



EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

EASA Conference
on future aerodrome safety rules
Workshop 2

Quality and Safety Management

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Your safety is our mission.

22 May 2012

Focus is here on the SMS and connect it briefly the basic QA principles and to Change Management within an organization.

Requirement originates in the BR.

SMS is defined in the rules draft definitions, article 2 of the Cover Regulation:

‘Safety management system’ means a systematic approach to managing safety including the necessary organisational structure, accountabilities, policies and procedures.



Presentation outline

- Origin of quality and safety management in the aerodrome rules?
- The Quality Assurance method
- Implementation and organizational change
- Basic structure of the SMS

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In this very short presentation the basic principles of QA/SMS will be presented as requirements for SMS and a Compliance Monitoring function are accommodated in the rules draft.



Why Quality and Safety?

- ICAO requirement (A14, Doc 9859, [A19]), EASA regulations, interface with other parts of the total aviation system, and other connecting industries
- Known methods applied world wide and in other industries

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ICAO Requirements in several Annexes, in Doc 9859 and Annex 19 on Safety Management is already in preparation.

EASA BR (EC) - No 216/2008 - and subsequent regulations in the different domains.

Interfacing with other parts of the aviation system (ANS, OPS, MET, AVSEC, etc), organizations providing service at and to the aerodrome (Handling companies, fuel providers, other providers of service or goods)

Interfacing with connecting industries; fuel industry, manufacturers etc.

Interfacing with governmental agencies.



Why Quality and Safety?

- The Compliance Monitoring is a QA function
- The product in relation to ISO 9001 is the output of a process
- The product in relation to aerodrome QMS/SMS may be considered as;
[ensured] regulatory compliance /
[enhanced] safety

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Compliance monitoring required in ADR.OR.D.005 (d)



Why QA methods?

- SMS is a system where QA methods are applied to the management of safety
- Quality Control versus Quality Assurance
 - Quality Control is a **failure detection** system
 - Quality Assurance is a **failure prevention** system

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Application of Quality Assurance methods to managing safety.



Change! - Manage it

- The aviation system has been implementing QSM the last few years
 - Trials and errors – Variable results
 - Major change to any organization
- Important – Must not be overlooked to apply Change Management methods to the organizational changes in each and every organization that successfully wants to implement a QAS/SMS

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QSM = Quality and Safety Management

Nothing new and not invented by EASA. Widely accepted on world scale and across industries.

Difference in Change Management for changes in physical characteristics or equipment at an aerodrome and an organizational change, such as implementing a safety management system and major processes and procedures.

Sometimes the importance of taking an organized approach such as applying change management methods to the major changes that an implementation of a QA/SMS system is for any organization, may be overlooked. This may be a factor in the difficulties some organization have experienced in their implementation process. The importance of communicating a vision for the change and overcoming resistance to the change can be studied within the domain of Change Management, literature available in books and articles that can be found on the internet for example:

“Kotter, J. P. (2007) Leading Change. Why Transformation Efforts Fail. Leaders who successfully transform businesses do eight things right (and they do them in the right order). *Harvard Business Review*. www.hbr.org. January 2007, 96-102. (First published 1995).”



Basic SMS structure

- Safety policy and objectives
 - Management commitment and responsibilities
 - Safety accountabilities
 - Coordination of emergency response plan
 - SMS documentation

- Safety risk management
 - Hazard Identification
 - Safety risk assessment and mitigation

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Those bullet points are addressed in the following articles and paragraphs:

ADR.OR.D.005 – Management

- Safety policy and objectives
 - Management commitment and responsibilities (2)
 - Safety accountabilities (1)
 - Coordination of emergency response plan (10)
 - SMS documentation ((C) and ADR.OR.D.035)

- Safety risk management
 - Hazard Identification (3)
 - Safety risk assessment and mitigation (4)



Basic SMS structure

- Safety assurance
 - Safety performance monitoring and measurement
 - The management of change
 - Continuous improvement of the SMS

- Safety promotion
 - Training and education
 - Safety communication

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- Safety assurance
 - Safety performance monitoring and measurement ((5) and ADR.OR.C.030 and ADR.OR.D.030)
 - The management of change ((6) and ADR.OR.B.045)
 - Continuous improvement of the SMS (7)

- Safety promotion
 - Training and education (8)
 - Safety communication (9)

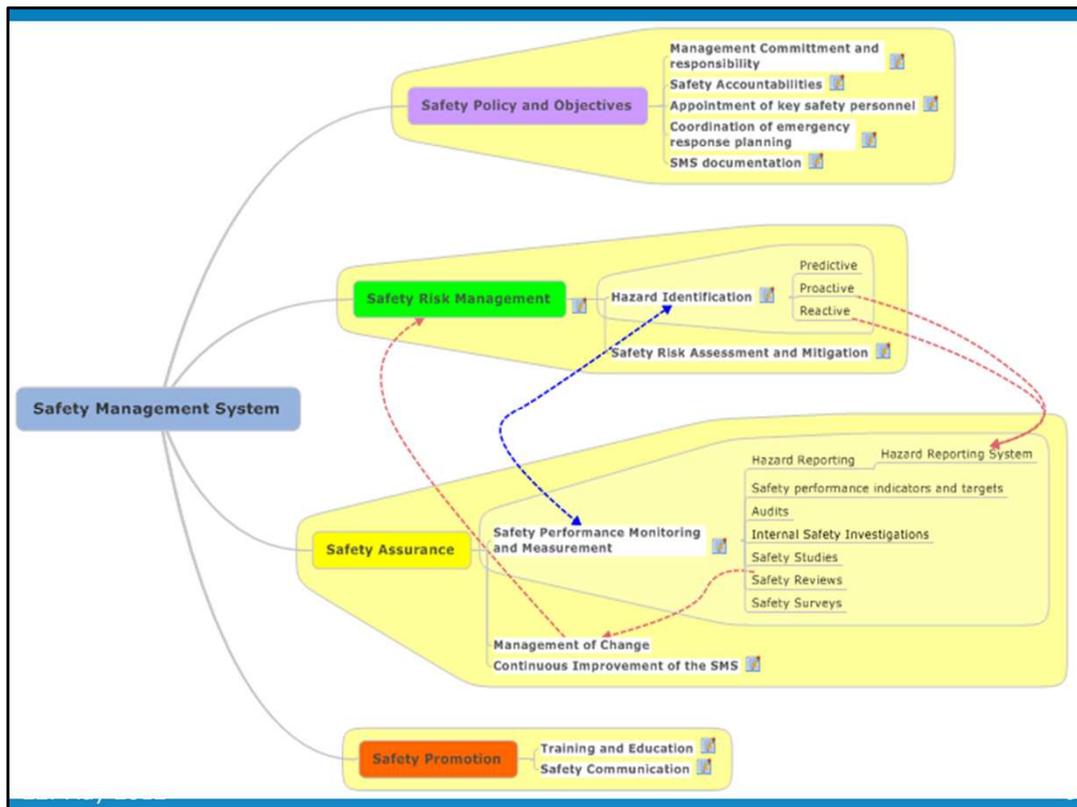
ADR.OR.D.015 Personnel requirements

ADR.OR.D.025 Coordination with relevant organisations

ADR.OR.D.030 safety reporting system

ADR.OR.D.035 Record Keeping

Subpart E – Aerodrome Manual



A simplified picture (MindMap) of SMS that may be compliant to the EASA rules – Providing it is active / functioning.

Some of the interactive relations in such a system are shown in the picture, for example how the management of changes is referred to the safety risk management process and the interrelation between the hazard identification and the safety performance monitoring and measurement items.

Guidance Material for safety assessments is provided in the rules draft. Note that what is called a “Safety Assessment” in the rules draft is a Safety Risk Management process.

There are multiple relations within a functioning SMS and to the outside of the system as well.

Mind that the SMS for an organisation must be proportional to the size / complexity of the organisation. (ADR.OR.D.005.(e))

An SMS can easily be applied to smaller organizations, it’s just a lighter and simpler system. In such a system the elements are not missing, they are just applied in a proportional manner.



EASA OR management rules

- The BR requires several safety management items in place in the operation and a Management system for competent authorities and aerodrome operators.
- The Management system for the ADR organizations includes safety management (SMS (QA methods)) and a compliance monitoring function (QA).

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Parts of the ADR organization SMS

SMS

ADR.OR.D.005, 015, 025, 030, 035, Subpart E.

ADR.OR.B.045

QA

ADR.OR.D.005 (d)



Management function

- The QSM are management functions
- QA/SMS Managers must be objective
- Proper place in the organizational chart

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QSM = Quality and Safety Management

Ensured objectivity is necessary for the system to be trustworthy and functioning.



A core function

- The safety management is a core function of the Management system and the organization
- It has arrived to stay
- Change? Be a part of it!



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Thank you

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