

# Getting started

The EATMP Safety Policy Implementation Guidance Material provides for a systematic approach to such a project.

Four main steps are shown below.



## 1 PLAN

You will need to perform a Safety Survey in order to be able to plan and communicate/negotiate with the Regulator.

SAFETY SURVEY to establish:

- PRIORITIES
  - SCHEDULING
  - COST/RESOURCES
- Establish partnership with Regulator

## 2 DEFINE AN SMS ORGANISATION

This will largely depend on the size of your organisation.

SAFETY MANAGER

- Select: Requirements-Personal Qualities
- Appoint: Responsibilities-Reporting Line

- Safety Department
- Safety Committees

## 3 ALLOCATE RESPONSIBILITIES

- Identify legal obligations and responsibilities
- Delineate the roles of the Provider and the Regulator
- Determine Safety responsibilities within the Organisation

## 4 ELABORATE SAFETY POLICY INSTRUCTIONS

These will describe the procedures and mechanisms to be put in place in order to run the system and verify its efficiency.

These instructions are culturally dependent and must be discussed and agreed by staff representatives.

The document should also contain provisions describing (\*):

- How is the activity defined
- Which events will initiate the activity
- What are the objectives of each activity
- What are the input/output of each activity
- What criteria are used to assess efficiency
- Who approves the activity output

(\* as you implement them

# Contacts

**Jean-Luc GARNIER** - Head SQS Unit email: jean-luc.garnier@eurocontrol.be  
**Jacques BEAUFAYS** - Safety Management email: jacques.beaufays@eurocontrol.be  
**Patrick MANA** - Technical Specialist email: patrick.mana@eurocontrol.be  
**Gilles LE GALO** - Operational Specialist email: gilles.le-galo@eurocontrol.be

**Editorial Matters**  
 e-mail : safety.management@eurocontrol.be  
 Tel: +32-2-729-3317 / 3296 Fax: +32-2-729-9984

# Support

As an EATMP service, DSA-SQS offers customised support to States/ATM Organisations for any of the required SMS components to be implemented.

European Air Traffic Management Programme

# EATMP



# Safety Management in Air Navigation Services

## Enhancing Safety Management

**“...a revised relationship between management and safety, this is how we will break the current impasse...”**

**Dr. Assad KOTAITE, President of the ICAO Council**

As air traffic continues to grow into the foreseeable future, it is imperative that aviation maintains its excellent safety record. Air navigation services (ANS) providers are increasingly adapting their systems (human-procedures-equipment) bringing almost constant change for which safety implications have to be assessed prior to implementation and thereafter operations safely managed and monitored.

Safety in service provision demands management commitment to implementation of Safety Management Systems (SMS) which address safety in an explicit, formal and documented manner operated by trained personnel using dedicated methods, procedures and tools.

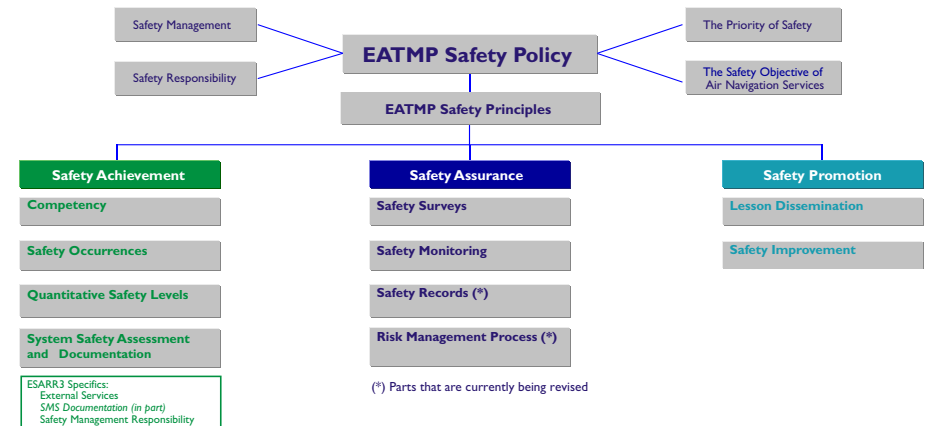
Safety should therefore be afforded the highest priority, taking precedence over commercial, operational, environmental or social pressures. Staff must be given responsibility for their own actions, and managers held responsible for the safety performance of their organisations.

This second edition of the EATMP Safety Letter provides a high level overview of the principles underpinning a typical SMS, particularly the achievement, assurance and promotion of safety. It is the first in a series covering each of the EATMP Safety Principles, and the reader will find a brief overview of what it takes to get an SMS started in an organisation and a list of key documents developed in support thereof.

## Editorial

The European Air Traffic Management Programme is helping to increase capacity and improve safety in European airspace through pan-European operational changes, such as RVSM and ACAS. ATS providers are adapting their systems and procedures to cope with these and other developments and many are using SMS to ensure safe implementation and operation. We in EUROCONTROL are working closely with the States to support them in this important task. As the Director responsible for EATMP safety management activities, I welcome the widespread use of SMS in air traffic services and believe that it will further improve our industry's safety record. I am confident that this and subsequent Safety Letters will help spread the word about this important development.

**G. PAULSON**  
 Director Safety, Airspace, Airports and Information Services - EATMP



### Safety Management

Safety must be managed in an explicit, proactive manner-  
As opposed to an embedded, undocumented manner.

### Safety Responsibility

Everyone has an individual responsibility for his/her own actions  
Managers are responsible for the safety performance of their own organisations  
As opposed to blaming the last person in the line.

# EATMP Safety Policy

## Management Commitment

### The priority of Safety

Safety should be afforded the highest priority over commercial, operational, environmental or social pressure-  
Not the other way round

### The Safety Objective of Air Navigation Services

The principal objective is to minimise the Air Navigation Services' contribution to the risk of an aircraft accident as far as practicable-  
i.e. at the same time as providing an expeditious service but not at safety expense

### EATMP Safety Principles

To form part of The Safety Manual

## Safety Achievement

### Competency

The Staff should be trained, motivated and competent for the job they are required to do, in addition to being licensed if so required

- Job descriptions
- Selection
- Evaluation
- Licensing
- Training

### Safety Occurrences.

Whether technical or operational, occurrences should be investigated and necessary action taken

- Reporting System(s)
- Occurrence Investigation
- (Safety) recommendations
- Reporting to (Regulator, SRC)
- Exchange of Safety Data (between units, with EUROCONTROL)

### Quantitative Safety Levels

Whenever practicable, quantitative safety levels should be derived and maintained for all systems

- ICAO SARPS
- EUROCONTROL standards
- National agreed standards with the Regulator
- International agreements on best practice

### System Safety Assessment and Documentation

Safety Analysis of new systems or changes to systems should be conducted to ensure that due consideration is given to all engineering and operational aspects

- Safety Assessment Methodology
- FHA-Functional Hazard Analysis
  - > System Definition
- PSSA-Preliminary System Safety Assessment
  - > System Design
- SSA-System Safety Assessment
  - > Development and transfer to operations

## Safety Assurance

### Safety Surveys

Safety Surveys should be carried out as a matter of routine to:

- recommend improvements where needed
- provide assurance to managers of safety activities in their areas
- confirm conformance with applicable parts of SMS
- Internal periodical surveys
- External survey/audits
- ICAO Safety Oversight Programme

### Safety Monitoring.

Methods should be put in place to detect changes in systems or operations which may require corrective actions to be taken

- Traffic statistics
- Interface with engineering
- Interface with management
- Interface with ATC procedures development department
- Interface with ATC operational practices changes

### Safety Records (\*)

Safety records appropriate to all systems should be maintained throughout the life of the system to provide evidence and arguments that demonstrate that an air navigation system is safe for operational use

- Safety Cases

### Risk Management Process (\*)

This process should:

- define criteria for assessing acceptability of identified risks
- identify authorities responsible for reviewing and accepting identified risks
- define the precedence policy for the mitigation of identified risks

## Safety Promotion

### Lesson Dissemination

The lessons arising from the Safety Occurrence Investigations as well as Safety Surveys, Safety Data Exchange and any other data source should be disseminated widely

- Reports
- Briefings
- Safety Data exchange
- Simulations
- Training
- Demonstrations
- Workshops-Seminars

### Safety Improvement

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

- Voluntary reporting systems especially those not limited to the reporting of occurrences but also open to the reporting of any "observation" of potentially unsafe elements of the system

## Reference Documentation

### EATMP Safety Management

● EATMP Safety Policy	SAF.ETI.ST01.1000-POL-01-00 [Ed. 1.1 25 Aug 99]
● EATMP Safety Policy-Implementation Guidelines	SAF.ETI.ST01.1000-GUI-01-00 [Ed. 1.1 25 Aug 99]
● EATMP Reporting Systems Guidelines	[to be released end 2000]
● EATMP Safety Occurrence Investigation Guidelines	[to be released end 2000]
● EATMP Emergency Training Guidelines	[to be released first semester 2001]
● EATMP Air Navigation System Safety Assessment Methodology (Awareness)	SAF.ETI.ST03.1000-MAN-01-00 [Ed.0.5 30 April 99]
● EATMP Air Navigation System Safety Assessment Methodology (FHA)	SAF.ETI.ST03.1000-MAN-01-00 [Ed.1.0 17 April 00]
● HEIDI Taxonomy	SAF.ETI.ST02.1000-REP-10-00 [Ed.1.0 8 May 00]
● EUROCONTROL EATMP Safety Letters	

### EATMP Human Factors & Training

● EATMP Guidelines for ATCO Manpower Planning Processes	HUM.ETI.ST03.1000-GUI-02 [Ed. 1.0 19 June 00]
● EATMP Guidelines for Personal and Career Development Processes	HUM.ETI.ST03.1000-GUI-01 [Ed. 1.0 14 June 00]
● EATMP Simulation Facilities for Air Traffic Control Training	HUM.ETI.ST07.3000-REP-02 [Ed. 1.0 15 March 00]
● EATMP Guidelines for Common Core Content and Training Objectives for Air Traffic Controllers Training (Phase I)	HUM.ETI.ST05.1000-GUI-01 [Ed. 1.0 29 April 97]
● EATMP Controller Training in the Handling of Unusual Incidents	HUM.ETI.ST12.3000-GUI-01 [Ed. 1.0 29 June 99]
● European Manual of Personnel Licensing Air Traffic Controllers	HUM.ETI.ST08-Established Standards for Personnel Licensing [Ed. 1.0 15 May 00]

### EUROCONTROL Safety Regulation

● ECAC Safety Minima for ATM	POLICY DOC1 [Draft 0.01, 14 July 00]
● EUROCONTROL Safety Regulatory Requirement 2	
"Reporting and Assessment of Safety Occurrences in ATM"	ESARR2 [Ed. 1.0 12 Nov 99]
● Severity Classification Scheme for Safety Occurrences in ATM	GM1-ESARR2 [Ed. 1.0 12 Nov 99]
● Publication and Confidentiality Policy	GM2-ESARR2 [Ed. 1.0 12 Nov 99]
● Annual Summary Template	CD1-ESARR2 [Ed. 08 Feb.00]
● Guidance Material for Completion of Annual Summary Template	CD2-ESARR2 [Ed. 04 Feb.00]
● EUROCONTROL Safety Regulatory Requirement 3	
"Use of Safety Management Systems by ATM Service Providers"	ESARR3 [Ed. 1.0, 13 July 00]
● Guidance Material on ESARR3	
"Use of Safety Management Systems by ATM Service Providers"	GM1-ESARR3 [Working Draft Ed.0.02, 03 March 00]
● Risk Assessment and Mitigation in ATM	ESARR4 [Draft 0.2, 14 July 00]
● Safety Regulatory Requirement for ATM Services' Personnel	ESARR5 [Draft 0.2, 18 July 00]

(\*) Parts that are currently being revised