

SMS Q&A Webinar

Answers addressing the rules & setting the scene Focus on Part-145 and Part-21

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Your safety is our mission.

SMS, Part 21 and Part-145



Reg.(EU) 2022/201 & 203 amending Reg. (EU) 748/2012 as regards SMS & occurrence reporting in Design & Production organisations

- → EUR-Lex 32022R0201 EN EUR-Lex (europa.eu)
- → EUR-Lex 32022R0203 EN EUR-Lex (europa.eu)
- → Applicability date: 7 March 2023

Reg.(EU) 2021/1963 amending Reg. (EU) 1321/2014 as regards SMS & occurrence reporting in maintenance organisations

- https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32021R1963&from=EN
- → Applicability date: 2 December 2022

"TWO YEARS" transition period for full implementation & closure of findings
The approval certificate remains valid; no issuance of a new certificate afterwards.



Applicability of SMS for CAW and Part-21 (IAW)

SMS applicable:

- → Part-CAMO CAMO.A.200
 - → https://www.easa.europa.eu/downloads/95788/en Annex Vc
- → Part-145 145.A.200
- → Part 21 Subpart G (Production) 21.A.139(c)
 - → Which includes ETSOA
- → Part 21 Subpart J (Design) 21.A.239(c)
 - → Which includes APU

SMS **not** applicable:

- → Alternative Procedures to DOA (21.A.14b)
- → Part 21 Subpart F (Production without DOA)
- → Part-CAO Annex Vd of Regulation (EU) No 1321/2014)



Approach for the AMC development

Align the AMC across all domains, based on Air Ops & Part CAMO

- → For CAT, the Part CAMO has to be integrated into the Air Operator's (S)MS
- → AMC to Part 145 (to be published soon)
 - → Copy/paste from Part-CAMO will mirror Decision 2020/002/R
 - → https://www.easa.europa.eu/document-library/agency-decisions/ed-decision-2020002r
- → AMC to Part-21
 - → Same principles but different regulatory structure
 - → Will copy/paste from Part-CAMO wherever possible
 - → AMC/GM to publish after summer 2022
 - → https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2019-05 (AMC under review)
 - → Or use SM.0001 (next slide) [guidance on SMS for Part-21 organisations]

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SM-0001B - International Industry Standard

SM0001 revision B

- Will be recognised as a Means of Compliance (MC) for Part-21 (without gap analysis).
- Not recognised as a MC for Part-145, awaiting revision C

Note 1: Chapter 6 proposes some generic hazards Note 2: Appendix B contains a maturity assessment tool that can be used for selfassessment.



For ASD: https://www.asd-europe.org/aerospace-associations-announce-safety-management-system-sms-industry-standard
https://www.asd-europe.org/aerospace-associations-announce-safety-management-system-sms-industry-standard
https://www.asd-europe.org/aerospace-associations-announce-safety-management-system-sms-industry-standard
www.asd-europe.org/news-publications/standards

For AIA: https://www.aia-aerospace.org/news/aerospace-associations-announce-safety-management-system-sms-industry-standard/

<u>https://www.aia-aerospace.org/international-safety-management-system-sms-standard-sm-001/.</u>

For AIAB: http://www.aiab.org.br/site-ingles/noticias-e-eventos2.asp?codnot=100008

For AIAC: https://aiac.ca/aerospace-associations-announce-safety-management-system-sms-industry-standard/

For GAMA: https://gama.aero/news-and-events/press-releases/aerospace-associations-announce-safety-management-system-industry-standard/

https://gama.aero/wp-content/uploads/SMS-Standard_final-issue-A_20180917-1.pdf



SMS and integrated approach

- → Compliance monitoring function (QMS) and SMS should be integrated
 - → Called « Management System (MS) » in EU
 - → See 145.A.200 (which supersedes ex 145.A.65); 21.A.139; 21.A.239
 - → Future placeholder for iSM (cyber)security and any other, future system or approval



- → Multiple approval certificates one single SMS or an SMS per approval certificate site?
 - → Left to the decision of the organisation
 - → While every approval needs an SMS, there is nothing to stop them being connected or merged
- → Standalone SMS manual or SMS built on existing procedures?
 - → Left to the decision of the organisation but ensure « no gap » (novelties e.g. internal reporting system)
 - → While every approval needs an SMS manual, there is nothing to stop them being merged.
- → EASA recommends an integrated (S)MS approach
 - → As it better addresses interfaces and ensure a corporate, cohesive approach
 - → Common risk assessment methodology for multiple domains might not be appropriate





Compliance versus Performance (1/2)

- → Quality is about compliance (conformity such as QMS, ISO 9000...)
- → SMS is about « Performance » (focus on the safety of operations)
 - → Do you manage safety effectively?
 - → Different from « product safety » e.g. impact of a massive early retirement plan (Covid19) such as for resources, knowledge, workload etc.
- → Compliance monitoring manager and safety manager must talk to each other
 - → E.g. A non-conformity may lead to the identification of a significant hazard.
 - → Functions can be combined left to the decision of the organisation





Compliance versus Performance (2/2)

Example for Part-145 - new SMS element: "internal reporting system" based on confidentiality and just culture principles – WHAT DOES THE 2 YEAR TRANSITION PERIOD MEAN?

- → Before 02/12/22, 145.A.202 not yet mandatory
- → 02/12/22 onwards, implement an internal safety reporting scheme.
- \rightarrow Between 02/12/22 and 02/12/24, the Competent Authority may come; audit; and issue findings if not implemented (**compliance**).
 - → Finding(s) to close before 02/12/24
- \rightarrow After 02/12/24, the NCA may revoke the approval certificate if not compliant.
- → After 02/12/24: remain compliant and demonstrate the effectiveness of the process (PERFORMANCE BEYOND COMPLIANCE)
 - → Analyse each report or occurrence : what does it tell you about the safety of your operations and its robustness?
 - → Identify the hazard; assess the risk (Probability versus Severity)
 - → Select the areas of greater risks and establish safety objectives
 - → E.g. too many deviations to the maintenance procedures; safety culture to improve; training to deliver; monitor (audit) etc.
 - → Mitigation measures must be established, monitored and effective so that the risk remains under control.
 - → Keep the system continuously active and be data-rich: e.g. complement your analysis by interviewing the staff (proactive approach anticipating negative outcomes)
- → The oversight thus drifts from compliance-based towards performance-based.
 - → For self assessment assessors to be trained please use:
 - → EASA MS assessment tool at https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool
 - → The PSOE model see pictogram
 - → SM.0001B Appendix B: SMS maturity assessment method





"Being compliant" does not necessarily mean "being safe"





All risks cannot be addressed by the rules. Local context, crisis, changes have to be considered....

Procedures/process... may not be effective...

This is what SMS tries to target...safe operations...

Back-up slides - available literature

→ <u>SMICG products</u>

https://www.skybrary.aero/index.php/Safety Management International Collaboration Group (SM ICG)#SM ICG Products

- 10 Things You Should Know About SMS
- · A Common Approach to Safety Performance
- Measuring Safety Performance Guidelines for Service Providers
- A Systems Approach to Measuring Safety Performance –
 The Regulator Perspective
- Development of a Common Hazard Taxonomy
- · The Senior Manager's Role in SMS
- The Frontline Manager's Role in SMS
- SMS Evaluation Tool updated in 2019
- Safety Management Terminology
- Risk Based Decision Making Principles
- How to Support a Successful SSP and SMS Implementation – Recommendations for Regulators
- SMS Inspector Competency Guidance
- Hazard Taxonomy Examples updated in 2019
- SSP Assessment Tool updated to be consistent with Annex 19 Amendment 1 in 2020
- · SMS for Small Organizations
- SMS for Small Organizations Considerations for Regulators – updated in 2020

- SMS Integration Points to Consider updated in 2020
- Determining the Value of SMS
- · SMS and SSP Reference Library
- Training Program Outline for Inspector SMS Competency
- SM ICG Description Paper
- SM ICG Findings on SMS Equivalence
- SM ICG Terms of Reference
- Safety Culture for Effective Safety Management (pamphlet)
- · Safety Culture Self-Assessment Tool for Regulators
- Industry Safety Culture Evaluation Tool
- · SM ICG position paper on SMS and QMS
- · Sector Safety Risk Profiling at the State Level
- State Evaluation of Industry Safety Cases
- Comprehensive Safety Performance Management in an SSP
- SSP Brochure
- Attitudes and Behaviors for Effective SMS (brochure)



SMS fundamentals basics

- → 2013 SMS fundamentals basic by FAA <u>Safety Management Systems (SMS)</u> <u>Fundamentals: Basics – YouTube</u>
- → 27 Mai 2019 Aviation safety management by NTSB CANADA <u>Aviation Safety</u> <u>Management - Kathy Fox of the TSB at McGill University - YouTube (systemic approach)</u>
- → 17 Nov.2016 SMS basic refresher course online <u>SMS basic refresher course online</u> YouTube
- → https://www.youtube.com/watch?v=QcFLxqbZMVU&feature=youtu.be Developing a SMS
- → Transport CANADA: https://www.youtube.com/watch?v=po9wxKCHdUI risk of "icing" (SMS and SSP)
- → TSB Watchlist 2020 Release YouTube why an SSP



EASA COVID19 resources



- → EASA safety week on 21-24 June 2021
 - → 5 domain <u>video-recorded sessions (also on YouTube)</u> were on "effective safety management" as well as "skills and knowledge degradation" during COVID times + additional video recordings on the <u>EASA risk</u> portfolio and the role of leadership in "SMS"
- → SAFE 360 Edition 2021
 - → Recordings about "New safety landscape" on YouTube
- → Various guidelines, notably:
 - → Return to service of aircraft from storage (CAW)
 - → The role of operator's Management System in the Covid-19 recovery phase
 - → <u>3 practical scenarios</u> for the operator's recovery phase (Hazards / Threats / consequences / mitigation measures)
 - → Review of safety issues arising from COVID-19 (Risk portfolio issue 2)







https://www.easa.europa.eu/domains/safety-management safety.management@easa.europa.eu