



**Ministry of Infrastructure and the Environment**

Directorate for Mobility and Transport

Civil Aviation Department



## SMICG

- SSP Assessment tool
- New vision regarding ALoSP

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Safety Management Advisor



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- FAA
- TC
- EASA



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## 10 THINGS YOU SHOULD KNOW ABOUT SAFETY MANAGEMENT SYSTEMS (SMS)



### 1. What is a safety management system (SMS)?

A safety management system is a series of defined, organization-wide processes that provide for effective risk-based decision-making related to your daily business.

### 2. What does the SMS focus on?

SMS focuses on maximizing opportunities to continuously improve the overall safety of the aviation system.

### 3. What are the key processes of an SMS?

- ▶ **Hazard Identification** – a method for identifying hazards related to your organization;
- ▶ **Occurrence Reporting** – a process for the acquisition of safety data;
- ▶ **Risk Management** – a standard approach for assessing risks and for applying risk controls;
- ▶ **Performance Measurement** – management tools for analyzing whether the organization's safety goals are being achieved; and
- ▶ **Quality/Safety Assurance** – processes based on quality management principles that support continuous improvement of the organization's safety performance.

### 4. What are the roles and responsibilities within the SMS?

- ▶ The senior manager/accountable executive is accountable for establishing the SMS and allocating resources to support and maintain an effective SMS;

- ▶ Management is responsible for implementing, maintaining and adhering to SMS processes in their area; and
- ▶ Employees are responsible for identifying hazards and reporting them.

### 5. How will SMS benefit my organization?

- ▶ Provides for more informed decision-making;
- ▶ Improves safety by reducing risk of accidents;
- ▶ Provides for better resource allocation that will result in increased efficiencies and reduced costs;
- ▶ Strengthens corporate culture; and
- ▶ Demonstrates corporate due-diligence.

### 6. What key qualities are evident in organizations with an effective SMS?

- ▶ A top-down commitment from management and a personal commitment from all employees to achieve safety performance goals;
- ▶ A clear roadmap of what the SMS is and what it is supposed to accomplish;
- ▶ An established practice of open communication throughout the organization that is comprehensive and transparent, and where necessary, non-punitive; and
- ▶ An organizational culture that continuously strives to improve.

### 7. What SMS is not:

- ▶ Self-regulation / de-regulation;

- ▶ A stand alone department;
- ▶ A substitute for oversight; or
- ▶ An undue burden.

### 8. What SMS does:

- ▶ Builds on existing processes;
- ▶ Integrates with other management systems by tailoring a flexible regulatory framework to your organisation; and
- ▶ Demonstrates good business practice.

### 9. What's the difference between SMS and a flight safety program?

A safety management system is primarily proactive/predictive. It considers hazards and risks that impact the whole organization, as well as risk controls. A flight safety program is primarily reactive and typically focuses on only one part of the system - the airline operation.

### 10. What's the difference between SMS and quality management systems (QMS)?

- ▶ SMS focuses on the safety aspects of the organization.
- ▶ QMS focuses on the services and products of the organization.
- ▶ While QMS focuses on conformity, SMS focuses on hazards. Both non-conformities and hazards can impact safety.

Both systems enhance safety and are essential and complementary management tools. You cannot have an effective SMS without applying quality management principles.

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## Safety Management International Collaboration Group (SM ICG)

Categories: [Safety Management Principles](#) | [State Sponsored Cooperative Bodies](#) | [Enhancing Safety](#)

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- 3 SM ICG Products
- 4 Points of Contact (POCs)
- 5 Further Reading

### Description

The Safety Management International Collaboration Group (SM ICG) was founded by the United States Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA) and Transport Canada Civil Aviation and is a joint cooperation between many regulatory authorities for the purpose of promoting a common understanding of [safety management](#) principles and requirements and facilitating their implementation across the international aviation community.

The purpose of the SM ICG is to promote a common understanding of Safety Management System (SMS)/State Safety Program (SSP) principles and requirements, facilitating their application across the international aviation community. The current core membership of the SM ICG includes the Aviation Safety and Security Agency (AESA) of Spain, the National Civil Aviation Agency (ANAC) of Brazil, the Civil Aviation Authority of the Netherlands (CAA NL), the Civil Aviation Authority of New Zealand, the Civil Aviation Safety Authority (CASA) of Australia, the Direction Générale de l'Aviation Civile (DGAC) in France, the Ente Nazionale per l'Aviazione Civile (ENAC) in Italy, the

### Article Information

Category: [Safety Management](#)






Content source: [Safety Management International Collaboration Group \(SM ICG\)](#)



Content control: [Safety Management International Collaboration Group \(SM ICG\)](#)



## SM ICG Products

The SM ICG welcomes feedback on its products. For further information regarding the SM ICG or to provide feedback, please contact Régine Hamelijnck , Amer Younossi , or Jacqueline Booth .

### Standardization

- Development of a Common Hazard Taxonomy
- Hazard Taxonomy Examples
- Safety Management Terminology

### Promotion

- 10 Things You Should Know About SMS
- Industry Day Events
- The Frontline Manager's Role in SMS
- The Senior Manager's Role in SMS

### Guidance/Tools

- A Common Approach to Safety Performance Measurement (SPMA) Paper
- A Systems Approach to Measuring Safety Performance – The Regulator Perspective
- How to Support a Successful SSP and SMS Implementation – Recommendations for Regulators
- Measuring Safety Performance Guidelines for Service Providers
- Risk Based Decision Making Principles
- SM ICG SMS Evaluation Tool
- SMS for Small Organizations
- SMS Inspector Competency Guidance
- SSP Assessment Tool

### Resources

- SM ICG Description Paper
- SM ICG Findings on SMS Equivalence
- SM ICG Terms of Reference

- **SSP Assessment Tool**

- **SMS Evaluation Tool**



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 provider's SMS
  - 2.2 Agreement on service provider's 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 and dissemination of safety information
  - 4.2 External training and dissemination of safety information1.



## 1. State safety policy and objectives

### 1.1 State safety legislative framework

1.2	1.1.1	Has the state promulgated a national safety legislative framework and specific technical regulations?
1.3		
1.4		
2.	1.1.2	Has the State developed and implemented procedures for the periodic review and amendment of its regulations?
2.1		
2.2		
3.	1.1.3	Has the State developed and implemented a procedure for identifying and notifying differences, if any, to ICAO?
3.1		
3.2		
3.3	1.1.4	Does the State have a record keeping system that ensures the retention of all records required to document and support SSP activities?
4.	1.1.5	Does the State have appropriate standards defining technical personnel qualifications and training?
4.1		
4.2		

# SSP Assessment Tool



1. State safety policy and objectives

1.1 State safety legislative framework

**1.2 State safety responsibilities and accountabilities**

1.2.1	Has the State identified the SSP Placeholder organisation as well as the Accountable Person for the administration and coordination of the SSP?
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1.4

2.

2.1 Safety requirements for service provider's SMS

2.2 Agreement on service provider's 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 and dissemination of safety information

4.2 External training and dissemination of safety information1.

# SSP Assessment Tool



1.2.1 Has the State identified the SSP Placeholder organisation as well as the Accountable Person for the administration and coordination of the SSP?

Present  
Suitable  
Operating  
Effective

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- The State has identified an organization with the appropriate authority and accountability that is responsible for the administration and Coordination of the SSP.
- The State has identified an Accountable Executive at the appropriate level that has full control of resources to ensure successful implementation of the SSP.
- The Accountable Executive is aware of his/her role in the SSP

Evidence

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Verification

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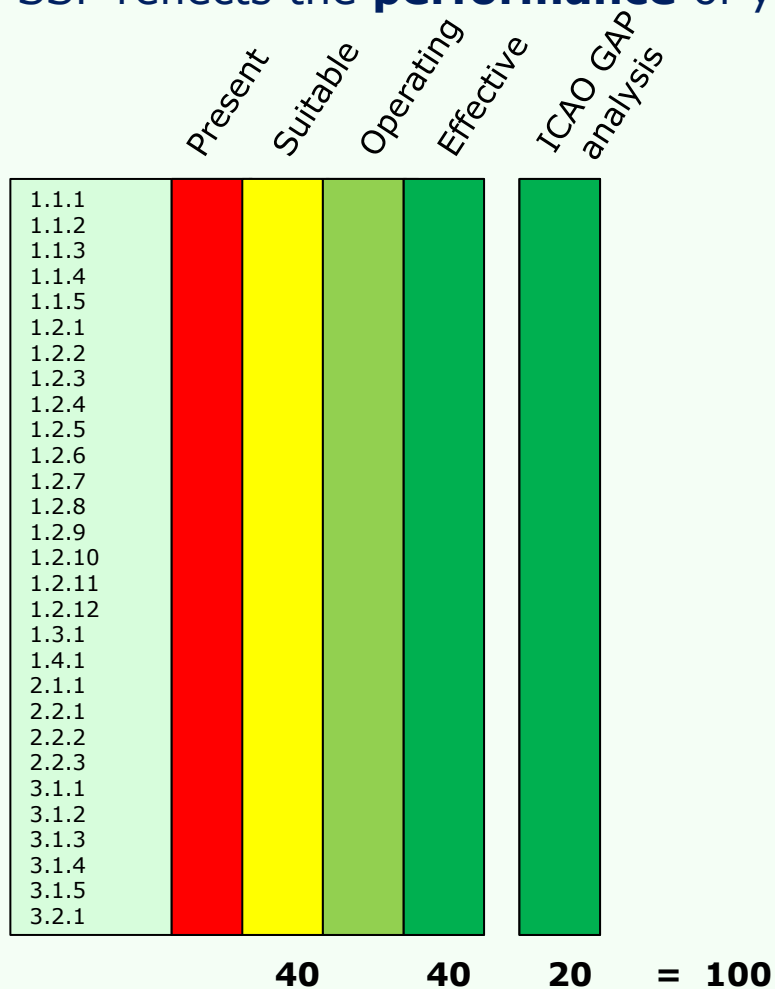


The SSP reflects the **performance** of your State.

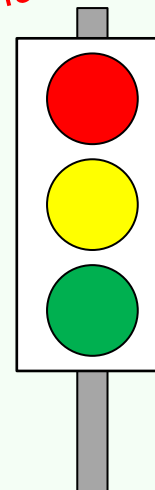
	Present	Suitable	Operating	Effective	ICAO GAP analysis
1.1.1		X		X	
1.1.2		X		X	
1.1.3		X		X	
1.1.4		X		X	
1.1.5		X		X	
1.2.1		X		X	
1.2.2		X		X	
1.2.3		X		X	
1.2.4		X		X	
1.2.5		X		X	
1.2.6		X		X	
1.2.7		X		X	
1.2.8		X		X	
1.2.9		X		X	
1.2.10		X		X	
1.2.11		X		X	
1.2.12		X		X	
1.3.1		X		X	
1.4.1		X		X	
2.1.1		X		X	
2.2.1		X		X	
2.2.2		X		X	
2.2.3		X		X	
3.1.1		X		X	
3.1.2		X		X	
3.1.3		X		X	
3.1.4		X		X	
3.1.5		X		X	
3.2.1		X		X	
		40	40	20	= 100

Performance indicator!?

The SSP reflects the **performance** of your State.



Performance indicator!?



# Vision towards ALoSP



ICAO Safety Management Panel  
= clarification on ALoSP

An acceptable level of safety performance for the State can be achieved

- through the implementation and maintenance of the SSP
- as well as safety performance indicators and targets showing that safety is effectively managed
- built on the foundation of implementation of existing safety-related SARPs
- as well as the implementation by service providers of SMS following the implementation of the safety related SARPs

Implementation of the SSP  
Indicators showing that safety is effectively managed  
Implementation of safety-related SARPs.  
Implementation of the SMS

SARPs

SSP

SMSs

indicators

1

2

3

4

new vision  
ALoSP

# Vision towards ALoSP



## SARPs

1

Source	ICAO OLF	
Tools	<ul style="list-style-type: none"><li>• EFoD</li><li>• PQs</li></ul>	
SPIs	<ul style="list-style-type: none"><li>• I of St</li><li>• LEI</li></ul>	

Are SARPs implemented?

Is the State's Safety Oversight System effective?

# Vision towards ALoSP



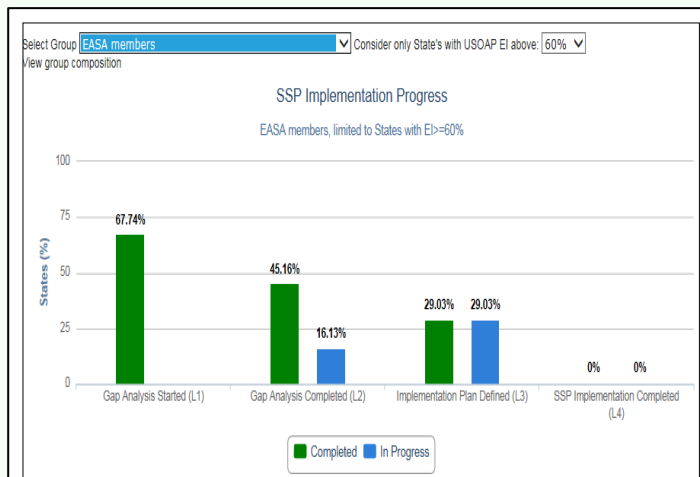
1	United Arab Emirates	98.85
2	Republic of Korea	98.58
3	Singapore	98.45
4	Armenia	96.20
5	Canada	95.28
6	France	94.37
7	Ireland	94.01
8	United Kingdom of Great Britain	93.63
9	Venezuela (Bolivarian Republic of)	93.13
10	Nicaragua	92.17
11	Egypt	91.45
12	United States of America	91.36
13	Romania	90.96
14	Iran (Islamic Republic of)	90.49
15	Japan	90.25
16	Germany	90.06
17	Saudi Arabia	89.12
18	Switzerland	89.02
19	Mongolia	88.21
20	Netherlands	88.16
21	Brazil	87.60
22	Uzbekistan	87.47
23	Poland	87.46
24	Israel	87.31
25	Sri Lanka	87.08

effective?

# Vision towards ALoSP



	SARPs	SSP
	1	2
Source	ICAO OLF	ICAO OLF
Tools	<ul style="list-style-type: none"> <li>EFoD</li> <li>PQs</li> </ul>	<ul style="list-style-type: none"> <li>GAP</li> </ul>
SPIs	<ul style="list-style-type: none"> <li>I of St</li> <li>LEI</li> </ul>	

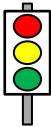


## EASA community:

- 68% started analysis
- 45% completed analysis
- 29% defined SSP plan

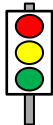
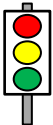
# Vision towards ALoSP



	SARPs	SSP	SMS
	<b>1</b>	<b>2</b>	<b>3</b>
Source	ICAO OLF	ICAO OLF SM ICG	SM ICG
Tools	<ul style="list-style-type: none"> <li>• EFoD</li> <li>• PQs</li> </ul>	<ul style="list-style-type: none"> <li>• GAP</li> <li>• SSP Tool</li> </ul>	<ul style="list-style-type: none"> <li>• SMS Tool</li> </ul>
SPIs	<ul style="list-style-type: none"> <li>• I of St</li> <li>• LEI</li> </ul>	% / 	

# Vision towards ALoSP



	SARPs	SSP	SMS
	1	2	3
Source	ICAO OLF	ICAO OLF SM ICG	SM ICG
Tools	<ul style="list-style-type: none"> <li>EFoD</li> <li>PQs</li> </ul>	<ul style="list-style-type: none"> <li>GAP</li> <li>SSP Tool</li> </ul>	<ul style="list-style-type: none"> <li>SMS Tool</li> </ul>
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Service provider:

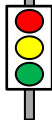
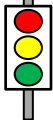
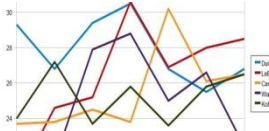
- implement SMS
- evaluate SMS

CAA:

- oversight tool

# Vision towards ALoSP



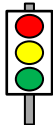
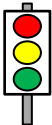

	SARPs	SSP	SMS	indicators
	1	2	3	4
Source	ICAO OLF	ICAO OLF SM ICG	SM ICG	databases SM ICG
Tools	<ul style="list-style-type: none"> <li>EFoD</li> <li>PQs</li> </ul>	<ul style="list-style-type: none"> <li>GAP</li> <li>SSP Tool</li> </ul>	<ul style="list-style-type: none"> <li>SMS Tool</li> </ul>	<ul style="list-style-type: none"> <li>NoA/EASp</li> </ul>
SPIs	<ul style="list-style-type: none"> <li>I of St</li> <li>LEI</li> </ul>	% / 	% / 	

## SM ICG documents:

- Common Approach to Safety Performance Measurement
- A Systems Approach to Measuring Safety Performance
- Measuring Safety Performance Guidelines for Service Providers

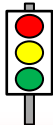
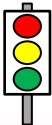
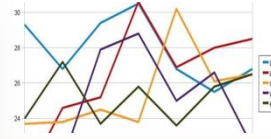
# Vision towards ALoSP



	SARPs	SSP	SMS	indicators
	1	2	3	4
Source	ICAO OLF	ICAO OLF SM ICG	SM ICG	databases SM ICG
Tools	<ul style="list-style-type: none"> <li>EFoD</li> <li>PQs</li> </ul>	<ul style="list-style-type: none"> <li>GAP</li> <li>SSP Tool</li> </ul>	<ul style="list-style-type: none"> <li>SMS Tool</li> </ul>	<ul style="list-style-type: none"> <li>NoA/EASp</li> </ul>
SPIs	<ul style="list-style-type: none"> <li>I of St</li> <li>LEI</li> </ul>	% / 	% / 	

# Vision towards ALoSP



	SARPs	SSP	SMS	indicators
	1	2	3	4
Source	ICAO OLF	ICAO OLF SM ICG	SM ICG	databases SM ICG
Tools	<ul style="list-style-type: none"> <li>EFoD</li> <li>PQs</li> </ul>	<ul style="list-style-type: none"> <li>GAP</li> <li>SSP Tool</li> </ul>	<ul style="list-style-type: none"> <li>SMS Tool</li> </ul>	<ul style="list-style-type: none"> <li>NoA/EASp</li> </ul>
SPIs ALoSP	<ul style="list-style-type: none"> <li>I of St</li> <li>LEI</li> </ul>	% / 	% / 	
	Leading indicators			Lagging indicators