

(G) — Appendix 1 to GM5 SKPI Verification of ANSP EoSM by NSA/competent authority

It is the responsibility of the ANSP to complete the ANSP-level Effectiveness of Safety Management questionnaire and for the NSAs to verify the evidence submitted. When answering the questions there are one of five levels of implementation to be selected. The ANSP should select the implementation level that best describes their organisation and provide evidence in support of the level selected.

In order to ensure consistent interpretation of the questions the following guidance has been prepared. Table A presents a set of generic principles that are applicable to each maturity level, throughout the questionnaire. Table B presents a set of outcomes for each question that align with each implementation level. It is important to be cognisant of BOTH tables when selecting the most appropriate implementation level since the principles of both tables are applicable. To further help with the interpretation of the questions additional explanations are provided at the end of each study area group.

Respondents are reminded that the answers should be conservative and ALL required elements must be in place for a certain level. This includes the generic elements from the table A below, as well as the particular elements suggested by the questionnaire and the guidance in Table B below. Even if a certain level has only one or two elements still missing, then the level below (which has all elements in place) must be selected.

Table A – Generic Principles for each Implementation Level

<i>Initiating</i>	<i>Planning / Initial Implementation</i>	<i>Implementing</i>	<i>Managing & Measuring</i>	<i>Continuous Improvement</i>
<ul style="list-style-type: none">• Awareness for the need for SMS exists. No specific formal implementation actions are in place or planned• The processes for managing safety are ad hoc and/or inconsistent with the Organisation's safety obligations.	<ul style="list-style-type: none">• A gap analysis has been performed.• The Organisation has an SMS Implementation Plan that is consistent with the Organisation's safety goals and obligations.• Implementation is underway but not yet completed in some major aspects.	<ul style="list-style-type: none">• The Organisation has achieved the required regulatory standard.• The SMS standard processes are in use across the organisation and are producing consistent results. The results are being measured using qualitative techniques.	<ul style="list-style-type: none">• SMS Implementation has been completed and both safety performance and system performance are measured and controlled using statistical and other quantitative techniques.• Quantitative safety objectives are based on customer, end user and organisational needs.• Sub-processes are developed that significantly contribute to overall organisation safety performance.	<ul style="list-style-type: none">• Safety processes / systems are firmly embedded within the organisation.• The focus is on continuous improvement in operational safety and maximising the effectiveness of SMS processes through innovative improvements.• There are defined processes to set standards and improvement targets.• The effectiveness of the SMS and safety improvement actions are measured and evaluated

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				against defined improvements criteria.
<p>The SMS framework is very immature or non-existent in the organisation.</p> <p>The SMS components and elements are not documented and have not been implemented. No Implementation Plan has been formally developed.</p>	<p>The SMS framework is not yet effective and does not yet meet the required regulatory standard.</p> <p>The Implementation Plan exists. The plan is not yet fully deployed.</p>	<p>The SMS framework meets the required regulatory standard.</p> <p>The SMS Implementation Plan is mostly implemented.</p>	<p>The SMS framework is functioning and is effective in achieving the overall safety policy and objectives of the organisation.</p> <p>The Organisation is identifying and adopting industry best (good) practices.</p>	<p>The SMS framework is regularly reviewed and enhanced to achieve excellence in ATM safety management. On-going planning ensures that safety management activities are integrated and drive priorities for operational safety improvement.</p> <p>The Organisation is setting the industry SMS best (good) practices.</p>
<p><i>The organisation is not measuring and monitoring safety performance.</i></p>	<p><i>The organisation has a plan to capture information about safety performance.</i></p>	<p><i>The organisation is collecting safety reports under a controlled process, and is responding to safety issues identified as a result of individual incident investigations.</i></p>	<p><i>The organisation is measuring safety performance. It has identified its key safety risks and has developed plans for improvement.</i></p>	<p><i>The organisation is managing its key safety risks in conjunction with external stakeholders and can demonstrate improved safety performance.</i></p>

Table B – Example Outcomes for Each Level and Every Question

Effectiveness Levels						
ID	Objective	Initiating	Planning / Initial Implementation	Implementing	Managing and Measuring	Continuous Improvement
SA1 Development of a positive and proactive safety culture						
SA1.1	A positive and pro-active, flexible, and informed safety culture (the shared beliefs, assumptions, and values regarding safety) that supports reporting and learning led by management.	<p>Within the organisation, there are significant differences between what is said, what is done, and what is believed.</p> <p>The competent authority may be regarded as being responsible for safety.</p> <p>The organisation determines what safety means and generates some awareness of this throughout the organisation. Individuals may have a different understanding of how their activities contribute to safety.</p>	<p>Individuals within the organisation have a good level of systematic safety management awareness.</p> <p>The organisation is starting to put processes in place for systematic safety management.</p>	<p>The fundamentals of a positive safety culture exist and are operating</p> <p>Individuals may be involved in systematic safety management.</p>	<p>All of Implementing plus: Staff are proactively involved in planning for and implementing systematic safety management.</p> <p>The organisation operates informed learning and reporting cultures, as well as a just culture with respect to errors in operations.</p>	<p>All of Managing & Measuring plus:</p> <p>Individuals across the organisation are proactively and constantly striving to improve their approach to systematic safety management. They are supported by measurement and review processes and organisational management.</p> <p>Experiences are openly exchanged internally and externally.</p> <p>Within the organisation, there is a complete alignment between what is said, what is</p>

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						done, and what is believed.
SA.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	<p>Safety is not recognised as a priority within the organisation and is strictly dealt with as required by the Regulations.</p> <p>Within the organisation there are</p> <ul style="list-style-type: none"> • Low levels of trust • Lack of appreciation for the role the organisation plays in safety • Lack of accountabilities for safety outcomes <p>Management gives little to no importance to safety issues.</p>	<p>Individuals within the organisation have a good level of systematic safety management awareness.</p> <p>Senior management has formulated and communicated to the workforce a corporate safety policy.</p> <p>The SMS and training to support its implementation are under development.</p> <p>Communication on safety starts to develop ,although it is strictly related to safety occurrences.</p>	<p>A positive safety culture is developing, although it is still immature. This is being achieved through forums such as safety committees, SMS integration working groups and other cross-organisational groups have been established for the sharing of information and the integration of safety processes.</p> <p>The reporting and investigation system includes accidents, incidents, hazardous situations and precursor data.</p> <p>All employees are aware of their duties and accountabilities as they relate to safety.</p> <p>A reporting and investigation 'regime' has been established.</p> <p>Safety reports are produced but they are not proactive.</p>	<p>Staff are proactively involved in planning for and implementing systematic safety management. It is expected that:</p> <ul style="list-style-type: none"> • Safety performance measures have been identified and implemented. • Safety performance targets have been set and measured, and weaknesses identified and addressed. • The organisation has committed resources to collect, maintain and analyse safety data. <p><u>This category may only be selected if a formal (i.e. not an ad hoc process) Safety Culture measurement has been performed, such as the EUROCONTROL Safety Culture Survey or similar.</u></p>	<p>Individuals across the organisation are proactively and constantly striving to improve their approach to systematic safety management.</p> <p>Management undertakes a leadership role in creating and communicating the future safety vision for their organisation.</p> <p>On-going contacts are established with external stakeholders such as airlines, aviation associations, airports and other ANSPs in order to collect and address safety concerns.</p> <p>The organisation has developed and implemented methods for sharing lessons learnt.</p> <p>The organisation looks to continuously improve and enhance its Safety Management System</p>

						A safety culture measurement must have been made and targets set for the organisation to select this level.
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SA1.2	Regular measurement of safety culture and an improvement programme.	The organisation does not see the need to have a safety culture measuring mechanism in place.	<p>The organisation is aware of the need to have periodic measurements of safety culture in place, as well as an improvement plan.</p> <p>However, what will be measured, and when, is still being defined.</p>	<p>Safety culture is measured and results are available.</p> <p>An improvement plan addresses the need for individuals to be aware of, and support, the organisation's shared beliefs, assumptions and values regarding safety.</p>	<p>All of Implementing plus:</p> <p>The organisation assesses its safety culture on a regular basis and implements improvements to any identified weaknesses.</p> <p>Safety Culture enablers and barriers are identified, and solutions to reduce barriers are being implemented.</p>	<p>All of Managing & Measuring plus:</p> <p>All personnel are proactive and committed to improving safety.</p> <p>Safety Culture Surveys confirm that, within the organisation, there is a high level of alignment between what is said, what is done, and what is believed.</p> <p>Organisational management approves a continuous improvement plan.</p>
SA1.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	There is no attempt to measure or improve the organisation's safety culture.	<p>There is a growing awareness of the impact of cultural issues in the workplace.</p> <p>Based on the operational context of the organisation, a model of safety culture has been defined.</p> <p>Safety culture drivers have been identified.</p> <p>Awareness campaigns and training on safety culture are</p>	<p>Management becomes cognisant of the need to address safety culture issues in order to support new SMS processes.</p> <p>Tools such as climate surveys and workshops have been developed and used to measure safety culture.</p> <p>Results of measurement</p>	<p>People are aware of the impact of cultural issues and consider these factors in key decisions.</p> <p>A regular cycle of safety culture measurement has been agreed upon, e.g., once every two years.</p> <p>Feedback is provided to management and</p>	<p>Safety and production are seen as interdependent and not mutually exclusive.</p> <p>Assessment of safety culture has been expanded outside the operational groups.</p> <p>Action plans for enhancing safety</p>

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			<p>being introduced to all employees.</p> <p>The organisation is researching how to measure safety culture.</p>	<p>efforts have been evaluated, areas for improvement identified and an action plan developed.</p> <p>In concert with employee representatives, a plan, including a communications plan, for safety culture assessment and enhancement has been developed and implemented.</p> <p><u>At least one safety culture measurement must have been undertaken and finalised, with results available.</u></p>	<p>employees on the results of the assessment and plans for enhancement.</p> <p><u>More than a single survey must have been undertaken and finalised in the past 3 to 5 years.</u></p>	<p>culture, including continuous improvement, have been implemented.</p> <p>Levels of safety culture are improving over time.</p>
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SA1.3	A just and open climate for reporting and investigation of occurrences.	Management believes there are no issues regarding the existing reporting and investigation culture and therefore does not see the need for any activity or dialogue with the staff in this area.	Discussions between staff and management to define an open reporting and investigation climate are underway. However, there is no agreed policy in place yet.	Safety data-sharing and publication policies are supported by the staff. Safety data are sufficiently protected from external interference within legal limits.	All of Implementing plus: Within the organisation, the line between acceptable and unacceptable mistakes is established and known by the staff. Just reporting and investigation culture principles are in place and systematically applied within the organisation.	All of Managing & Measuring plus: There is a clear and published policy on how dialogue with judicial authorities and media is established and followed.
SA1.3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	There is no guarantee against penalties arising from the reporting of incidents. There is not trust between management and staff.	Management begins to recognise the need for a just culture within the organisation. Management, in close cooperation with union representatives and employees, begins development of a JC policy for all operational staff. Management begins to recognise the value of safety reporting.	The organisation has a confidential safety reporting program that allows all employees to report safety concerns that they might have. The organisation has established the necessary procedures, processes and tools for collecting hazard and system safety deficiencies from across the company, providing feedback to reporters, and disseminating lessons learnt. Staff are protected and incident reporting is confidential.	Reporting is not limited to accidents and incidents, but also extends to collection of precursor data, such as situations where there was no loss of separation but safety was not assured. A just culture policy has been adopted by the organisation for employees, including operational staff. The organisation has developed operational rules and procedures that support a just culture and encourage self-reporting (i.e., a well-defined process, such as a decision tree, for dealing with rule violations,	Employees recognise the essential role of safety reporting, trust management to treat them fairly, and believe that their safety concerns will be investigated thoroughly and openly. Employees are comfortable reporting safety concerns directly to their supervisors, not just confidentially to the safety department.

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					including routine violations).	
					A confidential reporting system, with feedback processes to those who raise safety concerns, is in place for all employees, .	
SA1	Additional explanations	<p>Individuals: Means individual employees within the organisation whose responsibilities have a direct impact, or potential impact, on safety.</p> <p>Management: These are the people within the organisation who are accountable for safety and make the decisions that affect safety.</p> <p>Measurement: This refers not just to the fact that measurement takes place but to how things are measured. It refers to using the appropriate statistical and other quantitative techniques. These should be listed in the Justification paragraph.</p> <p>Organisation: In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this measurement is conducted at the level of the FAB, then 'organisation-wide' they can refer to the FAB and all other references to 'organisation' must be consistent with this approach.</p> <p>Staff: All those individual personnel, operational and technical, with a safety responsibility within their job description.</p>				

SA2 Organisational and individual safety responsibilities						
SA2.1	An approved, clearly documented, and recognised system for the management of safety. Management structure, responsibilities, accountabilities and authorities are clearly defined and documented.	No formal designation of authorities, responsibilities or accountabilities for the management of safety exists.	Safety authorities, responsibilities, and accountabilities have been identified but not yet formalised. Line managers assume responsibility for safety.	Authorities, responsibilities, and accountabilities for the management of safety have been defined and documented. Delineation of responsibility for the development, oversight and implementation of the SMS is clearly understood ¹ .	All of implementation plus: Procedures are in place to address the need to review safety authorities, responsibilities, and accountabilities after any significant organisational change.	All of Managing & Measuring plus: Safety authorities, responsibilities, and accountabilities are periodically reviewed to determine whether they are suitable and effective (i.e., continuous improvement of safety management).
SA2.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		Initial safety accountabilities are identified. A list of staff who have safety responsibilities is established.	Safety accountabilities of senior managers are documented. Safety accountability matrix that shows a complete and consistent set of accountabilities is	Responsibilities are clear and without overlap. Evidence shows that responsibilities are reviewed on 1) a regular basis, and 2), following any organisational change.	Evidence shows that data on the effectiveness of safety management and safety accountability/ responsibilities of managers are

¹ Line management is usually responsible for the implementation of procedures or practices which are required by the SMS, whilst specific responsibility for the development and oversight of the SMS and the organisation's safety outcomes centre in safety departments, executive management and board oversight committees depending on the structure and governance of the organisation.

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				<p>produced.</p> <p>Evidence shows that safety responsibilities are being delegated.</p> <p>SMS ownership is clearly documented.</p>		<p>gathered and used to drive a process of continuous improvement</p>
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SA2.2	A clearly defined safety management function/safety manager that is independent of line management.	A safety management function has not yet been appointed to develop the SMS.	A safety management function has been appointed to develop and maintain the SMS.	<p>The safety management function is independent of line management and develops and maintains an effective SMS.</p> <p>The safety manager has access to the resources required for the proper development and maintenance of the SMS.</p>	<p>All of implementation plus:</p> <p>The highest organisational level recognises its role in the SMS and actively supports the development, implementation, maintenance, and promotion of the SMS throughout the organisation (including support departments).</p>	<p>All of Managing & Measuring plus:</p> <p>There is clear evidence that the highest organisational level plays a pro-active role in the continuous improvement of the SMS.</p>
SA2.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		<p>The Safety Manager has been appointed</p> <p>An SMS Implementation Plan has been produced</p> <p>Governance structure for the SMS has been approved and published.</p>	<p>Evidence shows that the Safety Manager is providing effective and efficient challenge to proactively manage safety within the ANSP</p> <p>An SMS Resource plan exists.</p> <p>Safety Governance structures (e.g., review board and/or safety action group) are in place.</p>	<p>Evidence shows that:</p> <ul style="list-style-type: none"> the SMS is fully embedded within the organisation; safety is considered in every investment decision; senior management support for safety. 	<p>Evidence shows that safety and safety management have become a way of life in the organisation and drive decisions at all levels in the ANSP.</p>

SA2.3	An integrated safety planning process is adopted by the organisation with published and measurable safety goals and objectives for which the executive is accountable.	An ad hoc or non-existent safety planning process is utilised by the organisation. Safety goals and objectives have not been identified or documented for the implementation of a safety management system.	Identification of an appropriate SMS has been identified. A compliance gap analysis has been performed and a SMS Implementation Plan developed to meet the applicable safety regulatory requirements.	The requirements expressed in the SMS Implementation Plan have been completed. The SMS meets the regulatory requirements.	All of Implementing plus: An Organisation Safety Plan is published on a periodic basis with specific accountable and measurable safety management goals and targets.	All of Managing & Measuring plus: The Organisation Safety Plan goals and objectives are developed and prioritised based on organisation safety risks which have been identified through trend analysis, risk assessment processes and identified system safety deficiencies. Where appropriate (considering ANSP size and complexity), the organisation is committed to share and implement ATM safety management international best (good) practices.
SA2.3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		There is evidence of a gap analysis between established procedure and the proposed SMS. Regulatory requirements are identified. SMS structure is agreed upon.	SMS Implementation Plan is completed. SMS is in place. Evidences can be provided that the SMS addresses the regulatory requirements.	Organisation Safety Plan is in place. Measurable safety goals/targets exists.	The organisation understands its major safety risks. The organisation Safety Plan identifies mitigations for key risks. The effectiveness of

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			A SMS Implementation plan is produced.			both SMS and Safety Plan are measured and the information used to improve them on a continuous cycle.
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SA2.4	<p>Clear understanding and acceptance of safety management accountabilities and responsibilities by all relevant staff and contractors.</p> <p>Commitment to continuous improvement to safety.</p>	<p>Knowledge of the principles underpinning SMS amongst all staff and contractors is negligible.</p>	<p>All staff and contractors apply rules and procedures to their tasks in the knowledge that some of the rules and procedures need improvement.</p> <p>All staff and contractors are only partially aware of their roles in the SMS.</p>	<p>All staff and contractors are aware of how their actions impact the safety of the wider operation and how the actions of others impact safety.</p>	<p>All of implementation plus:</p> <p>All staff and contractors across the organisation are actively promoting and improving safety.</p> <p>All staff and contractors take pro-active day-to-day action to have rules and procedures changed where they identify a safety benefit by the change.</p>	<p>All of Managing & Measuring plus:</p> <p>The organisation regularly reviews and assesses documented safety management responsibilities.</p>
SA2.4	<p>Outcomes of the objective fulfilment which may be considered applicable for each level of implementation</p>		<p>Evidence shows that staff are starting to become aware of the importance of a formal SMS.</p> <p>Evidence shows that procedures available as part of the developing SMS are starting to be applied.</p>	<p>Evidence shows that employees are aware of how they contribute the safety of the operation and why it is important that formal SMS is agreed and applied.</p>	<p>Evidence shows that :</p> <ul style="list-style-type: none"> • safety and safety management are now core disciplines within the organisation; • safety is one of the key considerations in every part of the ANSP from operational units to finances and human resources departments 	<p>Evidence shows that the effectiveness of the SMS is continually assessed and that the data gathered are used in a cycle of continuous improvement.</p>
SA2	<p>Additional explanation</p>	<p>Accountability: The person, who is accountable, has ultimate responsibility (liability) for safety and ensuring that those who are responsible for safety undertake their duties effectively and efficiently, i.e. ‘the Buck stops here’.</p> <p>Appropriate: In this context, it means providing an SMS that meets the needs of your organisation. It is realised that smaller organisations have less complex processes than larger ANSPs. However, the chosen SMS must be Justified and clear Evidence of its suitability given.</p>				

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		<p>Authority: The person who is required to perform a certain safety management task is given all internal means to e.g. access the necessary data, avail of needed resources, experts, etc.</p> <p>Clear evidence: It must be shown that the CEO/Board have clear accountabilities with regard to safety and evidence of this must be shown below. E.g. Example of CEO's written accountability and examples of how he/she takes a proactive role in improving safety.</p> <p>Contractor: In the context of this survey, 'contractor' refers to internal 'contracted' staff with safety significant tasks and not external contractors. E.g. the IT department may have been outsourced, but the staff is on-site and for everyday work are working alongside permanent staff and operate under the rules. External 'contracted' staff are dealt with through external interfaces which are assessed in study area 7.</p> <p>Delineation: In this context, it means that accountabilities, responsibilities, etc. are described and written down in detail.</p> <p>Documentation: A formal statement, documentation, or equivalent, endorsed by top management and/or Board is required.</p> <p>Highest organisational level: It means that post with overall accountability for Safety. E.g. the CEO.</p> <p>Independent of Line Management: It means an individual can exercise authority without reference to their line management and reports directly to a senior post without going through line management. E.g. Safety Manager reports directly to CEO.</p> <p>Integrated safety planning process: It means that the process covers the entire organisation (not just single units) and is accountable to the highest level of the ANSP. E.g. the CEO/Board are accountable for the process.</p>
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SA3 Timely compliance with international obligations						
SA.1	A formal SMS that meets all applicable safety requirements.	There is no SMS in place. There may be deviations from safety requirements.	The SMS is partially implemented, but it is not yet effective; it does not yet meet the safety requirements.	The essential parts of the SMS are implemented, and the organisation meets the safety requirements.	All of Implementing plus: The SMS is fully implemented and effective. Operations are monitored regularly to identify deviations.	All of Managing & Measuring plus: The organisation is committed to going beyond compliance and operating at the highest international safety standard.
SA3.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		ANSP has a plan to implement a SMS and is working towards the goal through a prioritised program.	A compliant SMS is implemented.	The SMS is an effective management system which is assisting in decision making at the very highest levels.	The ANSP has recognised that there is benefit for its operations in having a mature SMS. There is a plan in place for reaching the highest international safety standards.

SA3.2	An organisation that strives to go beyond compliance, takes into account the need to ensure, in a timely manner, that there are no inconsistencies with European or national requirements or international safety standards.	There is little awareness of the regional or international safety standards.	There is an awareness of the European or national requirements or international safety standards. Work has started in some areas.	European or national requirements or international safety standards are known and met as required.	All of Implementing plus: There is a process in place to address the need for timely and consistent compliance with European or national requirements or international safety standards.	All of Managing & Measuring plus: The organisation has a structured mechanism to address the need for on-going and consistent compliance with European or national requirements or international safety standards. It contributes to a European, national or international dialogue to improve these requirements or standards.
SA3.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		A gap analysis has been completed, and areas of non-compliance are known and prioritised for action.	Compliance differences have been filed.	The organisation is compliant with new requirements ahead of the effective date. Embedded management processes (including audit) monitor practices to test internal compliance.	The organisation can identify areas of its operations which further legislative requirements are needed to improve safety standards.
SA3	Additional explanations	<p>Applicable: Means all those safety requirements laid down by State and International bodies. E.g. State Safety Plan, SES Regulations, etc.</p> <p>Evidence: Within the Evidence box you must show how you contribute and provide clear evidence of how you contribute to national and international standards. Structured mechanisms must be clearly identified.</p> <p>Examples: Clear examples of going beyond compliance have to be provided (more than one).</p> <p>Going beyond compliance: Means not just meeting the requirements but doing so before the deadline and having things in place that go</p>				

	<p>beyond the basic requirement. The ‘applicable’ safety requirements are often the ‘minimum’ standard required and it is feasible to reach higher levels of safety by implementing additional safety measures. To achieve this level ANSPs must demonstrate that they have not only achieved the applicable safety requirements but have also gone beyond that level of compliance.</p> <p>International Safety Standards: These are standards recognised by international organisations such as ICAO, EUROCONTROL, CANSO, EASA, etc.</p> <p>Monitored regularly: Justification and Evidence of the methods used to monitor and evidence of the monitoring will be required.</p> <p>Organisation In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this survey is conducted at the level of the FAB, then ‘organisation-wide’ can refer to the FAB and all other references to ‘organisation’ must be consistent with this approach.</p> <p>Process: Give details on the process to ensure compliance and measurements used to monitor this process, such as number of regulations per year, people involved directly, average time to compliance, number of findings (if applicable) from audits, etc.</p> <p>Safety Requirements: It means all those safety requirements laid down by State and International bodies that you have to meet. E.g. State Safety Plan, SES and BR Regulations, etc.</p> <p>Timely and Consistent Compliance: It means that the organisation consistently meets all deadlines set and has a process in place to ensure this happens. However, just having a process in place is not the same as meeting the target or implementing a specific project.</p> <p>Timely Manner: It means that all requirements and standards are met well within any deadlines set.</p>
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SA4 Safety standards and procedures						
SA4.1	Clearly defined and documented safety standards and procedures.	Some safety and safety management procedures exist, but they are not complete. Operations manuals do not contain any specific safety management procedures.	The documentation of SMS processes and procedures has started and is progressing as planned.	The documentation of the essential parts of the SMS processes and procedures is complete. The processes and procedures ensure that the organisation is compliant with all applicable safety and regulatory requirements.	All of Implementing plus: There is clear evidence that the safety and safety management documentation is readily available to all personnel in the organisation. This documentation details safety and safety management processes and procedures that meet or exceed the applicable safety and regulatory requirements.	All of Managing & Measuring plus: Processes are in place and are being applied to give effect to the organisation's commitment to continuously improve safety and safety management processes and procedures.
SA4.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		The following documentation exists: <ul style="list-style-type: none"> • SMS policy statement; • Documented SMS framework; • SMS implementation plan; • Initial SMS documentation. 	Documented Compliance with Regulatory requirements.	SMS published and available to all staff in the organisation It exceeds the regulatory requirements when it reflects best (good) practice in some areas.	The effectiveness of the organisations safety standards and procedures is measured and procedures are regularly updated to ensure that they reflect evolving best practice – i.e. better, quicker and more effective. Benchmarking against external organisations and sharing of best practice is an on-going activity.

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SA4.2	Staff know about the safety and safety management requirements and standards, which are regularly reviewed, assessed, and maintained.	Staff have limited knowledge of SMS processes and procedures. There is no formal process that maintains the SMS, nor is there an identified authority (or authorities) responsible for the updates.	A process to maintain all safety and safety management procedures exists, but its initial implementation is ad hoc and not fully effective. The authority (or authorities) responsible for the updates are partially identified.	The process to maintain all safety and safety management procedures is documented and practised. Procedures are kept up to date on an ad hoc basis as a minimum .	All of Implementing plus: There is a formal process in place to periodically review safety and safety management procedures and ensure that they remain relevant, up to date, and effective. The authority (or authorities) responsible for the updates are completely identified. All safety-related procedures are documented and are known by the staff.	All of Managing & Measuring plus: Changes within the organisation that could affect safety and/or the safety management framework are subjected to formal review.
SA4.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	SMS documentation is not subject to regular review and update. Staff familiarity with the SMS is low. Accessibility to SMS documents is low and not well understood.	The process for maintaining the SMS is documented but not yet implemented. Uncontrolled and out-of-date copies of the manual may still be used locally within the organisation. Responsibility for ownership and maintenance is known and documented for only parts of the SMS parts of the SMS.	The SMS development processes are well understood and follow the formally documented processes. The procedures are controlled and the issue status is known, but they are not all up-to-date as a formal and regular review and update cycle has not yet been instigated	The SMS update process is well understood and managed. Authorities maintain the individual sections for which they are responsible according to a periodic review cycle. All safety documents and procedures are up-to-date. All safety documents and procedures are easily accessible to staff.	All changes are subject to an impact assessment of the SMS before they are implemented. A well-established SMS change management process is in place and is continually reviewed to improve its efficiency and effectiveness.

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SA4.3	Emergency/Contingency response procedures and an emergency/contingency response plan that documents the orderly and efficient transition from normal to emergency operations and return to normal operations.	The organisation has sound primary Air Traffic Management systems but does not have redundant capabilities or back-up systems.	There are procedures and some redundant capabilities and resources to cope with abnormal and unexpected situations.	<p>All primary systems have redundant capabilities, and emergency/contingency response procedures have been developed, documented, and distributed to appropriate staff.</p> <p>The emergency/contingency response plan is properly coordinated with the emergency/contingency response plans of those organisations it must interface with during the provision of its services.</p>	<p>All of Implementing plus:</p> <p>Primary Air Traffic Management systems are reliable and have redundant capabilities and back-up systems.</p> <p>The emergency/contingency response plan and procedures have been rehearsed through desktop or operational exercises.</p>	<p>All of Managing & Measuring plus:</p> <p>The Emergency/Contingency Response planning processes and Emergency/Contingency Procedures and Plans are regularly exercised and revised to keep them up-to-date.</p>
SA4.3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	<p>No emergency response planning has been carried out.</p> <p>No planned redundant capabilities exist.</p>	<p>The primary risks to the organisation from abnormal and unexpected situations have been analysed.</p> <p>Emergency response procedures are documented for the most likely abnormal situations.</p> <p>Redundant capabilities are in place for high-risk functions.</p>	<p>Redundant capabilities are in place for all primary systems.</p> <p>Emergency response procedures have been published.</p> <p>An emergency response plan has been published.</p> <p>The emergency response plan has been co-ordinated with interfacing organisations.</p>	<p>Redundant capabilities and back-ups exist for all primary systems.</p> <p>The schedule for rehearsal of the emergency response plan and procedures has been determined.</p>	<p>The schedule for regularly reviewing the organisation's key risks has been determined.</p> <p>Regular lessons learnt exercises are conducted on the effectiveness of the emergency response plan.</p> <p>To reach level E ANSPs must demonstrate that their emergency/contingency response planning process is exercised on a regular basis and there is a process in place to ensure</p>

						that the procedures are revised and kept up-to-date. In practical terms this means that contingency plans must be exercised either in real time if feasible or, if not, by simulation.
SA4	Additional explanations	<p>Ad hoc: It means that plans are only developed as and when required and there is no formal planning process.</p> <p>Authorities: In the context of this survey it means those posts within the ANSP who are Accountable for Safety.</p> <p>Documentation: Documentation must be readily available to all staff, including those in remote locations. Intranet-based libraries are fine, however, there must be a process in place to ensure the documentation is updated and to check how easily it is accessible. Manuals buried in a library or web links that need countless clicks to access are not good examples, nor are those where personnel has to go through a complex registration procedure to access the documents.</p> <p>Emergency/contingency response plans: These must have been exercised, either through actual events, where practicable, or through simulation.</p> <p>Examples: Examples of such processes must be given. What are the resources allocated? Are these processes systematic or ad hoc?</p> <p>Formal Process: This is an established formal process in place that is documented and approved at the highest level within the ANSP.</p> <p>Formal Review: This is an established formal review process in place that is documented and approved at the top level within the ANSP.</p> <p>Organisation: In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this survey is conducted at the level of the FAB, then 'organisation-wide' they can refer to the FAB and all other references to 'organisation' must be consistent with this approach.</p> <p>Periodically: Something that occurs at regular or predictable intervals. E.g. a safety audit cycle that occurs every 6 months, or some other defined period.</p> <p>Redundancy: Monitoring of the redundancy as well as the readiness for crisis are needed (e.g. time to recovery, loss of capability on average etc.). Exercises and simulations should yield such results and indicate where improvement is potentially needed.</p> <p>Redundant Capability: The underlying concept behind redundant capability is to provide alternate means of providing a service. This may be a associated system or a standby network. To achieve redundancy, the network infrastructure (switches) must support redundancy protocols designed to negate the usual problems of putting loops into an Ethernet network, maintaining a default data path and switching to an alternate one when a fault occurs.</p> <p>Safety Processes/Procedures: Processes that are set out by local order or in the Safety Management Manual to ensure or enhance safety.</p> <p>Safety Management Processes/Procedures: Processes that are set out in the Safety Management Manual that define how safety should</p>				

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		<p>be managed within the organisation.</p> <p>Safety Standards & Regulations: Safety standards and Regulations are standards or requirements designed to ensure the safety of products, activities or processes, etc. They may be advisory or compulsory and may be issued by national and international bodies. E.g. National Regulator, ICAO, EUROCONTROL, EASA etc.</p> <p>Staff: All those individual personnel, operational and technical, with a safety responsibility within their job description.</p> <p>Targets: Further to the monitoring defined for D, there need to be targets defined in terms of review of procedures (threshold for review, number of reviews, average time to solution etc.) as well as ensuring a minimum level of staff awareness.</p>
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SA5 Competency						
SA5.1	Staff, and contractors (where appropriate) are trained, competent in safety and safety management, and where required, licensed.	<p>Competent staff and contractors (where appropriate) are provided on an ad hoc basis for safety and safety management activities.</p> <p>There are no formal competency methods (including proficiency, licensing, and training).</p>	<p>Competent staff, and contractors (where appropriate) are provided and allocated based on limited planning and only for a limited number of positions related to operations and safety management activities.</p> <p>Competency methods are being developed.</p>	<p>Competency methods have been designed and are applied.</p> <p>An annual planning process for training is in place.</p>	<p>All of Implementing plus:</p> <p>There is a process for the training providers(s) to receive feedback on the effectiveness of training programmes; based on feedback, the training programmes are revised to improve effectiveness.</p>	<p>All of Managing & Measuring plus:</p> <p>Competency methods (including proficiency, licensing, and training) are periodically reviewed and improved with industry best (good) practices adopted.</p> <p>Training plans cover safety and SMS activities and allow for the improvement of staff skills and competency.</p>
SA5.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		<p>Core Competencies for safety professionals are defined in policy.</p> <p>Training Plan is adopted.</p>	<p>Training course materials exists.</p> <p>Training statistics provide attendance records and competence assessment</p> <p>A gap analysis to identify any unfulfilled training needs or requirements has been established.</p>	<p>Safety professional performance standards related to core competency requirements as defined by the ANSP are met.</p> <p>The organisational structure shows recognised safety professional categories.</p> <p>Safety professionals possess required core competency process elements for their roles.</p>	<p>Training feedback is provided and analysed.</p> <p>Periodic training course review.</p> <p>Process Improvement Reports are available.</p> <p>Periodic Best (good) Practices Reports.</p>

SA5	Additional explanations	<p>Ad hoc: Means that plans are only developed as and when required and there is no formal planning process.</p> <p>Competent Staff: Are those individual Operational/Technical personnel who have reached the required standard to operate safely within the ANSP.</p> <p>Competency Methods/Processes: Any process or procedure that is in place that meets current regulations to check the competency of staff (Operational & Engineering when appropriate) and includes proficiency, licensing, and training.</p> <p>Contractor In the context of this survey ‘contractor’ refers to internal ‘contracted’ staff with safety significant tasks and not external contractors. E.g. the IT department may have been outsourced, but the staff are on-site and for everyday work are working alongside permanent staff and operate under the rules. External ‘contracted’ staff are dealt with through external interfaces which are assessed in study area 7.</p> <p>Feedback: Training and feedback must be monitored, such as effectiveness of response to the feedback, periodicity of training, satisfaction surveys from the trainees etc.</p> <p>Limited Planning: This means that, although some planning is undertaken, it does not cover all safety issues.</p> <p>Periodically: Something that occurs at regular or predictable intervals. E.g. a safety audit cycle that occurs every 6 months, or some other defined period.</p> <p>Staff: All those individual personnel, operational and technical, with a safety responsibility within their job description.</p> <p>Targets: There are targets on the periodicity of review as well as on the quality of training from the feedback received and potential external audits.</p>
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SA6 Risk Management						
SA 6.1	A continuing risk management process that identifies, assesses, classifies, and controls all identified safety risks within the organisation, including potential future risks.	There is no formal risk management process in place.	<p>The principles of risk management are documented and understood.</p> <p>There is an approved plan in place to implement the risk management process.</p>	The fundamentals of an approved and structured process is in place for the assessment of current and potential safety risks Training in risk assessment is on-going.	<p>All of Implementing plus:</p> <p>There is clear evidence that safety risk management is embedded within the organisation and identified safety risks are managed and controlled.</p>	<p>All of Managing & Measuring plus:</p> <p>Methods are in place to predict future safety risks and to mitigate these risks.</p> <p>The risk management processes are reviewed and improved on a periodic basis.</p> <p>The organisation develops best practice guidelines that it shares with other ANSPs.</p>
SA6.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		<p>The following documents (or equivalent) have been formally approved and published:</p> <ul style="list-style-type: none"> • Risk management policy; • Risk management definitions and theory. <p>Risk management training and risk management implementation plans have been developed and are subject to implementation.</p>	<p>The following (or equivalent) are available:</p> <ul style="list-style-type: none"> • Risk management process guide; • Risk management training manual and materials; • Training statistics (metrics). 	<p>Risk Management (RM) process reports (metrics) are available.</p> <p>Organisation structure shows RM process elements.</p> <p>RM process activities are well documented.</p> <p>There are lists of risks, controls & mitigations, and their status.</p>	<p>The following are available:</p> <ul style="list-style-type: none"> • Risk prediction reports; • Periodic risk management process review by management. Including agendas, minutes, actions and their status; • Risk management process

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						improvement reports.
SA6	Additional explanations	<p>Future/Potential Risks: These can be identified when planning future systems and/or making changes to existing systems. A risk assessment process needs to be in place to capture any unforeseen risks that may occur in the future.</p> <p>Metrics: There must be clear quantitative metrics identified, which are monitored on a systematic basis. These may be lagging, leading or a combination of both types of indicators.</p> <p>Risk Management: A systematic, explicit, and comprehensive analytical approach for managing safety risk at all levels and throughout the entire scope of an operation or the lifecycle of a system in ATM.</p> <p>Targets: Targets have to be defined based on the above mentioned metrics and these must be chased by the organisation.</p>				

SA7 Safety interfaces						
SA7.1	Effectively managed safety-related internal interfaces (e.g. quality management system, security, and environment).	The relationships between various different internal interfaces are defined; however, the interfaces operate in isolation.	Internal safety-related interfaces are managed on an informal or ad hoc basis.	Internal safety-related interfaces are managed with a solid understanding of the boundaries and relationships between the interfaces.	All of Implementing plus: Safety-related internal interfaces are coordinated, and relationships are managed through interface agreements (e.g., Letters of Agreement (LoAs), Memoranda of Understanding (MoUs), Service-Level Agreements (SLAs)).	All of Managing & Measuring plus: A process is in place to regularly review agreed interface arrangements (LoAs/MoUs/SLAs etc.), identify weaknesses and act on rectification .
SA7.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	The key relationships within the organisation are understood but not documented	All safety interfaces are understood, but procedures to manage these relationships are not formalised or documented. Plans to improve interaction between the interfaces or to formalise the interaction are absent.	Sound procedures are in place to manage the interfaces and the relationships between them.		

SA7.2	<p>The effective management of external interfaces with a safety impact (e.g., MIL, airspace users, airports). Formalised processes and procedures dealing with external agreements, services, and supplies (e.g., cross-border Letters of Agreement).</p> <p>(NB: for certain organisations MET, CNS and/or AIS are internal interfaces of the Organisation).</p>	There is a limited number of agreements in place.	<p>Safety-related external interfaces are managed on an informal or ad hoc basis.</p> <p>Draft contractual arrangements are being prepared and negotiated for all safety-related external interfaces.</p> <p>Some elements are already formalised and implemented.</p>	Safety requirements are specified and documented in appropriate agreements.	<p>All of Implementing plus:</p> <p>Activities with safety-related external interfaces are coordinated and relationships are managed through documented agreements.</p> <p>Safety requirements within contractual agreements are systematically reviewed and revised as necessary.</p>	<p>All of Managing & Measuring plus:</p> <p>External services and suppliers are surveyed/audited and systematically monitored to identify deviations from the documented arrangements.</p>
SA7.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	Some agreements between external interfaces have been agreed.	<p>All external safety interfaces are understood.</p> <p>Procedures/agreements to manage them are yet to be formalised but are in the process of being arranged.</p>	All safety-related external interfaces are acknowledged, and the management of the relationship and the associated safety requirements is formally acknowledged and agreed upon.		
SA7	Additional explanations	<p>Ad hoc: Means that plans are only developed as and when required and there is no formal planning process.</p> <p>Audit: Testing of process, product and people to assure that standards and requirements as documented in the organisation's SMS are complied with. If externals are independently audited and the report is made available that is it acceptable. E.g. If they are ISO certified and maintain the ISO certification.</p> <p>Environment: This term is used here as an example. If your organisation does not have an environmental unit it should be ignored.</p>				

	<p>External Interfaces: Interfaces between the ANSP and organisations, which are external to your own organisation e.g. NAA/NSA, FAB Partners, Military, Airlines, Energy Suppliers, etc., that you deal with on safety matters. Even if they are ISO certified it may be necessary to have an agreement if they have a direct effect on safety.</p> <p>Internal Interfaces: These are interfaces that exist within the ANSP between departments that work together and have some reliance upon each other for the safe execution of their responsibilities e.g. Safety, Security, operations, engineering, etc. It is accepted that internal interfaces are rarely managed through LoAs, but some form of formal agreement is required and evidence should be provided. Where Safety & Quality Departments are combined, or they are under the same leadership (e.g. a single Head of Safety and Quality), formalised agreements are not required, as it's assumed that the coordination is achieved naturally. In the case of FABs there may be instances where the FAB partner may be considered to be an internal interface.</p> <p>Interfaces: All interfaces have been positively identified and the need for formal agreements or not is documented, together with a measurement of such interfaces, such as number of required versus achieved, time between requests and solution across interfaces etc.</p> <p>Informal basis: Means that no formal agreements have been signed. Nonetheless, interfaces are managed by cooperation between the parties without an official formal agreement.</p> <p>Limited Number: Very few agreements compared to the potential number of interfaces the ANSP has. These agreements are by and large set up on an ad hoc basis.</p> <p>Periodicity: The periodicity is clearly established and documented. An option may also be a contract renewal, provided this is clearly specified and not simply expected. For example, contracts mutually extended do not guarantee a revision at the time of renewal.</p> <p>Process: The process must ensure that weaknesses are identified and measured and targets are set to eliminate the identified weaknesses or problems.</p> <p>Regularly: An action that is scheduled at regular, predictable time intervals.</p> <p>Some Elements: Where this term is used it means that agreements are being developed for interfaces (internal & external) and, although all agreements are yet to be finalised, some elements of the agreements are already in place and operating.</p> <p>Systematically: Something that is systematic, in the sense of belonging to the system, be it as a physical part of the system or as an enshrined procedure, action etc. This may also be an action or something that happens with a certain regularity, which is established through internal procedures.</p>
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SA8 Safety reporting, investigation and improvement						
SA8.1	A continuing organisation-wide process to report and investigate safety occurrences and risks.	<p>There is an informal system in place for reporting safety occurrences and risks, but reports are not reviewed systematically.</p> <p>The reporting system is not organisation-wide.</p> <p>Investigation is done on an ad hoc basis and with little or no feedback.</p>	<p>There is a plan to formalise the existing reporting and investigation system.</p> <p>There is commitment from management to allocate resources to implement this system.</p> <p>The reporting system is wide-spread but does not yet cover the whole organisation. Feedback is given on an ad hoc basis.</p>	<p>The system in place is commensurate with the size of the organisation.</p> <p>The organisation has a complete and formal system that records all reported information relevant to the SMS, including incidents and accidents.</p> <p>Corrective and preventive actions are taken in response to event analysis.</p>	<p>All of Implementing plus:</p> <p>Identified safety-related risks and deficiencies are actively and continuously monitored and reviewed for improvement.</p>	<p>All of Managing & Measuring plus:</p> <p>Personnel who report safety occurrences, risks and problems are empowered to suggest corrective actions, and there is a feedback process in place.</p>
SA8.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	<p>There are gaps in the organisation's knowledge of its performance. There is an incomplete investigation system, meaning some deficiencies are not rectified when they become visible. The potential of organisation learning is limited by the safety system inadequacies.</p>	<p>The organisation has committed to and resourced an organisational wide reporting and investigation system.</p>	<p>A reporting and investigation regime is established; however, improvements are able to focus only on findings from investigations of incidents and accidents due to the scope of the reporting system.</p>	<p>The reporting and investigation system is under continual development and includes accidents, incidents and hazardous situations. The organisation's process and system improvement cycle is embedded.</p>	<p>A confidential reporting system is in place with feedback processes to those who raise safety concerns</p>

SA8.2	An organisation-wide means to record and disseminate lessons learnt.	Safety lessons learnt are known only to those who experience them.	There is an intention to develop a means to record and share lessons learnt. This may already happen, but only on an ad hoc basis.	The process for sharing safety lessons learnt is systematic and operational and the majority of data is shared with appropriate personnel.	<p>All of Implementing plus:</p> <p>All safety lessons learnt are systematically shared across the organisation at all appropriate levels.</p> <p>Corrective actions are taken to address lessons learnt.</p>	<p>All of Managing & Measuring plus:</p> <p>There is clear evidence that the internal lessons learnt dissemination process is embedded across the organisation at all levels and is periodically reviewed.</p>
SA8.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	There is no transfer of learning at either an organisational or individual level.	Sharing of lessons is driven by individual workers or managers than at an organisational level.	The organisation has identified a number of mediums through which lessons can be shared	The organisation has developed and implemented a number of mediums through which lessons can be shared.	A continual improvement cycle has been developed to further refine and develop the ways in which lessons are shared within the organisation.

SA8.3	<p>Appropriate safety information and knowledge is shared with Industry stakeholders.</p> <p>Information disclosure is compliant with agreed publication and confidentiality policies/agreements.</p>	Safety data and information are treated as confidential. There are no plans to release it in any way to any industry stakeholders.	Safety data and information are shared internally, but the organisation is reluctant or unwilling to share data with industry stakeholders.	Safety data and information is shared internally, nationally, and with international bodies when it is required by regulation.	<p>All of Implementing plus:</p> <p>There is a clear and published policy that encourages the proactive sharing of safety-related information with other parties.</p>	<p>All of Managing & Measuring plus:</p> <p>Safety data and information are actively shared internally, nationally, with recognised international bodies, and with other industry stakeholders.</p> <p>The organisation has a process in place to receive and act on safety data and information from external stakeholders.</p>
SA8.3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation	Data is not accessible to those outside the information.	The organisation is accessing and using safety data internally.	The organisation meets the intent of the regulations in relation to data sharing.	Processes and protocols have been developed to assure that when data is shared with external parties this is conducted in an appropriate way. The organisation has determined with whom it believes it needs to share data and what data should be shared	Internal policy addresses the need for continued data sharing. The benefits of data sharing are recognised within the organisation, and acting on the basis of such information is a recognised organisational process.
SA8	Additional explanations	<p>Appropriate: In this context it means providing information that meets the needs of your organisation.</p> <p>Confidentiality policies/Agreements: These are those requirements that your ANSP is bound to follow by national and international requirements.</p> <p>Lessons Learnt Shared: This refers to significant information being made available.</p> <p>Metrics: The metrics defined above will have a number of relevant targets associated, such as minimum time to implementation, minimum number of people captured in the sharing exercise etc.</p>				

	<p>Monitored: In this context monitored means to observe and check the progress of all perceived safety risks and deficiencies and that regular surveillance over these areas is maintained. This is about how the monitoring is achieved.</p> <p>Monitoring: A monitoring system of lessons learnt and shared must be in place. Such metrics can be a count of the said lessons, targeted areas, units or people, effectiveness or corrective actions, time to implementation etc.</p> <p>Organisation: In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this survey is conducted at the level of the FAB, then “organisation-wide” can refer to the FAB and all other references to ‘organisation’ must be consistent with this approach.</p> <p>Other Parties: This is a collective term for all those organisations, bodies, Industry Stakeholders, etc. that an ANSP has a policy to proactively share data with.</p> <p>Process: The process must be measured for robustness. This objective is not about identifying the risks per se (see SA 6.1 for that). This is about having a process feeding the risk management, therefore its robustness and quality must be monitored. Possible measurements are: manual reports vs. automatic, internal vs. external, average duration of investigation, percentage of recommendations implemented and within what timescale etc.</p> <p>Safety Data: Any information associated with safety within the organisation. E.g. occurrence reports.</p>
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SA9 Safety performance reporting						
SA9.1	An established and active monitoring system that uses and tracks suitable safety indicators and associated targets (e.g., lagging and leading indicators).	There are no indicators, thresholds, or formal monitoring system in place to measure safety achievements and trends.	There is a plan to implement a monitoring system. A limited set of indicators has been implemented.	The safety monitoring system has been implemented and documented. Indicators and targets have been set:	All of Implementing plus: Additional indicators are also defined and monitored to meet both organisational and local safety objectives. All indicators are tracked against thresholds/targets on a regular basis. Trends are analysed for safety improvement purposes.	All of Managing & Measuring plus: Safety indicators covering all aspects of the system/operations are mature and used to measure safety improvement. There are comprehensive metrics in place to measure and monitor indicators and thresholds throughout the system.
SA9.1	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		An approved plan is in place to implement range of safety indicators;	Business process have been developed and documented to assure that data is available to support monitoring	Management is making decisions on the basis of safety performance monitoring. Trend monitoring is a key component of business operations.	Indicators and targets are updated on a regular basis and incorporate measures which address all services.

SA9.2	Methods to measure safety performance, which is compared within and between ANSPs.	Ad hoc safety performance data related to individual incidents is available, but there is no systematic approach for measuring safety performance.	The implementation of some qualitative and quantitative techniques in certain parts of the organisation has started. However, there is insufficient data to analyse.	Qualitative techniques are in place, and the implementation of quantitative techniques has started.	All of Implementing plus: Safety performance is measured using statistical and other quantitative techniques. Internal comparative analysis is done, and external comparative analysis has begun.	All of Managing & Measuring plus: The reporting, operational safety survey and SMS auditing programmes are integral parts of the management and operational processes. Results are used to drive further safety improvements across the organisation. Internal and external comparative analysis is well-established.
SA9.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		Monitoring is limited by available data.	A range of techniques to monitor safety are in place.	Internal benchmarking allows units to compare their performance against other similar operations.	Safety improvements are driven by internal and external benchmarking of performance.

SA9-3	A general public knowledgeable of the ANSP's performance through routine publication of achieved safety levels and trends.	Safety-related performance information is not made available to the public under any circumstances.	A limited amount of safety-related performance information is made available, but only to selected authorities.	High-level safety-related performance information is made available according to applicable requirements.	All of Implementing plus: Safety performance information not governed by applicable requirements is also made available to the public.	All of Managing & Measuring plus: The organisation voluntarily makes available appropriate safety-related performance information to the general public. The achieved safety levels and trends are transparent to the general public.
SA9-3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		The organisation has recognised the value of releasing information about the levels of safety achieved.	Regulatory agencies are provided with data about levels of safety achieved, in the expectation that regulatory activities such as audit will be informed by this information.	The ANSP makes available information about its performance to the public.	A range of measures are released to the general public with the aim of increasing confidence in the performance of the ANSP.
SA9	Additional explanations	<p>Applicable Requirements: Those published requirements national and international that state that specific data must be made available. That does not mean actively shared, just 'made available'.</p> <p>Appropriate: In this context it means safety data that will demonstrate safety performance, while not disclosing any sensitive details about individuals or the ANSP.</p> <p>Information: This refers to any safety information beyond that specified by international and/or national requirements. If there are no requirements, then any safety information published is acceptable.</p> <p>Metrics: The metrics and statistical techniques must be exemplified clearly.</p> <p>Monitored: In this context monitored means to observe and check the progress of additional indicators (along with other indicators) to ensure that they are meeting your and State objectives.</p>				

	<p>Monitoring System: In this context means a system that observes, checks and tracks the safety indicators and associated targets and maintains regular surveillance over must be consistent with this approach.</p> <p>Safety Objectives: This can be read the same as ‘targets’.</p> <p>Safety Requirements: Those requirements that are set out in national and international law (E.g. SES, ICAO) to maintain or improve ATM Safety.</p> <p>Safety Survey: A safety survey is a routine examination of the working processes of an ANSP with the objective of detecting and correcting weaknesses, thus improving the safety performance of the ANSP. A survey is wide in scope and typically encompasses either a Division or the entire ANSP. It is concerned with:</p> <ul style="list-style-type: none">• conformity to published procedures (i.e. correct working practices);• the fitness for purpose of the procedures;• the identification of new (or hitherto unidentified) potential hazards affecting operations;• any other safety weaknesses which are capable of elimination;• identifying opportunities for safety improvement even where no specific deficiencies exist;• validation that safety requirements are achieved during project execution;• verification that safety requirements continue to be achieved in operations. <p>SES States: Partners in a FAB may consider each other as “external”, for the purpose of this objective, provided they are not aggregated in a consortium.</p> <p>SMS Survey/Audit: An independent review of processes, products and people to assure that standards and requirements as documented in the organisation’s SMS are complied with.</p> <p>Transparent to the General Public: Safety levels and trends are published and available to the General Public in an easily accessible way (i.e. not an ‘on-request’ system).</p> <p>Organisation: In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this survey is conducted at the level of the FAB, then “organisation-wide” can refer to the FAB and all other references to ‘organisation’.</p>
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SA10 Operational safety surveys and SMS audits						
SA10-1	Internal and independent (external) operational safety surveys and SMS audits.	<p>There is no plan to conduct systematic operational safety surveys and SMS audits.</p> <p>Operational safety surveys, SMS audits, and gap assessments are conducted on an ad hoc basis (e.g., when deficiencies in the system or in working arrangements are found).</p>	<p>There is a plan in place to formalise the conduct of systematic operational safety surveys and SMS audits.</p> <p>A limited number of operational safety surveys and SMS audits have been carried out.</p>	<p>Internal operational safety surveys and SMS audits are conducted on a periodic basis.</p> <p>Based on the output of operational safety surveys and SMS audits, a process is in place that requires the development and implementation of appropriate improvement plans.</p>	<p>All of Implementing plus:</p> <p>Internal or external operational safety surveys and SMS audits are carried out in a systematic way.</p> <p>There is a process in place to monitor, analyse trends, and identify areas that require follow-up operational safety surveys or SMS audits.</p> <p>Follow-up operational safety surveys, SMS audits, and gap assessments are conducted in all areas affecting operational safety and the SMS.</p> <p>Operational safety surveys and SMS audits are actively reviewed to assess opportunities for system improvement.</p>	<p>All of Managing & Measuring plus:</p> <p>Independent (external) operational safety surveys and SMS audits are periodically conducted.</p> <p>The outputs from operational safety surveys and SMS audits are incorporated as appropriate into operations or the SMS.</p> <p>There is a process in place that requires external data (e.g. pilot performance trend information) to be considered when selecting areas to be subject to operational safety surveys and SMS audits.</p>
SA10-1	Outcomes of the objective fulfilment which may be considered applicable for	Little to no evidence of surveys/audits having been performed	<p>The following information for survey/audits can be provided:</p> <ul style="list-style-type: none"> - Plans; - Reports; - Requirements list; - Statement of authority and 	<p>The following survey/audit documentation exists</p> <ul style="list-style-type: none"> - Schedules; - Resources; - Technical procedure/ process descriptions. 	<p>Trend reports, showing periodicity have been published.</p> <p>Records of management review:</p> <ul style="list-style-type: none"> - Agendas; - Minutes; 	<p>External surveys/audits are documented in a log.</p> <p>There is evidence of management review and action on results</p> <p>An action plan has been written to address</p>

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	each level of implementation		independence-		- Action item responses; - Follow-up status reporting.	external findings Records of dissemination of findings, internally and externally, are available.
SA10	Additional explanations	<p>Actively: In this context, it means without any external and/or independent trigger, but simply at own initiative.</p> <p>Ad hoc: Means that plans are only developed as and when required and there is no formal planning process.</p> <p>Independent: This means surveys and audits are undertaken by people from outside of the ANSP. For the purpose of this question, audits performed by the national regulator (NSA, NAA or equivalent) or a qualified entity in a regulatory-auditing role, cannot be considered as independent .</p> <p>Periodic: Something that occurs at regular or predictable intervals. E.g. a safety audit cycle that occurs every 6 months, or some other defined period.</p> <p>Process: The process of monitoring and analysis must be clearly exemplified. Metrics must exist for all relevant areas surveyed.</p> <p>SMS Audit: Testing of processes, products and people to assure that standards and requirements as documented in the organisation's SMS are complied with.</p> <p>Safety Survey: A safety survey is a routine examination of the working processes of an ANSP with the objective of detecting and correcting weaknesses, thus improving the safety performance of the ANSP. A survey is wide in scope and typically encompasses either a Division or the entire ANSP. It is concerned with:</p> <ul style="list-style-type: none"> • conformity to published procedures (i.e. correct working practices); • the fitness for purpose of the procedures; • the identification of new (or hitherto unidentified) potential hazards affecting operations; • any other safety weaknesses which are capable of elimination; • identifying opportunities for safety improvement even where no specific deficiencies exist; • validation that safety requirements are achieved during project execution; • verification that safety requirements continue to be achieved in operations. 				

SA11 Adoption and sharing best(good) practices						
SA11.1	A structured approach exists to promote safety, its standing within the organisation and lessons learnt through application of the SMS.	<p>There is no structured approach to promote safety and its management within the organisation.</p> <p>The organisation has the capability to identify lessons learnt and promote them but on an ad hoc basis.</p>	<p>Ad hoc processes are in place to gather and then promote information on safety, lessons learnt and the SMS.</p> <p>Some initial implementation has begun.</p> <p>Some internal best (good) practices are spread across units within the organisation, but there is no systematic structure for internal safety promotion.</p>	An organisational approach has been established to promote safety, lessons learnt and the SMS.	<p>All of Implementing plus: Formal methods are in place to capture safety knowledge and promote it internally.</p> <p>The standing of safety and its management is a consistent and expected feature in internal communication.</p>	<p>All of Managing & Measuring plus: Staff are encouraged to share lessons learnt in order that the lessons can be promoted across the organisation.</p> <p>Strategies to promote safety and its management are developed by senior levels in the organisation and are being implemented.</p> <p>Other industries' initiatives in relation to internal safety promotion are periodically reviewed with the approach being modified on the basis of the information gathered.</p>
SA11.1	Outcomes of the objective fulfilment which may be considered applicable for each level of	There is no transfer of learning at either an organisational or individual level. Lessons learning, for example, is ad hoc.	Sharing of lessons is driven by individual workers or managers rather than at an organisational level. Lessons learnt processes are under development.	<p>The organisation has identified a number of mediums through which lessons can be shared and these have been formalised.</p> <p>There is some evidence that lessons learning is effective.</p>	<p>The organisation has developed and implemented a number of mediums through which lessons can be shared.</p> <p>Lessons learning process can be demonstrated to be</p>	<p>A continual improvement cycle has been developed to further refine and develop the ways in which lessons are shared within the organisation.</p> <p>All staff are aware of the</p>

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	implementatio n			KPIs and Milestones for lessons learnt identified.	effective. Changes to procedures, training can be traced back to lessons learning process.	lessons learning process. Senior managers actively promote safety to all staff. There is evidence of regular benchmarking of safety best (good) practices across the industry.
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SA11.2	A structured approach to gather information on operational safety and SMS best (good) practices from the industry.	<p>There is no structured approach to gather best (good) practices from the industry.</p> <p>The organisation has the capability to identify and adopt industry best (good) practices on an ad hoc basis.</p>	<p>There is an ad hoc structure in place to gather information on operational safety and SMS best (good) practices.</p> <p>Some initial implementation has begun.</p> <p>Some internal best(good) practices are spread across units within the organisation, but there is no systematic structure for the adoption of best (good) practices.</p>	A structure has been established to identify applicable operational safety and SMS best(good) practices from the industry.	<p>All of Implementing plus:</p> <p>Industry best (good) practices are periodically reviewed to provide the most current information, which is then assessed for applicability, and adopted as appropriate.</p>	<p>All of Managing & Measuring plus:</p> <p>All relevant best (good) practices are readily accessible to appropriate personnel.</p> <p>The organisation actively participates in developing industry best (good) practices.</p>
SA11.2	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		<p>Best practice process identified.</p> <p>There is evidence of identifying best practice.</p> <p>There is some evidence of application of internal best practice.</p>	<p>There is an auditable process to identify and apply best practice from the industry.</p> <p>Key performance indicators and Milestones have been produced to show that the process is being applied and is effective.</p>	<p>There is evidence of regular benchmarking of safety best (good) practices across the industry.</p> <p>Evidence shows that best (good) practices are adopted where appropriate.</p>	<p>Evidence shows that best (good) practices is made available for all staff to learn.</p> <p>Evidence shows that the organisation is proactive in developing and spreading best practice in the industry.</p>

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SA11.3	Sharing of safety and SMS-related best (good) practices with industry stakeholders.	There are no plans to release and share best (good) practices with industry stakeholders.	Sharing of best (good) practices is ad hoc and takes place in response to requests for assistance from industry stakeholders.	A formalised process is in place to share best (good) practices with industry.	All of Implementing plus: Best (good) practices are actively shared with industry stakeholders. Sharing of safety-related best (good) practices with industry has demonstrated improved safety performance.	All of Managing & Measuring plus: SMS-related best (good) practices are pro-actively shared with industry stakeholders with the aim of improving SMS standards.
SA11.3	Outcomes of the objective fulfilment which may be considered applicable for each level of implementation		A best practice process has been identified. There is evidence of ad hoc discussion on best practice with industry stakeholders. There is some evidence of application of internal best practice.	There is an auditable process to identify and apply best practice from the industry. Key performance indicators and milestones have been produced to show that the process is being applied and is effective.	There is evidence that best practice is proactively shared within the industry. KPIs show that the best practice has been effective in reducing risk and increasing safety performance.	Evidence that the organisation is proactive in developing and spreading best practice to improve the overall; level of safety management in the industry.
SA11	Additional explanations	<p>Ad hoc: Means that plans are only developed as and when required and there is no formal planning process.</p> <p>Appropriate: In this context means providing information to those personnel within your ANSP that need it in order to meet the needs of the organisation.</p> <p>No Structured Approach: Means that there is nothing in place to promote safety, not even an <i>ad hoc</i> process that would promote safety for a specific purpose or occasion.</p> <p>Organisation: In this context it means all those parts of the ANSP involved in ATM Safety. Where the ANSP is a Member of a formally established FAB and if this survey is conducted at the level of the FAB, then 'organisation-wide' can refer to the FAB and all other references to 'organisation' must be consistent with this approach.</p> <p>Other Industries' initiatives: It means safety initiatives taken within other industries E.g. Petrochemical, Rail, etc. Gathering information from other industries is a demanding requirement as it is about "the best of the best".</p> <p>Procedures: A procedure and/or allocated task is in place to review the industry best (good) practices, which is then applied internally. Examples of such best (good) practices should be given.</p>				

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		<p>Staff: All those individual personnel, operational and technical, with a safety responsibility within their job description. A visible policy of management is required to promote this sharing across the organisation.</p> <p>Structured approach: In this context it refers to actions, resources, procedures that the ANSP puts in place to share industry best-practice. While some elements may be part of a greater external structure (i.e. EUROCONTROL, CANSO etc.), there must be certain internal structures to deal with this matter and clearly allocated resources.</p>
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