EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

ESARR ADVISORY MATERIAL/GUIDANCE DOCUMENT (EAM/GUI)

EAM 3 / GUI 3

ESARR 3 AND RELATED SAFETY OVERSIGHT

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F.2   DOCUMENT CHARACTERISTICS

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Abstract
The previous versions of EAM 3 / GUI 3 were produced before the approval of ESARR 1 and the entry into force of the SES Regulations. As such, their enactment has necessitated a review of the documentin order to ensure its consistency with this new regulatory material. As a first step in this review process, the SRC has produced this version of EAM 3 / GUI 3 to include a new table with guidance on the criteria for the assessment of compliance with ESARR 3. This table replaces the former highlevel checklists included in previous versions of the document. Apart from the new table, no other contents have currently been modified. However, it is intended to produce a fully revised version of EAM 3 / GUI 3 to provide NSAs with guidance on the safety oversight of ESARR 3-related requirements.

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F.3   DOCUMENT APPROVAL

The following table identifies all management authorities who have approved this document.

AUTHORITY	NAME AND SIGNATURE	DATE
Quality Control (SRU)	*signed by Daniel Hartin* (Daniel HARTIN)	21.03.2006
Head Safety Regulation Unit (SRU)	*signed by Peter Stastny* (Peter STASTNY)	21.03.2006
Chairman Safety Regulation Commission (SRC)	*signed by Ron Elder* (Ron ELDER)	21.03.2006

Note: For security reasons and to reduce the size of files placed on our website, this document does not contain signatures. However, all management authorities have signed the master copy of this document which is held by the SRU. Requests for copies of this document should be e-mailed to: sru@eurocontrol.int.

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F.4 DOCUMENT CHANGE RECORD

The following table records the complete history of this document.

EDITION NUMBER	EDITION DATE	REASON FOR CHANGE	PAGES AFFECTED
0.01	10-Dec-01	Creation – First working draft 0.01 from SRU.	All
0.1	01-Feb-02	Draft submitted to SRC for comment and review after consultation at RTF/AGC level. New edition as draft.	None
0.11	11-Jul-02	Working draft incorporating modifications after SRC review, discussion of comments at AGC/RTF, and further SRU review.	All
0.12	31-Oct-02	Working draft after review by RTF. No new modifications except for some formatting aspects. Version proposed for final SRC approval by correspondence.	None
0.2	18-Nov-02	Following approval at RTF17, document status amended to 'Proposed Issue' and sent to SRC for approval by correspondence. Document format also updated.	All
1.0	18-Feb-03	Document formally released.	All
1.1	06-Feb-06	SRU internal review.	Previous Appendix B re-numbered as Appendix A. Section 3 deleted and replaced by new Appendix B.
1.2	03-Mar-06	New version produced after SRC consultation (RFC No. 602). SRU quality review.	All
2.0	21-Mar-06	Document formally released.	-

F.5 CONTENTS

F.5   CONTENTS

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F.6 EXECUTIVE SUMMARY

The previous versions of EAM 3 / GUI 3 were produced before the approval of ESARR 1 and the entry into force of the Single European Sky (SES) Regulations.

As such, their enactment has necessitated a full review of the document in order to ensure its consistency with this new regulatory material.

As a first step in this review process, the Safety Regulation Commission (SRC) has produced this version of EAM 3 / GUI 3 to include a new table (Appendix B) with guidance on the criteria for the assessment of compliance with ESARR 3. This table replaces the former highlevel checklists included in previous versions of the document.

The new table is primarily intended to provide National Supervisory Authorities (NSAs) with guidance to support the development of their strategy to verify the implementation of ESARR 3-related requirements in the context of the certification and on-going oversight of Air Navigation Service Providers (ANSPs) against the Common Requirements established in Commission Regulation (EC) 2096/2005. As such, the table is also referred to in EAM 1 / GUI 5 'ESARR 1 in the Certification and Designation of Service Providers'.

Apart from the new table, no other contents have currently been modified. However, it is intended to produce a fully revised version of EAM 3 / GUI 3 to provide NSAs with guidance on the safety oversight of ESARR 3-related requirements.

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1. INTRODUCTION

1.1 General Aspects

1.1.1 Purpose

The purpose of this document is to provide guidance for national ATM safety regulators in establishing safety oversight for verifying compliance with the provisions of ESARR 3 "Use of Safety Management Systems by ATM Service Providers" (Edition 1.0).

The establishment of safety oversight in regard to ESARR 3 is intended to ensure that ATM service providers that fall within the jurisdiction of a national ATM safety regulatory body operate safety management systems in accordance with the provisions of ESARR 3.

This document also describes the obligations and responsibilities of States for effective safety oversight of safety management systems used by ATM service providers in so far as ESARR 3 related regulations and safety oversight are concerned.

While still aiming at ensuring a harmonised implementation of ESARR 3 across ECAC States, this document does not intend to provide one exclusive model for ESARR 3 safety oversight:

- It includes a number of recommendations which are either generic, or conversely, are only valid in certain circumstances;
- It depicts a number of safety regulatory tools which could be combined and tailored to specific needs, into unique solutions to suit a State's specific situation.

Note: As ESARR 3 strengthens the new provisions of Annex 11 in the area of safety management[1], this document could also be used by States to verify compliance with related ICAO standards (and recommended practices).

1.1.2 Scope

The scope of this document is confined to the safety regulatory aspects of ATM, inclusive of all its elements: people, procedures[2] and equipment[3]. It excludes the subjects of security, regularity and efficiency when those are not directly safety related.

It also excludes the regulatory aspects of issuing licenses to radio aeronautical stations.

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[1] *Refer to Amendment 40 to ICAO Annex 11*

[2] *Including airspace design and procedures*

[3] *Hardware, software and integration thereof*

For the sake of clarity and consistency, and also to avoid unnecessary repetitions, it is assumed that the principles elaborated in SRC POLICY DOC 3 are well known and implemented or under implementation both at European and national levels[4].

Repetitions of ideas will only be included or referred to either for completeness or when seen as necessary for the clarity of this document.

In a safety regulatory regime, there are two major elements which need to be operated: 'Rule-making' and 'Safety Oversight'. This document only deals with the Safety Oversight functions of the designated authority, even if some necessary statements refer to rule-making.
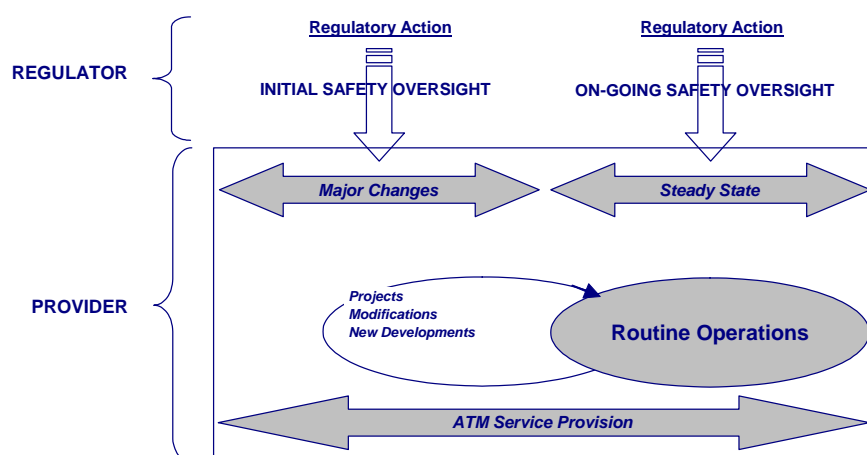
1.1.3 Safety Oversight Functions

Safety Oversight is the function undertaken by a designated authority to verify that safety regulatory objectives and requirements are met.

In consistency with SRC POL DOC 3, verification of compliance with ESARR 3 should be applied in respect of:

■ Safety management systems proposed initially by ATM service providers to meet applicable requirements. In that case, **initial safety oversight** is undertaken to demonstrate initial compliance and leads to the recognition of the SMS. Recognition may be formalised through the issuance of a **safety regulatory approval;**

■ Safety management systems whose operation has initially been accepted through a safety regulatory approval. In that case **ongoing safety oversight** processes provide the ATM safety regulator with verification of continuous compliance with applicable requirements.

Both 'initial safety oversight' and 'ongoing safety oversight' against ESARR 3 are referred to as 'ESARR 3 Safety Oversight' throughout this document.

In more general terms, the following diagram may illustrate the safety oversight processes as outlined in SRC POL DOC 3.

(Figure 1.1 – Safety Oversight Processes)

1.2   Context

1.2.1   General Aspects

The implementation of ESARR 3 safety oversight at national level requires in one form or another the establishment of a specific safety oversight function at national level.

ESARR 3 safety oversight will most probably be undertaken within a State-based organisation, of safety regulatory nature, called throughout this document "ATM safety regulator"[5].

The establishment of that designated authority, its roles, functions, safety regulations, resources and related ESARR 3 safety oversight processes may well differ significantly across States. In addition to a number of political, economical, legislative, and cultural factors, options to be selected when establishing ESARR 3 safety oversight will need to take into account a number of industry-related parameters such as:

- The national arrangements for ATM service provision;

- The capacity of the service provider(s);

- The number and size of regulated service provider(s);

- Previous experience in safety management systems in service provider(s) and within the designated authority itself; and

- The visibility/common past experience the designated authority has acquired over the years on/with the regulated service providers in the safety management field.

Some of these criteria are being developed further in subsequent sections.

1.2.2   International Obligations

It is recognised that the harmonisation of safety regulations and standards world-wide, either in the form of ICAO Standards and Recommended Practices (SARPs) and/or EUROCONTROL Safety Regulatory Requirements (ESARRs) and standards/guidance material is not enough to ensure their uniform implementation across States.

It is the integration of such regulations and standards into the national regulation and practices of States and their timely implementation that will ultimately achieve safety of aircraft operations and Air Navigation provisions world-wide.

ICAO identified in 1992 "an apparent inability of some Contracting States to carry out their safety oversight functions". As a result, the Assembly adopted Resolution A29-13: *Improvement of Safety Oversight*, reaffirming "individual State' responsibility for safety oversight as one the tenets of the Convention"[6].

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[5]   *Or "designated authority" or "Civil Aviation Authority" in this and other documents. The terms are equivalent in the terminology used by SRC (see SRC DOC 4).*

[6]   *Reference ICAO Doc 9734-AN/959*

The EUROCONTROL Revised Convention also defines implementation and enforcement as national responsibilities. This applies equally to ESARR 3. Under the current and revised EUROCONTROL Convention, member States will have to ensure that ATM service-providers meet the ESARR 3 safety requirements through appropriate safety regulation and safety oversight.

1.2.3 National ATM Safety Regulatory Framework

Implementation of international standards and requirements such as ICAO SARPs and EUROCONTROL ESARRs must normally be effected under the rule of law promulgated in that State. (Refer to SRC POLICY DOC 3). National regulations ought to be consistent with these international commitments, hence consistent with States' approval of ESARR 3.

A State entity, called 'ATM safety regulator' in this document[7] ought to exist and carry out, among other things, safety oversight to verify compliance with ESARR 3. In that process, the necessary legal and/or constitutional powers to ensure compliance with ESARR 3 compliant national regulations must be addressed and this authority ought to be vested with the necessary powers to ensure compliance with those regulations.

1.2.4 Regulatory and Service Provision Context

1.2.4.1 Regulatory Culture

Requirements on how best to establish a designated authority in charge of safety regulatory oversight may vary from States to States.

In the development, adoption, enactment and promulgation of national safety regulations, a State can make a number of choices which govern the type, nature and level of prescription of ATM safety regulations.

ESARR 3 represents a minimum set of safety regulatory requirements required at European level. One State may have decided to add complementary provisions. These potential choices may have an impact on related safety oversight activities.

In the establishment of the designated authority, the State has also the option of adopting solutions which will govern its role and daily safety oversight activities in the implementation of ESARR 3.

This may range:

- from a stringent regulatory involvement where for example, all potential changes to the ATM System are systematically under regulatory review and acceptance/approval;
- to an extremely passive role, where for example the holder of an approved Safety Management System (SMS) would be audited very occasionally for all SMS related processes.

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[7]   or 'Designated Authority', or 'Civil Aviation Authority' in this and other documents.

An extremely passive role can not be recommended, as that would imply that service providers are self-regulated. On the other hand, the ATM Safety Regulator, by being over involved, could inhibit the service provider's control of its operations and its safety involvement.

It is recommended to establish at national level a balanced ESARR 3 safety oversight with due consideration of the industry maturity in safety, and to both the aviation community and the public interest.

1.2.4.2 Institutional Arrangements for ATM Service Provision

The ultimate responsibility for ensuring safety within the national airspace rests with the State. The requirement for 'Use of Safety Management System by ATM Service Providers' applies equally to government and to commercialised organisations providing ATM services.

Whatever service provision arrangements are implemented at national level, it is recommended to establish a separate safety oversight function and a well documented safety oversight system to ensure full compliance with ESARR 3.

Whenever the service provision of ATM is delegated to a commercialised organisation, it is of prime importance that the State retains its overseeing responsibilities and ensures that the service provider complies with ESARR 3.

Even if the service provision remains government-based, a separate safety oversight function is recommended to verify initial and ongoing compliance with ESARR 3 in the provision of ATM services.

Note: This safety oversight function is different and complementary to the internal verification mechanisms (such as "safety surveys" as per ESARR 3) implemented within the Safety Management System itself.

1.2.4.3 Capabilities of ATM Service Providers

The level of ESARR 3 safety oversight should be dependent upon the capabilities and maturity of the regulated service providers in the safety management field.

Except in a limited number of States and service providers, we are still in the early days of implementing safety management systems in ATM:

- Previous experience in formal safety management systems and more specifically in ESARR 3, both in service provider(s) and in ATM safety regulators, is limited ;

- Previous experience in implementing ESARR 3, both in service provider(s) and in the ATM safety regulators, is almost nil;

- Equally, common past experience in ESARR 3 type of implementation, related potential challenges and issues is low, or even non-existent. ATM safety regulators would therefore benefit from a direct feed back on the implementation of ESARR 3

This implies that today, the level of maturity of the service provider(s) as well as of the designated authorities in that specialised area of safety management systems may still be insufficient.

There is a need for a close interface between the designated authority and the regulated organisation(s) in order to build confidence across the two communities and also support a joint learning process in ESARR 3 type of implementation.

At the early days of ESARR 3 implementation, it is also recommended that designated authorities avoid adopting a passive safety oversight role and dedicate enough resources and expertise in verifying compliance with ESARR 3 requirements.

Note: When the regulated organisations and designated authorities have acquired enough experience in implementing ESARR 3, the designated authority will be in a position to minimise its regulatory interventions and adapt the criteria used in the past to determine if a safety regulatory oversight action/review is required for a change to the ATM System.

1.2.5 Non-Punitive Approach

The ultimate aim of any sort of safety oversight process is to improve safety by gaining knowledge and identifying corrective actions to ensure safety. Any approach leading to blame or punishment will be clearly counter-productive.

Safety regulatory audits and inspections and other safety oversight actions should be conducted in a manner consistent with that aim.

1.3 Regulatory Capability

1.3.1 Organisation

As already stated, in all States, it will be necessary to identify a point of responsibility, vested with the necessary authority to verify that ESARR 3 safety requirements are met[8].

The implementation of ESARR 3 safety oversight at national level requires, in a form or another, the establishment of an appropriate organisation with adequate processes, working procedures and resources. In establishing such an entity, one should give consideration to the recommendations made in previous sections.

However, as the safety oversight activities related to ESARR 3 are only part of a bigger set of safety regulatory functions within a specific national legislative context, no model or detailed recommendations for organisational arrangements are provided in this document.

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[8]   *In Some States, it may be found that this function can be undertaken in a cost-effective manner through co-operative arrangements with neighbouring States or regional arrangements.*

1.3.2 Regulatory Procedures

In accordance with SRC POL DOC 3, ESARR 3 Safety Oversight activities should be conducted through standardised procedures.

Procedures should be written, understandable, actionable, auditable and mandatory, and form a documented system[9] containing:

- Instructions to undertake ESARR 3 safety oversight when appropriate; and

- Standardised working documents and forms to document the outcome of any ESARR 3 safety oversight activity.

The operation of these procedures shall be supported by documentation specifically intended to provide those personnel undertaking safety oversight with appropriate guidance to perform their functions.

1.3.3 Resources

1.3.3.1 General

Refer to SRC POLICY DOC 3 for generic principles.

The structuring and level of resources involved in ESARR 3 safety oversight will obviously depend on the volume of work to be handled, and more specifically:

- The number of ATM service providers under ESARR 3 safety oversight;

- The frequency and scope of changes being submitted to safety regulatory approval; and

- The safety oversight procedures in place for ESARR 3.

1.3.3.2 Staffing

Refer to SRC POLICY DOC 3 for generic principles.

Personnel involved in ESARR 3 Safety Oversight functions should include a combination of safety specialists, as well operational and technical experts, who would over time share and combine their initial know how.

It seems essential to select staff with a wide aviation culture, a sound aviation background, willingness and ability to keep learning about safety techniques as well as new operational concepts and techniques.

Those chosen to be in charge of assessments of safety arguments in safety regulatory audits and inspections must possess basic qualification appropriate to that task[10]. In particular, they must possess relevant operational and/or technical expertise and understanding of relevance to the national ATM system.

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[9] *A complete documented system in the form of manual(s) may potentially include all safety oversight procedures and arrangements.*

[10] *SRC POL DOC 3, Appendix 2, includes criteria for qualification of personnel performing safety regulatory audits and inspections.*

1.3.3.3 Training

Refer to SRC POLICY DOC 3 for generic principles.

In addition, there should be specialist training for staff involved in ESARR 3 Safety Oversight. Some areas that should be considered for more detailed training are:

- ESARR 3 based national regulation, and rationale,
- Safety management,
- Quality management,
- Risk assessment and mitigation processes and techniques,
- Recognised means of compliance with ESARR 3,
- Safety occurrence reporting and analysis in ATM,
- Auditing techniques,
- Questioning techniques,
- Inter-personal and negotiating skills.

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2. ESARR 3 SAFETY OVERSIGHT PROCESSES

2.1 Introduction

2.1.1 General Considerations

In order to verify compliance with ESARR 3, ATM safety regulators should implement specific safety oversight activities.

Two major regulatory processes are proposed in this chapter:

- **Initial Safety Oversight of SMS** – intended to verify initial compliance with applicable requirements in safety management systems proposed by ATM service-providers to meet their responsibilities in accordance with ESARR 3.

- **Ongoing Safety Oversight of SMS** – intended to verify continuous compliance with ESARR 3 in the operation of those safety management systems that have successfully demonstrated their initial compliance in the initial safety oversight process.

Both processes will make use of safety regulatory audits and inspections, as well as monitoring and any other oversight technique needed to verify compliance with applicable requirements.

2.1.2 Key Processes in Safety Oversight

ESARR 3 does not require specific regulatory processes. However, appropriate safety oversight actions should be implemented by each Member State to ensure the effective implementation and enforcement of the Requirement. The approach will vary depending upon specific situations.
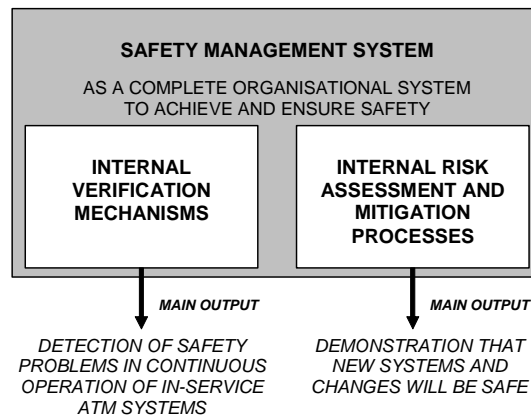
All safety oversight processes should take into account parallel processes performed by ATM providers. The link between the two sides can not be missed since it determines the scope of each safety oversight process.

Three essential SMS features should be considered:

- The existence of a complete organisational system, the SMS, to manage the safety of ATM services;

- The internal SMS verification mechanisms intended to detect safety problems in the continuous operation of in-service ATM systems.

- The internal SMS risk assessment and mitigation processes established to demonstrate that new systems and changes to the ATM system will be safe to be introduced into operational service.

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(Figure 2.1 – The Main SMS Features and their Output)

Safety oversight processes should be focused on these essential features in order to verify that appropriate outputs are achieved and properly used.

Two basic categories of safety oversight activities can be proposed in order to classify the processes needed on the regulatory side:

- The first category includes all those processes dealing with the definition and initial implementation of safety management systems;

- A second category is related to the continuous operation of SMS. It includes actions specifically intended to address the outputs obtained through internal verification and risk assessment and mitigation processes.

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1. **Regulatory processes dealing with the definition and initial implementation of safety management systems by ATM service providers.**

These processes provide **INITIAL SAFETY OVERSIGHT OF SMS**

They address the implementation of a complete organisational system through an acceptance/approval process leading to the issuance of a Safety Regulatory Approval

2. **Regulatory processes related to the continuous operation of safety management systems.**

They address the continuous operation of Safety management systems

a) **ONGOING SAFETY OVERSIGHT OF SMS**

Verifying the continuous operation of SMS processes. They should particularly address the SMS verification mechanisms intended to detect and correct safety problems in the steady state of systems.

b) **SAFETY OVERSIGHT DEALING WITH THE INTRODUCTION OF NEW SYSTEMS AND CHANGES TO THE ATM SYSTEM**

Verifying that the implementation of new systems and changes to the ATM system is always based on a systematic demonstration that they are safe to be introduced into operation.

(Figure 2.2 – Regulatory Processes in Relation to the Provider's Side)

> It should be noted that a sub-category has been identified to include the processes dealing with the introduction of new systems and changes to the ATM System. These safety oversight processes are directly related to the need for verification of compliance with ESARR 4. Therefore they can be defined as the **ESARR 4 Safety Oversight** processes.
>
> This document does not address ESARR 4 Safety Oversight.
>
> In order to support the implementation of ESARR 4, specific material is under development. This includes guidance on ESARR 4 and related Safety Oversight intended to address the issue in depth.

The content and scope of this document is therefore confined to the two major types of safety oversight processes forming the 'ESARR 3 Safety Oversight':

- Initial Safety Oversight of SMS, intended to verify initial compliance with ESARR 3, and

- Ongoing Safety Oversight of SMS, intended to verify continuous compliance with ESARR 3.

ESARR 4 Safety Oversight will complement them and verify compliance with requirements in regards of the introduction of new systems and changes to the ATM system.

2.2 Initial Safety Oversight of SMS

2.2.1 Rationale

Although ESARR 3 does not require safety regulatory approvals, the need to verify compliance with ESARR 3 implies that the ATM safety regulator should formally recognise the organisational system and associated processes initially proposed by the provider. The recognition may involve the issuance of a safety regulatory approval.

In accordance with ESARR 3, each safety management system will be systematically documented in a manner, which provides a clear linkage to the organisation's safety policy. The SMS will document processes and arrangements in consistency with the safety policies and strategies set out by the organisation.

An essential element of an acceptable SMS system is the documentation of the division of responsibilities and of the arrangements and processes of the SMS. The documented system could normally be presented in a safety management manual derived from a safety policy. This documentation makes possible for the Regulator to be assured that the results of the management processes will be predictable and consistent.

However, the initial safety oversight of SMS should not confine itself to assessing a documented system on paper. Verification of initial compliance with ESARR 3 concerns not only the development of a complete documented system including written policies, arrangements and processes, but also their effective implementation by the organisation.

2.2.2 Scope and Objective

The initial safety oversight of SMS should apply to any SMS initially proposed by an ATM service-provider as a means to meet ESARR 3 requirements.

The objective is to determine the acceptability of a SMS proposed for implementation and verify its initial compliance with ESARR 3 when effectively implemented in accordance with applicable requirements.

2.2.3 Process Principles

The initial safety oversight of SMS should:

1.	**Accept the SMS documented system proposed by the Provider after he demonstrates compliance of its policies, written procedures and any other proposed arrangement against the policy principles and procedures required and any other required arrangement;**
2.	**Verify, through safety regulatory audits and inspections, the effective implementation of the arrangements and processes established in the SMS documented system. This includes verification of compliance of actual processes and their results against written procedures and other established arrangements;**
3.	**Identify, propose and demand corrective actions where deficiencies are identified;**
4.	**Lead to the issuance of Safety Regulatory Approval in those cases where compliance with applicable requirements is demonstrated.**
5.	**The Safety Regulatory Approval should indicate, as a minimum, the precise scope, applicability and duration of the approval, and any operational condition or restriction that must apply while the approval is in force.**
6.	**The process should be conducted in successive steps to ease a phased implementation and provide useful feedback for the provider.**

2.2.4 Practical Aspects

Whenever possible, the initial safety oversight process should be parallel to the provider's SMS implementation. Clear interfaces should be defined between both sides to ensure appropriate co-ordination.
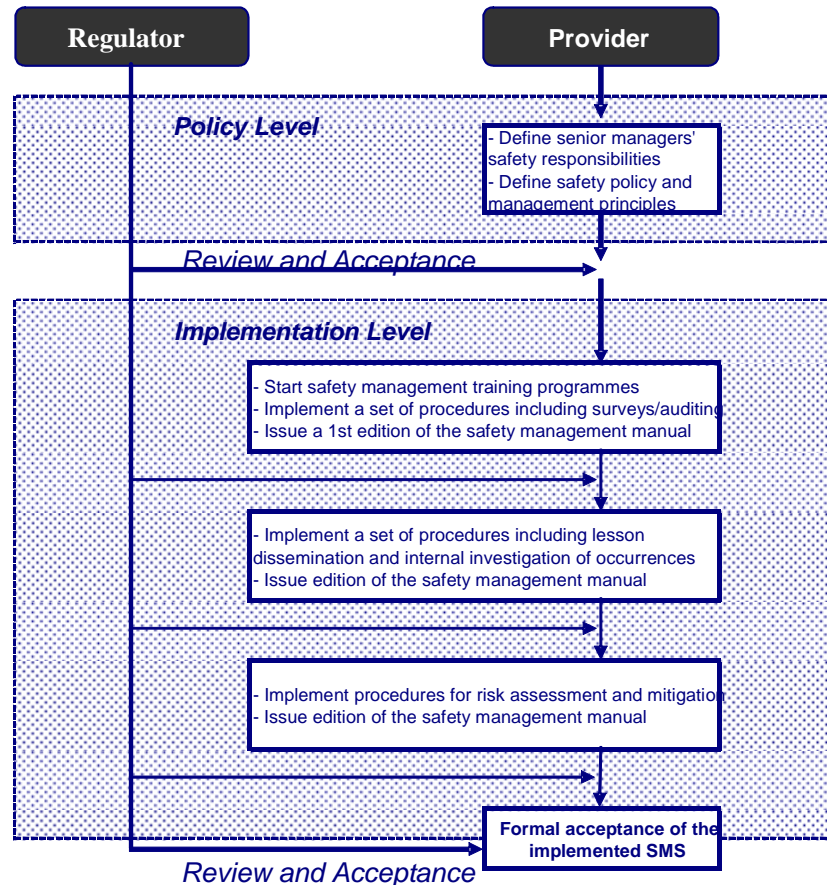
As providers normally use implementation plans or programmes to introduce SMS, initial safety oversight might be considered as a parallel programme involving both Regulator and Provider. The process should review and assess specific outputs delivered at specified milestones throughout the implementation process.

Some key aspects should be considered in any initial safety oversight process intended to determine the acceptability of safety management systems:

- There is a need for a clear identification of requirements to be met, always in accordance to ESARR 3;

- The process needs an early definition and planning of all regulatory activities in relation with the provider's implementation programme;

- It is advisable to follow a top-down approach starting at the policy level;

- Providers should provide sufficient documentary evidence of requirement compliance to the Regulator to enable the Regulator to conduct checks.

- Review activities should be focussed on the achievement of performances by the organisation and the effective implementation of processes and arrangements

- Regulators should consider not only the existence of appropriate documentation, but also their effective implementation.

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Without excluding any approach, the following diagram illustrates an example of initial safety oversight parallel to a SMS implementation programme:

(Figure 2.3 – Example of Initial Safety Oversight of SMS)
(Note: The implementation phases are for illustrative purposes only)

2.2.5 Changes to the SMS Documented System

SMS are 'live' organisational systems to be maintained and improved. After initial implementation and subsequent regulatory acceptance, significant modifications and changes should also be reviewed and accepted by the Regulator in order to ensure the acceptability of the system and maintain the safety regulatory approval.

The SMS documented system should identify procedures to assess and introduce any proposed change or modification. The Regulator will review and accept when appropriate these procedures as part of the SMS documented system.

Changes and modifications to the SMS documented system can be proposed by the Provider and should only be introduced by following the procedures accepted by the Regulator. This may include:

- Changes and modifications whose introduction needs to be accepted by the Regulator due to their significance;

- Changes and modifications whose introduction may be decided by the Provider following the procedures established in the SMS.

In most cases it is advisable to adopt an approach in which the provider forwards any proposed change or modification to the SMS documented system to the Regulator. Should the Regulator identify the need for regulatory acceptance it notifies the provider of that fact and appropriate regulatory actions are undertaken to verify compliance with requirements before accepting formally the change.

2.2.6 SMS Already in Operation

As some SMS were implemented before the adoption of ESARR 3, situations exist where already operational SMS could need to be formally accepted after verification of compliance with ESARR 3. In these cases, initial safety oversight can not be associated to a complete implementation process developed on the provider's side.

Nevertheless, specific programmes undertaken by providers to adapt their SMS to ESARR 3 requirements could provide a reference for designing an initial safety oversight process. Most of the considerations made in previous sections would be applicable in such a case.

2.3 On-going Safety Oversight of SMS

2.3.1 Rationale

Continuous compliance with ESARR 3 should be maintained after the issuance of a safety regulatory approval. Accordingly ongoing safety oversight should be established to verify continuous compliance in the case of those SMS that have successfully demonstrated their initial compliance with applicable requirements.

SMS shall include safety assurance processes and arrangements to provide demonstration that safety is being properly managed.

Although continuous compliance concerns all processes and arrangements established in SMS, its demonstration is particularly critical in the case of safety assurance processes and arrangements. The SMS safety assurance provides for internal verification mechanisms to detect and correct safety problems. That represents the "front line" to preserve safety.

Therefore it should be particularly verified that such mechanisms are really effective. Regulators should therefore concentrate most of their ongoing safety oversight efforts on those SMS processes and arrangements intended to provide detection of safety problems in the continuous operation of systems. Generally, this should have priority over other forms of verification.

Focussing oversight and auditing on 'processes' and their results should normally be preferred rather than conducting inspections on the 'service' (or 'product') to verify compliance with prescriptive specifications previously published by the Regulator. Nevertheless, inspections and testing activities on the 'service' (or 'product') could reinforce the safety oversight conducted by the Regulator.

2.3.2 Scope and Objective

The on-going safety oversight of SMS should apply to any SMS that has successfully demonstrated its initial compliance with ESARR 3 after an initial safety oversight process.

The objective is to verify the continuous compliance of the SMS with applicable requirements, identify possible areas of non-compliance and prompt corrective actions where needed.

2.3.3 Process Principles

The ongoing safety oversight of SMS should:

> **1.** **Conduct a continuous evaluation of SMS operated by ATM service providers through appropriate monitoring safety regulatory audits and inspections systematically programmed;**
>
> **2.** **Monitor SMS to prioritise the areas where verification of continuous compliance is needed;**
>
> **3.** **Use safety regulatory audits and inspections systematically to provide verification of compliance. Depending upon specific situations this may concern verification of:**
>
> - **Written procedures an other established arrangements against required procedures and other required arrangements,**
>
> - **Actual processes and their results against written procedures and other established arrangements,**
>
> - **Compliance with prescriptive specifications required and previously published by the safety regulator;**
>
> **4.** **Demand corrective actions where deficiencies are identified;**
>
> **5.** **Consider all SMS processes and arrangements as needed, but focus special attention on those safety assurance mechanisms implemented to detect and correct safety problems in the continuous operation of in-service systems;**
>
> **6.** **Follow up the implementation of corrective actions where they are needed, and verify that their effective implementation restores compliance within an appropriate time-scale;**
>
> **7.** **Propose further safety oversight actions to the appropriate point of responsibility of the ATM Safety Regulatory Body in those situations where they are needed[11].**

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[11] *In accordance with SRC POL DOC 3, most commonly the ATM Safety Regulator will leave the responsibility for remedial action with the service provider. However, if this course of action is shown to be inadequate, or (for the future) is expected to be inadequate, the safety regulator may need to initiate further steps, which could include:*

a) Placing restrictions on the service provided or, in the extreme, withdrawing the permission or approval to provide the service (in these cases, the safety regulator must ensure that any changes to the operational services provided are promulgated to interested and affected parties), and/or

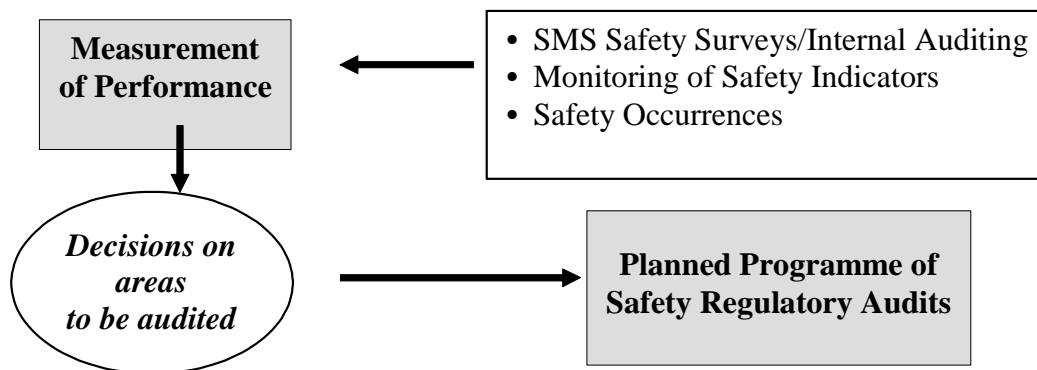*b) Imposition of further punitive measures as dictated by the situation*

2.3.4 Practical Aspects

The ongoing safety oversight of SMS may comprise elements of both audit and inspection. Performance measurements and appraisals of safety assurance documentation should be part of this regulatory function.

It is important to conduct safety regulatory audits and inspections in sufficient depth and scope to be satisfied that the organisation ensures safety through the operation of the accepted SMS.

In particular, safety regulatory audits (or similar actions) should specially be focused on internal SMS safety assurance processes and their results in order to ensure their effectiveness.

Although safety regulatory audits and inspections might be programmed to cover all possible areas of potential safety concern, regulators should primarily concentrate their efforts and resources in auditing/inspecting those areas where problems are detected. SMS outputs and other available information and SMS should be analysed to plan the safety regulatory audits/inspections to be conducted.

(Figure 2.4 – Programming Safety Regulatory Audits and Inspections)

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3. AREAS FOR CONSIDERATION IN SAFETY REGULATORY AUDIT PROTOCOLS

3.1 Introduction

3.1.1 Purpose

The material included in this section provides guidance for the preparation of audit protocols related to verification of compliance with ESARR 3.

This material indicates areas for consideration in ESARR 3 safety oversight processes. Its content can not be considered as a final checklist for evaluation of SMS.

3.1.2 Use of the Areas for Consideration

The exact areas to be verified will be determined by the exact contents of the ESARR 3 based safety regulatory requirements established at national level as well as by the circumstances of each case.

As stated in SRC POL DOC 3, appropriate preparation of safety regulatory audits and inspections should address the development of working documents required to facilitate the auditor/inspector's investigations and to document and report results[12].

It should be noted that fixed checklists make the assumption that all potential hazards have been previously identified.

Accordingly, those working documents should be designed so that they do no restrict additional audit/inspection activities or investigations which may become necessary as a result of the investigations gathered during the audit/inspection.

In addition, checklists for evaluation should be produced by the auditors/inspectors directly involved in their use.

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[12]   *SRC POLICY DOC 3 "National ATM Safety Regulatory Framework", Appendix 2, includes principles for safety regulatory audits and inspections.*

APPENDIX A – TERMS AND DEFINITIONS

TERM	DEFINITION
Accident	As per ICAO Annex 13.
Approval Process	A process of formal recognition that a product, process, service or organisation conforms to applicable safety regulatory requirements.
Assessment	An evaluation based on engineering, operational judgement and/or analysis methods.[13]
ATM	The aggregation of ground based (comprising variously ATS, ASM, ATFM) and airborne functions required to ensure the safe and efficient movement of aircraft during all appropriate phases of operations.
ATM Service	A service for the purpose of ATM.
ATM Service-Provider	An organisation responsible and authorised to provide ATM service(s).
CNS	Communication, Navigation and Surveillance.
EFQM	European Foundation for Quality Management. The EFQM Excellence Model provides a recognised framework for undertaking self-assessment processes in an organisation.
ESARR	EUROCONTROL Safety Regulatory Requirement (see Safety Regulatory Requirement).
External Services	All material and non-material supplies and services, which are delivered by any organisation not covered by the ATM Service-Provider's Safety Management System.
Level of Safety	A level of how far safety is to be pursued in a given context, assessed with reference to an acceptable or tolerable risk.
Occurrences	Accidents, serious incidents and incidents as well as other defects or malfunctioning of an aircraft, its equipment and any element of the Air Navigation System which is used or intended to be used for the purpose or in connection with the operation of an aircraft or with the provision of an air traffic management service or navigational aid to an aircraft.
Regulation	The adoption, enactment and implementation of rules for the achievement of stated objectives by those to whom the regulatory process applies.

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[13] Defined in ICAO DOC 9735 – Safety Oversight Audit Manual as "an appraisal of procedures or operations based largely on experience and professional judgement."

TERM	*DEFINITION*
Safety Achievement	The result of processes and/or methods applied to attain acceptable or tolerable safety.
Safety Assurance	All planned and systematic actions necessary to provide adequate confidence that a product, a service, an organisation or a system achieves acceptable or tolerable safety.
Safety Management	The management of activities to secure high standards of safety performance which meet, as a minimum, the provisions of safety regulatory requirements.
Safety Management Function	A managerial function with organisational responsibility for development and maintenance of an effective safety management system.
Safety Management System (SMS)	A systematic and explicit approach defining the activities by which safety management is undertaken by an organisation in order to achieve acceptable or tolerable safety.
Safety Monitoring	A systematic action conducted to detect changes affecting the ATM System with the specific objective of identifying that acceptable or tolerable safety can be met.
Safety Oversight	The function undertaken by a designated authority to verify that safety regulatory objectives and requirements are effectively met.
Safety Policy	A statement of the organisation's fundamental approach to achieve acceptable or tolerable safety.
Safety Performance	The measurement of achieved safety within the overall ATM system performance measurement.
Safety Promotion	Specification of the means by which safety issues are communicated to ensure a safety culture of safe working within the organisation.
Safety Records	Information about events or series of events that is maintained as a basis for providing safety assurance and demonstrating the effective operation of the SMS.

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TERM	DEFINITION
Safety Regulatory Requirement	The formal stipulation by the regulator of a safety related specification which, if complied with, will lead to acknowledgement of safety competence in that respect.
Safety Regulatory Audit	A systematic and independent examination conducted by the ATM Safety Regulator to determine whether processes and related results comply with required arrangements[14] and whether these arrangements are implemented effectively and are suitable to achieve objectives.
Safety Regulatory Inspection	A systematic and independent examination conducted by the ATM Safety Regulator to determine whether ATM services or specific parts of the ATM system comply with prescriptive specifications required and previously published by the safety regulator and whether these specifications are implemented effectively.
Safety Survey	A systematic review, to recommend improvements where needed, to provide assurance of the safety of current activities, and to confirm conformance with applicable parts of the Safety Management System.
SMS Documentation	The set of documents, arising from the organisation's safety policy statements, to develop and document the SMS in order to achieve its safety objectives.
SRC	Safety Regulation Commission.
Supporting Services	Systems, services and arrangements, including communications, navigation and surveillance services which support the provision of an ATM services.
System	A combination of physical components, procedures and human resources organised to perform a function.

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[14] *This also includes verification of compliance with allocated objectives, mitigation measures and any other arrangement derived from the application of safety regulatory requirements by the ATM service provider.*

APPENDIX B – GUIDANCE ON THE CRITERIA FOR THE ASSESSMENT OF COMPLIANCE WITH ESARR 3

This appendix does not include binding provisions. It only provides guidance for possible use by NSAs.

This table has been produced to provide NSAs with guidance to support the development of criteria for the assessment of compliance with ESARR 3.

This material is of particular interest when developing a strategy to verify the implementation of ESARR 3-related requirements in the context of the certification and on-going oversight of ANSPs against the Common Requirements established in Commission Regulation (EC) 2096/2005. As such, the table is referenced to in EAM 1 / GUI 5 'ESARR 1 in the Certification and Designation of Service Providers'.

This table also contains indications about the possible use of its contents by NSAs. In particular, it should be noted that this material only provides guidance on possible evidences and possible ways to evaluate them. The range of contents from this table that may support the NSA in a specific situation will normally depend upon the case. In particular, different approaches will be needed for initial and on-going safety oversight. NSAs are expected to define their strategy regarding the necessary actions and level of verification consistently with the recommendations of EAM 1 / GUI 3 and EAM 1 / GUI 5. The evidences and ways to assess them will also depend on the implementing arrangements put in place by the ANSP to meet the requirement.

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ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

NOTES ABOUT THE USE OF THIS TABLE

a) The table provides indications about evidences that can be expected to be found to show compliance with the requirement. These evidences illustrate a means, but not necessarily the only possible means, by which a requirement can be met.

b) Guidance is also included about some possible ways to assess these evidences. Depending upon the case only a limited set of the actions proposed, or other alternative or additional actions, may be needed to assess the evidences under consideration. NSAs are expected to define their strategy regarding the necessary actions and level of verification in a manner consistent with the recommendations of EAM 1 / GUI 3 and EAM 1 / GUI 5. In particular, different approaches will be needed for initial and ongoing safety oversight.

c) Indications of possible evidences are given not only regarding the existence of written arrangements/procedures but also in relation to their effective implementation. This latter aspect is normally demonstrated by means of evidences which exist after allowing a period for the effective operation of the written arrangements/procedures.

d) Sampling is proposed to assess the effective implementation of various arrangements. As a general rule, it is recommended that samples include at least 10% of the units relevant to the case under consideration over a specific period of time. Wherever sampling is proposed, the comments/notes normally include an indication of the sampling unit.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1	An ATM service-provider shall, as an integral part of the management of the ATM service, have in place a safety management system (SMS) which :	*Common Requirements* *Annex 2, 3.1.1* A provider of air traffic services shall, as an integral part of the management of its services, have in place a safety management system ('SMS') which:	Documentation describing the structure, organisation and management approach of the ANSP: • Organisational diagrams, • Description of management functions in the organisation, • etc.	Check that the management of safety: • Is established and recognised as a differentiated part of the overall management function, • Is intended to implement all the elements required for a SMS.	To note that a single SMS should be preferable for holders of multiple operator's certificates with integrated operations (e.g. aerodrome and ATS associated with that aerodrome).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1.1 a) Safety Management	[...a SMS which:] ensures a formalised, explicit and pro-active approach to systematic safety management in meeting its safety responsibilities within the provision of ATM services;	Common Requirements Annex 2, 3.1.1 [...] ensures a formalised, explicit and pro-active approach to systematic safety management in meeting its safety responsibilities within the provision of its services;	Documentation describing the SMS approach: • Safety Policy, • SMS Documentation, • Description of management functions in the organisation, • etc.	Check that safety policy statements, properly endorsed by the most senior level of management, exist to establish an approach to the management of safety: • Formalised: safety will be managed through the application of a formal SMS. • Explicit: safety is explicitly addressed in a differentiated manner; that is to say, safety management is not implicit in the actions related to operational and/or technical activities. • Pro-active: intended to prevent rather than react. Check that other existing policies within the organisation do not contradict this management approach. Check that these safety policy statements are included, or at least referred to, in a single document presenting the ANSP Safety Policy in line with 5.1.1 c) (preferably 'included' rather than 'referred to').	
			SMS Documentation: • Elements showing that procedures & other arrangements are in place (e.g. status, approval signatures applicability date, etc).	Check that the SMS procedures and arrangements are properly formalised (approved, promulgated, updated, etc) when reviewing the various evidences proposed in this table.	Action proposed in order to check that the approach is effectively 'formalised'.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1.1 b) Safety Management	[...a SMS which:] operates in respect of all ATM and supporting services which are under its managerial control;	*Common Requirements* *Annex 2, 3.1.1* [...] operates in respect of all its services and the supporting arrangements under its managerial control;	Documentation describing the scope of the SMS: • Safety Policy, • SMS documentation (e.g. manual/s, etc.), • Description of management functions in the organisation, • etc.	Check that safety policy statements, properly endorsed by the most senior level of management, exist to define the scope of the SMS. Check that, in accordance with those statements, the scope of the SMS includes: • All services provided by the ANSP; and • All systems, services and arrangements, which support the provision of ANS services and are under the managerial control of the ANSP. and that, accordingly, they are all subject to the processes and other arrangements which from the SMS. Check that these safety policy statements are included, or at least referred to, in a single document presenting the ANSP Safety Policy in line with 5.1.1 c) (preferably 'included' rather than 'referred to'). Check that other existing policies within the organisation do not exclude any service or supporting service from the SMS arrangements.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1.1 c) Safety Management	[…a SMS which:] includes, as its foundation, a statement of safety policy defining the organisation's fundamental approach to managing safety;	*Common Requirements* *Annex 2, 3.1.1* [...] includes, as its foundation, a statement of safety policy defining the organisation's fundamental approach to managing safety (safety management);	Safety Policy	Check that a Safety Policy is in existence and: • Defines the organisation's intent to maintain and improve safety, • Establishes a clear commitment to safety which concerns all levels of the organisation, notably the highest level of management in the organisation, • Includes, or refers to, safety policy statements with regard to the requirements established in 5.1.1, 5.1.2, 5.1.3 and 5.1.4 (preferably 'includes' rather than 'refers to'), • Is formally adopted by the highest organisational level of the ANSP, • Is signed by a member of the most senior level of management in the ANSP, • Is signed by a person who is in a position to make decisions to ensure that human and financial resources are provided to manage safety, • Is published within the organisation in such a way that all personnel with a safety-related responsibility are aware of the policy.	5.1.1, 5.1.2, 5.1.3 and 5.1.4 identify specific aspects to be addressed at policy level. Verification of compliance with these provisions should be conducted simultaneously in relation to the Safety Policy. Safety policy means a statement of the organisation's fundamental approach to achieve acceptable or tolerable safety. (Definition included in ESARR 3 Appendix A). (sampling unit = person involved in safety-related aspects within the organisation irrespective of having an operational, technical or management profile).
				In a sample of safety-related personnel selected by the NSA (which ideally includes management, operational and technical staff from different units) check tat each person in the sample: • Is aware of the existence of a Safety Policy, • Has access to the Safety Policy, Has understood the message.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1.2 Safety Responsibility	[…a SMS which:] ensures that everyone involved in the safety aspects of ATM service-provision has an individual safety responsibility for their own actions, and that managers are responsible for the safety performance of their own organisations;	*Common Requirements* *Annex 2, 3.1.1* [...] ensures that everyone involved in the safety aspects of the provision of air traffic services has an individual safety responsibility for their own actions, that managers are responsible for the safety performance of their respective departments or divisions and that the top management of the provider carries an overall safety responsibility (safety responsibility);	Documentation defining the approach to safety responsibilities: • Safety Policy, • Relevant documentation regarding functions and responsibilities.	Check that safety policy statements, properly endorsed by the most senior level of management, state that: • Each individual involved in safety aspects has an individual responsibility for his/her own actions, • Managers are responsible for the safety performance of their organisations, • The senior executive officer in the organisation is ultimately accountable for safety in the organisation. Check that these safety policy statements are included, or at least referred to, in a single document presenting the ANSP Safety Policy in line with 5.1.1 c) (preferably 'included' rather than 'referred to').	

			Documentation related to safety responsibilities in:
			
			• SMS documentation (e.g. manual/s, etc.),
			
			• Organisational diagrams,
			
			• Other relevant documents on definition of responsibilities.
				Check that:
				
				• Safety responsibilities are defined, allocated and documented for:
				
				  o Managers (including senior management),
				
				  o Operational personnel,
				
				  o Technical personnel.
				
				• Safety responsibilities are included in the SMS documentation or in relevant documents referred to in the SMS documentation,
				
				• There is a logical flow within the organisation of accountabilities and responsibilities for safety,
				
				• There are no gaps, overlaps or duplication of responsibilities that could cause confusion,
				
				• Safety responsibilities for key managerial appointments are promulgated.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the definition and communication of safety responsibilities for personnel.	In a sample of safety-related personnel selected by the NSA (which ideally includes management, operational and technical staff from different units) check: • That each person in the sample has a safety responsibility defined and documented, • That his/her safety responsibilities have been communicated to him/her. That he/she understands his/her authorities, responsibilities and accountabilities in regard to all safety management processes, decision and actions.	(sampling unit = person involved in safety-related aspects within the organisation, irrespective of having an operational, technical or management profile).
5.1.3 Safety Priority	[…a SMS which:] ensures that the achievement of satisfactory safety in ATM shall be afforded the highest priority over commercial, operational, environmental or social pressures;	*Common Requirements* *Annex 2, 3.1.1* [...] ensures that the achievement of satisfactory safety in air traffic services shall be afforded the highest priority (safety priority);	Documentation establishing the priorities of the ANSP: • Safety Policy, • Other relevant business documentation.	Check that safety policy statements, properly endorsed by the most senior level of management, exist to: • Identify the achievement of safety as the priority over commercial, operational, environmental or social pressures. Check that these safety policy statements are included, or at least referred to, in a single document presenting the ANSP Safety Policy in line with 5.1.1 c) (preferably 'included' rather than 'referred to'). Check that there is an explanation of what the statements about safety priority mean in practice. Check that other existing policies within the organisation do not contradict these safety policy statements.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records of actions reflecting an effective priority of safety: • Minutes of management meetings • Decisions made and relevant documentation explaining the rationale for them • etc.	Check that wherever significant decisions are made by the management: • Safety-related aspects are explicitly considered in the documentation supporting the decision-making process (e.g. studies, reports, assessments, analysis, etc.), • In particular, risk assessment and mitigation documentation is effectively considered by the management when deciding the implementation of new systems or changes to existing systems, • Minutes of management meetings reflect the consideration given to safety. More specifically, select a sample of cases in which decisions were made by management regarding issues with safety-related implications. Ideally the sample should include decisions made at different management levels including the highest one. For each case in the sample, review the records documenting the rationale which supported the decisions in the sample to check whether: • Safety was explicitly taken into consideration, and • Safety was not diminished to a non-acceptable level due to other priorities.	(sampling unit = significant decision made by the management regarding an issue with safety-related implications).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.1.4 Safety Objective of ATM	[…a SMS which:] ensures that while providing an ATM service, the principal safety objective is to minimise the ATM contribution to the risk of an aircraft accident as far as reasonably practicable.	*Common Requirements* *Annex 2, 3.1.1* [...] ensures that while providing air traffic services, the principal safety objective is to minimise its contribution to the risk of an aircraft accident as far as reasonably practicable (safety objective).	Documentation establishing safety objectives and targets for the organisation: • Safety Policy, • SMS documentation (e.g. manual/s, etc.), • Other relevant business documentation.	Check that safety policy statements, properly endorsed by the most senior level of management, establish that: • The main safety objective is to minimise the contribution to the risk of an aircraft accident. Check that these safety policy statements are included, or at least referred to, in a single document presenting the ANSP Safety Policy in line with 5.1.1 c) (preferably 'included' rather than 'referred to'). Check that safety targets defined in the organisation are consistent with the principal safety objective defined in the policy. Wherever the term 'reasonably practicable is used', check that: • Its meaning is clearly defined, • The use of the term recognises the existence of minimum levels determined by regulation through applicable safety regulatory requirements and other standards.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2 Safety Achievement	Within the operation of the SMS, the ATM service provider: [...]	Within the operation of the SMS, a provider of air traffic services shall ensure that: [...]	All evidences below from 5.2.1 to 5.2.7	When reviewing these requirements, check that all the relevant procedures / arrangements are formally subject to the SMS policies and processes in order to verify that requirement is met "*within the operation of the SMS*". (See note on the right for further clarification).	It should be noted that: • In some cases, ANSPs may use a differentiated framework to manage some of the aspects addressed in ESARR 3 (e.g. human resources directorate to address the management of staff competence). • As a result, some procedures could be either included in the SMS framework or properly linked with the SMS framework. • In both cases, all relevant procedures and arrangements must be subject to the SMS mechanisms (safety policy, safety assurance, safety achievement and safety promotion) in order to claim that they are implemented "*within the operation of the SMS*".

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.1 Competency	[Within the operation of the SMS, the ATM service-provider:] shall ensure that staff are adequately trained, motivated and competent for the job they are required to do, in addition to being properly licensed if so required;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] ensure that personnel are adequately trained and competent for the job they are required to do, in addition to being properly licensed if so required and satisfying applicable medical fitness requirements (competency);	Procedures/arrangements with regard to personnel competency: • Job descriptions, • Recruitment process, • Training processes, • etc.	Check that procedures/arrangements to manage the competency of safety-related personnel exist. Check that through these procedures/arrangements: • Job descriptions are defined for safety-related functions to specify the minimum level of education for the job, and the amount, type and diversity of experience required, • Selection criteria derived from those job descriptions are set up for safety-related functions, • Training programmes exist to maintain and improve the competency of those involved in safety related functions, • There is a documented process to identify training requirements so that all personnel are competent to perform their duties, • There is a validation process that measures the effectiveness of training, • The training includes initial, recurrent and update training, as applicable, • Safety management is incorporated into the training programmes, • SMS training is incorporated into indoctrination training upon employment.	To note that the expression 'satisfying applicable medical fitness requirements' included in the CRs intends to transpose the provisions of ESARR 5, Section 5.1.2 provisions with regard to applicable medical fitness requirements.
			Records documenting qualification and training of safety-related personnel.	Check that qualification and training records exist for those performing safety-related functions. Review records for a sample of safety-related staff, selected by the NSA, to check whether: • Personnel effectively follow training programmes established for their safety-related functions.	(sampling unit = person involved in safety-related aspects within the organisation; irrespective of having an operational, technical or management profile).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Evidences showing implementation of ESARR 5 by the service provider.	If appropriate proceed to verify the implementation of ESARR 5, totally or partially, using the tables included in the EAM 5 deliverables.	ESARR 5 establishes further requirements to be met by ANSPs with regard to ATM services' personnel. The expression 'being properly licensed if so required' should be considered as a reference to the national or EU rules transposing ESARR 5 and other relevant documents (e.g. ICAO Annex 1).

5.2.2 a)
 	
Safety Management Responsibility
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that a safety management function is identified with organisational responsibility for development and maintenance of the safety management system;
		Common Requirements
		
		Annex 2, 3.1.2
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[...] ensure that a safety management function is identified with organisational responsibility for development and maintenance of the safety management system;
			Responsibilities in relation to the SMS as defined in:
			
			• Safety Policy,
			
			• SMS documentation (e.g. manual/s, etc.),
			
			• Relevant documentation regarding management functions/responsibilities,
			
			• Organisational diagrams,
			
			• Appointment of managers.
				Check that safety management function is defined within the overall management function of the organisation.
				
				Check that this safety management function:
				
				• Has organisational responsibility for the implementation, development and maintenance of the SMS, including the authority to:
				
				   o Implement the SMS processes,
				
				   o Monitor safety throughout the organisation by means of the SMS processes,
				
				   o Report shortcoming and safety issues to the highest organisational level,
				
				   o Request resources to the highest organisational level to ensure the implementation of SMS.
				
				• Has relevance in the overall management structure of the organisation.
				
				• Is not considered responsible for the overall safety performance of the organisation	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.2 b) Safety Management Responsibility	[Within the operation of the SMS, the ATM service-provider:] shall ensure that this point of responsibility is, wherever possible, independent of line management, and accountable directly to the highest organisational level;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] ensure that this point of responsibility is independent of line management, and accountable directly to the highest organisational level.	Responsibilities in relation to the SMS as defined in: • Safety Policy, • SMS documentation (e.g. manual/s, etc.), • Relevant documentation regarding management functions/responsibilities, • Organisational diagrams, • Appointment of managers,	Check that the safety management function: Is exercised by a point of responsibility (e.g. safety manager, safety management director, etc.) who: • Is part of the management team. • Is accountably directly to the highest organisational level. • Has access to the highest organisational level of the organisation. • Is not involved in other operational or technical functions (the 'wherever possible' should be considered confined to the case of small organisations addressed in 5.2.2 c). • Meets qualification and training criteria required for this position (defined in accordance with 5.2.1).	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.2 c) Safety Management Responsibility	[Within the operation of the SMS, the ATM service-provider:] shall ensure that, in the case of small organisations where combination of responsibilities may prevent sufficient independence in this regard, the arrangements for safety assurance are supplemented by additional independent means;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] However, in the case of small organisations where combination of responsibilities may prevent sufficient independence in this regard, the arrangements for safety assurance shall be supplemented by additional independent means;	Arrangements for safety assurance conducted with additional independent means (wherever applicable).	Check that safety assurance, that is to say: • Safety surveys in accordance with 5.3.1, and/or • Safety monitoring in accordance with 5.3.2, is arranged with additional external means such as: • External support from specialised organisations, • Arrangements concluded with bigger ANSPs, • Joint arrangements established with other small ANSPs (e.g. sharing specialised support or conducting cross-audits), etc. • Other independent means accepted by the NSA, In relation to these arrangements check that: • The procedures to be used through these arrangements meet the relevant requirements of ESARR 3, and. • The extent of these safety assurance activities is considered sufficient by the NSA to balance the lack of independence of the safety management function. *(NOTE: the additional independent means can not be achieved by means of safety regulatory audits conducted by the NSA or on behalf of the NSA).*	Applicable only where it has been found acceptable by the NSA that the safety management function can be combined with other technical and operational management roles due to the small size of the organisation. EAM 3 / GUI 2 provides NSAs with guidance on the safety regulatory aspects of the ESARR 3 implementation of in small organisations. This material includes: • Criteria to determine whether an organisation is small and, as such, eligible to implement the safety management function in accordance with 5.2.2 c), • Guidance on the additional independent means for safety assurance required to balance the situation in these cases.
			Records documenting the results and effectiveness of the safety assurance actions conducted with independent means (wherever applicable).	When checking the implementation of safety assurance (notably 5.3.1 Safety Surveys and 5.3.2 Safety Monitoring) check that the actions to be implemented with additional independent means were effectively conducted using the arrangements accepted by the NSA.	See 5.3.1 and 5.3.2 below.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.2.2 d)
 	
Safety Management Responsibility
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that the highest level of the service provider organisation plays a general role in ensuring safety management;
		Common Requirements
		
		Annex 2, 3.1.2
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[...] ensure that the top management of the service provider organisation is actively involved in ensuring safety management.
			Responsibilities in relation to the SMS as defined in:
			
			• Safety Policy,
			
			• SMS documentation (e.g. manual/s, etc.),
			
			• Relevant documentation regarding management functions / responsibilities,
			
			• Organisational diagrams,
			
			• Appointment of managers.
				Check that highest management level of the organisation:
				
				• Has explicitly documented responsibilities:
				
				  o To ensure that the SMS is properly implemented in all areas concerned within the organisation and, more specifically, that financial and human resources are provided to implement the SMS,
				
				  o Regarding the overall safety performance of the organisation (as required in 5.1.2 above).
				
				• Is effectively involved in the safety improvement process (e.g. by means of management reviews. Check aspects related to this point in 5.4.2 b below).	

5.2.3
 	
Quantitative Safety Levels
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that, wherever practicable, quantitative safety levels are derived and are maintained for all systems;
		Common Requirements
		
		Annex 2, 3.1.2
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[...] ensure that, wherever practicable, quantitative safety levels are derived and are maintained for all functional systems (quantitative safety levels);
			Procedures/arrangements in relation to safety performance indicators.	Check that procedures/arrangements are in place to develop and maintain a set of quantitative safety performance indicators.
				
				Check that:
				
				• The process for measuring these indicators and determining their effectiveness is documented,
				
				• In defining the indicators the process considers:
				
				  o The monitoring of safety occurrences,
				
				  o Potential safety-critical events.
				
				• The process to review the set of quantitative safety performance indicators is established,
				
				• The output of the process is used in the activities conducted to meet 5.3.2 (safety monitoring).	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Set of quantitative safety performance indicators.	Within a sample of systems selected by the NSA amongst the systems for which quantitative safety indicators have been defined, review whether: • The determination of the indicators conformed the procedures established, • Safety occurrences and potential safety-critical events identified through other SMS processes where consider in case they were relevant to the system under consideration, • The set of indicators was subject to period review, • The set of indicators is subject to monitoring by means of the arrangements related to 5.3.2 (safety monitoring).	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.2.4 a)
 	
Risk Assessment and Mitigation
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that risk assessment and mitigation is conducted to an appropriate level to ensure that due consideration is given to all aspects of ATM;
		Common Requirements
		
		Annex 2, 3.1.2
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[…] ensure that risk assessment and mitigation is conducted to an appropriate level to ensure that due consideration is given to all aspects of the provision of ATM (risk assessment and mitigation).
			Risk assessment and mitigation procedure(s):
			
			• Elements describing the applicability of the procedures,
			
			• Criteria to evaluate risk,
			
			• Elements describing the actions in relation to existing systems,
			
			• Elements describing the actions in relation to changes.
				Check the existence of documented procedure(s) in place for risk assessment and mitigation applicable to:
				
				• Steady state of existing systems,
				
				• Changes to the ATM systems; that is to say new systems and changes to existing systems (see 5.2.4 b and c, and ESARR 4).
				
				To an appropriate level to ensure that due consideration is given to all aspects of ATM.
				
				Check that the process described:
				
				• Includes criteria for evaluating risk associated with identified hazards and defining mitigation measures,
				
				• Follows 5.2.4 a, 5.2.4 b (and ultimately ESARR 4) in the case of changes (i.e. new systems and changes to existing systems),
				
				• Includes a process to deal with the application of this requirement to the steady state of existing systems. In that regard:
				
				  o The output could take the form of 'unit safety arguments' (or 'unit safety cases'). If that is the approach followed by the ANSP, 'unit safety arguments' should be:
				
				    ▪ Produced for all units operated by the ANSP (ACCs, TWRs, etc.),
				
				    ▪ Maintained as live documents, notably in relation to the incorporation of relevant information from safety arguments for new systems and changes to the existing systems.
				
				  o See notes on the right column for further information on the use of 'unit safety arguments',
				
				  o Any process proposed by the ANSP to deal with this aspect should normally:
					To note that:
					
					• 5.2.4 a, applies not only to new systems or changes to existing systems, but also to the steady state of existing systems.
					
					• No further provisions exist in ESARR 3, ESARR 4 or the CRs with regard to risk assessment and mitigation in existing systems.
					
					• However, it is common practice in ATM to use 'unit safety cases' to present arguments, evidence and assumptions that justify the claim that operational safety of a unit or facility is adequate for its role.
					
					A 'unit safety argument' (or 'unit safety case') normally:
					
					• Allows to understand the safety issues and their resolution or implications without having to gain access to the referenced material.
					
					• Is scoped to cover all the elements related to the unit or facility under consideration (e.g. airspace, equipment, procedures, staff, safety management system, etc.).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				- Be conducted to an appropriate level to ensure that due consideration is given to all aspects of ATM (e.g. if unit safety arguments are used, a unit safety argument is produced in each unit), - Articulate a proactive process that provides for the capture of internal information to identify hazards, - Evaluate the risk associated with these hazards and whether existing measures are sufficient to control that risk to a tolerable level. • Determines mitigation measures if the risk is not found tolerable, and monitors their implementation and effectiveness, Is documented together with its results (see 5.3.4)	• Is a live document that needs regular review and update. Incorporates the relevant information from safety arguments for new systems and changes to the existing system in the context of the unit or facility under consideration.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the application of risk assessment and mitigation to the steady state of existing systems: • 'Unit safety arguments' (i.e. 'unit safety cases') or similar • Other relevant documentation	Within a sample of cases selected by the NSA amongst the systems where the ANSP applied its approach to risk assessment and mitigation regarding the steady state of existing systems, check that: • The actions conformed with the documented approach applied by the ANSP, • Hazards are identified as a result of a proactive process that provides the capture of internal information, • The risk associated with identified hazards is evaluated, • The existing measures are evaluated in relation to their capability to control that risk, • Additional mitigation measures are proposed if the risk is not found tolerable, implemented, and their implementation and effectiveness is monitored, • All actions taken and their results are documented. When reviewing this sample, check also the implementation of those provisions of 5.2.4 b) which are applicable to the steady state of existing systems (i.e. ATM system functions are classified according to their safety severity).	See the information included in the previous row as regards risk assessment and mitigation applicable to the steady state of the existing systems. See also 5.2.4 b). (sampling unit = activity in which the ANSP has applied in approach to risk assessment and mitigation regarding the steady state of an existing system. For example, A 'unit safety argument' will be the sampling unit wherever that is the means used by the ANSP).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the application of risk assessment and mitigation to changes to the ATM system: • Safety arguments of changes to the ATM system, • Other relevant documentation.	Within a sample of cases selected by the NSA amongst the changes where the ANSP applied its approach to risk assessment and mitigation regarding the changes to the ATM system, check that: • The actions conformed with the documented approach applied by the ANSP. More specifically, hazards were identified and their associated risks were properly evaluated, • All actions taken and their results are documented. When reviewing this sample, check also the implementation of the provisions of 5.2.4 b), 5.2.4 c) and 5.3.4. If appropriate, proceed to verify compliance with ESARR 4, totally or partially, using the tables included in EAM 4 / GUI 2.	(sampling unit = activity in which the ANSP has applied its approach to risk assessment and mitigation regarding changes to the ATM system. To note that a 'safety argument' will be the main output of this activity if ESARR 4 was applied fully by the ANSP).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.4 b) Risk Assessment and Mitigation	[Within the operation of the SMS, the ATM service-provider:] shall ensure that changes to the ATM system are assessed for their safety significance, and ATM system functions are classified according to their safety severity;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] As far as changes to the ATM functional system are concerned, the provisions of part 3.2 of this Annex shall apply, *Common Requirements* *Annex 2, 3.2* *(intended to transpose ESARR 4 provisions)* Within the operation of the SMS, a provider of air traffic services shall ensure that hazard identification as well as risk assessment and mitigation are systematically conducted for any changes to those parts of the ATM functional system and supporting arrangements within his managerial control, in a manner which addresses [...]	Risk assessment and mitigation procedure(s): • Elements describing the actions in relation to existing systems, • Elements describing the actions in relation to changes.	Check that in all cases (i.e. existing systems, new systems and changes to existing changes) the risk assessment and mitigation procedures: • Classifies system functions accordingly to their severity. Check that in the case of changes to the ATM system (i.e. new systems and changes to existing systems) the risk assessment and mitigation procedures: • Classifies and assesses the changes at a different level of depth in the procedures depending on their safety significance (this is related to the expression "To an appropriate level to ensure that due consideration is given to all aspects of ATM), • Articulates the various features required in 5.2.4 a) and b) in a manner compatible with ESARR 4. If appropriate, proceed to verify compliance with ESARR 4, totally or partially, using the tables included in EAM 4 / GUI 2.	Wherever guidance is needed as regards the approach to implement ESARR 3, 5.2.4 in the case of changes, the provisions of ESARR 4 and its associated guidance material provides the right interpretation, on the basis that the ANSP will be required to develop further its approach for changes up to the extent required in ESARR 4. The classification and assessment of changes will in practice be related to the statement of 5.2.4.a) about "an appropriate level to ensure that due consideration is given to all aspects of ATM". The CRs include all the provisions intended to transpose ESARR 3 and 4 in a single set of requirements, while the ESARRs establish them separately. As a result: • An ANSP could be found compliant with ESARR 3 and not compliant with ESARR 4, • Although this differentiation may have no real relevance in the case of the CRs

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the application of risk assessment and mitigation to the steady state of existing systems: • 'Unit safety arguments' (i.e. 'unit safety cases') or similar, • Other relevant documentation.	When reviewing the sample proposed (for steady state of systems) in relation to 5.2.4 a), check that: for each situation included in the sample: • System functions are classified according to their safety severity, • All actions taken and their results are documented.	see 5.2.4 a) above.
			Records documenting the application of risk assessment and mitigation to changes to the ATM system: • Safety arguments of changes to the ATM system, • Other relevant documentation.	When reviewing the sample proposed (for changes) in relation to 5.2.4 a), check that for each change included in the sample: • System functions are classified according to their safety severity, • Changes to the ATM system are assessed for their safety significance, • All actions taken and their results are documented. If appropriate, proceed to verify compliance with ESARR 4, totally or partially, using the tables included in EAM 4 / GUI 2.	see 5.2.4 a) above.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.4 c) Risk Assessment and Mitigation	[Within the operation of the SMS, the ATM service-provider:] shall ensure appropriate mitigation of risks where assessment has shown this to be necessary due to the safety significance of the change;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] As far as changes to the ATM functional system are concerned, the provisions of part 3.2 of this Annex shall apply, *Common Requirements* *Annex 2, 3.2.2* *(intended to transpose ESARR 4 provisions)* The hazard identification, risk assessment and mitigation processes shall include: [...] The derivation, as appropriate, of a risk mitigation strategy which [...]	Risk assessment and mitigation procedure(s): • Elements describing the actions in relation to changes.	Check that in the case of changes to the ATM system (i.e. new systems and changes to existing systems) the risk assessment and mitigation procedures: • Mitigation measures are proposed if the risk is not found tolerable, implemented, and their implementation and effectiveness is monitored, • Articulates the various features required in 5.2.4 a) and b) and c) in a manner compatible with ESARR 4. If appropriate, proceed to verify compliance with ESARR 4, totally or partially, using the tables included in EAM 4 / GUI 2.	In relation to the 'articulation' of various features in 5.2.4 see the comments included in 5.2.4 b) regarding the use of ESARR 4 to provide interpretation on these ESARR 3 provisions.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the application of risk assessment and mitigation to changes to the ATM system: • Safety arguments of changes to the ATM system, • Other relevant documentation.	When reviewing the sample proposed (for changes) in relation to 5.2.4 a), check that for each change included in the sample: • Mitigation measures were determined where the risk was found not tolerable, • Mitigation measures were implemented, • Mitigation measures and their implementation are monitored, • All actions taken and their results are documented. If appropriate, proceed to verify compliance with ESARR 4, totally or partially, using the tables included in EAM 4 / GUI 2.	see 5.2.4 a) above.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.2.5 SMS Documentat.	[Within the operation of the SMS, the ATM service-provider:] shall ensure that the SMS is systematically documented in a manner, which provides a clear linkage to the organisation's safety policy;	*Common Requirements Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] ensure that the SMS is systematically documented in a manner, which provides a clear linkage to the organisation's safety policy (SMS documentation);	SMS Documentation: • Safety Policy, • SMS Manual(s), • SMS Procedures, • Other SMS documents as applicable, • Relevant documentation referred to in the SMS (manuals, instructions, procedures, etc.), • Records.	Verify whether the SMS is systematically documented by checking if: • There is a consolidated documentation that describes the safety management system and the interrelationship between all of its elements, • The information resides or is incorporated by reference into approved documentation, • The consolidated documentation is accessible by personnel, • Documentation reflects functional coordination within the management system with regard to all the activities subject to the SMS framework to ensure that the organisation's management of safety works as a system and not as a group of separate or fragmented units, • There is a documented process to update the SMS documentation when the safety management system is reviewed and modified, • There are documentation control procedures in place, • Procedures exist to cover, as a minimum, all the processes required in ESARR 3, • Procedures are understandable, actionable, auditable and mandatory. Check whether the documentation structure ensures a clear linkage of the SMS documentation with the Safety Policy (e.g. using a top-down approach in which manuals and procedures cascade from policy statements).	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				In addition, when reviewing documentation (e.g. policies, plans, manuals, procedures, records, etc) in relation to any ESARR 3 requirement, always check: • Status of the document (e.g. approved, draft, etc.), • Authority who approves the document (e.g. signatures), • Date(s) of applicability. and pay attention to the place of the document within the SMS documentation structure and the links established with other documents by means of references.	
5.2.6 External Services	[Within the operation of the SMS, the ATM service-provider:] shall ensure adequate and satisfactory justification of the safety of the externally provided services, having regard to their safety significance within the provision of the ATM service;	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] ensure adequate justification of the safety of the externally provided services and supplies, having regard to their safety significance within the provision of its services (external services and supplies);	Procedures/arrangements to address external services: • Elements identifying the external services used as inputs by the ANPS, • Processes to assess external services and mitigate any related risk, • Evaluation and selections of suppliers, • Monitoring of external services.	Check whether there is a documented identification of the external inputs that could affect safety (e.g. CNS, MET, power supply, telecom, approach lighting systems operated by airports, etc.). Check whether the external inputs identified are assessed in terms of their safety significance. More specifically check whether there are documented processes to: • Identify hazards associated to external inputs and their interrelationship with internal elements, • Evaluate the risk associated to the hazards identified, • The existing or proposed arrangements are evaluated in relation to their capability to control that risk, • Additional mitigation measures are proposed if the risk is not found tolerable, implemented, and their implementation and effectiveness is monitored, • Adopt an approach proportionate in relation to the safety significance of the input,	External Services means all material and non-material supplies and services, which are delivered by any organisation not covered by the ATM service-provider's SMS. (Definition included in ESARR 3 Appendix A). Te notion of External Service is therefore wide and may include various types of external inputs used by an ANSP to provide its service. Some possible examples: • Services provided by external organisations (e.g. CNS, MET, AIS, telecom, power supply, aerodrome lightning, etc), • Procurement of equipment,

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				Check whether depending upon the case the following approaches, or equivalent ones, are used in practice where external inputs with safety signification exist: • Suppliers are evaluated and, whenever possible, selected by their ability to meet relevant safety-related standards, • If appropriate the supplier's ability to meet relevant safety-related standards are audited by the ANSP, • Contracts and terms of reference established with external organisations include relevant safety-related standards and specifications to be ensured by these organisations, • Services/supplies provided by external organisations are monitored, notably wherever no alternative supplier could be selected or no satisfactory assurances could be obtained with regard to the achievement of relevant safety-related standards in the provision of the service/supply, • Mitigation measures include, as applicable, monitoring techniques, redundancy, contingency procedures, etc.	• Operational inputs from adjacent sectors, radar data from other organisations, etc. To note that the process to address external services could be integrated in an overall approach proposed to implement the risk assessment and mitigation provisions of 5.2.4 (for existing systems and/or changes).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

			Records documenting the operation of arrangements related to external services	In a sample of external services selected by the NSA amongst the different external services of safety significance used by the ANSP (the sample should ideally include inputs for which alternative suppliers exist and services with no alternative supplier) check that for each external service in the sample:
				
				• The relevant documentation includes arguments, evidence and assumptions that justify the claim that the external input does not negatively affect the safe service provided by the ANSP,
				
				• Hazards have been identified and their risk evaluated, and mitigation measures have been determined and implemented and are monitored,
				
				• More specifically, as applicable to the external service considered and the approach taken by the ANSP, check that:
				
				  o Evaluation of the ability of suppliers to meet relevant safety-standards took place in accordance with the applicable documented processes,
				
				  o Contracts or terms of reference identify relevant safety-related standards and specifications to be ensured by the external organisation,
				
				  o The service/supply provided by the external organisations is monitored, notably wherever no alternative supplier could be selected or no satisfactory assurances could be obtained with regard to the relevant safety-related standards of the service/supply,
				
				  o Records demonstrate that monitoring takes place.
					(sampling unit = a material or non-material supply or service with significant safety implications, which is delivered by an organisation not covered by the SMS under consideration)

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.2.7 Safety Occurrences	[Within the operation of the SMS, the ATM service-provider:] shall ensure that ATM operational or technical occurrences which are considered to have significant safety implications are investigated immediately, and any necessary corrective action is taken.	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] ensure that ATM operational or technical occurrences which are considered to have significant safety implications are investigated immediately, and any necessary corrective action is taken (safety occurrences). It shall also demonstrate that it has implemented the requirements on the reporting and assessment of safety occurrences in accordance with applicable national and Community law.	Procedures/arrangements in relation to the investigation of safety occurrences:
			• Means for reporting,
			• Investigation process,
			• Corrective action process,
			• etc.
				Check that formal procedures and arrangements are in place to report, investigate internally, and address safety occurrences.
				Check that the procedures and arrangements contain provisions to:
				• Provide means for personnel to report occurrences or situations in which he or she was involved, or witnessed, and which he or she believes posed a potential threat to flight safety or compromised the ability to provide safe ATM services.
				• Collate the information from reports.
				• Assess the safety implications of the occurrence or situation reported.
				• Internally investigate the occurrence or situation, having regard to the significance of its safety implications. To that goal, appropriate action:
				  o Is initiated immediately,
				  o focuses on the causes of the occurrence,
				  o documents its results and conclusions,
				  o determines corrective action to address the causes of the occurrence to prevent its repetition.
				• Includes coordination with relevant organisations wherever necessary.
				• Implement the corrective actions determined.
				• Follow up the implementation of the corrective actions.
				• Document all the actions taken and its results.
					The initiation of an external investigation should not prevent the internal investigation from taking place.
					ESARR 2 contains requirements applicable to the States. Depending upon the national approach taken to implement ESARR 2 and the EC Directives 42/2003/EC and 56/1994/EC, different tasks and responsibilities can be allocated to the ANSP.
					To note that the CRs refer to these obligations in its ESARR 3-related provision while the ESARRs establish them separately. As a result:
					• An ANSP could be found compliant with ESARR 3 and not compliant with its ESARR 2-related obligations,
					Although this differentiation may have no real relevance in the case of the CRs.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				Check that the procedures and arrangements contain provisions to meet all the obligations allocated to the ANSP by the national rules transposing ESARR 2. If appropriate, proceed to verify compliance with national rules implementing ESARR 2, totally or partially, using the tables included in EAM 2 / GUI 7.	

			Records documenting safety occurrences and actions related to them:
			
			• Occurrence reports,
			
			• Lists of occurrences reported,
			
			• Investigation reports,
			
			• Records related to corrective actions,
			
			• etc.
				Review a sample of safety occurrences reported. The sample should be selected by the NSA and include enough safety occurrences to cover situations:
				
				• In which the report originated from the ANSP,
				
				• In which an occurrence concerned the ANSP although the report originated outside its organisation,
				
				• Involving coordination between the relevant entities responsible for action in accordance with the national framework (NSA, ANSPs, AIB, Military, etc.),
				
				• Involving the various types of safety occurrences to be reported in accordance with ESARR 2 Annex 2,
				
				• Involving different units, facilities and services operated by the ANSP.
				
				Check that for each occurrence included in the sample:
				
				• The information of the report was properly collated,
				
				• The safety implications of the occurrence or situation reported were assessed,
				
				• An internal investigation took place and, having regard to the significance of its safety implications:
				
				  o Were immediately initiated,
				
				  o Focused on the causes of the occurrence,
				
				  o Documented its results and conclusions.
					(sampling unit = safety occurrence reported in relation to the activities of the ANSP).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				• Corrective action to address the causes of the occurrence to prevent its repetition were determined, • Implementation of corrective actions took place, • Implementation of corrective actions was followed up, • Coordination with relevant organisations took place wherever necessary, • All the actions taken and its results were documented. If appropriate, proceed to verify compliance with national rules implementing ESARR 2, totally or partially, using the tables included in EAM 2 / GUI 7.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.3 Safety Assurance	Within the operation of the SMS, the ATM service provider: [...]	Within the operation of the SMS, a provider of air traffic services shall ensure that: [...]	All evidences below from 5.3.1 to 5.3.4.	When reviewing these requirements, check that all the relevant procedures/arrangements are formally subject to the SMS policies and processes in order to verify that requirement is met "*within the operation of the SMS*". (See note on the right for further clarification).	It should be noted that: • In some cases, ANSPs may use a differentiated framework to manage some of the aspects addressed in ESARR 3 (e.g. case of safety assurance with external means in the case of a small organisation operating under 5.2.2 c), • As a result, some procedures could be either included in the SMS framework or properly linked with the SMS framework, • In both cases, all relevant procedures & arrangements must be subject to the SMS mechanisms (safety policy, safety assurance, safety achievement & safety promotion) in order to claim that they are implemented "*within the operation of the SMS*".

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.3.1 Safety Surveys	[Within the operation of the SMS, the ATM service-provider:] shall ensure that safety surveys are carried out as a matter of routine, to recommend improvements where needed, to provide assurance to managers of the safety of activities within their areas and to confirm conformance with applicable parts of their Safety Management Systems.	*Common Requirements* *Annex 2, 3.1.3* [Within the operation of the SMS, a provider of air traffic services shall] [...] safety surveys are carried out as a matter of routine, to recommend improvements where needed, to provide assurance to managers of the safety of activities within their areas and to confirm compliance with the relevant parts of the SMS (safety surveys);	Plan(s) for safety surveys/audits	Check the existence of formal plan(s) Review the plan(s) to assess whether: • Enough safety surveys/audits are systematically planned to cover all relevant functional areas and factors affecting safety • Enough resources are put in place to implement the plan	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Procedure(s) for safety surveys/audits: elements describing: • Responsibilities, • Scope of the surveys/audits, • Approach and actions, • Corrective action process, • etc.	Check the existence of procedure(s) and arrangements in place to conduct safety surveys/audits organised by the ANSP, or on its behalf, as part of the operation of the SMS. Review the procedure(s) and arrangements to assess whether: • Responsibilities are defined and allocated in regard to the personnel conducting safety surveys/audits, • Safety surveyors/auditors have full access to relevant information, • The scope includes the safety of all activities conducted under the managerial control of the ANSP irrespective of its organisational structure, • The scope includes the conformance with applicable SMS arrangements, • Survey/audit investigations can deviate from their original scope if safety issues are revealed, • Findings are based on objective evidence, • Findings are recorded, • Findings are communicated to the managers of the areas audited/surveyed, • Findings revealing serious safety issues are brought to the attention of senior management by the safety management function, • A process is in place to define, initiate and follow up corrective actions to correct the findings, • Corrective actions are implemented, • Implementation of corrective actions is checked, • Independence of the area being surveyed/audited is ensured, • etc.	To note that the use of safety regulatory audits conducted by the NSA, or on behalf of the NSA, is not an acceptable means of compliance to implement 5.3.1. The safety surveys must be implemented by the provider "within the operation of the SMS".

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records documenting the results and effectiveness of safety surveys/audits: • Survey/audit reports, • Records related to corrective actions.	Check the correspondence between the safety surveys/audits planned and those actually conducted. Review the application of the procedure(s) to a specific sample selected by the NSA auditor. More specifically, in relation to the sample selected: • Check that all steps conformed to the procedure. • Check that the issue raised in a selected finding has been solved or that, as an alternative, the SMS detected a non satisfactory resolution and action is ongoing to address this aspect.	(sampling unit = survey/audit conducted) In 5.2.2 c) see the actions proposed to assess records in the case of small organisation implementing additional independent means.
			Records showing the qualification of human resources involved in the safety surveys/audits.	Check the existence of criteria for selection and training of safety surveyors/auditors. Review the criteria to assess whether they ensure sufficient knowledge and understanding of : • The relevant procedure(s) for safety surveys/audits, • The ATM environment and the safety aspects related to it, • The applicable safety regulatory requirements and other relevant standards, • Safety survey/audit methodologies. Review the application of the criteria to a specific sample selected by the NSA auditor. More specifically, check that surveyors/auditors met the relevant criteria at the time the safety survey/audit was conducted.	(sampling unit = surveyor/ auditor involved in the surveys/audits conducted).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.3.2
 	
Safety Monitoring
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that methods are in place to detect changes in systems or operations which may suggest any element is approaching a point at which acceptable standards of safety can no longer be met, and that corrective action is taken.
		Common Requirements
		
		Annex 2, 3.1.3
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[...] methods are in place to detect changes in functional systems or operations which may suggest any element is approaching a point at which acceptable standards of safety can no longer be met, and that corrective action is taken (safety monitoring).
			Procedures/arrangements for safety monitoring: Elements describing:
			
			• Identification of indicators to be monitored,
			
			• Collation of information for safety monitoring,
			
			• Analysis of indicators,
			
			• Corrective action process.
				Check that formal procedures, methods and other arrangements are in place to detect changes in systems and operations which may affect safety.
				
				Review the procedures, methods and arrangements to assess whether:
				
				• The safety monitoring scope covers technical and operational aspects,
				
				• There is a systematic collation of results from all safety monitoring activities to ensure that interrelationships can be detected,
				
				• Safety indicators are defined to monitor their evolution and detect negative trends. More specifically:
				
				  o The set of quantitative safety performance indicators obtained from the application of 5.2.3 is monitored,
				
				  o Indicators are in place in relation to safety occurrences,
				
				  o Indicators are in place in relation to equipment with safety significance.
				
				• The evolution of the indicators is analysed,
				
				• The analysis of safety occurrence indicators investigates whether negative trends may be the result of deviations from intended procedures,
				
				• The process highlights where situations where any deterioration in equipment or technical systems has an impact on safety occurrences,
				
				• Corrective actions are determined, taken and followed up wherever the monitoring shows that an element is approaching a point which may affect safety to a non acceptable extent,
				
				• Coordination with relevant units/organisations takes place wherever necessary,
				
				• The indicators and their evolution are documented as well as the actions taken and their results.
					In 5.2.2 c) see the actions proposed to assess records in the case of small organisation implementing additional independent means.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

			Records documenting the safety monitoring actions and their results:
			
			• Evolution of indicators,
			
			• Analysis of trends,
			
			• Records related to corrective actions,
			
			• etc.
				Review a sample of safety indicators monitored. The samples should be selected by the NSA and include safety indicators related to technical and operational matters as well as indicators linked with safety occurrences.
				
				Check that for each indicator included in the sample:
				
				• The results of the monitoring are properly collated in accordance with the procedures/arrangements established,
				
				• The evolution of the indicator is documented,
				
				• Wherever deviations and negative trends were detected:
				
				  o An analysis is documented,
				
				  o Corrective action to address the situation were determined,
				
				  o Implementation of corrective actions took place,
				
				  o Implementation of corrective actions was followed up.
				
				• Coordination with relevant units/organisations took place wherever necessary,
				
				• All the actions taken and its results were documented.
					(sampling unit = safety occurrence reported in relation to the activities of the ANSP).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.3.3
 	
Safety Records
	[Within the operation of the SMS, the ATM service-provider:]
	
	shall ensure that safety records are maintained throughout the SMS operation as a basis for providing safety assurance to all associated with, responsible for or dependent upon the services provided, and to the safety regulatory authority;
		Common Requirements
		
		Annex 2, 3.1.3
		
		[Within the operation of the SMS, a provider of air traffic services shall]
		
		[...] safety records are maintained throughout the SMS operation as a basis for providing safety assurance to all associated with, responsible for or dependent upon the services provided, and to the national supervisory authority (safety records).
			Procedures/arrangements in relation to safety records:
			
			• Identification of safety records,
			
			• Retention policy,
			
			• Control processes.
				Check that there is a records system in place to ensure:
				
				• The generation and retention of all records:
				
				   o Specifically required in 'applicable safety regulatory requirements',
				
				   o Necessary to document and support the implementation of 'applicable safety regulatory requirements', including in particular those record,
				
				   o Related to the implementation of requirements applicable to the SMS operated by ANSPs (e.g. ESARR 3).
				
				• Control processes necessary to ensure appropriate identification, legibility, storage, protection, archiving, retrieval, retention time and disposition of safety records.
				
				Check that there is an appropriate policy to define how long safety records that are not specifically required by regulations are kept.
					Safety records means information about events or series of events that is maintained as a basis for providing safety assurance and demonstrating the effective operation of the safety management system.
					
					(Definition included in ESARR 3 Appendix A).
					
					The definition makes reference to safety assurance and therefore is not confined to those records demonstrating an effective SMS operation. In practical terms, a record should normally be considered a safety record if it supports and/or documents the implementation of 'applicable safety regulatory requirements'.
					
					To note that 'applicable safety regulatory requirements' means the requirements for the provision of ATM services, applicable to the specific situation under consideration, and established through the existing rulemaking framework, concerning, inter alia:

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
					• Technical and operational competence and suitability to provide ATM services; • Systems and processes for safety management; • Technical systems, their constituents and associated procedures. (Definition included in ESARR 1 Section 1).
			Safety Records	Select a sample of results from processes that are expected to be found documented by means of records. The sample should be selected by the NSA and cover various SMS processes as well as other safety-related arrangements of operational and/or technical nature. For each one of the expected results included in the sample check that: • A record exists to document the result, • The generation, control and retention of the record conform to applicable procedures and arrangements. In addition, when reviewing evidences in relation to any ESARR 3 requirement, always check that records exist documenting the results of processes and that they are appropriately kept.	(sampling unit = a result expected from a safety-related process which should be documented by means of safety records).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.3.4 Risk Assessment and Mitigation Documentat.	[Within the operation of the SMS, the ATM service-provider:] shall ensure that the results and conclusions of the risk assessment and mitigation process of a new or changed safety significant system are specifically documented, and that this documentation is maintained throughout the life of the system	*Common Requirements* *Annex 2, 3.1.2* [Within the operation of the SMS, a provider of air traffic services shall] [...] As far as changes to the ATM functional system are concerned, the provisions of part 3.2 of this Annex shall apply, *Common Requirements* *Annex 2, 3.2.3* *(intended to transpose ESARR 4 provisions)* [Within the operation of the SMS, a provider of air traffic services shall] The results, associated rationales and evidence of the risk assessment and mitigation processes, including hazard identification, shall be collated and documented in a manner which ensures that [...]	Risk assessment and mitigation procedure(s): • Elements describing the collation of results from the process, • Elements describing the risk assessment and mitigation documentation and its development.	Check that the procedure(s) establish(es) a specific means to collate and document the results and conclusions of the risk assessment and mitigation processes for changes to the ATM system. Check that the procedure(s) require(s) that this documentation is maintained throughout the life of the system. More specifically check that in the process described, the actions, results and conclusions required in 5.2.4 are collated and documented, including: • The risk associated with identified hazards as a result of 5.2.4 a), • Mitigation measures determined in accordance with 5.2.4 a) and c), • Classification of system functions accordingly to their severity as a result of 5.2.4 b), • Classification of changes for an assessment at a different level of depth depending on their safety significance, as a result of 5.2.4 b) (this is related to the expression used in 5.2.4 a about "an appropriate level to ensure that due consideration is given to all aspects of ATM"). If appropriate, proceed to verify compliance with ESARR 4, Section 5.3, totally or partially, using the tables included in EAM 4 / GUI 2.	Isolated results are normally documented in records. The risk assessment and mitigation documentation refers to the whole set of documents related to the process and its results, from isolated records to the document presenting the safety argument. The use of the term 'specific' implies that for risk assessment and mitigation for changes ESARR 3 requires a specific collection of safety records. In practice this is a further elaboration of 5.3.3 (safety records) which applies to the case of changes. Although not mandatory, it would make sense for the ANSP to apply 5.3.4 in the case of risk assessment and mitigation for the steady state of systems. Wherever that is not the case, the safety records requirement (5.3.3) will anyway apply in regard to that aspect.

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Risk assessment and mitigation documentation produced for news systems or changes to existing systems.	When reviewing the sample proposed (for changes) in relation to 5.2.4 a), check that for each change included in the sample: • Risk assessment and mitigation documentation exists, and • Is maintained (i.e. updated as appropriate) till the end of the life of the system under consideration, • Collects results and conclusions from the processes conducted including: • The risk associated with identified hazards as a result of applying the procedures related to 5.2.4 a), • Mitigation measures determined as a result of applying the procedures related to 5.2.4 a) and c), • Classification of system functions accordingly to their severity as a result of applying the procedures related to 5.2.4 b), • Classification of changes for an assessment at a different level of depth depending on their safety significance, as a result of applying the procedures related to 5.2.4 b). If appropriate, proceed to verify compliance with ESARR 4, Section 5.3, totally or partially, using the tables included in EAM 4 / GUI 2.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.4 Safety Promotion	Within the operation of the SMS, the ATM service provider: [...]	Within the operation of the SMS, a provider of air traffic services shall ensure that: [...]	All evidences below from 5.4.1 to 5.4.2.	When reviewing these requirements, check that all the relevant procedures/arrangements are formally subject to the SMS policies and processes in order to verify that requirement is met "*within the operation of the SMS*". (See note on the right for further clarification).	It should be noted that: • In some cases, ANSPs may use a differentiated framework to manage some of the aspects addressed in ESARR 3. • As a result, some procedures could be either included in the SMS framework or properly linked with the SMS framework. • In both cases, all relevant procedures and arrangements must be subject to the SMS mechanisms (safety policy, safety assurance, safety achievement and safety promotion) in order to claim that they are implemented "*within the operation of the SMS*".

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.4.1 Lessons Dissemination	[Within the operation of the SMS, the ATM service-provider:] shall ensure that the lessons arising from safety occurrence investigations and other safety activities are disseminated widely within the organisation at management and operational levels.	*Common Requirements* *Annex 2, 3.1.4* [Within the operation of the SMS, a provider of air traffic services shall ensure that] [...] the lessons arising from safety occurrence investigations and other safety activities are disseminated within the organisation at management and operational levels (lesson dissemination);	Processes/arrangements for lesson dissemination: Elements describing: • Collection of lessons, • Dissemination of lessons to personnel, • Incorporation into training programmes.	Check that formal procedures and other arrangements are in place to disseminate safety lessons. Review the procedures and arrangements to assess whether: • There is a systematic process to collect lessons arising from: o Safety occurrence investigations, o Other safety activities (notably from safety surveys and safety monitoring). in a manner which ensures that interrelationships can be detected. • Lessons from external sources are also incorporated into the process, • Relevant information from lessons learnt is passed to all concerned staff, • Relevant information from lessons learnt is used to improve the training programmes.	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
			Records describing the operation of processes and arrangements for lesson dissemination	In a sample of safety-related conclusions, selected by the NSA amongst various safety-related conclusions obtained from SMS activities (the sample should include at least conclusions from safety occurrence investigations and safety surveys), check whether: • The information was collated in accordance with the procedures established, • Relevant information from the conclusions was passed to all the personnel concerned, including the managers of the units concerned and the relevant technical and/or operational personnel, • Relevant information from the conclusions was used to improve the training programmes, Additionally, in a sample of personnel selected by the NSA amongst safety-related personnel concerned by a lesson / conclusion chosen by the NSA, (ideally including management, operational and technical staff from different units), check that each person in the sample: • Received information relevant to his/her functions as regards that lesson/conclusion, and • He/she understood the lesson / conclusion up to an extent relevant to his/her functions.	(1st sampling unit = lesson or conclusion about a safety issue). (2nd sampling unit = person performing a safety-related functions and concerned by a specific lesson/conclusion which was obtained from SMS processes and is chosen by the NSA).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
5.4.2 a) Safety Improvement	[Within the operation of the SMS, the ATM service-provider:] shall ensure that all staff are actively encouraged to propose solutions to identified hazards,	*Common Requirements* *Annex 2, 3.1.4* [Within the operation of the SMS, a provider of air traffic services shall ensure that] [...] all personnel are actively encouraged to propose solutions to identified hazards [...]	Processes/arrangements in relation to feedback on safety matters: • Process to deal with proposals and reports on potential hazards, • Means to facilitate proposals and reports on potential hazards, • Feedback to the originator. Means for safety awareness and promotion of a safety improvement culture in the organisation (e.g. web-site, bulleting, workshops, etc.).	Check that arrangements are in place to: • Encourage personnel to report back about possible solutions to identified hazards, • Facilitate, in practical terms, that personnel reports back (e.g. forms, a focal point to forward proposals, etc.), • Disseminate information about the way to communicate proposal, • Ensure that the originator of a proposal receives adequate feedback about the actions taken with regard to his/her report.	
			Records in relation to feedback on safety matters • Proposals made by staff, • Feedback given, • Actions taken.	Additionally, in a sample of personnel selected by the NSA amongst safety-related personnel who proposed solutions to an identified hazard (ideally including management, operational and technical staff from different units), check that each person in the sample: • Received appropriate feedback about the actions taken with regard to his/her report, and • He/she understood the actions taken by the organisation.	(sampling unit = person within the organisation who reported a proposal to an identified hazard).

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes

5.4.2 b)
 	
Safety Improvement
	[Within the operation of the SMS, the ATM service-provider:]
	
	and shall ensure that changes are made to improve safety where they appear needed.
		Common Requirements
		
		Annex 2, 3.1.4
		
		[Within the operation of the SMS, a provider of air traffic services shall ensure that]
		
		[...] changes are made to improve safety where they appear needed (safety improvement).
			Arrangements to implement the continuous improvement of safety:
			
			• Management reviews,
			
			• Other review processes (e.g. EFQM or similar),
			
			• Safety Committees, Safety Review Groups (or equivalent means),
			
			• etc.
				Check that formal procedures and arrangements are in place to ensure that changes are made to improve safety where they appear needed.
				
				Check that that these procedures and arrangements:
				
				• Include a systematic review of safety issues and needs identified for safety improvement; and
				
				• Effectively involve the senior management of the ANSP (in order to really 'ensure').
				
				More specifically, check that a SMS management review, or equivalent mechanism is established with the following features:
				
				• Review of safety issues and lessons derived from:
				
				   o The application of SMS processes (notably those from safety occurrence investigation, safety surveys, safety monitoring, and risk assessment and mitigation);
				
				   o Internal feedback from personnel and information from external sources whenever relevant to safety.
				
				• Review of the SMS and its operation,
				
				• Approach of the review focused on:
				
				   o Suitability/Adequacy/Effectiveness of the SMS,
				
				   o Safety Issues,
				
				   o Assessing Opportunities for improvement,
				
				   o Need for changes to the SMS,
				
				   o Systematic follow up of previous improvement actions.
				
				• Decisions made on specific measures intended to improve safety and the SMS,
				
				• Regular periodicity of the review,	

ESARR 3 Reference	ESARR 3 provision	EC provisions intended to transpose the ESARR provision	Evidence(s)	How could the evidence be assessed	Comments/Notes
				• Involvement, participation and attendance required to senior managers, • Documentation and recording of the inputs to the review, participation / attendance, decisions made, and follow up of decisions made.	
			Records documenting the operation of safety improvement arrangements • Agendas of management reviews, • Minutes of management reviews, • Other relevant documents.	Review the agendas, minutes and other relevant documentation related to management reviews conducted over a period of time. Check that: • Reviews take place in accordance with a pre-planned schedule, • Senior management participates / attends, • Decisions are made and followed up in next reviews whenever a need for corrective action or improvement is identified with regard to safety, • Safety issues are addressed, notably those raised by safety surveys and safety occurrence investigations, • The management review and its outputs are properly documented.	