DGP-WG/22-IP/13
25/11/22

DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/22)

Montréal, 21 to 25 November 2022

Agenda Item 5: Clarifying State oversight responsibilities in Annex 18 (Ref: Job Card DGP.005.04)

BRIEFING ON THE STATE SAFETY PROGRAMME (SSP) AND SAFETY MANAGEMENT SYSTEMS (SMS)

(Presented by the Secretary)

SUMMARY

Attached is the briefing provided to DGP-WG/22 on the State safety Programme (SSP) and safety management systems (SMS).

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RECONNECTINGTHEWORLD

Briefing on SSP and SMS

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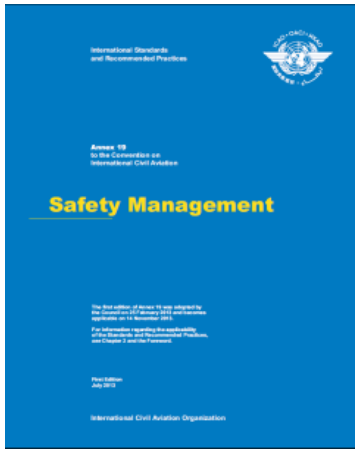
24 November 2022

Outline

1. Background to Annex 19
2. Overview of the State Safety Programme (SSP)
3. SSP/SMS relationship
4. Considerations in extending SMS applicability
5. ICAO initiatives to support SSP & SMS implementation

Annex 19 – *Safety Management*

1st Phase: Establish



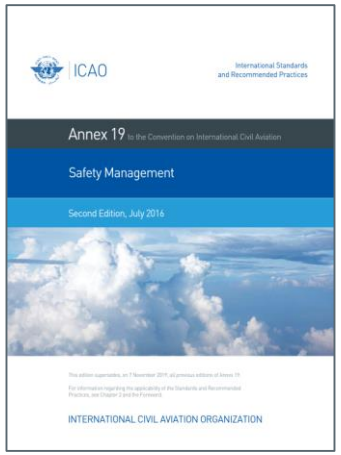
Adopted by ICAO Council on 25 February 2013

Effective from 15 July 2013

Applicable from 14 November 2013

Establish the safety management Annex through the consolidation and reorganization of existing Standards and Recommended Practices (SARPs) and supporting guidance material.

2nd Phase: Further development



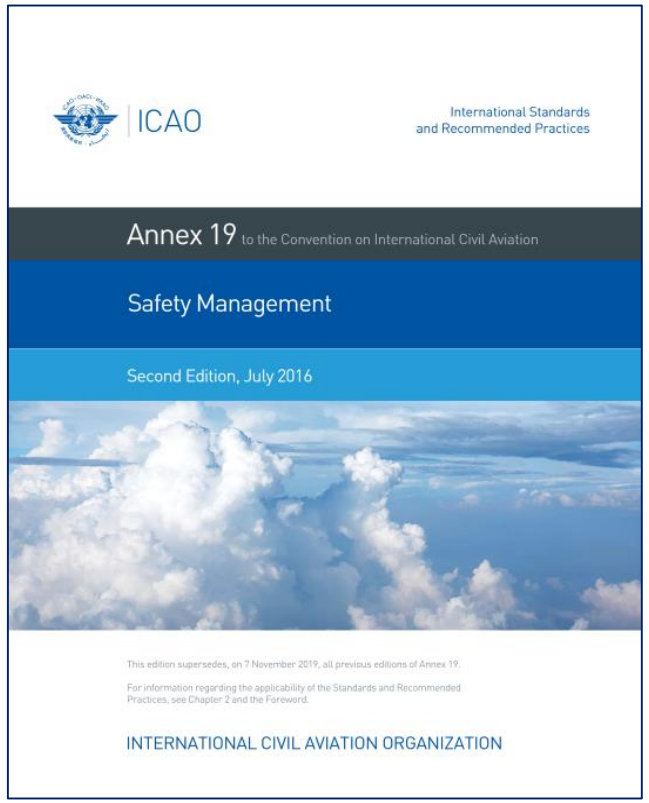
Adopted by ICAO Council on 2 March 2016

Effective from 11 July 2016

Applicable from 7 November 2019

- Upgraded provisions for the protection of safety data, safety information and related sources;
- Integration of the 8 critical elements of State safety oversight into the SSP components;
- Enhanced provisions for SMS, including extension to engine and propeller design and manufacturing organizations.

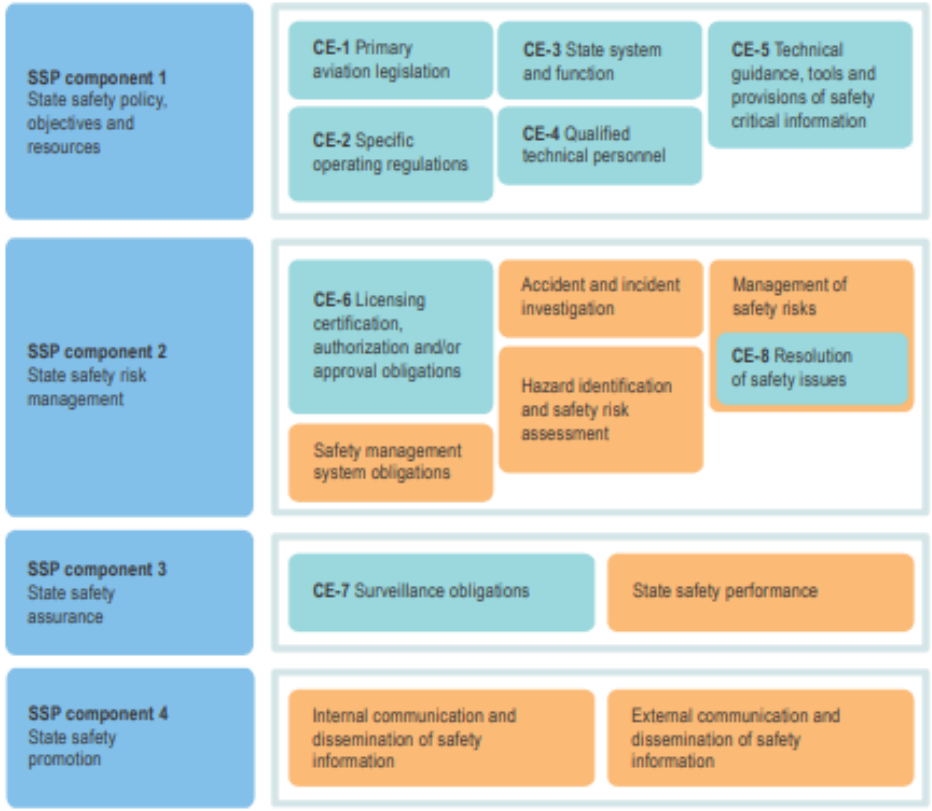
What is a State Safety Programme?



- States to establish and maintain a State Safety Programme (SSP)
- Safety Management Systems (SMS) framework for service providers
- SARPs related to safety data and safety information

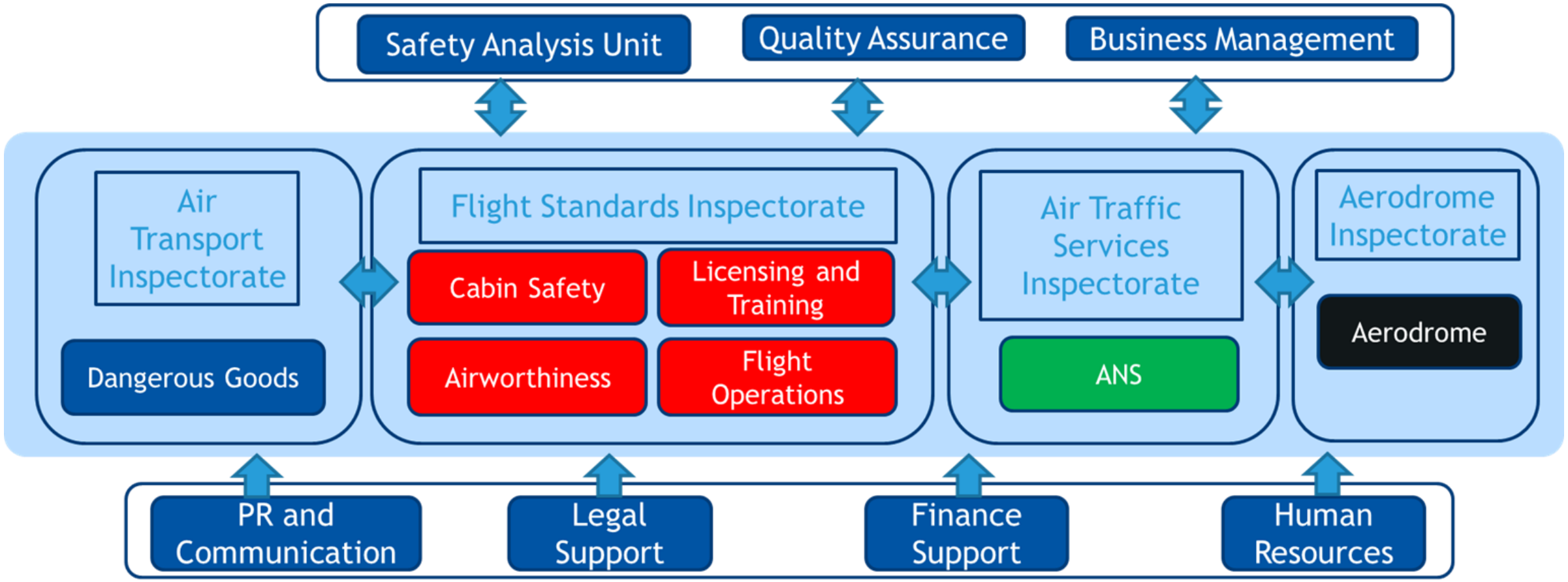
Overview of State Safety Programme

- The SSP is **an integrated** set of regulations and activities aimed at improving safety, which includes State safety oversight (SSO).
- The SSO aspect reflects the traditional role of the State i.e. ensuring effective implementation of prescriptive SARPs by the aviation industry. The SSP represents the incorporation of safety management principles. These responsibilities have been integrated in Annex 19 and referred as the **State's safety management responsibility.**
- By using safety management principles, the relationship between a State and its service providers should **evolve beyond compliance and enforcement**, to a partnership aimed at maintaining or **continuously improving safety performance**.

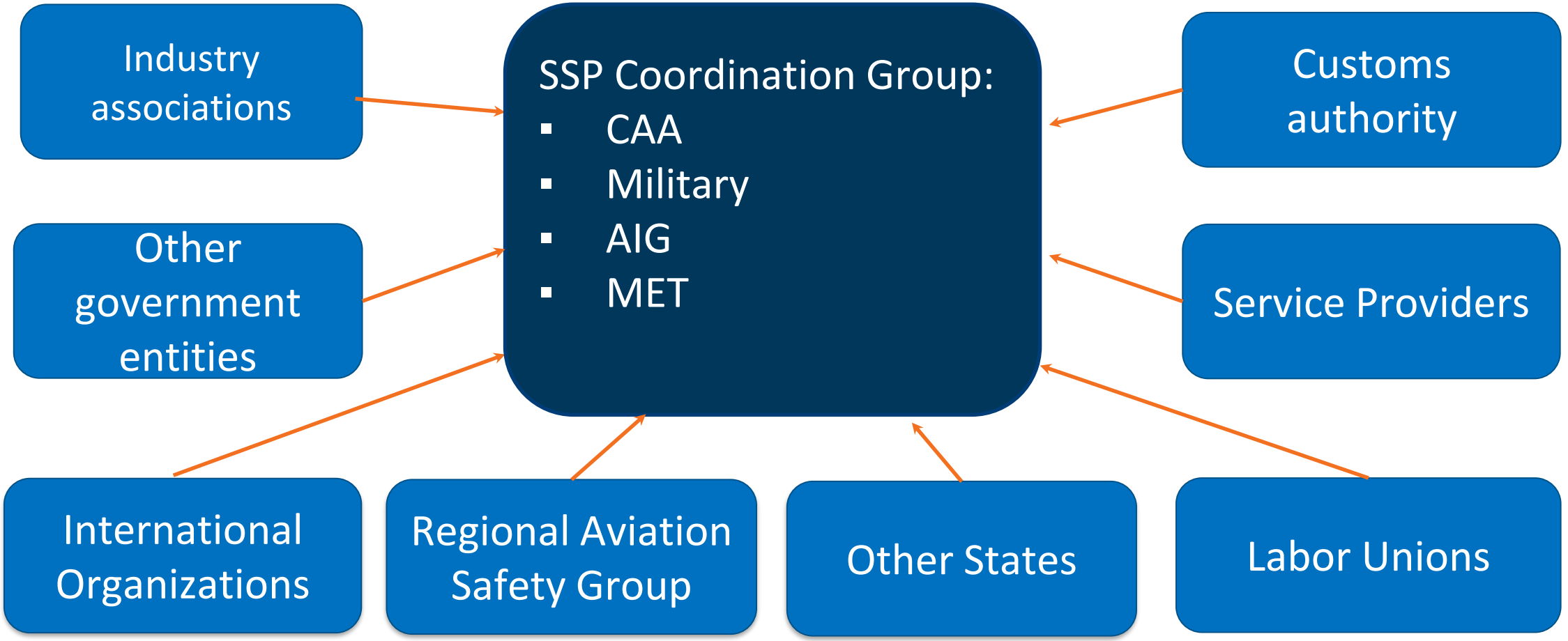


Integrated State Safety Programme

Example of a system description



SSP coordination group



State relationship with Air Operators

State has access to safety information from operators, such as:

- Safety performance indicators (SPIs)
- Top safety risks
- Internal audits conducted by operator on SMS compliance
- De-identified safety information
- Mandatory and voluntary reports sent by operators

State supports operators, for example:

- Leading industry seminars and conferences
- Presenting at industry led seminars and conferences
- Coordinating and communicating during major aviation system structure changes
- Investigating reports related with non-compliance within supply chain

SMS Applicability

- States shall require that the following service providers under their authority implement an SMS (3.3.2, Annex 19 refers)
  a) Approved Training Organizations
  b) Operators of aeroplanes or helicopters authorized to conduct international commercial air transport
  c) Approved maintenance organizations providing services to b)
  d) Organizations responsible for the type design or manufacture of aircraft, engines or propellers
  e) Air traffic services providers
  f) Operators of certified aerodromes

Amendment 2, Annex 19 (applicable Nov 2026) extends SMS applicability to

g) operators holding a remotely piloted aircraft system (RPAS) operator certificate and authorized to conduct international operations;

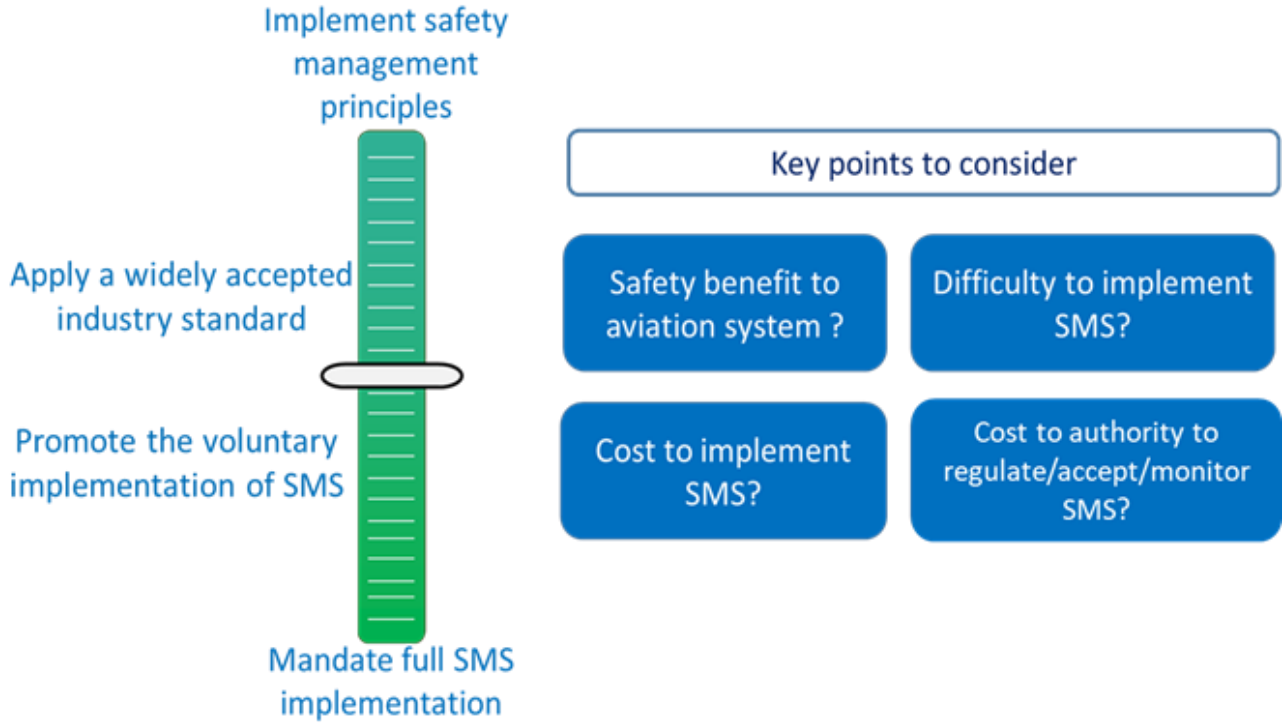
h) approved maintenance organizations providing services to g); and

i) operators of certified heliports.

SMS Discretionary Applicability

- Under the SSP, States are responsible for identifying their top safety risks. Even if some safety risks are not directly addressed by ICAO Annex SARPs

- States should consider all the safety risk controls they have available to manage their safety risks, taking into consideration the resources required by the industry as well as the State and the potential benefits.



- This may involve extending the applicability of SMS or applying safety management principles directly or indirectly. The SMM contains guidance on the scope of safety management provisions, applying discretionary SMS applicability and safety management interfaces (e.g. Ground Handling – Doc 10121).

Considerations for extending SMS

- As part of each State's evaluation process, a cost-benefit analysis should be carried out to support the justification of recommended safety risk control actions

Existing risk controls (aviation legislation and operating regulations)

- **Are there any ICAO SARPs addressing the activity/service provider?**
  - **Technical standards and/or organisation approval**
  - **Do existing ICAO SARPs adequately address the risks?**

Oversight capability – impact of extending SMS applicability

- **Budget, staffing, skills & knowledge to oversee**
- **How to perform SMS 'oversight' in the absence of an organisation approval?**
- **For some of the activities :**
  - **rely on service provider to cover the activities under their SMS**
  - **e.g. transport of dangerous goods, ground handling, AIM/CNS/MET services**

Examples of risk controls available to the State

- Do you know what types of risks you are trying to mitigate?
- It is important you understand and match the right risk controls to the risks being observed.

- ❖ **Introduce prescriptive requirements such as new regulations**
- ❖ **Direct intervention with service provider**
- ❖ **Issue operational directives**
- ❖ **Influence through safety promotion/engagement with stakeholders**
- ❖ **Using safety data and safety information to proactively identify hazards**

Management of interfaces

- Service providers interact and share interfaces with many entities that have an impact on safety, including other service providers with an SMS, and organizations without an SMS including non-aviation organizations and individuals. These interfaces need to be identified, assessed and managed by service providers.

- Ground handling is particularly dependent on coordination with several service providers, e.g. aircraft operators, aerodromes and other aviation organizations in the aviation system.

- As part of managing risks across interfaces, Runway Safety Teams are encouraged to apply safety management principles.

SMS interface management

Step 1. Identification of SMS interfaces

The service provider should try to **identify and understand the interfaces** it has with each organization. This includes its interface with the State

Step 2. Assessing safety impact of interfaces

The service provider should then try to **identify the potential impact of hazards related to the interfaces** on its **safety performance**.

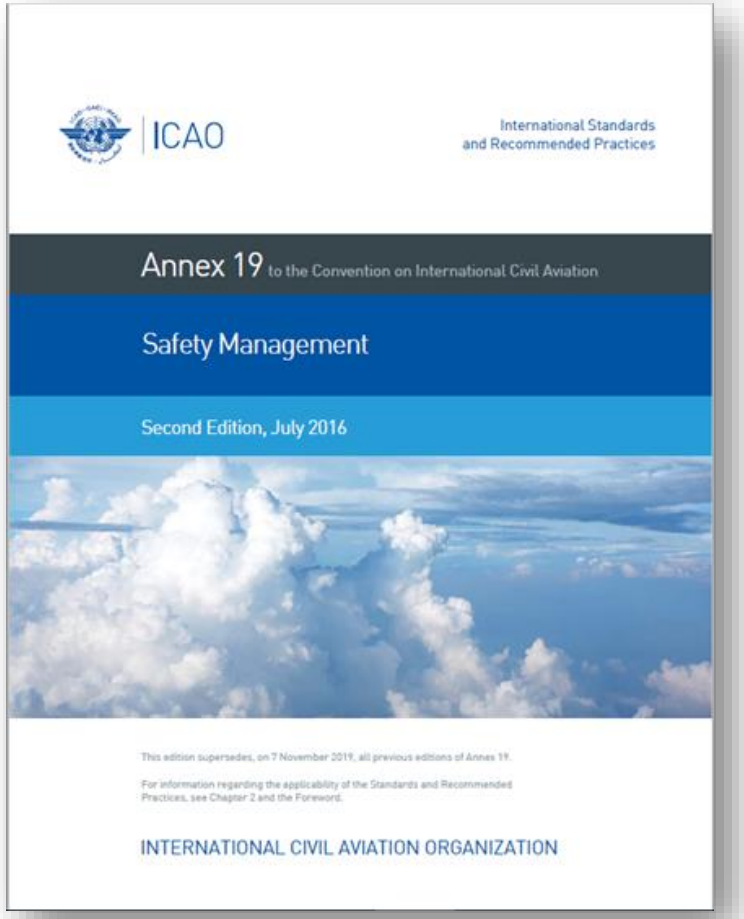
SMS interface management (cont.)

Step 3. Managing and monitoring interfaces through safety risk controls

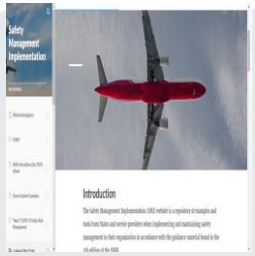
Some important things to consider:

1. Whether the interfacing entity **already has some type of certificate, authorization or approval;**
2. The level of understanding the interfacing entity has of the **impact** of their services **on the safe operation of aircraft;**
3. The **benefit vs. the cost** of introducing additional requirements;
4. The **appropriate formality** of any additional requirements;
5. The **management and monitoring** of the requirements and **who** will do it. and
6. The appropriate use of **safety performance indicators (SPIs)**.

Other ICAO Safety Management Provisions



***Safety Management Manual* (SMM) Doc 9859, 4th edition** www.icao.int/SMI

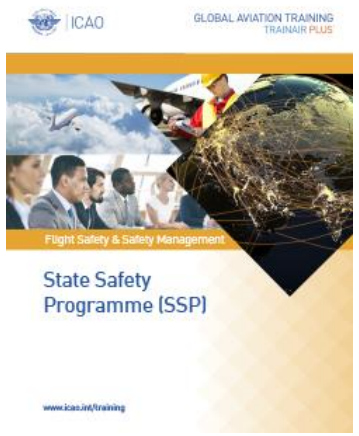


Safety Management Implementation (SMI) Website www.icao.int/SMI

ICAO Safety Management Training Programme

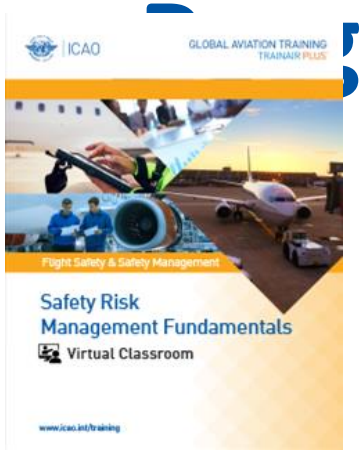
Safety Management Online Course

Now available in English and Spanish



State Safety Programme Classroom Course

Virtual Classroom Course and Classroom course available



Safety Risk Management Fundamentals Virtual Classroom Course

	SSP Roles	Online courses: Universal Safety Oversight Audit Programme (USOAP)	Online courses: Safety Management Online Curriculum *Prerequisite to [SSP] and [SMxP] classroom courses	Online courses: Introduction to Safety Information Protection	Online courses: Fundamentals of Aviation Data-driven Decision Making (AD3M) **Prerequisite to [AD3M] classroom course	Online courses: Fundamentals of the Air Transport System (FATS) †	Classroom courses: State Safety Programme (SSP)*	Classroom courses: Safety Management for Practitioners (SMxP)*	Classroom courses: SMS Assessment and Monitoring	Classroom courses: Application of Aviation Data-driven Decision Making (AD3M)**	Classroom courses: Safety Occurrence Reporting and Analysis (SORA)
1	SSP – Related Legislation and Regulations		✓	✓		Recommended ‡	✓				
2	SSP Coordination Group Members		✓				✓				
3	SSP Management	✓	✓	✓	✓		✓	✓		✓	✓
4	Safety Data Collection and Analysis		✓	✓	✓		✓			✓	✓
5	State Safety Performance		✓		✓		✓	✓		✓	
6	Safety Risk Management		✓				✓	✓			
7	SMS Assessment and Monitoring		✓				✓		✓		
8	Safety Promotion		✓				✓				
9	Heads of Departments within the CAAs		✓								

icao.int/training/Pages/Safety-Management-Training-Programme-(SMTP).aspx