standard in Annex 19:

1. State Safety Policy and Objectives
2. State Safety Risk Management
3. State Safety Assurance
4. State Safety Promotion

SSP Framework

1. **State safety policy and objectives**

   1.1 State safety legislative framework

   1.2 State safety responsibilities and accountabilities

   1.3 Accident and incident investigation

   1.4 Enforcement policy

2. **State safety risk management**

   2.1 Safety requirements for service providers SMS

   2.2 Agreement on service providers safety performance

3. **State safety assurance**

   3.1 Safety oversight

   3.2 Safety data collection, analysis and exchange

   3.3 Safety data driven targeting of oversight on areas of greater concern or need

4. **State safety promotion**

   4.1 Internal training, communication and dissemination of safety information

   4.2 External training, communication and dissemination of safety information

Prescription

Performance

Safety Management Systems (SMS)

The SMS is a systematic approach to managing safety, including the organizational structures, accountabilities, policies and procedures
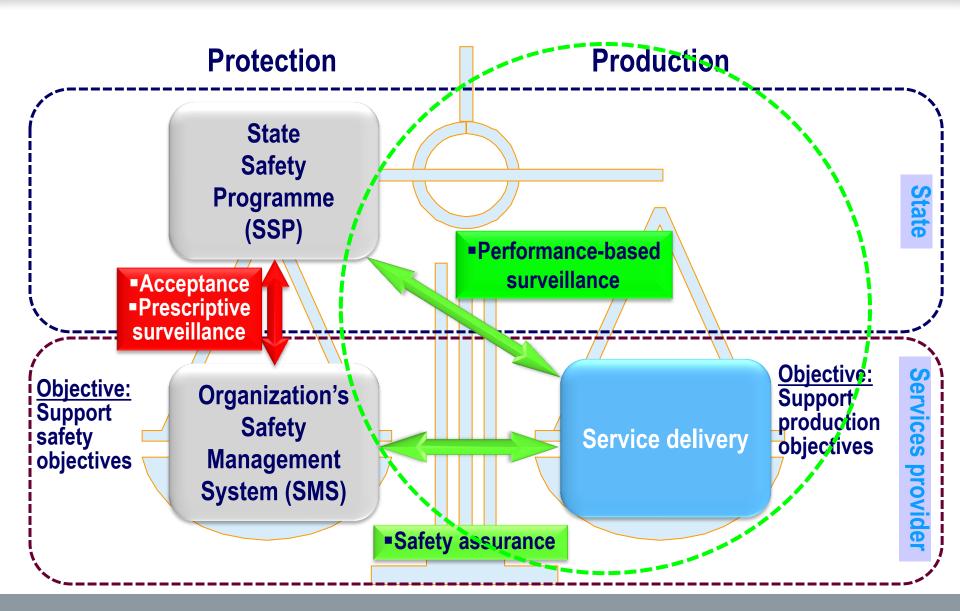
SMS State Requirement

- That a service provider implement the SMS acceptable to the State that:

  – Identifies safety hazards

  – Ensures the implementation of remedial action necessary to maintain agreed safety performance

  – Provides for continuous monitoring and regular assessment of the safety performance

  – Aims at a continuous improvement of the overall performance of the safety management system

Protection

Production

State
Safety
Programme
(SSP)

- Acceptance
- Prescriptive surveillance

- Performance-based surveillance

Objective: Support safety objectives

Organization's Safety Management System (SMS)

Service delivery

Objective: Support production objectives

- Safety assurance

State

Services provider

SSP and SMS Components

SSP components

❶ **State safety policy and objectives**
❷ **State safety risk management**
❸ **State safety assurance**
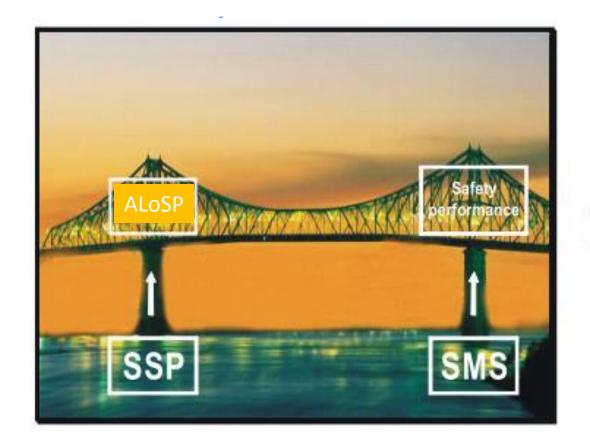❹ **State safety promotion**

SMS components

❶ **Safety policy and objectives**
❷ **Safety risk management**
❸ **Safety assurance**
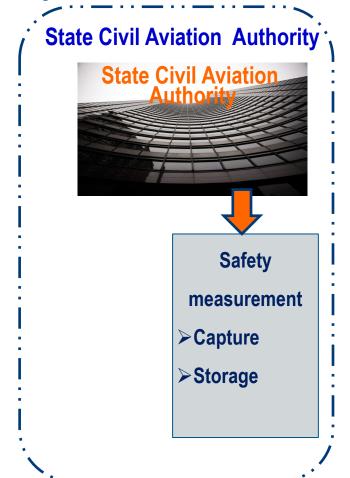❹ **Safety promotion**

Role of the SSP in Supporting SMS

System Today

Service providers

SMS

Airport N° 1

Airport N° 2

Airport N° 3

State Civil Aviation Authority

State Civil Aviation Authority

Safety

measurement

➢**Capture**

➢**Storage**

Initial ALoSP

Service providers

SMS

Airport N° 1

Airport N° 2

Airport N° 3

State Civil Aviation Authority
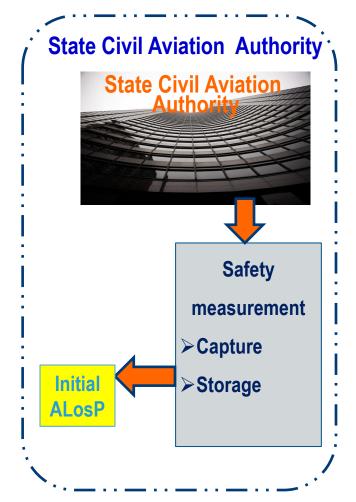
State Civil Aviation Authority

Safety measurement

➢Capture

➢Storage

Initial ALoSP

Initial ALoSP

Mature ALosP

Service providers

State Civil Aviation Authority

SMS

Airport N° 1

Airport N° 2

Airport N° 3

Exchange of protected safety data

Exchange of protected safety data

Exchange of protected safety data

State Civil Aviation Authority

Safety data collection & processing system

Protected safety data

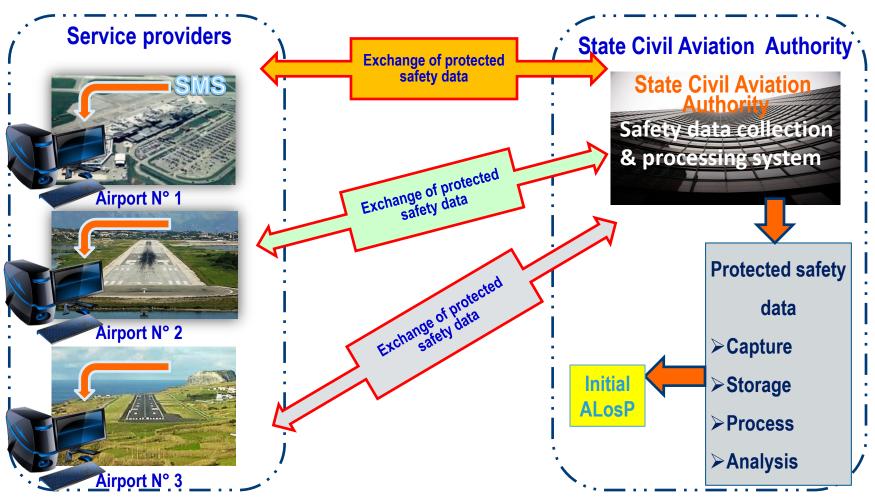➢ **Capture**

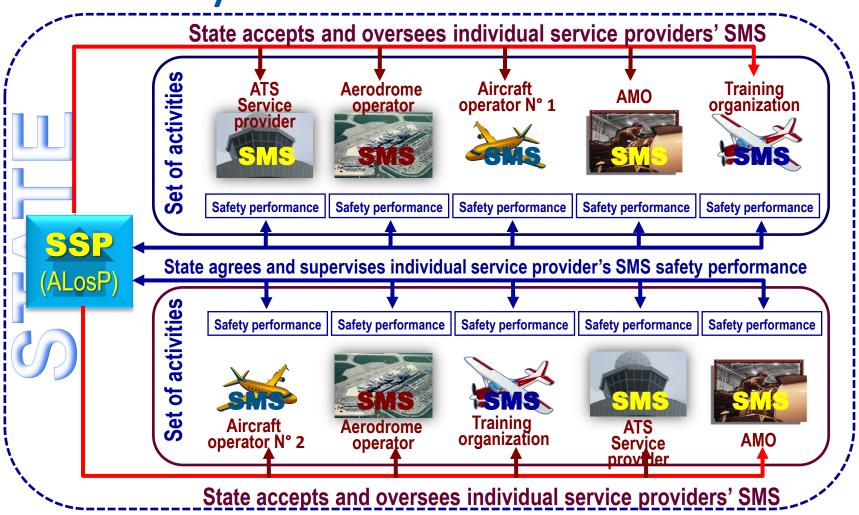➢ **Storage**

➢ **Process**

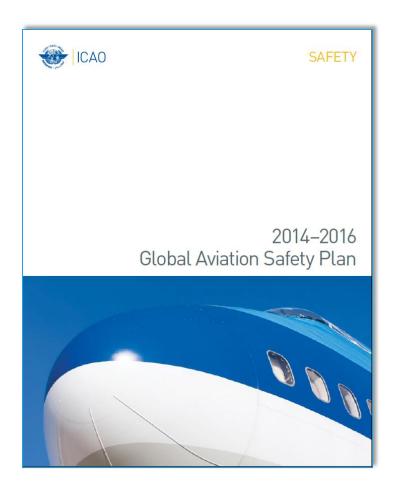➢ **Analysis**

Initial ALosP

System in the Future

Global Aviation Safety Plan (GASP)

GASP prioritizes the implementation of a State safety oversight system as a prerequisite to the establishment of a SSP
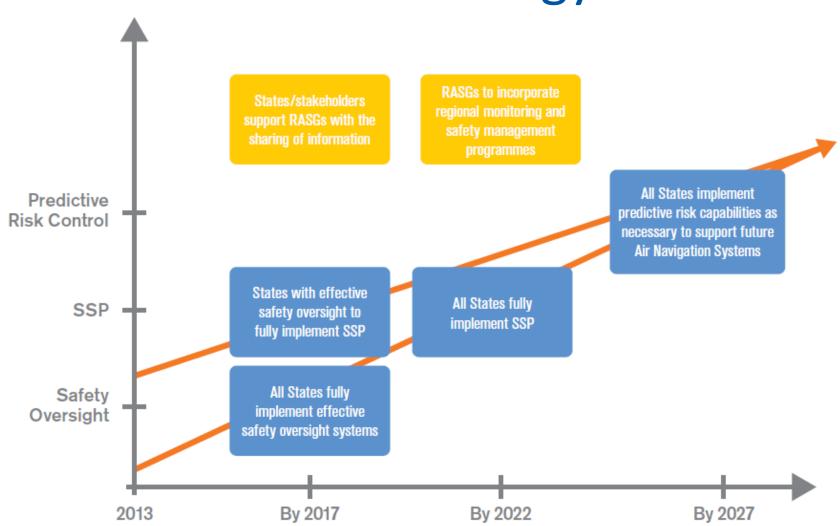
Global Aviation Safety Plan (GASP)

- GASP target dates and broad objectives:
  - Near-term (by 2017):
    - Implementation of an effective safety oversight system
  - Mid-term (by 2022):
    - Full implementation of the ICAO SSP framework
  - Long-term (by 2027):
    - Implementation of an advanced safety oversight system, including predictive risk management
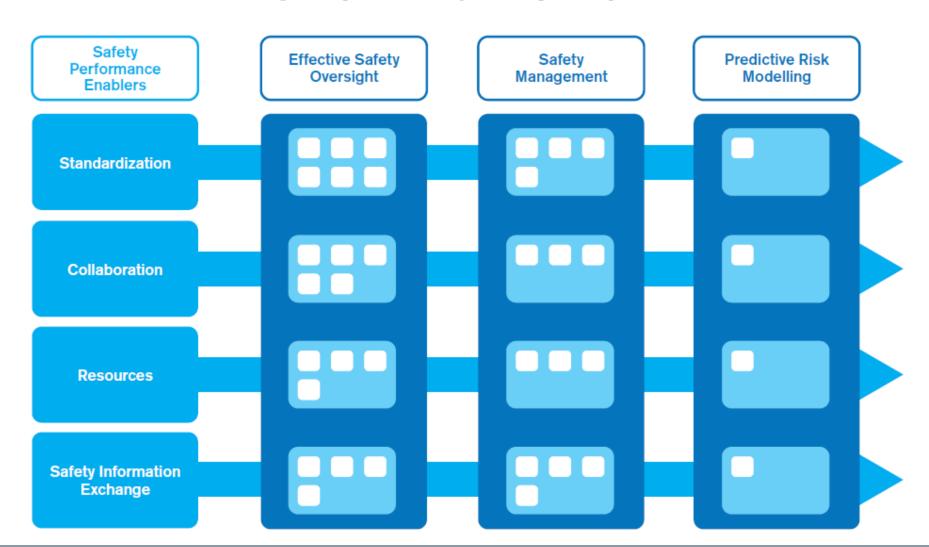
GASP Strategy

States/stakeholders support RASGs with the sharing of information

RASGs to incorporate regional monitoring and safety management programmes

All States implement predictive risk capabilities as necessary to support future Air Navigation Systems

States with effective safety oversight to fully implement SSP

All States fully implement SSP

All States fully implement effective safety oversight systems

Predictive Risk Control

SSP

Safety Oversight

2013 | By 2017 | By 2022 | By 2027
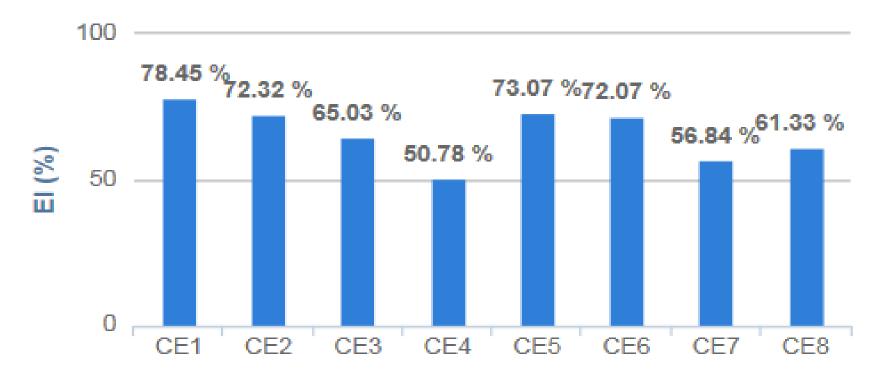
GASP Framework

Global Results

Critical Elements (CE) of a State Oversight System

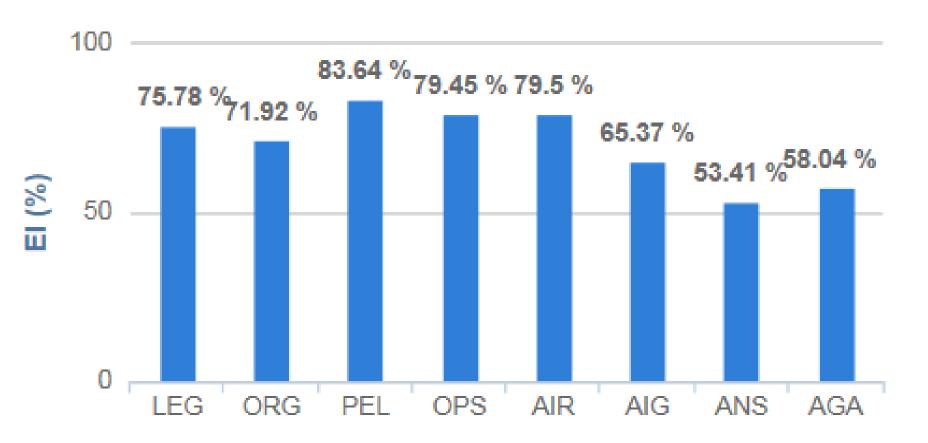# Effective Implementation (EI) by Critical Element (CE)

western Hemishere

Effective Implementation (EI) by Area

western Hemishere

CAR/DCA/OPSAN/1 Approval of the Port of Spain Declaration

CONCLUSION

- That the Port-of-Spain Declaration, presented by the CAR Region Safety and Air Navigation Directors Meeting (CAR/DCA/OPSAN), be presented at the Fifth North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/5) to be held in Port-of-Spain, Trinidad and Tobago, from 28 to 30 April 2014, for review and approval by the respective civil aviation authorities

Metas Regionales de Seguridad Operacional

1. **Vigilancia de la Seguridad Operacional**

   – Alcanzar un promedio regional del 80% de la Implementación Efectiva (EI) a más tardar en diciembre de 2016

   – Ningún Estado en la Región tendrá una EI del Elemento Crítico 3 del USOAP de la OACI (Personal de AAC) y, Elemento Crítico 4 (competencia de Inspectores) por debajo del 70% a más tardar en diciembre de 2016

Metas Regionales de Seguridad Operacional

2. Accidentes

- – Utilizando como referencia el año 2010, reducir el riesgo mortal de la Parte 121 u operaciones similares de transporte aéreo comercial en un 50% a más tardar en el año 2020 en la Región CAR

Metas Regionales de Seguridad Operacional

3. Excursiones de Pista

– Reducir el porcentaje regional de las excursiones de pista en un 20% usando la tasa regional (2007-2012) como punto de referencia a más tardar en diciembre de 2016

Metas Regionales de Seguridad Operacional

4. Certificación de Aeródromo

– 48% de aeródromos internacionales a ser certificados a más tardar en diciembre de 2016

Metas Regionales de Seguridad Operacional

5. Implementación del Programa Estatal de la Seguridad Operacional (SSP)/Gestión de la Seguridad Operacional (SMS)

– 60% de los Estados haya implementado la Fase 1 del SSP; que hayan aceptado los indicadores de la performance de la seguridad operacional relacionados con el SMS de los proveedores de servicios; y que haya establecido un Nivel inicial aceptable de la performance de la seguridad operacional (ALoSP) a más tardar en diciembre de 2016

– 60% de los proveedores de servicios haya implementado la Fase 1 de su SMS con un mínimo de procedimientos funcionales de riesgo en la Fase reactiva a más tardar en diciembre de 2016

Summary

- States and service providers have safety responsibilities

- ICAO SARPs requiere States to establish a SSP

- SSP is an integrated set of regulations and activities aimed at improving safety

- States are required to establish an ALoSP to be achieved

- Services providers are required to establish SMS

Summary cont.

- Regional Aviation Safety Groups (RASGs) have been invited to identify activities, included required resources, to support the effective and continuing implementation of SMS and SSP provisions

- States, through their RASGs are strongly encouraged to report progress, regarding the implementation of SSP and SMS provisions, which is essential to guide the future development of safety management provisions (Phase 2 of Annex19)

- ICAO is providing implementation assistance:
  - Project RLA/09/801 (courses, workshops, SSP Go-Teams)
  - Technical Missions

For additional information
Contact: echacin@icao.int

Visit: www.icao.int/nacc/

Thank You!