European Safety Promotion Network Rotorcraft
TO SERVE THE COMMUNITY

eliance ALWAYS READY

ELI FRIULIA ELIANCE GROUP

ESPN-R
Ops & SMS Working Group

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Safety Manager (20 years)

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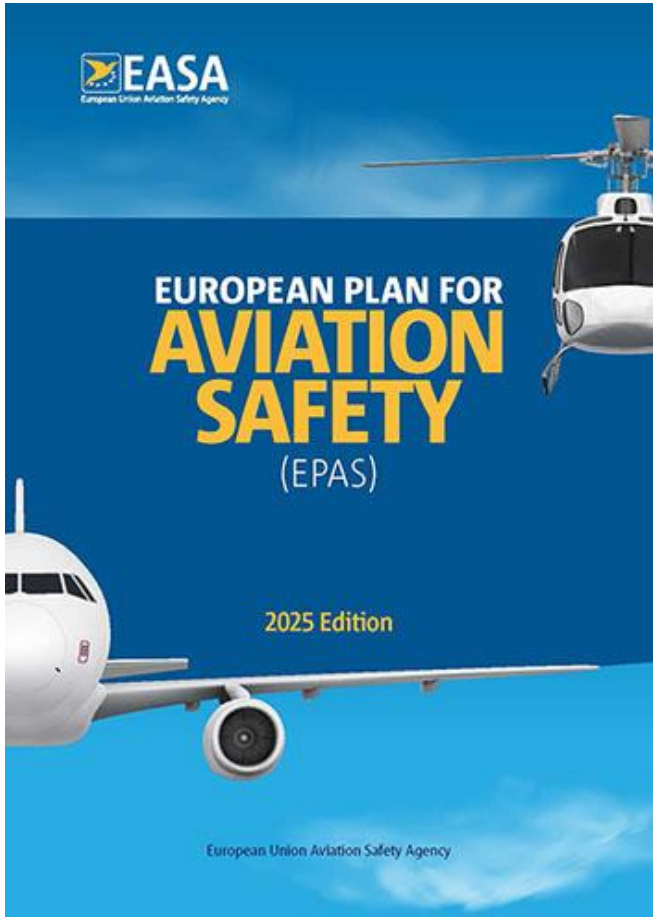
ESPN-R DELIVERABLES

Templates for the Aviation Community

Capt. Stefano Burigana

WHY THIS PRESENTATION?



FROM EPAS 2024 VOL. II

4.3 Efficiency/proportionality

SPT.0127 **Supporting small helicopter operators in implementing m anagement systems effectively**

The objective of this task is to provide support to small helicopter operators to implement management systems effectively with the following indicative scope:

- promote good practices and examples on how to organise the implementation of a safety management system, including change management, risk assessments, examples of safety key performance indicators, etc.;
- promote good practices and examples on how to organise the implementation of a compliance monitoring system, including good practices in root-cause analysis, simpler internal audit checklist systems, etc.;
- promote good practices and examples on how to organise digital record-keeping, etc.

European Plan for Aviation Safety (EPAS) | **VOLUME II - 2024 edition**
4. ROTORCRAFT

SPT.0128 **Support helicopter operators in developing improved organisational processes and procedures**

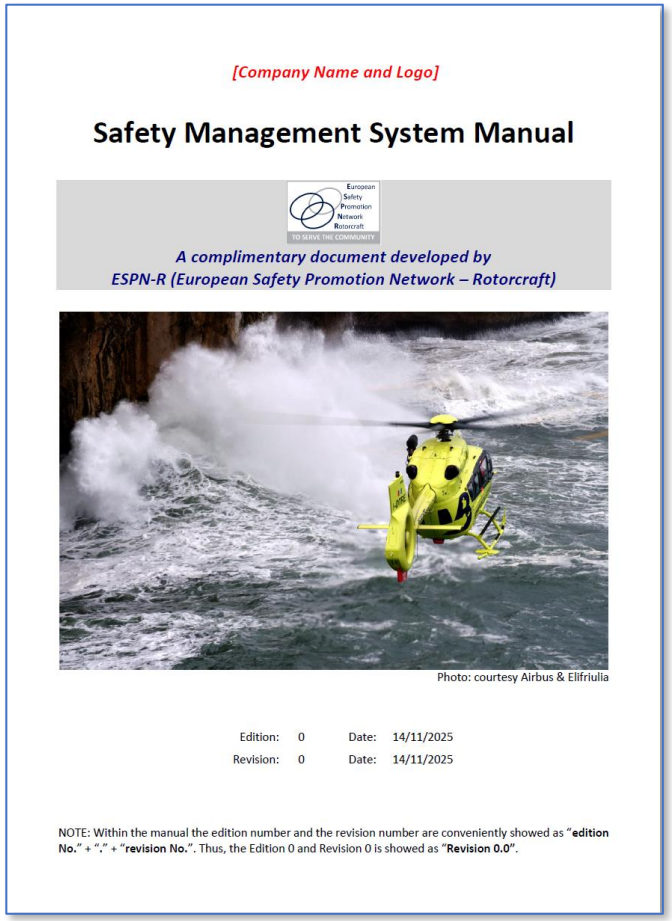
The objective of this task is to provide support to helicopter operators in the development of internal organisational processes and procedures, including the following areas:

- Development and promotion of typical standard operating procedures (SOPs) and checklists as a basis which will have to be further tailored to the specific needs/risks of the operators. More concretely, this includes the development of practical guidance material which will guide the operators through the identification of their risks (related to their envisaged operations). Subsequently, the guidance material will provide information on how to develop an adequate risk assessment on the basis of which suitable SOPs and checklists can be developed. Typical SOPs could include thematic hazard lists, possibly with some common controls/compensating measures. However, they would need to be further tailored to the needs/risks of the operators.
- Development and promotion of guidance on how an operator verifies the validity of a certificate/approval for certified subcontractors and how to appropriately ensure compliance with the applicable requirements and that relevant hazards are considered. Promotion of examples of contracts for subcontracting CAMO/Part-145 approvals.
- Development and promotion of guidance related to EFB operations and the related approval process.

https://www.easa.europa.eu/en/document-library/general-publications/european-plan-aviation-safety-epas-2024

TODAY PRESENTATION

SPT.0127 Supporting small helicopter operators in implementing m anagement systems effectively



[Company Name and Logo]

Safety Management System Manual

A complimentary document developed by
ESPN-R (European Safety Promotion Network – Rotorcraft)

Photo: courtesy Airbus & Elifriulia

Edition: 0 Date: 14/11/2025
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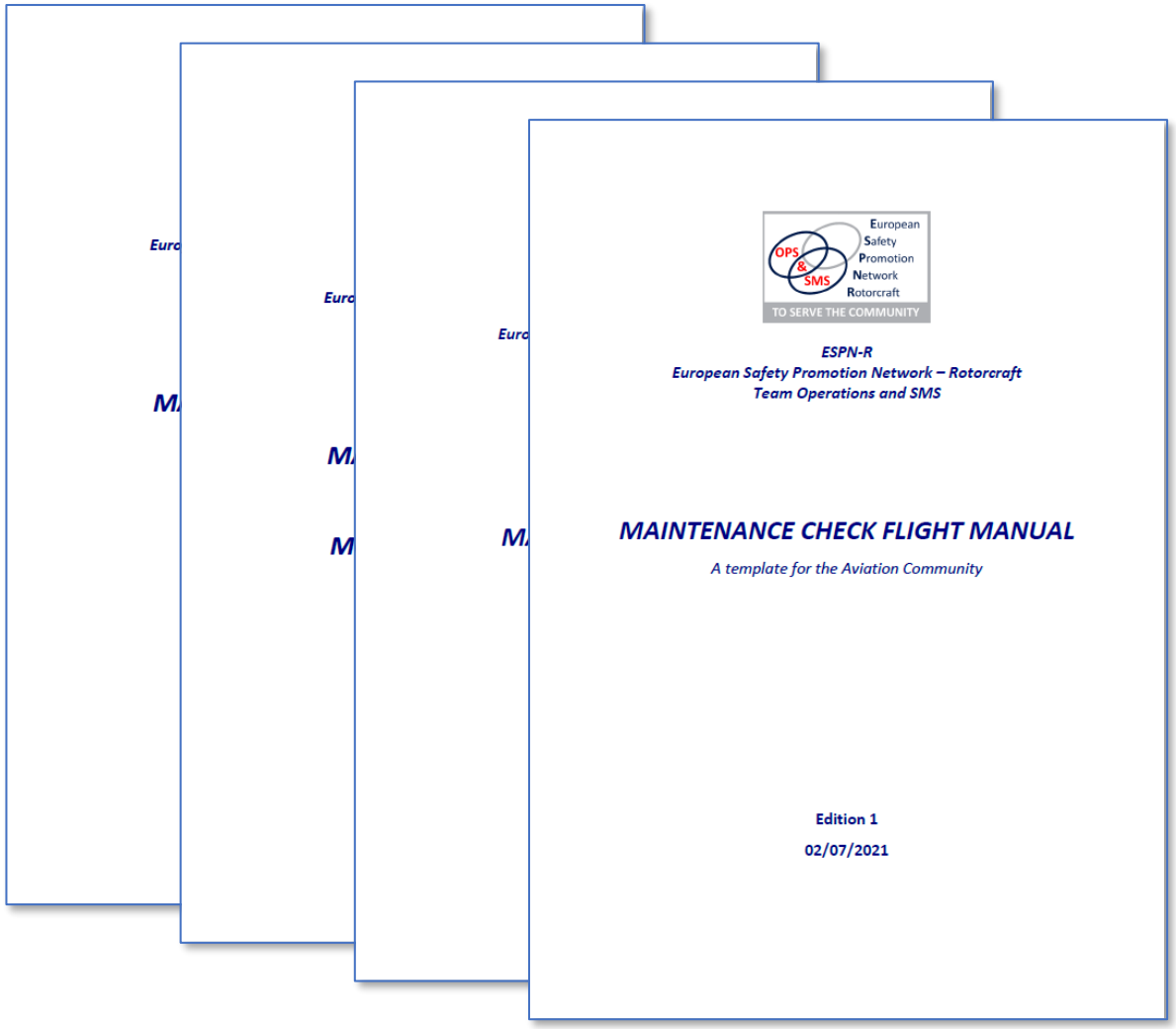

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MAINTENANCE CHECK FLIGHT MANUAL

A template for the Aviation Community

Edition 1
02/07/2021

TODAY PRESENTATION

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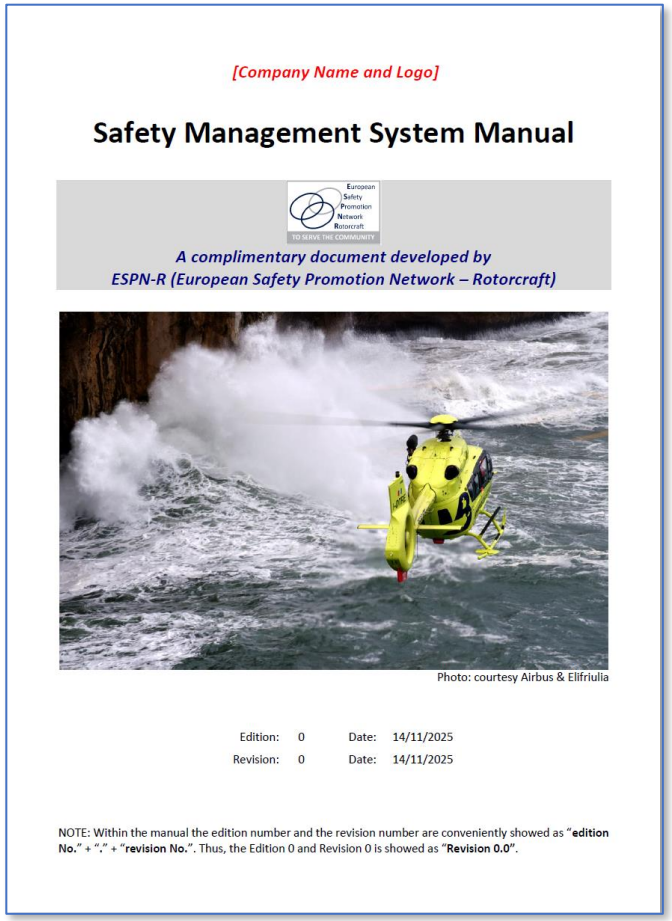

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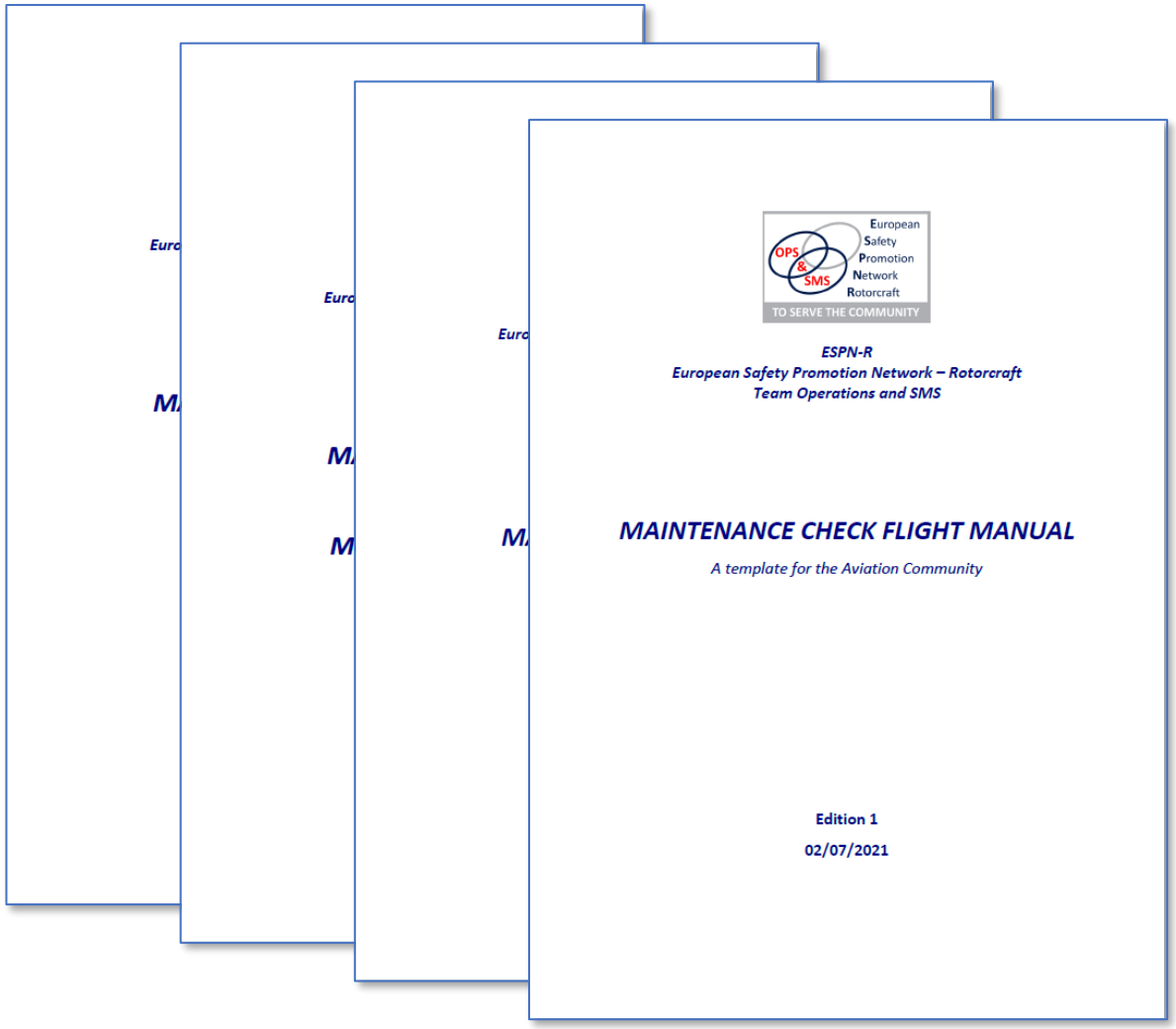

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SAFETY MANAGEMENT SYSTEM MANUAL

A template for the Aviation Community

MANAGEMENT SYSTEM

SAFETY + COMPLIANCE

Reg. (EU) 748/2012	Reg. (EU) 1321/2014 Part-CAMO	Reg. (EU) 1321/2014 Part-145	Reg. (EU) 1178/2011	Reg. (EU) 965/2012	Reg. (EU) 2023/203 Part-IS (22/02/2026)
					
Construction	CAMO	Maintenance	Training	Operations	Information

SAFETY MANAGEMENT SYSTEM

MANUAL

[Company Name and Logo]

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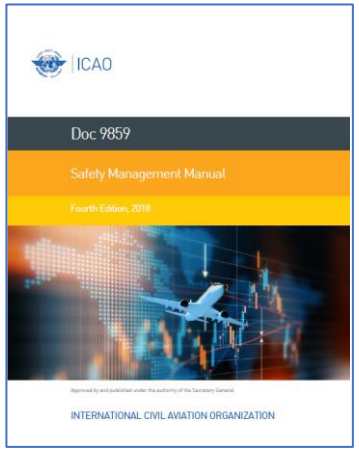


COMPLIANCE

ICAO Doc. 9859
SMS Manual

vs

ESPN-R SMS Manual

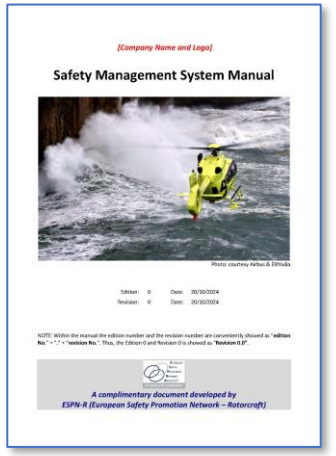
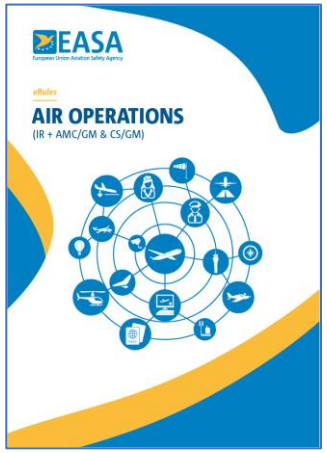


Table 10. Components and elements of the ICAO SMS framework

COMPONENT	ELEMENT
1. Safety policy and objectives	1.1 Management commitment
	1.2 Safety accountability and responsibilities
	1.3 Appointment of key safety personnel
	1.4 Coordination of emergency response planning
	1.5 SMS documentation
2. Safety risk management	2.1 Hazard identification
	2.2 Safety risk assessment and mitigation
3. Safety assurance	3.1 Safety performance monitoring and measurement
	3.2 The management of change
	3.3 Continuous improvement of the SMS
4. Safety promotion	4.1 Training and education
	4.2 Safety communication

ESPN-R SMS Manual – Index (extract)

TABLE OF CONTENTS



COMPLIANCE

Reg. (EU) 965/2012
(and other regulations)

vs

ESPN-R SMS Manual

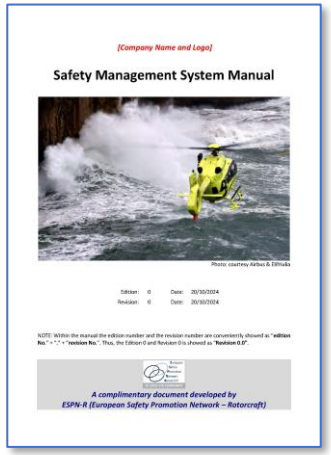


Table 10. Components and elements of the ICAO SMS framework

AMC2 ORO.GEN.200(a)(5)

(1) scope of the safety management system;

(2) safety policy and objectives;

(3) safety accountability of the accountable manager;

(4) safety responsibilities of key safety personnel;

(5) documentation control procedures;

(6) hazard identification and risk management schemes;

(7) safety action planning;

(8) safety performance monitoring;

(9) incident investigation and reporting;

(10) emergency response planning;

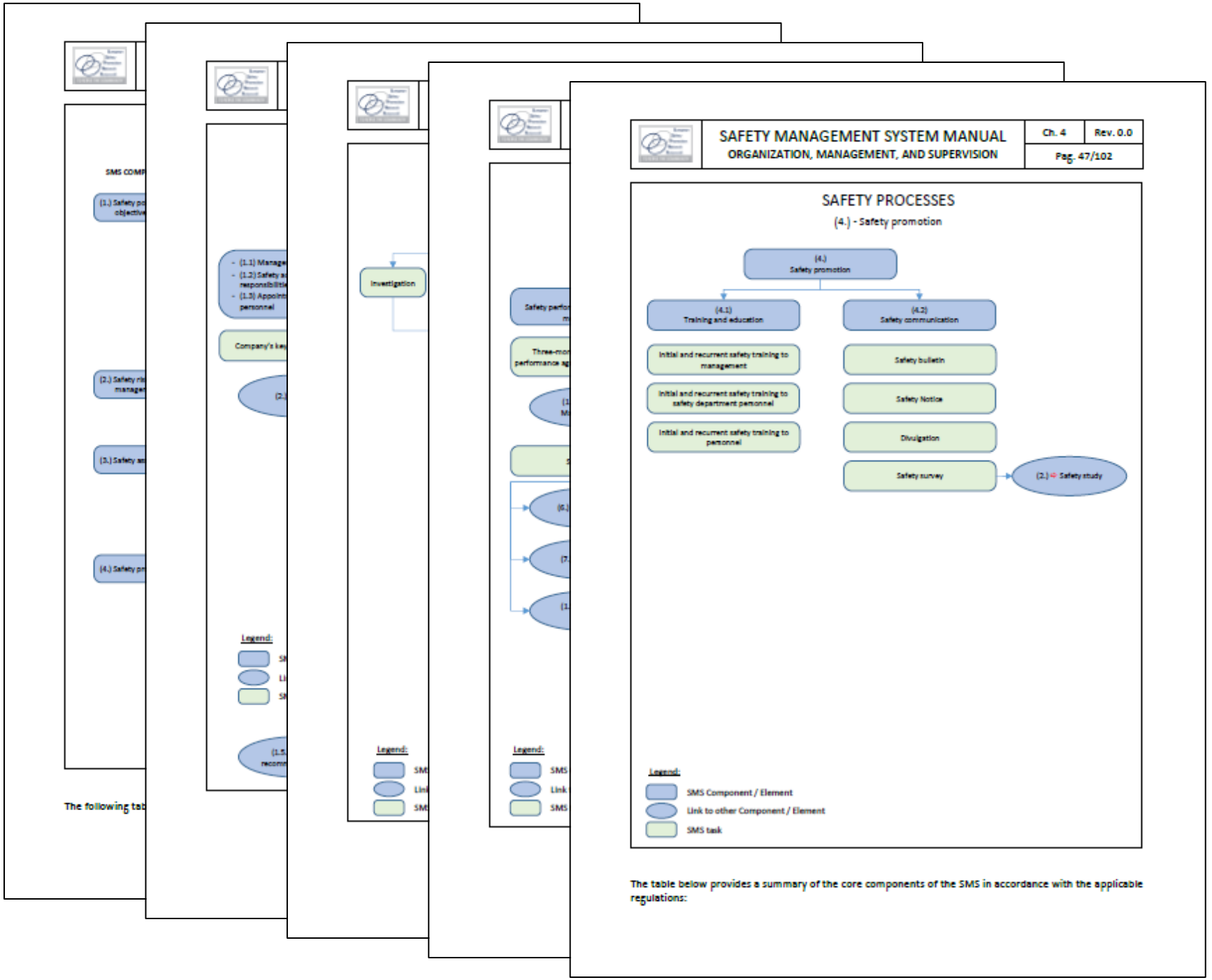
(11) management of change (including organisational changes with regard to safety responsibilities);

(12) safety promotion.

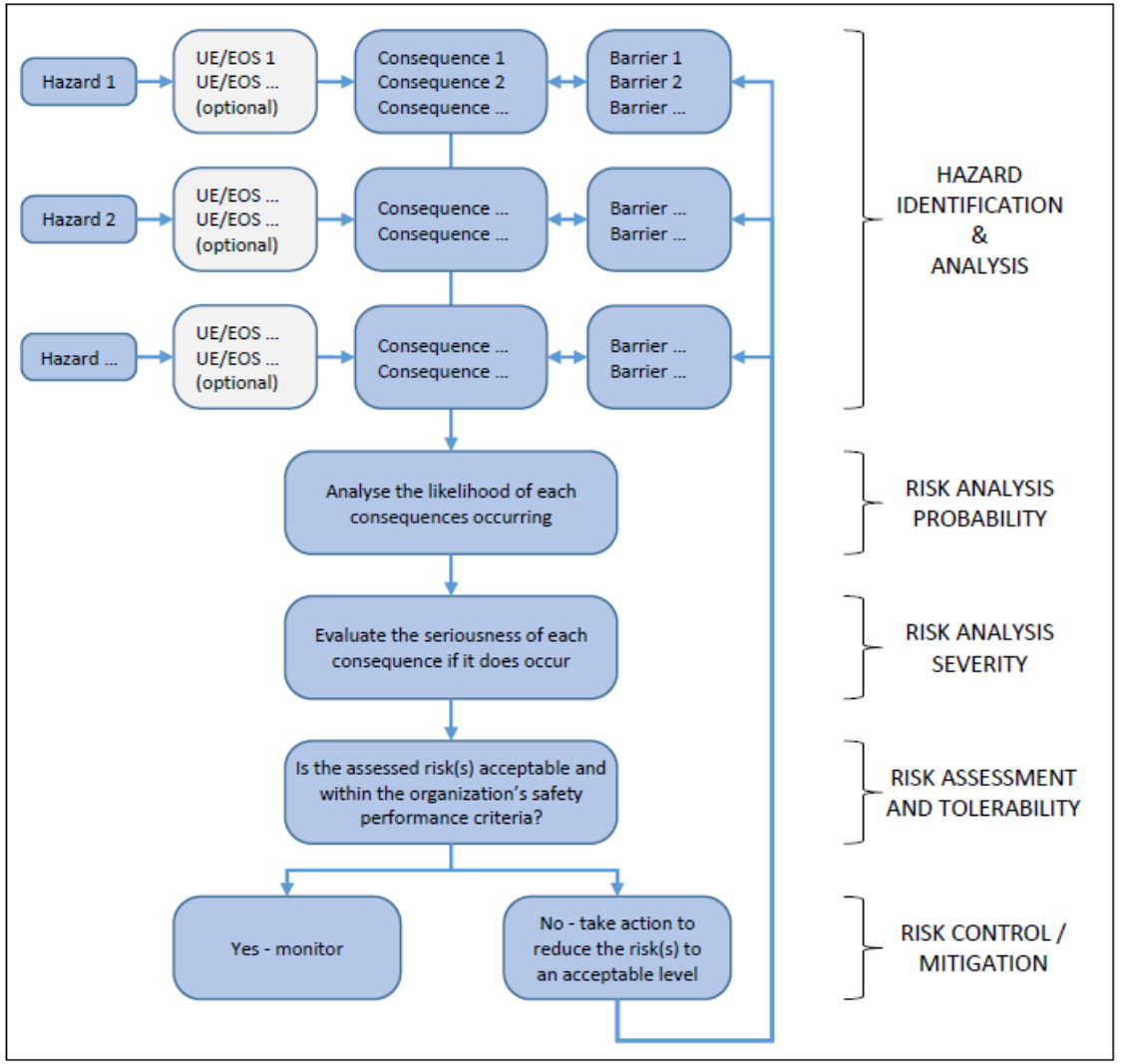
ESPN-R SMS Manual – Index (extract)

TABLE OF CONTENTS

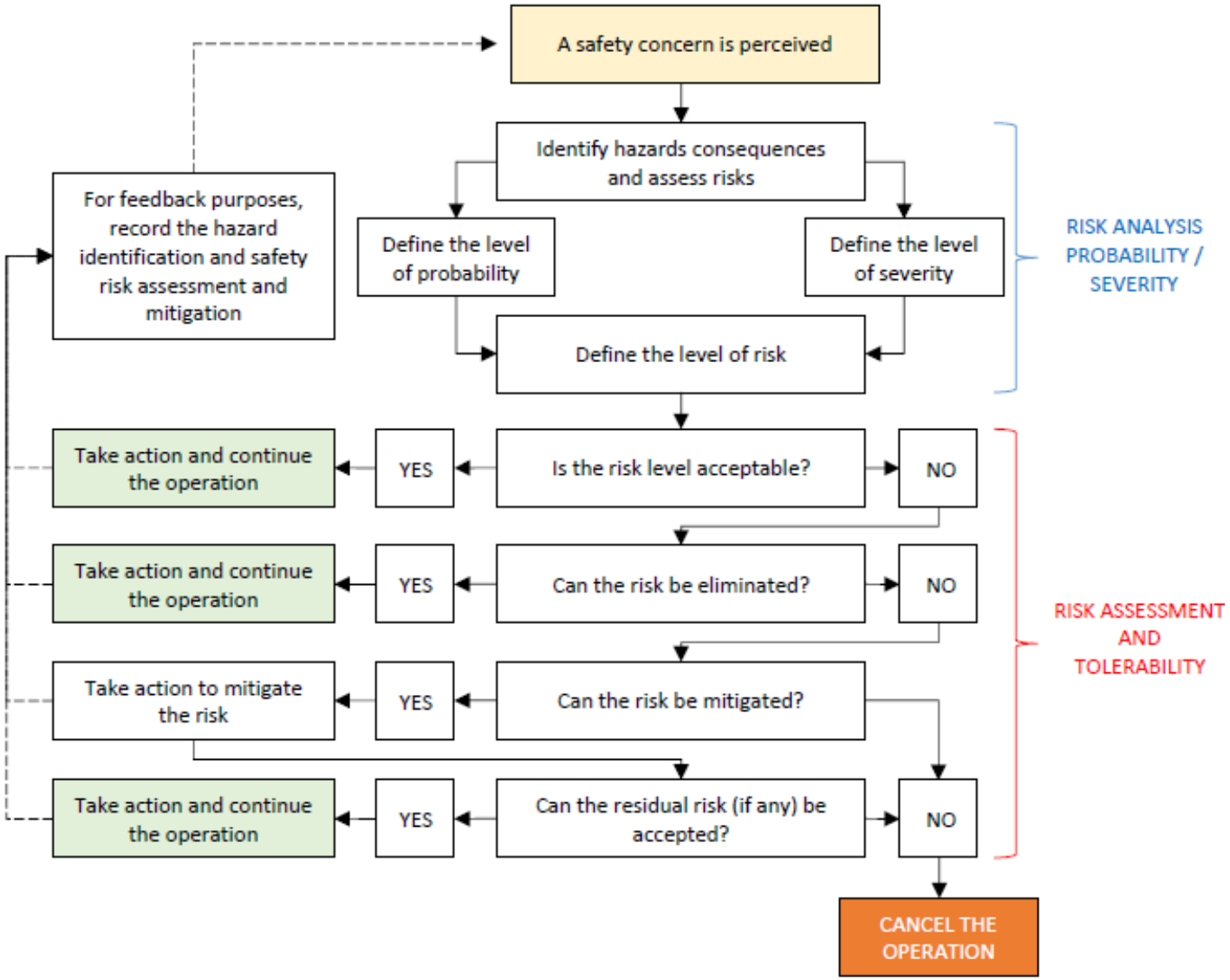
PROCESSES


SAFETY MANAGEMENT SYSTEM MANUAL
ORGANIZATION, MANAGEMENT, AND SUPERVISION
Ch. 4
Rev. 0.0
Pag. 47/102
SAFETY PROCESSES
(4.) - Safety promotion
(4.)
Safety promotion
(4.1)
Training and education
(4.2)
Safety communication
Initial and recurrent safety training to management
Initial and recurrent safety training to safety department personnel
Initial and recurrent safety training to personnel
Safety bulletin
Safety Notice
Divulgation
Safety survey
(2.) Safety study
Legend:
SMS Component / Element
Link to other Component / Element
SMS task
The table below provides a summary of the core components of the SMS in accordance with the applicable regulations:

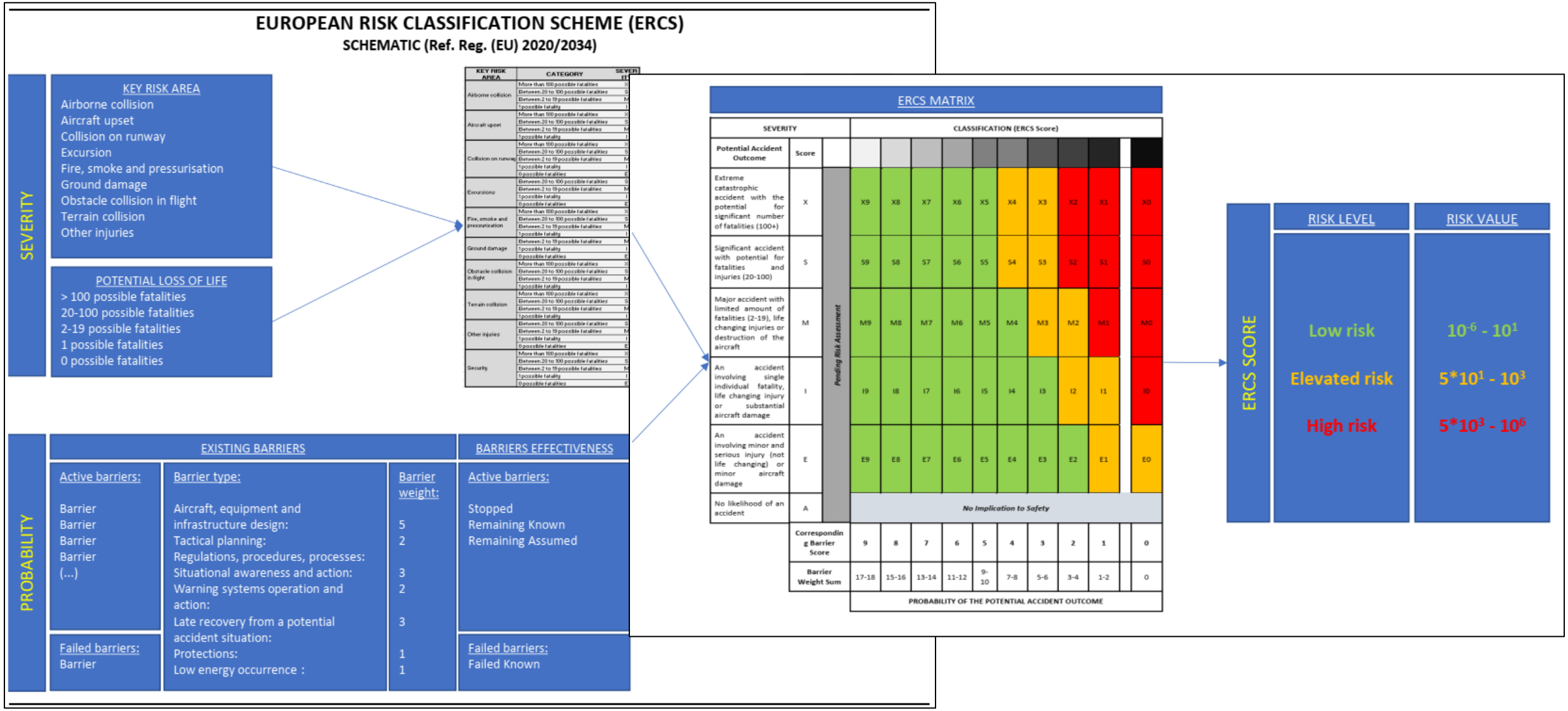
SAFETY RISK MANAGEMENT



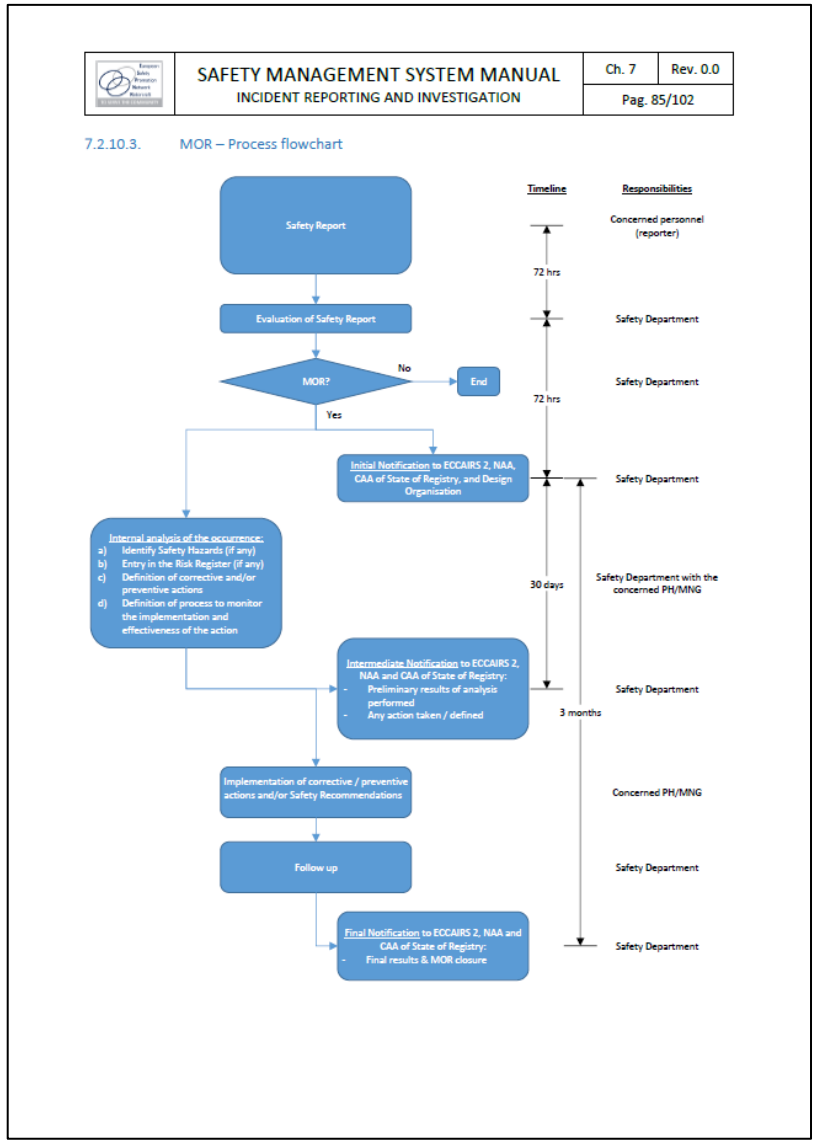
RISK ASSESSMENT



European Risk Classification Scheme (ERSC)



Mandatory Occurrence Reporting



SAFETY MANAGEMENT SYSTEM MANUAL
INCIDENT REPORTING AND INVESTIGATION
Ch. 7 | Rev. 0.0
Pag. 85/102

7.2.10.3. MOR – Process flowchart

SAFETY DOCUMENTS

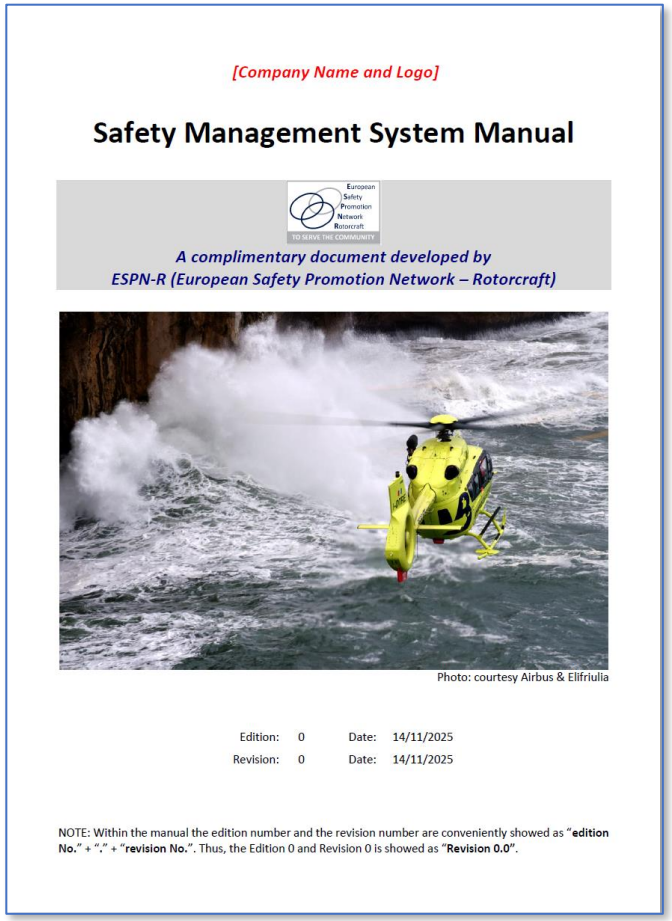
- SMS-03-AUPLAN - Annual Audit Plan 20__ - Safety - Rev. 0.docx
- SMS-04-AUREC - SMS audit - Safety Recommendation Effectiveness - Rev. 0.docx
- SMS-05-AUTOL - SMS audit - Tolerable consistency - Rev. 0.docx
- SMS-06-RECREG - Safety Recommendations Register - Rev. 0.xlsx
- SMS-07-RECF - Safety Recommendations Form - Rev. 0.docx
- SMS-08-ASR - Annual Safety Report.docx
- SMS-09-INV - Investigation final report - Rev. 0.docx
- SMS-10-MOC - Management of change - Rev. 0.1 - SB 2025-11-01.docx
- SMS-11-RA - Risk assessment - rev. 0.1 - SB 2025-11-01.docx
- SMS-12-SR - Safety report form - Rev. 0.docx
- SMS-13-SPI - SPI-SPO - Rev. 0.docx
- SMS-14-SRBM - Safety Review Board meeting minute.docx

MAINTENANCE CHECK FLIGHTS

From Risk Assessment to SOP

TODAY PRESENTATION

SPT.0127 Supporting small helicopter operators in implementing m anagement systems effectively



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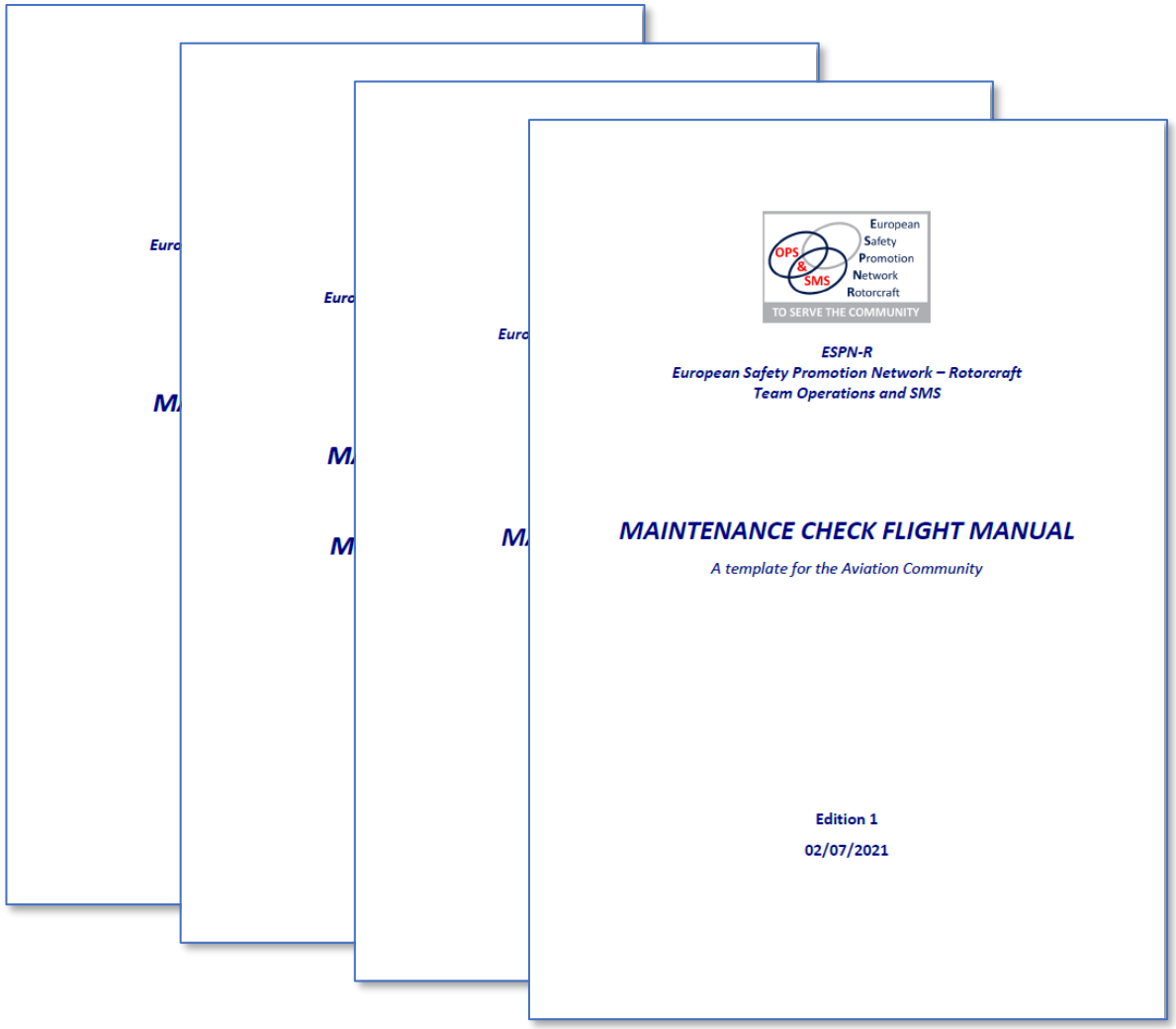

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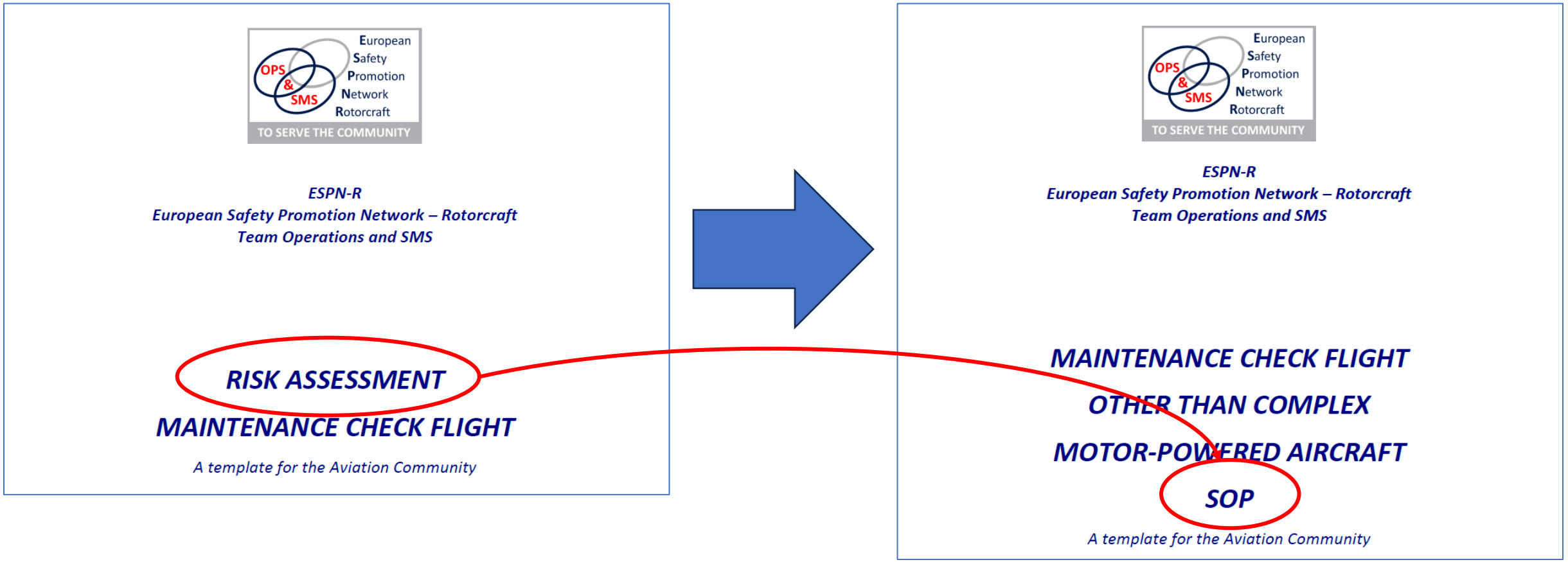
RA TO SOP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Team Operations and SMS
RISK ASSESSMENT
MAINTENANCE CHECK FLIGHT
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MAINTENANCE CHECK FLIGHT
OTHER THAN COMPLEX
MOTOR-POWERED AIRCRAFT
SOP
A template for the Aviation Community

Reg. (EU) 965/2012

ORO.AOC.125 Non-commercial operations of an AOC holder with aircraft listed on its AOC

a. (…)

b. An AOC holder shall comply with:
   1. Annex VIII (Part-SPO) when conducting maintenance check flights with complex motor-powered aircraft;
   2. Annex VII (Part-NCO) when conducting maintenance check flights with other than complex motor-powered aircraft.

c. An AOC holder conducting operations referred to in points (a) and (b) shall not be required to submit a declaration in accordance with this Annex.

Reg. (EU) 965/2012

- ***SPO.SPEC.MCF.100 Levels of maintenance check flight***
- *Before conducting a maintenance check flight, the operator shall determine the applicable level of the maintenance check flight as follows:*
- *"Level A" maintenance check flight for a flight where the use of abnormal or emergency procedures, as defined in the aircraft flight manual, is expected, or where a flight is required to prove the functioning of a backup system or other safety devices;*
- *a "Level B" maintenance check flight for any maintenance check flights other than a "Level A" maintenance check flight.*

Reg. (EU) 965/2012

- ***SPO.SPEC.MCF.140 Systems and equipment***
- *When a maintenance check flight is intended to check the proper functioning of a system or equipment, that system or equipment shall be identified as potentially unreliable and appropriate mitigation measures shall be agreed prior to the flight in order to minimise risks to flight safety.*

9. Task analysis

Following is an analysis of the phase of flight where this risk assessment applies. The analysis is focused only on those elements that may increase the operational risk.

TE Ref.	Top Element	(Unwanted) Event
	Common	
TE 001	Preparation	Aircraft status not in standard conditions
TE 002		Pilots not skilled in the use of abnormal and emergency procedures
TE 003	Loading	Aircraft CG near limits
TE 004	Prefight	Aircraft improperly set for the flight
TE 005	MCF flight (all phases)	Failure of the checked system
TE 006		Failure of other-than-checked system
TE 007		Multiple failures
TE 008		Emergencies requiring an immediate or as-soon-as-possible landing
TE 009		Pilot high workload

TE no.	Revised on	Description		Consequence	Most significative regulatory barriers (if any)	Likeli-Hood	Seve-rity	Risk before	Additional barriers implemented (if any)	Likeli-Hood	Seve-rity	Risk after	Ref. docu-mentation	Notes
TE 003	14/06/2020	Aircraft CG near limits	The aircraft released for an MCF flight may be in a non-standard condition or not completely operatively prepared, and with a different position of the basic CG than usual	1. LOC-I	I. Mass and balance	1	D	A		1	D	A		
TE 004	14/06/2020	Aircraft improperly set for the flight	Due to maintenance operations, the aircraft may be not completely fit for the flight (open latches, loose object left in the vanes, etc.)	1. Aircraft damage 2. LOC-I 3. CFIT		3	C	T	a. Attentive pre-flight inspection by pilot-in-command b. Pilot-in-command pre-flight with support by an engineer	2	C	A	a. MCF Manual b. MCF Manual	
TE 005	14/06/2020	Failure of the checked system	In-flight failure of the system under check	1. CFIT 2. LOC-I	I. Pilot's recurrent training (TR, OPC, etc.) II. Pilot's MCF course (Level A complex)	2	C	A		2	C	A		Check tables 1 and 2 for a more detailed analysis. Herein risk takes into consideration also the real likelihood of a malfunction.

Level A and B classification by emergency and malfunction area

Malfunction or Emergency area	Emergency procedures	Malfunction procedures	Consequence	Contingency action	Risk before	Safety barrier	Risk after	Note	MCF level
Rotor	Rotor-overspeed		Rotor-overspeed	Return to base Land on airport Off airfield precautionary landing Autorotation	5 D	Rotor speed system verification on ground-run and hovering before flight	5 B	Rotor speed system functionality verification on ground excludes major problems in flight	A
	Rotor under-speed		Rotor under-speed	If in an intentional autorotation (e.g., NR check) – Apply power If NR low during flight (e.g., NR regulator, engine(s) failure) – Initiate autorotation	5 D	Rotor speed system verification on ground-run and hovering before flight	5 B	Rotor speed system functionality verification on ground excludes major problems in flight	A
	Rotor vibrations		Rotor out of balance	Return to base	5 A		5 A		B

BROWSER SEARCH

- ESPN-R - MCF – MANUAL
- ESPN-R - MCF - RA

QUESTIONS?

European Safety Promotion Network Rotorcraft

TO SERVE THE COMMUNITY

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