

# **BULATSA and ROMATSA COMMON SAFETY MANAGEMENT MANUAL WITHIN DANUBE FAB**

**DFD - SWG - MAN0001 - SAF.MNG**

Edition	:	1.0
Edition date	:	15 November 2012

# **BULATSA and ROMATSA COMMON SAFETY MANAGEMENT MANUAL WITHIN DANUBE FAB**

**DFD - SWG - MAN0001 - SAF.MNG**

Edition	: 1.0
Edition date	: 15 November 2012
Status	: Approved issue
Intended for	: BULATSA and ROMATSA
Copy no.	:

**BEFORE USE CHECK IF THIS IS THE EDITION IN FORCE !**  
Refer to „**Contact Person**” or „**Document Administration**” in the manual


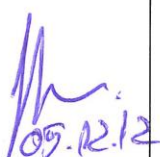

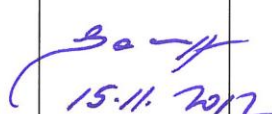



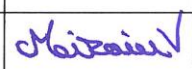
## DOCUMENT IDENTIFIER

DOCUMENT CHARACTERISTICS								
<b>Title:</b>  <div style="text-align: center;"><b>BULATSA and ROMATSA</b></div> <div style="text-align: center;"><b>COMMON SAFETY MANAGEMENT MANUAL WITHIN DANUBE FAB</b></div>								
<b>DOCUMENT CONTROL REFERENCE</b>								
IDENTIFICATION BLOCK: DFD - SWG - MAN0001 - SAF.MNG	<b>EDITION:</b>	1.0						
<b>PROJECT INDEX:</b> Common Safety Management Manual	<b>DATE:</b>	15 November 2012						
<b>ABSTRACT:</b> This manual presents how safety is managed within DANUBE FAB through BULATSA and ROMATSA Safety Management Systems								
<b>KEY WORDS:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding-right: 10px;">           1. Air Navigation Safety            2. Manual            3. Safety Management System            4. Safety Policy            5. Safety Achievement            6. Safety Assurance         </td> <td style="width: 50%; vertical-align: top;">           7. Safety Promotion            8. DANUBE FAB            9. Interfaces            10. Arrangements            11. Air Navigation Service Provider            12. ANSP Safety Committee         </td> </tr> </table>			1. Air Navigation Safety 2. Manual 3. Safety Management System 4. Safety Policy 5. Safety Achievement 6. Safety Assurance	7. Safety Promotion 8. DANUBE FAB 9. Interfaces 10. Arrangements 11. Air Navigation Service Provider 12. ANSP Safety Committee				
1. Air Navigation Safety 2. Manual 3. Safety Management System 4. Safety Policy 5. Safety Achievement 6. Safety Assurance	7. Safety Promotion 8. DANUBE FAB 9. Interfaces 10. Arrangements 11. Air Navigation Service Provider 12. ANSP Safety Committee							
<b>Contact persons:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Ştefan GACEFF</td> <td style="width: 33%;">- ROMATSA Director Safety and Quality</td> <td style="width: 33%;">Phone no.: +40 2083 536</td> </tr> <tr> <td>Plamen HRISTOV</td> <td>- BULATSA Director Safety and Quality</td> <td>Phone no. :+359 2931 630</td> </tr> </table>			Ştefan GACEFF	- ROMATSA Director Safety and Quality	Phone no.: +40 2083 536	Plamen HRISTOV	- BULATSA Director Safety and Quality	Phone no. :+359 2931 630
Ştefan GACEFF	- ROMATSA Director Safety and Quality	Phone no.: +40 2083 536						
Plamen HRISTOV	- BULATSA Director Safety and Quality	Phone no. :+359 2931 630						

DOCUMENT STATUS AND AUDIENCE		
STATUS	CATEGORY	INTENDED FOR
Draft <input type="checkbox"/>	Management <input checked="" type="checkbox"/>	Public <input type="checkbox"/>
Proposed issue <input type="checkbox"/>	Specialist <input type="checkbox"/>	BULATSA/ROMATSA <input checked="" type="checkbox"/>
Approved issue <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	Restricted audience <input type="checkbox"/>

ELECTRONIC SOURCE
<b>File name:</b> BULATSA and ROMATSA Common SMM_Edition_1.0.doc <b>Host system:</b> Microsoft Windows – Microsoft Office WORD 2003

**DOCUMENT APPROVAL**

Position	Name	Signature/ Date	Position	Name	Signature/ Date
<b>Approved by</b>					
BULATSA Director General	<b>Diyan DINEV</b>	 22.11.12	ROMATSA Director General	<b>Aleodor FRÂNCU</b>	
<b>Endorsed by</b>					
BULATSA Danube FAB Project Leader	<b>Veselin STOYANOV</b>	 22.11.2012	ROMATSA Danube FAB Project Leader	<b>Adrian FLOREA</b>	 05.12.12
BULATSA Director Safety	<b>Plamen HRISTOV</b>	 22.11.2012	ROMATSA Director Safety and Quality	<b>Ștefan GACEFF</b>	 15.11.2012
<b>Reviewed by</b>					
BULATSA Head of Operational Safety Department	<b>Veselin MARKOV</b>	 15.11.2012	ROMATSA Head of Safety and Investigation Department	<b>Voinea GUNȚĂ</b>	 15.11.2012
<b>Prepared by</b>					
BULATSA Aviation Safety Expert	<b>Petar DIMITROV</b>	 15.11.12	ROMATSA Safety Expert	<b>Pavel CĂȚINEAN</b>	 15.11.12
			ROMATSA Safety Expert	<b>Valentin MIROIU</b>	 15.11.2012

Document change record					
Edition Number	Amd. Number	Date	Reason for Change	Date and Signature	Affected Pages
0.1	-	15 October 2012	First draft edition.		All
1.0	-	15 November 2012	First edition		All

List of effective pages						
Document: DFD - SWG - MAN0001 - SAF.MNG						
Page Number	Date	Amendment Number		Page Number	Date	Amendment Number
i	15 Nov 2012					
ii	15 Nov 2012					
iii	15 Nov 2012					
iv	15 Nov 2012					
v	15 Nov 2012					
vi	15 Nov 2012					
vii	15 Nov 2012					
viii	15 Nov 2012					
IX	15 Nov 2012					
1	15 Nov 2012					
2	15 Nov 2012					
3	15 Nov 2012					
4	15 Nov 2012					
5	15 Nov 2012					
6	15 Nov 2012					
7	15 Nov 2012					
8	15 Nov 2012					
9	15 Nov 2012					
10	15 Nov 2012					
11	15 Nov 2012					
12	15 Nov 2012					
13	15 Nov 2012					
14	15 Nov 2012					
15	15 Nov 2012					
16	15 Nov 2012					
17	15 Nov 2012					
18	15 Nov 2012					
19	15 Nov 2012					
20	15 Nov 2012					
21	15 Nov 2012					
22	15 Nov 2012					
23	15 Nov 2012					

### **Distribution List**

<b>Copy Number</b>	<b>Recipients</b>
1.	ROMATSA Safety and Quality Directorate - Safety and Investigation Department - master copy
2.	BULATSA Director General
3.	ROMATSA Director General
4.	The Bulgarian Civil Aeronautical Authority
5.	The Romanian Civil Aeronautical Authority
6.	BULATSA Director of Safety
7.	ROMATSA Director Safety and Quality
8.	BULATSA Safety Directorate – Operational Safety Department

***BULATSA and ROMATSA Common Safety Management Manual within DANUBE FAB is also available in electronic format, Safety Section, on BULATSA and ROMATSA individual internal corporate website (intranet).***

## CONTENTS

<b>CHAPTER.1. GENERAL</b>	<b>1</b>
1.1. Preamble	1
1.2. Scope	3
1.3. Applicability	3
1.4. Reference Documents	3
1.5. Conventions	5
1.6. Document Administration	5
1.7. Abbreviations	6
1.8. Definitions	7
<b>CHAPTER 2. SAFETY POLICY AND SAFETY MANAGEMENT PRINCIPLES</b>	<b>13</b>
2.1. Safety Policy	13
2.2. Safety Management Principles	13
<b>CHAPTER 3. SAFETY MANAGEMENT</b>	<b>15</b>
3.1. Safety Achievement	15
3.2. Safety Assurance	20
3.3. Safety Promotion	21
<b>ANNEXES</b>	<b>23</b>



**CHAPTER.1. GENERAL****1.1. Preamble**

- 1.1.1. The Republic of Bulgaria and Romania have established, through their State Agreement, the DANUBE Functional Airspace Block (FAB). The DANUBE FAB is compliant with the EU Single European Sky (SES) legislation and brings about a harmonisation in the provision of air navigation services in the two States, being an “operationally-driven” FAB with the primary objective of delivering enhanced efficiency and reduced costs for airspace users, and by reducing the impact of aviation on the environment, all with due regard to safety of traffic.
- 1.1.2. The DANUBE FAB comprises the airspace over the territory of Romania, the airspace over the territory of the Republic of Bulgaria and the airspace over those parts of the high seas where the Parties have accepted, pursuant to a regional agreement, the responsibility of providing air traffic services, referred to as Bucharest FIR and Sofia FIR.
- 1.1.3. Two ANSPs provide air navigation services within the DANUBE FAB airspace, notably:
- The Bulgarian Air Traffic Services Authority - BULATSA
  - The Romanian Air Traffic Services Administration - ROMATSA
- 1.1.4. The DANUBE FAB air navigation service providers are certified, designated and oversighted by their respective NSAs in accordance with the SES requirements. **Both providers have implemented and operate individual mature safety management systems in line with the applicable regulatory requirements and take actions to continuously improve them.**
- 1.1.5. In accordance with national and international civil aviation regulations, the ultimate responsibility regarding the safety of the air navigation services rests with the provider, as a legal entity.
- 1.1.6. Within the general management of the air navigation services, the provider has the responsibility to ensure that all safety-significant issues have been appropriately considered, as well as to provide assurance of the achievement thereof.
- 1.1.7. Safety management is that function of the air navigation services provision, which ensures that all safety risks have been identified, assessed and satisfactorily mitigated to an acceptable level.
- 1.1.8. Safety management function is independent of line management, and accountable directly to the highest organisational level.
- 1.1.9. ROMATSA and BULATSA have committed themselves to SMS harmonisation and enhancement, in order to ensure essentially similar SMSs processes. One contributor to this objective is the development of this common safety management manual.
- 1.1.10. This „BULATSA and ROMATSA Common Safety Management Manual within DANUBE FAB” is developed and adopted based on the approach to keep the existing individual manuals as local ones and to detail cooperation/ coordination/ collaboration arrangements mainly focused on the interactions between the two safety management systems (such as consultation on safety indicators and safety targets, exchange of safety data, usage of same

methodologies, reporting of occurrences near state borders, lesson dissemination, etc).

- 1.1.11. The existing Safety Management Manuals of BULATSA and ROMATSA remain under the responsibility of each ANS Provider to document their SMSs as per applicable regulations, while this Common Safety Management Manual is under the responsibility of both ANS Providers to document the interactions between the two SMSs within DANUBE FAB.
- 1.1.12. This manual is approved by DANUBE FAB ANSPs General Directors and is not intended to get any safety formal approval from NSAs.
- 1.1.13. This Manual is mainly a “safety bridging” type document as it also describes the interaction between ROMATSA and BULATSA SMSs within DANUBE FAB. It is the result of the following processes:
- initial exchange of English language versions of the Safety Management Manuals between BULATSA and ROMATSA;
  - review of BULATSA Safety Management Manual;
  - review of ROMATSA Safety Management Manual;
  - identification of possible essential differences between BULATSA and ROMATSA SMSs;
  - identification of the interactions between BULATSA and ROMATSA SMSs within DANUBE FAB;
  - development of the required cooperation/ coordination/ collaboration arrangements, including guidance, processes and tools, to deal with the identified interaction.
- 1.1.14. This Common Safety Management Manual is structured as follows:
- CHAPTER 1. GENERAL
- CHAPTER 2. SAFETY POLICY AND SAFETY MANAGEMENT PRINCIPLES
- CHAPTER 3. SAFETY MANAGEMENT
- This document covers mainly the aspects of cooperation/ coordination/ collaboration arrangements in safety management domain between BULATSA and ROMATSA within DANUBE FAB.
- CHAPTER 1 presents the Manual scope, applicability and administration.
- CHAPTER 2 of the Manual presents the DANUBE FAB Safety Policy, as a fundamental commitment of all organizational structures involved in activities related to the established Romanian and Bulgarian DANUBE FAB, regarding how safety is managed, including safety management principles.
- CHAPTER 3 presents the manner in which BULATSA and ROMATSA ensures that the safety requirements, as per Commission Implementing Regulation No.1035/2011, are fulfilled and maintained while describing the interactions (interfaces, links) between ROMATSA and BULATSA SMSs.
- THE ANNEXES comprise the Rules of Procedures for the DANUBE FAB ANSP Safety Committee.

## 1.2. Scope

- 1.2.1. „BULATSA and ROMATSA Common Safety Management Manual within DANUBE FAB” contains the description of the main aspects of BULATSA and ROMATSA Safety Management Systems operation and the way the two SMSs interact within DANUBE FAB. The Manual makes reference also to DANUBE FAB safety policy and to safety management principles and procedures.
- 1.2.2. The purposes of this Common Safety Management Manual are the following:
- to document the interactions between BULATSA Safety Management System and ROMATSA Safety Management System;
  - to provide initial guidance, processes and tools for the personnel of BULATSA and ROMATSA safety structures, responsible for the implementation and operation of the cooperation/ coordination/ collaboration arrangements related to the interaction between the two SMSs;
  - to reassure the national and international authorities in the field, that, within DANUBE FAB, the two ANS Providers, BULATSA and ROMATSA, have developed and implemented Safety Management Systems (SMSs), in conformity with the requirements of the Commission Implementing Regulation No.1035/2011, ESARR 3, and ICAO Annex 11;
  - to reassure customers that, within DANUBE FAB, the two ANS Providers, BULATSA and ROMATSA, use Safety Management Systems in providing them air navigation services;
  - to assure interested parties that, within DANUBE FAB, the two ANS Providers, BULATSA and ROMATSA, have put in place arrangements related to the interactions between their two SMSs, as part of the process of aligning and harmonising their Safety Management Systems.

## 1.3. Applicability

The provisions of this Common Safety Management Manual apply in the ANSPs safety organisational structures of DANUBE FAB, BULATSA and ROMATSA, for the aspects related to the interactions between the SMSs of BULATSA and ROMATSA.

## 1.4. Reference Documents

This Common Safety Management Manual has been developed in accordance with the applicable documents issued by the authorities in the field, both at the national and international level.

Item No.	Document Title	Edition	Revision	Date
<b>ICAO</b>				
1.	Annex 11, Air Traffic Services	13	45	July 2001
2.	Doc. 9859 ICAO Safety Management Manual	2	-	2009

Item No.	Document Title	Edition	Revision	Date
3.	Doc. 4444 Procedures for Air Navigation Services – Air Traffic Management	15	-	2007
<b>EUROPEAN</b>				
4.	Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the Single European Sky	-	-	Edition in force
5.	Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the Single European Sky	-	-	Edition in force
6.	Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the Single European Sky	-	-	Edition in force
7.	Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management Network	-	-	Edition in force
8.	Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulations (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004 in order to improve the performance and sustainability of the European aviation system	-	-	Edition in force
9.	Commission Regulation (EU) No 176/2011 of 24 February 2011 on the information to be provided before the establishment and modification of a functional airspace block	-	-	Edition in force
10.	Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010	-	-	Edition in force
11.	Commission Implementing Regulation (EU) No 1034/2011 of 17 October 2011 on safety oversight in air traffic management and air navigation services and amending Regulation (EU) No 691/2010	-	-	Edition in force
12.	Commission Regulation (EU) No 691/2010 of 29 July 2010 laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) No 2096/2005 laying down common requirements for the provision of air navigation services	-	-	Edition in force
<b>EUROCONTROL</b>				
13.	Reporting and assessment of safety occurrences in ATM (ESARR 2)	3	0	01.12.2009
14.	Use of Safety Management Systems by ATM Service Providers (ESARR 3)	1	0	17.07.2002

Item No.	Document Title	Edition	Revision	Date
15.	Risk assessment and mitigation in ATM (ESARR 4)	1	0	05.04.2001
16.	ATM Services' Personnel (ESARR 5)	2	0	11.04.2002
17.	Software in ATM Systems (ESARR 6)	2	0	06.05.2010
<b>DANUBE FAB</b>				
18.	Agreement on the Establishment of the DANUBE Functional Airspace Block between Romania and the Republic of Bulgaria	-	-	Edition in force
19.	DANUBE Functional Airspace Block ANSP cooperation agreement between BULGARIAN Air Traffic Services Authority and the ROMANIAN Air Traffic Services Administration	-	-	Edition in force
20.	DANUBE FAB Safety Policy	-	-	Edition in force
21.	SMS Roadmap for the harmonisation and enhancement of BULATSA and ROMATSA Safety Management Systems within DANUBE FAB	-	-	Edition in force
22.	DANUBE FAB Safety Case Report	-	-	Edition in force
<b>BULATSA and ROMATSA</b>				
23.	BULATSA Safety Policy	-	-	Edition in force
24.	ROMATSA Safety Policy	-	-	Edition in force
25.	BULATSA Safety Management Manual	-	-	Edition in force
26.	ROMATSA Safety Management Manual	-	-	Edition in force

## 1.5. Conventions

This document does not use any specific editing conventions.

In the context of this document:

- a) „**safety**” shall denote „**air navigation safety**”;
- b) „**requirements**” shall denote „**air navigation safety requirements**”.

## 1.6. Document Administration

- 1.6.1. The Safety and Investigation Department within ROMATSA Safety and Quality Directorate is responsible for the administration of the master copy of this Common Safety Management Manual, as well as the coordination of all activities carried out to control this document.

- 1.6.2. The Common Safety Management Manual will evolve in accordance with the changes that may occur in DANUBE FAB, BULATSA and ROMATSA structures, policies, strategies or procedures.
- 1.6.3. The Common Safety Management Manual modification procedure (for an amendment or new edition) consists in the following actions of the DANUBE FAB Safety Working Group (SWG):
- develop and edit the amendment/ edition working draft;
  - mark the amended area by a 2 pixel wide vertical line, on the right of the page, in case of an amendment editing;
  - write the edition number both in the list of effective pages, and the page footer, in case of a new edition, and/or an amendment;
  - submit the new document for review by BULATSA and ROMATSA Heads of Safety Departments, for endorsement by the BULATSA and ROMATSA Directors of Safety and Quality, and for approval by the BULATSA and ROMATSA General Directors;
  - distribute the new document to the holders of the manual, together with the Letter of Dispatch, signed by ROMATSA Director Safety and Quality. Such a letter shall contain instructions regarding the management, and incorporation of the new edition/ amendment;
  - incorporate the edition/ amendment into the copy of each holder, while filing the Letter of Dispatch for reference;
  - fill the fields of the „Document change record page“;
  - the activities above are in the responsibility of each Manual copy holder.

**NOTE:**

*The correction of any printing/ editing errors shall not be subject to the procedure above.*

## 1.7. Abbreviations

<b>ANS</b>	Air Navigation Services
<b>ANSP</b>	Air Navigation Services Provider
<b>ATM</b>	Air Traffic Management
<b>ATS</b>	Air Traffic Services
<b>CNS</b>	Communication, Navigation and Surveillance
<b>DF</b>	DANUBE FAB
<b>DFD</b>	DANUBE FAB General Directors
<b>EATMP</b>	EUROCONTROL Air Traffic Management Policy
<b>EC</b>	European Commission
<b>ECAC</b>	European Civil Aviation Conference

<b>ESARR</b>	EUROCONTROL Safety Regulatory Requirement
<b>EUROCONTROL</b>	European Organisation for the Safety of Air Navigation
<b>ICAO</b>	International Civil Aviation Organisation
<b>LSC</b>	Local Safety Committee
<b>MND</b>	Ministry of National Defence
<b>MTI</b>	Ministry of Transport and Infrastructure
<b>NSA</b>	National Supervisory Authority
<b>OJT</b>	On The Job Training
<b>QMS</b>	Quality Management System
<b>BCAA</b>	The Bulgarian Civil Aeronautical Authority
<b>RCAA</b>	The Romanian Civil Aeronautical Authority
<b>SMS</b>	Safety Management System
<b>SSC</b>	Safety Supervisory Council
<b>SWG</b>	DANUBE FAB Safety Working Group

## 1.8. Definitions

<b>Accident</b>	<p>An occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight, until such time as all persons have disembarked, in which:</p> <p>a) a person is fatally or seriously injured, as a result of being:</p> <ul style="list-style-type: none"> <li>- in the aircraft; ;</li> <li>- in direct contact with the aircraft or an object, which is fixed in the aircraft;</li> <li>- in direct contact with any part of the aircraft, including parts which have become detached from the aircraft;</li> <li>- directly exposed to engine suction or engine or propeller blast;</li> </ul> <p>b) the aircraft sustains damage or structural failure, which adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair, which cannot be normally performed by the means available on board, or replacement of the affected components;</p> <p>c) the aircraft has been damaged;</p> <p>d) the aircraft is missing or completely inaccessible. An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located. (ICAO Annex 13).</p>
-----------------	---



<b>Air Traffic Management (ATM)</b>	The aggregation of ground based (comprising variously air traffic services -ATS, Airspace Management - ASM, Air Traffic Flow Management - ATFM) and airborne functions, required to ensure the safe and efficient movement of aircraft during all appropriate phases of operations. (ICAO Doc 9713)
<b>Assessment</b>	An evaluation based on engineering, operational judgment and/or analysis methods. (As per ESARR 4)
<b>Assumption</b>	Statement, principle and/or premises offered without proof. (As per ESARR 4)
<b>ATM Service Provider</b>	An organisation responsible and authorised to provide ATM service(s) (as per ESARR 3)
<b>ATM Service</b>	A service for the purpose of ATM. <b>Note:</b> <i>Consistent with the definition of ATM, ATM services include the air traffic services - ATS, the airspace management - ASM, the air traffic flow management -ATFM.</i> (As per ESARR 4)
<b>ATM System</b>	ATM System is a part of an Air Navigation (ANS) System, composed of a Ground Based ATM component, and an airborne ATM component. <b>Note:</b> <i>The ATM system includes the three constituent elements: human, procedures and equipment (hardware și software). The ATM System assumes the existence of a supporting CNS System.</i> (As per ESARR 4)
<b>CNS System</b>	All the hardware and software that make up a function, tool or application that is used to provide one or more air traffic management services. The CNS system is an enabler to the provision of ATM services. (as per ESARR 4)
<b>Designated Authority</b>	The competent body designated by State Authority, responsible for aviation safety regulation. (As per ESARR 4)
<b>Direct ATM system contribution to accident/incident</b>	Where at least one ATM event or item was judged to be DIRECTLY in the causal chain of events leading to an accident or incident. Without that ATM event, it is considered that the occurrence would not have happened. (As per ESARR 4)
<b>Environment of operations</b>	The environment of operations consists of the physical and institutional characteristics of the airspace within which operations occur. The environment includes ATM services being provided, technologies used, airspace organisation, ambient conditions and people. (As per ESARR 4)
<b>Error</b>	A mistake in specification, design, or implementation or an occurrence arising as a result of incorrect action or decision by personnel operating or maintaining the system (flight crew, Air Traffic Controller, service provider or maintenance personnel). (As per ESARR 4)



<b>External Services</b>	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. (As per ESARR 3)
<b>Failure</b>	The inability of any element of the Air Traffic Management System to perform its intended function or to perform it correctly within specified limits. (As per ESARR 4)
<b>Failure Condition</b>	A condition having an effect on the aircraft and/or its occupants, either directly or indirectly through loss of separation, which is caused or contributed to by one or more failures, or errors, considering flight phase and relevant adverse operational (density of air traffic, TMA et) or environmental conditions. (As per ESARR 4)
<b>General Aviation Operation</b>	An aircraft operation other than a commercial air transport operation or an aerial work. (As per ICAO Doc 9713)
<b>Hazard</b>	A potentially unsafe condition (a situation in which safety might be affected). (As per ESARR 3)
<b>Hazard Identification</b>	The process of determining what can happen, why, and how. (As per ESARR 3)
<b>Inadequate Separation</b>	In the absence of prescribed separation minima, a situation in which aircraft were perceived to pass too close to each other for pilots to ensure safe separation. (As per ESARR 4)
<b>Incident</b>	An occurrence, other than an accident, associated with the use of an aircraft, which affects or might affect the safety of operation. (ICAO Annex 13)
<b>Loss of Safety Margins</b>	All situations where an aircraft is too close to something else (e.g., another aircraft, ground, obstacle, restricted area, meteorological anomalies) and the ability to recover from the hazardous situation is jeopardised. <b>Note:</b> Includes inappropriate separation and infringement of minimum separation. (As per ESARR 4)
<b>Mitigation or Risk Mitigation</b>	Steps taken to control or prevent a hazard from causing harm and reduce risk to a tolerable or acceptable level. (As per ESARR 4)
<b>Occurrences</b>	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. (As per ESARR 3)

<b>Procedure</b>	<p>A step-by-step sequence of activities that must be followed in the same order to correctly perform a task (<i>what must be done and by whom; what materials, equipment and documentation must be used, and when the control must be performed</i>).</p> <p>(As per ICAO Doc 9713)</p> <p><b>Note:</b> ATC procedures include the control and handling of air traffic, including the transfer of control, the application of separation criteria, resolution of conflicts, methodologies for maximizing traffic flows and general communication between controllers and between pilots and controllers. Also, how particular ATC tasks are executed using available equipment and action, in the event of equipment failure.</p> <p>(As per ESARR 4)</p>
<b>Quantitative Safety Levels</b>	Numerical expression to define levels of safety. (ESARR 3)
<b>Risk</b>	<p>The combination of the probability, or frequency of occurrence of a defined hazard, and the magnitude of the consequences of the occurrence.</p> <p>(As per ESARR 3)</p>
<b>Risk Assessment</b>	<p>Assessment to establish that the achieved or perceived risk is acceptable or tolerable.</p> <p>(As per ESARR 4)</p>
<b>Safety</b>	<p>Freedom from unacceptable risk of harm.</p> <p>(As per ESARR 3)</p>
<b>Safety Achievement</b>	<p>The result of processes and/or methods applied to attain acceptable or tolerable safety.</p> <p>(As per ESARR 3)</p>
<b>Safety Assurance</b>	<p>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.</p> <p>(As per ESARR 3)</p>
<b>Safety Management</b>	<p>The management of activities to secure high standards of safety performance which meet, as a minimum, the provisions of safety regulatory requirements.</p> <p>(As per ESARR 3)</p>
<b>Safety Management Function</b>	<p>A managerial function with organisational responsibility for the development and maintenance of an effective safety management system.</p> <p>(As per ESARR 3)</p>
<b>Safety Management System</b>	<p>A systematic and explicit approach defining the activities, by which safety management is undertaken by an organization, in order to achieve acceptable or tolerable safety.</p> <p>(As per ESARR 3)</p>
<b>Safety Management System Documentation</b>	<p>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.</p> <p>(As per ESARR 3)</p>

<b>Safety Minima</b>	The maximum tolerable risk value („ <i>worst-case scenario</i> ”) Refer “to target level of safety”. (as per ESARR 4)
<b>Safety Monitoring</b>	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. (as per ESARR 3)
<b>Safety Objective</b>	A safety objective is a planned safety goal. The achievement of an objective may be demonstrated by appropriate means to be determined in agreement with the safety regulator. More specifically for this ESARR 4, a safety objective is a qualitative or quantitative statement that defines the maximum frequency or probability at which a hazard can be expected to occur. (As per ESARR 4)
<b>Safety Policy</b>	A statement of the organisation’s fundamental approach to achieve acceptable or tolerable safety. (As per ESARR 3)
<b>Safety Promotion</b>	Specification of the means, by which safety issues are communicated to ensure a safety culture of safe working within the organisation. (As per ESARR 3)
<b>Safety Records</b>	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. (As per ESARR 3) When both a Safety Management System, and a Quality Management System have been implemented, a SMS record is a particular type of QMS record.
<b>Safety Regulatory Requirement</b>	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. (As per ESARR 3)
<b>Safety Requirement</b>	A risk mitigation means, defined from the risk mitigation strategy that achieves a particular safety objective. Safety requirements may take various forms, including organisational, operational, procedural, functional, performance, and interoperability requirements or environment characteristics. (As per ESARR 4)
<b>Safety Survey</b>	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. (As per ESARR 3)
<b>Separation Minima Infringement</b>	A situation in which prescribed separation minima were not maintained between aircraft. (As per ESARR 4)

<b>Severity</b>	Level of effect/consequences of hazards on the safety of flight operations (i.e., combining level of loss of separation and degree of ability to recover from the hazardous situation). (As per ESARR 4)
<b>Severity Class</b>	Gradation, ranging from 1 (most severe) to 5 (least severe), as an expression of the magnitude of the effects of hazards on flight operations. (As per ESARR 4)
<b>Supporting Services</b>	Systems, services and arrangements, including Communication, Navigation and Surveillance services, which support the provision of an ATM service. (As per ESARR 4)
<b>System</b>	A combination of physical components, procedures and human resources organised to perform a function. (As per ESARR 3)
<b>Target Level of Safety (TLS) (or „safety level”, or „safety minima”)</b>	A level of how far safety is to be pursued in a given context, assessed with reference to an acceptable or tolerable risk. (As per ESARR 4)
<b>Traceability</b>	The ability to find the history, creation or localisation of what is taken into consideration. (As per SR EN ISO 9000:2008)
<b>Validation</b>	Confirmation, by examination of objective evidence, that the requirements for a certain purpose or application have been fulfilled. (As per SR EN ISO 9000:2008)
<b>Verification</b>	Confirmation, by examination of objective evidence, that the specified requirements have been fulfilled. (As per SR EN ISO 9000:2008)

**CHAPTER 2. SAFETY POLICY AND SAFETY MANAGEMENT PRINCIPLES****2.1. Safety Policy**

- 2.1.1. The “**DANUBE FAB Safety Policy**” (reference 20) is in place and clearly lays down the approach and commitment from all entities involved in activities related to the DANUBE FAB, at State, NSA and ANSP levels, to improve the current levels of safety within the DANUBE FAB.
- 2.1.2. BULATSA and ROMATSA have their own Safety Policies (references 23 and 24), as part of each SMS, documenting the statement of the top management and defining the fundamental manner in which the achievement of an acceptable level of safety is considered.
- 2.1.3. These Safety Policies are in conformance with the applicable requirements, and address aspects pertaining to:
- a) the fundamental safety objective;
  - b) safety management;
  - c) essential values of safety culture;
  - d) safety priority;
  - e) safety responsibilities;
  - f) safety principles.
- 2.1.4. ROMATSA and BULATSA have jointly reviewed their Safety Policies and DANUBE FAB Safety Policy and agreed that:
- no essential differences between them are found to exist;
  - the Safety Policies of ROMATSA and BULATSA are in line with DANUBE FAB Safety Policy;
  - modification of any existing Safety Policy will be notified between ROMATSA and BULATSA, by Heads of Safety Departments.

**2.2. Safety Management Principles**

- 2.2.1. Safety management is the Safety Policy’s core.
- 2.2.2. Best current practices in safety management consist in applying the following safety management principles:
- 2.2.2.1. ***The principle of an effective organisation and operation of a safety management system.*** The application of this principle consists in implementing those processes necessary for a systematic, explicit and pro-active approach to safety management, with regard to:
- a) safety management;
  - b) safety objective of the air navigation services;
  - c) safety priority;
  - d) safety responsibility.

- 2.2.2.2. ***The principle of safety achievement.*** The application of this principle consists in implementing those processes necessary for an ANSP to attain its safety objectives, and the requirements stemmed there from, with regard to:
- a) personnel competency;
  - b) safety management responsibility;
  - c) quantitative safety levels;
  - d) safety management system documentation;
  - e) safety of external services;
  - f) risk assessment and mitigation;
  - g) safety occurrences.
- 2.2.2.3. ***The principle of safety assurance.*** The application of this principle consists in implementing those processes necessary for ensuring that risks are properly and effectively managed with regard to:
- a) safety surveillance;
  - b) safety monitoring;
  - c) safety records.
- 2.2.2.4. ***The principle of safety promotion.*** The application of this principle consists in implementing those processes necessary to communicate safety issues, in order to ensure a safety culture throughout ANSP, so as to eliminate any risks, and avoid repetitive errors or risks, with regard to:
- a) safety awareness;
  - b) safety lesson dissemination;
  - c) safety improvement.

## CHAPTER 3. SAFETY MANAGEMENT

### 3.1. Safety Achievement

#### 3.1.1. Personnel Competency

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Personnel Competency and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“personnel are adequately trained and competent for the job they are required to do, in addition to being properly licensed if so required and satisfying applicable medical fitness requirements”*;
- b) **differences:** no essential differences between personnel competency procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding training of safety personnel:
    - ✓ the Heads of Safety Departments will exchange information, on case by case basis, regarding foreseen safety training courses (when, where and name of course);
    - ✓ the Heads of Safety Departments will exchange information, on case by case basis, regarding best practices in competency domain;
  - collaboration arrangements regarding the usage of safety personnel in internal safety surveys:
    - ✓ the Directors of Safety and Quality may decide to use, as specialists, personnel from each other for the purpose of performing internal safety survey.

#### 3.1.2. Safety Management Responsibility

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Management Responsibilities and agreed that:

- a) **regulatory compliance:** the provisions in place are in line with the applicable regulations related to the requirement that: *“safety management function is identified with organisational responsibility for development and maintenance of the SMS; ensure that this point of responsibility is independent of line management, and accountable directly to the highest organisational level”*;
- b) **differences:** no essential differences between safety management responsibilities are found to exist;
- c) **interactions:** actions for SMS harmonization and enhancement;

d) **arrangements and/or processes:**

- coordination/ cooperation arrangements regarding safety management responsibilities:
  - ✓ establishment of DANUBE FAB ANSP Safety Committee with defined Rules of Procedures as per Annex 1 – to be defined;
- collaboration arrangements regarding safety management responsibilities:
  - ✓ the establishment of DANUBE FAB Safety Working Group within SQSE Standing Committee as per the provisions of ANSP Cooperation Agreement.
- collaboration arrangements regarding safety management responsibilities:
  - ✓ the Directors of Safety and Quality will exchange and keep up-to-date information regarding the Safety Organisation within BULATSA and ROMATSA. The information will cover the following data:
    - ⇒ Safety Structure and positions;
    - ⇒ Person in charge for each position: Name and Surname, contact details (email, phone number – office and Mobile).

**3.1.3. Quantitative Safety Levels**

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Quantitative Safety Levels and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“wherever practicable, quantitative safety levels are derived and are maintained for all functional systems”*;
- b) **differences:** no essential differences between quantitative safety levels procedures are found to exist;
- c) **interactions:** participation in the development and/or development of DANUBE FAB Safety Targets;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding quantitative safety levels:
    - ✓ the Heads of Safety Departments will share information on ANSP specific safety targets/ performance plans and achieved safety levels (on annual basis, in first trimester of each year);
  - collaboration arrangements regarding participation in the development of quantitative safety levels:



- ✓ common participation of safety specialists, within DANUBE FAB Safety Working Group, to the development of quantitative safety levels.

### 3.1.4. Safety Management System Documentation

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Management System Documentation and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“the SMS is systematically documented in a manner which provides a clear linkage to the organisation’s safety policy”*;
- b) **differences:** no essential differences between safety management system documentation are found to exist;
- c) **interactions:**
  - development and maintenance of BULATSA and ROMATSA Common Safety Management Manual within DANUBE FAB;
  - maintenance of DANUBE FAB Safety Case;
  - maintenance of DANUBE FAB Safety Policy;
  - implementation of SMS Roadmap for the harmonization and enhancement of BULATSA and ROMATSA Safety Management Systems within DANUBE FAB.
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding BULATSA and ROMATSA Common Safety Management Manual within DANUBE FAB:
    - ✓ DANUBE FAB Safety Working Group Experts are responsible for the maintenance and update on regular basis of the Common Safety Management Manual;
  - coordination/ cooperation arrangements regarding maintenance of DANUBE FAB Safety Case:
    - ✓ DANUBE FAB Safety Working Group Experts are responsible for the administration and update of the DANUBE FAB Safety Case. The updated document will be submitted through DANUBE FAB ANSP Safety Committee to ANSP Board in order to follow the procedure in place (as per State Agreement) for the approval of DANUBE FAB Safety Case.
    - ✓ The DANUBE FAB Safety Case will be revisited and updated, as necessary, in the following cases:
      - ⇒ following an amendment to the horizontal and vertical dimensions of the FAB airspace resulting from the accession of third Parties to the FAB Agreement;

⇒ planning and implementation of operational changes resulting from the FAB modification.

Note: As per Regulation (EU) No 176/2011 “an established functional airspace block shall be considered as modified when a proposed modification shall result in changes to the defined dimensions of the functional airspace block”.

- coordination/ cooperation arrangements regarding maintenance of DANUBE FAB Safety Policy:
  - ✓ DANUBE FAB Safety Working Group Experts are responsible for the administration and update of the DANUBE FAB Safety Policy. The updated document will be submitted through DANUBE FAB ANSP Safety Committee to ANSP Board in order to follow the procedure in place (as per State Agreement) for the approval of DANUBE FAB Safety Policy;
- collaboration arrangements regarding implementation of SMS Roadmap for the harmonization and enhancement of BULATSA and ROMATSA Safety Management Systems within DANUBE FAB:
  - ✓ establishment of DANUBE FAB ANSP Safety Committee with defined Rules of Procedures as per Annex 1.

### 3.1.5. Safety of External Services

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety of External Services and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“adequate justification of the safety of the externally provided services and supplies, having regard to their safety significance within the provision of its services” is ensured;*
- b) **differences:** no essential differences between safety of external services procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding safety of external services:
    - ✓ the Heads of Safety Departments will share information on existing external services with the aim to identify common external services and products (on annual basis, in first trimester of each year). For common external providers, results of monitoring and practices will be exchanged;
    - ✓ the Heads of Safety Departments will share information about future common external suppliers in order to take coordinated actions (requirements, assessment of supplier, any other info).

### 3.1.6. Risk Assessment and Mitigation

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Risk Assessment and Mitigation (including changes and Software Safety Assurance System) and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“risk assessment and mitigation is conducted to an appropriate level to ensure that due consideration is given to all aspects of the provision of ATM”*, including changes;
- b) **differences:** no essential differences between risk assessment and mitigation procedures are found to exist;
- c) **interactions:** risk assessment and mitigation of ANS system components changes that have common interfaces;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding risk assessment and mitigation:
    - ✓ the Heads of Safety Departments will share information of relevant performed changes mainly focused on: functions affected, safety severities and objectives/ requirements (on annual basis, in first trimester of each year);
  - collaboration arrangements regarding risk assessment and mitigation:
    - ✓ share expertise related to documentation, within DANUBE FAB Safety Working Group;
    - ✓ share information for changes that have cross-border impact/ common interfaces, within DANUBE FAB Safety Working Group.

### 3.1.7. Safety Occurrences

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Occurrences and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“ATM operational or technical occurrences which are considered to have significant safety implications are investigated immediately, and any necessary corrective action is taken” and that “the requirements on the reporting and assessment of safety occurrences in accordance with applicable national and Union law” have been implemented*;
- b) **differences:** no essential differences between safety occurrences procedures are found to exist;
- c) **interactions:** reporting and investigation of common interest occurrences (cross-border, near border, impact on both ANSPs)
- d) **arrangements and/or processes:**
  - coordination/cooperation arrangements regarding safety occurrences:

- ✓ the Heads of Safety Departments will share information regarding safety data collected, mainly focused on: reported safety occurrences, results of analysis/ investigation, including safety recommendations (on annual basis, in first trimester of each year);
- coordination/cooperation arrangements regarding safety occurrences:
  - ✓ the Heads of Safety Departments will share information regarding common interest occurrences (cross-border, near border, impact on both ANSPs): reported safety occurrences, results of analysis/ investigation including safety recommendations (on case by case basis).

## 3.2. Safety Assurance

### 3.2.1. Safety Surveillance

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Surveillance and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement 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 compliance with the relevant parts of the SMS”*;
- b) **differences:** no essential differences between safety surveillance procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - collaboration arrangements regarding safety surveillance:
    - ✓ share expertise related to safety surveillance, within DANUBE FAB Safety Working Group.
    - ✓ the Directors of Safety and Quality may decide to use, as specialists, personnel from each other for the purpose of performing internal safety survey.

### 3.2.2. Safety Monitoring

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Monitoring and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“methods are in place to detect changes in functional systems or operations which may suggest any element is approaching a point at which acceptable standards of safety can no longer be met, and that corrective action is taken”*;

- b) **differences:** no differences between safety monitoring procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding safety monitoring:
    - ✓ the Heads of Safety Departments will share information on the results of safety monitoring (on annual basis, in first trimester of each year).

### 3.2.3. Safety Records

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Records and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement 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 competent authority”*;
- b) **differences:** no essential differences between safety records procedures are found to exist;
- c) **interactions:** the applications of the processes of this common manual;
- d) **arrangements and/or processes:**
  - processes regarding safety records: the documents (notifications, presentations, minutes of meetings, e-mail messages, etc.) generated by applying this Common Manual are safety records. The Heads of Safety Departments are responsible for maintaining them throughout DANUBE FAB operation;

## 3.3. Safety Promotion

### 3.3.1. Safety Awareness

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Awareness and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“all personnel are aware of the potential safety hazards connected with their duties”*;
- b) **differences:** no essential differences between safety awareness procedures are found to exist;
- c) **interactions:** no interactions are foreseen;
- d) **arrangements and/or processes:** no arrangements and/or processes are foreseen

### 3.3.2. Lesson Dissemination

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Lesson Dissemination and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“the lessons arising from safety occurrence investigations and other safety activities are disseminated within the organisation at management and operational levels”*;
- b) **differences:** no essential differences between lesson dissemination procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding lesson dissemination:
    - ✓ the Heads of Safety Departments will share information on relevant lessons arising from safety occurrence investigations and other safety activities (on case by case basis);

### 3.3.3. Safety Improvement

ROMATSA and BULATSA had jointly reviewed their Safety Management Manuals regarding Safety Improvement and agreed that:

- a) **regulatory compliance:** the procedures in place are in line with the applicable regulations related to the requirement that: *“all personnel are actively encouraged to propose solutions to identified hazards, and changes are made to improve safety where they appear needed”*;
- b) **differences:** no essential differences between safety improvement procedures are found to exist;
- c) **interactions:** no direct interactions are foreseen;
- d) **arrangements and/or processes:**
  - coordination/ cooperation arrangements regarding safety improvement:
    - ✓ the Heads of Safety Departments will share information regarding relevant safety improvement proposals (on case by case basis).

**ANNEXES**

The effective Annexes to this Manual are the following:

<b>Annex 1</b>	ANSP Safety Committee Rules of Procedures Edition ..... of ..... 201... <b>To be defined</b>	- xx pages
----------------	--	------------