



International Civil Aviation Organization

SMM 3rd Edition Highlights

(Doc 9859, Final version)



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 (en) version posted on 8 May 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)



SMM Contents

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

Chapter 1 Highlights: (5)

Safety Management Fundamentals



1. Definitions:

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



Defns

2. Safety Culture [2.6]:

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



ORP

Chapter 1 Highlights: (5 of 5)

Safety Management Fundamentals



3. Hazards [2.13]:

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



Hazard
Prioritization

4. Safety Risk Management (SA) [2.15]:

- ✓ *Basic risk mitigation tool* (enhancement)

5. Prescriptive & Performance-based Requirements [2.16]

- ✓ *Performance-based requirements and its oversight*



Chapter 2 Highlights: (2)

Safety Management SARPs

1. SARPs [chpt 3]:

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

2. Annex 19 [3.4]:

- ✓ *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) [C4, App 10 & 11]:

➤ *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)

[C4- App 2, 3 & 5]:

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

Safety-data driven targeting of oversight on areas of greater concern or need (3.3) [C4- Fig 4-1]:

- *Safety data and risk based surveillance process* (enhancement) [Fig 4-1]



Risk based
Surveillance May13

Chapter 3 Highlights: (2 of 6)

State Safety Programme



2. SSP Gap Analysis & Implementation Plan [4.3.3; App 7]

✓ *Updated gap analysis questions, including main text references* (enhancement) [\[C4-App7\]](#)



GAQs

✓ *Improved documentation for gap analysis outcomes and tasks implementation* (new) [\[T4-A7-2&3\]](#)



GA Tables

Chapter 3 Highlights: (3 of 6)

State Safety Programme



3. SSP Implementation – Phased Approach [5.5; Table A]

✓ *Guidance on 4-phased progressive implementation of SSP elements & processes* (new)



SSP 4 Phased

[C4-T4-1]

Chapter 3 Highlights: (4 of 6)

State Safety Programme



4. Safety Indicators & Acceptable level of safety performance (ALoSP) [4.3.5; App 4]

- ✓ *Guidance on ALoSP measurement and monitoring through State aggregate SPIs and associated Target and Alert levels* (new) [\[C4-App4\]](#)



SSP SPIs n ALoSP

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.

Chapter 3 Highlights: (4 of 6)

State Safety Programme



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) [\[C4-App 12\]](#)



SMS Audit

6. SSP Document/ Manual Contents [C4-App 8]

- ✓ *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) [C5-App 3]

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

SMS Documentation (1.5) [C5-App 4]

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

Chapter 4 Highlights: (4)

Safety Management System



Hazard Identification (2.1) [C5-App 5]

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

Risk Assessment & Mitigation (2.2) [C2-App 2]

- ✓ *Basic Safety Assessment Tool* (new) [\[C2- App 2\]](#)
[Latest version>](#)



HIRM Basic



HIRM R5 May13

Chapter 4 Highlights: (4)

Safety Management System



2. Integration of Management Systems [2.9; 5.4.2]

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

3. SMS Gap Analysis & Implementation Plan [5.4.3/4; App7]

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

Chapter 4 Highlights: (4)

Safety Management System



4. SMS Safety Indicators & Safety Performance

[5.4.5; 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*

Q & A