



International Civil Aviation Organization

SMM 3rd Edition Highlights

(Doc 9859, advance version)

ICAO-SARO SSP-SMS-RST Meeting

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Integrated Safety Management (ISM)

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SMM 3rd Edition Highlights - *Agenda*

1. Introduction
2. SMM 3rd Edition - Contents overview
3. Twenty-six enhancements
4. Summary
5. Q & A

SMM 3rd Edition - *Introduction*

- SMM 1st & 2nd editions in 2006 & 2009
- SMM 3rd edition (advance version) posted on 28 May 2012
- SMM 3rd edition final version estimated by 1Q 2013
- Purpose of this presentation



SMM 3rd Edition – *Contents overview*

4 Chapters:

CHAPTER 1 - SAFETY MANAGEMENT FUNDAMENTALS

CHAPTER 2 - ICAO SAFETY MANAGEMENT SARPs

CHAPTER 3 - STATE SAFETY PROGRAMME (SSP)

CHAPTER 4 - SAFETY MANAGEMENT SYSTEM (SMS)

(previous SMM 2nd Edition 2009 had 11 Chapters)

Browse SMM 3rd Edition [Contents Page](#)



1. Definitions:

✓ *List of Definitions included* (new) [\[DEFNS\]](#)

2. Safety Culture [1.6]:

✓ *Organization risk profile assessment* (new) [\[C1A3\]](#)



3. Hazards [1.12]:

- ✓ *Hazards prioritization procedure* (new) [\[C1A1\]](#)
- ✓ *Distinguishing Aviation & OSHE hazards* (new)

4. Safety Risk Management (SA) [1.15]:

- ✓ *Basic risk mitigation tool* (enhancement)

5. Prescriptive & Performance-based Requirements [1.16]

- ✓ *Performance-based requirements and its oversight*

Chapter 2 Highlights: (2)

Safety Management SARPs



1. SARPs [2.2; 2.3]:

✓ *Consolidation and overview of current safety management SARPs (new)*

2. Annex 19 [2.4]:

✓ *Introduction to Annex 19 development status (new)*

Chapter 3 Highlights: (1 of 6)

State Safety Programme



1. SSP framework elements overall guidance improvements:

Enforcement Policy (1.4) [App 3 & 4]:

➤ *Clarity between enforcement policy & enforcement procedures* (enhancement)

Agreement on service provider safety performance (2.2)

➤ *Agreement on SPIs and associated target & alert settings* (enhancement)

Chapter 3 Highlights: (1 of 6) continued

State Safety Programme



Safety data collection, analysis and exchange (3.2)

[App 9, 11 & 12]:

- *Mandatory & voluntary reporting systems* (new);
- *Safety information protection* (enhancement)

Safety-data driven targeting of oversight on areas of greater concern or need (3.3) [Fig 3.3-1]:

- *Safety data and risk based surveillance process* (enhancement) [\[Fig 3.3-1\]](#)

Chapter 3 Highlights: (2 of 6)

State Safety Programme



2. SSP Gap Analysis & Implementation Plan [3.3.2; App 1]
 - ✓ *Updated gap analysis questions, including main text references* (enhancement) [\[C3A1TA\]](#)
 - ✓ *Improved documentation for gap analysis outcomes and tasks implementation* (new) [\[C3A1TB&C\]](#)

Chapter 3 Highlights: (3 of 6)

State Safety Programme



- 3. SSP Implementation – Phased Approach [3.4; Table A]
 - ✓ *Guidance on 4-phased progressive implementation of SSP elements & processes* (new)

[C3.4-TA]

Chapter 3 Highlights: (4 of 6)

State Safety Programme



4. Safety Indicators & Acceptable level of safety performance (ALoSP) [3.3.4; App 6]

- ✓ *Guidance on ALoSP measurement and monitoring through State aggregate SPIs and associated Target and Alert levels (new) [C3A6]*

In essence - A State defines its ALoSP through:

- A selected package of aggregate SPIs;
- Set Target and Alert levels for each SPI; and
- Monitor & measure individual & consolidated SPIs' Target achievement & Alert avoidance (Yes/ No) outcomes.



SPI Alert & Target settings and a State's ALoSP:

- ✓ *An Alert level ensures attention is drawn to a SPI anytime its trending is statistically worse off than its recent performance*
- ✓ *A Target level ensures a planned endeavor to drive a SPI to improve on its own recent average performance*
- ✓ *Alert exceedance & Target achievement incidence count is a data-based performance measure of a package of SPIs - hence the expression and measure of a State's ALoSP*

Chapter 3 Highlights: (6 of 6)

State Safety Programme



5. SMS Acceptance/ Assessment [App 7]

✓ *Initial SMS regulatory acceptance as well as routine SMS audit checklists* (new) [\[C3A7\]](#)

6. SSP Document/ Manual Contents [App 10]

✓ *Guidance on SSP Manual Contents development*
(new)

Chapter 4 Highlights: (4)

Safety Management System



1. SMS framework elements overall guidance improvements:

Emergency Response Planning (1.4) [App 4]

✓ *Enhanced guidance on emergency response planning* (enhancement)

SMS Documentation (1.5) [App 3]

✓ *Guidance on development of a SMS Document/Manual* (new)

Chapter 4 Highlights: (4)

Safety Management System



Hazard Identification (2.1) [App 7]

- ✓ *Guidance on SMS voluntary and confidential reporting system* (new)

Risk Assessment & Mitigation (2.2) [C1-App 2]

- ✓ *Basic Safety Assessment Tool* (new) [\[C1- App 2\]](#)
[Latest version>](#)

Chapter 4 Highlights: (4)

Safety Management System



2. Integration of Management Systems [4.4.2]

- ✓ *Enhanced guidance, especially on SMS-QMS integration* (enhancement)

3. SMS Gap Analysis & Implementation Plan

[4.4.3/4; App 2]

- ✓ *Updated gap analysis questions, including main text references* (enhancement)

Chapter 4 Highlights: (4)

Safety Management System



4. SMS Safety Indicators & Safety Performance

{4.4.5; App 6}

- ✓ *Safety performance measurement through SPIs' target and alert settings*

SMM 3rd Edition Highlights - *Summary*

1. List of Definitions

Chapter 1 (Safety Management Fundamentals):

- 2. Organization risk profile assessment*
- 3. Hazards prioritization procedure*
- 4. Distinguishing Aviation & OSHE hazards*
- 5. Basic risk mitigation tool*
- 6. Performance-based requirements and its oversight*

Chapter 2 (Safety Management SARPs):

- 8. Consolidation of current safety management SARPs*
- 9. Introduction to Annex 19 development status*

SMM 3rd Edition Highlights - *Summary*

Chapter 3 (State Safety Program):

10. *Clarity between enforcement policy & procedures*
11. *Agreement on SPIs, Targets & Alert settings*
12. *Mandatory & voluntary reporting systems*
13. *SPI & ALoS development*
14. *Safety information protection*
15. *Safety data and risk based surveillance process*
16. *Updated GAQs, including main text references*
17. *Documentation for gap analysis & tasks implementation*
18. *4-phased progressive implementation of SSP*
19. *ALoSP measurement through SPI Target and Alert levels*

SMM 3rd Edition Highlights - *Summary*

Chapter 4 (SMS):

- 20. Guidance on emergency response planning*
- 21. Guidance on development of a SMS Document/
Manual*
- 22. Guidance on SMS voluntary reporting system*
- 23. Basic Safety Assessment Tool*
- 24. SMS-QMS integration guidance*
- 25. Updated GAQs, including main text references*
- 26. Safety performance measurement through SPI target
and alert settings*

SMM 3rd Edition – *Your Feedback*

So, out of these 26 items, what would you consider as that necessary guidance material which is not yet addressed in this SMM 3rd edition? (in relation to SSP/SMS implementation)



SMM 3rd Edition

Q & A
(10:30)