



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

Safety management systems

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Safety management systems ?

- ??? What and why ???
- Evolution:
 - Prescriptive rules : repetitive causes
 - Risk management : random and combination of causes
- Back to basics... ICAO draft annex 19



Draft ICAO Annex 19

Foreword

Chapter 1 - Definitions

Chapter 2 - Applicability

Chapter 3 - State Safety Management Responsibilities

Chapter 4 - Safety Management System

Chapter 5 - Safety Data Collection, Analysis and Exchange

Appendix 1 - State Safety Oversight System

Appendix 2 - Framework for a Safety Management System (SMS)

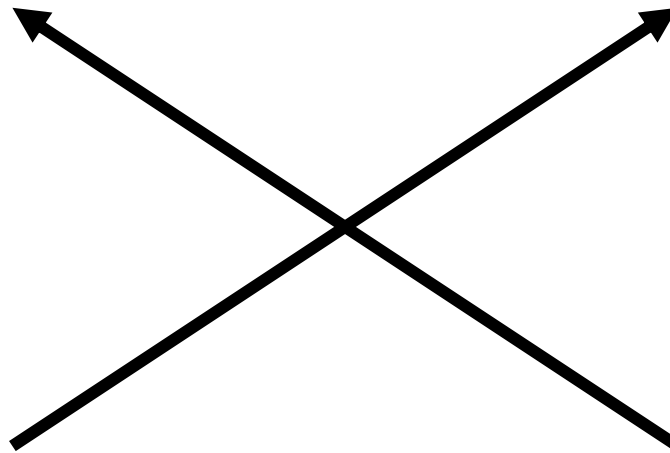
Attachment 1 - Framework for State Safety Programme (SSP)

Attachment 2 - Legal Guidance for the Protection of Information from Safety Data Collection and Processing Systems



Two component system

- Two parallel linked requirements
 - State Safety Programme



- Safety Management System for industry



Chapter 3: State Safety Management Responsibilities

3.1: State safety programme

- Includes 4 components of SSP at the level of standard
 - State safety policy and objectives
 - State safety risk management
 - State safety assurance
 - State safety promotion
- Includes a note for acceptable level of safety performance
 - “An acceptable level of safety performance for the State can be demonstrated through the combination of the following:*
 - *implementation and maintenance of the SSP;*
 - *safety performance indicators and targets showing that safety is effectively managed,*
 - *built on the foundation of implementation of existing safety-related SARPs.”*
- Identifies the service providers required to implement a SMS
- Refers to Attachment 1 “SSP framework” defining the 11 elements corresponding to the SSP components



Chapter 4: Safety Management System

- **Safety management system is required from industry (service providers, as defined in ICAO annexes 1, 6 and 8, essentially)**
- **Provides further details regarding SMS addressing service providers**
 - Includes 4 components of SMS
 - Safety policy and objectives
 - Safety risk management
 - Safety assurance
 - Safety promotion
 - Allows for consideration of size and complexity of the organisation.
- **Clarifies who is responsible for accepting a service provider's SMS**
- **Introduces framework for SMS (12 elements) as Appendix 2**

It includes a separate section for international General Aviation.



Annex 19 – Appendix 2 (1)

- Safety policy and objectives
 - Management commitment and responsibility,
 - Safety accountability,
 - Appointment of key safety personnel,
 - Coordination of emergency response planning,
 - SMS documentation;

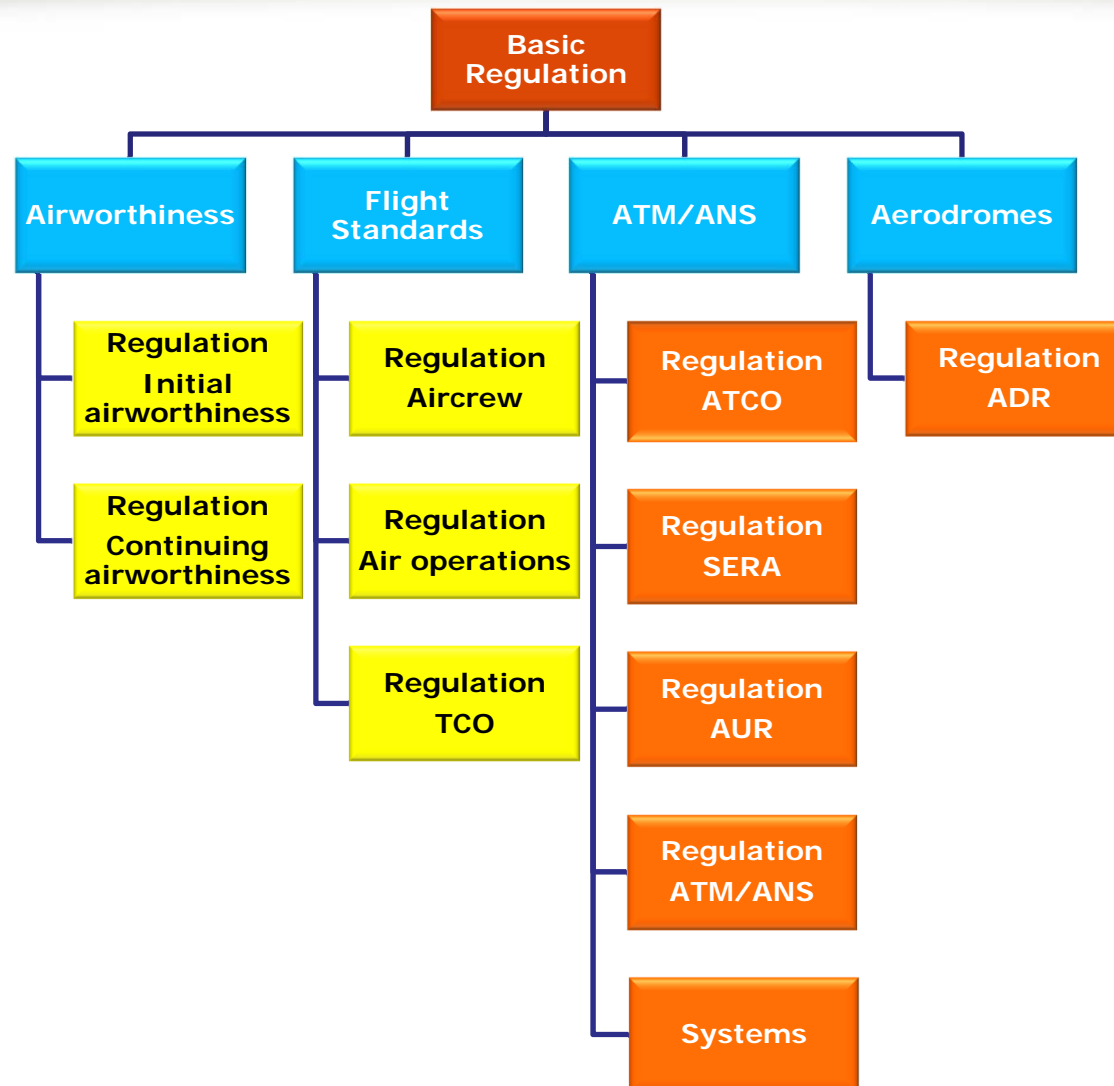


Annex 19 – Appendix 2 (2)

- Safety risk management
 - Hazard identification,
 - Safety risk assessment and mitigation;
- Safety assurance
 - Safety performance monitoring and measurement,
 - The management of change,
 - Continuous improvement of SMS;
- Safety promotion
 - Training and education
 - Safety communication

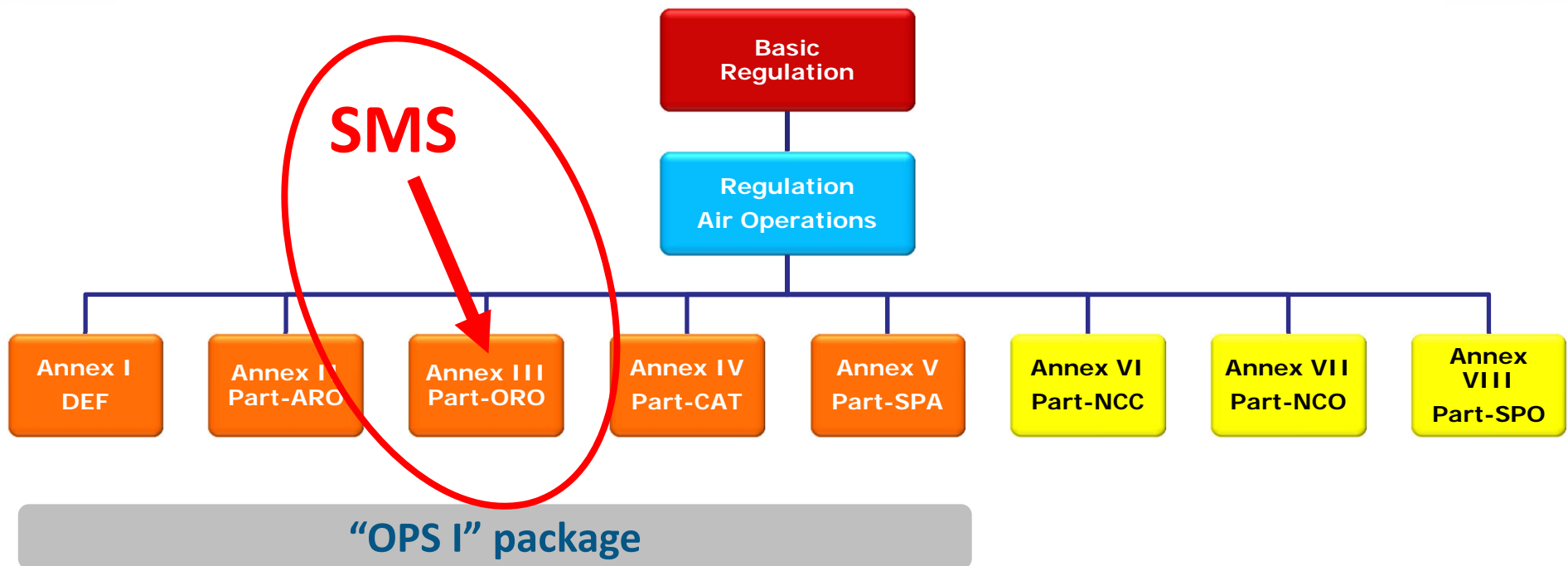


European rule structure





Rule structure: Air Operations



CAT: Commercial Air Transport
SPA: Specific Approvals (e.g. PBN, LVO, ETOPS)
NCC: Non-commercial OPS with CMPA
NCO: Non commercial OPS with other than CMPA
SPO: Specialised Operations (Aerial Work)



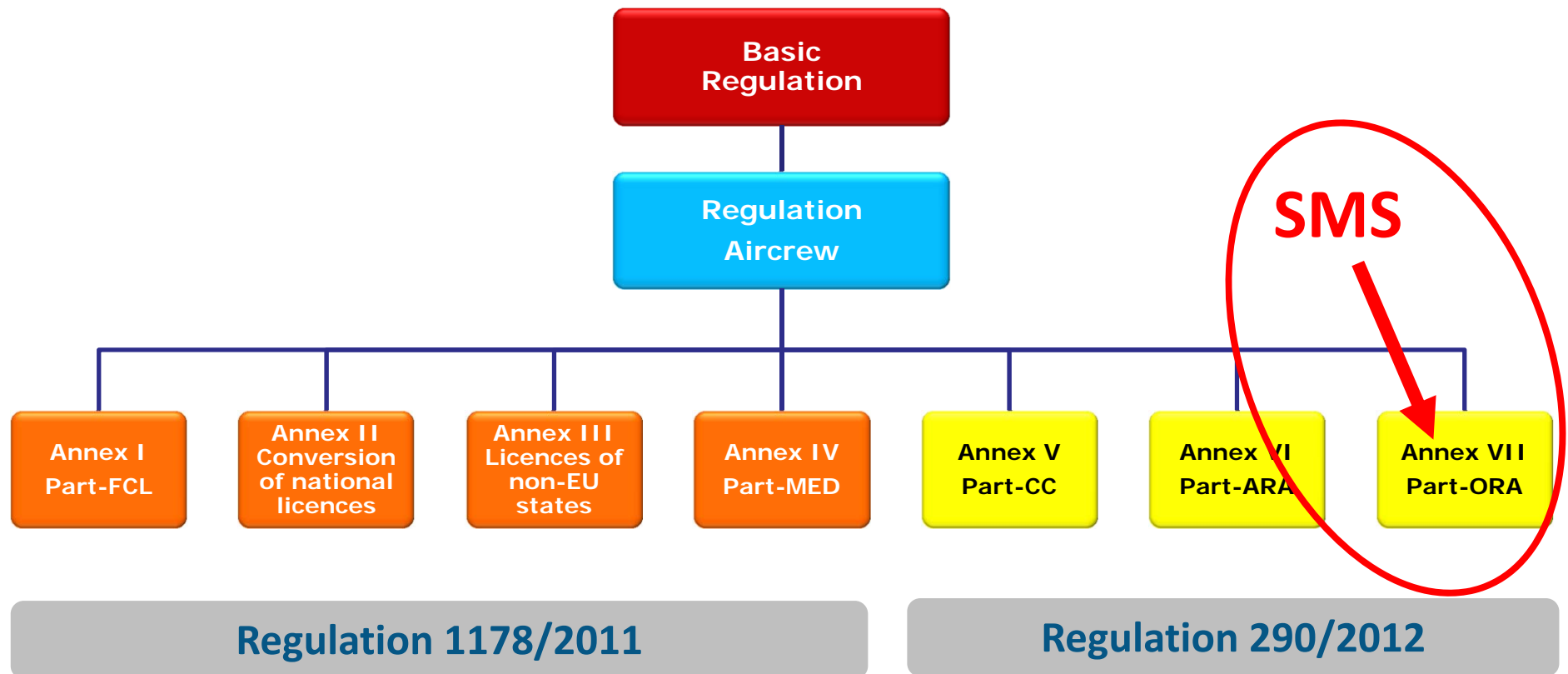
Management System

most relevant IR: **ORO.GEN.200** (extract)

- (a) An operator shall establish, implement and maintain a **management system** that includes:
- (1) clearly defined lines of **responsibility and accountability** throughout the organisation, including a direct safety accountability of the accountable manager;
 - (2) a description of the overall philosophies and principles of the organisation with regard to safety, referred to as the **safety policy**;
 - (3) the **identification of aviation safety hazards** entailed by the activities of the organisation, their **evaluation and the management of associated risks**, including taking **effective actions to mitigate the risk**;
 - (4) maintaining **personnel trained and competent** to perform their tasks;
 - (5) **documentation** of all management system key processes, including a process for making personnel aware of their responsibilities, and its amendment procedure;
 - (6) a function to **monitor compliance of the organisation** with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to **ensure effective implementation of corrective actions** as necessary.

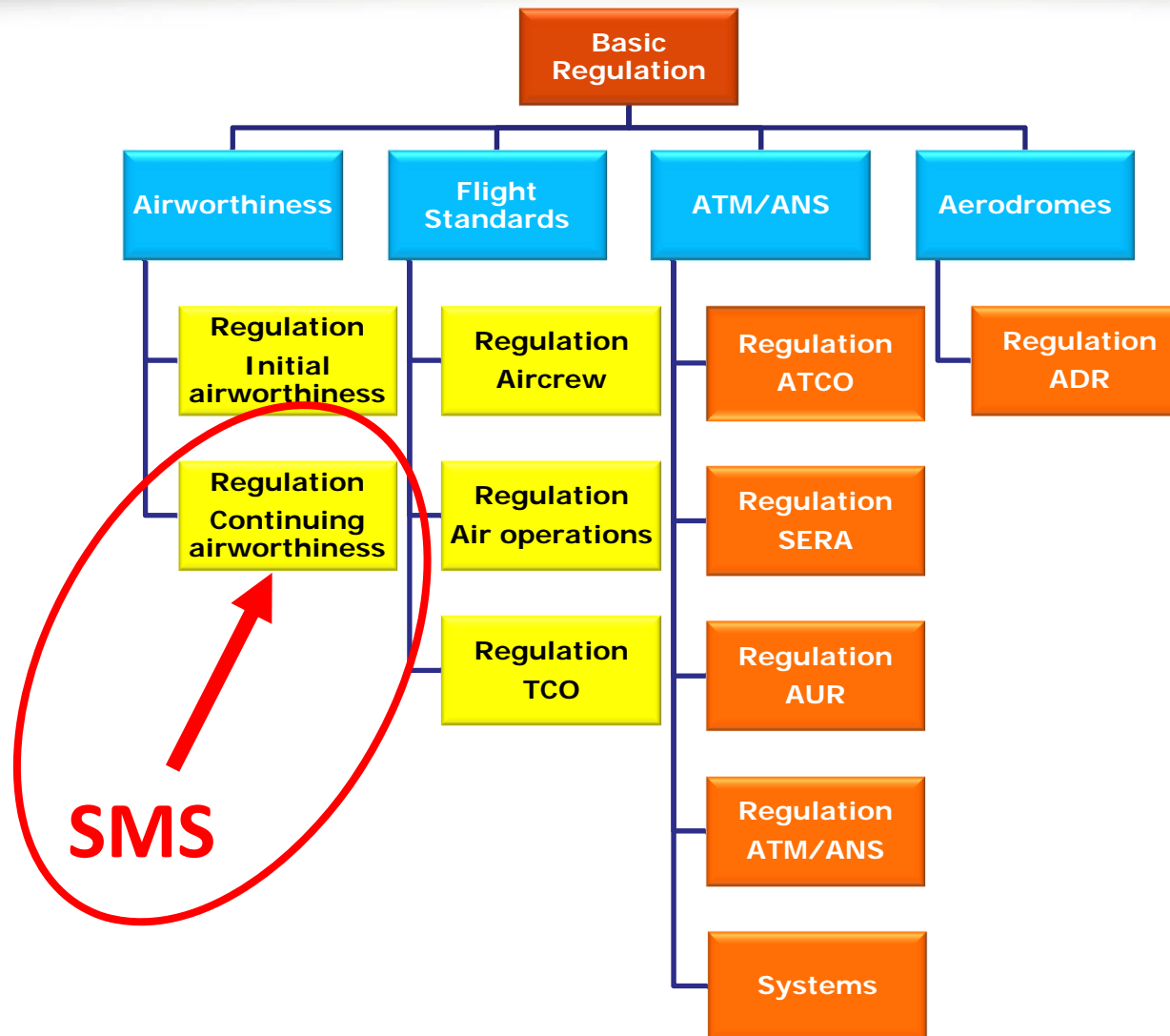


Rule structure – Aircrew





European rule structure



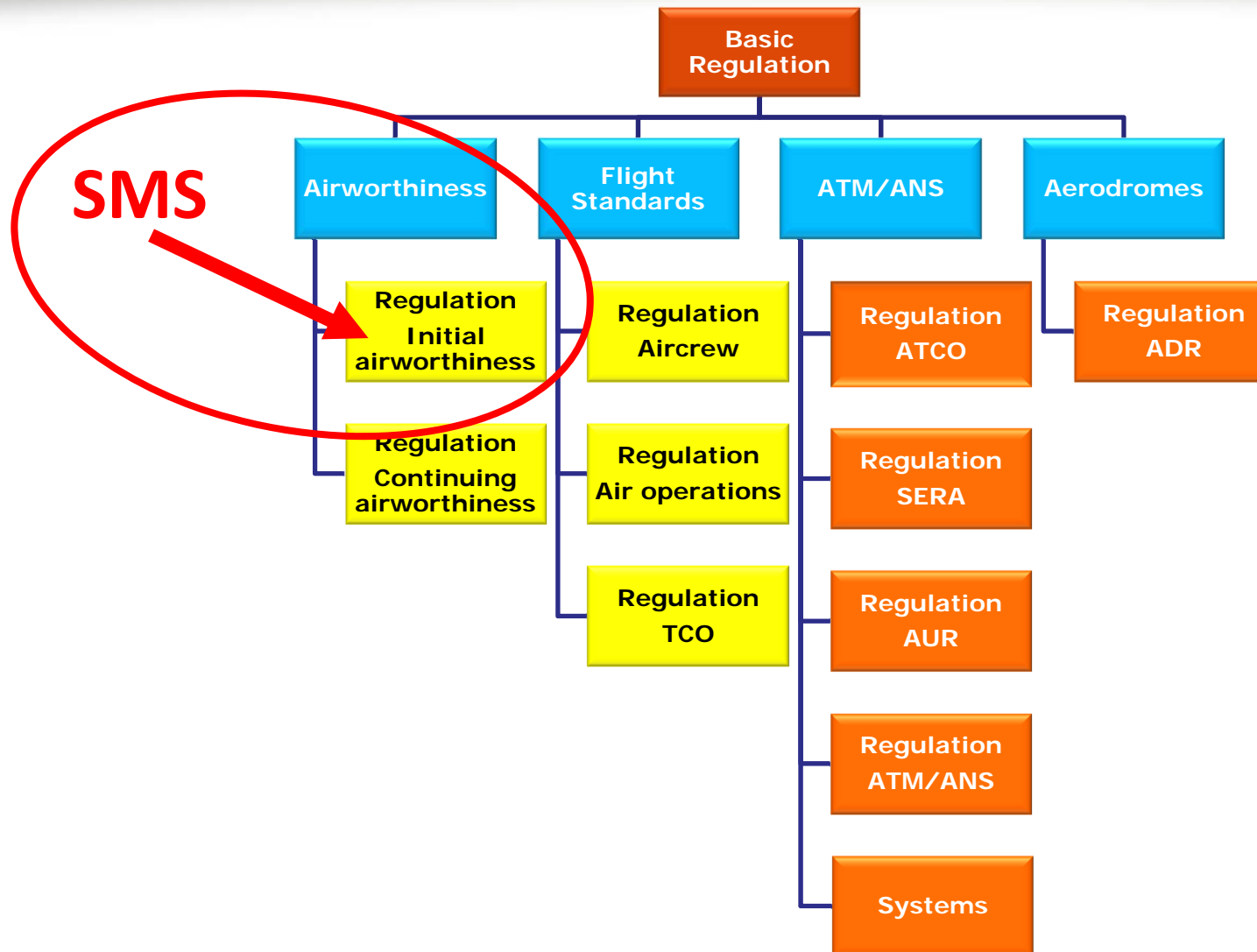


Regulation 2042/2003 - Continuing Airworthiness

- **Scope:**
 - Maintenance (Part-145 / Part-M Subpart F)
 - Continuing Airworthiness Management ("Part-M Subpart G")
 - Maintenance Training (Part-147)
 - Aircraft Mechanics Licensing (Part-66)
- **EASA is the competent authority for:**
 - third country organisations (Maintenance, Maintenance Training and Continuing Airworthiness Management Organisations)
- **SMS not yet implemented**
 - Will be introduced through rulemaking **Task MDM.055** (ToRs published 07/2011)
 - SMS elements will be based on those developed for **Flight Standards**
 - NPA: September 2012
 - Opinion/Decision: 2nd Quarter 2013 (Regulation one year later)



European rule structure





Initial airworthiness (748/2012)

- Scope:
 - Design:
 - TC, RTC, change to TC, STC, repairs...
 - Design organisation approval;
 - Production : POA
- EASA is the competent Authority for:
 - Design approvals,
 - DOA approvals and surveillance,
 - Non-EU POA and when required by the MS (e.g. Airbus single POA).



SMS in initial airworthiness

- SMS not yet implemented:
 - Will be introduced through rulemaking task MDM060
- SMS will consist of:
 - Generic elements based on those of flight standards,
 - Specific elements related to safety management in the frame of:
 - Product certification and
 - Design organisation approval



Level of involvement (LOI) project

- Two separate safety management loops:
 - One for product certification,
 - One for design organisation approval;
- Sharing and feeding a common performance indicator: design organisation performance,
- Fast-tracked rulemaking project depending on support of industry.



Conclusion

- So far so good...
- Keep It Short and Simple !





Thank you for your
attention!

Questions?

