



AEROSYSTEMS

REQUISITI DI SAFETY PER FORNITORI
SAFETY REQUIREMENTS
FOR SUPPLIERS



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DEFINITIONS

Safety

The state in which risks associated with aeronautical activities, whether directly supporting or related to aircraft operations, are reduced and controlled to an acceptable level.

Accident

An event associated with the operation of an aircraft that occurs between the time a person boards with the intention of flying and the time all persons have disembarked, in which:

- A person on board or on the ground suffers serious or fatal injuries.
- The aircraft sustains damage or structural failure.
- The aircraft is missing or completely inaccessible.

Hazard

A condition or object with the potential to cause or contribute to an Incident or Accident.

Incident

An event, other than a serious accident, associated with the operation of an aircraft that affects or could affect the safety of the operation.

Just Culture

A culture in which individuals are not punished for actions, omissions, or decisions made in line with their experience and training, but where gross negligence, willful violations, and destructive acts are not tolerated.

2. BASIC SAFETY CONCEPTS

DEFINITIONS

Safety

Concept of safety (ICAO Doc 9859)

Safety is the state in which the risk of harm to people or property is reduced and maintained at an acceptable level or below through a continuous process of hazard identification and risk management.



3. REGULATORY REQUIREMENTS



REGULATORY REQUIREMENTS

ENAC <https://www.enac.gov.it/sicurezza-aerea/flight-safety/safety-management-system/>

The European regulations have been issued for the implementation of ICAO Annex 19 in the domain of initial airworthiness (Design and Production) and continuing airworthiness (Maintenance).

Specifically, the following regulations have been issued for organizations:

- **EU Implementing Regulation 2021/1963, concerning Part 145.**
- **EU Implementing Regulation 2022/201, concerning Part 21.**

<p>DESIGN ORGANIZATIONS (DOA) AND PRODUCTION ORGANIZATIONS (POA)</p>	<p>With Regulation (EU) No. 2022/201 of December 10, 2021, amended by Regulation (EU) 2022/1253 of July 19, 2022, Safety Management System (SMS) requirements were introduced into Regulation (EU) 748/2012 for production and design organizations. Acceptable Means of Compliance (AMC) and Guidance Material (GM) have been provided by EASA and are available on the agency's website. For further details, please refer to the Safety Management System Implementation section.</p> 
<p>MAINTENANCE ORGANIZATIONS (PART 145)</p>	<p>With Regulation (EU) No. 2021/1963, Management System requirements were introduced into Regulation (EU) 1321/2014 for maintenance organizations approved under Part 145. These requirements have been applicable since December 2, 2022. acceptable Means of Compliance (AMC) and Guidance Material (GM) have been provided by EASA (ref. ED Decision 2022/011/R) and are available on the agency's website. While awaiting any specific guidance from ENAC, it may be useful to review the materials provided by EASA in FAQ No. 136745, which includes a guide outlining EASA's perspective on the transition of Part 145 maintenance organizations to the new SMS-inclusive requirements. For further details, please refer to the section Regulation (EU) 2021/1963 – Implementation Process of the Safety Management System (SMS) in AMO-145 Organizations.</p> 

4. INTRODUZIONE AL SMS

SAFETY MANAGEMENT SYSTEM (SMS), WHAT IS IT?

The Safety Management System (SMS) is a risk management and prevention system that promotes a positive safety culture and helps enhance the reliability levels within the aviation system.

The SMS involves all aspects of the company, helping to identify hazards related to its activities while managing and mitigating risks.

The implementation of SMS helps reduce operational costs while improving safety and compliance of the final product.



The European Regulation 748/2012 and its amendments (ref. Part 21 Subpart G) mandate the implementation of SMS for aerospace manufacturing companies, which must also extend its principles to their supply chain.

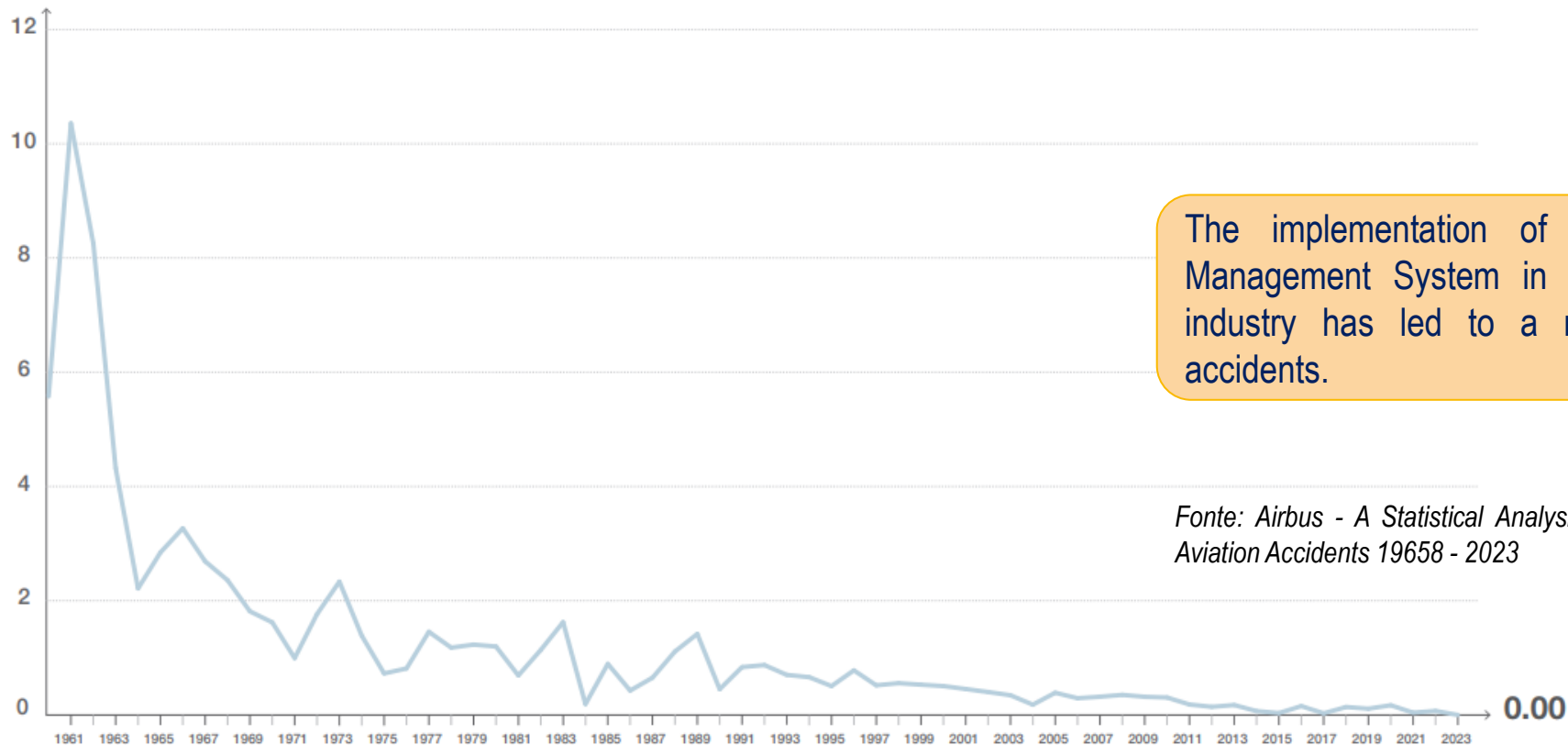


In compliance with the aforementioned regulation and its subsequent amendments, Aerosystems will implement the Safety Management System (SMS) within its production processes during 2024, also involving its supply chain in the organization's related policies.

SAFETY MANAGEMENT SYSTEM (SMS), WHY?

The SMS was introduced for air operators in 2012. Its extension to the manufacturing and maintenance sectors aims to further reduce the likelihood of fatal accidents.

Yearly fatal accident rate per million flights



The implementation of the Safety Management System in the aviation industry has led to a reduction in accidents.

Fonte: Airbus - A Statistical Analysis of Commercial Aviation Accidents 19658 - 2023

5. ICAO FRAMEWORK – THE PILLARS

ICAO FRAMEWORK – THE 4 PILLARS

Aerosystems' Safety Requirements are based on the framework of **Appendix 2 of ICAO Annex 19**, which has been fully adopted by the company. This framework includes four components and twelve elements that constitute 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

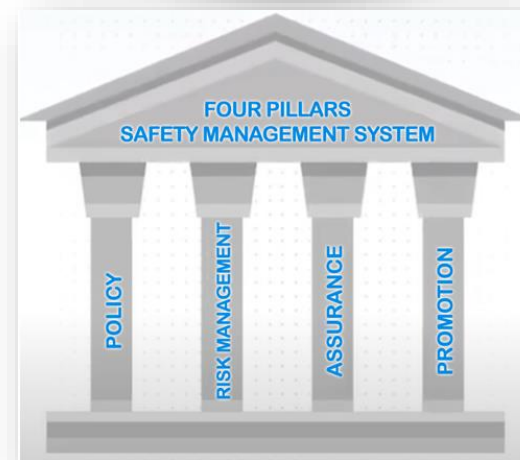
- 2.1. Hazard identification.
- 2.2. Safety risk assessment and mitigation.

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



6. SAFETY POLICY AND OBJECTIVES

SAFETY POLICY AND OBJECTIVES

This component focuses on creating an environment where safety management can be effective. It is based on a **Safety Policy and Objectives that outline management's commitment to safety, its goals, and the related organizational structure.**

Management's commitment and leadership are explicitly affirmed through the Safety Policy and Safety Objectives and are demonstrated through managerial decisions and resource allocation. Consistency between decisions and actions with the Safety Policy and Safety Objectives will help foster a **positive safety culture (Just Culture).**

The organization defines a Safety Policy approved and signed by the Accountable Manager. This first component holds the responsibility and commitment to implementing and maintaining Safety Management Processes in the areas of the following components and their related elements.

The organization's safety responsibilities and obligations in relation to the Safety Policy and Objectives:

- Safety accountability obligation.
- Safety Management System (SMS) documentation.



The purpose of the policy statement in the SMS is to communicate the management's commitment to the SMS

6. SAFETY POLICY AND OBJECTIVES

SAFETY OBJECTIVES

Organizations define safety objectives that reflect the operational safety performance of their products/components/parts (e.g., based on analyses conducted through the Continuing Airworthiness process), as well as objectives related to the functioning of the Safety Management System (SMS) itself. These objectives may include monitoring the proper implementation of the SMS, measuring its activities, and allocating appropriate resources and competencies to personnel. Safety objectives should reflect identified safety improvements based on the current situation.

Aerosystems Safety Objectives Dashboard

SOD DASHBOARD							SMA Safety Objectives Dashboard KPIs							
Processo	CODICE SAIP	DATA	N° INDY	NOME INDICATORE	TARGET - OBIETTIVO	FREQ. (months)	Dati relativi al completamento della raccolta dei dati			Dati relativi all'andamento dell'indicatore				
							COMPLETAMENTO RACCOLTA DATI	COMPLETAMENTO ANALISI DEI DATI	EMISSIONE INDY REPORT	VALORE NUMERICO OBIETTIVO per anno 2024	VALORE RAGGIUNTO (TOTALE O PROMEDIO)	RISULTATO (OBIETTIVO RAGGIUNTO)	ANDAMENTO INDICATORE	ANNOTAZIONI
SMS	SAIP-SIMO	2024	SIMO	Safe internal manufacturing operations;	Mediante la riduzione totale degli infortuni sul lavoro (Zero accidents)	12	100%	100%	100%	0	0,00	SI	↑0	Dato a cadenza annuale calcolato sull'esercizio 2023. Calcolo eseguito dal 1 Gennaio 2023 al 31 Dicembre 2023.
SMS	SAIP-SHR	2024	SHR	Safety and Hazard reporting;	Mediante la presenza minima di report (Segnalazioni MOR e VOR).	12	100%	100%	100%	0	0,00	SI	↑0	Dato a cadenza annuale calcolato sull'esercizio 2023. Calcolo eseguito dal 1 Gennaio 2023 al 31 Dicembre 2023.
SMS	SAIP-JCP	2024	JCP	Mantenimento della formazione continua e promozione della Just Culture	Mantenimento di formazione continua, con corsi di aggiornamento, sensibilizzazione e iniziative che promuovano la Just Culture (minimo 16 ore/24 mesi/persona)	24m	100%	100%	100%	16	0,0	SI	↑16,0	Dato a cadenza biennale calcolato sull'esercizio 2023 e 2024. Calcolo eseguito dal 1 Gennaio 2023 al 30 Ottobre 2024.
SMS	SAIP-SRM	2022	SRM	Actively Engage in Safety Risk Management and Safety Assurance Activities	Mediante l'individuazione degli Hazard e della loro gestione del rischio (mantenimento del rischio finale inferiore a Negligibile <=4 Ref. SHIRRMA)	12	100%	100%	100%	>=4	1,4	SI	↑1,4	Dato a cadenza annuale calcolato sull'esercizio 2024. Calcolo eseguito dal 1 Gennaio 2024 al 30 Ottobre 2024.

6. SAFETY POLICY AND OBJECTIVES

SAFETY POLICY

SAFETY IS EVERYONE'S RESPONSIBILITY

Safety is not the sole responsibility of a single person or department; it involves all managers and employees within the company. It is everyone's duty to adhere to this policy and commit to improving our safety standards whenever an opportunity arises.



Everyone has the responsibility to report hazards / safety issues.

7. SAFETY ASSURANCE

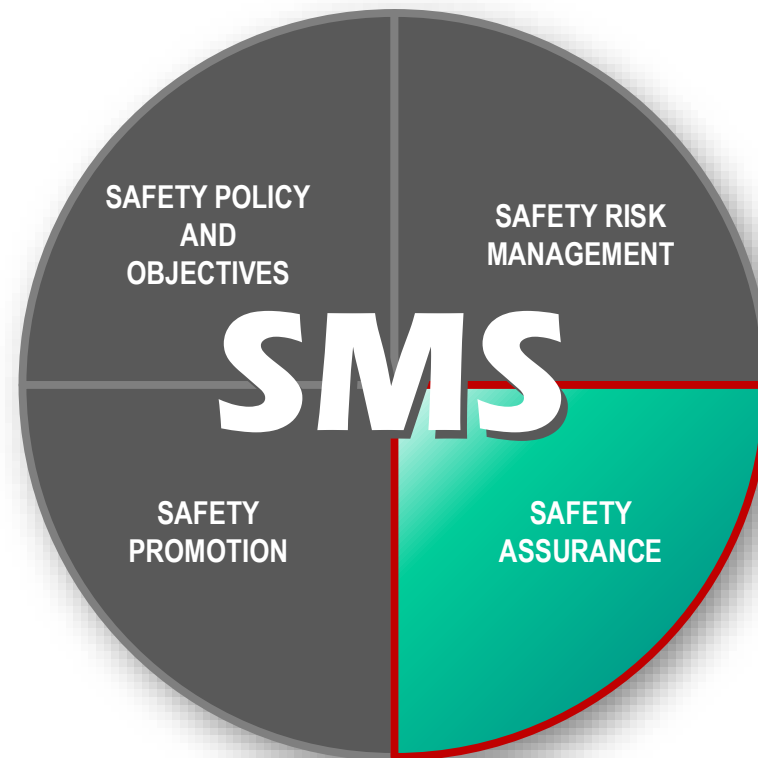
SAFETY ASSURANCE

Safety Assurance (SA) includes processes and activities aimed at ensuring that the SMS operates in line with expectations and requirements.

SA continuously monitors processes and the operational environment to detect changes or deviations that could introduce new risks or weaken existing safety controls. Any anomalies are addressed through the SRM process. Safety activities include implementing corrective actions for identified issues with potential safety impacts, aiming to continuously improve SMS effectiveness.

The organization is committed to ensuring that risk mitigation measures, developed through hazard identification and risk management, fully achieve the intended objectives. This component is responsible for implementing and maintaining safety management processes, supporting the activities of related components and elements:

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



8. SAFETY PROMOTION

SAFETY PROMOTION

Safety Promotion fosters a positive safety culture and contributes to achieving safety objectives through training, education, effective communication, and information sharing.

Leadership at the management level is essential for promoting a strong safety culture within the organization, as effective safety management cannot be achieved solely through directives or rigid adherence to policies and procedures.

Safety promotion influences both individual and organizational behavior by integrating company policies, procedures, and processes while providing a value system that supports safety efforts. The organization should develop and maintain safety training and communication activities to create an environment where safety objectives can be achieved and sustained.

This component holds the responsibility and commitment to implementing and maintaining safety management processes, supporting the activities of related components and elements:

- **Training and education.**
- **Safety Communication.**



One of the main objectives of Safety Promotion within an SMS is the training on safety culture and awareness.

8. SAFETY PROMOTION

SAFETY JUST CULTURE

Organizations should adopt internal rules and documented processes, ensuring their consistent application across the structure to maintain high safety standards.

Safety is not only a legal obligation but also a fundamental element for ensuring business sustainability. All personnel, at every organizational level, are responsible for contributing to the maintenance and improvement of implemented Safety Systems.

A safe aviation system requires that all events affecting or potentially affecting safety are reported comprehensively, freely, and in a timely manner. This approach is crucial for facilitating investigations and ensuring the application of lessons learned.

"Just Culture is the foundation of an effective reporting system, essential for maintaining and improving aviation safety."



Whats is the Just Culture ?

Just Culture is a corporate culture in which operators or individuals are not punished for actions, omissions, or decisions that align with their experience and training.

However, gross negligence, intentional violations, or destructive acts are not tolerated. It fosters an environment of trust and accountability, encouraging the reporting of safety-related issues to improve processes and prevent future incidents.

8. SAFETY PROMOTION

SAFETY PROMOTION

Safety must be embedded in everything we do and must be at the front to our mind every day.

Ultimately, the success of our business relies on us being a safe production and maintenance company and we should strive to be a world leader in delivering safe products and services and never become complacent.

Our collective ambition should be to continue to improve our safety performance and culture every single day.

To meet this ambition, we work according to the following 8 Safety Principles:

La sicurezza deve essere integrata in tutto ciò che facciamo e deve essere al centro dei nostri pensieri ogni giorno. In definitiva, il successo della nostra attività si basa sul fatto che siamo un'azienda di produzione e manutenzione sicura e dovremmo impegnarci a essere leader mondiali nella fornitura di prodotti e servizi sicuri e non diventare mai compiacenti. La nostra ambizione collettiva dovrebbe essere quella di continuare a migliorare le nostre prestazioni e la nostra cultura in materia di sicurezza ogni giorno.

Per soddisfare questa ambizione lavoriamo secondo i seguenti 8 principi di sicurezza:

We tell someone when we see something that is unsafe.

Quando vediamo qualcosa di pericoloso lo segnaliamo.

We are all responsible for Safety.

Siamo tutti responsabili per la sicurezza.

We are all empowered to seek out, stop and eliminate unsafe situations.

Abbiamo tutti il potere di ricercare, fermare ed eliminare le situazioni pericolose.

We accept that mistakes happen and always maintain a Just Culture.

Accettiamo che gli errori accadano e manteniamo sempre una Just Culture.

We allocate the right resources to keep us safe.

Assegniamo giuste risorse per garantire la nostra sicurezza.

We give our staff the tools they need to keep us safe.

Forniamo al personale gli strumenti necessari per garantire la nostra sicurezza.

We measure how safe we are.

Misuriamo quanto siamo sicuri.

We ensure our partners work to the same standard of safety as us.

Garantiamo che i nostri partner lavorino secondo i nostri stessi standard di sicurezza.

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

SAFETY RISK MANAGEMENT

Safety Risk Management (SRM) involves hazard identification, risk assessment, and mitigation. The SRM process detects hazards related to the delivery of products and services, which may arise from system deficiencies, process errors, human interfaces, or changes in the operational environment.

A detailed description of systems and their interfaces is essential to understanding the operational environment and identifying hazards, which can emerge at any stage of the operational lifecycle from both internal and external sources. Risk assessment and mitigation must be continuously monitored to ensure their effectiveness.

The organization must develop tailored processes for its operations and environment, applying this approach to identify hazards, assess risks, and establish necessary controls.



9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

HAZARD IDENTIFICATION

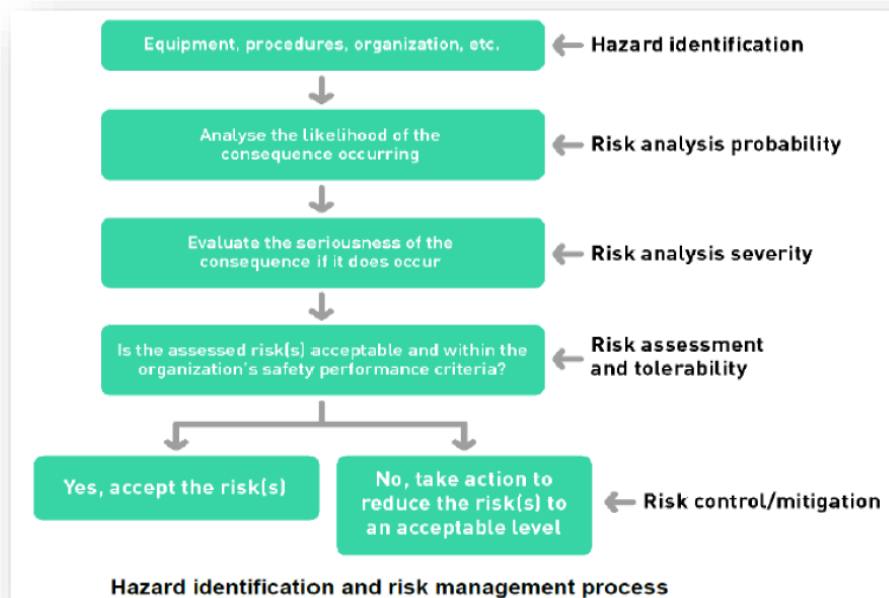
Organizations should develop and maintain formal tools to collect and generate feedback on operational hazards, using reactive, proactive, and predictive methods for safety data analysis.

The hazard identification process should include the following steps:

1. Reporting 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 derived from data analysis.

Hazards may also arise from organizational activities, particularly significant changes such as:

- Employee responsibilities.
- Organizational structure (e.g., relocation of a site, opening of a new facility, etc.).
- Business operations.
- Resources (human and physical).
- Organizational privileges or limitations.
- Policies, processes, and/or procedures.
- Significant changes due to external or environmental constraints (e.g., new non-safety-related regulations) or the introduction of health procedures in a pandemic context.



The primary focus of the SMS is the Identification of safety-related hazards.

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

THE MANAGEMENT OF CHANGE

As part of the Safety Assurance activities within the Safety Management System (SMS), organizations should develop and maintain a formal Change Management Process, which includes:

- **Identifying changes** that could affect the level of safety risk, incorporating this information into specific reports, such as a **Management of Change (MOC) Form**.
- **Integrating specific safety controls** into change management processes, such as within an Engineering Change Order (ECO), to ensure safety is considered at every stage.
- **Adopting preventive measures** to verify safety effectiveness before implementing any modification, using dedicated tools and documentation.
- **Eliminating or modifying outdated risk controls** that are no longer necessary or effective due to changes in the operational environment.
- **Applying the safety risk management process** to every planned modification, ensuring a thorough analysis of potential safety impacts.

MANAGEMENT OF CHANGE PROCESS

INITIATION	PLANNING	EXECUTION	MONITORING
1 Describe the scope of the change	3 Develop and agree an assurance plan for changes	5 Develop a risk management strategy	7 Monitor and verify the performance of the system
2 Describe the safety impact of the change	4 Develop a supporting communications plan	6 Develop, agree and implement the change	



The Management of Change (MOC) address Changes in personnel, systems, equipment, and procedures.

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

HAZARD IDENTIFICATION

So, what does hazard identification consist of?

Hazard identification involves recognizing conditions that may lead to:

- Impacts on the safety of the aircraft and/or its components, including passengers, occupants, operators, etc.
- Impacts on the safety of employees, processes, products, and overall aviation safety.



9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

RISK MATRIX

The risk matrix evaluates the safety level of activities by calculating risk (R) as the product of severity of harm (S) and probability of occurrence (P). This helps identify intervention priorities and ensure appropriate risk mitigation measures.

$$R = S \times P$$

Safety risk	Severità				
Probabilità	Catastrofico A	Pericoloso B	Maggiore C	Minore D	Insignificante E
Frequente 5	5A	5B	5C	5D	5E
Occasionale 4	4A	4B	4C	4D	4E
Remoto 3	3A	3B	3C	3D	3E
Improbabile 2	2A	2B	2C	2D	2E
Estremamente improbabile 1	1A	1B	1C	1D	1E

Example Risk Level: R = 2D

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

RISK MATRIX

Severity (S) is the degree and extent of damage caused or that could be caused by an event.

SEVERITA'	SIGNIFICATO				VALORE
	PERSONALE	AMBIENTE	ECONOMICO	REPUTAZIONALE	
Catastrofico	Più fatalità	Effetti disastrosi	> 1M€	Impatto internazionale	A
Pericoloso	Una fatalità	Effetti difficili da recuperare	< 1M€	Impatto nazionale	B
Moderato	Infortuni seri	Effetti localizzati	< 250K€	Impatto considerevole	C
Minore	Infortuni minori	Lieve impatto	< 50K€	Impatto limitato	D
Insignificante	Lievi infortuni	Nessun impatto	< 10K€	Impatto lieve	E

PROBABILITA'	SIGNIFICATO	VALORE
Frequente	- E' già accaduto in azienda (almeno 3 volte l'anno) - E' accaduto frequentemente nella storia dell'aviazione	5
Occasionale	- E' già accaduto in azienda (almeno 2 o 3 volte l'anno) - Le persone sono frequentemente esposte al pericolo - E' accaduto poco frequentemente nella storia dell'aviazione	4
Remoto	- E' accaduto in azienda almeno una volta - E' accaduto più di una volta nella storia dell'aviazione - Le persone sono regolarmente esposte al pericolo	3
Improbabile	- Non si ha evidenza che è accaduto in azienda, ma è accaduto almeno una volta nella storia dell'aviazione - Le persone sono raramente esposte al pericolo	2
Estremamente improbabile	- Non è mai accaduto né in azienda, né nella storia dell'aviazione	1

Probability (P) is the likelihood that a specific event will occur, with varying frequency.

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

RISK MATRIX

If a risk associated with a certain activity falls within the red or orange level (Intolerable or Tolerable), it is mandatory to take actions to mitigate the associated risk. For activities classified as Intolerable risk, if it is not possible to reduce the risk level to an acceptable range, the activity must be discontinued.

Risk Level Index	Risk Description	Action Reccomended
5A, 5B, 5C, 4A, 4B, 3A	Intolerable	Act immediately to mitigate the risk or stop the activity. Implement risk mitigations to ensure or improve controls, bringing the risk level to a tolerable state.
5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C, 1A	Tolerable	It can be tolerated based on the mitigations implemented. It may require a decision to accept the risk.
3E, 2D, 2E, 1B, 1C, 1D, 1E	Accettabile	Acceptable as is. No further risk mitigations are required.

Example Risk Level: R = 2D

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

MITIGATION

Mitigation represents the strategy used when a risk cannot be avoided.

Mitigating risk means taking actions to reduce the severity of the impact or the probability of occurrence in case the threat (safety event) happens.

Mitigation should include realistic actions that are economically sustainable and have a limited impact on business operations.

Mitigation should include realistic actions that are economically sustainable and have a limited impact on business operations.

!! Zero risk exists only when no activity is undertaken! !!

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

HAZARD LOG

Each supplier must identify its hazards in a register called the Hazard Log. For each hazard, the probability of occurrence and severity must be analyzed. If the risk level is deemed unacceptable, containment measures must be defined to reduce either the probability or severity.

A	B	C	D	E	F	XYZ	G	L	Q	R	S	M	H	I	J-K
Number series of numbers that will identify each particular hazard	Scope short description	Hazard Type short description	Hazard Factors Definitions	This field is used to indicate the Hazard Title in a few words. (Also known as Safety Issue)	This field is used to indicate a brief textual description of the Hazard.	Indication of how the hazard was identified	This field is used to indicate a textual description of the context analysis.	This field serves to illustrate, through a textual description of the interested parties: Ownership/Management, Customers/Partners, Suppliers, Employees, Operators, Airlines etc.	This field is used to indicate, through a textual description, the Hazard Element	This field is used to indicate, through a short textual description, the Origin of the Cause of the Hazard (if known). Safety Events (Causes or Threats)	This field is used to indicate, through a short textual description, the Impact of the Risk. For the purposes of full understanding it is important that in describing a risk both the Cause and the Effect are described.	The Risk Owner is the person designated to develop and manage the action plan and monitoring for the risk.	The Risk Owner is the person designated to indicate the impact of the Risk Probability (also translated as Severity) on a scale of increasing severity values from 1 to 5.	This field is used to indicate the probability of occurrence on a scale of subjective vision values. Subjective view of the probability of occurrence (1 to 5)	Risk Index (Risk Value) = Risk Value derived by multiplying the Severity value by the Probability (always in numerical form).
HAZARD IDENTIFICATION											RISK IDENTIFICATION		P=Probabilità	S=Severità	PxS (RI)
NUMERO	AMBITO	TIPO DI PERICOLO	TIPO DI PERICOLO	TITOLO FATTORE DI PERICOLO	FATTORE PERICOLO (DESCRIZIONE)	RIFERIMENTO A COME È STATO IDENTIFICATO IL	ANALISI DEL CONTESTO	PARTI INTERESSATE	ELEMENTO DI PERICOLO	CAUSA DEL PERICOLO (ORIGINE)	IMPATTO DEL RISCHIO	RESPONSABILE	INDICE DI RISCHIO (RISK INDEX)		
HAZARD ID	SCOPE	HAZARD TYPE	HAZARD FACTOR TYPE	HAZARD TITLE	HAZARD FACTOR DESCRIPTION	HAZARD INPUT REFERENCE	CONTEXT ANALYSIS	INTERESTED PARTIES (STAKEHOLDERS)	HAZARD ELEMENT	HAZARD CAUSE (ORIGIN)	RISK IMPACT	RISK OWNER RESPONSIBLE FOR SAFETY MONITORING	RISK PROBABILITY (LIKELIHOOD)	RISK IMPACT (SEVERITY)	RISK INDEX
HZ-01	SMS Safety Management System	TECHNICAL	Deficiencies	Use of Measuring Instruments not calibrated	L'utilizzo (incolore) di strumentazioni di misura non calibrata può determinare la produzione e validazione di parti non conformi.	ITO 2024/01-NAV	Aerosystems è conscia dei rischi nel caso di utilizzo di strumentazione non tarata. Ha deciso di attuare un sistema SGS Sistema Gestionale Strumentazione e dipendente. CONSAPEVOLEZZA, Gestione della strumentazione. AUTORIA / ENTI Audits e Verifiche della strumentazione. FORNITORI: Controllo della gestione della strumentazione, flowdown requisiti. CLIENTI/PARTNER: Controllo della gestione della strumentazione, produzione di parti non conformi.	PROPRIETÀ/DIREZIONE: Continuità nel business e sviluppo di un sistema orientato alla sicurezza ed alla prevenzione dei guasti e delle non conformità. DIPENDENTI: Consapevolezza, Gestione della strumentazione. AUTORIA / ENTI Audits e Verifiche della strumentazione. FORNITORI: Controllo della gestione della strumentazione, flowdown requisiti. CLIENTI/PARTNER: Controllo della gestione della strumentazione, produzione di parti non conformi.	Pericolo utilizzo di strumentazione non idonea e produzione / validazione di parti non conformi.	Non rispetto delle procedure di gestione della strumentazione.	Un utilizzo di uno strumento non tarato potrebbe comportare la produzione di componenti con problemi di Safety. Notifiche NC interne e da parte del Cliente.	QAM	2	2	4
HZ-02	SMS Safety Management System	NATURAL	Geophysical events	Natural Disaster	Capacità di gestire i fattori geografici e di catastrofi naturali che possono influenzare il Sistema di Gestione e la Business Continuity. Example: Earthquakes, volcanoes, tsunamis, floods and landslides.	ECCAST SMS-WG	Aerosystems è conscia dei rischi di tipo ambientale che possono essere pericolosi per la continuità del business (terremoti, alluvioni, incendi, temperature estreme, frane etc.). Ha deciso di pianificare, attuare e mantenere specifici piani al fine di prevenire eventuali situazioni di rischio ambientale geografico e di disastri naturali.	PROPRIETÀ/DIREZIONE: Continuità nel business e sviluppo di un sistema orientato alla sicurezza ed alla prevenzione dei disastri naturali. FORNITORI: Mantenimento delle opportunità di lavoro e rapporti collaborativi al fine della sicurezza e della prevenzione. DIPENDENTI: Consapevolezza. ISTITUZIONI: Aggiornamenti informativi continui / ISPRA Ambiente / Comune. CLIENTI/PARTNER: Continuità nel business.	Pericolo di interruzione (o distruzione della facility con conseguenti problematiche relative ai rapporti con i clienti).	Sviluppo della resilienza e nella preparazione a potenziali interruzioni. Evoluzione del Business Recovery aziendale per ridurre al minimo le interruzioni. Assicurazione.	Pericolo di interruzione delle attività lavorative o distruzione (totale o parziale) delle facility, con conseguenti problematiche relative ai rapporti con i clienti.	CMM SM	1	2	2

Aerosystems Hazard Log

9. SAFETY RISK MANAGEMENT - HAZARD IDENTIFICATION, CHANGE AND RISK MANAGEMENT PROCESS

HAZARD LOG

W	T	U	N	V	RI	MF	RR	RRC	Y	X	Z	NO
Classification: See legenda. (Tolerable, Non Tolerable, Acceptable)	This text field is used to indicate the Decision made in a summary of a few words. For example: to Monitor, to Reduce, to xxxxxxxxxxxxxxxxxx	This text field serves to illustrate the Treatment Decision made with an explanation.	This text field serves to illustrate with a summary explanation of the actions (activities) that will eliminate the risk or reduce it to an acceptable level. Explanation of treatment actions decided as Risk Mitigation.	Action (Planned/Estimated) Due Date (also expiration date).	Identical Value of the Risk Index (taken from Field J-K)	Mitigation factor. See Legenda.	RR Residual Risk = RI/MF	Description of Residual Risk: NEGLIGIBLE, LOW to MEDIUM, MEDIUM to HIGH	Description of System Impact (if any)	Record here a brief statement on the achievements, reasons for any delay to the Action Plan and recovery activities.	Effective Date of the Last Update	Notes and OFI Opportunity Of Improvement
RISK ASSESSMENT					RI	MF	RR	RRC				
CLASSIFICAZIONE DEL RISCHIO	DECISIONE	DECISIONE (TRATTAMENTO)	AZIONE DI MITIGAZIONE DEL RISCHIO (PIANO DI AZIONE)	ENTRO IL	RISCHIO RESIDUO			DESCRIZIONE DEL RISCHIO RESIDUO	IMPATTO SUL SISTEMA	VERIFICA DELL'EFFICACIA	DATA ULTIMO AGGIORNAMENTO	NOTE E OPPORTUNITA'
RISK CLASS (TOLERABILITY)	DECISION	RISK TREATMENT DECISION	ACTION PLAN (RISK MITIGATION ACTIONS)	PLANNED DUE DATE	RISK INDEX	MITIGATION FACTOR	RESIDUAL RISK	RESIDUAL RISK DESCRIPTION	SYSTEM IMPACT	VERIFICATION EFFECTIVENESS OF THE ACTION PLAN (OR FURTHER ACTION)	DATE OF LAST UPDATE	NOTES AND OFI OPPORTUNITY FOR IMPROVEMENT
ACCETTABILE	MONITORARE	L'azienda dispone e attua una Guida della Qualità G006 che viene applicata durante le operazioni.	Monitoraggio delle scadenze du database della strumentazione SGS. Training del personale.	Nessuna data di completamento in quanto per questo rischio viene eseguito il MONITORAGGIO CONTINUO e va verificato di anno in anno.	4	8	0,5	ACCETTABILE	N/A	Verifiche addizionali possono essere implementate in caso di necessità.	30/10/2024	N/A
ACCETTABILE	MONITORARE	Il nuovo stabilimento di AEROSYSTEMS (entrambi) è situato in una zona sicura e lontana da Fiumi o altri elementi potenzialmente disastrosi. Dall'analisi storica si rileva scarsa probabilità di terremoti, alluvioni, frane, temperature estreme. Stabilimento Aziendale in zona sicura da disastri ambientali. Analisi allegate ISPRA. Assicurazione contro danni. Sono previsti Rilevatori di Fumo e CO2 WIFI.	Verificare gli strumenti di prevenzione e alert. Verificare la disponibilità di Assicurazione contro danni. Verificare che le facility siano state realizzate nel rispetto della normativa antisismica. Verificare attuazione di BCP Business Continuity Plan e (BRP Business Recovery Plan) e ERP. Verificare ECOR e relativa distribuzione	Nessuna data di completamento in quanto per questo rischio viene eseguito il MONITORAGGIO CONTINUO e va verificato di anno in anno.	2	6	0,3	ACCETTABILE	N/A	Verificato che Aerosystems dispone di una stazione meteo WIFI dotata di Alert (alarm) meteorologici in remoto. Verificato che Aerosystems dispone di nuovi Rilevatori di Fumo e CO2 WIFI (personale Fire Brigade presente e formato). Verificato che Aerosystems dispone di assicurazione contro danni. Lo stabilimento è stato realizzato nel rispetto della normativa antisismica. Verificato che Aerosystems dispone e attua un BCP	30/10/2024	N/A

Continuation of the Hazard Log

Severity (S) (Severità)	Value	Meaning	Designated Letter
Catastrophic	5	Aeromobile/equipaggiamento distrutto; Diversi decessi.	a
Hazardous	4	Forte riduzione dei margini di sicurezza, ma essere fisico o carico di lavoro tale che le organizzazioni non possono svolgere i propri compiti con precisione o completezza. Lesioni gravi o decesso per un certo numero di persone. Danno maggiore all'equipaggiamento.	b
Major	3	Significativa riduzione dei margini di sicurezza, riduzione nella capacità delle organizzazioni di far fronte alle avverse condizioni operative a causa di un aumento del carico di lavoro o come risultato di condizioni che possano compromettere la loro efficienza; Inconvenienti e gravi; Lesioni alle persone.	c
Minor	2	Fastidio. Limitazioni operative; Uso di procedure emergenza; Inconveniente minore.	d
Negligible	1	Conseguenze minime.	e

Likelihood (P) (Probabilità)	Value	Qualitative definition	Quantitative definition
Frequent	5	Likely to occur many times (has occurred frequently) Probabilmente si verifica più volte (si è verificato frequentemente)	≥ 1 time per week
Occasional	4	Likely to occur sometimes (has occurred infrequently) Probabilmente si verifica in qualche momento (si è verificato occasionalmente)	≥ 1 time per month < 1 time per week
Remote	3	Unlikely but possible to occur (has occurred rarely) Improbabile ma possibile che accada (si è verificato raramente)	≥ 1 time per year < 1 time per month
Improbable	2	Very unlikely to occur (not known to have occurred) Molto improbabile che accada (non si sa se sia verificato)	≥ 1 time every 10 years < 1 time per year
Extremely Improbable	1	Almost inconceivable that the event will occur Quasi inconcepibile che l'evento si verifichi	≥ 1 time every 100 years < 1 time every 10 years

Aerosystems Hazard Log Legenda

10. SAFETY COMMUNICATION

SAFETY COMMUNICATION

Aerosystems, as part of its Safety Promotion activities, has developed ways to ensure awareness of the Safety Management System (SMS).

Formal Communication channel:

A dedicated webpage, the Aerosystems [Safety Portal](http://www.aerosystems.it/safety-portal/#), accessible to employees, suppliers, customers, and other stakeholders, centralizes all safety-related information and content.

Purpose and Functionality of the Safety Portal:

- **Centralization of Data:** Consolidates Aerosystems' safety-related documents and communications within the Safety Management System (SMS).
- **Reporting System:** Includes an anonymous and confidential reporting form (ORS – Occurrence Reporting Form) for reporting safety concerns.
- **Reporting Criteria:** Provides clear guidelines on how to report safety issues, non-conformities, violations, and occurrences.




AEROSYSTEMS SAFETY PORTAL

Safety Management System (SMS) is a collection of structured, company-wide processes that provide effective risk-based decision-making for daily business functions.


Safety Management Systems help Aerosystems offer products or services at the highest level of safety and maintain safe operations.

SMS can also serve as a formal means of meeting statutory requirements. According to the International Civil Aviation Organization (ICAO), the key processes of a safety management system are **hazard identification, occurrence reporting, risk management, performance measurement, and quality assurance.**

Below, click on the button to Download the Aerosystems Safety Policy

SAFETY POLICY 

Below, click on the button to Download the Aerosystems Safety Manual

SAFETY MANUAL 

AEROSYSTEMS SAFETY PORTAL
at the following link:

<http://www.aerosystems.it/safety-portal/#>

10. SAFETY COMMUNICATION

SAFETY REPORTING

Any relevant changes or Safety Events must be communicated through formal safety communication channels.

Mandatory Occurrences are defined directly by EASA. For example, this category includes cases such as parts released with unauthorized production/maintenance data or the identification of a replacement part with a counterfeit certificate. The Safety Portal provides a direct link to the **MOR (Mandatory Occurrence Reporting) system**.

The **VOR (Voluntary Occurrence Reporting)** allows the reporting of events and/or potential hazards that, at the time of detection, do not explicitly fall under mandatory reporting categories but could still pose safety concerns. This report can be submitted by any company personnel upon becoming aware of such situations, thereby contributing to prevention and the continuous improvement of operational safety.

OCCURRENCE REPORTING SYSTEM - SISTEMA DI SEGNALAZIONE DEGLI EVENTI AERONAUTICI

Occurrence Reporting - Segnalazione Eventi Aeronautici

Il **Regolamento (EU) 376/2014**, entrato in vigore il 15 novembre 2015, prevede due sistemi di segnalazione degli eventi significativi ai fini della prevenzione e di miglioramento della safety: un sistema che raccoglie le segnalazioni obbligatorie (**MOR - Mandatory Occurrence Reporting**) ed uno che raccoglie le **segnalazioni volontarie (VOR - Voluntary Occurrence Reporting)** competenza di **ANSV**.

Vanno pertanto segnalati **obbligatoriamente** all'ENAC gli eventi (**MOR**) ricompresi negli annessi al **Reg. (EU) 2015/1018** ma non per questo ad essi limitati. I soggetti per cui sussiste l'obbligo sono riportati nell'art. 4 del succitato Reg. (EU) 376/2014.

A partire dal 1° gennaio 2022 i MOR devono essere riportati all'ENAC utilizzando esclusivamente il sistema **ECCAIRS 2** (detto anche E2), il sistema di reporting progettato da EASA per soddisfare i requisiti del Reg. (EU) 376/2014. Pertanto il sistema eE-MOR è stato dismesso e resta in funzione per gli spedizionieri che devono riportare **Merici Pericolose** in attesa della transizione ad E2 prevista entro dicembre 2024.

La **ITO 2024/01-GEN Ed. 1 del 21 giugno 2024 - Segnalazione Obbligatoria Eventi Aeronautici - Mandatory Occurrence Reporting** fornisce maggiori informazioni sul sistema ECCAIRS 2 nonché le indicazioni operative per il suo corretto utilizzo, incluse le modalità di accredito al sistema.

ORS Occurrence Reporting System - Aerosystems 🔗

VOR Voluntary Occurrence Reporting - ANSV 🔗

ECCAIRS 2 - MOR 🔗

AEROSYSTEMS SAFETY PORTAL
at the following link:

<http://www.aerosystems.it/safety-portal/#>



10. SAFETY COMMUNICATION

SAFETY REPORTING

Regulation (EU) 376/2014, which came into force on November 15, 2015, establishes two reporting systems for significant events aimed at prevention and safety improvement: one system for mandatory reports (**MOR – Mandatory Occurrence Reporting**) on **ECCAIRS 2** and another for voluntary reports (**VOR – Voluntary Occurrence Reporting**), under the competence of **ANSV**.

Therefore, events classified as **MOR** (Mandatory Occurrence Reporting) must be **mandatorily reported to ENAC**, as specified in the annexes of **Regulation (EU) 2015/1018**, though not limited to them. The entities required to comply with this obligation are listed in Article 4 of Regulation (EU) 376/2014.

As of January 1, 2022, all Mandatory Occurrence Reports (MORs) must be submitted to ENAC exclusively through the **ECCAIRS 2 (E2) system**, the reporting platform developed by EASA to comply with Regulation (EU) 376/2014. This system replaces the eE-MOR platform, which has been discontinued, except for shippers reporting dangerous goods, who will transition to E2 by December 2024. Events requiring mandatory reporting are specified in the annexes of Regulation (EU) 2015/1018, though they are not limited to those listed. The obligation applies to the entities identified in Article 4 of Regulation (EU) 376/2014. **For detailed information on the ECCAIRS 2 system, including operational guidelines and accreditation procedures, refer to ITO 2024/01-GEN Ed. 1 of June 21, 2024 – Mandatory Occurrence Reporting.**

Confidentiality and Personal Data Protection

Reported events are entered into ENAC's database, ensuring confidentiality and information protection as required by Articles 15 and 16 of Regulation (EU) 376/2014 and Regulation (EU) 2016/679 (GDPR).

MOR = Mandatory Occurrence Reporting

VOR = Voluntary Occurrence Reporting

11. Aerosystems Occurrence Reporting System

Aerosystems Occurrence Reporting System

Aerosystems has made an online Occurrence Reporting Form available on the **Safety Portal > Occurrence Reporting System** for reporting safety-related events.

Employees, suppliers, customers, and other stakeholders can use this form, even anonymously, to report incidents that may impact the safety of Aerosystems' production.

It is the responsibility of Aerosystems' managers to analyze the reported event and to provide and relevant feedback.

AEROSYSTEMS ORS FORM
at the following link:
<http://www.aerosystems.it/occurrence-reporting-system/>



ORS Occurrence Reporting Form

Name and Surname

First Last

Email

Please enter your email, so we can follow up with you.

When occurred - Date

Insert Date and Time (UTC) when the event has occurred.

Where

Insert the Place/Location where the event has occurred (Location, Address, City, State, Plant).

Event Type

Consequential Event

Equipment

Operational

Personnel

Organisational

Any other event type

Unknown

Insert the Type of Event from the list.

Event Title

Insert a short message (title) describing the event.

Event Description

Describe the event. If you need to send/Upload any attachments please ask as you will be contacted with instructions.

AEROSYSTEMS SAFETY PORTAL
at the following link:
<http://www.aerosystems.it/safety-portal/#>



THANK YOU

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