



Australian Government
Civil Aviation Safety Authority

**Safety Management Systems
for aviation: a practical guide**

SMS 8

Resource kit

3rd Edition

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How to use this kit

This resource kit is designed to assist organisations with the lifecycle of their safety management system (SMS) and complements the other seven booklets within the *SMS for Aviation: a practical guide* resource.

Regardless of the size and complexity of your organisation, the same four SMS components and twelve elements are required and the lifecycle of your SMS will also be the same.

An SMS is just as relevant for smaller aviation organisations as it is for larger organisations and can be scaled to suit the size and complexity of any organisation. Smaller organisations may feel they are at a disadvantage when it comes to implementing an SMS, but an SMS is scalable, so not all elements of an SMS will look the same in all organisations.

SMS elements for a complex or non-complex organisation do not change, but their complexity and detail do. Therefore, they should be scalable and flexible and designed to be relevant for your operating environment.

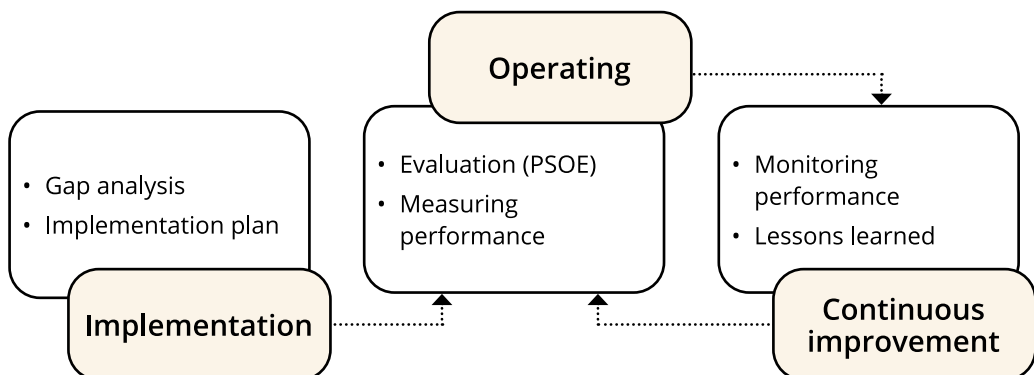
SMS lifecycle

An SMS lifecycle contains three stages: implementing, operating and continuous improvement. During each of these stages your SMS functionality and performance or outputs will differ.

The implementation stage requires you to identify where your organisation is at the moment regarding the required SMS elements (your gap analysis) and then to develop a plan to meet your SMS requirements (your implementation plan). This is your starting point, and it will be different for all organisations even if you already have some level of safety management in place.

During the operating stage of your SMS, all the SMS elements have been turned on or are live and should be producing the intended outputs. At this stage you should be measuring your safety performance and identifying if you are achieving your desired safety performance. You should now also be evaluating your SMS to determine if all SMS elements are present, suitable, operating, and effective.

SMS lifecycle



The next stage is continuous improvement that is achieved from your safety performance monitoring, change management and safety lessons learned. All these processes should be allowing for SMS continuous improvement as your SMS is not a static system, but dynamic and changing. As your safety performance is improved so too does your SMS capability and functionality. Striving for a mature SMS produces effective outputs allowing for constant safety risk management to continually enhance proactive safety performance.

The life cycle of your SMS does not end once you are in the continuous improvement stage. This stage results in constant adaption and change to your SMS processes, procedures, and safety culture. When these changes are made to your SMS, you then flow back into the operating stage, making a continual loop between operating and continuous improvement.

Gap analysis tool

The first step in implementing an SMS is to identify which elements may already exist within your organisation. The tool below is an adaption from the SMS evaluation tool which identifies all the required SMS components and elements. Through using this tool, you can identify which indicators are already present, which are partially present, and which are not present.

Assess each SMS element frankly for your organisation, with a present response of either 'yes', 'partially' or 'no'. If you have identified an element is already present, you should identify where this is already documented within your current organisational documents. If it is something you are already doing but it is not formally documented, record this as partially present, identify the outstanding documentation requirement, and then add the creation of the documentation to your implementation plan.

After completing the gap analysis any elements identified as partially present or not present will form the basis of your SMS implementation plan as specific activities that need to be completed.

For further information about each of the components and elements you can refer to the relevant SMS toolkit booklets named for that SMS component.

Please note that the gap analysis tool provided here is a scaled back version of the SMS evaluation tool found later in this booklet. They look similar but the areas for consideration and evaluation outcomes do vary.

- Use the gap analysis tool when starting your SMS implementation planning process.
- Use the SMS evaluation tool when evaluating the maturity of your operational SMS.

Component 1: Safety policies and objectives

See booklet 2: Safety policies and objectives for further information and guidance.

Element 1.1 Management commitment		Present			Document reference	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.1.1	There is a safety policy, signed by the accountable manager, which includes a commitment to continuous improvement; observes all applicable legal requirements and standards; and considers best practices.					
1.1.2	The safety policy includes a statement to provide appropriate resources and the organisation is managing resources by anticipating and addressing any shortfalls.					
1.1.3	There are policies in place for safety critical roles relating to all aspects of fitness for duty (for example, alcohol and drugs policy or fatigue).					
1.1.4	There is a means in place for the communication of the safety policy.					
1.1.5	The accountable executive and the senior management team promote a positive safety and just culture and demonstrate their commitment to the safety policy through active and visible participation in the safety management system.					

Element 1.1 Management commitment		Present			Document reference	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.1.6	The safety policy actively encourages safety reporting.					
1.1.7	A just culture policy and principles have been defined that clearly identifies acceptable and unacceptable behaviours to promote a just culture.					
1.1.8	Safety objectives have been established that are consistent with the safety policy and they are communicated throughout the organisation.					
1.1.9	The State Safety Programme (SSP) is being considered and addressed as appropriate.					

Element 1.2 Safety accountability and responsibilities		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.2.1	An accountable executive has been appointed with full responsibility and accountability to ensure the SMS is properly implemented and performing effectively.					
1.2.2	The accountable executive is fully aware of their SMS roles and responsibilities in respect of the safety policy, safety standards, and safety culture of the organisation.					
1.2.3	Safety accountabilities, authorities, and responsibilities are defined and documented throughout the organisation and staff understand their own responsibilities.					

Element 1.3 Appointment of key personnel		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.3.1	A competent safety manager who is responsible for the implementation and maintenance of the SMS has been appointed with a direct reporting line to the accountable executive.					
1.3.2	The organisation has allocated sufficient resources to manage the SMS including, but not limited to, competent staff for safety investigation, analysis, auditing, and promotion.					
1.3.3	The organisation has established appropriate safety committee(s) that discuss and address safety risks and compliance issues and includes the accountable executive and the heads of functional areas.					

Element 1.4 Co-ordination of emergency response planning		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.4.1	An appropriate emergency response plan (ERP) has been developed and distributed that defines the procedures, roles, responsibilities, and actions of the various organisations and key personnel.					
1.4.2	The ERP is periodically tested for the adequacy of the plan and the results reviewed to improve its effectiveness.					

Element 1.5 SMS documentation		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
1.5.1	The SMS documentation includes the policies and processes that describe the organisation's safety management system and processes and is readily available to all relevant personnel.					
1.5.2	SMS documentation, including SMS related records, are regularly reviewed and updated with appropriate version control in place.					



Image: Civil Aviation Safety Authority

Component 2: Safety risk management

See booklet 3: Safety risk management for further information and guidance.

Element 2.1 Hazard identification		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
2.1.1	There is a confidential reporting system to capture errors, hazards, and near misses that is simple to use and accessible to all staff.					
2.1.2	There is a confidential reporting system that provides appropriate feedback to the reporter and, where appropriate, to the rest of the organisation.					
2.1.3	Personnel express confidence and trust in the organisation's reporting policy.					

Element 2.1 Hazard identification		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
2.1.4	There is a process that defines how hazards are identified from multiple sources through reactive and proactive methods (internal and external).					
2.1.5	The hazard identification process identifies human performance related hazards.					
2.1.6	There is a process in place to analyse safety data and safety information to look for trends and gain useable management information.					
2.1.7	Safety investigations are carried out by appropriately trained personnel to identify contributing factors (why it happened, not just what happened).					

Element 2.2 Safety risk assessment and mitigation		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
2.2.1	There is a process for the management of risk that includes the analysis and assessment of risk associated with identified hazards expressed in terms of likelihood and severity (or alternative methodology).					
2.2.2	There are criteria for evaluating the level of risk the organisation is willing to accept and risk assessments and ratings are appropriately justified.					
2.2.3	The organisation has a process in place to make decisions and apply appropriate and effective risk controls.					
2.2.4	Senior management have visibility of medium and high-risk hazards and their mitigation and controls.					



image: Thinkstock | Michal Staniewski

Component 3: Safety assurance

See booklet 4: Safety assurance for further information and guidance.

Element 3.1 Safety performance monitoring and measurement		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
3.1.1	Safety performance indicators (SPIs) linked to the organisation's safety objectives have been defined, promulgated, and are being monitored and analysed for trends.					
3.1.2	Risk mitigations and controls are being verified, audited to confirm they are working and effective.					
3.1.3	Safety assurance takes into account activities carried out by all directly contracted organisations.					

Element 3.1 Safety performance monitoring and measurement		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
3.1.4	Responsibilities and accountability for ensuring compliance with safety regulations are defined and applicable requirements are clearly identified in organisation manuals and procedures.					
3.1.5	There is an internal audit programme including details of the schedule of audits and procedures for audits, reporting, follow up, and records.					
3.1.6	Responsibilities and accountabilities for the internal audit process are defined and there is a person or group of persons with responsibilities for internal audits with direct access to the accountable manager.					
3.1.7	After an audit, there is appropriate analysis of causal factors, and corrective or preventive actions are taken.					

Element 3.2 The management of change		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
3.2.1	The organisation has a process to identify whether changes have an impact on safety and to manage any identified risks in accordance with existing safety risk management processes.					
3.2.2	Human factor (HF) issues have been considered as part of the change management process and, where appropriate, the organisation has applied the appropriate HF or human-centred design standards to the equipment and physical environment design.					

Element 3.3 Continuous improvement of the SMS		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
3.3.1	The organisation is continuously monitoring and assessing its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.					



image: Civil Aviation Safety Authority

Component 4: Safety promotion

See booklet 5: Safety promotion for further information and guidance.

Element 4.1 Training and education		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
4.1.1	There is a training programme for the SMS in place that includes initial and recurrent training. The training covers individual safety duties (including roles, responsibilities, and accountabilities) and how the organisation's SMS operates.					
4.1.2	There is a process in place to measure the effectiveness of training and to take appropriate action to improve subsequent training.					

Element 4.1 Training and education		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
4.1.3	Training includes human and organisational factors including just culture and non-technical skills with the intent of reducing human error.					
4.1.4	There is a process that evaluates the individual's competence and takes appropriate remedial action when necessary.					
4.1.5	The competence of trainers is defined and assessed, and appropriate remedial action taken when necessary.					

Element 4.2 Safety communication		Present			Where documented	Comments
Indicators of compliance and performance		Yes	Partially	No		
4.2.1	There is a process to determine what safety critical information needs to be communicated and how it is communicated throughout the organisation to all personnel, as relevant. This includes contracted organisations and personnel where appropriate.					



image: Civil Aviation Safety Authority

Interface management

An additional consideration of how third-party contractors and interfaces have been identified and documented within your SMS.

Interface management	Present			Where documented	Comments
Indicators of compliance and performance	Yes	Partially	No		
The organisation has identified and documented the relevant internal and external interfaces and the critical nature of such interfaces.					
What to look for					
<ul style="list-style-type: none">• Review how interfaces have been documented. It may be included in a system description.• Evidence that:<ul style="list-style-type: none">– safety critical issues, areas, and associated hazards are identified– safety occurrences have a mechanism for being reported and addressed– risk control actions have a mechanism to be applied and regularly reviewed; and– interfaces are reviewed periodically.• Training and safety promotion sessions are organised with relevant external organisations.• External organisations participate in SMS activities and share safety information.• Check the identified interfaces (e.g., interfaces with aerodromes, airlines, Air Traffic Control [ATC], training organisations, contracted organisations, and the State).					

Implementation planning basics

Developing an SMS implementation plan is like many other project management or business development plans. You need to identify where you currently are and where you need to get to. The steps in between these two points are the actions or activities that form the basis of your implementation plan.

After you have completed your gap analysis you will have a list of SMS elements that are currently missing from your organisation, that require an action plan against each one to work towards full implementation of your SMS.

How you record and monitor your SMS implementation plan can vary. From being as simple as a spreadsheet with identified

tasks or activities recorded against responsible individuals for actioning by set due date through to more complex and elaborate plans by using project management software and interactive tools. Regardless of what form your plan takes, there are some core basics you need to ensure successful implementation. This starts at knowing what your end goal or state should look like (this is all the SMS components and elements) and where you are currently sitting in relation to this – this is your gap analysis.

From there you can develop your plan for each SMS element and its associated requirements, possibly breaking down the plan into staged implementation phases. It is important to build in realistic timeframes for achieving these tasks or implementation phases, as well as dedicated times for reassessing your progress towards implementation.



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Ten steps to implementing an SMS

An SMS allows an organisation to monitor and improve its safety culture. The International Civil Aviation Organization (ICAO) recommends implementing an SMS in a ten-step sequence to ensure you build it efficiently while also cross-checking your progress against each required SMS component and element, as per the SMS evaluation tool.

Step 1: Planning preparation

As previously discussed, the SMS process starts with careful planning, including a gap analysis. Creating a planning group of appropriately experienced staff and managers is an important aspect of this. Setting up the group involves designating a safety manager, if you have not already done so, and developing a realistic safety strategy in line with your SMS implementation plan.

This step also requires you to identify the key stakeholders within your organisation to assist with SMS implementation. These key stakeholders will include people that will hold key safety accountabilities within your SMS.

Step 2: Senior management's commitment to safety

The ultimate responsibility for safety rests on the shoulders of senior management. The extent to which company leaders accept the importance of safety management sets the stage for a positive safety culture. Safety objectives must be practical, achievable, regularly reviewed, reassessed, and communicated to staff with a clear endorsement by senior management.

The chief executive officer (CEO), as the accountable manager, should endorse (sign) and support safety plans and program documents. There should be a reasonable reporting chain for safety issues that goes through the safety manager and ends at the accountable manager (CEO), where necessary. The CEO should allocate, and be seen to allocate, appropriate resources to support your safety manager and the safety program. This allocation of resources should be appropriate for both the implementation of the SMS and its ongoing running through the operational phase.

Step 3: Safety promotion

Keeping staff informed of current safety issues is vital for continuous improvement. You can accomplish this using appropriate training, safety communication and participation in safety-related seminars. Training is an investment in the future of your organisation. All employees, regardless of their role and experience, can benefit from safety analysis feedback and lessons learned. Safety communication is two-way: management and employees give and receive feedback.

During your SMS implementation you will need to have dedicated communication channels or forums to ensure all staff are kept aware of what is happening and what is planned or expected to be rolled out across the implementation phases. Once your SMS is implemented these communication channels become an integrated component for the delivery of safety promotion.

Step 4: Organisation

A company's way of conducting business and managing safety influences its resilience. In your implementation planning you need to identify your key safety roles and stakeholders, many of these individuals will be involved in implementing your SMS. You will need to develop a SMS organisational chart which shows the reporting structure for safety matters and how this is supported by your safety committee.

Your safety committee should be structured to support safety management, have a clear statement of responsibilities and accountabilities, and should oversee training and competency, and management of aviation safety risk.

To support the efficient implementation of an SMS, the safety manager should be appointed by, and have direct access to, the CEO.

Step 5: Hazard identification

In a good safety culture, hazard identification is proactive and non-punitive. When individuals operate in fear of being punished for making normal mistakes, then errors and unsafe actions will remain hidden, and organisations will lose opportunities for improvement and prevention. If you do not already have a hazard or safety reporting form you will need to develop one, along with a system for recording and analysing these reports.

Proactive hazard identification processes such as the line operations safety audit (LOSA) or the maintenance error decision aid (MEDA) provide a continuous commitment to safety. Management must provide adequate resources to systematically record and store data on identified hazards, as well as to competently analyse data on such hazards.

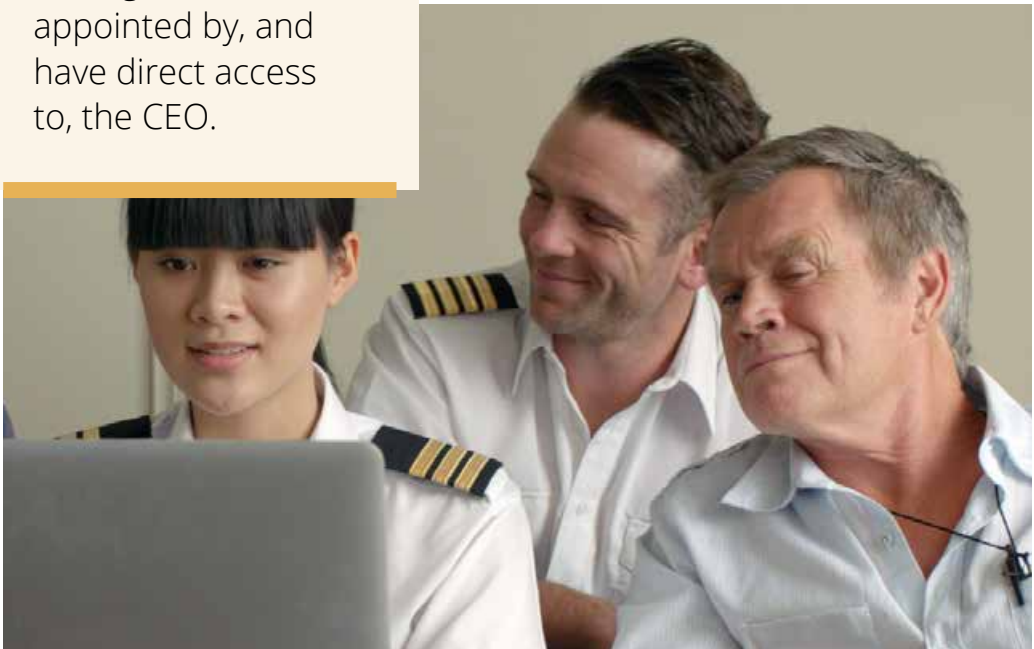


image: Civil Aviation Safety Authority

Step 6: Safety risk management

After you have identified the hazards, risk management focuses safety efforts on those hazards posing the greatest risks. Assess all risks critically and rank them according to their accident potential, considering both the severity of consequences and their likelihood of occurrence. If you decide the risks are acceptable, the company's operations may continue unchanged, at least for the present. However, even 'acceptable' risks can be the focus of SMS efforts to reduce overall accident exposure. If you consider the risks to be 'unacceptable', you must stop, or change, operations until you can remove or avoid the identified hazards.

Safety management is a closed-loop process: residual risks are assessed, and cost-benefits analysed after each risk-reduction step. Staff feedback on actions taken and the success of procedures put into place is vital in this process.

Step 7: Safety investigation

Safety lessons are more beneficial when they include a focus on contributing or causal factors (the why) rather than on a description of the accident or incident (the what). Identifying contributing factors requires trained investigators who look beyond the obvious causes and at other possible contributing factors, including, but not limited to, organisational issues.

If safety investigations only focus on 'what' elements instead of 'why' elements, the ability to proactively mitigate latent hazards and risks becomes significantly degraded. This means that contributing factors, latent organisational factors, remain untreated and the potential for a reoccurrence of the event is likely.

Key operational staff must be properly trained to conduct safety investigations and have appropriate management support. Their findings should be disseminated throughout the organisation as safety lessons learned. The regulatory authority might also need to be made aware of causal findings so they can be communicated to other operators, as appropriate.

Include a focus on causal factors (the why) rather than on a description of the accident or incident (the what).

Step 8: Safety analysis

Solid analytical capabilities can deliver compelling evidence used to steer cultural change. Analytical tools and up-to-date safety databases are also used to support the risk-management process. Only through analysis of your safety data and information can you adequately identify trends and potential latent organisational hazards and risks.

Safety recommendations should be proposed to senior management, and corrective measures must be taken and tracked to verify their effectiveness.

Step 9: Safety information management

Operating an SMS has the potential to generate large amounts of data, depending on the size and complexity of your operation. If you do not properly record, store, and use this data, it can be a waste of time and money. Your safety management manual is the way in which you document how the SMS relates to other functions in your organisation, and how SMS data should flow and be used. You need to have appropriate ways of disseminating safety information, including necessary technical support and equipment, at the same time assuring the protection of sensitive safety and personal information.

Step 10: Safety performance monitoring and measurement

This last step 'closes the loop'. Feedback for continuous improvement of your SMS and overall safety performance relies on:

- safety oversight: through inspections and audits, documenting for staff and management that the safety actions are performed properly.
- safety performance monitoring: to assess if the SMS efforts remain effective and are meeting the organisation's safety objectives. For this you must identify accepted safety performance indicators (SPIs).
- safety communication: dissemination of lessons learned, safety findings and observations, and implementation of corrective actions to improve the system.



SMS evaluation tool

During the operating stage of your SMS, you need to evaluate your SMS to identify not only your compliance with each SMS element but also your SMS maturity level. To assist with this the Safety Management International Collaboration Group (SM ICG) developed an SMS evaluation tool, which directly compliments ICAO's standardised common approach to SMS across all aviation domains.

The tool evaluates the overall effectiveness of the SMS through a series of indicators based on the ICAO SMS framework. Each indicator should be reviewed to determine whether it is *present, suitable, operating, or effective*, using the definitions and guidance provided. This concept of evaluating SMS effectiveness supports the move from traditional, compliance-based oversight to performance-based oversight that focuses on how the SMS is performing. It provides a common baseline for SMS effectiveness evaluation that creates a sound basis for mutual acceptance of an SMS.

Although the evaluation tool follows the ICAO SMS framework, the order of the components does not indicate an order of importance. Risk management is generally considered the most important component of an organisation's SMS and may therefore be given more attention during an evaluation.

When starting out on your SMS journey the indicators will be mainly evaluated as meeting the present and suitable classifications. However, as your SMS starts to become fully functional you would start to be meeting, or aiming to achieve, the operating and effective classifications.

An item cannot be considered operating or effective if it is not present and it cannot be considered as present if it is not documented as documentation ensures consistent repeatable and systematic outcomes.

Present

There is evidence that the relevant indicator is documented within the organisation's SMS documentation.

Suitable

The relevant indicator is suitable based on the size, nature, and complexity of the organisation and the inherent risk in its activity.

Operating

There is evidence that the relevant indicator is in use and an output is being produced.

Effective

There is evidence that the relevant indicator is achieving the desired outcome and has a positive safety impact.

The tool has been designed to evaluate the maturity and overall effectiveness of the SMS in a standardised manner. To give the organisation an overall picture of its SMS performance, it is recommended to compile an evaluation summary that is concise and reflects the level of progress achieved by the organisation.

Due to the continuously changing and dynamic nature of aviation, during ongoing and subsequent evaluations the suitable designation should be constantly re-evaluated, considering any changes to the organisation, its activities and operating environment.

When re-evaluating your SMS, you cannot just assume because you were effective for an element previously that this assessment still stands. The constant changing nature of aviation organisations and the industry, plus the continuous improvement requirement for an SMS, means that no single element's maturity evaluations will remain constant and static.

The following is the CASA SMS evaluation tool adapted from the SM ICG SMS evaluation tool version 2, published April 2019.

Please note that the SMS evaluation tool below is a more detailed version of the SMS gap analysis tool provided earlier in this booklet. Although the indicators for evaluation are the same across both tools, the criteria within the SMS evaluation tool requires assessment against the maturity of the SMS elements during the operating phase of your SMS.

- Use the gap analysis tool when starting your SMS implementation planning process, as it allows for a simple yes, partial or no evaluation for action planning.
- Use the SMS evaluation tool for a more detailed analysis of your operating SMS, as it provides you with guidance on what to look for each level of maturity.



image: iStockphoto.com | Alberto Pomares

Component 1: Safety policies and objectives

Element 1.1: Management commitment							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.1.1	There is a safety policy, signed by the accountable manager, which includes a commitment to continuous improvement; observes all applicable legal requirements and standards; and considers best practices.						
1.1.2	The safety policy includes a statement to provide appropriate resources and the organisation is managing resources by anticipating and addressing any shortfalls.						
1.1.3	There are policies in place for safety critical roles relating to all aspects of fitness for duty (for example, alcohol and drugs policy or fatigue).						

Element 1.1: Management commitment

Guidance

What to look for

- Interview the accountable executive to assess their knowledge and understanding of the safety policy.
- Check that the safety policy is reviewed periodically for content and currency.
- Confirm that the safety policy meets the requirements.
- Interview staff to determine to what extent the safety policy is known, as well as how readable and understandable it is.
- Review available resources including personnel, equipment, and financial.
- There are sufficient and competent personnel.
- Review planned resources versus actual resources.
- Check how a positive safety culture is encouraged and impacts the overall effectiveness.

Present	Suitable	Operating	Effective
There is a safety policy, signed by the accountable manager, which includes a commitment to continuous improvement; observes all applicable legal requirements and standards; and considers best practices. The safety policy includes a statement to provide appropriate resources.	<p>The safety policy is easy to read.</p> <p>The content is customised to the organisation.</p> <p>There is a process for assessing resources and addressing any shortfalls.</p>	<p>The safety policy is reviewed periodically to ensure it remains relevant to the organisation.</p> <p>The organisation is assessing the resources being provided to deliver a safe service and taking action to address any shortfalls.</p>	<p>The accountable executive is familiar with the contents of the safety policy and endorses it.</p> <p>The organisation is reviewing and taking action to address any forecasted shortfalls in resources.</p>

Element 1.1: Management commitment							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.1.4	There is a means in place for the communication of the safety policy.						
1.1.5	The accountable executive and the senior management team promote a positive safety, just culture and demonstrate their commitment to the safety policy through active and visible participation in the safety management system.						

Element 1.1: Management commitment

Guidance

What to look for

- Review how the safety policy is communicated.
- Safety policy is clearly visible to all staff including relevant contracted staff and third-party organisations.
- Question managers and staff regarding knowledge of the safety policy.
- All managers are familiar with the key elements of the safety policy.
- Evidence of senior management participation in safety meetings, training, conferences, etc.
- Feedback from safety surveys that include specific just culture aspects.
- Relationship with regulator and other stakeholders.
- Review how a positive safety and just culture are promoted.

Present	Suitable	Operating	Effective
There is a means in place for the communication of the safety policy. The management commitment to safety is documented within the safety policy.	<p>The safety policy is clearly visible to all staff (consider multiple sites).</p> <p>The safety policy is understandable (consider multiple languages). The accountable executive and the senior management team have a well-defined role in the safety management system.</p>	<p>The safety policy is communicated to all personnel (including relevant contract staff and organisations). The accountable executive and the senior management team are promoting their commitment to the safety policy through active and visible participation in the safety management system.</p>	<p>People across the organisation are familiar with the policy and can describe their obligations in respect of the safety policy. Decision making, actions, and behaviours reflect a positive safety, just culture and there is good safety leadership that demonstrates commitment to the safety policy.</p>



image: Civil Aviation Safety Authority

Element 1.1: Management commitment							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.1.6	The safety policy actively encourages safety reporting.						
1.1.7	A just culture policy and principles have been defined that clearly identifies acceptable and unacceptable behaviours to promote a just culture.						

Element 1.1: Management commitment

Guidance

What to look for

- Evidence of when the just culture principles have been applied following an event.
- Evidence of interventions from safety investigations addressing organisational issues rather than focusing only on the individual.
- Review how the organisation is monitoring reporting rates.
- Review the number of aviation safety reports appropriate to the activities.
- Safety reports include the reporter's own errors and events they are involved in (events where no one was watching).
- Feedback on just culture from staff safety culture surveys.
- Interview staff representatives to confirm that they agree with just culture policy and principles.
- Check that staff are aware of the just culture policy and principles.

Present	Suitable	Operating	Effective
A just culture policy and principles have been defined.	<p>The just culture policy clearly identifies acceptable and unacceptable behaviours.</p> <p>The principles ensure that the policy can be applied consistently across the whole organisation.</p> <p>The just culture policy and principles are understandable and clearly visible.</p>	There is evidence of the just culture policy and supporting principles being applied and promoted to staff.	<p>The just culture policy is applied in a fair and consistent manner and staff trust the policy.</p> <p>There is evidence that the line between acceptable and unacceptable behaviour has been determined in consultation with staff and staff representatives.</p>

Element 1.1: Management commitment**Evaluation**

Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.1.8	Safety objectives have been established that are consistent with the safety policy and they are communicated throughout the organisation.						
1.1.9	The State Safety Programme (SSP) is being considered and addressed as appropriate.						

Element 1.1: Management commitment**Guidance****What to look for**

- Assess whether the safety objectives are appropriate and relevant.
- Objectives are defined that will lead to an improvement in processes, outcomes, and the development of a positive safety culture.
- Assess how safety objectives are communicated throughout the organisation.
- Safety objectives are being measured to monitor achievement through SPIs and safety performance targets (SPTs).
- Assess if the safety objectives have considered the State safety objectives in the SSP.

Present	Suitable	Operating	Effective
Safety objectives have been established that are consistent with the safety policy and there is a means to communicate them throughout the organisation.	<p>Safety objectives are relevant to the organisation and its activities.</p> <p>Safety objectives are understandable and clearly visible.</p> <p>Safety objectives are aligned with the SSP.</p>	Safety objectives are being regularly reviewed and are communicated throughout the organisation.	Achievement of the safety objectives is being monitored by senior management and action taken to ensure they are being met.



image: Civil Aviation Safety Authority

Element 1.2: Safety accountability and responsibilities

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.2.1	An accountable executive has been appointed with full responsibility and accountability to ensure the SMS is properly implemented and performing effectively.						
1.2.2	The accountable executive is fully aware of their SMS roles and responsibilities in respect of the safety policy, safety standards, and safety culture of the organisation.						

Element 1.2: Safety accountability and responsibilities

Guidance

What to look for

- Evidence that the accountable executive has the authority to provide sufficient resources for relevant safety improvements.
- Evidence of decision making on risk acceptability.
- Review SMS activities are being carried out in a timely manner and the SMS is sufficiently resourced.
- Evidence of activities being stopped due to unacceptable level of safety risk.
- Look for evidence that accountable executive actions are consistent with the active promotion of a positive safety culture in the organisation.

Present	Suitable	Operating	Effective
An accountable executive has been appointed with full responsibility and ultimate accountability for the SMS.	The accountable executive has control of resources.	<p>The accountable executive ensures that the SMS is properly resourced, implemented, and maintained, and has the authority to stop the operation if there is an unacceptable level of safety risk.</p> <p>The accountable executive is fully aware of their SMS roles and responsibilities.</p> <p>The accountable executive is accessible to the staff in the organisation.</p>	The accountable executive ensures that the performance of the SMS is being monitored, reviewed, and improved.

Element 1.2: Safety accountability and responsibilities

Evaluation

Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.2.3	Safety accountabilities, authorities, and responsibilities are defined and documented throughout the organisation and staff understand their own responsibilities.						

Element 1.2: Safety accountability and responsibilities

Guidance

What to look for

- Question managers and staff regarding their roles and responsibilities.
- Confirm senior managers are aware of the organisation's safety performance and its most significant risks.
- Evidence of managers having safety related performance targets.
- Look for active participation of the management team in the SMS.
- Evidence of appropriate risk mitigation, action, and ownership.
- The levels of management authorised to make decisions on risk acceptance are defined and applied.
- Check for any conflicts of interest and that they have been identified and managed.

Present	Suitable	Operating	Effective
The safety accountability, authorities, and responsibilities are clearly defined and documented.	Individuals have access to their safety accountability, authorities, and responsibilities (for example, through job descriptions or organisational charts).	Everyone in the organisation is aware of and fulfil their safety responsibilities, authorities, and accountabilities and are encouraged to contribute to the SMS.	The accountable executive and the senior management team are aware of the risks faced by the organisation and SMS principles exist throughout the organisation so that safety is part of the everyday language.



image: Civil Aviation Safety Authority

Element 1.3: Appointment of key personnel							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.3.1	A competent safety manager who is responsible for the implementation and maintenance of the SMS has been appointed with a direct reporting line to the accountable executive.						
1.3.2	The organisation has allocated sufficient resources to manage the SMS including, but not limited to, competent staff for safety investigation, analysis, auditing, and promotion.						

Element 1.3: Appointment of key personnel

Guidance

What to look for

- Review safety manager role including credibility and status.
- Review the training that the safety manager has received.
- Evidence of maintained competency.
- Review how the safety manager gets access to internal and external safety information.
- Review how the safety manager communicates and engages with operational staff and senior management.
- Review the safety manager's workload and allocated time to fulfil the role.
- Check there are sufficient resources for SMS activities such as safety investigation, analysis, auditing, safety meeting attendance, and promotion.
- Review of safety report action and closure timescales.
- Interviews with accountable executive and safety manager.
- Check for any conflicts of interest and that they have been identified and managed.

Present	Suitable	Operating	Effective
A safety manager who is responsible for the implementation and maintenance of the SMS has been appointed with a direct reporting line to the accountable executive.	<p>The safety manager is competent.</p> <p>Sufficient time and resources are allocated to maintain the SMS.</p>	<p>The safety manager has implemented and is maintaining the SMS. The safety manager is in regular communication with the accountable executive and escalates safety issues when appropriate.</p> <p>The safety manager is accessible to staff in the organisation.</p>	<p>The safety manager is competent to manage the SMS and identifies improvements in a timely manner.</p> <p>There is a close working relationship with the accountable executive and the safety manager is considered a trusted advisor and given appropriate status in the organisation.</p>

Element 1.3: Appointment of key personnel							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.3.3	The organisation has established appropriate safety committee(s) that discuss and address safety risks and compliance issues and includes the accountable executive and the heads of functional areas.						



image: Civil Aviation Safety Authority

Element 1.3: Appointment of key personnel

Guidance

What to look for

- Review safety committee and meeting structure and terms of reference for each committee or meeting.
- Review meeting attendance levels.
- Review meeting records and actions.
- Check that outcomes are communicated to the rest of the organisation.
- Evidence of safety objectives, safety performance, and compliance are being reviewed and discussed at meetings.
- Participants challenge what is being presented when there is limited evidence.
- Senior management are aware of the most significant risks faced by the organisation and the overall safety performance of the organisation.

Present	Suitable	Operating	Effective
The organisation has established safety committee(s).	<p>Safety committee(s) structure and meeting frequency supports the SMS functions across the organisation.</p> <p>The scope of the safety committee(s) includes safety risks and compliance issues.</p> <p>The attendance of the highest-level safety committee includes at least the accountable executive and the heads of functional areas.</p>	<p>There is evidence of meetings taking place detailing the attendance, discussions, and actions.</p> <p>The safety committee(s) monitor the effectiveness of the SMS and compliance monitoring function by reviewing there are sufficient resources.</p> <p>Actions are being monitored and appropriate safety objectives and SPIs have been established.</p>	<p>Safety committee(s) include key stakeholders.</p> <p>The outcomes of the meetings are documented and communicated, and any actions are agreed, taken, and followed up in a timely manner. The safety performance and safety objectives are reviewed and actioned as appropriate.</p>

Element 1.4: Co-ordination of emergency response planning

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.4.1	An appropriate emergency response plan (ERP) has been developed and distributed that defines the procedures, roles, responsibilities, and actions of the various organisations and key personnel.						
1.4.2	The ERP is periodically tested for the adequacy of the plan and the results reviewed to improve its effectiveness.						

Element 1.4: Co-ordination of emergency response planning

Guidance

What to look for

- Review emergency response plan.
- Review how coordination with other organisations is planned.
- Review how the ERP is distributed and where copies are held.
- Interview key personnel and check they have access to the ERP.
- Check that different types of foreseeable emergencies have been considered.
- Review when the plan was last reviewed and tested and actions taken.

Present	Suitable	Operating	Effective
A coordinated ERP has been developed and defined.	<p>Key personnel have easy access to the relevant parts of the ERP at all times.</p> <p>The ERP defines the procedures, roles, responsibilities, and actions of the various organisations and key personnel.</p> <p>The frequency and methods for testing the ERP are defined.</p> <p>The coordination with other organisations (including non-aviation organisations) is defined with appropriate means.</p>	The ERP is reviewed and tested to make sure it remains up-to-date. There is evidence of coordination with other organisations as appropriate.	The results of the ERP review and testing are assessed and actioned to improve its effectiveness.



image: Rawpixel.com

Element 1.5: SMS documentation							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
1.5.1	The SMS documentation includes the policies and processes that describe the organisation's safety management system and processes and is readily available to all relevant personnel.						
1.5.2	SMS documentation, including SMS related records, are regularly reviewed and updated with appropriate version control in place.						

Element 1.5: SMS documentation

Guidance

What to look for

- Review the SMS documentation and amendment procedures.
- Check for cross references to other documents and procedures.
- Check availability of SMS documentation to all staff.
- Check that staff know where to find safety-related documentation including procedures appropriate to their role.
- Review the supporting SMS documentation (hazard logs, meeting minutes, safety performance reports, risk assessments, etc.).
- Check how safety records are stored and version controlled.
- Check appropriate staff are aware of the records control processes and procedures.

Present	Suitable	Operating	Effective
<p>The SMS documentation includes the policies and processes that describe the organisation's SMS and processes. The SMS documentation defines the SMS outputs and which records of SMS activities will be stored.</p> <p>Records to be stored, storage period, and location are identified.</p>	<p>SMS documentation is readily available to all relevant personnel.</p> <p>SMS documentation is comprehensible.</p> <p>SMS documentation is consistent with other internal management systems and is representative of the actual processes in place.</p> <p>Data protection and confidentiality rules have been defined.</p>	<p>Changes to the SMS documentation are managed.</p> <p>Everyone is familiar with and follows the relevant parts of the SMS documentation.</p> <p>SMS activities are appropriately stored and found to be complete and consistent with data protection and confidentiality control rules.</p>	<p>SMS documentation is proactively reviewed for improvement.</p> <p>SMS records are routinely used as inputs for safety management-related tasks and continuous improvement of the SMS.</p>



image: Civil Aviation Safety Authority

Component 2: Safety risk management

Element 2.1: Hazard identification							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
2.1.1	There is a confidential reporting system to capture errors, hazards, and near misses that is simple to use and accessible to all staff.						
2.1.2	There is a confidential reporting system that provides appropriate feedback to the reporter and, where appropriate, to the rest of the organisation.						
2.1.3	Personnel express confidence and trust in the organisation's reporting policy.						

Element 2.1: Hazard identification

Guidance

What to look for

- Review the reporting system for access and ease of use.
- Check staff's trust of and familiarity with the reporting system, and whether they know what should be reported.
- Review how data protection and confidentiality is achieved.
- Evidence of feedback to reporter, the organisation, and third parties.
- Assess volume and quality of reports, including whether personnel are reporting their own errors and mistakes.
- Review report closure rates.
- Check whether contracted organisations and customers are able to make reports.
- Review how reports in the system are analysed.
- Confirm that responsibilities with regard to occurrence analysis, storage, and follow-up are clearly defined.
- Check that relevant staff are aware of which occurrences should be mandatory.
- Assess how senior management engage with the outputs of the reporting system.

Present	Suitable	Operating	Effective
<p>There is a confidential reporting system to capture mandatory occurrences and voluntary reports that includes a feedback system and stored on a database.</p> <p>The process identifies how reports are actioned, and timescales are specified and addressed.</p>	<p>The reporting system is accessible and easy to use by all personnel.</p> <p>Responsibilities, timelines, and format for the feedback are meaningful and well defined.</p> <p>Data protection and confidentiality is ensured.</p>	<p>The reporting system is being used by all personnel.</p> <p>There is feedback to the reporter of any actions taken (or not taken) and, where appropriate, to the rest of the organisation.</p> <p>Reports are evaluated, processed, analysed, and stored.</p> <p>Staff are aware of and fulfil their responsibilities in respect to the reporting system.</p> <p>Reports are processed within the defined timescales.</p>	<p>There is a healthy reporting system based on the volume of reporting and the quality of reports received.</p> <p>Safety reports are acted on in a timely manner.</p> <p>Personnel express confidence and trust in the organisation's reporting policy and process.</p> <p>The reporting system is being used to make better management decisions and continuously improve.</p> <p>The reporting system is available for third parties to report (partners, suppliers, and contractors).</p>

Element 2.1: Hazard identification

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
2.1.4	There is a process that defines how hazards are identified from multiple sources through reactive and proactive methods (internal and external).						
2.1.5	The hazard identification process identifies human performance related hazards.						
2.1.6	There is a process in place to analyse safety data and safety information to look for trends and gain useable management information.						
2.1.7	Safety investigations are carried out by appropriately trained personnel to identify contributing factors (why it happened, not just what happened).						

Element 2.1: Hazard identification

Guidance

What to look for

- Review how hazards are identified, analysed, addressed, and recorded.
- Review structure and layout of hazard log.
- Consider hazards related to:
 - possible accident scenarios
 - human and organisational factors
 - business decisions and processes
 - third party organisations
 - regulatory factors.
- Review what internal and external sources of hazards are considered such as safety reports, audits, safety surveys, investigations, inspections, brainstorming, management of change activities, commercial and other external influences, etc.
- Review whether safety investigations identify human and organisational contributing factors.

Present	Suitable	Operating	Effective
<p>There is a process that defines how hazards are identified though reactive and proactive methods.</p> <p>The triggers for safety investigations are identified.</p>	<p>Multiple sources of hazards (internal and external) are considered and reviewed, as appropriate.</p> <p>The data analysis process enables gaining useable safety information.</p> <p>Hazards are documented in an easy-to-understand format.</p> <p>The level of sign-off for safety investigations is defined and adequate to the level of risk.</p>	<p>The hazards are identified and documented. Human and organisational factors related to hazards are being identified.</p> <p>Safety investigations are carried out and recorded.</p>	<p>The organisation has a register of the hazards that is maintained and reviewed to ensure it remains up-to-date. It is continuously and proactively identifying hazards related to its activities and the operational environment and involves all key personnel and appropriate stakeholders including external organisations.</p> <p>Hazards are continuously assessed in a systematic and timely manner.</p> <p>Safety investigations identify causal or contributing factors that are acted upon.</p>



image: Civil Aviation Safety Authority

Element 2.2: Safety risk assessment and mitigation							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
2.2.1	There is a process for the management of risk that includes the analysis and assessment of risk associated with identified hazards expressed in terms of likelihood and severity (or alternative methodology).						
2.2.2	There are criteria for evaluating the level of risk the organisation is willing to accept and risk assessments and ratings are appropriately justified.						

Element 2.2: Safety risk assessment and mitigation

Guidance

What to look for

- Review the risk classification scheme and procedures.
- Check that severity and likelihood criteria are defined (or that an alternative methodology is described).
- Review whether risk assessments are carried out consistently.
- Sample an identified hazard and review how it is processed and documented.
- Review what triggers a risk assessment.
- Check any assumptions made and whether they are reviewed.
- Review how issues are classified when there is insufficient quantitative data available.
- Check that the process defines who can accept what level of risk.
- Check that the risk register is being reviewed and monitored by the appropriate safety committee(s).
- Evidence of risk acceptability being routinely applied in decision making processes.

Present	Suitable	Operating	Effective
<p>There is a process for the analysis and assessment of safety risks.</p> <p>The level of risk the organisation is willing to accept is defined.</p>	<p>Severity and likelihood criteria are clearly defined and fit the service provider's actual circumstances.</p> <p>The risk matrix and acceptability criteria are clearly defined and usable.</p> <p>Responsibilities and timelines for accepting the risk are clearly defined.</p>	<p>Risk analysis and assessments are carried out in a consistent manner based on the defined process.</p> <p>The defined risk acceptability is being applied.</p>	<p>Risk analysis and assessments are reviewed for consistency and to identify improvements in the processes.</p> <p>Risk assessments are regularly reviewed to ensure they remain current.</p> <p>Risk acceptability criteria are used routinely and applied in management decision making processes and are regularly reviewed.</p>

Element 2.2: Safety risk assessment and mitigation**Evaluation**

Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
2.2.3	The organisation has a process in place to make decisions and apply appropriate and effective risk controls.						
2.2.4	Senior management have visibility of medium and high-risk hazards and their mitigation and controls.						

Element 2.2: Safety risk assessment and mitigation**Guidance****What to look for**

- Risk controls consider human and organisational factors.
- Evidence of risk controls being actioned and follow up.
- Aggregate risk is being considered.
- Check whether the risk controls have reduced the residual risk.
- Risk controls are clearly identified.
- Review the use of risk controls that rely solely on human intervention.
- Check that new risk controls do not create additional risks.
- Check whether the acceptability of the risks is made at the right management level.

Present	Suitable	Operating	Effective
The organisation has a process in place to decide and apply risk controls.	Responsibilities and timelines for determining and accepting the risk controls are defined.	Appropriate risk controls are being applied to reduce the risk to an acceptable level including timelines and allocation of responsibilities. Human factors are considered as part of the development of risk controls.	Risk controls are practical and sustainable, applied in a timely manner, and do not create additional risks. Risk controls take human factors into consideration.



image: Civil Aviation Safety Authority

Component 3 : Safety assurance

Element 3.1: Safety performance monitoring and measurement							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.1.1	Safety performance indicators (SPIs) linked to the organisation's safety objectives have been defined, promulgated, and are being monitored and analysed for trends.						

Element 3.1: Safety performance monitoring and measurement

Guidance

What to look for

- Evidence that SPIs are based on reliable sources of data.
- Evidence of when SPIs were last reviewed.
- The defined SPIs and targets are appropriate to the organisation’s activities, risks, and safety objectives.
- SPIs are focused on what is important rather than what is easy to measure.
- Consideration of any State SPIs.
- Review whether any action has been taken when an SPI is indicating a negative trend (reflecting a risk control or an inappropriate SPI).
- Evidence that results of safety performance monitoring are discussed at the senior management level.
- Evidence of feedback provided to the accountable executive.

Present	Suitable	Operating	Effective
There is a process in place to measure the safety performance of the organisation including SPIs and targets linked to the organisation’s safety objectives and to measure the effectiveness of safety risk controls.	<p>SPIs are focused on what is important rather than what is easy to measure.</p> <p>Reliability of data sources is considered in the design of SPIs.</p> <p>SPIs are linked to the identified risks and safety objectives.</p> <p>Frequency and responsibility for the trend monitoring of SPIs are appropriate.</p> <p>Realistic targets have been set.</p> <p>State SPIs are considered, as applicable.</p>	The safety performance of the organisation is being measured and meaningful SPIs are being continuously monitored and analysed for trends.	<p>SPIs are demonstrating the safety performance of the organisation and the effectiveness of risk controls based on reliable data.</p> <p>SPIs are reviewed and regularly updated to ensure they remain relevant.</p> <p>Where the SPIs indicate that a risk control is ineffective, appropriate action is taken.</p>

Element 3.1: Safety performance monitoring and measurement

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.1.2	Risk mitigations and controls are being verified, audited to confirm they are working and effective.						
3.1.3	Safety assurance takes into account activities carried out by all directly contracted organisations.						

Element 3.1: Safety performance monitoring and measurement

Guidance			
What to look for			
<ul style="list-style-type: none"> • Evidence of risk controls being assessed for effectiveness (e.g., audits, surveys, reviews, SPIs and safety performance targets [SPTs], reporting systems). • Evidence of risk controls applied by contracted organisations being assessed and overseen (e.g., quality check, reviews, and regular meetings). • Information from safety assurance and compliance monitoring activities feeds back into the safety risk management process. • Review where risk controls have been changed as a result of the assessment. 			
Present	Suitable	Operating	Effective
There is a process in place to assess whether the risk controls are applied and effective.	Responsibilities, methods, and timelines for assessing risk controls are defined. Contracted organisations are included in the safety assurance process.	Risk controls are being verified to assess whether they are applied and effective.	Risk controls are assessed, and actions taken to ensure they are effective and delivering a safe service.

Element 3.1: Safety performance monitoring and measurement

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.1.4	Responsibilities and accountability for ensuring compliance with safety regulations are defined and applicable requirements are clearly identified in organisation manuals and procedures.						
3.1.5	There is an internal audit programme including details of the schedule of audits and procedures for audits, reporting, follow up, and records.						
3.1.6	Responsibilities and accountabilities for the internal audit process are defined and there is a person or group of persons with responsibilities for internal audits with direct access to the accountable manager.						

Element 3.1: Safety performance monitoring and measurement

Guidance

What to look for

- Review how senior management ensure the organisation remains compliant.
- Review job descriptions for compliance responsibilities.
- Evidence that senior management take action on internal and external audit results.
- Review how independence of the internal audit function is achieved.
- Review how the internal audit function interacts with:
 - senior management
 - line managers
 - the safety management staff.
- Assess the contents of the programme against any regulatory requirements.

Present	Suitable	Operating	Effective
<p>Responsibilities and accountabilities for compliance are defined.</p> <p>The organisation has an internal audit programme and procedures for audits, reporting, and records.</p> <p>A person or group of persons with responsibilities for internal audits has been identified and they have direct access to the accountable executive.</p>	<p>The internal audit programme covers all applicable regulations and includes details of the schedule of audits.</p> <p>Independence of the internal audit function is achieved.</p>	<p>The compliance monitoring programme is being followed and regularly reviewed.</p> <p>All staff are aware of their responsibilities and accountabilities for compliance and to follow processes and procedures.</p> <p>Internal and external audit results are reported to the accountable executive and senior management.</p>	<p>Individuals are proactively identifying and reporting potential non-compliances.</p> <p>The accountable executive and senior management actively seek feedback on the status of internal and external audit activities.</p>



image: Civil Aviation Safety Authority

Element 3.1: Safety performance monitoring and measurement							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.1.7	After an audit, there is appropriate analysis of causal factors, and corrective or preventive actions are taken.						

Element 3.1: Safety performance monitoring and measurement

Guidance

What to look for

- Review the methods used for causal analysis.
- Check that the method is used consistently.
- Review any repeat findings and check for actions that have not been implemented or are overdue.
- Check for timely implementation of actions.
- Review senior management awareness of the status of significant findings and related corrective or preventive actions.
- Check that appropriate personnel participate in the determination of causes and contributing factors.
- Look for consistency between internal audit results and external audit results.
- Review whether causal factors are considered as potential hazards.

Present	Suitable	Operating	Effective
<p>The process for the identification and follow-up of corrective and preventive actions are defined.</p> <p>The interface between internal audits and the safety risk management processes is described.</p>	<p>Responsibilities and timelines for determining, accepting, and following-up of the corrective and preventive actions are defined.</p> <p>Compliance monitoring includes contracted activities.</p>	<p>The identification and follow-up of corrective and preventive actions is carried out in accordance with the procedures including causal analysis to address contributing factors.</p> <p>The status of corrective and preventive actions is regularly communicated to relevant senior management and staff.</p>	<p>The organisation investigates the systemic causes and contributing factors of findings.</p> <p>The organisation proactively reviews the status of corrective and preventive actions.</p> <p>Effectiveness of the corrective and preventive actions is verified.</p>

Element 3.2: The management of change							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.2.1	The organisation has a process to identify whether changes have an impact on safety and to manage any identified risks in accordance with existing safety risk management processes.						
3.2.2	Human factor (HF) issues have been considered as part of the change management process and, where appropriate, the organisation has applied the appropriate HF or human-centred design standards to the equipment and physical environment design.						

Element 3.2: The management of change

Guidance

What to look for

- Key stakeholders are involved in the process.
- Review what triggers the process.
- Review recent changes that have been through the risk assessment process.
- Check that change is signed off by an appropriately authorised person.
- Transitional risks are being identified and managed.
- Review follow up actions such as whether any assumptions made have been validated.
- Review whether there is an impact on previous risk assessments and existing hazards.
- Review whether consideration is given to the accumulative effect of multiple changes.
- Review that business-related changes have considered safety risks (organisational restructuring, upsizing or downsizing, IT projects, etc.).
- Evidence of HF issues being addressed during changes.
- Review the impact of change on training and competencies.
- Review previous changes to confirm they remain under control.
- Consider how the changes are communicated to those people impacted by the change.

Present	Suitable	Operating	Effective
The organisation has established a change management process to identify whether changes have an impact on safety and to manage any identified risks in accordance with existing safety risk management processes.	<p>Triggers for the change management process are defined.</p> <p>The process also considers business related changes and interfaces with other organisations and departments.</p> <p>The process is integrated with the risk management and safety assurance processes.</p> <p>Responsibilities and timelines are defined.</p>	<p>The change management process is being used and includes hazard identification and risk assessments with appropriate risk controls being put in place before a decision to make the change is taken.</p> <p>HF issues have been considered and been addressed as part of the change management process.</p>	<p>The change management process is used for all changes that may impact safety, including HF issues, and considers the accumulation of multiple changes. It is initiated in a planned, timely, and consistent manner and includes follow up action that ensures the change was implemented safely.</p> <p>The change is communicated to those affected.</p> <p>Risk control and mitigation strategies associated with changes are achieving the planned effect.</p>



image: Adobe Stock | chalabala

Element 3.3: Continuous improvement of the SMS							
Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
3.3.1	The organisation is continuously monitoring and assessing its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.						

Element 3.3: Continuous improvement of the SMS

Guidance

What to look for

- Review the information and safety data used for management decision making and continuous improvement.
- Evidence of:
 - lessons learnt being incorporated into SMS and operational processes
 - best practices being sought and embraced
 - surveys and assessments of organisational culture being carried out and acted upon
 - data being analysed and results shared with safety committees
 - follow-up actions.
- Information from external occurrences, investigation reports, safety meetings, hazard reports, audits, and safety data analysis all contribute towards continuous improvement of the SMS.

Present	Suitable	Operating	Effective
There is a process in place to monitor and review the effectiveness of the SMS using the available data and information.	<p>The SMS is periodically reviewed, and the review is supported by safety information and safety assurance activities.</p> <p>Senior management and different departments are involved.</p> <p>The decision making is data informed.</p> <p>External information is considered in addition to internal information.</p>	There is evidence of the SMS being periodically reviewed to support the assessment of its effectiveness and appropriate action being taken.	The assessment of SMS effectiveness uses multiple sources of information including the safety data analysis that supports decisions for continuous improvements.

Component 4: Safety performance

Element 4.1: Training and education						
Evaluation						
Indicators of compliance and performance	P	S	O	E	How it is achieved	Comments
4.1.1 There is a training programme for SMS in place that includes initial and recurrent training. The training covers individual safety duties (including roles, responsibilities, and accountabilities) and how the organisation's SMS operates.						
4.1.2 There is a process in place to measure the effectiveness of training and to take appropriate action to improve subsequent training.						
4.1.3 Training includes human and organisational factors including just culture and non-technical skills with the intent of reducing human error.						

Element 4.1: Training and education

Guidance

What to look for

- Review the SMS training programme including course content and delivery method.
- Check training records against the training programme.
- Review how the competence of the trainers is being assessed and maintained.
- Training considers feedback from external occurrences, investigation reports, safety meetings, hazard reports, audits, safety data analysis, training, course evaluations, etc.
- Review how training is assessed for new staff and changes in position.
- Review any training evaluation.
- Check that the training includes human and organisational factors.
- Ask staff about their own understanding of their role in the organisation's SMS and their safety duties.
- Check that all staff are briefed on compliance.

Present	Suitable	Operating	Effective
There is an SMS training programme in place that includes initial and recurrent training.	<p>The training covers individual safety duties (including roles, responsibilities, and accountabilities) and how the organisation's SMS operates.</p> <p>Training material and methodology are adapted to the audience and include human factors.</p> <p>All staff requiring training are identified.</p>	The SMS training programme is delivering appropriate training to the different staff in the organisation and is being delivered by competent personnel.	<p>SMS training is evaluated for all aspects (learning objectives, content, teaching methods and styles, tests, etc.) and is linked to the competency assessment.</p> <p>Training is routinely reviewed to take feedback from different sources into consideration.</p>

Element 4.1: Training and education

Evaluation

Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
4.1.4	There is a process that evaluates the individual's competence and takes appropriate remedial action when necessary.						
4.1.5	The competence of trainers is defined and assessed, and appropriate remedial action taken when necessary.						

Element 4.1: Training and education

Guidance

What to look for

- Review how competence assessments are carried out on initial recruitment and recurrently.
- Check it includes safety duties and responsibilities, as well as compliance management.

Present	Suitable	Operating	Effective
A competency framework is defined for all personnel, including trainers.	There is a process in place to periodically assess the actual competency of personnel against the framework.	There is evidence of the process being used and being recorded.	<p>The competence assessment programme and process is routinely reviewed and improved.</p> <p>The competence assessment takes appropriate remedial action when necessary and feeds into the training programme.</p>



image: Civil Aviation Safety Authority

Element 4.2: Safety communication

Evaluation

Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
4.2.1	There is a process to determine what safety critical information needs to be communicated and how it is communicated throughout the organisation to all personnel, as relevant. This includes contracted organisations and personnel where appropriate.						

Element 4.2: Safety communication

Guidance

What to look for

- Review the sources of information used for safety communication.
- Review the methods used to communicate safety information (e.g., meetings, presentations, emails, website access, newsletters, bulletins, posters, etc.).
- Assess whether the means of communication is appropriate.
- The means for safety communication is reviewed for effectiveness and material used to update relevant training.
- Significant events, changes, and investigation outcomes are being communicated.
- Check accessibility to safety information.
- Ask staff about any recent safety communication.
- Review whether information from occurrences is timely, communicated to all relevant personnel (internal and external), and has been appropriately disidentified.

Present	Suitable	Operating	Effective
There is a process to communicate safety critical information.	<p>The process determines what, when, and how safety information needs to be communicated.</p> <p>The process includes contracted organisations and personnel where appropriate.</p> <p>The means of communication are adapted to the audience and the significance of what is being communicated.</p>	Safety critical information is being identified and communicated throughout the organisation to all personnel, as relevant, including contracted organisations and personnel where appropriate.	<p>The organisation analyses and communicates safety critical information effectively through a variety of methods as appropriate to maximise it being understood.</p> <p>Safety communication is assessed to determine how it is being used and understood and to improve it where appropriate.</p>



image: Civil Aviation Safety Authority

Interface management

An additional consideration of how third-party contractors and interfaces have been identified and documented within your SMS.

Element 5.1: Interface management

Evaluation							
Indicators of compliance and performance		P	S	O	E	How it is achieved	Comments
5.1.1	The organisation has identified and documented the relevant internal and external interfaces and the critical nature of such interfaces.						

Element 5.1: Interface management

Guidance

What to look for

- Review how interfaces have been documented. It may be included in a system description.
- Evidence that:
 - safety critical issues, areas, and associated hazards are identified
 - safety occurrences are being reported and addressed
 - risk control actions are applied and regularly reviewed
 - interfaces are reviewed periodically.
- Training and safety promotion sessions are organised with relevant external organisations.
- External organisations participate in SMS activities and share safety information.
- Check the identified interfaces (e.g., aerodromes, airlines, Air Traffic Control [ATC], training organisations, contracted organisations, and the State).

Present	Suitable	Operating	Effective
The organisation has identified and documented the relevant internal and external interfaces and the critical nature of such interfaces.	<p>All relevant interfaces are addressed.</p> <p>The way the interfaces are managed is appropriate to the criticality in terms of safety.</p> <p>The means for communicating safety information is defined.</p>	<p>The organisation is managing the interfaces through hazard identification and risk management.</p> <p>There is an assurance activity to assess risk mitigations being delivered by external organisations.</p>	<p>The organisation has a good understanding of interface management and there is evidence that interface risks are being identified and acted upon.</p> <p>Interfacing organisations are sharing safety information and take actions when needed.</p>

Source: SM ICG SMS Evaluation Tool, SKYbrary Aviation Safety; <https://skybrary.aero/articles/sm-icg-sms-evaluation-tool>

SMS continuous improvement

Maintaining and continuously improving your SMS is an ongoing journey because an organisation and its operating environment is constantly changing. There are two main aspects of SMS continuous improvement:

1. Maintenance of the safety systems: which is aimed at ensuring your safety practises meet the desired level of safety performance, even during a changing operational context.
2. Improvement of the safety system: which is aimed at enhancing current standards and proactively enhancing safety performance.

Many aspects of an organisations SMS are designed to achieve continuous improvement by maintaining and improving the safety system. An SMS is an integrated system where outputs from one part provide inputs into other parts of the system. Through this integrated system interaction, and via the constant learning aspect of safety management your SMS is forever evolving. Improving safety performance through enhancing safety processes, procedures and overall developing a positive safety culture is key to continuous improvement.

Like with anything in life, the more we learn about something and practice it, the better we become at it. Safety management is the same. The more we increase our knowledge of our safety performance and understanding our safety lessons the better our safety management capabilities become.

Some key areas that indicate effective SMS continuous improvement:

- Safety lessons learned are being incorporated into SMS policies, procedures, and processes.
- Best safety practices are constantly being sought and embraced.
- Assessments of organisational safety culture are routinely carried out and findings are acted upon.
- Safety risk controls are routinely re-evaluated to determine ongoing effectiveness.
- All organisational changes are assessed against change risk management processes to proactively mitigate safety risks.
- Management embraces an ever-evolving safety management mindset, routinely evaluating and revising current processes, in response to changing needs, operational environment, or standards to ensure the SMS remains effective and relevant.

Maintenance and continuous improvement of the SMS is supported by several safety assurance activities. For more information on continuous improvement of the SMS through safety assurance activities see booklet 4: Safety assurance.

As your organisation's SMS matures you are building a proactive and resilient safety culture, always striving for best practise. At this stage you would be aiming for excellence in your SMS components. This would look like:

- Safety policy and objectives: the organisation is an industry leader in safety and embraces best practices.
- Safety risk management: key personnel throughout the organisation are aware and understand the risks relative to their responsibilities and are continuously searching out new hazards and risks, while re-evaluating existing risks.
- Safety assurance: the organisation is continuously assessing its approach to safety management and is continuously improving its safety performance and seeking out and embracing best practices.
- Safety promotion: the organisation provides training and safety promotion to all personnel including third-party contracted service providers and assesses the effectiveness of its safety promotion and its influence on safety behaviours.
- Human factors integration: human factors are embedded into day-to-day activities of the organisation and fully integrated into the SMS. This is evident throughout the organisation from senior management to front line staff across all activities.



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