

EATMP SAFETY POLICY

SAF.ET1.ST01.1000-POL-01-00

Edition	:	1.3
Edition Date	:	15 Mar. 2001
Status	:	Working Draft
Class	:	EATMP

DOCUMENT IDENTIFICATION SHEET

DOCUMENT DESCRIPTION

Document Title
EATMP SAFETY POLICY

EWP DELIVERABLE REFERENCE NUMBER

PROGRAMME REFERENCE INDEX

SAF.ET1.ST01.1000-POL-01-00

EDITION :

2.1

EDITION DATE :

15 Mar. 2001

Abstract

The EATMP Safety Policy specifies the policy statements and principles for a harmonised approach to Safety Management in the different ECAC States participating in EATMP.

Keywords

Safety Management
Safety Policy

CONTACT PERSON : J. Beaufays

TEL : 3732

DIVISION : SQS

DOCUMENT STATUS AND TYPE

STATUS	CATEGORY	CLASSIFICATION
Working Draft <input checked="" type="checkbox"/>	Executive Task <input checked="" type="checkbox"/>	General Public <input type="checkbox"/>
Draft <input type="checkbox"/>	Specialist Task <input type="checkbox"/>	EATMP <input checked="" type="checkbox"/>
Proposed Issue <input type="checkbox"/>	Lower Layer Task <input type="checkbox"/>	Restricted <input type="checkbox"/>
Released Issue <input type="checkbox"/>		

ELECTRONIC BACKUP

INTERNAL REFERENCE NAME : c:\Beaufays\safety\policy\Ed_01.doc

HOST SYSTEM	MEDIA	SOFTWARE(S)
Microsoft Windows	Type : Hard disk	
	Media Identification :	

DOCUMENT APPROVAL

The following table identifies all management authorities who have successively approved the present issue of this document.

AUTHORITY	NAME AND SIGNATURE	DATE
Safety Group Chairman	J.L. Garnier	
EATMP Project Leader	W. Philipp	

DOCUMENT CHANGE RECORD

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

EDITION	DATE	REASON FOR CHANGE	SECTIONS PAGES AFFECTED
0.1	1 Aug 1995	First issue	All
0.2	22 Sep. 1995	Draft issue (Review by Safety Group)	All
0.3	27 Oct. 1995	Proposed Issue (Review by Liaison Officers)	None
1.0	28 Nov. 1995	Issue adopted by the EATCHIP Project Board	4.3
1.1	25 Aug. 1999	Replacement of "EATCHIP" by "EATMP"	All
1.2	25 Oct. 2000	Proposed Updates of the Policy	All
1.3	15 Mar. 2001	First review of the Safety Group	All

TABLE OF CONTENTS

DOCUMENT IDENTIFICATION SHEET	ii
DOCUMENT APPROVAL	iii
DOCUMENT CHANGE RECORD	iv
TABLE OF CONTENTS	v
FOREWORD.....	vi
1. INTRODUCTION	1
1.1 Purpose	1
1.2 Scope 1	
1.3 Glossary	2
2. The EATMP Safety Management Approach	3
3. The EATMP Safety Policy Statements	4
3.1 Safety Management	4
3.2 Safety Management Implementation	4
3.3 Safety Responsibility.....	4
3.4 The Priority of Safety.....	5
3.5 The Safety Objective of Air Navigation Services.....	5
4. The EATMP Safety Management Principles.....	6
4.1 Safety Achievement.....	6
4.1.1 Competency	6
4.1.2 Risk Management Process	6
4.1.3 Safety Occurrences	7
4.1.4 Safety Objectives and Requirements.....	7
4.1.5 System Safety Assessment Process and Documentation.....	7
4.1.6 External Services.....	8
4.2 Safety Assurance.....	8

- 4.2.1 Safety Surveys8
- 4.2.2 Safety Monitoring.....9
- 4.2.3 Safety Records9
- 4.3 Safety Promotion9**
- 4.3.1 Lesson Dissemination.....9
- 4.3.2 Safety Improvement9

- 5. From Principles to Practice 11**
- 5.1 A Clear Commitment from Management..... 11**
- 5.2 Safety Management System Implementation 11**
- 5.2.1 Safety Management System..... 11
- 5.2.2 Safety Management Function 12
- 5.3 Measurement, Analysis and Improvement..... 12**

FOREWORD

The EATMP Safety Policy has been prepared and reviewed by the Safety Group.

The document identifies the Safety Policy statements and principles defining the foundation and the basic requirements of the Safety Management programme.

The statements and principles need to be tailored to what is achievable, and it is advisable to set a realistic time scale for their implementation. Most will require action to be taken and this requires training and the issue of guidance material. The principles need to be reviewed at regular intervals to reflect the lessons learned.

1. INTRODUCTION

1.1 Purpose

The general safety objective of the Air Traffic Management Strategy for the Years 2000+ states :

“To improve safety levels by ensuring that the number of ATM induced accidents and serious or risk bearing incidents do not increase and, where possible, decrease.”

To achieve this objective, the Strategy proposes, amongst others, to enhance the Safety Management methods.

Safety Management in the provision of Air Navigation Services, within the EUROCONTROL/ECAC area, was initiated in 1995, with the first issue of the EATCHIP Safety Policy. Since then,

- ICAO is amending Annex 11 and PANS RAC Doc 4444 to require the implementation of Safety Management in Air Traffic Services;
- ESARR 3 has been issued, mandating the implementation of Safety Management by ATM Service Providers, by July 2003.

This document defines a new EATMP Safety Policy. It is based on the original EATCHIP Safety Policy, and integrates new elements to improve the Safety Management approach.

The EATMP Safety Policy defines the foundation of, and specifies the general requirements for, a harmonised approach to Safety Management in the different Service Providers participating in EATMP and in EATMP Programmes.

The new Safety Policy is consistent with ICAO and SRC regulatory materials.

1.2 Scope

The EATMP Safety Policy is limited to the definition of the policy statements and principles.

Service Providers, participating in EATMP, are invited to allocate safety responsibilities and establish local instructions to implement the requirements specified in this document.

To implement the EATMP Safety Policy statements and principles, Service Providers, participating in EATMP, may refer to the guidance material developed by the Safety Group.

1.3 Glossary

In the context of this document, Air Navigation Service and Air Navigation System are defined as:

Air Navigation Service: 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.

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.

2. THE EATMP SAFETY MANAGEMENT APPROACH

Safety management is the process used by organisations providing safety related services or products to ensure that all safety aspects of that provision have been adequately addressed.

It includes:

- The setting of organisational safety policies and their deployment,
- A means for measuring safety achievement, and
- A mechanism for the rectification of deficiencies.

Safety Management should address all aspects in the provision of Air Navigation Services which have the potential to impact safety: people, procedures, equipment, exchanged information, infrastructure, organisations, external services, ...

The EATMP Safety Management approach is defined in a "top-down" fashion.

The Safety Policy Statements are first defined: these statements define the organisation's fundamental approach for managing safety.

From the statements, the Safety Principles are defined: the principles specify the requirements that the Safety Management System has to fulfil.

Having defined the policy statements and principles, local instructions should be defined: local instructions identify the tasks to be performed to meet the stated objectives of the policy and the principles, and assign responsibilities for carrying out these tasks. Procedures could then be established to support the implementation of these local instructions.

As the allocation of responsibilities and the elaboration of local instructions are strongly dependent on the organisation's management style and requirements, the definition of the EATMP Safety Management approach is limited to the specification of policy statements and principles.

3. THE EATMP SAFETY POLICY STATEMENTS

The Policy Statements define the basic approach adopted for managing safety.

3.1 Safety Management

Service Providers participating in EATMP should adopt a formalised, explicit and pro-active approach to systematic safety management in the air navigation services.

Rationale: A top management commitment to secure high safety standards as a major and priority objective of the organisation determines its attitude to safety (the organisation's Safety Culture). An intuitive or ad hoc approach is not good enough - safety issues must be dealt with and managed explicitly.

3.2 Safety Management Implementation

Safety Management should be implemented at all levels of the organisation. This requires:

- A formal statement of the organisation Safety Policy;
- A documented Safety Management System and an organisational structure to support the implementation of the Safety Policy;
- Means to provide assurance on the effectiveness of the Safety Management implementation in every unit or department of the organisation.

Rationale: These are prerequisites for successful safety management. These aspects are interdependent and a weakness in any one of them will undermine the integrity of the organisation's overall management of safety.

3.3 Safety Responsibility

Everyone has an individual responsibility for their own actions and managers are responsible for the safety performance of their own organisations.

Rationale: The Safety Management System relies on individual responsibility allocation in the organisation. The attainment of satisfactory safety requires the commitment and participation of all members of the organisation whereas the responsibility for safety management belongs to top management. The slogan, "Safety is everybody's business", means that everybody should be aware of the consequences of their mistakes and strive to avoid them. Therefore management is responsible for fostering this basic motivation so that everybody develops an awareness of safety. To do this management must provide the proper working environment, adequate training and supervision and the right facilities and

equipment. Once an individual has been properly trained and provided with a clear description of her/his task, she/he is responsible for her/his own actions. When control of risks requires action, managers are responsible for taking that action.

3.4 The Priority of Safety

The achievement of satisfactory safety in the Air Navigation Services should be afforded the highest priority over commercial, operational, environmental or social pressures.

Rationale: The Safety Management approach should clearly address the insidious nature of such pressures. Note that it is necessary to be clear that we are talking about risks to the safety of aircraft. The other side of the coin is that Safety is often used as an emotional argument to support commercial, financial, environmental or working practice arguments that have little real safety significance. If the term 'safety' is abused in this way, action cannot be focused on controlling the real risks.

3.5 The Safety Objective of Air Navigation Services

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.

Rationale: This is the key policy statement; it defines what we are trying to achieve. Note that we talk about 'risks' as there is no such thing as absolute safety. "As far as reasonably practicable" means that risks must be balanced against the time, trouble, costs and difficulty of taking measures to avoid them, considering their obviousness and the likelihood and severity of possible accidents. It is implicit, therefore, that risks have to be identified and quantified before a judgement can be made on their tolerability. Risk assessment requires a total aviation approach, considering all safety impacts within the global aviation system.

4. THE EATMP SAFETY MANAGEMENT PRINCIPLES

Safety Management Principles reflect best safety practices. They define the scope of the Safety Management System, provide a framework for processes to identify safety shortcomings so that remedial action can be taken, and provide an assurance that safety levels are being maintained or improved.

The EATMP safety principles address three main issues:

1. Safety achievement, specifying the means for achieving high safety standards.
2. Safety assurance, specifying the means for providing assurance that risks are being managed.
3. Safety promotion, specifying the means by which safety issues are communicated to ensure a culture of safe working within the organisation.

4.1 Safety Achievement

4.1.1 Competency

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.

Rationale: This is a fundamental principle in the provision of a safe air navigation service: safety is a direct outcome of the competence, skill, experience and motivation of people. People need to be aware of the significant impact of their activities on safety (potential or actual), the benefits of improved personal performances, and the potential consequences of departure from specified practices.

4.1.2 Risk Management Process

A Risk Management Process should be specified and implemented. This Process should:

- Define criteria for assessing the acceptability and tolerability of identified risk;
- Identify authorities responsible for reviewing, accepting and controlling identified risk;
- Define the precedence policy for the mitigation of identified risk;

Rationale: The Risk Management Process is the basic tool of Safety Management. In order to establish a prioritised list of hazards and an organisation action plan of how and by when each of these hazards are to be resolved, managers need criteria to evaluate hazard severity and likelihood of

(re-) occurrence. Depending on the risk level, different levels of authority should be granted for their acceptance or tolerability. Management should ensure that the process of risk management is documented, and that this documentation is maintained.

4.1.3 Safety Occurrences

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.

Rationale: If lessons are to be learned from safety incidents and remedial action taken promptly, occurrences need to be investigated immediately after the event. It is not good enough to await the results of an external investigation before taking action. Safety Occurrences detection and reporting will be integrated, as appropriate, in the individual States problem reporting procedure.

4.1.4 Safety Objectives and Requirements

Safety Objectives and Safety Requirements should be specified for all systems and their components. Wherever practicable, quantitative safety levels should be derived and maintained.

Rationale: If the safety performance of air navigation systems is to be monitored, it is necessary to define the safety requirements or objectives that need to be met.

4.1.5 System Safety Assessment Process and Documentation

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. Safety analysis should be conducted and documented to ensure that due consideration is given to all engineering and operational aspects. Selected risk mitigation means should be validated and implemented. 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. Finally, one should assure that the system as implemented achieves its specified safety objectives.

Rationale: The safety assessment process is conducted during the complete system life cycle

- To establish safety objectives for the system ("How safe the system needs to be");
- To identify, select, validate and implement risk mitigation means; and
- To demonstrate that the system is (and will continue to be) safe for operational use.

Systematic safety assessment is the basis for providing assurance that a new or modified air navigation system is safe for its intended operational objectives and environment.

The system safety assessment documentation provides the evidence and arguments that demonstrate that a new air navigation system is safe to enter operational service: the document should specify the safety objectives and requirements to be met by the system, and demonstrate that the system is fulfilling these objectives and requirements. Maintenance of this document as a living document throughout the life of the system provides continuing assurance that the remaining risks are controlled.

4.1.6 External Services

The air navigation service provider should control the processes of provision of services and/or products to the organisation.

Rationale: The type and the extend of methods to control these processes should be dependent on the effect of the service and/or product upon the safety.

4.2 Safety Assurance

4.2.1 Safety Surveys

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.

Rationale: Safety surveys can serve different purposes:

- *A means for hazard identification, to spot potential safety problems and to recommend some preventive or corrective actions;*
- *A means for promoting best practices, to determine the effectiveness and suitability of an implemented safety management system;*
- *A means for ensuring compliance with the organisational Safety Policy, to confirm adherence of an implemented Safety Management System to the organisational Safety Policy requirements.*

4.2.2 Safety Monitoring

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.

Rationale: Air navigation systems' performance can deteriorate, particularly as analogue systems are approaching the end of their useful lives. Traffic levels can also change, resulting in unacceptably high increases in controller workload. Such changes need to be detected, assessed and managed.

4.2.3 Safety Records

Appropriate safety records should be maintained in order to provide the evidence and arguments that demonstrate the continuing ability to provide safe services.

Rationale: This could include safety assessment documentation for the various used systems, the outcomes of safety surveys, the follow-up action of safety occurrences investigation, the results of safety monitoring.

4.3 Safety Promotion

4.3.1 Lesson Dissemination

The lessons arising from safety occurrence investigations and other safety activities should be disseminated widely within units and passed up the management chain to enable wider dissemination to other units or departments if appropriate.

Rationale: It is essential that lessons should be learned from other's experiences to reduce the chances of recurrence.

Communicate safety information to the entire organisation, in as many ways possible (for example, through safety reports, newsletters and employee meetings and briefings). Identification of problems is meaningless unless personnel knows about them.

Moreover, dissemination of positive safety news can reinforce the "emphasis-on-safety" message that top management has created to enable safety conscious personnel to know that their efforts are successful.

4.3.2 Safety Improvement

All staff should be actively encouraged to propose solutions to identified hazards and changes should be made to improve safety where they appear needed.

Rationale: This requires an effective means of communicating safety issues and the development of an internal safety culture that encourages safety improvements. To ignore an identified risk could be judged culpable.

In addition, an internal voluntary/confidential incident-reporting system may indicate "latent" or hidden safety problems. Without a proactive incident reporting system, these latent problems can go undetected until they contribute to an incident or an accident.

For such a system to be effective, management must make clear to employees that reported information will be used only in a constructive and non punitive way.

5. FROM PRINCIPLES TO PRACTICE

To enable the implementation of the above policy statements and principles, one should also consider the following elements:

5.1 A Clear Commitment from Management

Top management should demonstrate its commitment to:

- Establishing an organisational Safety Policy;
- Creating and maintaining awareness of the importance to fulfil the principles of the Safety Policy;
- Facilitating the deployment of the organisational Safety Policy;
- Establishing, implementing and maintaining a Safety Management System;
- Ensuring the availability of resources for safety management implementation;
- Continuously improving the safety performances of the organisation.

Rationale: If top management takes safety seriously, all personnel will be more likely to do the same.

The organisation's safety policy should be communicated and cascaded down to all employees by the highest levels of management: this helps create a "organisation safety culture" by sending the message that every person in the organisation is expected to make a commitment to safety.

A personal involvement of the top management in the organisation's safety management system promotion and development would support its implementation.

5.2 Safety Management System Implementation

5.2.1 Safety Management System

The organisation should establish a Safety Management System as a means to achieve its Safety Policy.

Rationale: A framework of key processes should be designed to implement the Safety Policy statements and principles.

Roles and their interrelationships, responsibilities and authorities should be defined in order to facilitate effective safety management and should be communicated to relevant levels of the organisation.

The Safety Management System should be documented and communicated to all personnel involved in safety related activities.

Safety management system should be implemented, maintained and improved as an integral part of the overall management function.

5.2.2 Safety Management Function

A safety management function should be established in the organisation for ensuring the development and maintenance of the safety management system. The Safety Manager, irrespective of other responsibilities, should report to top management on the performance of safety management system, including needs for improvement. He/she also ensures awareness throughout the organisation on safety management issues.

Rationale: Wherever possible the safety function should be independent of operational functions.

The safety manager should report directly to the top manager. This will ensure that decision-makers receive information about safety issues that is not compromised by operational or financial concerns. This top-level reporting structure will also ensure that genuine attention is given to safety issues by those ultimately accountable for the safety.

5.3 Measurement, Analysis and Improvement

The major objective of Safety Management is to contribute to continuous safety improvement. Therefore, overall safety performance should be measured. Appropriate data should be analysed for identifying where improvement can be made and for evaluating the effectiveness of the safety management system.

Rationale: Management should periodically review the current safety performance of the organisation. The evaluation of safety performances could be based on the outcomes of the Safety Management System, e.g., results of safety surveys, safety occurrence investigations, safety monitoring activities.

Management should also review the safety management system to ensure its continuing suitability, adequacy and effectiveness.

The improvement requirements may respond to changing conditions in the environment or to necessary enhancements in operations.

The review may, for example, lead to new safety targets or safety objectives, introduction of new functions or systems, dedicated training initiatives or changes to the organisation's safety management system, including its Safety Policy.