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**Assessment of the EATMP Safety
Policy as a Means of Compliance
with ESARR 3**

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Abstract

This document has been prepared by the Safety Regulation Commission. It has been validated and completed by the SRC Expert Panel in charge of assessing to which extent the "EATMP Safety Policy" (SAF.ET.ST01.1000-POL-01-00, Edition 1.1, August 1999) implemented in accordance with its related "EATMP Safety Policy Implementation Guidance Material" (SAF. ET1.ST01.1000-GUI-01-00, Edition 1.2, August 1999) complies with ESARR 3 "Use of Safety Management Systems by ATM Service Providers", Edition 1.0.

This document compiles the outcome of this SRC assessment to form a view on the acceptability of the EATMP Safety Policy. It is intended to be used, as a decision making tool for the SRC to develop its own judgement on the acceptability of the EATMP Safety Policy and its Implementation Guidance Material as one Means Of Compliance with ESARR 3.

Keywords

ESARR 3	Safety Management	SMS	Safety Achievement
Safety Assurance	Safety Promotion	Means of Compliance	EATMP Safety Policy

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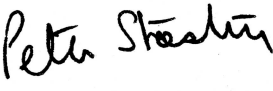
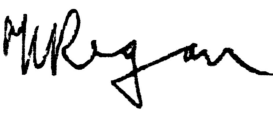

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DOCUMENT APPROVAL

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The following table records the complete history of the successive editions of the present document.

EDITION	DATE	REASON FOR CHANGE	SECTIONS PAGES AFFECTED
0.01	1 Sept. 2001	Creation – First working draft 0.01 produced by SRU as an initial input to the SRC Expert Panel established to assess the PMC.	All
0.10	12 Nov. 2001	Version incorporating modifications agreed by the SRC Expert Panel and further review of the document as decided at its meeting. Edition produced as a proposed issue for submission to SRC for review and approval by correspondence.	4.1 (Table 5); 4.2; 4.3.7 (removed); 6.5; 7; 7.1 (removed)
1.0	1 Feb. 2002	Released version after a final SRC consultation by correspondence to validate the outcome of the assessment proposed by the Expert Panel	Table 4, 5.3.3 (previous comment deleted to avoid confusion)

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EXECUTIVE SUMMARY

This document has been developed by the Safety Regulation Commission.

Its content has been validated and completed by the SRC Expert Panel in charge of assessing to which extent the “EATMP Safety Policy” (SAF.ET.ST01.1000-POL-01-00, Edition 1.1, August 1999) implemented in accordance with its related “EATMP Safety Policy: Implementation Guidance Material” (SAF.ET1.ST01.1000-GUI-01-00, Edition 1.2, August 1999) complies with ESARR 3 “Use of Safety Management Systems by ATM Service Providers”, Edition 1.0.

This document compiles the outcome of this SRC assessment and establishes the rationale for the SRC judgement on the acceptability of the EATMP Safety Policy, Edition 1.1, when implemented in accordance with its related Implementation Guidance Material, Edition 1.2, as one Means Of Compliance with ESARR 3.

It considers all sections of ESARR 3 and includes a complete mapping between each and every safety requirement included in ESARR 3, Section 5, and the elements of the Proposed Means of Compliance « EATMP Safety Policy and related Implementation Guidance Material » which are considered as meeting the intent of the requirement.

It also provides a set of conclusions and recommendations to support the final SRC judgement. The conclusions refer to the compliance of the totality of ESARR 3, but also, as necessary, to compliance with only a part(s) of ESARR. The set of conclusions and recommendations provide justifications supporting the final statement on the PMC « EATMP Safety Policy and related Implementation Guidance Material ».

Throughout this document, the EATMP Safety Policy and its related Implementation Guidance Material are referred as « The PMC ».

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ASSESSMENT OF THE EATMP SAFETY POLICY AS A MEANS OF COMPLIANCE WITH ESARR 3

1. INTRODUCTION

Under international treaties, such as the Chicago Convention, the safety regulation of civil aviation is a national responsibility. Indeed, every State has complete and exclusive sovereignty over the airspace above its territory.

Each State signatory of the Chicago Convention undertakes to keep its own Regulations, its air navigation equipment and operations compliant, as far as possible, with those established by the International Civil Aviation Organisation (ICAO) under the Chicago Convention.

Recent amendments to ICAO Annex 11 require States to introduce Safety management practices in ATS services.

ESARR 3, EUROCONTROL Safety Regulatory Requirement “Use of Safety Management Systems by ATM Service Providers”, approved by the EUROCONTROL Permanent Commission in July 2000, strengthens those ICAO requirements and recommended practices. Its implementation is binding on EUROCONTROL Member States as of July 2003.

In that context, the EUROCONTROL Safety Regulation Commission has the task of ensuring the uniform implementation of ESARR 3 across Europe, hence the need for SRC to recognise a number of Means Of Compliance to help this uniform implementation of ESARR 3.

2. PURPOSE AND SCOPE

The Safety Regulation Commission has approved an internal procedure by which a SRC Expert Panel is set up to assess the acceptability of Proposed Means Of Compliance (PMC) to meet ESARR provisions.

A number of ATM service-providers are considering the use of the EATMP Safety Policy and its related Implementation Guidance Material as a means to show compliance with the provisions of ESARR 3.

ESARR 3 has already recognised the EATMP Safety Policy when implemented in accordance with its related Implementation Guidance Material as valuable reference documents in implementing SMS¹. Besides, the Requirement established that both documents would be formally assessed to determine whether they might be declared as acceptable means of compliance with the provisions of ESARR 3.

In accordance with those provisions, the scope of the assessment has considered the EATMP Safety Policy in the light of its Implementation Guidance Material. This approach is consistent with the fact that no safety policy can be considered as a means of compliance without an effective implementation of its statements².

This document will include the factual findings of the assessment of the EATMP Safety Policy and its related Implementation Guidance Material against ESARR 3 requirements in the form of tables as well as a set of additional comparisons, conclusions and recommendations to support the final SRC decision making process.

The conclusions will refer to the compliance of the totality of ESARR 3, but also, as necessary, to compliance with only a part(s) of ESARR. The set of conclusions and recommendations will provide justifications supporting the final draft statement on the PMC « EATMP Safety Policy and related Implementation Guidance Material ».

SRC will then be in a position to recognise/accept or not the EATMP Safety Policy and its Implementation Guidance Material as a Means to show compliance with ESARR 3.

Throughout this document, the EATMP Safety Policy and its related Implementation Guidance Material are referred as « The PMC ».

¹ See ESARR 3, Section 8.3 b)

² ESARR 3 provides the rationale for this approach not only in Section 8.3 but also throughout Section 5. The provisions for Safety Achievement, Assurance and Promotion are required within the operation of the SMS.

3. ASSESSMENT AGAINST ESARR 3 NON-OBLIGATORY SECTIONS

ESARR 3 includes sections which do not provide for obligatory provisions³. Their purpose is to define the context, rationale and purpose under which the requirements operate and provide guidance material and supplementary material.

This concerns Sections 1, 2, 4 and 8 (Scope, Rationale, Safety Objective and Additional Material).

Within the scope of this document, equivalent contents in the PMC have been considered against these non-obligatory sections.

3.1 ESARR 3 Section 1 - Scope

3.1.1 Analysis

According with the standardised approach to the formatting of ESARR, Section 1 (Scope) defines the intended scope of requirements, and what the requirements are about⁴.

3.1.1.1 ESARR 3

ESARR 3, Section 1, states the Requirement concerns the use of SMS by service providers of ATM services. Appendix A, defines ATM as 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.

Common terminology, based on ICAO definitions, considers ATM as a part of the Air Navigation Services⁵.

3.1.1.2 PMC

The EATMP Safety Policy contains various references to Air Navigation Services, defined⁶ as a generic term describing the totality of services provided in order to ensure the safety, regularity and efficiency of international air navigation and the appropriate functioning of the air navigation system.

³ See SRC Working Paper 10.9 'Future ESARR Developments'

⁴ See SRC Working Paper 5.5 'Safety Regulation Commission Requirements Framework'

⁵ Applicable definitions for Air Navigation Services, ATM services and supporting services are included in Appendix B to this document. ATM is considered as part of ANS in accordance with common ICAO terminology

⁶ See also EATMP Safety Policy, Section 1.4, Glossary

EATMP Safety Policy, Section 3 (The EATMP Safety Policy Statements) establishes direct links between its policy statements and the Air Navigation Service concept.

In particular, the Safety Management Policy Statement (Section 3.1) states that the ECAC States participating in EATMP should adopt an explicit, proactive approach to safety management in the Air Navigation Services.

3.1.2 Conclusions

The PMC contains enough elements to conclude that its implementation concerns the use of SMS by the providers of Air Navigation Services in the ECAC region. That category includes all ATM service providers subject to the requirements established in ESARR 3.

Therefore, no issues are raised by the assessment of the PMC against ESARR 3, Section 1 (Scope).

3.2 ESARR 3 Section 2 - Rationale

3.2.1 Analysis

According with the standardised approach to the formatting of ESARR, Section 2 (Scope) presents the rationale for the requirements, so that it is clearly specified why regulatory action is felt necessary for the improvement of aviation safety. The rationale is intended to mention any background information useful to understand the context within which the regulatory action takes place, and the safety benefit that is to be anticipated⁷.

3.2.1.1 ESARR 3

ESARR 3, Section 2, presents a rationale based on the fact that a formal a systematic approach to safety management maximises safety benefits in a visible and traceable way.

3.2.1.2 PMC

The PMC develops a detailed rationale in its Implementation Guidance Material, Chapter 2 (Context of the EATMP Safety Management Programme). It encompasses various considerations about the need for further safety improvement, economic factors, introduction of new ATM technologies, etc.

⁷ See SRC Working Paper 5.5 'Safety Regulation Commission Requirements Framework'

3.2.2 Conclusions

Although no contradictions exist between the contexts outlined by ESARR 3 and the PMC, no direct correspondence can easily be established between them. However, there is no regulatory need for equivalent descriptions due to the different nature of both documents.

Therefore, no issues are raised by the assessment of the PMC against ESARR 3, Section 2 (Rationale).

3.3 ESARR 3 Section 4 – Safety Objective

3.3.1 Analysis

According with the standardised approach to the formatting of ESARR, Section 4 (Safety Objective) is intended to present a clear and succinct statement of the safety objective to be achieved⁸.

3.3.1.1 ESARR 3

ESARR 3, Section 4, states that the overall objective is to ensure that all safety issues within the provision of an ATM service have been addressed in a satisfactory manner, and to a satisfactory conclusion.

That statement should be interpreted in the light of the overall strategic objectives defined at the highest political level for the ECAC region.

3.3.1.2 EATMP

EATMP Safety Policy, Section 1.1 (Purpose), refers to the overall objective of the ECAC Strategy for the 1990s, and identifies the Safety Policy as a possible mean to accomplish that objective through the definition of the a harmonised approach to Safety Management.

In addition, EATMP Safety Policy, Section 2 (The EATMP Safety Management Approach) defines the purposes of the safety management programme needed to implement a harmonised approach to Safety Management. Those purposes are to maintain and improve the levels of safety and provide assurance that this is being achieved.

⁸ See SRC Working Paper 5.5 'Safety Regulation Commission Requirements Framework'

3.3.2 Conclusions

Although the overall strategic objectives established at the highest political level for the ECAC region can be assumed as the common objective for ESARR 3 and the PMC, no direct correspondence can easily be established between the purposes explicitly defined for both. However, there is no regulatory need for that due to the different nature of both documents.

Therefore, no issues are raised by the assessment of the PMC against ESARR 3, Section 4 (Safety Objective).

3.4 ESARR 3 Section 8- Additional Material

According with the standardised approach to the formatting of ESARR, Section 8 (Safety Objective) is intended to include guidance information and other supplementary material.

As referred in Section 8.2, Appendix A to ESARR 3 includes the definitions for specific terms used in the Requirement. As those definitions provide agreed terminology for the interpretation of ESARR 3, Appendix A should be considered mandatory when used for interpretation purposes.

Section 8.3 refers to the PMC (EATMP Safety Policy when implemented in accordance with its related Implementation Guidance Material) as valuable reference documents in implementing SMS. It also establishes that the PMC will be formally assessed to determine whether it can be declared as acceptable means of compliance with the provisions of ESARR 3.

The analysis of Section 8 in comparison to the PMC does not raise any issue except for those that could come up from the use of alternative definitions⁹.

⁹ See Section 5.4 of this document

4. ASSESSMENT AGAINST ESARR 3 SAFETY REQUIREMENTS

According with the standardised approach to the formatting of ESARR, Section 5 Safety Requirement gives a statement of precise actions which are considered necessary to achieve the stated safety objective. This section includes all applicable mandatory requirements (expressed using the word “shall”), including those relating to implementation.

Due to the nature of Section 5, the assessment against its content provides the main basis for making a judgement about the acceptability of the PMC.

This assessment is based on a complete mapping between each and every safety requirement included in ESARR 3, Section 5, and the elements of the Proposed Means of Compliance « EATMP Safety Policy and related Implementation Guidance Material » which are considered as meeting the intent of the requirement.

4.1 Mapping of Safety Requirements

Table 1 is intended to provide a summary of results and. It identifies those mandatory provisions (as included in Section 5) not be covered by the PMC.

Tables 2 to 5 provide detailed information resulting from the comparison between ESARR 3, Section 5 and the PMC. In all cases, the literal text of ESARR 3 and PMC has been presented as far as practicable.

Tables 2 to 5 use a colour code to indicate the points where issues are raised (dark grey) as well as those where the content of the Implementation Guidance Material provides major elements for the assessment (light grey).

TABLE 1 – SUMMARY OF RESULTS

ESARR 3 Section 5	Covered by EATMP Safety Policy	Covered if Implementation Guidance Material is considered	Not covered and comments
GENERIC REQUIREMENT			
5.1.1 Safety Management	Paragraphs a) c) covered		Paragraph b) not covered
5.1.2 Safety Responsibility	Covered		
5.1.3 Safety Priority	Covered		
5.1.4 Safety Objective	Covered		
REQUIREMENTS FOR SAFETY ACHIEVEMENT			
5.2.1 Competency	Covered		
5.2.2 Safety Management Responsibility		Covered except for Paragraph c)	Paragraph c) not covered
5.2.3 Quantitative Safety Levels	Covered		
5.2.4 Risk Assessment and Mitigation		Covered	Pending assessment of methodology as a means of compliance with ESARR 4
5.2.5 SMS Documentation		Covered	
5.2.6 External Services			Not covered
5.2.7 Safety Occurrences	Covered		
REQUIREMENTS FOR SAFETY ASSURANCE			
5.3.1 Safety Surveys	Covered		
5.3.2 Safety Monitoring	Covered		
5.3.3 Safety Records			Not covered
5.3.4 Risk Assessment and Mitigation Doc.	Covered		Pending assessment of methodology as a means of compliance with ESARR 4
REQUIREMENTS FOR SAFETY PROMOTION			
5.4.1 Lesson Dissemination		Covered	
5.4.2 Safety Improvement	Paragraph a) covered		Paragraph b) not covered

TABLE 2 - (1/2) - ASSESSMENT AGAINST ESARR 3 GENERAL REQUIREMENT

ESARR 3 Section 5		EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
5.1 General Requirement 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:		3.1 Safety Management (Policy Statement) The ECAC States participating in EATMP should adopt an explicit, pro-active approach to safety management in the air navigation services.	<i>The Implementation Guidance Material as a whole provides an approach for implementing the Policy Statement.</i>	COVERED BY THE PMC
5.1.1 Safety Management	a) ensures a formalised, explicit and pro-active approach to systematic safety management in meeting its safety responsibilities within the provision of ATM services	3.1 Safety Management (Policy Statement) The ECAC States participating in EATMP should adopt an explicit, pro-active approach to safety management in the air navigation services.	<i>The Implementation Guidance Material as a whole provides an approach for implementing the Policy Statement.</i>	COVERED BY THE PMC
	b) operates in respect of all ATM and supporting services which are under its managerial control,			NOT COVERED THE SCOPE OF THE SMS DOES NOT INCLUDE SUPPORTING SERVICES AS DEFINED IN ESARR 3
	c) includes, as its foundation, a statement of safety policy defining the organisation's fundamental approach to managing safety;	Existence of the EATMP Safety Policy		COVERED BY THE EXISTENCE OF THE SAFETY POLICY

TABLE 2 - (2/2) - ASSESSMENT AGAINST ESARR 3 GENERAL REQUIREMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS	
<p>5.1.2 Safety Responsibility</p>	<p>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;</p>	<p>3.2 Safety Responsibility (Policy Statement) Everyone has an individual responsibility for their own actions and managers are responsible for the safety performance of their own organisations.</p> <p><i>NOTE: Section 1.2 (Scope) states that EATMP Safety Policy is limited to the specification of policy statements and principles, and invites ECAC States to allocate safety responsibilities as developed in its guidance material.</i></p>	<p><i>Chapter 5 (Allocating Safety Management Responsibilities) provides enough guidance for implementing the Policy Statement.</i></p> <p><i>Annex B provides for additional guidance for implementing the Policy Statement</i></p>	<p>COVERED BY THE PMC</p>
<p>5.1.3 Safety Priority</p>	<p>ensures that the achievement of satisfactory safety in ATM shall be afforded the highest priority over commercial, operational, environmental or social pressures;</p>	<p>3.3 The Priority of Safety (Policy Statement) The achievement of satisfactory safety in the Air Navigation Services should be afforded the highest priority over commercial, operational, environmental or social pressures</p>	<p><i>The Implementation Guidance Material as a whole provides an approach for implementing the Policy Statement.</i></p>	<p>COVERED BY THE PMC</p>
<p>5.1.4 Safety Objective of the ATM Service</p>	<p>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.</p>	<p>3.4 The Safety Objective of Air Navigation Services (Policy Statement) While providing an expeditious service, the principal safety objective is to minimise the air navigation services' contribution to the risk of an aircraft accident as far as reasonably practicable</p>	<p><i>The Implementation Guidance Material as a whole provides an approach for implementing the Policy Statement.</i></p>	<p>COVERED BY THE PMC</p>

TABLE 3 - (1/5) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ACHIEVEMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
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<p>5.2 Requirements for Safety Achievement Within the operation of the SMS, the ATM service-provider:</p>		<p>Section 4.1 – Safety Achievement</p>			
<p>5.2.1 Competency</p>	<p>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;</p>	<p>4.1.1 Competency (Principle) Staff should be adequately trained, motivated and competent for the job they are required to do, in addition to being properly licensed if so required.</p>	<p><i>Section 7.2 (Competency Principle) provides enough guidance for implementing the Principle.</i></p>	<p><i>COVERED BY THE PMC</i></p>	
<p>5.2.2 Safety Management Responsibility</p>	<p>a) shall ensure that a safety management function is identified with organisational responsibility for development and maintenance of the safety management system;</p>		<p>5.2 The Safety Department To ensure the long-term success of the Safety Management Programme, it is necessary to have a focal point: the Safety Manager supported by a Safety Department.</p> <p>5.4.1 The Safety Manager Function The role of the Safety Manager is very important as she/he is the management representative for Safety Management issues. She/he will have the authority and responsibility for ensuring that the Safety Management Programme is implemented and maintained.</p> <p><i>Chapter 5 (Defining the Safety Organisation) provides additional guidance</i></p>	<p><i>COVERED BY THE PMC IN ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p> <p><i>IN THIS REGARD THE PMC ACCEPTABILITY IS PARTICULARLY SUBJECT TO THE USE OF ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p>	

TABLE 3 - (2/5) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ACHIEVEMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
5.2.2 Safety Management Responsibility CONTINUATION	b) shall ensure that this point of responsibility is, wherever possible, independent of line management, and accountable directly to the highest organisational level;	<p>5.4.1 The Safety Manager Function Non-Executive Status. Depending on the size of the organisation and the availability of resources, the Safety Manager task may be a part time or a full time responsibility. In order to be both independent and impartial, she/he should be independent of line management.</p> <p>Position in the Organisation The Safety Manager must be placed at a high level in the organisation: To reflect the commitment of the organisation management for safety; To have access to every facet of the organisation, in order to fulfil its advisory role; To have credibility with senior line managers.</p> <p><i>Chapter 5 (Defining the Safety Organisation) provides additional guidance</i></p>	<p><i>COVERED BY THE PMC IN ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p> <p><i>IN THIS REGARD THE PMC ACCEPTABILITY IS PARTICULARLY SUBJECT TO THE USE OF ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p>
	c) 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;	<p>5.2 The Safety Department The Safety Department could be, for example: ...</p> <p>In smaller organisations, it could be a specific person in an ATS unit.</p> <p>The manner in which the Safety Organisation should be established largely depends on the existing organisation structure. The following sections give examples of possible integration schemes.</p> <p><i>Chapter 5 (Defining the Safety Organisation) may provides additional guidance</i></p>	<p><i>NOT COVERED</i></p> <p><i>NEITHER POLICY NOR GUIDANCE MENTIONS POSSIBLE WAYS TO PROVIDE THE REQUIRED ADDITIONAL INDEPENDENT MEANS</i></p> <p><i>THIS ISSUE DOES NOT AFFECT EATMP AND OTHER LARGE ATM ORGANISATIONS</i></p>

TABLE 3 - (3/5) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ACHIEVEMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
5.2.2 Safety Management Responsibility CONTINUATION	d) shall ensure that the highest level of the service provider organisation plays a general role in ensuring safety management;	<p>5.4.1 The Safety Manager Function Access to Senior Management. She/he shall have direct access to top level Senior Management for serious or immediate concerns related to safety issues. If the responsible manager does not take corrective action and a serious shortcoming remains, then the Safety Manager should be able to report to a higher level of management. The Safety Manager therefore provides external and objective assurance of maintenance of high safety standards.</p> <p><i>Chapter 5 (Defining the Safety Organisation) may provide additional guidance</i></p>	<p><i>COVERED BY THE PMC IN ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p> <p><i>IN THIS REGARD THE PMC ACCEPTABILITY IS PARTICULARLY SUBJECT TO THE USE OF ITS IMPLEMENTATION GUIDANCE MATERIAL</i></p>
5.2.3 Quantitative Safety Levels	Shall ensure that, wherever practicable, quantitative safety levels are derived and are maintained for all systems;	<p>4.1.3 Quantitative Safety Levels (Principle) Wherever practicable, quantitative safety levels should be derived and maintained for all systems.</p>	<p><i>Section 7.4 (Quantitative Safety Levels Principle) provides enough guidance for implementing the Principle.</i></p> <p><i>COVERED BY THE PMC</i></p>
5.2.4 Risk Assessment and Mitigation	a) 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	<p>4.1.4 System Safety Assessment (Principle) All new systems and changes to operational systems should be assessed for their safety significance and system functions should be classified according to their safety criticality.</p> <p>Safety analysis should be conducted and documented to ensure that due consideration is given to all engineering and operational aspects.</p>	<p><i>Section 7.5 (System Safety Assessment Principle) provides guidance based on the EATMP Air Navigation System Safety Assessment Methodology.</i></p> <p><i>COVERED BY THE PMC AT THE LEVEL REQUIRED BY ESARR 3</i></p> <p><i>PENDING THE ASSESSMENT OF THE PROPOSED METHODOLOGY AS A MEANS OF COMPLIANCE WITH ESARR 4.</i></p>

TABLE 3 - (4/5) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ACHIEVEMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
5.2.4 Risk Assessment and Mitigation CONTINUATION	b) 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;	4.1.4 System Safety Assessment (Principle) All new systems and changes to operational systems should be assessed for their safety significance and system functions should be classified according to their safety criticality.	COVERED BY THE PMC AT THE LEVEL REQUIRED BY ESARR 3 PENDING THE ASSESSMENT OF THE PROPOSED METHODOLOGY AS A MEANS OF COMPLIANCE WITH ESARR 4.
5.2.4 Risk Assessment and Mitigation CONTINUATION	c) shall ensure appropriate mitigation of risks where assessment has shown this to be necessary due to the safety significance of the change		7.5.1 Purpose The safety assessment process is an analytical process which supports the complete system life cycle activities. This process involves : ... The identification and validation of the means used to eliminate or mitigate the effects of these failure conditions, The verification that specific implementations satisfy the means. <i>Section 7.5 (System Safety Assessment Principle) provides guidance based on the EATMP Air Navigation System Safety Assessment Methodology.</i>
5.2.5 SMS Documentation	shall ensure that the SMS is systematically documented in a manner, which provides a clear linkage to the organisation's safety policy;		3.4 The Safety Manual It is recommended to document the organisation policy statements and principles, the definition of safety responsibilities, the terms of reference of the safety organisation and the specification of the local instructions in a so-called Safety Manual. This manual is the major means for communicating the organisation's approach to safety to all employees. COVERED BY THE PMC IN ITS IMPLEMENTATION GUIDANCE MATERIAL IN THIS REGARD, THE PMC ACCEPTABILITY IS PARTICULARLY SUBJECT TO THE USE OF ITS IMPLEMENTATION GUIDANCE MATERIAL

TABLE 3 - (5/5) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ACHIEVEMENT

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS	
5.2.6 External Services	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;			NOT COVERED
5.2.7 Safety Occurrences	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.	4.1.2 Safety Occurrences (Principle) Air navigation system operational or technical occurrences that are considered to have significant safety implications should be investigated immediately and any necessary corrective action taken	Section 7.3 (Safety Occurrences Principle) provides guidance for implementing the Principle.	COVERED BY THE PMC

TABLE 4 - (1/2) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ASSURANCE

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS
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5.3 Requirements for Safety Assurance Within the operation of the SMS, the ATM service-provider:		Section 4.2 – Safety Assurance		
5.3.1 Safety Surveys	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.	4.2.1 Safety Surveys (Principle) Safety surveys should be 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.	<i>Section 7.6 (Safety Surveys Principle) provides guidance for implementing the Principle.</i>	<i>COVERED BY THE PMC</i>
5.3.2 Safety Monitoring	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.	4.2.2 Safety Monitoring (Principle) Methods should be 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 corrective action should be taken.	<i>Section 7.7 (Safety Monitoring Principle) provides guidance for implementing the Principle.</i>	<i>COVERED BY THE PMC</i>

TABLE 4 - (2/2) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY ASSURANCE

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS	
5.3.3 Safety Records	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;			NOT COVERED
5.3.4 Risk Assessment and Mitigation Documentation	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.	4.2.3 System Safety Assessment Documentation (Principle) The results and conclusions of the safety assessment process of a new safety significant system should be documented and this documentation should be maintained throughout the life of the system.	Section 7.8 (System Safety Assessment Documentation Principle) provides guidance for implementing the Principle	COVERED BY THE PMC

TABLE 5 - (1/1) - ASSESSMENT AGAINST ESARR 3 REQUIREMENTS FOR SAFETY PROMOTION

ESARR 3 Section 5	EATMP Safety Policy Statements/Principles covering the Requirement	EATMP Safety Policy Implementation Guidance Material Sections covering the Requirement	COMMENTS	
<p>5.4 Requirements for Safety Promotion Within the operation of the SMS, the ATM service-provider:</p>	<p>Section 4.3 – Safety Promotion</p>			
<p>5.4.1 Lesson Dissemination</p>	<p>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.</p>	<p>4.3.1 Lesson Dissemination (Principle) The lessons arising from safety occurrence investigations should be disseminated widely within units and passed up the management chain to enable wider dissemination to other units and Design Authorities if appropriate.</p>	<p>7.9.1 Purpose The second source of information is safety recommendations resulting from the analysis and assessment of hazards, identified during Safety Surveys conducted within the unit.</p> <p>Other sources of information could be : Safety recommendations resulting from the Safety Improvement process, safety recommendations resulting from the Lesson Dissemination process in other operational units, safety recommendations made by international organisation (e.g. the Safety Improvement Sub-Group), safety recommendations made in dedicated safety newspapers or reports.</p> <p><i>Section 7.9 (Lesson Dissemination Principle) provides additional guidance for implementing the Principle</i></p>	<p><i>COVERED BY THE PMC ONLY IF THE PRINCIPLE IS EXTENDED IN ACCORDANCE WITH THE IMPLEMENTATION GUIDANCE MATERIAL</i></p> <p><i>THE SAFETY POLICY PRINCIPLE ONLY CONCERNS SAFETY OCCURRENCE INVESTIGATION.</i></p> <p><i>GUIDANCE MATERIAL REFERS TO OTHER ACTIVITIES AS SOURCES OF VALUABLE INFORMATION</i></p>
<p>5.4.2 Safety Improvement</p>	<p>a) shall ensure that all staff are actively encouraged to propose solutions to identified hazards, and</p> <p>b) shall ensure that changes are made to improve safety where they appear needed.</p>	<p>4.3.2 Safety Improvement (Principle) All staff should be actively encouraged to propose solutions to identified hazards and changes should be made to improve safety where they appear needed.</p>	<p><i>Section 7.10 (Safety Improvement Principle) provides guidance for implementing the Principle</i></p>	<p><i>COVERED BY THE PMC</i></p>

4.2 Issues

In the light of the analysis supported by the above mapping tables, the assessment against the safety requirements of ESARR 3 Section 5 raises the following issues:

In relation to Section 5.1.1 b) (Safety Management):

ISSUE 1 - The PMC does not identify the scope of the SMS as defined by the Requirement to include those supporting services that are under the managerial control of the organisation.

In relation to Section 5.2.2 c) (Safety Management Responsibility):

ISSUE 2 - The PMC does not propose additional independent means to address the specific case pointed out by the Requirement (small organisations where combination of responsibilities may prevent a sufficient level of independence in the safety managerial function).

In relation to Sections 5.2.4 and 5.3.4 (Risk Assessment and Mitigation and Risk Assessment and Mitigation Documentation):

ISSUE 3 – The PMC may meet these requirements at the level of detail required by ESARR 3, pending the assessment of the methodology proposed as a means of compliance with ESARR 4.

In relation to Section 5.2.6 (External Services):

ISSUE 4 - The PMC does not cover the External Services Requirement. The issue is not addressed by the PMC.

In relation to Section 5.3.3 (Safety Records):

ISSUE 5 - The PMC does not cover the Requirement. The PMC System Safety Assessment Documentation Principle only concerns safety assessment activities.

In relation to Section 5.4.1 (Lesson Dissemination):

ISSUE 6 - The Lesson Dissemination Principle only concerns the results of safety occurrence investigation, although the Implementation Guidance Material refers to other activities as additional sources of valuable information.

Further, it should be noted that the acceptability of the PMC in relation to Section 5.2.2 (Safety Management Responsibility) and 5.2.5 (SMS Documentation) is particularly subject to the use of its Implementation Guidance Material. No explicit references to those matters are presented in the policy level of the PMC.

This fact validates the need to consider the EATMP Safety Policy in the light of its Implementation Guidance Material.

4.3 Analysis of Issues

4.3.1 Issue 1

4.3.1.1 Statement

The PMC does not identify the scope of the SMS as defined by the Requirement to include those supporting services that are under the managerial control of the organisation.

4.3.1.1 Rationale

ESARR 3 requires the implementation by each ATM service provider of a SMS that must cover not only its ATM services but also those supporting services which are under the managerial control of the organisation.

The Requirement defines supporting services as those systems, services and arrangements, including Communication, Navigation and Surveillance services which support the provision of an ATM service.

The supporting services concept includes systems, services and arrangements which are not considered as Air Navigation Services if they support directly the provision of ATM services and are under the managerial control of the organisation.

In the PMC, the Safety Management Policy Statement provides the basis to conclude that the scope of the SMS concerns air navigation services. Therefore, depending on specific situations some supporting services, as defined in ESARR 3, could be outside the scope of the PMC.

4.3.1.2 Conclusion

This issue does not prevent the acceptability of the PMC if a clarification is made, preferably at policy level, as part of the use made of the PMC by ATM service providers to implement SMS.

It has to be made clear, preferably at policy level, that the SMS also operates in respect of those supporting services which are under the managerial control of the organisation.

4.3.2 Issue 2

4.3.2.1 Statement

The PMC does not propose additional independent means to address the specific case pointed out by the Requirement (case of small organisations where combination of responsibilities may prevent a sufficient level of independence in the safety managerial function).

4.3.2.2 Rationale

The Requirement includes specific provisions to address the case of small organisations. Those provisions concern the implementation Safety Management Responsibility Requirement in a particular situation.

In those specific cases ESARR 3 establishes that where combination of responsibilities may prevent sufficient independence, the arrangements for safety assurance are to be supplemented by additional independent means.

The PMC does not address this issue due to the nature of its development. The PMC is tailored for its use in relation to EATMP activities and is primarily intended for its use by major organisations.

4.3.2.3 Conclusion

This issue does not prevent the acceptability of the PMC in the case of organisations not affected by the small organisation issue as raised by ESARR 3.

ATM service providers, including small organisations, can use the PMC without developing its SMS under the specific provisions included in ESARR 3, Section 5.2.2 c). In that case, this issue does not prevent the use of the PMC to implement their SMS.

If a small organisation decided to develop its SMS under the specific provisions included in Section 5.2.2 c), the PMC would not provide criteria for arranging additional safety assurance as required in ESARR 3. Additional independent means for safety assurance should be identified and implemented in a way acceptable for the ATM Safety Regulator¹⁰.

4.3.3 Issue 3

4.3.3.1 Statement

The PMC may meet these requirements (Risk Assessment and Mitigation and Risk Assessment and Mitigation Documentation) at the level of detail required by

¹⁰ SRC is to develop specific guidance material for ATM safety regulators about the implementation of ESARR 3 in small organisations.

ESARR 3, pending the assessment of the methodology proposed as a means of compliance with ESARR 4.

4.3.3.2 *Rationale*

ESARR 3 requires Risk Assessment and Mitigation and specific documentation for that activity.

In addition ESARR 4 recognises that, in certain cases, the implementation of ESARR 3 (Use of Safety Management Systems by ATM Service Providers) also necessitates the provision of more specific requirements to be used. ESARR 4 provides such detailed requirements, hence developing further sections 5.2.4 and 5.3.4 of ESARR 3.

Regarding these specific provisions, the PMC presents an approach based on the EATMP Air Navigation System Safety Assessment Methodology¹¹ which is to be formally assessed by SRC as a proposed means of compliance with ESARR 4.

4.3.3.3 **Conclusion**

The PMC provides means to meet ESARR 3 Sections 5.2.4 and 5.3.4 when considered at the generic level used by ESARR 3, pending the results of the assessment of the “EATMP Air Navigation System Safety Assessment Methodology” as a proposed means of compliance with ESARR 4.

Where the “EATMP Air Navigation System Safety Assessment Methodology” is used, the issues resulting from that assessment will apply to the use of PMC to meet ESARR 3 Sections 5.2.4 and 5.3.4.

4.3.4 **Issue 4**

4.3.4.1 *Statement*

The PMC does not cover the External Services Requirement. The issue is not addressed by the PMC.

4.3.4.2 *Rationale*

The Requirement establishes that ATM service providers have to 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.

¹¹ *In particular, the Implementation Guidance Material explicitly states in Section 7.5.5 that the procedures (implementing the System Safety Assessment Principle) should be based on the Air Navigation System Safety Assessment Methodology. It also states that the Methodology provides guidelines for conducting a system safety assessment and recommendations for the usage of some assessment techniques.”*

As defined in ESARR 3, External Services include all material and non-material supplies and services, which are delivered by any organisation not covered by the ATM service-provider's SMS.

The issue is not addressed by the PMC. Neither the Safety Policy nor the Implementation Guidance Material provides specific means to deal with external services.

4.3.4.3 Conclusion

In order to accept the use of the PMC to implement SMS in accordance with ESARR 3, the PMC has to be necessarily completed with specific arrangements and processes to deal with external services in an acceptable way¹².

4.3.5 Issue 5

4.3.5.1 Statement

The PMC does not cover the Safety Record Requirement. The PMC System Safety Assessment Documentation Principle only concerns safety assessment activities.

4.3.5.2 Rationale

The Requirement states that ATM service providers have to ensure that safety records are maintained throughout the SMS operation; that is to say, concerning all SMS related processes, arrangements and activities.

The PMC identifies some elements of the SMS Documented Systems (Policy and, Manual) and also defines documentation equivalent to the Risk Assessment and Mitigation Documentation required by ESARR 3.

Although the existence of some safety records could be assumed in the light of the Implementation Guidance Material¹³, the general need for safety records associated to all SMS-related arrangements, processes and activities should be clearly identified.

¹² Further guidance about the External Services Requirement is provided in the document ESARR 3 Guidance Material to ATM Safety Regulators "Explanatory Material to ESARR 3 Requirements" (Edition 1.0, July 2001, Reference to be assigned)

¹³ See Implementation Guidance Material, Chapter 7, Design of Safety Policy Local Instructions.

4.3.5.3 Conclusion

In order to accept the use of the PMC to implement SMS in accordance with ESARR 3, the PMC has to be necessarily completed with specific arrangements and processes to deal with safety records in an acceptable way¹⁴.

In particular, those arrangements and processes have to make clear that safety records are to be produced and maintained for all SMS-related arrangements, processes and activities.

4.3.6 Issue 6

4.3.6.1 Statement

The Lesson Dissemination Principle only concerns the results of safety occurrence investigation, although the Implementation Guidance Material refers to other activities as additional sources of valuable information.

4.3.6.2 Rationale

ESARR 3 requires the dissemination of lessons arising not only from safety occurrence investigation but also from other safety-related activities.

In the PMC, the Lesson Dissemination Principle only concerns safety occurrence investigation. The Implementation Guidance Material expands its scope and proposes other safety-related activities as sources of valuable information.

4.3.6.3 Conclusion

If the principle is implemented in accordance with its guidance, the use of the PMC may be considered as acceptable to meet the Lesson Dissemination Requirement. However, it would be advisable to re-formulate the principle to make completely clear that it concerns other safety-related activities as required in ESARR 3.

The arrangements and processes related to this principle should consider inputs from all safety-related activities.

¹⁴ Further guidance about the Safety Records Requirement is provided in the document ESARR 3 Guidance Material to ATM Safety Regulators "Explanatory Material to ESARR 3 Requirements" (Edition 1.0, July 2001, Reference to be assigned)

5. ASSESSMENT AGAINST OTHER OBLIGATORY PROVISIONS

5.1 ESARR 3 Section 3 - Applicability

5.1.1 Analysis

According with the standardised approach to the formatting of ESARR, Section 3 (Applicability) specifies the scope of applicability of the requirements, i.e. the elements of the ATM system, as well as the categories of organisations that are subject to the requirement¹⁵.

The Requirement applies to all providers of ATM services that fall under the jurisdiction of the national ATM safety regulatory body.

There is no need for equivalent provisions due to the non-regulatory nature of the PMC. However, as already discussed¹⁶ the PMC identifies the air navigation services of the ECAC area as its scope for implementation.

5.1.2 Conclusions

No issues are raised by the assessment against Section 3 (Applicability)

5.2 ESARR 3 Section 6 - Implementation

5.2.1 Analysis

The provisions of the requirement are effective within three years from the date of approval by the EUROCONTROL Commission.

The PMC does not contain equivalent provisions. There is no need for them due to its non-regulatory nature.

5.2.2 Conclusions

No issues are raised by the assessment against Section 6 (Implementation)

5.3 ESARR 3 Section 7 - Exemptions

Neither ESARR 3 nor the PMC identifies exemptions. No issues are therefore raised

¹⁵ See SRC Working Paper 5.5 'Safety Regulation Commission Requirements Framework'

¹⁶ See Section 3.1 of this document

5.4 ESARR 3 Section

5.4.1 Analysis

Definitions for specific terms used in ESARR 3 are included in Appendix A to the Requirement.

Alternative definitions can be used by various means of compliance. However, the interpretation of the Requirement should be based on the specific terminology of Appendix A to ESARR 3.

The PMC uses a set of alternative definitions for risk assessment and mitigation concepts. No other major differences had to be considered throughout this assessment.

5.4.2 Conclusion

The assessment of EATMP Air Navigation System Safety Assessment Methodology as a proposed means of compliance with ESARR 4 will address any issue related to their terminological differences.

As already identified, any issue resulting from that assessment will apply to the use of PMC to meet ESARR 3 Sections 5.2.4 and 5.3.4.

6. CONCLUSIONS and RECOMMENDATIONS

6.1 Conclusion 1

Based on the mapping of requirements presented in form of tables in Section 4, this assessment concludes that,

The acceptability of the PMC in relation to Section 5.2.2 (Safety Management Responsibility) and 5.2.5 (SMS Documentation) is particularly subject to the use of its Implementation Guidance Material as no explicit references are presented in the policy level of the PMC.

This fact validates the need to consider the EATMP Safety Policy in the light of its related Implementation Guidance Material, as already established in ESARR 3.

Recommendation:

Any further amendment to the PMC at policy level should be accompanied by its associated update of the Implementation Guidance Material in order to be considered as a revised PMC.

6.2 Conclusion 2

Based on the analysis of the Issue 1 in Section 4.3, summarised by its conclusion 4.3.1.3, this assessment concludes that,

The PMC does not identify the scope of the SMS to include those supporting services (as defined by ESARR 3) that are under the managerial control of the organisation.

This issue does not prevent the acceptability of the PMC if a clarification is made, preferably at policy level, within the use of the PMC by ATM service providers to implement SMS.

Recommendation:

When using the PMC, ATM service providers should make clear that the PMC also concerns those supporting services (as defined in ESARR 3) that are under the managerial control of the organisation.

Further, ATM Safety Regulators should specifically verify the effective implementation of such clarification in those cases where the PMC is used to implement SMS.

6.3 Conclusion 3

Based on the analysis of the Issue 2 in Section 4.3, summarised by its conclusion 4.3.2.3, this assessment concludes that,

The provisions established in ESARR 3, Section 5.2.2c, concerning the safety management responsibility in small organisations, do not prevent the acceptability of the PMC in the case of organisations not concerned in that special situation.

ATM service providers, including small organisations, can use the PMC without developing its SMS under the specific provisions included in ESARR 3, Section 5.2.2 c). In that case, this issue does not prevent the use of the PMC to implement the safety management function requirement.

If a small organisation decided to develop its SMS under the specific provisions included in Section 5.2.2 c), the PMC would not provide criteria for arranging additional safety assurance as required in ESARR 3. Additional independent means for safety assurance should be identified and implemented in a way acceptable for the ATM Safety Regulator¹⁷.

6.4 Conclusion 4

Based on the analysis of the Issue 3 in Section 4.3, summarised by its conclusion 4.3.3.3, this assessment concludes that,

The PMC provides means to meet ESARR 3 Sections 5.2.4 and 5.3.4 when considered at the generic level used by ESARR 3, pending the results of the assessment of the “EATMP Air Navigation System Safety Assessment Methodology” as a proposed means of compliance with ESARR 4.

Where the “EATMP Air Navigation System Safety Assessment Methodology” is used, the issues resulting from that assessment will apply to the use of PMC to meet ESARR 3 Sections 5.2.4 and 5.3.4.

¹⁷ SRC is to develop specific guidance material for ATM safety regulators about the implementation of ESARR 3 in small organisations.

6.5 Conclusion 5

Based on the analysis of the Issues 4 and 5 in Section 4.3, summarised by their conclusions 4.3.4.3 and 4.3.5.3, this assessment concludes that,

In order to accept the use of the PMC to meet ESARR 3, the PMC has to be necessarily completed with additional arrangements and processes specifically implemented to deal, in an acceptable manner, with the following subjects:

- a) **EXTERNAL SERVICES:** To ensure adequate and satisfactory justification of the safety of externally provided services, as defined by ESARR 3, and having regard to their safety significance within the provision of the ATM service.
- b) **SAFETY RECORDS:** To ensure that safety records are maintained throughout the SMS 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.

Recommendation:

ATM Safety Regulators should assess the arrangements and processes proposed by ATM service providers to complete the PMC when using it to implement SMS.

The document ESARR 3 Guidance Material for ATM Safety Regulators “Explanatory Material to ESARR 3 Requirements” (Edition 1.0, July 2001) provides guidance for considering the acceptability of those arrangements and processes.

6.6 Conclusion 6

Based on the analysis of the Issue 6 in Section 4.3, summarised by its conclusions 4.3.6.3, this assessment concludes that,

If the Lesson Dissemination Principle is implemented in accordance with the Implementation Guidance Material, the use of the PMC may be considered as acceptable to meet the Lesson Dissemination Requirement.

Nevertheless, it would be advisable to re-formulate the principle to make completely clear that it concerns other safety-related activities as required in ESARR 3.

Recommendations:

The arrangements and processes related to the Lesson Dissemination Principle should consider inputs from all safety-related activities.

ATM Safety Regulators should verify that ATM service providers implement the Lesson Dissemination Principle without limiting its input to the results of safety occurrence investigation.

7. Statement of Compliance

The implementation of the Proposed Means of Compliance « EATMP Safety Policy and related Implementation Guidance Material »¹⁸ meets the mandatory provisions of ESARR 3, Edition 1.0, when completed with the following features:

- a) The implementation of the PMC by ATM service providers makes clear, preferably at policy level, that the Safety Management System operates in respect of all ATM services and supporting services (as defined¹⁹ in ESARR 3) that are under the managerial control of the organisation, and
- b) The PMC is effectively implemented in accordance with that clarification.
- c) In the case of small organisations developing their SMS under the specific provisions of ESARR 3, Section 5.2.2 c, the PMC is completed with the implementation of additional independent means for safety assurance, identified and implemented in an acceptable manner to the ATM Safety Regulator²⁰.
- d) Where the “EATMP Air Navigation System Safety Assessment Methodology” is used, the Statement of Compliance issued by SRC on that ESARR 4 PMC will apply to the use of this ESARR 3 PMC to meet ESARR 3 Sections 5.2.4 and 5.3.4.
- e) Additional arrangements and processes complement the PMC and are implemented to deal, specifically and in an acceptable manner²¹, with the following subjects:
 - **EXTERNAL SERVICES:** To ensure adequate and satisfactory justification of the safety of externally provided services, as defined by ESARR 3, and having regard to their safety significance within the provision of the ATM service.
 - **SAFETY RECORDS:** To ensure that safety records are maintained throughout the SMS 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.
- f) The Lesson Dissemination Principle is implemented in accordance with the PMC Implementation Guidance Material without limiting its input to the results of safety occurrence investigations.

¹⁸ EATMP Safety Policy, Edition 1.1, August 1999 and EATMP Safety Policy: Implementation Guidance Material, Edition 1.2, August 1999

¹⁹ Applicable definitions for Air Navigation Services, ATM services and supporting services are included in Appendix B to this document. ATM is considered as part of ANS in accordance with common ICAO terminology.

²⁰ SRC is to develop specific guidance material for ATM safety regulators about the implementation of ESARR 3 in small organisations.

²¹ ESARR 3 Guidance Material for ATM Safety Regulators “Explanatory Material to ESARR 3 Requirements” (Edition 1.0, July 2001) provides guidance for considering the acceptability of those arrangements and processes.

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Appendix A

List of documents of Reference

EUROCONTROL Safety Regulatory Requirement – ESARR 3 ‘Use of Safety Management Systems by ATM Service Providers’, Edition 1.0, July 2000.

EUROCONTROL Safety Regulatory Requirement – ESARR 4 ‘Risk Assessment and Mitigation in ATM’, Edition 1.0, April 2001.

ESARR 3 Guidance Material for ATM Safety Regulators ‘Explanatory Material for ESARR 3 Requirements’ (*reference to be assigned*), Edition 1.0, June 2001.

EATMP Safety Policy (SAF.ET1.ST01.1000-POL-01-00), Edition 1.1, August 1999.

EATMP Safety Policy Implementation Guidance Material (SAF.ET1.ST01.1000-GUI-01-00), Edition 1.2, August 1999

EATMP Air Navigation System Safety Assessment Methodology (SAF.ET1.ST03.1000-MAN-01-00), Edition 1.0, April 2000.

SRC DOC 9 ‘Process for Establishing Acceptable Means of Compliance with ESARRs’, Edition 1.0, June 2001.

SRC Working Paper 5.5 ‘Safety Regulatory Commission Requirements Framework’, SRC5, June 1999.

SRC Working Paper 10.9 ‘Further ESARR Developments’, SRC10, February 2001.

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Appendix B

Terms and Definitions

Acceptable Means of Compliance (AMC)	An acceptable means of compliance illustrates a means, or several alternative means, but not necessarily the only possible means, by which a requirement can be met
Assessment	An evaluation based on engineering, operational judgement and/or analysis methods.
Air Navigation Service (ANS)	A generic term describing the totality of services provided to ensure safety, regularity and efficiency of international air navigation and the appropriate functioning of the air navigation system.
Air Navigation System	The aggregate of organisations, people, infrastructure, equipment, procedures, rules and information used to provide to airspace users air navigation services in order to ensure the safety, regularity and efficiency of international air navigation.
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
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.

Hazard	Any condition, event, or circumstance which could induce an accident.
Hazard Identification	The process of determining what can happen, why and how.
Mitigation or Risk Mitigation	Steps taken to control or prevent a hazard from causing harm and reduce risk to a tolerable or acceptable level.
National ATM Safety Regulatory Body	The competent body designated by State authority, responsible for the safety regulation of civil aviation.
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.
Proposed Means of Compliance (PMC)	Any means proposed as an acceptable means of compliance to meet the provisions of a requirement. In the context of this document, the expression “the PMC” refers to the EATMP Safety Policy when implemented in accordance with its related Implementation Guidance Material.
Quantitative Safety Levels	Numerical expression to define levels of safety
Risk	The combination of the overall probability or frequency of occurrence of a harmful effect induced by a hazard and the severity of that effect.
Risk Assessment	Assessment to establish that the achieved or perceived risk is acceptable or tolerable
Risk Mitigation	See mitigation

Safety	Freedom from unacceptable risk of harm.
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 Policy	A statement of the organisation's fundamental approach to achieve acceptable or tolerable safety
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 safety management system

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 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.
Supporting Services	Systems, services and arrangements, including Communication, Navigation and Surveillance services, which support the provision of an ATM service
System	A combination of physical components, procedures and human resources organised to perform a function.
Assessment	An evaluation based on engineering, operational judgement and/or analysis methods.
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
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.

Hazard	A potentially unsafe condition.
Hazard Identification	The process of determining what can happen, why and how.
Mitigation or Risk Mitigation	Steps taken to control or prevent a hazard from causing harm and reduce risk to a tolerable or acceptable level.
National ATM Safety Regulatory Body	The competent body designated by State authority, responsible for the safety regulation of civil aviation.
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.
Quantitative Safety Levels	Numerical expression to define levels of safety
Risk	The combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.
Risk Assessment	Assessment to establish that the achieved or perceived risk is acceptable or tolerable
Risk Mitigation	See mitigation
Safety	Freedom from unacceptable risk of harm.
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 Policy	A statement of the organisation's fundamental approach to achieve acceptable or tolerable safety
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 safety management system
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 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.

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Supporting Services

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System

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