LEONARDO

Leonardo Helicopters

Safety Management System (SMS) Manual Principles

(SRS-101&102 supporting documentation)

Cascina Costa

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Electronics

Helicopters

Aircraft

Cyber & Security

Space

Unmanned Systems

Aerostructures

The Company SMS Manual

Introduction

- ✓ The SMS Manual addresses in a **single view** all the characteristics that identify Safety Management System in the Company.
- ✓ The SMS Manual follows **SM-0001 International Industry Standard structure**, but it is also conceived as an implementation guide and a dissemination tool for the whole Company:
  - ➤ **Section 0**: Executive Summary and SMS implementation strategy
- • **All SMS pillars are managed in separate easily accessible Sections**
  - ➤ **Section 1**: Safety Policy and Objectives
  - ➤ **Section 2**: Safety Risk Management
  - ➤ **Section 3**: Safety Assurance
  - ➤ **Section 4**: Safety Promotion
- • **Great emphasis is given to a unique model development and…**
  - ➤ **Section 5**: Interface between Organizations
  - ➤ **Section 6**: SMS Implementation (step by step sequence of activities to allow any SMS enactment)
- • **…to a single, shared methodological implementation of the processes**
  - ➤ **Appendix 1**: Safety Concept Evolution, SMS and relation with CS
  - ➤ **Appendix 2**: Safety Performance Indicators
  - ➤ **Appendix 3**: Safety Risk Management Methodology
  - ➤ **Appendix 4**: SMS Gap Analysis worksheet and rating
  - ➤ **Appendix 5**: Cross-Reference between SM-0001 and the Company SMS Manual
  - ➤ **Appendix 6**: Company Aviation Emergency Response Plan (ERP) Guidelines
  - ➤ **Appendix 7**: Safety Culture Creation
  - ➤ **Appendix 8**: Safety Communication and Promotion (Internal)
  - ➤ **Appendix 9**: Terms of Reference
  - ➤ **Appendix 10**: Forms
  - ➤ **Appendix 11**: Safety External Dissemination / Safety Information Documents (SID)
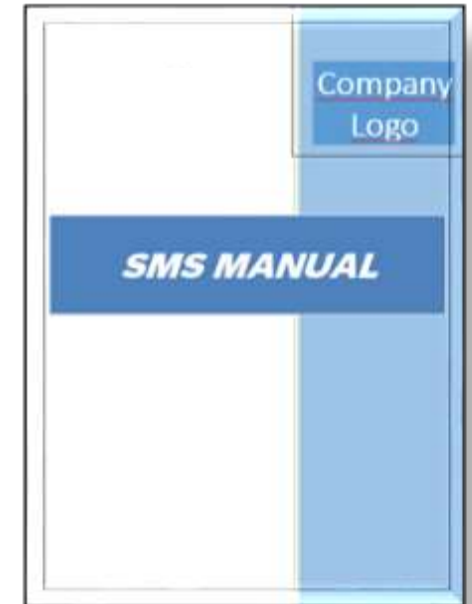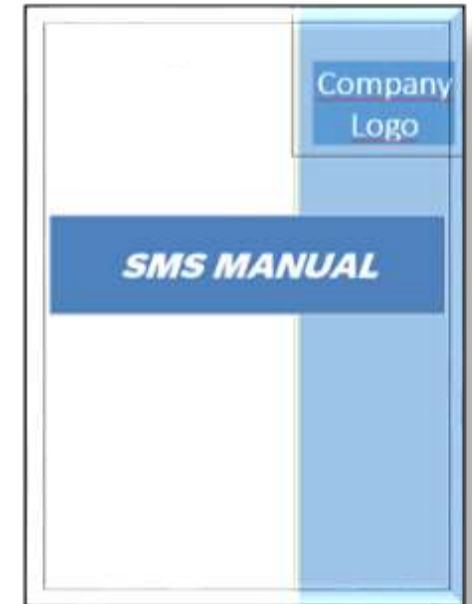
The Company SMS Manual

Executive Summary

> The main goal of the Company SMS Manual shall be to ensure an **integrated approach to safety management (safety governance)** reducing / eliminating gaps in safety analyses and risk based decision making management by departments.
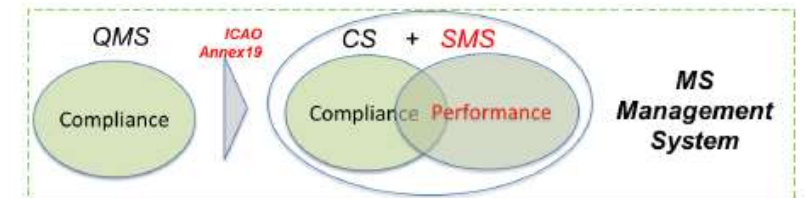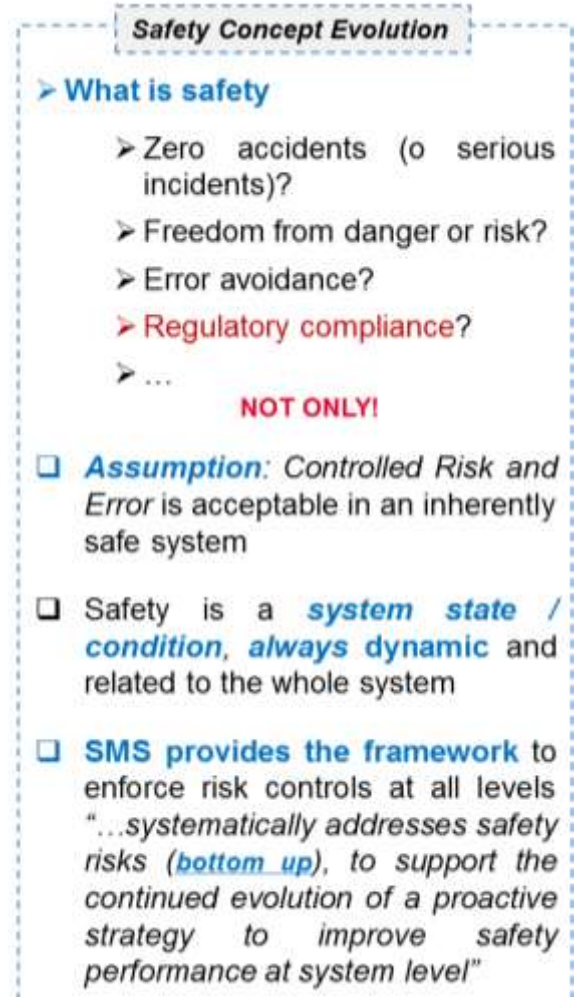>
> Our fundamental safety beliefs shall be:
>
> – **Safety is a core business and personal value;**
> – **Safety is a source of our competitive advantage**

The Company SMS Manual

Concept of Safety, SMS and relationship with QMS

- **Safety** is the state in which the risk of harm to persons or property damage is reduced to and maintained at or below an acceptable level through a continuing process of hazard identification and risk management.
- **Safety** is a dynamic characteristic of the aviation system, whereby safety risks shall be continuously mitigated.

- **Safety Management System (SMS)** is a systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.
- SMS is designed to **proactively identify hazards and mitigate the related safety risks** before they result in aviation accidents and incidents.

- SMS in its whole framework cover the 3 types of risk management:
  - ➢ **Reactive**: mitigate severity of safety events and threats;
  - ➢ **Proactive**: identify safety concerns before safety events happen;
  - ➢ **Predictive**: anticipate future exposure based on past performance data.

Safety Concept Evolution

➢ What is safety
  ➢ Zero accidents (o serious incidents)?
  ➢ Freedom from danger or risk?
  ➢ Error avoidance?
  ➢ Regulatory compliance?
  ➢ …
  NOT ONLY!

❑ Assumption: Controlled Risk and Error is acceptable in an inherently safe system

❑ Safety is a system state / condition, always dynamic and related to the whole system

❑ SMS provides the framework to enforce risk controls at all levels "…systematically addresses safety risks (bottom up), to support the continued evolution of a proactive strategy to improve safety performance at system level"
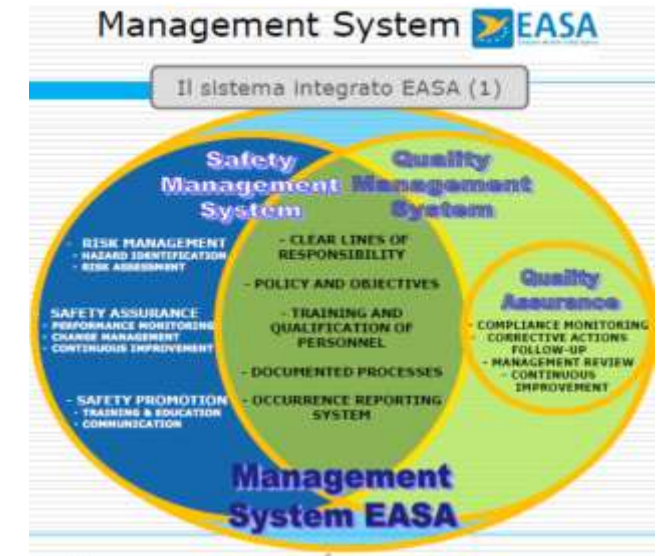
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Concept of Safety, SMS and relationship with QMS (cont.)

- **QMS and SMS are two complementary systems. Both promote system approach and continuous improvement** and may use the same tools and techniques:
    - process mapping / system and process analysis
    - survey, auditing
    - performance monitoring
- An effective QMS will support the implementation of an effective SMS process.
- However, **QMS focuses on conformity and compliance to the basic requirements, it is prescriptive**.
- **QMS is geared towards customer expectations and contractual/regulatory obligations**. However such requirements (external, e.g. Safety Regulations as CS, and internal) can be considered primary risk mitigation actions, based on consolidated "safety knowledge" and not able to intercept the emerging **safety issues (not yet captured by rules)**.
- These requirements can be considered as "Necessary, but not Sufficient Conditions".
- Processes designed to produce a quality product/service only will not guarantee Safety, where the Safety is not a "component property" but **a "system property", always to be considered within a dynamic scenario**.
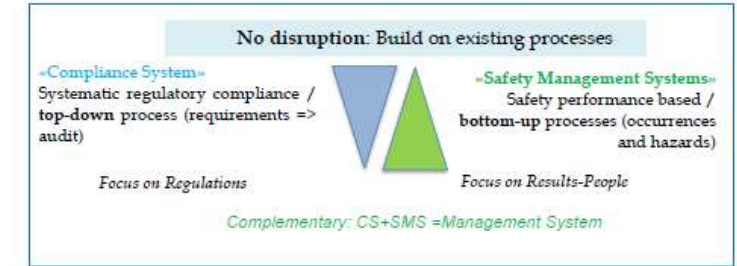
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The Company Approach

The new Company model is based on a **network between a Corporate SMS centralized Safety Systems Governance (SSG) and Local SMS(s).**

These SMS are deeply inserted in the various Operative Departments, thus, SMS are able to gather the real local risks, system's weaknesses and weak signals, counting on the competence of highly qualified personnel.

In particular, the **SSG:**

➢ facilitates the SMS implementation by **providing a consistent approach and model over the Local SMS(s) across the Organization, including applicable standard documentation and processes**.

➢ ensures that the **four components of each SMS are consistently managed and integrated by the Local SMS.**

➢ **chairs the Safety Governance Review (SGR)** to monitor Local SMS(s) implementation and harmonization.

And each **Local SMS have a complete and functional structure** with its own Accountable Manager (AM), Safety Manager (SM), Compliance Monitoring Manager (CMM), working through Safety Review Board (SRB) and Safety Action Group (SAG) in accordance with the established model.
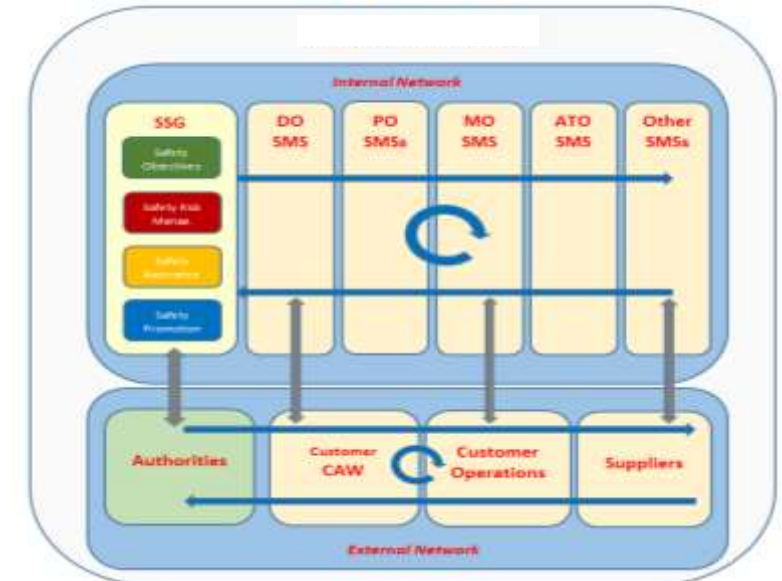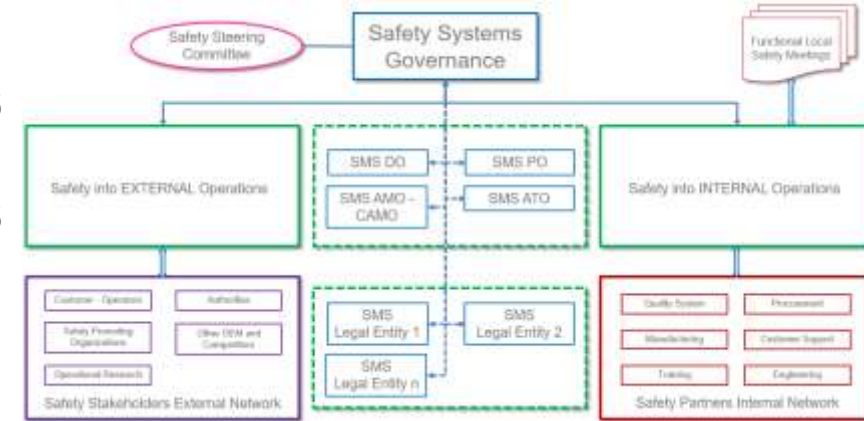
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Applicability of the Company SMS Manual

The Company SMS Manual addresses the implementation of the SMS within the **organizations undertaking design, manufacturing, training and maintenance responsibilities and activities** as Approved Organizations (e.g. DO, PO, MO, CAMO, ATO).

The extent to which SMS is applied to the Company Organizations depends on the organization's scope of approval.

The Company SMS Manual shall be applied in the Organizations according to the table illustrated.

However, the SMS Manual is applicable for common requirements only across the Organizations. For Organization specific requirements refer to the relevant expositions/handbook.

The Company requirements are also applicable to the **external Organizations not yet required to have a mandatory SMS.** A set of SMS requirements, to be flown down to Suppliers, shall be defined and **introduced in the contractual documentation**.

Organization	Certification	Exposition / Handbook	Local SMS Manual Re.
Design Organization (DO)	xxxxx	xxxxx	xxxxx
Production Organization (PO)	xxxxx	xxxxx	xxxxx
Maintenance Organization (MO)	xxxxx	xxxxx	xxxxx
Approved Training Organization (ATO)	xxxxx	xxxxx	xxxxx
Aerodrome Flight Information Service (AFIS)	xxxxx	xxxxx	xxxxx
Remotely Piloted Aircraft System (RPAS)	xxxxx	xxxxx	xxxxx

The Company SMS Manual

SMS Framework

The SMS framework is structured in four components and twelve elements.

1. Safety policy and objectives
    1.1 Management commitment and responsibility
    1.2 Safety accountabilities
    1.3 Appointment of key safety personnel
    1.4 Coordination of emergency response planning
    1.5 SMS documentation

Establishes senior management's commitment to continually improve safety; defines the methods, processes and organizational structure needed to meet safety objectives.

2. Safety risk management
    2.1 Hazard identification
    2.2 Safety risk assessment and mitigation

By identifying hazards, determines the need for and adequacy of new, or revised, risk control based on the continuously assessment of acceptable risk.

3. Safety assurance
    3.1 Safety performance monitoring and measurement
    3.2 The management of change
    3.3 Continuous improvement of the SMS

Evaluates, collecting and analysing data, the continued effectiveness of implemented risk control strategies: in this way the SRM is not an open loop process but under a continuous improvement approach; support the identification of new hazard.

4. Safety promotion
    4.1 Training and education
    4.2 Safety communication.

Includes training on methods, education on values, communication on lesson learnt, and other actions to create and fostering a positive safety culture within all levels of the workforce achieving a individuals' awareness of their role and influence on safety.
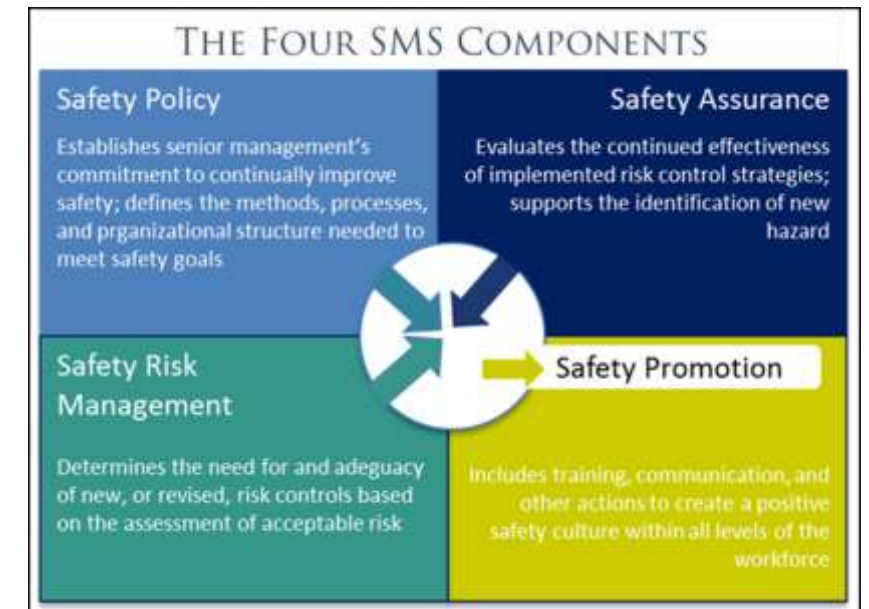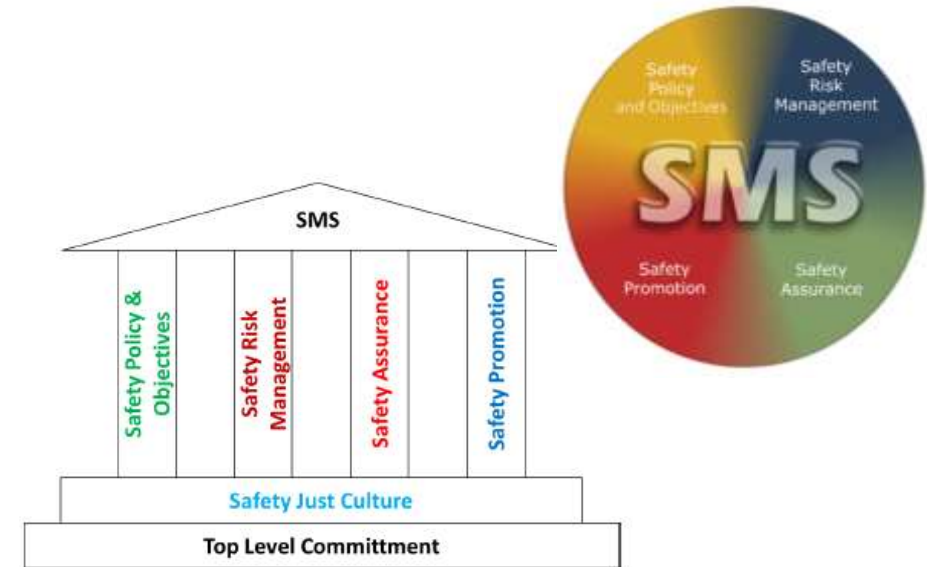
The Company SMS Manual

1.1 Safety Policy

The **Company Safety Policy is the foundation of the Company SMS**. Safety is identified as a top priority and core value for the Organization.

The Safety Policy describes **the vision of the Organization for safety management**; how it intends to deal with safety related topics; and how it will create and foster a safety culture at all levels in the Organizational structure, with active and visible commitment.

Vision

The Company is strongly committed to being "**the safest manufacturer and service provider in the world**".

The **protection of human life and Company assets including Customers' trust shall be our first priority.** This Policy is being published to enforce our values across the whole organization as a required and distinguishing **characteristic of all personnel, originating from Top Management commitment.**

Mission

To achieve this essential goal the Company will focus efforts on improvements in the following five areas: **Leadership, Culture, Competence, Capability and Assurance.**

The Company SMS Manual

1.1 Safety and Just Culture

The Company has implemented internal rules, documented processes and applied them consistently throughout the Organization.

➢ Safety is not only a legal requirement but also a key contributor to sustainable business.

➢ **Staff working in the Company, at all levels, have a safety responsibility and are key to maintain and improve the implemented Safety Systems.**

A safe Aviation System requires that events that affect or could affect aviation safety are reported fully, freely and in a timely manner. This is necessary to facilitate investigation and implementation of lessons learnt.

"Just Culture lies at the heart of an effective reporting system and such a system is needed to maintain and improve Aviation Safety."

The above Just Culture Declaration:

- **supports existing legislation, in particular Regulation (EU) No 376/2014, on the reporting**, analysis and follow-up of occurrences, and;

- constitutes a set of **key principles implemented in the Company Just Culture** internal rules.

The Company SMS Manual

1.1 Safety Objectives

Safety objectives are established to continuously improve the safety of aircraft operations and the Organization performance with regards to product safety. These safety objectives are meaningful to the Organization, and adapted to the type of business and to the volume of collected safety data.

These safety objectives shall reflect the identified targets in safety improvements, based on the current situation; they shall be **Specific, Measurable, Achievable, Relevant and Time-bound (SMART).**

The safety objectives should:

- form the basis for **safety performance monitoring and measurement;**
- reflect the organization's commitment to maintain and continuously improve the overall effectiveness of the SMS;
- be **periodically reviewed** to ensure that they remain relevant and appropriate to the Organization (aligned with the issuance of the safety performance results in terms of achievement of the previous objectives);
- **be communicated and known** throughout the whole Organizations.

The Company SMS Manual

1.1 Safety Objectives (cont.)
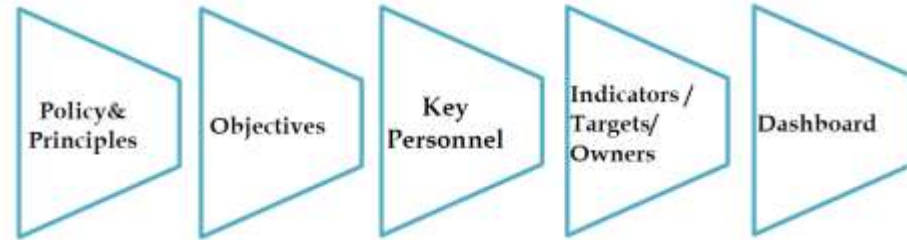
From Policy to Objectives …. and to Indicators

Detailed indicators, associated to the objectives, with related targets and owners are defined in the SMS Manual and reviewed annually.

Two classes of objectives are identified:

1) **High level general objectives** that will constitute the minimum content for each Local SMS

2) whilst **a dedicated set of more specific objectives** could be defined to better fit with the peculiar necessities of any Local SMS. In such a case this dedicated set will be part of Local SMS documentation.

The table below shows examples of indicators for each objective with their metrics, applicable targets, and ownership / responsible managers.

Each Indicator is defined based on the classification of the main areas in which the Policy is grouped:

Objective (and related Indicators)	Target	Owner	Classification
1) to ensure that a sufficient number of appropriately competent staff are available to manage the Safety of product, services and personnel in line with the current and emerging Company business			
Resolution of safety issues given appropriate priority	No priority safety issues held by lack of resource	Delegates of Accountable Manager	Lea / Com
Staff succession plan identified for all posts with significant safety impact	Plans available for 80% of key posts	Relevant functional head with Head of HR	Lea / Cult

The Company SMS Manual

1.2 Safety accountability and responsibilities

The Company Safety Accountable Manager (SAM): the role is assigned to the Managing Director (MD).

The SAM:

- has the **final authority** over operations under the certificate/approval of the Organization and ultimately is accountable for the implementation and maintenance of an effective SMS;
- clearly defines **lines of safety accountability throughout the Organization**;
- identifies the **responsibilities of all members of management**;
- **documents and communicates** safety accountability, responsibilities and authorities throughout the Organization;
- defines the levels of management with **authority to make decisions** regarding safety risk tolerability;
- **provides and allocates human, technical, financial or other resources** for the effective performance of SMS;
- endorses, establishes and promotes **safety policies**;
- establishes the Organization's **safety objectives and safety targets**;
- **acts as the Organization's safety champion**;
- has **the final responsibility for the resolution** of all safety issues;
- establishes and maintains the **Organization's competence** to learn from the analysis of data collected through the safety reporting system.
- **chairs the Safety Steering Committee (SSC)** with the Head of SSG as co-Chairman.

The Company SMS Manual

1.2 Safety accountability and responsibilities (cont.)

Approved Organization Accountable Manager (AM)

- The **complexity of the Operational Organization Structure** makes it necessary to identify a group of persons, known as **Accountable Managers,** reporting directly to and appointed by the SAM.

  The MD is the highest authority within the Company and acts as AM for all the Approved Organization of the complex Company reality. In the role of SAM, the MD delegates their responsibilities to the following AMs:

  ➢ **the Head of DO within the DO;**

  ➢ **the AM within the PO;**

  ➢ **the AM within the TA;**

  ➢ **the AM within the MOA;**

  ➢ **the AM of any other required Organization**

- AM and Organization responsibilities are described within the relevant **Organizational applicable Exposition / Handbook**.
- Each single AM, whether necessary or deemed applicable, can establish a Local SMS and appoint a **Local Safety Manager, responsible to manage the SMS**.

The Company SMS Manual

1.3 Appointment of key safety personnel

Local SMS Organization Model

The main roles are:

- **Organization's Accountable Manager (AM)**
- **Local Safety Manager (L SM);**
- **Safety Related Unit Line Manager(s) (SRU Manager);** and
- **Local Compliance Monitoring Manager (L CMM);**
- **Local Safety Officer (L SO)** within the **SRU.**

Further roles, could be:

- **Subject Matter Expert (SME);** and
- **Safety Specialist (SS)** within the L SM staff.

In case of complex Organizations local **Safety Manager Representative(s) (SMR)** can be appointed by the SM to support the SMS.
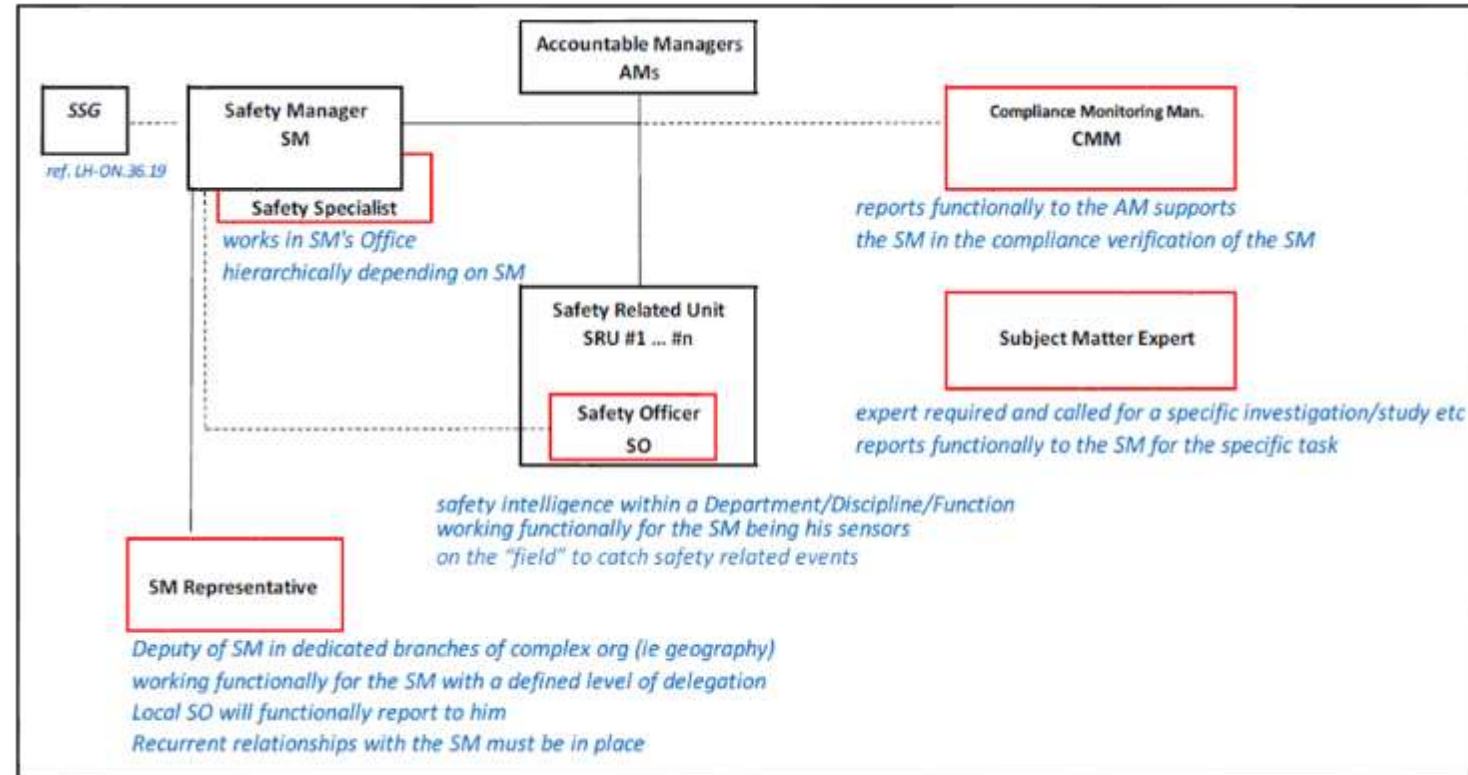
The Company SMS Manual

1.3 Appointment of key safety personnel

Local Safety Manager (L SM):

– manages the **SMS implementation plan** on behalf of the AM (upon initial implementation)

– **advises the Organizational AM** on safety matters;

– provides **periodic reports on safety performance** to the Organization AM and to the Head of SSG;

– manages the **Safety Action Request (SAR) / Safety Information Notice** issued against other Organizations;

– is chairman of the **SAG**;

– Supports the Accountable Manager to prepare the **SRB, SGR and SSC**;

– analyzes and manages the incoming **voluntary reports;**

– prepares **SPI reports (**as requested by SAG, SRB and SSC/SGR);

– assists in the conduct of **Safety audits**;

– **monitors corrective actions definition, planning, implementation and evaluates their results (through SAG)**;

– ensures that **safety-related information, including Organization goals and objectives, are made available** to all personnel;

– is involved in the development and updating of **Emergency Response Plan (ERP)** and procedures;

– coordinates and communicates (on behalf of the AM) with the **Agency on issues relating to safety**;

– maintains **SMS documentation and records**;

– administers **safety-related surveys and Audits**;

– monitors **safety concerns reported within the aviation community** that could affect the Organization or its products/services;

– promotes the **Voluntary reporting , through the "Just Culture"** principles;

– defines the **hazard matrix for the Organization** and assures it is continuously updated;

– defines and **identifies hazards** with the support, if necessary, of specific **working group (SWG) or Subject Matter Experts (SME)**;

– defines the **risk mitigation matrixes** and assures their continuous improvement and update;

– plans and facilitates staff **safety training**;

– **promotes Safety Culture.**

The Company SMS Manual

1.3 Appointment of key safety personnel (cont.)

The Company SMS Model and Safety Review meetings

- SWG analyze / define / propose
- SAG analyzes / identify / deploy / maintenance / propose
- SRB monitor / guideline / decide / prioritization / define objectives and resources
- SGR integration / monitor / coordinate / propose
- SSC strategic guideline / prioritization / approve / define objectives and resources

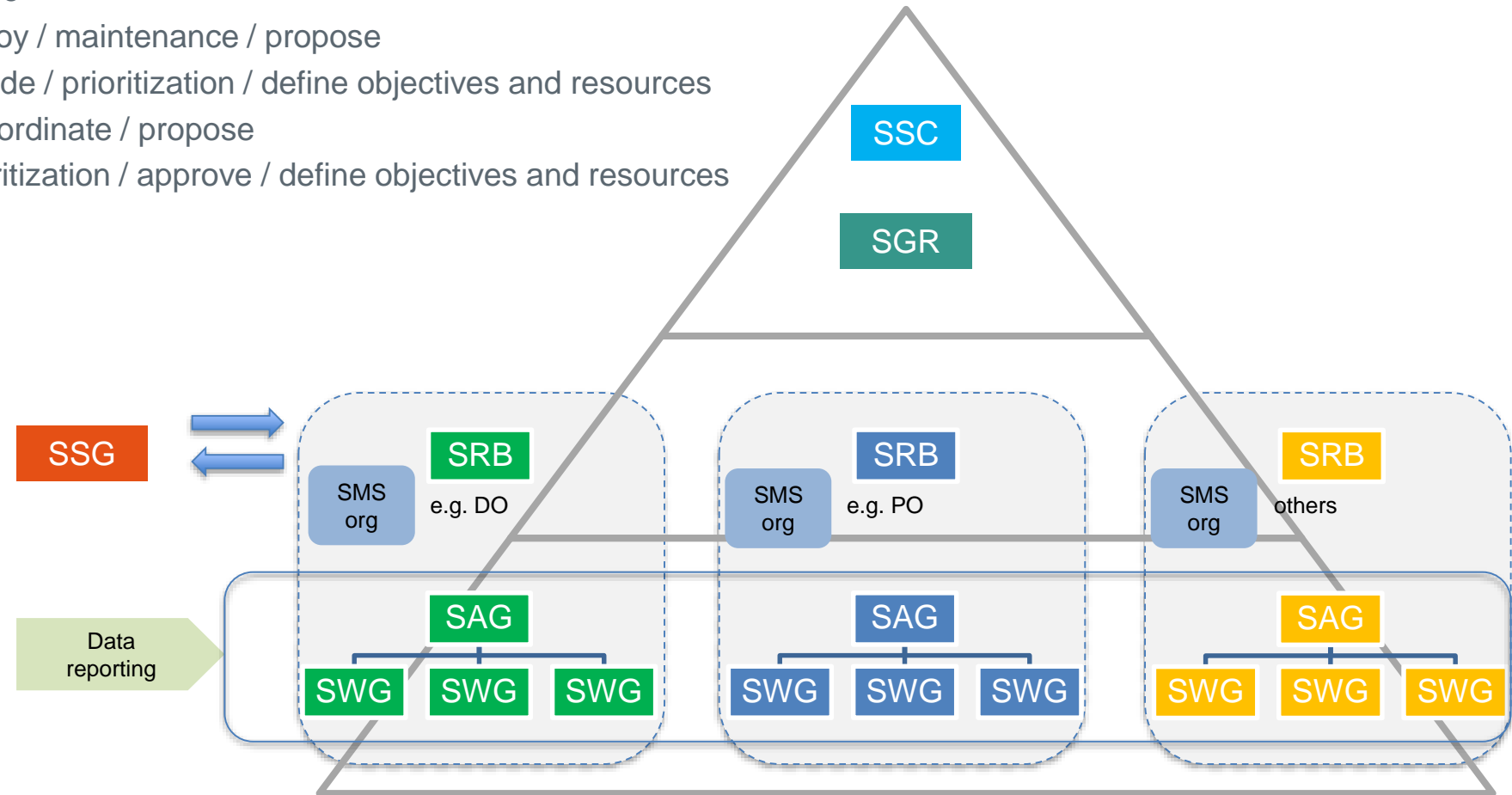**The Company SMSs MODEL**

@ Personnel level
- **SM** Safety Manager
- **SS** Safety Specialist
- **SO** Safety Officer
- **SME** Subject Matter Expert
- **SRU** Safety Related Unit personnel

@ Organizations' level
- **SRB** Safety Review Board
- **SAG** Safety Action Group
- **SWG** Safety Working Group

@ Company level
- **SSC** Safety Steering Commitee
- **SGR** Safety Governance Review

The Company SMS Manual

1.4 Coordination of Emergency Response Planning (ERP)

- For all the SMSs where Flight Operations are exercised (i.e. ATO, CAMO, PO FALs, DOA experimental flight tests), an Emergency Response Plan (ERP), shall be available as part of the SMS procedures; **this document will contain in details all the actions to be undertaken, by the listed and appointed responsible personnel, during aviation-related emergencies.**

- The purpose of an **ERP is to ensure that there is an orderly and efficient transition from normal to emergency** operations (and vice versa), including assignment of emergency responsibilities and delegation of authority

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ERP: Principle & Mandatory Contents

- Abbreviations;
- List of applicable documents;
- Definitions (according to ICAO and / or ENAC standards);
- Clear purpose and intent of the document and scope of applicability;
- Identification of possible external organizations with interfaces with the local accident/incident management;
- Events classification model and its implications according to ICAO Annex 13;
- Indication and univocal identification of key figures and roles' responsibilities;

- Definition of the "Chain of Command";
- Rules for interfacing with other Organizations;
- Explicit appointment of the Functions and Names of the people involved in the ERP responsibilities;
- General Policies and Responsibilities;
- Response to the accident;
- Responsibility Matrix;
- Special problems;
- Check Lists / Action Lists following an aircraft crash;
- Description of intervention equipment / communication tools;
- Training.

The Company SMS Manual

1.5 SMS Documentation

- The procedures and instructions, used to document the management system, are the key instruments to internally communicate and foster the approach in the SMS. They are defined in the Company SMS Manual, which constitutes part of the 'Company Operating System' and they are managed and stored in the Company SAP Document Management System (DMS).

- **Any Local SMS documentation shall include**:
  - A standalone and **Local SMS Manual** with the description of the architecture of the Local SMS in line with the principles of the Company SMS Manual;
  - Annex for each **Organization jobs and roles attribution** with respect to the SMS duties and responsibilities, a standalone Safety Policy signed by the local AM with reference to the Company Safety Policy;
  - **Risk assessment documentation and relevant library (HIRM);**
  - **Safety objectives**;
  - **SMS Processes and procedures** described or referenced in the SMS manual;
  - **ERP** (if applicable);
  - **Safety External stakeholder process**.

The Company SMS Manual

1.5 SMS Documentation (cont.)

- SMS documentation also includes the compilation and maintenance of **operational records substantiating the existence and ongoing operations of the SMS**.

- Operational records are the outputs of the SMS processes and procedures such as the SRM and safety assurance activities. SMS operational records shall be stored and kept in accordance with existing retention periods.

- **Typical SMS operational records** shall include:

    a) Register of hazards and hazard/safety reports (HIRM);

    b) SPIs and related charts;

    c) record of completed safety risk assessments (HIRM);

    d) SMS internal reviews or audit records;

    e) internal audit records;

    f) records of SMS/safety training records;

    g) SMS/safety committee meeting minutes;

    h) SMS implementation plan (during the initial implementation); and

    i) gap analysis to support implementation plan.

The Company SMS Manual

2. Safety Risk Management (SRM)

- SRM relies on the following activities (both often named HIRM):
  - **Hazard Identification (HI)**
  - **Safety Risk Assessment and Mitigation (RM)**

- The **aim of SRM is to prevent the occurrence of serious incidents or accidents**.

- SRM is a core activity of the Company SMS because it incorporates **decision making tools to provide a formalized approach to safety.**

- The result of the SRM is **actionable safety intelligence consisting of safety recommendations;** this is where a risk-based decision-making process starts. In general, SRM is used to evaluate the need for, and the development of safety risk controls for new and existing safety issues in the Design/Production/Services Systems.

- **The SRM final goal is to put in place tools for identifying hazards, analyzing them** (in terms of probability and severity of the consequences), **assessing them** (in terms of tolerability) **and controlling them through "safety barriers" able to prevent and/or mitigate them.**

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2. Safety Risk Management (SRM) (cont.)

- The Company SRM shall cover the following areas:

  - **System Description**
    - to establish the framework for hazard Identification.

  - **Hazard Identification**
    - to identify hazards according to a generalized method.

  - **Safety Risk identification**
    - to identify safety risks associated with identified hazards.

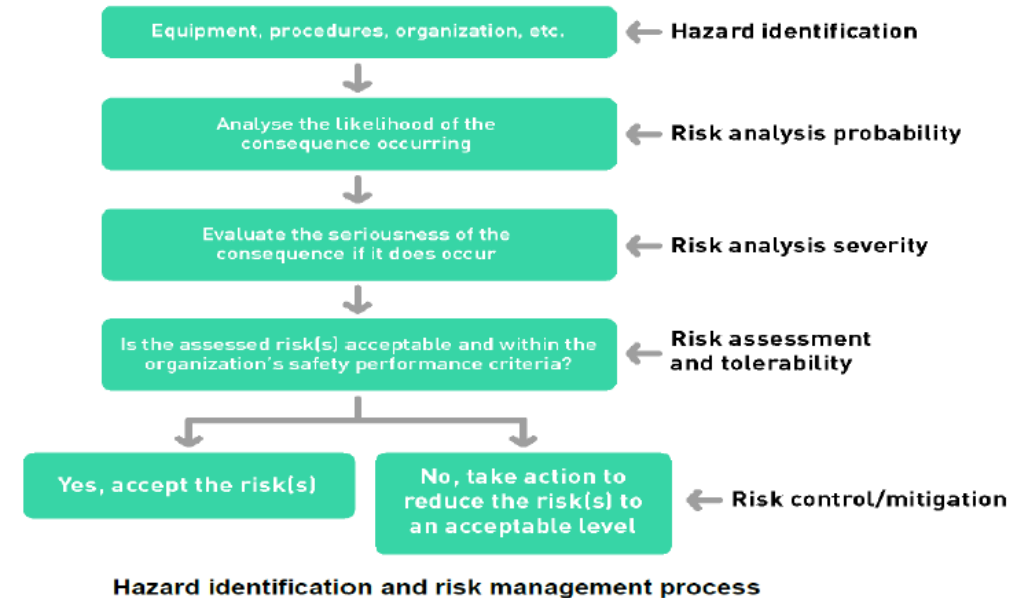 - **Safety Risk Analysis**
    - to determine the severity and likelihood of a risk associated with the identified hazard(s).

  - **Safety Risk Assessment**
    - from the risk analysis outcomes, to determine if a risk is unacceptable according to defined criteria.

  - **Safety Risk Control**
    - to eliminate, reduce or mitigate a safety risk through action(s) to be defined only when the risk is unacceptable. The final aim is to render it tolerable according to defined Organization criteria.

Equipment, procedures, organization, etc.	← Hazard identification
Analyse the likelihood of the consequence occurring	← Risk analysis probability
Evaluate the seriousness of the consequence if it does occur	← Risk analysis severity
Is the assessed risk(s) acceptable and within the organization's safety performance criteria?	← Risk assessment and tolerability
Yes, accept the risk(s) / No, take action to reduce the risk(s) to an acceptable level	← Risk control/mitigation

Hazard identification and risk management process

The Company SMS Manual

2. Safety Risk Management (SRM) (cont.)

- **Interfaces in Safety Risk Management (SRM) and Safety Assurance (SA)**

  - Safety Risk Management (SRM) and Safety Assurance (SA) are the key processes of the Company SMS. They are also **highly interactive**. The SRM works in conjunction with the SA: this monitors new hazards to be analyzed and/or the risk control effectiveness of previously analyzed hazards.

    $\Rightarrow$ **the SA assures that the SRM is not an open loop exercise**
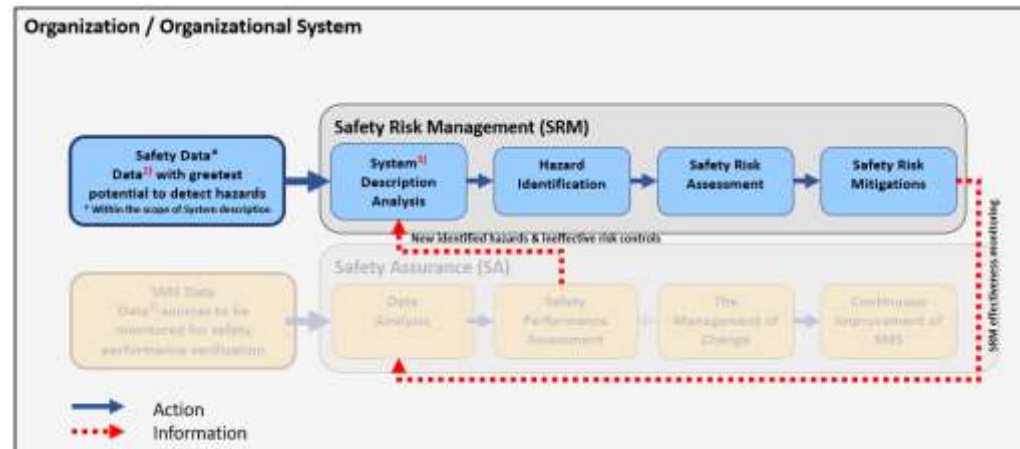
- The SRM main objective is to make sure that **all risks are identified and remain at an acceptable level**, through the application of a systematic, robust and intellectually cohesive **Risk Assessment and Risk Mitigation process**.
- At all levels, the Company and relevant Organizations shall define actions to maintain safety risks at an acceptable level, where the Voluntary Occurrence Reporting (VOR) is one of the key elements.
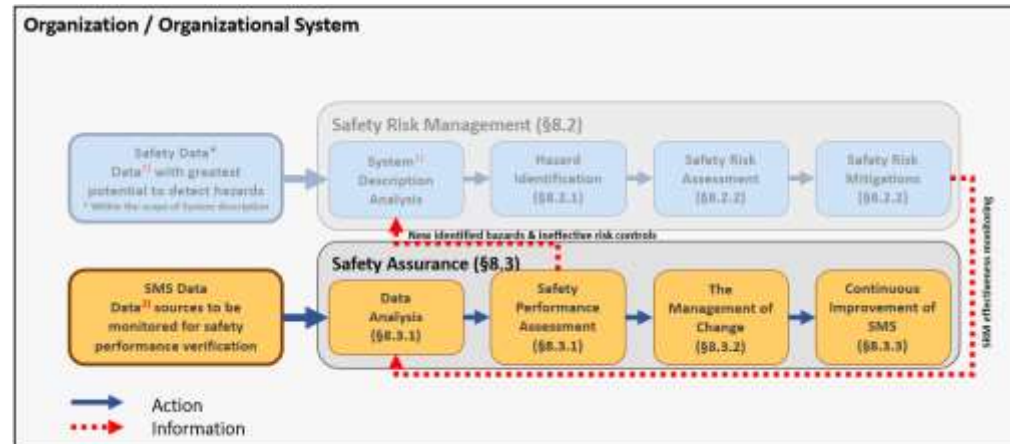
3. Safety Assurance (SA)

- Safety Assurance (SA) relies on the following activities:

    - **Safety performance monitoring and measurement.**

    - **Process for the management of change.**

    - **Continuous improvement of the SMS.**

- SA consists of processes and activities undertaken by the Organization to determine **whether the SMS is operating according to expectations and requirements.**

- The Company and the relevant Organizations shall **continually monitor** their internal processes as well as their operating environments to detect changes or deviations that may introduce emerging safety risks or the degradation of existing risk controls. Such **changes or deviations may then be addressed with the SRM process**.

The Company SMS Manual

3. Safety Assurance (SA) (cont.)

SA shall be achieved by monitoring the Company SMS activities in 3 main tasks:

1) **Monitoring, gathering and analyzing data (data acquisition)**, which are fed into the SRM process.

2) **Safety performance measurement:** best understood as an assessment of the capability of managing risks. A determination of the **success in managing risks and effectiveness of implemented risk controls**, from both a Product and Organizational perspective.

3) **Management of change and SMS Continuous Improvement:** driving an iterative process where performance requirements evolve with the complete Organization maturity.

Because SMS has been designed such that **ineffective controls, new hazards, or potential hazards identified by the safety performance assessment are fed back into the SRM process** for hazard identification, risk analysis, risk assessment, and risk control:

> ➤ **the SA assures that the SRM is not an open loop exercise**

The Company SMS Manual

3. Safety Assurance (SA) (cont.)

- **Data acquisition process is a pre-requirement** for the monitoring and part of the SA activity.

- Acquiring data and safety related data in the context of safety performance monitoring and measurement is a key input to check the level of achievement of the Company SMS versus safety objectives and to continuously improve the SMS.

- The means for data acquisition should be identified and used by SA:

  - **Internal**:
    - ➢ This can rely on already implemented means, such as the data gathering system used for Continued Airworthiness, when mandated by the applicable regulations, or the monitoring of the Organization operations for malfunctions, defects, and quality escapes that could result in unacceptable aviation safety risk.

  - **External**:
    - ➢ The data acquisition process shall include data collected in the context of monitoring of external stakeholders (i.e., operators, customers, suppliers, authorities).

- Data can be **quantitative (e.g. statistical measures) and qualitative (e.g. employee safety report)**

- Data can be related to **Products (oriented to the Safety ⇒ Lagging Indicators) and Process (oriented to the SMS operation/implementation ⇒ Leading Indicators)**

The Company SMS Manual

4. Safety Promotion

Safety promotion is strictly linked to the strategy to develop the Safety Culture within the Organization. Safety Culture is also an enabler for the continuous improvement in safety performance.

Positive safety culture is characterized by values, attitudes and behavior that are committed to the Company's safety efforts. This is achieved through the combination of technical competence, continually enhanced through training and education, management behavior examples, effective communications and information sharing.

This strategy, to support the implementation and the operations of the Company SMS, shall address the following main tasks:

1) **Training and Education**

2) **Communication of safety information**

Safety training, combined with safety communication and information sharing is part of safety promotion.

⇒ **The Final goal is the creation of a real Company Safety Culture.**

Attitude to	Pathological	Bureaucratic	Generative
Information	Hidden	Ignored	actively Sought
Messengers	'Shot'	Tolerated	Trained
Responsabilities	Avoided	Compartimented	Shared
Reporting	Discouraged	Allowed	Welcomed
Failures	Covered up	Well minded and Sympathetic	Scrutinised
New Ideas	Crushed	Problematic	Rewarded
Resultant Organisation	Conflicted	Formal/ 'Red Tape'	High Reliability

The Company SMS Manual

4.1 Safety Training and Education

The Company shall **develop and maintain a safety training program** that ensures that personnel are trained and competent to perform their SMS duties. This is valid at Company level and at Local Organization for their peculiarities and specific requirements. The SM should escalate through SSG their own necessity for the integration and harmonization at the Company level.

- The scope of the safety training program shall be **appropriate to each individual's involvement in the SMS**.

- Each Organization shall maintain a **record of all safety training provided to each individual** subject to the training program. Safety record shall be kept in accordance with requirements.

- **Initial training** (that is compliant with the approved Organization's training standards) shall be provided to all personnel **within 6 months from joining the Organization**, unless their competency assessment justifies that there is no need for such a training. Personnel who are recruited from another Company and temporary staff, shall be assessed whether they need to receive any additional safety management training.

- **Recurrent safety training** should be delivered either as a dedicated course, or integrated within other training. It should be of an appropriate duration and **ideally repeated every 2-years**.

The Company SMS Manual

4.2 Safety Communication

Each Company SMS Organization shall establish **communication channels** regarding safety matters that **ensure that all relevant personnel are** aware of the safety policies, processes, tools and receive up-to-date information about safety objectives, safety management activities and safety critical information, as relevant to them.

Communication is essential to **build a positive safety culture** through, for instance, hazard reporting or sharing of safety information. In particular, the SMS Organization will communicate its safety objectives as well as the achievement status.

SMS Organization shall maintain a **formal channel for safety communication** that:

- **ensures personnel are aware of the SMS** to a degree commensurate with their positions;
- **conveys safety critical information**, especially related to matters that could expose the Organization to safety risk; in particular to staff required to enact the necessary actions;
- explains **why particular safety actions are taken**;
- explains **why safety procedures/improvements are introduced or changed**;
- promotes a positive safety culture and **encourages personnel to identify and report hazards (**safety is a two way communication);
- **provides feedback to personnel** submitting safety reports on what actions have been taken to address any identified concern;
- ensures Organizational knowledge so that **safety decisions are incorporated into the Organization learning**.

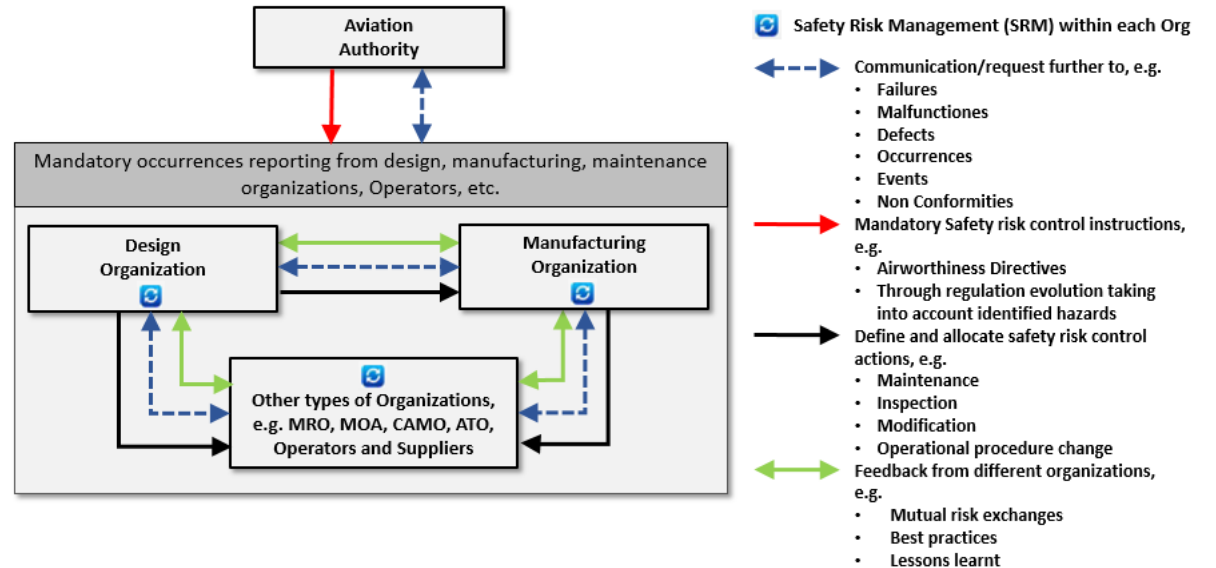# The Company SMS Manual

5. Interface Between Organizations

The **integration and the interfaces between different Organizations are key elements** of the final success of the imposed strategy.

- **Interface principles**

  In the context of an SMS, interface management shall encompass the four components (Safety Policy and Objectives, SRM, SA and Safety Promotion).

The interface between Organizations can be expressed:

- **internally within the Company**, where each Organization holding its own SMS is supported by a Corporate SMS Governance approach;
- **externally with separate Companies**;
  - **having implemented an SMS (e.g. operators, PO, MO);**
  - **not having implemented an SMS;**
- **externally with Aviation Authorities** as required by applicable regulations.

The Company SMS Manual

5. Interface Between Organizations (cont.)

- **Safety Policy**
  - **The Company Safety Policy is shared between interfacing Organizations** to ensure consistent approach.

- **Safety Risk Management**
  - **Safety risks in one Organization may impact other Organizations** through the potential consequences of the risks or the management of their mitigation.
  - These Safety Risks will be communicated, using the **Safety Action Request Form (SAR) between the interfacing Organizations**.
  - Risks that are shared between interfacing Organizations shall be reported among those Organizations and acknowledged by each of them based on an agreed risk assessment model. **Both Organizations' HIRM shall report the risk with the required evaluation and the mitigating actions reciprocally shared and agreed**.
  - Safety risks can result from interactions between Organizations (e.g. due to gap or overlap of interactions) or lack of interface management (e.g. absence of monitoring).

The Company SMS Manual

5. Interface Between Organizations (cont.)

- **Safety Assurance**
  - Safety assurance activities are focused first on **data exchanges necessary for continued airworthiness** which are subject to regulatory requirements (e.g., Part 21, EU 376/2014). These exchanges are usually governed by contractual requirements.
  - But, apart from the above essential task, core for every Approved Aircraft Manufacturer, any different issue(s) arising from Safety Assurance interfaces will be faced and managed in the SGR institutional Board.
  - **Safety performance shall be taken into account in the assessment of suppliers** (for initial qualification and/or continuous monitoring) and shall represent a **contractual requirement** for each of them.

- **Safety promotion**
  - **Safety promotion principles and priorities are shared between interfacing Organizations** to ensure consistent SMS approaches (e.g. regular sharing of safety policies, top safety objectives and risks, best practices).

The Company SMS Manual

5. Interface Between Organizations (cont.)

- **Interface documentation**

  This documentation shall consider the following objectives:
  - **To support the understanding of the organization's boundaries and their interactions**;
  - **To clarify how the organizations (with or without implemented SMS) are interfacing**;
  - **To address the management of relevant safety issues/items.**

  The interface between Organizations for safety management is documented and maintained in the following documents:
  - **Organization's Handbook and Expositions**
  - **Procedures**
  - **Arrangements**
  - **Policy**
  - **Other documents**

➢ During the development of the Local SMS, **dedicated interface documents may be developed to facilitate the interaction** and to reduce/eliminate gaps between the SMSs. In particular the management of specific risks (transfer/sharing of risk to other SMS function) could involve other functions and **a formal engagement is recommended** (SAR Form).

The Company SMS Manual

6. SMS Implementation

- **General**

This paragraph contains a **step by step sequence of activities to enable the Local SMS implementation**.

Pre-requisite is that the SAM is identified, as the AM of each Local SMS, and the relevant SM is appointed.

The SM shall be responsible for developing the implementation plan and shall deploy the SMS on behalf of AM and following the SSG policies.

- **Step by Step Implementation Process**
  - Identification of **SMS structure and architecture** (No. of branches, No. of S. Spec., No. of SO, SME, SR Units);
  - **Safety Policy** published (according to the Company's guide lines and Function's peculiarities);
  - **Safety Objectives** published;
  - **Gap Analysis** (following SSG proposed scheme plus possible peculiarities);
  - **Implementation Plan definition** (AM approval required):
    - Address identified gaps resulting from phase 1, by defining actions and responsibilities;
    - Include tasks, activities, check points, timelines and milestones;
    - Address coordination with interfacing organizations, where applicable.
  - **Implementation ROM Costs evaluation**: initial and recurrent with budget allocation;

The Company SMS Manual

6. SMS Implementation (cont.)

- **Step by Step Implementation Process (cont.)**
  - **Local SMS Manual** preparation (according to SSG guidelines);
  - **Local SMS Procedural Documentation plan** identification and preparation (according to the Company guidelines);
  - Verification and Identification of SMS peculiarities and introduction in the **Local SMS Manual;**
  - **Data Collection** system (reporting, sources, methods and means for gathering and filtering, etc.);
  - **OR/VOR analysis set up** (following Company's model and using available standard tools. The Organization shall be ready to perform safety analyses based on information obtained through the reporting system);
  - **Hazard Identification and Hazard Register** definition (for each SMS, following SSG guidelines);
  - **Risk Assessment and mitigation** measures identification and definition (for each SMS, following SSG guidelines);
  - **Local SMS structure definition** (names and roles) and dissemination (dedicated Company Organization Notice);
  - **Meetings structure** definition and implementation (according to SSG guidelines);
  - Safety Promotion: **Training plan for SMS personnel** (following Company's guidelines);
  - Safety Promotion: **Training plan for Function's personnel**, including new entries (internal and external, following Company's guidelines);
  - **Safety Communication**: definition of the tools/media for continuous information on initiatives, encourage reporting, maintain and enhance a safety culture at all the company levels;

The Company SMS Manual

6. SMS Implementation (cont.)

- **Step by Step Implementation Process (cont.)**
  - Safety Assurance: **SPI matrix creation** (following SSG guidelines, including specifics requirements for Local SMS);
  - **ERP** definition (if applicable and according to Company's guidelines and local requirements);
  - **Integration plan** with Company's established SMSs (following SSG guidelines);
  - **CMM appointment** and audits plan definition (Quality Function responsibility);
  - Structure of recurrent **Safety Reports / Plan;**
  - **Local SMS readiness assessment** against the implementation plan with a new Gap Analysis to check the level of maturity of the SMS. (activity to be recurrently repeated - re. ICAO);
  - **Continuous Improvement** plan and Hazard/Risks continuous updating strategy.

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