

AS-SMS-SM1000 Issue A

SAFETY MANAGEMENT SYSTEM

June 4, 2024



# SAFETY MANUAL



AEROSYSTEMS S.r.I. - Precision Aerospace Components Via San Gottardo 4, 21021 Angera (VA) Italy

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# SAFETY MANAGEMENT SYSTEM

June 4, 2024

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### AEROSYSTEMS S.r.I. Precision Aerospace Components Via San Gottardo 4, 21021 Angera (VA) Italy <u>www.aerosystems.it</u> NCAGE CODE: AR971

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### 2. LIST OF EFFECTIVES PAGES

Upon receipt of the second and subsequent changes to this manual, personnel responsible for maintaining this publication in current status will ascertain that all prevision changes have been received and incorporated. Action should be taken promptly if the publication is incomplete.

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# 3. DISTRIBUTION LIST AND CHANGE METHOD

This manual is subject to revisions and changes which will be automatically distributed to all listed subscribers and holders of this manual. Revisions and changes will take into account errors, changes discrepancies pointed out and suggestions. To avoid mistakes or misunderstandings manual holders are required to insert changes in the manual immediately upon receipt and to destroy the old manual whenever a revision (new issue) of the same is distributed.

The portion of page affected by the change is indicated by the following change method:

Changed text is indicated by a black vertical line on the outer margin of the page, adjacent to the affected text. The change symbol identifies the addition of either new information, a change procedure, the correction of an error or a rephrasing of the previous information.



### 4. DEFINITION, GLOSSARY

### 4.1. SAFETY AND JUST CULTURE

### SAFETY DEFINITION

Safety Culture is the way safety is perceived, valued and prioritized in an organization. It reflects the real commitment to safety at all levels in the organization.

It has also been described as "how an organization behaves when no one is watching".

**Safety Culture is not something you get or buy ;** it is something an organization acquires as a product of the combined effects of Organizational Culture, Professional Culture and, often, National Culture.

Safety Culture can therefore be positive, negative or neutral. Its essence is in what people believe about the importance of safety, including what they think that their peers, superiors and leaders really believe about safety as a priority.

### We already have an SMS, why do we need Safety Culture too ?

A Safety Management System (SMS) represents an organization's competence in the area of safety, and it is important to have an SMS and competent safety staff to execute it. But such rules and processes may not always be followed, particularly if people in the organization believe that, for example, 'moving traffic' is the real over-riding priority, even if risks are occasionally taken.

# So, organizations need both a SMS and a healthy Safety Culture in order to achieve acceptable safety performance.

#### If you want to remain safe, you have to know the realities of safety in your organization.

The more robust approach is to carry out a Safety Culture survey which attempts to 'measure' Safety Culture in a way which can be repeated subsequently for comparative purposes.

### JUST CULTURE DEFINITION

One key to the successful implementation of safety regulation is to attain a "just culture" reporting environment within aviation organizations, regulators and investigation authorities. This effective reporting culture depends on how those organizations handle blame and punishment.

"Just culture" is an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information - but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

There is a need to learn from accidents and incidents through safety investigation so as to take appropriate action to
prevent the repetition of such events. In addition, it is important that even apparently minor occurrences are
investigated, in order to prevent catalysts for major accidents.



### SAFETY MANAGEMENT SYSTEM

### CONDITIONS FOR JUST CULTURE

Under "Just Culture" conditions, individuals are not blamed for 'honest errors', but are held accountable for willful violations and gross negligence.

People are less willing to inform the organization about their own errors and other safety problems or hazards if they are afraid of being punished or prosecuted. Such lack of trust of employees prevents the management from being properly informed of the actual risks. Managers are then unable to make the right decisions in order to improve safety. However, a totally "no-blame" culture is neither feasible nor desirable. Most people desire some level of accountability when a mishap occurs.

"Just Culture" is a culture in which front-line operators and others are not punished for actions, omissions or decisions taken by them which are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated.

### 4.2. **DEFINITIONS**

The following definitions are based upon those within the Supporting Reference Documentation listed at paragraph 9.

#### Accident

An occurrence associated with the operation of an aircraft which takes place between the times any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which :

- 1) A person on board or on ground is fatally or seriously injured.
- 2) The aircraft sustains damage or structural failure.
- 3) The aircraft is missing or is completely inaccessible.

#### Aircraft

Manned or unmanned aerial system (with or without pilot). (Source: SMS SM-0001 Standard).

#### Climate of SMS

The perceived value placed on safety in an organization at a particular point in time. (*Source: SMS SM-0001 Standard*).

#### **Continuing Airworthiness Management**

A process by which a type certificated aircraft is thereafter kept in a condition where it remains airworthy, being compliant with the technical conditions fixed to the issue of the Certificate of Airworthiness and kept in a condition for safe operation (technically fit for flight).

#### **Continued Airworthiness**

The post-certification phase of an aircraft's design life, during which the design approval holder has duties to collect data on "failures, malfunctions and defects" (see 21.A.3) to identify potential threats to the continuing airworthiness of the aircraft, and for which phase the design approval holder is required to make available 'instructions for continued airworthiness' to ensure the safe operation and support the development of the operator's maintenance programs.



### **Corporate SMS**

Corporate governance, structure and processes to cover some or all elements common across domains (such as accountability, safety policy, hazards identification and safety risks management principles, safety data collection and assessment, safety awareness and training).

Corporate SMS is not compulsory, but could facilitate consistent SMS implementation in companies holding multiple approvals and/or certificates.

(Source: SMS SM-0001 Standard).

### Event

Any anomaly in operating an aviation product or in performing an organization's activity. (*Source: SMS SM-0001 Standard*).

### Foreseeably

Identification of every conceivable or theoretically possible hazard is neither possible nor desirable; therefore, judgment is required to determine the adequate level of detail in hazard identification. Organizations should exercise due diligence in identifying significant and reasonably foreseeable hazards related to their operations.

#### Hazard

A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

### Incident

An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

### Just Culture

A culture where individuals are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated. (*Source: based on EU No* 376/2014).

#### Management System

A framework of policies, processes and procedures used by an organization to ensure that it can fulfil all the tasks required to achieve its objectives. (*Source: based on ISO 9000:2015*).

#### Occurrence

Any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident (as defined in ICAO Annex 13). (*Source: EU No* 376/2014).

#### Organization

Any entity, approved or non-approved, independent of size, performing an activity in Design, Manufacturing or Maintenance (DMM) of aircraft, propellers, aircraft engines or parts and appliances. ICAO is making use of the term "organization" for those organizations. (*Source: SMS SM-0001 Standard*).

#### Procedure

A specified way to carry out an activity or a process. (*Source: ISO 9000:2015*).

#### Process

A set of interrelated or interacting activities which transforms input elements into outputs, respecting constraints, requiring resources, meeting a defined mission, corresponding to a specific purpose adapted to a given environment. (*Source: based on ISO 9000:2015*).

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### Product

A broad term that includes aircraft, aircraft engine, aircraft propeller, aircraft part or appliance or both, their subcomponents (hardware and software) and associated deliverables such as documentation necessary for operation and maintenance (e.g., Instructions for Continued Airworthiness, Aircraft Flight Manual). (*Source: SMS SM-0001 Standard*).

### Quality escape

Any product released by an internal or external supplier or sub-tier supplier that is subsequently determined to be nonconforming to contract or product specification requirements or both. (*Source: AS/EN/SJAC 9131*).

### Risk

The combination of predicted severity (criticality) and likelihood (probability) of the potential effect of a hazard. (*Source: NAS9927*).

### **Risk Control**

A means to reduce or eliminate the effects of hazards. (Source: NAS9927).

### **Risk Mitigation**

The process of incorporating defenses or preventive controls to lower the severity or likelihood of a hazard's projected consequence or both.

### Safety

The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

#### Safety Assurance (SA)

Processes within the SMS that function systematically to ensure the performance and effectiveness of safety risk controls and that the organization meets or exceeds its safety objectives through the collection, analysis, and assessment of information. (*Source: NAS9927*).

#### (Source. NAS9921)

#### Safety Culture

A set of enduring values, behaviors, and attitudes regarding safety management, shared by every member at every level of an organization.

#### Safety data

Data recorded for further use in SMS activities (e.g., events reports, safety risk assessments). Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

- Accident or incident investigations.
- Safety reporting.
- Continuing airworthiness reporting.
- Product operational performance monitoring.
- Inspections, audits, surveys.
- Safety studies and reviews.

Some Safety data can be used as SMS data.

#### Safety information

Safety data processed, organized or analyzed in a given context so as to make it useful for safety management purposes.



### SAFETY MANAGEMENT SYSTEM

### Safety Management System (SMS)

A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

### SMS data

Data used to measure SMS performance.

Examples:

- Hazards report register and samples of reports.
- Outputs of risk assessments.
- Safety performance indicators and related charts.
- Record of completed or in-progress safety assessments.
- SMS internal review or audit records.
- Safety promotion records.
- Personnel SMS/safety training records.
- SMS/safety committee meeting minutes.
- SMS implementation plan (during implementation process).

(Source: SMS SM-0001 Standard).

#### Safety objective

A measurable goal or desirable outcome related to safety.

#### Safety performance

Realized or actual safety accomplishment relative to the organization's safety objectives.

#### Safety policy

An organization's fundamental approach for managing safety that is to be adopted within an organization and further defines the organization management's commitment to safety and overall safety vision.

#### Safety promotion

A combination of training and communication of safety information to support the implementation and operation of an SMS in an organization enhancing its safety culture.

#### Safety Risk Management (SRM)

A process within the SMS identifying the hazard, analyzing, assessing and controlling related risks.

(Source: based on SMICG terminology).

Note: SRM is one of the recognized and equivalent names used for the Safety Risk Management/Mitigation process and related tools (e.g. excel spreadsheet). Other common names are:

- SA = Safety Assessment

- SRA = Safety Risk Assessment
- HIRA = Hazard Identification & Risk Assessment
- HIRM = Hazard Identification & Risk Mitigation

#### Service Provider (or product and service provider)

Any organization providing aviation products and/or services. The term thus encompasses approved maintenance organizations and organizations responsible for type design and/or manufacture of aircraft. (*Source: SMS SM-0001 Standard*).

#### Substantive Change

A change (internal or external) involving matters of major or practical importance to an organization that could have a consequential impact on product safety. Substantive changes include modification, expansion or contraction of the nature and scope of an organization's structure, operating environment, roles and responsibilities, policies, processes, procedures, products, operations, facilities, and/or human resources. (*Source: SMS SM-0001 Standard*).

(Source: Sing Sin-ooor Standard).



# SAFETY MANAGEMENT SYSTEM

### **System Description**

A description of an organizational system including its structure, policies, communications, processes, products and operations to determine the scope and perimeter of the system subject to SRM. This allows the understanding of critical factors or features for the purpose of identifying hazards. It is updated whenever there is a newly introduced element or change to the internal or external situation that could affect safety.

### 4.3. GLOSSARY, ACRONYMS AND ABBREVIATIONS

- AMO Approved Maintenance Organization
- AS Aerosystems
- ATO Approved Training Organization
- CAA Civil Aviation Authority
- CAMO Continuing Airworthiness Management Organization
- DMM Design Manufacturing & Maintenance
- DO Design Organization
- DOA Design Organization Approval
- ERP Emergency Response Planning
- FDA Flight Data Analysis
- FDM Flight Data Monitoring
- HIRM Hazard Identification & Risk Mitigation
- ICAO International Civil Aviation Organization
- JC Just Culture
- LHD Leonardo Helicopters Division
- LOSA Line Operations Safety Audit
- MM Maintenance Manager
- MO Maintenance Organization
- MOA Maintenance Organization Approval
- ODA Organization Designation Authorization
- PC Production Certificate
- PE Production Engineering
- PM Production Manager
- PMA Parts Manufacturer Approval
- PO Production Organization
- POA Production Organization Approval
- QAM Quality Assurance Manager
- QM Quality Manual
- QMS Quality Management System
- SA Safety Assurance
- SAG Safety Action Group
- SAM Safety Accountable Manager
- SARP Standards and Recommended Practices
- SM Safety Manual
- SM Safety Manager
- SMART Specific, Measurable, Achievable, Relevant and Time-bound
- SME Subject Matter Expert
- SMM Safety Management Manual
- SMP Safety Management Plan
- SMS Safety Management System
- SN Safety Notice



# SAFETY MANAGEMENT SYSTEM

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- SP Safety Policy
- SP Safety Promotion
- SPI Safety Performance Indicator
- SPT Safety Performance Target
- SO Safety Officer
- SOAR Safety Occurrence Alert Report
- SOD Safety Objectives Database
- SRC Safety Review Committee
- SRM Safety Risk Management
- SRU Safety Related Unit
- STC Supplemental Type Certificate
- SWG Safety Working Group
- TC Type Certificate
- TCH Type Certificate Holder
- UAS Unmanned Aircraft System



SAFETY MANAGEMENT SYSTEM

# SECTION 0 - EXECUTIVE SUMMARY AND SMS IMPLEMENTATION STRATEGY

### 5. EXECUTIVE SUMMARY

This Safety Management System (SMS) Manual has been developed to direct all personnel in the safe operations of the organization. The manual defines the policies that govern the operation of Aerosystems.

The main goal of the Company SMS Manual is 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 are:

- Safety is a core business and personal value;
- Safety is a source of our competitive advantage.

A SMS is a pro-active, integrated approach to safety management. The SMS is part of an overall management process that Aerosystems has adopted in order to ensure that the goals of the organization can be accomplished safely. It embraces the principle that the identification and management of risk increases the likelihood of accomplishing the mission. Hazards can be identified and dealt with systematically through the Occurrence Reporting Program that facilitates continuing improvement and professionalism. Auditing and monitoring processes ensures that Aerosystems components and operations are made in such a way as to minimize the risks inherent in flight operations.

This Safety Manual is written in compliance with the SM-0001 International Industry Standard « IMPLEMENTING A SAFETY MANAGEMENT SYSTEM IN DESIGN, MANUFACTURING AND MAINTENANCE ORGANIZATIONS ». The SM-0001 Standard is intended to enable the aviation industry to implement a Safety Management System (SMS) consistent with ICAO Annex 19 [Second Edition-Amendment 1] to the Convention on International Civil Aviation, as adopted by the International Civil Aviation Organization's (ICAO). It can be used to support demonstration of compliance with applicable SMS requirements from Aviation Authorities or for voluntary SMS implementation.

ICAO Annex 19 establishes Standards and Recommended Practices (SARPs) applicable to safety management functions related to, or in direct support of, the safe operation of aircraft. Annex 19 prescribes that each State must require several organizations under its authority to implement an SMS (e.g., organizations responsible for the type design or manufacture of aircraft, engines or propellers in accordance with Annex 8, approved maintenance organizations providing services to operators of aeroplanes or helicopters engaged in international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, respectively).

The industry anticipates that each Local Aviation Authority will continue to promulgate SMS regulations applicable to organizations identified in ICAO Annex 19 and that the industry organizations will be required to respond consistent with their State's requirements.

The SM-0001 Standard has been developed to consider the broadest scope of potential SMS implementation in design, manufacturing and maintenance organizations. SMS is being introduced for the purpose of continuous improvement in Aviation Safety. When the term "Safety" is used in this document, it is defined as the state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

The main objective of an SMS is to manage safety related to, or in direct support of the safe operation of aircraft through the effective management of safety risks. It is a system designed to maintain or improve safety by identifying hazards, collecting and analyzing data and managing safety risks. An SMS seeks to proactively assess and control risks before they result in aviation accidents and incidents.



# SAFETY MANAGEMENT SYSTEM

It is important to recognize that (unlike other service providers required by Annex 19 to have an SMS) Design, Manufacturing and Maintenance organizations' contribution to aviation safety is through the product delivered into operation. The contribution to aviation safety of such organizations is essentially defined by their output at the point it is provided for operation. Design, manufacturing and maintenance organizations can identify what a safe contribution is either a design shown to meet a defined safety/certification standard, a fully conforming product, or a set of maintenance activities completed exactly as requested, and SMS should be considered as the means to consider why that might not be achieved. SMS is therefore a tool to build upon the existing mature disciplines already aiming to achieve these objectives, by seeking weaknesses in the organization's systems, and limiting the opportunity for the expected contribution to safety not to be achieved.

SMS can be a complex topic with many aspects to consider, but the defining characteristic of an SMS is that it is a decision-making system, based on the collection and analysis of information that encompasses both reactive and proactive measures. It also aims to maintain or improve the safety performance of organizations by establishing and fostering a positive safety culture. A positive safety culture should be present at all levels, and be reflected in an active and visible management commitment as well as by individuals' awareness of their role and influence on safety.

An SMS should not be implemented through an additional management system requirement, superimposed onto the existing rules but should be fully consistent with other organization management systems. It is important to note that the SM-0001 Standard addresses only the requirements of an SMS and does not provide guidance or means of compliance for the other organization management system requirements, or other duties already required of the holder of certificates or approvals. The SMS may contribute to the discharge of these duties, but does not act as the sole means of compliance. As an example, duties for reporting of certain occurrences to the Aviation Authorities from holders of certain approvals or certificates exist today. The SMS does not re-define the criteria for the selection of such reports or the means to convey them to the Aviation Authorities, but may, through its collection of information and reports, provide additional sources of information from which the organization may identify items required to be reported to the Aviation Authorities.

The structure of an SMS has been formalized in ICAO Annex 19 around four components :

- 1) Safety Policy and Objectives.
- 2) Safety Risk Management.
- 3) Safety Assurance.
- 4) Safety Promotion.

The ICAO Safety Management Manual (SMM, Doc 9859) also mentions SMS as a system that is commensurate with the organization's regulatory obligations and safety goals. The SM-0001 Standard recognizes the variability of organizations implementing SMS requirements. As a supplement to the SM-0001 Standard, the industry has included a new appendix 7 entitled "SMS Implementation Strategies," to provide additional guidance for organizations having disparate attributes including, but not limited to their size and complexity, the types of products or services being provided, as well as external factors such as operating environments and regulatory requirements. The guidance stresses the interest of keeping the system as simple as possible for its effective and efficient operation.

The SM-0001 Standard is intended to support SMS implementation by Design, Manufacturing and Maintenance organizations, and is expected to be usable as Guidance Material (GM) and as an Acceptable Means of Compliance (AMC) to the corresponding Annex 19 transposition into aviation safety regulations [e.g., in the USA, the Federal Aviation Administration (FAA) has published 14 CFR Part 5 – this rule is expected to be updated via Notice of Proposed Rulemaking (NPRM) in Q3 2022, to include SMS requirements for part 21 (applicable to Design, Production), part 91.147, part 135 and part 145 organizations; in Europe, the European Union Aviation Safety Agency (EASA) has published the SMS requirements for Design, Manufacturing and Maintenance organizations in Part 21 and Part 145; Transport Canada and National Civil Aviation Agency – Brazil (ANAC) are continuing to operate a voluntary SMS program for Design and Manufacturing organizations – no formal rulemaking is currently planned].



# SAFETY MANAGEMENT SYSTEM

The SM-0001 Standard can be used as a means for demonstrating compliance with FAA 14 CFR Part 5 under the conditions as specified within the Appendix 4 "Compliance with FAA 14 CFR Part 5". The Aerospace Industries Association of America (AIA) has issued a National Aerospace Standard (NAS) "Safety Management System Practices for Design and Manufacturing": NAS 9927. Section I has been recognized by the FAA as being consistent with 14 CFR Part 5 and ICAO Annex 19, Appendix 2.

The NAS Standard has been considered as an input for the development of this SM-0001 Standard. SMS requirements may also be applied to military regulations (just as airworthiness certification requirements are used in a military context).

The SM-0001 Standard may then be considered as guidance material and an acceptable means of compliance with military regulation.

ICAO Annex 19 includes a requirement for a voluntary incident reporting system and accords the protections outlined in its Appendix 3, Principles for the Protection for Safety data, Safety Information and Related Sources, to the safety data captured by and safety information derived from these voluntary reporting systems and related sources. These principles are in line with the concept of "Just Culture" which are important to encourage individuals to report safety-related information. However, it should not absolve individuals of their normal responsibilities. In a European context, "Just Culture" is also required by EU No 376/2014. The SM-0001 Standard considers "Just Culture" principles from both Annex 19 and EU No 376/2014 perspective.

The SM-0001 Standard has been developed with the expectation that when safety management systems implemented in a manner consistent with SM-0001 will be accepted by the implementing organization's National Aviation Authority, it should be mutually recognized by other National Aviation Authorities. However, it is understood that some Aviation Authorities may apply additional requirements over and above those contained in ICAO Annex 19. Any additional requirements contained in national regulations should be subject to a dedicated annex to this Standard.

The SM-0001 Standard has been developed by a group of representatives of the aviation Design, Manufacturing, and Maintenance organizations.



SAFETY MANAGEMENT SYSTEM

# 5.1. SCOPE

This SM Safety Manual provides :

- Means of compliance for each of the SMS Framework elements.
- Detailed guidance to implement SMS requirements.
- Guidelines to enable the sharing of safety related information and continuing airworthiness through interfaces between organizations having safety management obligations, such as: design, manufacturing, maintenance and training organizations, as well as operators and relevant Aviation Authorities.

This SM Safety Manual also considers Aerosystems corporate structure and processes to cover some or all elements common across domains, such as : accountability, safety policy, hazard identification and safety risk management principles, safety data collection and assessment, and safety awareness and training. Corporate SMS is not compulsory but could facilitate consistent SMS implementation, in companies holding multiple approvals and/or certificates.

This SM Safety Manual is intended to provide a means, but not the only means, of compliance with civil aviation regulations but could be used for compliance with other regulations (e.g., military regulations) when acceptable to the relevant Aviation Authorities.

### Intended application:

This SM Safety Manual addresses the implementation of the SMS elements within Aerosystems undertaking design, manufacturing or maintenance responsibilities and activities or both as:

- Approved Production Organization (holding an organization approval POA).
- Approved Maintenance Organization (holding an organization approval MOA).

# 5.2. SAFETY MANAGEMENT PLAN

Safety holds the key to this company's future and affects everything we do.

This SMS Manual defines the organization's Safety Management Plan. The Aerosystems management is committed to the aviation SMS, and is required to give leadership to the program and demonstrate through everyday actions, the commitment to safety and its priority in the achievements of the organization.

The processes in place in the Safety Management Plan include the active involvement of all managers and supervisors, who, through planning and review, will continue to promote efforts for continued improvement in safety and safety performance. The term "Safety Management" should be taken to mean safety, security, health, and environmental management. The key focus is the safe operations of airworthy aircraft.

# 5.3. CONCEPT OF SAFETY, SMS AND RELATIONSHIP WITH QMS

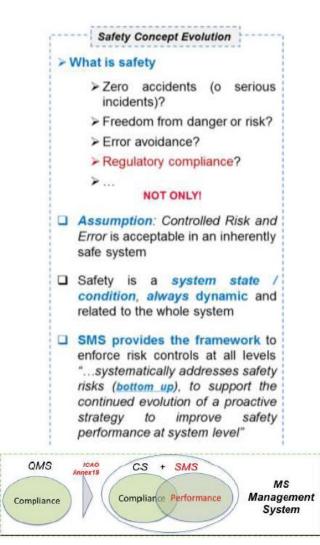
- **Safety** is the state in which the risk of harm to persons or property damage is reduced to and maintained at or below an acceptable level through a continuing process of hazard identification and risk management.
- Safety is a dynamic characteristic of the aviation system, whereby safety risks shall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



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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.



There is a distinction between the concepts of quality management system and safety management system. It is possible to have a quality product or service, as defined by the ISO standards, and still not have a safe product or service.

The adoption of some of the types of tools and techniques used in quality management is also used to manage the safety system. However, it must not be assumed to mean that processes designed to produce a quality product, (repeatedly doing the same thing, without variation) equates to the same thing as repeatedly producing a safe product.

Improving a safety record is not the same as improving safety performance. There are many airlines that have extremely good safety records but are operating with inadequate organizational structures or unsafe performance and have just not had an accident. A good safety record, just like a good quality record, does not guarantee safe performance.



SAFETY MANAGEMENT SYSTEM

### Improvements to the QMS process (and Documented Information) are needed to fully meet SMS requirements.

This includes establishing processes to better identify new hazards and establishing processes to measure the effectiveness of safety risk controls. These improvements are developed during the SMS implementation effort. Safety management and Quality management are complementary and work closely together to achieve the overall safety goals of the organization.



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.



SAFETY MANAGEMENT SYSTEM

### 5.4. APPLICABILITY OF THE COMPANY SAFETY MANUAL

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

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

The Aerosystems SMS Manual shall be applied in the organization according to the table illustrated below. For Organization specific requirements refer to the relevant expositions/handbook.

| Organization (Type)              | Certification                            | Exposition / Handbook /<br>Manual                              | SMS<br>Safety Manual          |
|----------------------------------|--|--|-------------------------------|
| Production Organization<br>(PO)  | IT.21G.0073                              | POE-AS01<br>Product Organization Exposition<br>signed          |                               |
| Maintenance Organization<br>(MO) | IT.145.0412                              | MOE-AS01<br>Aerosystems Maintenance<br>Organization Exposition | AS-SMS-SM100<br>Safety Manual |
| Quality System Approval          | UNI EN 9100:2018<br>UNI EN ISO 9001:2015 | QM01<br>Aerosystems Quality Manual                             |                               |

Aerosystems SMS requirements are also applicable to the external Organizations (Suppliers) not yet required to have a mandatory SMS. A set of SMS requirements, to be flown down to Suppliers, are defined and introduced in the contractual documentation (Ref. Paragraph 6.3.1.1).



SAFETY MANAGEMENT SYSTEM

### 5.5. FRAMEWORK

ICAO Framework

The Aerosystems SMS framework is in alignment with the regulatory SMS framework.

The Aerosystems Safety Requirements are based upon ICAO Annex 19 Appendix 2 framework, fully adopted by the company, which comprises **Four Components** and twelve elements forming the minimum requirements as follows:

### 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



ICAO Annex 19 Appendix 2 Note 2 highlights also that interfaces with other organizations can make a significant contribution to the safety of products or services.

By identifying and managing these interfaces, either internal or external, the organization will have more control over any safety risks related to the interfaces. Section 5 of this document will further elaborate on Interface Management.

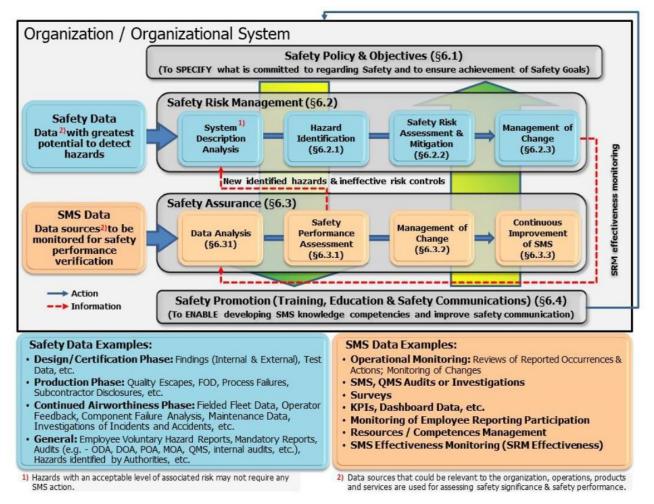


# SAFETY MANAGEMENT SYSTEM

### 5.6. SMS COMPONENTS

This part provides a brief description of the SMS Components. Further details on SMS Components and Elements are detailed in the following pages.

The following figure provides an overview of the SMS components and the interactions among them, with a specific focus on Safety Risk Management and Safety Assurance.



SMS Overview and Interactions between SMS Components (Source: SMS SM-0001 Standard).



# 5.6.1. SAFETY POLICY AND OBJECTIVES



The first components of the SMS framework focus on creating an environment where safety management can be effective. It is based on a **Safety Policy and Objectives** that describe management's commitment to safety, its goal and the related organization.

Management commitment and leadership is specifically asserted through the safety policy and safety objectives and demonstrated through management decision-making and allocation of resources.

Consistency of decisions and actions with safety policy and safety objectives will help to cultivate a positive safety culture.

Our organization has defined a Safety Policy approved and signed by the Accountable Manager. This first component has the responsibility and commitment to implement and maintain the Safety Management Processes in Aerosystems, in the areas of the following components and their elements:

- Responsibility and Safety accountability of the organization regarding the Policy and the Safety Objectives.
- Obligation of accountability for safety.
- Designation of key safety personnel.
- Coordination of the Emergency Response Plan (ERP).
- SMS Documentation.

### NOTE:

Aerosystems has not choose to develop a combined safety policy that addresses both « Product & Services Safety » and « HSE Employee Health & Safety ». Distinct requirements for product & services safety and employee health & safety are managed distinct systems and policy statements.



### 5.6.2. SAFETY RISK MANAGEMENT



The second component of the SMS framework is **Safety Risk Management (SRM)**, which include hazard identification, safety risk assessment and safety risk mitigation.

The SRM process identifies hazards that exist within the context of providing products and/or services.

Hazards may result from systems that are deficient in their design, technical function, human interface or interaction with other processes or systems.

They can be the result of failure of existing processes or the result of changes of the operating environment.

Having a detailed system description will help to understand the operating environment and its interfaces. In fact, hazards may be identified through all the operational life cycle and from internal and external sources.

Safety risk assessment and safety risk mitigation will need to be continuously reviewed to ensure they remain effective.

Our organization has developed its processes considering the essential characteristics of its operations and its environment. Apply this knowledge to identify hazards, analyze them, assess risk and establish the necessary controls. This second component has the responsibility and commitment to implement and maintain the Safety Management Processes in Aerosystems. In the areas of the following components and their elements:

- Hazards Identification.
- The Safety Risks Assessment and Mitigation.



#### 5.6.3. SAFETY ASSURANCE



The third component of the SMS framework is Safety Assurance (SA) that consists of processes and activities undertaken to determine whether the SMS is operating according to expectations and requirements.

The SA continuously monitors processes as well as the operating environment to detect changes or deviations that may introduce emerging safety risks or the degradation of the existing safety risk controls.

Such changes or deviations may then be re-addressed through the SRM process.

Safety assurance activities include the development and implementation of actions taken in response to any identified issues having a potential safety impact, and continuously improve the performance of the SMS.

Our organization ensures that the measures for the Safety Risks developed as a consequence of the activities of hazard identification and risk management, reach the intended objectives. This third component has the responsibility and commitment to implement and maintain the Safety Management Processes within Aerosystems, in the areas of the following components and their elements:

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



# 5.6.4. SAFETY PROMOTION



The fourth component of the SMS framework is **Safety Promotion** that encourages a positive safety culture and helps to achieve the safety objectives through the combination of training and education, effective communication, and information-sharing.

Senior management provides the leadership to promote the safety culture throughout an organization, since effective safety management cannot be achieved solely by mandate or strict adherence to policies and procedures.

Safety promotion affects both individual and organizational behavior, and supplements the organization's policies, procedures and processes, providing a value system that supports safety efforts.

Our organization develops and maintains formal training in Safety and communication activities to create an environment where Safety Objectives can be maintained and achieved. This fourth component has the responsibility and commitment to implement and maintain the Safety Management Processes in Aerosystems, in the areas of the following components and their elements:

- Training and education.
- Safety Communication.



# SECTION 1 - SAFETY POLICY AND OBJECTIVES



# 6. SAFETY POLICY AND OBJECTIVES

### 6.1. SAFETY POLICY COMMITMENT

### 6.1.1. MANAGEMENT COMMITMENT

The Management commitment and safety policy are set out in the Accountable Manager's declarations in paragraph 1.8.1 of the POE and 1.4.1 of the MOE, as provided according to point 21.A.139 of part 21 and 145.A.200 of part 145.

Management commitment to SMS concerns:

- promote a positive safety culture,
- provide the necessary resources for the implementation of the security policy, including reporting procedures,
- indicate the types of behaviour that are unacceptable in relation to aeronautical activities,
- communication within the organization and periodic review of safety policy.

(Source: SMS SM-0001 Standard).

### 6.1.1.1. SAFETY POLICY

Aerosystems 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. Aerosystems has defined the Safety Policy of the organization and communicated it to its collaborators. Aerosystems Safety Policy includes a commitment to continuous improvement, observe all applicable legal requirements, standards and considers best practice.



SAFETY MANAGEMENT SYSTEM

Aerosystems Safety Policy includes the following commitments:

- Design and manufacture of safe products;
- Superior continued operational safety and performances;
- Safe internal manufacturing operations;
- Proactive employee participation in product/aviation safety and hazard reporting;
- Inherent compliance to applicable national and international regulatory requirements, processes, procedures and policies associated with the design, manufacture and continued operational safety of Aerosystems products;
- Comprehensive Safety Risk Management of compliance and conformity assurance processes.

The leadership of Aerosystems commits to providing the necessary resources to ensure implementation of Safety Management System fundamentals, and will:

- Consult, listen, communicate, and respond openly to our staff and customers;
- Ensure personnel competence and accountability. Everyone employed at Aerosystems is responsible for operating
  appropriately and demonstrating compliance with this policy, associated regulatory requirements, and company
  processes and procedures at all times;
- Actively engage in Safety Risk Management and Safety Assurance activities;
- Openly report all aspects of our safety performance;
- Recognize those who contribute to improve product safety performance;
- Ensure that a positive Safety Just Culture is maintained at all times.

#### NOTE:

- 1) Aerosystems has defined a readable and understandable Safety Policy in accordance with international and national requirements.
- 2) The Safety Policy is signed by the SAM Safety Accountable Manager executive of Aerosystems.
- 3) The SAM Safety Accountable Manager is familiar with the contents of the safety policy.
- 4) The Safety Policy is periodically reviewed to ensure it remains relevant and appropriate to Aerosystems.
- 5) The Safety Policy include a clear statement about the provision of the necessary resources for the implementation of the Safety Policy.
- 6) The Safety Policy is communicated, with visible endorsement, throughout the organization by the means of: Digital Communication (Email, Website, Intranet etc.) or Papercopy (Copies, "Clearly Visible" Posters, Announcements etc.).
- 7) The Safety Policy is communicated to all personnel (including relevant contract staff and organisations) and interested parties.
- 8) People across Aerosystems are familiar with the policy and can describe their obligations in respect of the safety policy.
- 9) The Safety Policy reflect Aerosystems commitment regarding safety, including the promotion of a positive safety culture.
- 10) The SAM Safety Accountable Manager and the management team are promoting their commitment to the Safety Policy through active and visible participation in the safety management system.
- 11) Decision making, actions and behaviours reflect an Aerosystems positive safety culture and there is good safety leadership that demonstrates commitment to the Safety Policy.

Reference: FF300 - AS-SMS SAFETY POLICY (signed by the Accountable Manager)



SAFETY MANAGEMENT SYSTEM

# 6.1.1.2. SAFETY OBJECTIVES

### 6.1.1.3. AEROSYSTEMS SAFETY OBJECTIVES

Aerosystems has established Safety Objectives, which are related to high and low impact performance indicators, targets and Safety obligations. Safety Objectives are periodically monitored through the "Management Review" process is to ensure that the system remains suitable, adequate and effective. As part of the Management Review, safety objectives Board is updated, which is the responsibility of the Safety Manager and is delivered to the Authority when requested.

Safety objectives are established to continuously improve the safety of aircraft operations and Aerosystems performances 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.

Safety objectives should be periodically reviewed and checked for relevance, progress and need for adaptation, as appropriate to the organization's needs, and as suited to the nature of the objectives. Safety objectives may not change year-to-year but will likely evolve over time.

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

The safety objectives:

- 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;
- are **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);
- are **communicated and known** throughout the whole organization.
- a) Aerosystems define safety objectives reflecting the in-service safety performance of its Components products/parts/appliances (e.g., based on the analyses performed through the Continued Airworthiness process) as well as objectives related to the function of the SMS itself. These objectives could include monitoring correct deployment of the SMS, measurement of its activity, and allocation of appropriate means and staff competencies. These safety objectives should reflect the identified improvement in safety, based on the current situation. Safety objectives may consider the management of interfaces within the organization as well as with other organizations (DO-PO).

The **safety objectives are presented as a « standalone document »** to constitute Aerosystems safety performance dashboard, which can also be used to report the safety performance results (an example of safety performance dashboard is given in the document **FF310 - SMS SOD Safety Objectives Database** (Includes Safety Objectives, Indicators and Dashboard)).

- b) The establishment of objectives is intended to drive Aerosystems strategy to maintain or improve safety performance. It is appropriate to set strategic (long term) and tactical (short to medium term) goals and objectives to enable periodic reviews and performance assessment.
- c) During the process of communicating the safety policy and associated objectives throughout the organization, "local" safety objectives, if applicable, should be consistent with the general organization-level objectives. Such local objectives aim to show the contribution to safety for an individual/group of employees. Each employee must be aware of the potential consequences of his/her actions and behaviour and of its positive contribution to the SMS through the understanding of the safety objectives.
- d) Aerosystems SMS include a periodic review of safety objectives, on a yearly basis. This review is aligned with the review of safety performance in terms of achieving the objectives. Aerosystems can establish objectives at an



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appropriate cycle, review progress periodically, and evaluate to what degree they were achieved. These evaluations can then be the basis of establishing the objectives for the following cycle.

# 6.1.1.4. FROM SAFETY POLICY TO OBJECTIVES AND TO INDICATORS

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

Two classes of objectives are identified:

- 1) High level general objectives that will constitute the minimum content for the SMS.
- 2) Whilst a dedicated set of more specific objectives could be defined to better fit with the peculiar SMS necessities. In such a case this dedicated set will be part of Local SMS documentation.



### 6.1.1.5. SAFETY AND JUST CULTURE

Aerosystems 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.

The Company SMS Manual.

A safe Aviation System (Aerospace Components) 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.
- •



SAFETY MANAGEMENT SYSTEM

### 6.1.2. SAFETY ACCOUNTABILITY AND RESPONSIBILITIES

### SAFETY ACCOUNTABLE MANAGER

Aerosystems has identified and appointed a **SAM Safety Accountable Manager** who, irrespective of other functions to, has the ultimate responsibility for the implementation and maintenance of the Safety Management System (SMS).

Reference: FF302 – Appointment Letter for the role Safety Accountable Manager

For this purpose he/she has been designated in the document FF301 - AS-SMS Organization Chart.

Reference: FF301 - SMS Organization Chart

This SAM authority and responsibilities may include, but are not limited to:

- Providing and allocating human, technical, financial or other resources necessary for the effective and efficient performance of SMS;
- Responsibility for the conduct of Aerosystems functions covered by the scope of the SMS, and as described in the system description, if applicable;
- The authority to stop the operations if there is an unacceptable level of safety risk;
- Endorsement, establishment and promotion of the safety policy;
- Ensuring the establishment of the organization's safety objectives and safety targets;
- Acting as the organization's safety champion;
- Accountability for the management of and decision taken with respect and final resolution to safety issues;

and

- Control of the human resources required for the operations authorized to be carried out under the certificate or authorization of operation;
- Direct responsibility to conduct the affairs of Aerosystems ;
- Establishment and maintenance of the organization's competence to learn from the analysis of data collected through its safety reporting system ;
- Final responsibility in matters of safety.

(Source: SMS SM-0001 Standard).



SAFETY MANAGEMENT SYSTEM

# 6.1.3. APPOINTMENT OF KEY SAFETY PERSONNEL

(Source: SMS SM-0001 Standard).

### SAFETY MANAGER

Aerosystems has defined the member of the Direction the Safety Manager, who will be responsible for the implementation and maintenance of the Safety Management System (SMS).

Reference: FF303 – Appointment Letter for the role Safety Manager

For this purpose it has been designated in the document FF301 - AS-SMS Organization Chart.

Reference: FF301 - SMS Organization Chart

His specific responsibilities are:

- Guarantee that the necessary processes for the Safety Management System (SMS) are established, implemented and maintained.
- Provide information and advice to the Accountable Manager on matters related to the performance of safe operations;
- Ensure the promotion of safety at all levels of Aerosystems.
- 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;
- Manages the Safety Notices issued against other Organizations;
- Is the chairman of the SAG Safety Action Group;
- Supports the Accountable Manager to prepare the SAG.
- Analyzes and manages the incoming voluntary reports;
- Prepares SPI Safety Performance Indicators reports (as requested by SAG);
- 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 ERP development and updating of Emergency Response Plan (ERP) and procedures;
- Coordinates and communicates (on behalf of the AM) with the Authority 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.

#### NOTE :

The Safety Manager responsible for administering the SMS does not hold other responsibilities that may conflict or impair his role as SMS manager.

The Safety Manager manager's position is a senior management position not lower than or subservient to other operational or production positions (Reference: FF301 - SMS Organization Chart). See also POE 1.8.5 and MOE 1.3.2 for 21.A.139 and 145.A.200 relevant tasks.

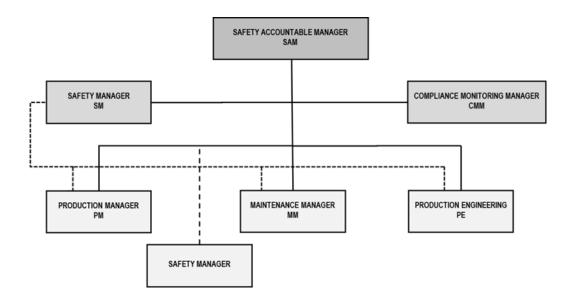


SAFETY MANAGEMENT SYSTEM

Aerosystems has determined the safety responsibilities of all members of the company, including the Safety Accountable Manager and Safety Manager.

Aerosystems has documented and communicated the safety functions, responsibilities and authorities ; through the different Competency Profiles / Job Descriptions / Competency Descriptions / Safety Responsibility Matrix. The process owners are detailed below :

| PROCESS                    | PROCESS OWNER                  |
|----------------------------|--------------------------------|
| MANUFACTURING / PRODUCTION | PM Production Manager          |
| MAINTENANCE                | MM Maintenance Manager         |
| TRAINING                   | SM Safety Manager              |
| SAFETY COMMUNICATION       | SM Safety Manager              |
| DESIGN                     | PE Production Engineering      |
| MANAGEMENT REVIEW          | SAM Safety Accountable Manager |



Aerosystem's SAG Safety Action Group is composed by : SAM, SM, QM/CMM, PM, MM, PE and QCM

### 6.1.3.1. GROUPS MANAGING THE SAFETY OF AEROSYSTEMS

Aerosystems as part of the functional responsibilities and accountability on safety has established a Safety Action Group (SAG). Aerosystems is a simple highly-focused small company, for this reason a single SAG is established for the purpose of the SMS.

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# 6.1.3.2. SAFETY ACTION GROUP (SAG)

Responsible for providing the platform to achieve the objectives of the allocation of resources and evaluate the effectiveness and efficiency of risk mitigation strategies, this is led by the Accountable Manager and meets yearly. This committee is formed by: AM Accountable Manager, QM Quality Manager, CMM Compliance Monitoring Manager, PM Production Manager, MM Maintenance Manager, SM Safety Manager, PE Production Engineering, QCM Quality Control Manager. This committee receives counsel from the Safety Manager and together they are responsible for:

- Review Safety performance compared to the safety policy and objectives of Aerosystems;
- Review the effectiveness of the safety management processes of Aerosystems;
- · Review the effectiveness of safety oversight of subcontracted operations;
- Ensure that the corresponding resources are allocated to achieve performance in terms of safety; and
- Promote the necessary personnel changes, to maximize the implementation of the system within Aerosystems.
- Supervise safety performance within functional areas;
- Ensure that the corresponding safety risk management activities are carried out;
- Coordinate the resolution of mitigation strategies for the consequences of identified hazards;
- Evaluate the impact of safety related to the introduction of changes;
- Coordinate the implementation of corrective action plans in a timely manner; and
- Review the effectiveness of safety controls and recommendations.

### 6.1.4. COORDINATION OF EMERGENCY RESPONSE PLANNING (ERP)

(Source: SMS SM-0001 Standard).

Aerosystems act, maintains and update an Emergency Response Plan (ERP) that is adequately coordinated with the emergency response plans of the other organizations (DO-PO) with which it interfaces while providing services, Aerosystems (ERP) ensures:

- An orderly and efficient transition from normal operations to emergency operations;
- Delegation of authority to emergencies;
- Assignment of responsibilities in the emergency during coordinated activities;
- Authorization for key personnel for the actions contained in the plan.
- Coordination of efforts to address the emergency.
- Perform periodic trials through exercises, which will be at least one (1) time a year and must be consistent with the size and complexity of the organization;
- Return of emergency activities to normal activities; and
- Proactive identification of all possible emergency events / scenarios and their corresponding mitigation measures.

The above is detailed in the document "SP Safety Procedure" document ERP Emergency Response Plan.

Reference: AS-SP-ERP1001 - ERP Emergency Response Plan



### 6.1.4.1. CONTENT OF THE EMERGENCY RESPONSE PLAN (ERP) DOCUMENT

Content of the ERP Document:

- 1) The list of designated persons that will be part of the emergency response teams;
- 2) The roles and responsibilities of the personnel assigned to the emergency response teams;
- 3) The description of the Emergency Operations Center (EOC) under which the crisis management center should operate in cases of emergency;
- 4) The procedures for receiving requests for information, especially during the first days after an accident or incident;
- 5) Procedures for the appointment of a spokesperson to deal with the media;
- 6) Procedures for access to available resources, including financial authorizations for immediate activities;
- 7) Procedures for the appointment of the company representative for all official investigations undertaken by the Accident and Incident Commision and the Aviation Authority;
- 8) The description of a call plan for key personnel; and
- 9) Checklists and procedures relevant to specific emergency situations.

Reference: AS-SP-ERP1001 - ERP Emergency Response Plan

### 6.1.5. SMS DOCUMENTATION

### 6.1.5.1. SMS DOCUMENTATION

(Source: SMS SM-0001 Standard).

### **AEROSYSTEMS SAFETY MANUAL**

This Safety Manual (SM) communicates to all Aerosystems and accounts for the documentation of all aspects of the Safety Management System, which describes the following:

- 1) Scope and integration of the safety management system;
- 2) The safety policy and objectives;
- 3) The regulatory requirements under which the SMS of [Name of the organization] is conceived.
- 4) The processes and / or procedures of the Safety Management System must be at least the following:
  - Documentation of Safety Management System;
  - Coordination of emergency response planning (ERP);
  - Hazard identification;
  - Evaluation and mitigation of safety risks;
  - Observation and measurement of safety performance;
  - Change management;
  - Continuous improvement of the Safety Management System;
  - Training and education; and
  - Safety communication.
  - Control of the contracted activities;
  - Key Safety personnel;
  - Obligations of accountability, functional responsibilities and attributions related to the processes and procedures of the Safety Management System; and
  - Safety Performance indicators.



The SMS documentation include:

- Safety Manual with the description of the architecture of the SMS in line with the principles of the Company;
- Safety Policy signed by the AM Accountable Manager;
- AS-SMS-SHIRMA Safety Hazard Identification and Risk Mitigation Analysis
- AS-SMS-COHIRM Component Safety Assessment Risk Management Hazard Identification and Risk Mitigation;
- AS-SMS-MMERAR Manufacturing Machines and Equipment Risk Analysis and Register
- AS-SMS-PROSHIRA Product Safety Hazard Identification and Risk Analysis
- SOD Safety Objectives Database (with Objectives, Indicators and Dashboard);
- SMS Processes, Procedures and Forms described or referenced in the Safety Manual;
- AS-SP-ERP1001 Emergency Response Plan;
- SMS AUDIT (Checklist and Reports);
- AS-SMS-IP Implementation Plan (during implementation phases);
- any other necessary documented information

### 6.1.5.2. SMS RECORDS - CONTROLLED DOCUMENTATION OF THE SMS

#### (Source: SMS SM-0001 Standard).

The Controlled Documentation of the SMS is:

- Safety Policy.
- Safety Objectives.
- The requirements, procedures and processes of the Safety Management System (SMS).
- Responsibilities and authority for procedures and processes.
- Safety Management System Performance (SMS).

Aerosystems controls all the documentation of the Safety Management System (SMS) making sure that:

- The current versions of the relevant documents are available in all the places where the operations essential for the efficient operation of the system are carried out.
- Easily locatable and retrievable.
- Be periodically revised if necessary, and approved by authorized personnel; and
- Obsolete documents are removed quickly and in a timely manner from all points of use and ensure that they are not used

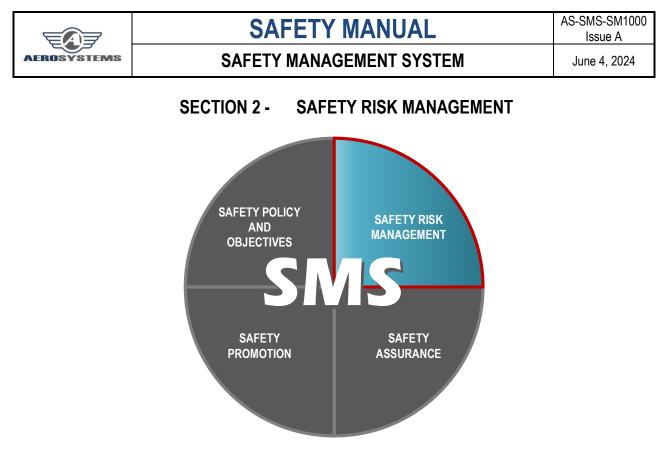


## SAFETY MANAGEMENT SYSTEM

Aerosystems ensures the proper identification of the records of the Safety Management System (SMS) so that they are legible, identifiable and traceable, as well as easy to recover and protected against damage, deterioration and loss. Each process that controls the Safety Management System (SMS) defines the retention times of the records for a period acceptable to the Aerosystems Direction.

- 1. The SMS record publishing format is physical and/or electronic and is accessible.
- 2. Retained SMS records are always retrievable.
- 3. Aerosystems Record Retention Policy typically stipulate how long records are to be retained; they are consistent with regulatory requirements and needs of the SMS. For example, it could range from "no retention required" to the "life of the product plus 10 years".

The above is done according to the Transversal/Cross Process Quality Assurance Guideline "GQ02 Records Management" and the FF131 First Issue - RML Record Master List. See POE and MOE for relevant data and documents management.



# 6.2. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

Hazard identification, Change and Risk Management process: this section includes the safety reporting and hazard identification process and how hazards and their risks are assessed and then managed and controlled. The aim of Safety Risk Management (SRM) is to prevent the occurrence of serious aviation incidents or accidents. To that end, SRM identifies hazards, analyses, assesses and controls safety risks. Use of a system description is useful for defining the scope of the SRM application (hazard Identification, safety risk assessment and mitigation). Some National Aviation Authorities require an organizational definition for entities that hold an organizational approval (e.g., DOA, POA, MOA). For those entities, the existing organizational definition can serve as the system description. In all cases, the organization should take actions to maintain safety risks at an acceptable level.

Aerosystems has developed the processes comprising the essential characteristics of our operations and its environment and we have applied this knowledge to identify the hazards, analyze them, evaluate the risk and establish the necessary controls.

Safety Risk Management (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 riskbased 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.



SAFETY MANAGEMENT SYSTEM

Aerosystems SRM covers 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.

## 6.2.1. HAZARD IDENTIFICATION

#### (Source: SMS SM-0001 Standard).

Aerosystems has developed and maintain formal means of collecting and generating feedback on the hazards of operations, which combine reactive, proactive and predictive methods of safety data.

The hazard identification process includes the following steps:

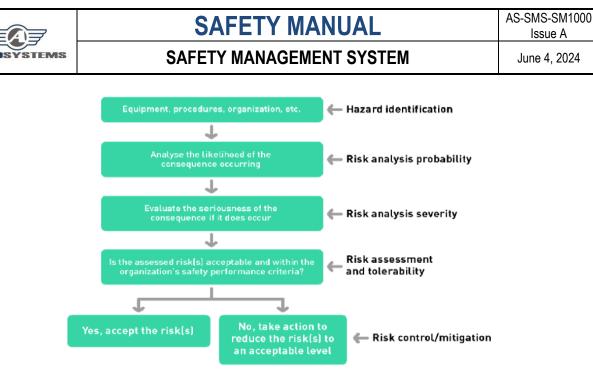
- 1) Reports of hazards, events and safety concerns.
- 2) Collection and storage of operational safety data.
- 3) Analysis of operational safety data.
- 4) Distribution of safety information emanated from safety data.

Hazards may also arise from organizational activities such as substantive changes to the following:

- 5) The organization (relocation of a facility, opening a new facility, etc.);
- 6) Employee responsibilities;
- 7) Operations;
- 8) Resources (human and physical);
- 9) Organization's privileges or limitations;
- 10) Policies, processes, and/or procedures;
- 11) Substantive changes due to "external or environmental" constraints (e.g. new regulations not linked to Safety), or new sanitary procedures in a pandemic context.

To enhance Hazard identification, Aerosystems has also implemented an employee Voluntary Occurrence Reporting system (VOC), based on the Just Culture policy defined and deployed by the organization.

The Hazards Identification is also carried out according to the transversal/cross process Quality Assurance Guideline "Hazard Identification" GQ11 Risk Management.



Hazard identification and risk management process

## 6.2.2. SAFETY RISKS ASSESSMENT AND MITIGATION

(Source: SMS SM-0001 Standard).

Aerosystems has developed and maintains a formal risk assessment and mitigation process for risk management, which ensures the analysis of risks (in terms of the probability and severity of their being translated into events); its evaluation (in terms of its tolerability); and its control (in terms of its mitigation and / or elimination), so that they remain at an acceptable level of safety.

Aerosystems has defined the administration levels with the authority to make risk tolerability decisions and has defined mitigation strategies for each hazard, evaluating each one, and that have taken unacceptable risks. This process has the objective of identifying, analyzing and reducing the different risks related to safety and maintaining them at a level accepted by Aerosystems.

Aerosystens has defined the following FOUR SRM Methods:

#### 1) GENERAL SAFETY RISK ANALYSIS FOR SAFETY MANAGEMENT SYSTEM

SMS General Risk Management Safety Hazard Identification and Risk Mitigation Analysis FF312 - AS-SMS-SHIRMA

| RISK ITEM NUMBER<br>Hazard Identification Number  | This is a unique series of characters that will identify with a Code each particular risk.<br>The title should indicate the name of the Risk (Hazard) in a few words.  |  |  |  |
|---|--|--|--|--|
| RISK TITLE<br>Hazard Title  |  |  |  |  |
| RISK DESCRIPTION CAUSE<br>Hazard Description<br>RISK DESCRIPTION IMPACT-<br>TYPE<br>Hazard Type | For the purposes of full understanding it is important that in describing a risk both cause and impact statements are made. For that reason the field is in two parts. |  |  |  |
| RISK OWNER  | The Risk Owner is the person nominated to develop and manage the action plan for this risk.  |  |  |  |



## SAFETY MANAGEMENT SYSTEM

| RISK IMPACT  | Predefined Value (1 to 4) Risk Impact  |  |  |  |  |
|--|--|--|--|--|--|
| RISK PROBABILITY   | Subjective view of the probability of occurrence (1=low 4=high) Probability  |  |  |  |  |
| RISK CRITICALITY AND<br>PRIORITY LEVEL (RISK RAG)                  | Evaluation for each Risk (risk Criticality) Risk Criticality is a figure derived from the multiplication of the Impact and Probability factors   |  |  |  |  |
| RISK TREATMENT   | Description of Risk Treatment to be performed  |  |  |  |  |
| ACTION PLAN  | This is a summary of the programme and activities that will eliminate the risk or reduce it to an acceptable level. Progress of the defined treatment Risk Mitigation  |  |  |  |  |
| PLANNED DUE DATE   | Planned/estimated date of completion, if not planned write N/A   |  |  |  |  |
| IMPACT   | Impact (Consequence) – If something bad were to occur, what would be the consequences to the organization?   |  |  |  |  |
| LIKEHOOD   | Likelihood (Probability) – What is the probability that something bad could occur?   |  |  |  |  |
| EXPOSURE   | For businesses, technology risk is governed by one equation: Risk = Likelihood x Impact. This means that the total amount of risk exposure is the probability of an unfortunate event occurring, multiplied by the potential impact or damage incurred by the event. |  |  |  |  |
| VERIFICATION PROGRESS OF<br>THE ACTION PLAN<br>(OR FURTHER ACTION) | Record of a brief statement on the achievements, reasons for any delay to the Action Plan and recovery activities (e.g. Risk Acceptance because of, etc.).   |  |  |  |  |
| STATUS RAG   | Red, Amber, Green indication of the status of the Action Plan.   |  |  |  |  |
| CLOSURE DATE   | Final Closure Date   |  |  |  |  |

### 2) SAFETY RISK ANALYSIS FOR AEROSPACE COMPONENTS

A Safety Risk Assessment Analysis for AEROSPACE Components (Products) in accordance with the DOA, in order to determine and evaluate the potential causes and hazardous consequences of a system's functional failures (at AC Level).

Ref. UNI EN 9100 Management of safety critical items: Aerosystems has defined and implemented a monitoring control plan for critical items identified through FMEA and safety analysis.

#### FF308 - AS-SMS-COHIRM COHIRM - Component Safety Assessment Risk Management Hazard Identification and Risk Mitigation

| AEROSYSTEMS PART NUMBER          | Manufacturer Part Number and Revision  |
|----------------------------------|--|
| CUSTOMER PART NUMBER             | Customer Part Number   |
| DESCRIPTION                      | Component Description  |
| CUSTOMER NAME                    | Customer Name  |
| TYPE                             | Component Type (COTS, VENDOR)  |
| AEROSYSTEMS DRAWING and REVISION | Manufacturer Drawing Number and Revision   |
| CUSTOMER DRAWING AND REVISION    | Customer Drawing Number and Revision   |
| STATUS OF TECHNICAL DATA         | Manufacturer Status completion ot Technical Data   |
| STATUS OF DOC.                   | Manufacturer Status completion ot Technical Documents  |
| STATUS OF APPROVAL               | Manufacturer Approved Technical Data   |
| CRITICALITY (CRIT)               | Customer Criticality Classification (from BOM)   |
| FUNCTION DESCRIPTION             | Customer Component Function Description (can be more than one - add rows as necessary)   |
| FUNCTIONAL FAILURE HAZARD (FHA)  | Customer Functional Hazard Analysis (FHA) is an inductive hazard<br>analysis method used to evaluate the potential causes and hazardous<br>consequences of a system's functional failures. |



## SAFETY MANAGEMENT SYSTEM

| Classification Severity Level<br>(C=Catastrophic, H=Hazardous, MJ=Major, MI=<br>Minor) | Customer Classification of Failure Condition. If no criticality/severity level<br>is shown for a given function, it shall be assumed that failure of the subject<br>function will reult "Minor" consequences at aircraft level. |
|--|---|
| REMARKS  | Customer Remarks (Observations)   |
| ASSUMPTIONS ON REMARKS   | Customer Assumptions on remarks   |
| RISK MITIGATION ACTION   | Insert planned Risk Mitigation Actions (measures)   |
| EVIDENCE   | Documented Evidence of the Mitigation Actions   |
| RESULT   | RAG (Red, Amber, Green indication of the status of the Action Plan (Closed, Running and Open)   |
| NOTES  | Verification of SCD Sheets and Available BOM  |

The risk assessment and the establishment of control measures are carried out according to the Safety Manual and transversal/cross process Quality Assurance Guideline "Risk and Change Management" GQ11 Risk Management.

### 3) SAFETY RISK ANALYSIS FOR MACHINERY AND WORK EQUIPMENT

A Safety Risk Assessment Analysis for the internal Manufacturing processes (Production) Machines and Equipment with specific analysis of hazards and risks, and determination of mitigations, in order to determine and evaluate potential causes and hazardous consequences of failures. Hazards arising from Machinery and other Work Equipment.

| MMERAR Manufacturing Machines and Equipment Risk Analysis and Register |  |  |  |  |
|--|--|--|--|--|
| RISK ITEM NR<br>Hazard Item Number                                     | Unique Hazard (Risk) Identification Number   |  |  |  |
| RISK TITLE<br>Hazard Title   | The title should indicate the name of the Risk (Hazard) in a few words.         Risk Titles incudes (but not limited to):         Machine Position, Machine Manual (Documentation), Warning Visual Information, Rotating Parts, Electrical Emergency Stop, Machine Keys, Cutting Parts, Sharp Edges, Electrical Hazard, Therma |  |  |  |
| RISK DESCRIPTION CAUSE<br>Hazard Description                           | <ul> <li>Hazard, Training, Noise Hazard, Weight Nameplate, other specific hazard.</li> <li>This field describe a risk and the eventual cause.</li> </ul>   |  |  |  |
| HAZARD GROUP   | The Hazard Group defines the Risk Family   |  |  |  |
| TYPICAL HARM SCENARIO  | This field describe the Typical Harm Scenario  |  |  |  |
| POTENTIAL CONSEQUENCES - NEGATIVE<br>EFFECT                            | This field describe the Potential and/or Consequences (Negative effect)  |  |  |  |
| RISK IMPACT  | Predefined Value (1 to 4) Risk Impact  |  |  |  |

Probability

FF309 - AS-SMS-MMERAR

**RISK CRITICALITY AND PRIORITY LEVEL (RISK** 

**RISK PROBABILITY** 

**RISK TREATMENT** 

RAG)

Subjective view of the probability of occurrence (1=low 4=high)

Evaluation for each Risk (risk Criticality) Risk Criticality is a figure derived from the multiplication of the Impact and Probability factors

Description of Risk Treatment to be performed



## SAFETY MANAGEMENT SYSTEM

| ACTION PLAN   | This is a summary of the programme and activities that will eliminate<br>the risk or reduce it to an acceptable level. Progress of the defined<br>treatment Risk Mitigation   |
|---|---|
| PLANNED DUE DATE  | Planned/estimated date of completion, if not planned write N/A  |
| ІМРАСТ  | Impact (Consequence) – If something bad were to occur, what would be the consequences to the organization?  |
| LIKEHOOD  | Likelihood (Probability) – What is the probability that something bad could occur?  |
| EXPOSURE  | For businesses, technology risk is governed by one equation: Risk =<br>Likelihood x Impact. This means that the total amount of risk<br>exposure is the probability of an unfortunate event occurring,<br>multiplied by the potential impact or damage incurred by the event. |
| VERIFICATION PROGRESS OF THE ACTION<br>PLAN (OR FURTHER ACTION) | Record of a brief statement on the achievements, reasons for any delay to the Action Plan and recovery activities (e.g. Risk Acceptance, etc.).   |
| STATUS RAG  | Red, Amber, Green indication of the status of the Action Plan.  |
| CLOSURE DATE  | Final Closure Date  |

## 4) SAFETY RISK ANALYSIS FOR PRODUCT SAFETY

A Safety Risk Assessment Analysis related to Product Safety in order to verify the state in wich a product is able to perform to its desiged or intended purpose without causing unacceptable risk of harm to persons or damage property with specific analysis of hazards and risks, and determination of mitigation actions:

- Aerosystems is committed to the design and manufacture of products in a safe and compliant manner, and the company conduct regular assessments to verify that the products continue to meet applicable safety, compliance, and regulatory requirements.
- Adherence to applicable regulatory requirements and to product safety and quality expectations is a core element of the design phase of new and updated products and is tested through relevant development stages to ensure compliance prior to product launch.

## Product Safety – UNI EN 9100 Citations

The state in wich a product is able to perform to its desiged or intended purpose without causing unacceptable risk of harm to persons or damage property (9100 – 9110).

Maintaining the state of product so that it is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage property (9120).

UNI EN 9100 Definition – 3.4 The state in wich a product is able to perform to its desiged or intended purpose without causing unacceptable risk of harm to persons or damage property

UNI EN 9100 Clause 7.3g – Awareness: The organization shall ensure that persons doing work under the organization's control are aware of their contribution to product safety.

UNI EN 9100 Clause 8.1a – Operational Planning and Control: The organization shall plan, implement, and control the processes needed to meet the requirements for the provision of products and services, and to implement the actions determined in clause 6 by determining the requirements of products and services that should include considerations of: Personal and Product Safety.

UNI EN 9100 Clause 8.1b - Operational Planning and Control: The organization shall plan, implement, and control the processes needed to meet the requirements for the provision of products and services, and to implement the actions determined in clause 6 by establishing criteria for: Design Verification (Reliability, Maintainability and Product Safety).



## SAFETY MANAGEMENT SYSTEM

UNI EN 9100 Clause 8.1.3 – Product Safety: The Organization shall Plan, implement and control the processes to ensure product safety during the product life cycle as appropriate to the company and the product. Example of these processes include: hazard identification, management of associated risks, management of safety critical items, analysis and reporting of occurred safety-related events, safety training of staff.

UNI EN 9100 Clause 8.4.3 – Information for External Providers: The Organization shall ensure the adequacy of requirements prior their communication to external provider. The Organization shall communicate to external providers its requirements for: their contribution to product safety.

#### FF311 - AS-SMS-PROSHIRA

PROSHIRA Product Safety Hazard Identification and Risk Analysis

| AEROSYSTEMS PART NUMBER   | AEROSYSTEMS Part Number   |
|---|---|
| CUSTOMER PART NUMBER  | Customer Part Number  |
| DESCRIPTION   | Description   |
| PROBABILITY   | ELIMINATED, LOW, MEDIUM, SERIOUS, HIGH  |
| PROBABILITY LEVELS (Product Safety Level)                       | ELIMINATED, LOW, MEDIUM, SERIOUS, HIGH<br>(from 0 to 20)  |
| SEVERITY (Category)   | NEGLIGIBLE, MARGINAL, CRITICAL, CATASTROPHIC<br>(from 1 to 4)   |
| SEVERITY (Levels)   | NEGLIGIBLE, MARGINAL, CRITICAL, CATASTROPHIC<br>(from 1 to 4)   |
| RISK ASSESSMENT   | PROBABILITY, FREQUENT, PROBABLE, OCCASIONAL, REMOTE,<br>IMPROBABLE, ELIMINATED  |
| RISK LEVELS   | from 0 to 20  |
| RISK NAME (IDENTIFICATION)                                      | A brief description for the Risk to be identified   |
| RISK MITIGATION (MEASURES)                                      | A planned Risk Mitigation actions (measures)  |
| RISK TREATMENT  | Risk Treatment to be performed MANUAL   |
| ACTION PLAN   | This is a summary of the programme and activities that will eliminate the risk or<br>reduce it to an acceptable level. Progress of the defined treatment Risk<br>Mitigation |
| PLANNED DUE DATE  | Planned/estimated date of completion, if not planned write NONE   |
| VERIFICATION PROGRESS OF THE ACTION PLAN<br>(OR FURTHER ACTION) | Record of a brief statement on the achievements, reasons for any delay to the Action Plan and recovery activities.  |
| STATUS RAG  | Red, Amber, Green indication of the status of the Action Plan (Closed, Running and Open)  |
| LESSON LEARNED ALLISS (Reference)                               | Lesson Learned Reference to ALLIS   |
| CLOSURE DATE  | Final Closure Date  |
|   |   |

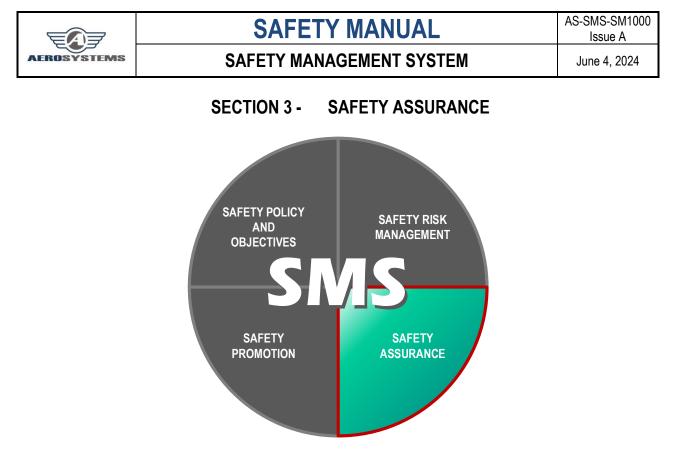


## SAFETY MANAGEMENT SYSTEM

## 6.2.3. THE MANAGEMENT OF CHANGE

As part of the safety assurance activities of the Safety Management System (SMS), Aerosystems has developed and maintains a formal process to manage the change, which includes:

- Identify changes within Aerosystems that may affect the level of safety risk associated with products (or services), as well as established processes, procedures and services by inserting in the ECO Engineering Change Order (FF53 A ECO Engineering Change Order) a specific point of Safety Control of Change;
- Establish the measures adopted to ensure the effectiveness of safety before implementing any change by the use of a specific **a**
- Eliminate or modify safety risk controls that are no longer necessary or effective, due to changes or modifications in the operational environment; and
- Apply the safety risk management process for any planned change to be made.



## 6.3. SAFETY ASSURANCE

Aerosystems has developed and maintains formal processes to verify the safety performances of our organization, achieve the objectives for the risks control, as well as the investigation of events that do not require to be investigated by the Aviation Authorities to identify the causes of the possible low efficiency of the Safety Management System (SMS), its implications and eliminate the causes.

The monitoring of safety performance is made according to the performance indicators which are related to the objectives, goals and action plans of Aerosystems including a range of indicators of both high impact and low impact. The safety performance monitoring and measurement includes:

- Safety Reports;
- Safety Studies;
- Safety Reviews;
- Safety Audits;
- Safety Investigations.

As part of the monitoring and performance measurement system in terms of safety and being a core activity of the Safety Management System (SMS), internal evaluations or self-audits and internal audits are carried out periodically through the "Safety Audit Annual Plan", taking into consideration the following:

- Internal evaluations or self-audits of each of the activities, processes or operational procedures are conducted and are conducted by those responsible for the technical operational processes.
- Internal audits are carried out with duly qualified internal auditors.

The records of all audits must be kept for at least 24 months from the date of the last audit, in the case of the self-audits carried out, they must be sent to the Safety Manager for purposes of updating the base of the audit and the statistics and procedures of the Safety Management System (SMS).

Identify the causes of low efficiency of the Safety Management System (SMS), determine the implications in their operations and eliminate such causes. (*Source: SMS SM-0001 Standard*).



## 6.3.1. SAFETY PERFORMANCE MONITORING AND MEASUREMENT

(Source: SMS SM-0001 Standard).

## 6.3.1.1. RESPONSIBILITY REGARDING CONTRACTED ACTIVITIES

Our organization makes sure to control externally contracted activities by identifying them with the support of the Supplier Evaluation Process or the Risk Management Matrix and the Contracted Activities Control.

Aerosystems ensures that our Safety Management System (SMS) interacts effectively with safety systems or subcontractors that provide products or services relevant to the safe operation of the (components) aircraft, likewise in this way we assume responsibility for the safety performance of the products or services provided by subcontractors that do not require the acceptance of a Safety Management System (SMS).

The interface between our Safety Management System (SMS) and the safety system of the contracted subproduct or sub-service provider includes the identification of hazards, risk assessment and the development of risk mitigation strategies, as appropriate.

Aerosystems shows the control of our suppliers by keeping records that show that this was done. These records can be of different types depending on the type of control.

Aerosystems guarantees that:

- It has established the flow of responsibility and authority for safety between the service provider and the subcontractor; by communicating and updating the AS-QRS-01- Quality Requirements for Aerosystems Suppliers (that includes Safety Requirements) available on Aerosystems Website under the Supplier Portal.
- 2) The subcontractor has a safety notification system; all Aerosystems subcontractors can use:
  - the Website Supplier Portal
  - the AORS AEROSYSTEMS OCCURRENCE REPORTING SYSTEM
  - or the SOAR Safety Occurrence Alert System
  - and the AEROSYSTEMS SAFETY PORTAL
- 3) This system must be commensurate with its scope and complexity.
- 4) The SAG of Aerosystems includes the representation of the subcontractor, as applicable;
- 5) Safety / Quality indicators have been created to monitor the performance of the subcontractor, as appropriate; One specific Safety Indicator is integrated in the SPI Supplier Performance Index with the name of SSI Supplier Safety Index that it is calculated on the basis of the presence of safety issues, events, or occurrences.
- 6) The Safety Promotion Process ensures that the subcontractor's employees have the corresponding safety communications from Aerosystems; by communications from **Aerosystems Website Supplier Portal** and,
- Any role, responsibility and function of the relevant subcontractor has been developed and tested for Aerosystems ERP.



## 6.3.2. THE MANAGEMENT OF CHANGE

#### (Source: SMS SM-0001 Standard).

Aerosystems has developed and maintains formal processes to achieve the continuous improvement of the Safety Management System (SMS), to identify the causes of low efficiency of the System, determine the implications in its operations, and eliminate such causes.

Aerosystems as part of the safety assurance activities of the Safety Management System (SMS), has developed and maintains the formal processes to identify the causes of a poor performance with respect to the Safety Management System (SMS), determine the consequences of these deficiencies in their operations, and rectify situations by eliminating the identified causes to achieve the continuous improvement.

The continuous improvement of the Safety Management System (SMS) includes:

- Proactive evaluations of facilities, equipment, documentation and procedures to verify the effectiveness of safety risk control strategies;
- Proactive evaluation of the efficiency of individuals, to verify compliance with safety responsibilities;
- A reactive evaluation to verify the effectiveness of risk control and mitigation systems, for example: investigations of accidents, incidents and significant events; and
- A predictive evaluation, studying and analyzing reactive, proactive and external elements; anticipating incidents or accidents.

For the above Aerosystems has the following processes:

- Risk and Change Management.
- Hazard identification.
- Internal Investigations.
- Implementation of Actions.

See also POE and MOE for relevant MOC requirements.

In addition, Aerosystems evaluates the System periodically through the review by the Safety Review Committee of the Safety Control Board, leaving the activity recorded in the Minutes of the SMS Review Meeting (Impact of Changes).

The following describes the Management of Change Process.

| MANAGEMENT OF CHANGE PROCESS |  |   |  |   |   |   |  |
|------------------------------|--|---|--|---|---|---|--|
|                              | INITIATION                               |   | PLANNING   |   | EXECUTION                                     |   | MONITORING   |
| 1                            | Describe the scope of the change         | 3 | Develop and<br>agree an<br>assurance plan<br>for changes | 5 | Develop a risk<br>management<br>strategy      | 7 | Monitor and verify<br>the performance<br>of the system |
| 2                            | Describe the safety impact of the change | 4 | Develop a<br>supporting<br>communications<br>plan        |   | Develop, agree<br>and implement<br>the change |   |  |



|                | BEST PRACTICES FOR MANAGEMENT OF CHANGE PROCESS  |  |  |  |  |
|----------------|--|--|--|--|--|
|                | INITIATION STAGE   |  |  |  |  |
| 1              | Describe the scope of the change, including why the change is taking place and how it aligns with organizational goals and plans.  |  |  |  |  |
| 2              | Describe the safety impact of the change to the product and services. Establish a baseline safety performance and identify an initial set of indicators to measure the impact of the change. This should also consider the individuals and organizations affected. |  |  |  |  |
| PLANNING STAGE |  |  |  |  |  |
| 3              | Develop and agree on assurance plan for change, including identifying rolesand responsibilities of individuals and organizations that will be affected by the change.  |  |  |  |  |
| 4              | 4 Develop a supporting communications plan to increase awareness and acceptability of the change. This will encourage people to 'buy in' to the change.  |  |  |  |  |
| EXECUTIONSTAGE |  |  |  |  |  |
| 5              | Develop a risk management strategy encompassing the outcomes of previous activities and assess the safety risk against the risk tolerability levels.   |  |  |  |  |
| 6              | Develop, agree and implement the changes and associated actions to mitigate safety risk.   |  |  |  |  |
|                | MONITORING STAGE   |  |  |  |  |
| 7              | Monitor and verify the performance of the system during the implementation of the change and once it is complete, to determine the effectiveness of the risk management strategy and the success of the change.  |  |  |  |  |

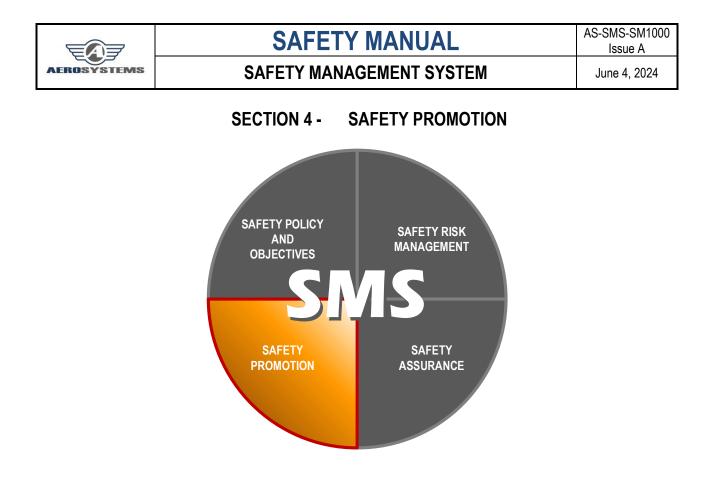
For the MOC the model is used is Aerosystems\_Moc\_report\_draft.doc for risk analysis, mitigation and management.

## 6.3.3. CONTINUOUS IMPROVEMENT OF THE SMS

#### (Source: SMS SM-0001 Standard).

Aerosystems has developed and maintains a formal process for the Continuous Improvement of the SMS considering safety performance measurements and defining continuous improvement actions for the SMS. Aerosystems ensure that:

- Analysis of data at the organizational level is done to establish an action plan.
- Improvement actions are collected and implemented.
- Best practices and lessons learned are considered to improve the SMS. Furthermore, these best practices should be disseminated across the organization through safety promotion activities (and the use of the sytems named ALLIS – Aerosystems Lesson Learned Information Sharing System).



## 6.4. SAFETY PROMOTION

Safety Promotion utilizes various methods to supplement the organization's policies, procedures, and processes to provide an enduring value system and enable a robust safety culture within the organization.

# Safety promotion consists of training, and communication elements, in order to enable the dissemination of safety information and support the implementation, operation and continuous improvement of the SMS.

Aerosystems has developed and maintains a formal safety and communication activities training to create an environment where safety objectives can be achieved. This section details how the organization promote, train and communicate safety to the personnel.

# 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 Aerosystems' 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 SMS, shall address the following main tasks:

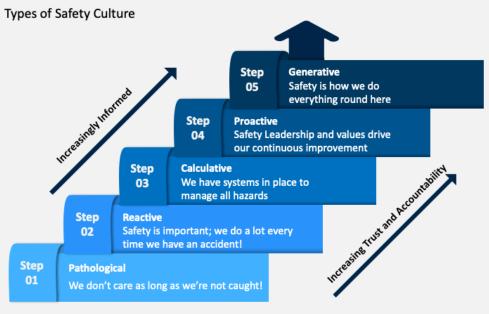
#### Training and Education Communication of safety information

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.







Safety Maturity Model



Safety Culture Wheel



## 6.4.1. SAFETY TRAINING AND EDUCATION

(Source: SMS SM-0001 Standard).

Aerosystems has developed and maintains a formal safety training program that guarantees that the personnel has the instruction and competencies necessary to carry out their functions within the framework of the Safety Management System (SMS).

The scope of the safety training program is appropriate for the type of participation that each person has in the Safety Management System (SMS). And it is independent of the company's training program.

Aerosystems has ensured that its Accountable Manager has received instruction in safety knowledge regarding:

- Safety policy and objectives;
- Functions and responsibilities in the SMS; and
- Safety Assurance.

RIF. point 3.13.6.2 on POE and point 3.13 on MOE.

### 6.4.1.1. RECORDS OF THE EXECUTION OF AEROSYSTEMS TRAINING PROGRAM

The training program of Aerosystems record the records of its execution and includes:

- Initial Indoctrination.
- Recurrent training.
- Promotion instruction.
- Self Information Knowledge on HSE Health Safety and Environment (available for all employees on Aerosystems Website).
- Emergency Drills (See the ERP).

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

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

## 6.4.1.2. CONTENTS OF AEROSYSTEMS TRAINING PROGRAM

The training program contains:

- Safety policies, objectives and goals of Aerosystems;
- Safety Manual;
- ERP Emergency Resposne Plan;
- Safety functions and responsibilities;
- Basic principles of safety risk management;
- Safety notification systems;
- Safety assurance activities;
- Safety information communication lines;



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- Just Safety Evaluation Quiz;
- Personnel SMS Interviews;
- Emergency Drills.

These includes as part of the training program, their respective validation activities, that measure the effectiveness of the training.

The training is carried out according to the "Safety Training" process and the performance is evaluated according to the "Competency Evaluation" process and is carried out according to the transversal/cross process Quality Assurance Guideline GQ05 Knowledge Management.

## 6.4.2. SAFETY COMMUNICATION

#### (Source: SMS SM-0001 Standard).

Aerosystems, as part of Safety Promotion activities, has developed and maintains means for Safety Communication to ensure that personnel are fully aware of the Safety Management System (SMS).

A safety communication process has been developed that guarantees full knowledge of the Safety Management System (SMS) in accordance with the position it occupies. Critical safety information is disseminated in which it explains why measures are taken and safety procedures are introduced or modified through generic safety information.

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

## 6.4.3. FORMAL MEANS OF SAFETY COMMUNICATION

Aerosystems SMS Organization maintains 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 Aerosystems 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.

Formal means of communication of Safety of Aerosystems:

• A specific webpage is available for internal and externals (Employees, Suppliers, Customers and any other Stakeholder) with all Safety Contents on Aerosystems Website: **AEROSYSTEMS SAFETY PORTAL** 

The scope of the **AEROSYSTEMS SAFETY PORTAL** is to share in one place the results of the statistical analysis of the safety data collected in the AORS Aerosystems Occurrence Reporting System and for other safety issues.

- The Aerosystems Safety Portal include a Voluntary Occurrence Reporting (VOR) Form for reporting safety issues to the company.
- The form is an anonymous and confidential\* employee reporting system to capture safety concerns.
- The portal provides criteria for reporting safety issues, noncompliance findings, nonconformities and occurrences.



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- The portal encourages promotion of reporting and exchange / sharing of safety data; proactive employee participation in product/aviation safety and hazard reporting;
- The portal has specific section tho show company safety reporting policies confidentiality, "non-punitive".
- The portal assures open and proactive reporting of potential and identified safety hazards from internal and external sources and enterprise-wise responsiveness to proactively assess and address.

NOTE: Feedback by the receiving company to the originator of the voluntary reporting is compulsory; a feedback is granted to the originator.

NOTE: Aerosystems transfer its own model/tool of voluntary reporting to the organization without an SMS establishing an open communication channel (eg. Suppliers);

The formal means of communication of safety of Aerosystems include, among others:

- Bulletins; Text (e.g., newsletter, email);
- Visual media (e.g. posters, short videos);
- Crew or team briefings;
- Notice circulars;
- Official publications;
- Aerosystems Site or Web pages;
- Intranet;
- Internal magazines; and
- Posters or billboards.

The safety communication is made according to the process " Safety Communication".



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## SECTION 7 - INTERFACES BETWEEN ORGANIZATIONS

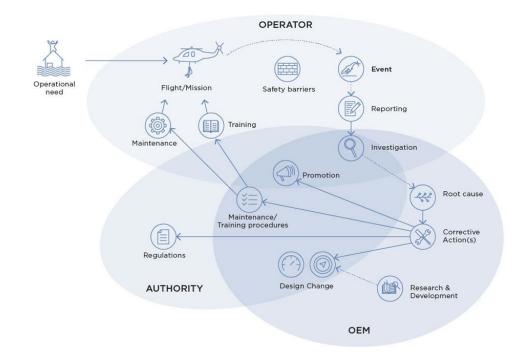
## 7. INTERFACES BETWEEN ORGANIZATIONS

(Source: SMS SM-0001 Standard).

#### 7.1. INTERFACE PRINCIPLES

(Source: SMS SM-0001 Standard).

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



#### 7.2. TYPES OF INTERFACES

The following paragraphs describe examples of interfaces, which may be considered.

The interfaces between organizations can be expressed:

- Externally with separate Companies;
  - o having implemented an SMS (e.g. operators, PO, MO);
  - o not having implemented an SMS;
- Externally with Aviation Authorities as required by applicable regulations.

NOTE - Externally with Aviation Authorities: As required by applicable regulation, certain information may need to be provided to the Authority by the organization. However, Aviation Authorities may receive from other channels (operators, other National Aviation Authorities, various entities under their jurisdiction) valuable information related to the safety of a product or they may have access to generic safety data (e.g., recommendations from official investigation bodies). These may be potential sources of information for the organizations. (Source: SMS SM-0001 Standard).



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## 7.2.1. COLLABORATION

Safety requires collaboration with all stakeholders. Aerosystems is an active partner in all the main ambitions and contexts involved in promoting safety and a proactive player in numerous initiatives in ours.

This collaboration allows to always be updated on the latest developments on the subject and guarantees full involvement in all the most important national and international discussions and projects that aim to promote and improve safety.

The collaborative approach places safety at the heart of Aerosystems' operations and those who use its products.

#### AEROSYSTEMS and EASA

The <u>EASA Rotorcraft Together4Safety</u> project aims to update the helicopter community with all the latest safety related news, information and recommendations. Joining the relevant Community Area allows you to receive updates via email notifications. Aerosystems is an active partner of Together4Safety and helps generate and review the content. Sharing information and best practices is a key element in improving flight safety.

#### **AEROSYSTEMS and ENAC**

The **ENAC "Safety Portal"** is updated yearly with the Safety Report, which summarizes the result of the analysis of the safety data collected with particular regard to the trend of the Safety Performance Indicators (SPI). The Safety Report has been made available online, in the form of a web portal (Safety Portal) to allow easier consultation both from a PC and on a tablet/mobile phone. Furthermore, thanks to this design choice, the Safety Report can be promptly enriched whenever new safety analyzes are available without having to wait for the annual publication cycle of the paper document. In addition to the SPI trend, other data analyzes relating to dangerous goods, unruly pax, unreliable airspeed and clear air turbulence events were introduced. In the individual pages of the safety data analysis - where available - useful links to related safety promotion material have also been included.

The new <u>European Occurrence Reporting System ECCAIRS</u>, developed by EASA on a mandate from the European Commission, definitively replaces the ENAC eE-MOR system, which will still remain accessible for consultation to already registered users.

#### **AEROSYSTEMS and EHA**

The <u>European Helicopter Association (EHA)</u> is a non-profit association which represents the interests of helicopter operators in European and international institutions. It provides support to the European Aviation Safety Agency (EASA) and to all major European and international agencies and institutions in the sector: the European Defense Agency (EDA), the European Commission (EC), the European Parliament (EP), Eurocontrol, the SESAR Joint Undertaking (SJU), the Joint Regulators for Remotely Piloted Systems (JARUS), the International Civil Aviation Organization (ICAO), the International Partnership Program (IPP), etc.

The EHA influences safety standards and the growth of the European aviation industry, creating new opportunities for its members. Aerosystems is a registered user of EHA with which it shares the primary objective of improving helicopter safety through newsletters.

Aerosystems maintain and updates a register named « ORA Occurrence Reporting Advisor » with all above subscriptions and all data of Aerosystems registered users.



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## 7.3. TYPE OF INFORMATION EXCHANGED

Again, depending on the organization, many safety related information exchanges may be considered.

## 7.3.1. SAFETY POLICY AND OBJECTIVES

When considered appropriate, safety policies and objectives may be shared between interfacing organizations to facilitate a better understanding of SMS approaches. Such an exchange is normally for information only, as policies and objectives are mostly specific to each organization, and if any particular aspects are to be managed across the interface, these will be <u>covered in contractual arrangements described in 7.1</u> to ensure consistent SMS approaches.

### 7.3.2. 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 e.g. LHD) 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).

## 7.3.3. 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.

Safety performance is considered in the assessment of suppliers (for initial qualification and/or continuous monitoring) and represent a contractual requirement for each of them. (Ref. AS-QRS-01)

## 7.3.4. SAFETY PROMOTION

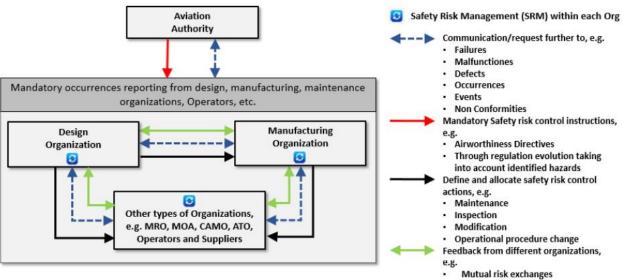
Safety promotion principles and priorities are shared between interfacing Organizations to ensure consistent SMS approaches (e.g. regular sharing of safety policies, top safety objectives and risks, best practices).

## 7.3.5. EXAMPLE OF INTERFACES BETWEEN ORGANIZATIONS FOR PRODUCT SAFETY

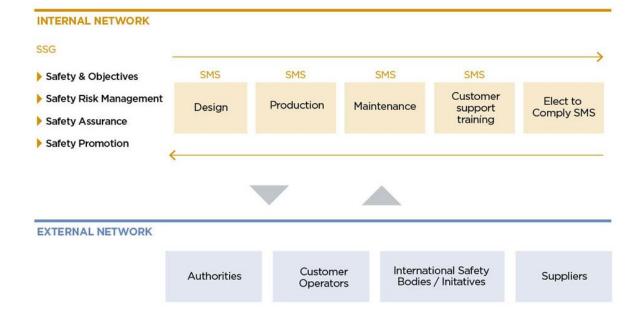
The following Figures depicts general cases of possible exchange of data between interfacing organizations. The interface applies both proactively and reactively.



#### AS-SMS-SM1000 **SAFETY MANUAL** Issue A SAFETY MANAGEMENT SYSTEM



- **Best practices** 2
- Lessons learnt





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#### 7.4. LIMITATION OF INFORMATION FLOW

Although it is desirable that organizations work collaboratively through their interfaces, in order to better identify their inherent hazards (and possibly detect emerging ones), assess associated safety risks and develop mitigations, there is a need for guidelines on limitations to be applied to the flow of information.

In a world with increased interactions between a large number of stakeholders in aerospace, unlimited exchanges with an obligation of reciprocity, hold the threat of generating multiple inquiries, over multiple links, thereby increasing the level of "unnecessary noise". More specifically, the flow of information queries, both up and down, along single or even multiple-tier supplier arrangements needs to be properly controlled.

SMS is dealing with the inner working of each organization and it may not be necessary or useful to propagate all hazard and risks analyses across interfaces: at some point it is sufficient to know that the risk is assessed and controlled by the relevant people.

The level and details of data exchanges should be adapted and commensurate to the complexity and safety risks of the products, services and interfacing organizations. It also should be adapted to the maturity of each organization with regard to safety management.

For interfaces between supplier and customer, a level of definition of the interface requirements is expected to be included in contractual arrangements. An organization is not required to justify hazard identification and decide risk control actions beyond its obligations in order to avoid interfering situations.

Exchange and management of safety or SMS data exceeding the needs for continued airworthiness should be agreed upon between organizations and documented. This should prevent excessive system interaction between organizations (e.g., an operator in the context of its own SMS requesting to audit a TC holder's SMS).

(Source: SMS SM-0001 Standard).

#### 7.5. SAFETY INTERFACE DOCUMENTATION

When relevant, the interface between organizations for safety management should be documented and maintained.

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 (DO-PO)
- Policy
- **Quality Assurance Plan**
- Other documents

This documentation can contain the following elements for the interfacing topics and activities:

- Organization and responsibilities (e.g., rights and duties to report issues, defects or occurrences, accountabilities and ownership for hazard identification and risk control, clear identification of interfacing focal points);
- Processes and deliverables descriptions (directly or indirectly through cross-reference to procedures); •
- Criteria for reporting safety issues, noncompliance findings, nonconformities and occurrences. These criteria should focus on early communication of safety occurrences and potential safety issues;
- Agreed means for timely safety issue reporting between organizations;
- Periodic reviews of the interface.



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## SECTION 8 - SMS IMPLEMENTATION

## 8. SMS IMPLEMENTATION PLAN

## 8.1. GENERAL

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

Pre-requisite is that the AM Accountable Manager of the SMS is identified, and the relevant SM Safety Manager is appointed.

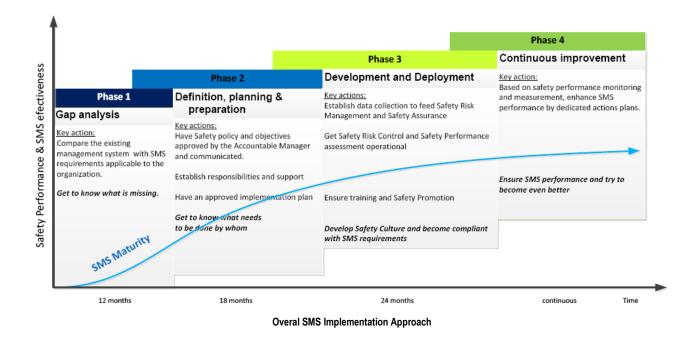
The SM shall be responsible for developing the implementation plan and shall deploy the SMS on behalf of AM.

- Step by Step Implementation Process
- Identification of SMS structure and architecture;
- Safety Policy published (according to the Company's guide lines and Function's peculiarities);
- Safety Objectives published;
- Gap Analysis (following SMS proposed scheme plus possible peculiarities);
- Implementation ROM Costs evaluation: initial and recurrent with budget allocation;
- Implementation Plan definition (AM approval required):
  - o Address identified gaps resulting from phase 1, by defining actions and responsibilities;
  - o Include tasks, activities, check points, timelines and milestones;
  - Address coordination with interfacing organizations, where applicable.
- Safety Manual preparation;
- SMS Procedural Documentation plan identification and preparation (according to Aerosystems guidelines);
- Verification and Identification of SMS peculiarities and introduction in the Safety 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;
- Risk Assessment and mitigation measures identification and definition;
- SMS structure definition (names and roles) and dissemination;
- Safety Promotion: Training plan for SMS personnel (according to Aerosystems guidelines)
- Safety Promotion: Training plan for Function's personnel, including new entries (internal and external, according to Aerosystems 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;
- Safety Assurance: Safety Performance Index matrix creation;
- ERP definition (if applicable and according to Aerosystems guidelines and local requirements);
- 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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## 8.2. IMPLEMENTATION PLAN



#### (Source: SMS SM-0001 Standard)

Aerosystems, for the purpose of above implementation phases has issued an Implementation Plan named **AS-SMS-GAP - SMS GAP ANALYSIS CHECKLIST AND IMPLEMENTATION PLAN** to be used and updated during all the deployment of the SMS.

The Implementation Plan include:

- Instructions;
- Company Description;
- GAP Analysis with actions and responsibilities;
- Management of the Transition Phase;
- General Implementation Plan Include timelines and milestones;
- Approvals (endorsement) by the Accoutable Manager, the Quality Assurance manager and the Safety Accountable Manager;
- Development and Deployment;
- SMS Readiness Assessment;
- Continuous Improvement.



## SAFETY MANAGEMENT SYSTEM

## 9. SUPPORTING REFERENCE DOCUMENTATION

The following documents have been considered during the development and update of this standard:

- SMS SM-0001 International Industry Standard, Revision B dated 31 March 2022.
- EU regulation No 2018/1139 (for basic safety aspects);
- EU regulation No 376/2014 (for reporting aspects) and ASD Just Culture declaration.
- EU regulation No 2021/1963 amending Regulation (EU) No 1321/2014 as regards safety management systems to be established by maintenance organizations (Part 145);
- EU regulation (EU) No 2022/201 amending Regulation (EU) No 748/2012 as regards safety management systems to be established by design and production organizations (Part 21);
- International Standards (EN/AS9100 & EN/AS9110, ISO 31010);
- ENAC State Plan for Aviation Safety, 2021-2025 edition
- ENAC Safety Performance Indicators 2nd edition, July

Other support documents:

- ICAO Annex 19, Second Edition-Amendment 1 effective July 2016;
- ICAO Annex 13 (Amendment 18, effective July 2020);
- Safety Management Manual (Doc 9859 4th edition published October 2018);
- Safety Management International Collaboration Group (SMICG) documentation (e.g. SMS evaluation tool, riskbased decision, SMS terminology);
- FAA 14 CFR Part 5
- GAMA/AIA outcomes on SMS for D&M organizations starting with the AIA NAS9927 (1st issue dated May 31, 2016), including the FAA documentation on SMS in other domains;
- ISO/IEC Directives Part 2 Principles and rules for the structure and drafting of ISO and IEC documents.
- State Safety Programme Italy, 4th edition



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# 10. CROSS REFERENCE / COMPLIANCE MATRIX BETWEEN SM-0001 AND AEROSYSTEMS SAFETY MANUAL

| SM-0001 Issue B – March 31, 2022<br>Implementing a Safety Management System in Design,<br>Manufacturing and Maintenance Organizations | Aerosystems<br>AS-SMS-SM1000 Safety Manual   |
|---|--|
| 1 Introduction  | 5 Executive Summary  |
| 2 Scope of the Standard   | 5.1 Scope  |
| 3 Supporting Reference Documentation  | 9 Supporting Reference Documentation   |
| 4 Terms and Definitions   | 4 Definition, Glossary   |
| 4.1 Terms   | 4 Definition, Glossary   |
| 4.2 Definitions   | 4.2 Definitions  |
| 5 Applicable Requirements   | 5 Executive Summary  |
| 6 Understanding and Means of Compliance with SMS Requirements   | 5.2 Safety Management Plan<br>5.3 Concept of Safety, SMS and relationship with QMS<br>5.4 Applicability of the Company Safety Manual<br>5.5 Framework<br>5.6 SMS Components<br>5.6.1 Safety policy and Objectives<br>5.6.2 Safety Risk Management<br>5.6.3 Saferty Assurance<br>5.6.4 Safety promotion |
| 6.1 Safety Policy and Objectives  | 6 Safety Policy and Objectives   |
| 6.1.1 Management Commitment   | 6.1.1 Management Commitment  |
| 6.1.1.1 Safety Policy   | 6.1.1.1 Safety Policy  |
| 6.1.1.2 Safety Objectives   | <ul><li>6.1.1.2 Safety Objectives</li><li>6.1.1.3 Aerosystems Safety Objectives</li><li>6.1.1.4 From Safety Policy to Objectives to Indicators</li><li>6.1.1.5 Safety Just Culture</li></ul>   |
| 6.1.2 Safety Accountability and Responsibilities  | 6.1.2 Safety Accountability and Responsibilities   |
| 6.1.3 Appointment of Key Safety Personnel   | 6.1.3 Appointment of Key Safety Personnel<br>6.1.3.1 Groups managing the safety of Aerosystems<br>6.1.3.2 Safety Action Group (SAG)  |
| 6.1.4 Coordination of Emergency response Planning   | 6.1.4 Coordination of Emergency response Planning<br>6.1.4.1 Content of Emergency response Planning Document   |
| 6.1.5 SMS Documentation   | <ul><li>6.1.5 SMS Documentation</li><li>6.1.5.1 SMS Documentation</li><li>6.1.5.2 SMS Records – Controlled Documentation of the SMS</li></ul>  |
| 6.2 Safety Risk Management  | 6.2 Safety Risk Management   |
| 6.2.1 Hazard Identification   | 6.2.1 Hazard Identification  |
| 6.2.2 Safety Risk Assessment and Mitigation   | 6.2.2 Safety Risk Assessment and Mitigation  |
| 6.2.3 The Management of Change  | 6.2.3 The Management of Change   |
| 6.3 Safety Assurance  | 6.3 Safety Assurance   |
| 6.3.1 Safety Performance Monitoring and Measurement   | 6.3.1 Safety Performance Monitoring and Measurement<br>6.3.1.1 Responsibility Regarding Contracted Activities  |
| 6.3.2 The Management of Change  | 6.3.2 The Management of Change   |
| 6.3.3 Continuous Improvement of the SMS   | .3.3 Continuous Improvement of the SMS   |
| 6.4 Safety Promotion  | 6.4 Safety Promotion   |
| 6.4.1 Training and Education  | 6.4.1 Safety Training and Education<br>6.4.4.1 Records of the execution of Aerosystems training Program<br>6.4.4.2 Contents of Aerosystems training Program  |
| 6.4.2 Safety Communication  | 6.4.2 Safety Communication<br>6.4.3 Formal Means of Safety Communication   |
| 7 Interfaces Between Organizations  | 7 Interfaces Between Organizations   |
| 7.1 Interface Principles  | 7.1 Interface Principles   |
| 7.2 Types of Interfaces   | 7.2 Types of Interfaces<br>7.2.1 Collaboration   |
| 7.3 Type of Information Exchanged   | <ul> <li>7.3 Type of Information Exchanged</li> <li>7.3.1 Safety policy and objectives</li> <li>7.3.2 Safety Risk Management</li> <li>7.3.3 Safety Assurance</li> <li>7.3.4 Safety Promotion</li> <li>7.3.5 Example of Interfaces between organizations for product safety</li> </ul>                  |
| 7.4 Limitation of Information Flow  | 7.4 Limitation of Information Flow   |
| 7.5 Interface Documentation   | 7.5 Safety Interface Documentation   |
|   | N/A  |
|   |  |
| 7.6 Corporate SMS Approach<br>8 SMS Implementation Plan   | 8 SMS Implementation Plan  |



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| 8.2 Implementation Plan  | 8.2 Implementation Plan                   |
|--|---|
| Appendix 1 Best practices for Safety Risk Management   | N/A                                       |
| Appendix 2 Example of SMS Maturity Assesment Method  | N/A                                       |
| Appendix 3 Example of Safety Policy and Safety Objectives  | N/A                                       |
| Appendix 4 Compliance with FAA 14 CFR Part 5   | N/A                                       |
| Appendix 5 Correlation Between ICAO Annex 19 app.2, SMS Standard,<br>IAQG 9100:2016 and IAQG 9110:2016 | N/A                                       |
| Appendix 6 Examples of Interface Management  | N/A                                       |
| Appendix 7 SMS Implemantation Strategies   | N/A                                       |
| Appendix 8 Acronyms  | 4.3. Glossary, Acronyms and Abbreviations |