No. _____/_____

NATIONAL PLAN FOR CIVIL AVIATION SAFETY 2020 – 2024

National Plan for Civil Aviation Safety

2020 – 2024

Legal Basis

- Chapter II, Article 8 of Regulation (EU) No 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91

- The National Plan for Civil Aviation Safety 2020-2024 was prepared based on the provisions of Article 11 of the National Civil Aviation Safety Programme, 3rd edition, approved by Order of the Ministry of Transport No 1182/2016, published in the Official Gazette, Part I No 813 of October 14, 2016.

Endorsed in the Safety Technical Committee 24 meeting of January 27, 2020 **Endorsed in the State Safety Review Board 15 meeting of January 29, 2020**		
Safety Technical Committee Coordinator **Head of Safety Analysis Office**	**Daniel ACHIM**	

National Plan for Civil Aviation Safety

2020 – 2024

National Plan for Civil Aviation Safety

2020 – 2024

TABLE OF CONTENTS

National Plan for Civil Aviation Safety

2020 – 2024

General

The obligation of developing a National Plan for Civil Aviation Safety is set forth both in Chapter II, Article 8 of Regulation (EU) No 2018/1139[1] (*New Basic Regulation*), and Article 11 of PNSAC, 3rd edition [2].

The National Plan for Civil Aviation Safety (pNSAC) establishes the national safety indicators with safety targets and related alert thresholds, and the actions needed to reduce safety risks.

In this way, the Acceptable Level of Safety Performance (ALoSP) is defined, by identifying, based on the assessment of the relevant safety information, the main safety risks affecting the national civil aviation system.

Essentially, pNSAC groups together the entire range of safety actions deemed necessary to be implemented in order to achieve the safety objectives set out by PNSAC.

The National Plan for Civil Aviation Safety contributes to the development of the European Plan for Aviation Safety by taking into its content the risks and related actions identified at European level, relevant for civil aviation in Romania.

Both the pNSAC and the revisions thereof are prepared by the Technical Safety Committee, endorsed by the Safety Assessment Committee and approved by the manager responsible for PNSAC, according to their duties set out in PNSAC.

With the publication of pNSAC, Romanian Civil Aeronautical Authority (RCAA) sets out its following objectives:

- Continuous update of strategic decisions adopted by means of PNSAC;
- Implementation of safety actions assigned to the Member States by means of EPAS;
- Implementation of safety actions identified at national level;
- Carrying out the actions to reduce the identified risks.

In conclusion, pNSAC is not a static document, it evolves based on EASA recommendations and the analyses carried out based on the data collected at national level.

European Plan for Aviation Safety 2020-2024 (EPAS 2020-2024)

European Plan for Aviation Safety - EPAS is the tool the fundamental aim of which is to avoid the occurrence of accidents and serious incidents in the field of civil aviation at European level.

While until this year, the EU Member States would implement the EPAS on a voluntary basis, it became binding with the entry into force of Regulation (EU) 2018/1139 (*New Basic Regulation*). The Regulation provides that the risks and related actions, established under EPAS, are to be included in a document such as a national safety plan. Each Member State is required to analyse and determine the risks and actions incumbent to them, to justify the omission of those which do not apply to them, and to develop their own Safety Plan.

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[1] Regulation (EU) No 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91

[2] Order of the Ministry of Transport No 1182/2016 for the approval of the *National Safety Civil Aviation Programme and for the appointment of the General Director of the Romanian Civil Aeronautical Authority as manager responsible for the implementation and monitoring of the functioning of the National Safety Civil Aviation Programme*, published in the Official Gazette, Part I No 813 of 14 October 2016.

- *EPAS 2020-2024 Structure*

EPAS 2020-2024 keeps the division into two volumes from the previous edition, namely:

- Volume I - including introduction, elements of strategy and monitoring, as well as performance measurement;
- Volume II - effective actions.

Volume I establishes a number of *Strategic priorities,* of which those relating to safety are:

- Systemic safety;
- Operational safety;
- Safe integration of new technologies and concepts.

Volume II is completely restructured compared to the previous edition, in order to better highlight the link with the risk portfolio established by the last Safety Report.1

Thus, all actions related to the priority *Systemic Safety and Competence of personnel* are grouped in a separate chapter, divided in turn into 6 sections:

- Safety Management;
- Human Factor and Human Performance;
- Competence of Personnel:
- Aircraft tracking, search/rescue operations and accident investigation;
- Impact of security on safety;
- Oversight and standardisation.

All other actions are grouped in 10 domains, as follows:

- Operational - aeroplanes (CAT & Business aviation and SPO);
- Rotorcraft;
- General Aviation;
- Design and production;
- Maintenance and Continuing airworthiness management;
- Air Traffic Management/Air Navigation Services (ATM/ANS)
- Aerodromes;
- Groundhandling;
- Unmanned aircraft systems;
- New technologies and concepts.

Each domain is analysed from the point of view of the following 3 drivers (safety, fair competition, efficiency/ proportionality). The *Environment* driver is dealt with in a separate chapter.

1 Air Safety Review 2019 - https://www.easa.europa.eu/sites/default/files/dfu/Annual%20Safety%20Review%202019.pdf

For domains that contain a large number of actions in the *Safety* driver, they are further grouped in *Key Risk Areas.*

Actions which fall within EASA responsibility are to be carried out by means of *rulemaking* - RMT, *safety promotion* - SPT, *evaluation task - EVT,* or *research/study* - RES. Actions which fall within the responsibility of the Member States, regardless of the type thereof, are marked in a simplified manner by MST.xxx.

MST actions contained in EPAS 2020-2024 are listed in Table1.

The comparative situation of the actions included in EPAS 2019-2023 against those of EPAS 2020-2024 is presented in Table 2.

NOTE: It should be noted that the action *MST.028 - Member States shall establish and develop a National Plan for Civil Aviation Safety,* further includes the following actions from the edition of EPAS 2018-2022:

- MST.004 - Aircraft upset *(indicator for 'Loss of control in flight - LOC-I' type events)*
- MST.005 - Fire, Smoke and Fumes
- MST.006 - Terrain Collision *(indicator for 'Controlled flight into terrain - CFIT' type events)*
- MST.007 - Runway safety - *Runway Excursion (RE)*
- MST.010 - Loss of separation *(indicator for 'Mid-air collision - MAC' type events)*
- MST.014 - Runway safety -*Runway Incursion (RI)*
- MST.016 - Prevention of loss of separation in general aviation, caused by *Airspace infringement in General Aviation*
- MST.018 - Ground safety

Domain	Safety - Area of action/action	MST
Systemic and Competence of personnel	Safety Management	MST.001 MST.002 MST.026 MST.028
	Human Factor and Human Performance	
	• • Flight time limitation	n.a.
	• • Medical	n.a.
	Competence of Personnel	
	• • General	n.a.
	• • Language proficiency	MST.033
	• • Flight crew	n.a.
	• Cabin crew	n.a.
	• Maintenance personnel	MST.035
	• ATM/ANS personnel	n.a.
	Aircraft tracking, search/rescue operations and accident investigation	n.a.
	Impact of security on safety	n.a.
	Oversight and standardisation	MST.032
Operational - aeroplanes	CAT & Business Aviation Operations:	
	• • Aircraft upset *(Loss of control in flight - LOC-I)*	n.a.
	• • Runway safety	n.a.
	• • Loss of separation *(Mid-air collision - MAC)*	MST.024 MST.030
	• • Terrain Collision *(Controlled flight into terrain - CFIT)*	n.a.
	• • Aircraft environment (fire, smoke and fumes)	n.a.
	• • Miscellaneous	MST.003 MST.019 MST.034
	SPO Operations	n.a.
Helicopters	Helicopter operations	MST.015 MST.031
General Aviation	• • Systemic enablers	MST.025 MST.027
	• • Maintaining control	n.a.
	• • Enable all-weather operations	n.a.
	• • Prevention of loss of separation	n.a.
	• • Flight management	n.a.
Design and production	Safety	n.a.
Maintenance and CAMO	Safety	n.a.
ATM/ANS	Safety	n.a.
Aerodromes	Safety	MST.029
Groundhandling	Safety	n.a.
Drones	Safety	n.a.
New technologies and concepts	• • New business models	n.a.
	• • New products, systems, technologies and operations	n.a.
	• • SESAR implementation	n.a.
	• • All-weather operations (AWO)	n.a.

Table 1 - Action Areas in EPAS 2020-2024 and related MST and FOT actions

Action	EPAS 2019-2023	EPAS 2020-2024
MST.001	X	X
MST.002	X	X
MST.003	X	X
MST.004	X Thrg. MST.028	X Thrg. MST.028
MST.005	X Thrg. MST.028	X Thrg. MST.028
MST.006	X Thrg. MST.028	X Thrg. MST.028
MST.007	X Thrg. MST.028	X Thrg. MST.028
MST.010	X Thrg. MST.028	X Thrg. MST.028
MST.014	X Thrg. MST.028	X Thrg. MST.028
MST.015	X	X
MST.016	X Thrg. MST.028	X Thrg. MST.028
MST.018	X Thrg. MST.028	X Thrg. MST.028
MST.019	X	X
MST.020	X	
MST.024	X	X
MST.025	X	X
MST.026	X	X
MST.027	X	X
MST.028	X	X
MST.029	X	X
MST.030	X	X
MST.031	X	X
MST.032		X
MST.033		X
MST.034		X
MST.035		X

Table 3 - Comparative situation of EPAS actions

- *Safety performance*

Pursuant to Article 6 of *New Basic Regulation*, EPAS shall specify the level of safety performance at the level of the European Union, which the States and the Commission together with EASA will strive to achieve. The level of safety performance should be determined based on Safety Performance Indicators - (*SPI*) from EPAS, accompanied, where required, by related safety targets, but also considering the safety related indicators and targets set forth in the ATM Performance Scheme.

The principles for establishing SPI in EPAS and related targets are based on two components:

1. Monitoring the negative ***consequences*** of civil aviation activities (accidents, serious incidents and injuries);
2. Monitoring the enablers, from the point of view of ***systems*** and ***processes*** necessary to maintain the safety management at the level of States and organizations.

In other words, SPIs based on consequences are reactive indicators, while SPIs based on systems and processes are proactive indicators.

EASA has decided that the SPI related targets established through EPAS are more relevant in terms of process-based indicators. As for the SPIs based on consequences, resulted under safety reporting, no targets will be set but a reference performance, against which the system shall be monitored.

Considering the foregoing, SPIs established through EPAS 2020-2024 are the following:

1. Monitoring of systems and processes

a. Oversight capabilities of the Member States

Monitoring shall be based on the EASA Standardization Rate (as an alternative to the ICAO USOAP indicator *Effective Implementation - EI*), an indicator currently used to prioritize standardization inspections. The rate considers elements such as the size, nature and complexity of the functions of the State authorities, the number and type of open non-compliances, and the State's reaction to the closure of the non-compliances, following the submission of the final reports.

b. Member States progress on SSP implementation

The indicator is based on data input by the Member States in the ICAO iSTARS platform. Moreover, additional information shall be used, collected from the relevant documents provided by the States (National Security Plans and Programmes), and the results of EASA visits assessing the application of Articles 6 and 7 of NBR shall be used in the future.

c. Effective implementation of SMS in civil aviation organizations

In order to be able to monitor the effective implementation of SMS by organizations, it will be necessary to develop a common methodology for SMS assessment, and a method for scoring the results of assessments. Such an assessment and scoring method is currently only available in the ATM/ANS field, as part of the ATM Performance Scheme. It should also be borne in mind that SMS requirements are not yet applicable in the field of initial and continuous navigation.

For these reasons, this edition of EPAS does not set out any indicator and target for the degree of SMS implementation. However, the following shall be monitored:

- To what extent Member States use the monitoring tool developed by EASA (see action AS.01.04 - MST.026); the assessment of this point shall take place during EASA standardisation visits;
- Stage of compliance with SMS requirements; this point shall be assessed on the basis of information submitted by the competent authorities, to cover the requirements in the Table below.

Regulation	965/2012	1178/2011	139/2014	2015/340	2017/373
Part Subject	Part-ORO	Part-ORA	Part. ADR.OR	Part ATCO.OR	Part ATM/ANS.OR
Changes to the organisation	ORO.GEN.130	ORA.GEN.130	ADR.OR.B.04	ATCO.OR.B.015	ATM/ANS.OR.B.010
Management System	ORO.GEN.200	ORA.GEN.200	ADR.OR.D.005	ATCO.OR.C.001	ATM/ANS.OR.B.005
Contracted Activities	ORO.GEN.205	ORA.GEN.205	ADR.OR.D.010	ATCO.OR.C.005	ATM/ANS.OR.B.015
Personnel Requirements	ORO.GEN.210	ORA.GEN.210	ADR.OR.D.015	ATCO.OR.C.010	ATM/ANS.OR.B.020
Record Keeping	ORO.GEN.220	ORA.GEN.220	ADR.OR.D.035	ATCO.OR.C.020	ATM/ANS.OR.B.030

The above list shall be reviewed once the mandatory requirements for SMS development in the domains of initial and continuing airworthiness are introduced.

The information to be requested and collected by EASA for this point, starting in 2020, shall include:

- Number of organisations with open non-compliances regarding the above requirements, both level 1 and level 2, for each category of organisations;
- The average duration (in days) in which category 2 non-conformities were closed, regarding the above requirements, for each category of organisations;
- Number of organisations for which an extended oversight planning cycle applies, for each category of organisations;
- Number of organisations for which a reduced oversight planning cycle applies, for each category of organisations;
- The main 3 types of non-conformities in the area of requirements regarding the Management Systems, for each category of organisations.

EASA shall not require any individual information on organisations and the data shall be converted into percentages on the basis of information regularly transmitted by the Member States through the Standardisation Information System.

2. Consequences monitoring

The main inputs of the consequences-based indicators are:

- Number of accidents resulting in fatalities;
- Number of fatalities; and
- Number of accidents without fatalities and serious

incidents EASA divided SPI into two levels, namely:

- Level 1 SPI, which monitors all domains from the point of view of safety performance. The following are measured:
  - o The number of accidents with fatalities and the number of deceased from the previous year, compared to the average of the previous decade; The current edition of EPAS takes into account the 2008-2017 decade, against which the data from 2018 are compared;
  - o In addition, for CAT operations, the number of accidents and serious incidents over a 4-year period is measured (2105-2018), which is compared to the 2011-2014 reference.
- Level 2 SPI, which covers the main risk domains by fields. These can be found in the Annual Risk Portfolio, developed annually by EASA as part of the risk management system.

National Plan for Civil Aviation Safety 2020-2024 (pNSAC 2020-2024)

Normally, the information considered in preparing the pNSAC is as follows:

- The actions highlighted at European level, through EPAS;
- The risk portfolio for civil aviation in Romania, in which the specific risks at national level are highlighted;
- The result of the analysis carried out within the working groups set up to support CTS activity;
- The conclusions resulting from the Report on the compliance with ALoSP established in pNSAC from the previous year.

Considering that pNSAC 2019-2023 was approved in August 2019, the period elapsed until the end of 2019 does not allow a realistic Report on how to comply with the ALoSP. However, in order to comply with the periodicity of the development of EPAS, namely the beginning of each year, this edition of pNSAC (2020-2024) is drawn up based on the presumption that the results of the Risk Portfolio for civil aviation in Romania, drawn up in 2019, are still valid, and the results of the Report on the compliance with ALoSP are maintained for the current year.

Consequently, the drawing up of pNSAC 2020-2024 is presented in Fig. 1.

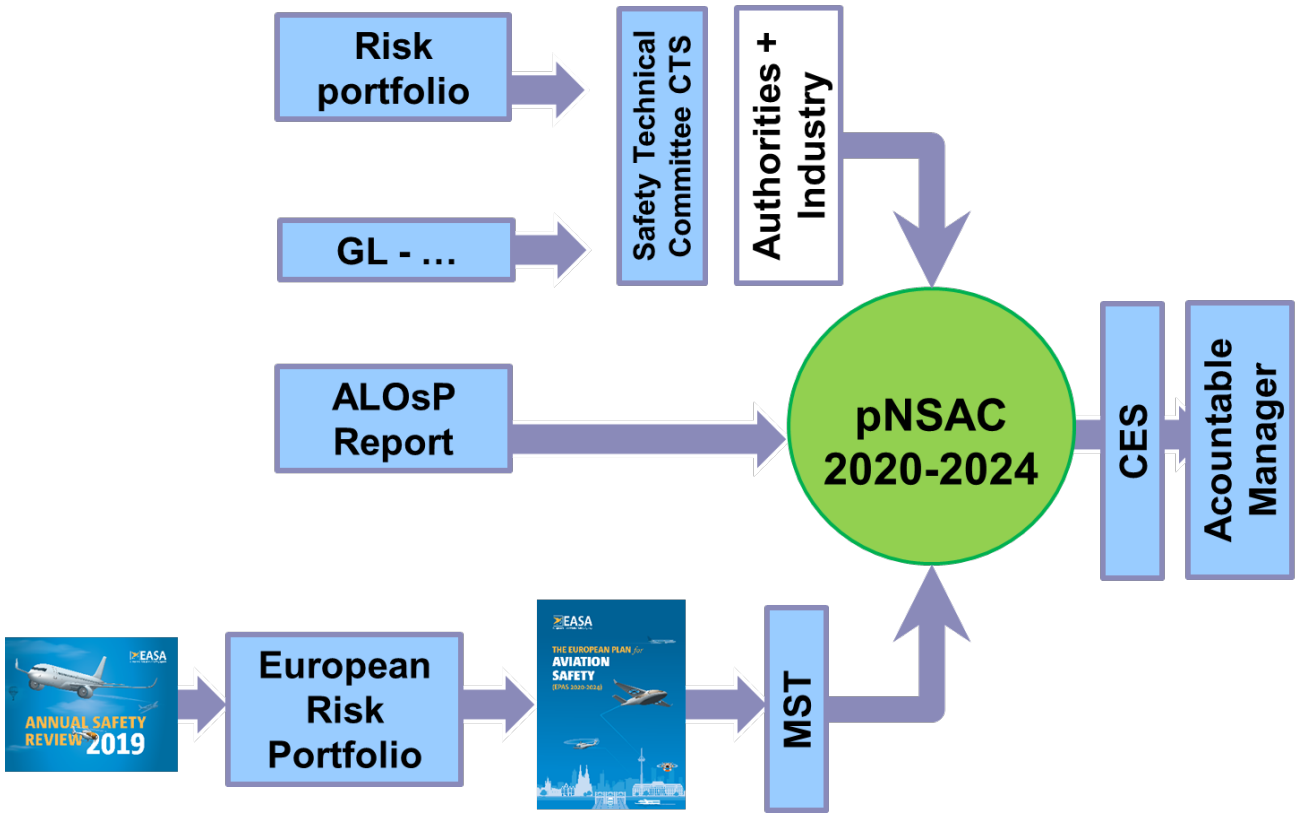
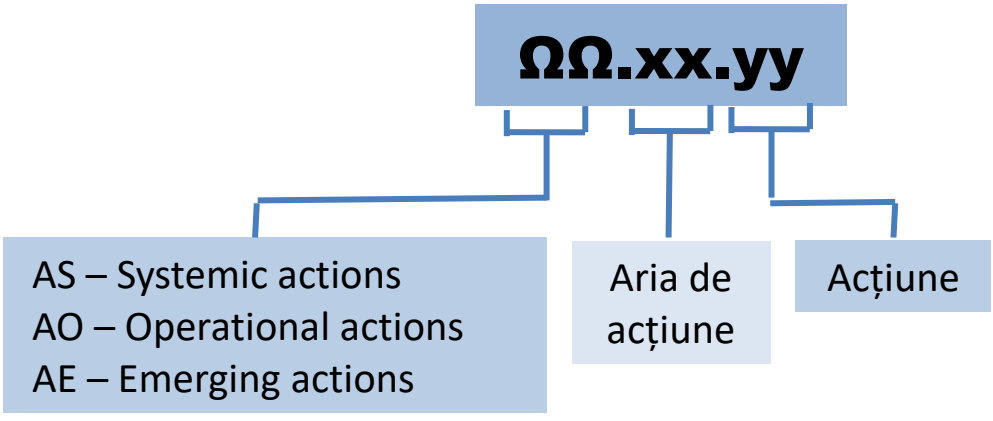


Fig. 1 - Information used in preparing pNSAC

pNSAC 2020-2024 structure

The first part of the current edition of pNSAC 2020-2024 includes the presentation of the safety performance, the evolution of the number of accidents and serious incidents recorded in our country respectively, with the involvement of a civil aeronautical agent that is subject to the oversight of the Romanian authority.

Subsequently, all the actions covered by the pNSAC comply with the division by fields presented in EPAS 2020-2024, namely systemic, operational and emergent. Accordingly, the numbering of actions complies with the following scheme:



The clustering of action was as follows:

- AS - Includes the systemic domain and competence of personal;
- AO - Includes the following domains:
  - o Aeroplane operations,
  - o Helicopters,
  - o General aviation,
  - o Design and production,
  - o Continuing airworthiness maintenance and management,
  - o Air Traffic Management/Air Navigation Services,
  - o Aerodromes,
  - o Groundhandling,
  - o Drones
- AE - Covers the domain New technologies and concepts.

The correlation between the actions included in the pNSAC 2020-2024 and those incumbent upon the Member States, included in EPAS 2020-2024, is presented in Table 3.

No.	pNSAC Action	Domain/Action Name	EPAS Action
SYSTEMIC AND COMPETENCE OF PERSONNEL			
		Safety management	
1	AS.01.01	Development and monitoring of pNSAC	MST.001
2	AS.01.02	Promoting the implementation of safety management systems (SMS)	MST.002
3	AS.01.04	SMS assessment	MST.026
4	AS.01.06	Development and monitoring of pNSAC	MST.028
5	AS.01.05	Correlation of pNSAC with SMS	
		Competence of personnel	
6	AS.02.01	LPR feedback (language proficiency requirements)	**MST.033**
7	AS.02.02	Oversight capacity - reducing the risk of fraud in Part-147	**MST.035**
		Impact of security on safety	
8	AS.03.01	Ensuring cyber security	
		Oversight and standardisation	
9	AS.04.01	Enhancing the capacity of oversight of competent authorities	**MST.032**
AEROPLANE OPERATIONS			
		CAT and NCC Operations	
10	AO.01.01	Risk reduction of *'Aircraft upset - LOC-I' type events*	MST.028 (MST.004)
11	AO.02.01	*Runway safety*	
		• Risk reduction of RE type events	MST.028 (MST.007)
12	AO.02.02	• Risk reduction of RI type events	MST.028 (MST.014)
13	AO.02.03	• Increased importance of Local Runway Safety Teams (LRST)	
14	AO.02.04	• Risk reduction for birdstrike/wildlife type events	
15	AO.02.05	• Risk reduction for FOD on the movement areas	
		Loss of separation	
16	AO.03.01	• Risk reduction of 'Mid-air collision - MAC' type events	MST.028 (MST.010)
17	AO.03.02	• Reduction of the risk posed by 'Loss of separation between civil and military aircraft' type events	MST.024
18	AO.03.03	• Implementation of SE SAR solutions regarding the reduction of the risk of occurrence of MAC events en route or TMA	MST.030

19	AO.04.01	Ground Safety	MST.028 (MST.018)
20	AO.05.01	Risk reduction for 'Controlled flight into terrain (CFIT)' *(Terrain Conflict) type events*	MST.028 (MST.006)
21	AO.06.01	Risk reduction for 'Fire, smoke and fumes' type events *(Aircraft environment) type events*	MST.028 (MST.005)
22	AO.07.01	Reduction of the risk posed by SCF-PP type events	
23	AO.07.02	Reduction of the risk posed by SCF-NP type events	
24	AO.08.01	The rate of occurrence of non-compliances following RAMP inspections	
		General	
25	A0.09.01	Member States shall maintain a regular dialogue with national aircraft operators on flight data monitoring (FDM) programmes	MST.003
		Better understanding of aircraft operators' governance structure	MST.019
26	A0.09.02	Individual flight time specification schemes	**MST.034**
HELICOPTER OPERATIONS			
27	AO.10.01	Increasing the safety level of helicopter operations	MST.015
28	AO.10.02	Implementation of SESAR solutions aiming to facilitate safe IFR operations.	MST.031
GENERAL AVIATION OPERATIONS			
29	AO.11.01	Improving the dissemination of safety information	MST.025
30	AO.11.02	Development Just Culture in General Aviation	MST.027
31	AO.11.03	Loss of separation - Reduction of the risk posed by *'Airspace infringement'* by General Aviation aircraft type events	MST.028 (MST.016)
AERODROMS			
32	AO.15.01	Implementation of SESAR solutions for runway safety	MST.029
DRONES			
33	AO.17.01	Reducing the risks related to the operation of civil drones	

Table 3 - Correlation between pNSAC and EPAS actions

The following elements are stated for each action in particular:

- Description of the problem;
- Objective pursued;
- Corresponding action from EPAS 2020-2024 (if applicable);
- Performance indicator used;
- Performance target;
- Alert level;
- Necessary measures to reach the proposed target.

SAFETY PERFORMANCE

ACCIDENTS

Description
The definition provided for in Regulation (EU) No 996/2010[1]shall apply.

Objective
Increase the degree of safety of civil air transport.

Performance Indicator
- Number of accidents resulting in fatalities;
- Number of fatalities following accidents;
- Number of accidents;

Measurement
- The number of accidents resulting in fatalities, and the number of fatalities following accidents occurred with the involvement of a Romanian civil aeronautical agent are monitored, differentiated by the types of operations according to EPAS 2020-2024.[2];
- For CAT operations, the total number of accidents and the number of accidents and the number of accidents resulted in fatalities are monitored, occurred with the involvement of a Romanian civil aeronautical agent, related to:
  - 10,000 movements;
  - 10,000 flight hours;
- For operations:
  - with aircraft from Annex I to Regulation (EU) No 2018/1139;
  - with parachutes

The total number of accidents occurred with the involvement of a Romanian civil aeronautical agent, an aircraft registered in Romania or a pilot holding a license issued in Romania is monitored.

Performance target
- The number of accidents resulting in fatalities and the number of fatalities following the accidents, occurred with the involvement of a Romanian civil aeronautical agent in the year preceding the preparation of the pNSAC, should not exceed the reference levels at EU level, established by means of EPAS 2020-2024, namely:

[1] Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC (OJ L 295, 12.11.2010, p. 35).
[2] Operations: With aeroplanes (CAT companies, NCC business, SPO, NCO), helicopters (offshore, onshore, SPO, NCO), balloons, sailplanes, aerodrome and groundhandling infrastructure contribution, ATM/ANS infrastructure contribution; The definitions set forth in Regulation (EU) No 965/2012 shall apply.

Field	Average no. of accidents with fatalities 2008-2017	Average no. of fatalities 2008-2017
Aeroplanes		
CAT companies	0,8	66,1
NCC business	0,4	0,9
SPO	6,8	13,8
NCO	47,1	86,0
Helicopters		
Offshore	0,4	3,6
Onshore	1,6	5,2
SPO	3,8	7,1
NCO	5,5	11,8
Balloons		
	1,3	2,2
Sailplanes		
	24,9	28,6
ADR/GH		
	0,7	1,7
ATM/ANS		
	0,7	2,4

- For CAT operations, the average of the total number of accidents and the number of accidents resulting in fatalities, occurred over the last 4 years, with the involvement of a Romanian civil aeronautical agent, related to 10,000 movements, 10,000 flight hours respectively, should not exceed the reference levels at EU level, established by means of EPAS 2020-2024, namely the **average for the period 2011-2014 and the period 2012-2015**, that are:
-

SPI	Per 10,000 movements	Per 10,000 flight hours
Accidents average		
2011-2014	0,044	0,023
2015-2017	0,028	not available
Accidents average resulting in fatalities		
2011-2014	0,001	0,0004
2015-2017	0,001	not available

Accident average, differentiated by movement groups/ 10.000 movements		
Activity of AOC holder	2011-2014	2015-2017
Group A: < 7.100	0,17	not available
Group B: 7.100 – 35.099	0,18	not available
Group C: 35.100 – 101.099	0,06	0,04
Group D: 102.100 – 199.999	0,04	0,03
Group E: > 199.999	0,03	0,03

- For operations:
  - with aircraft from Annex I to Regulation (EU) No 2018/1139;
  - with parachutes.

  Downward trend in the number of accidents, compared to the average over the last 5 years.

SERIOUS INCIDENTS

Description
The definition provided for in Regulation (EU) No 996/2010[1]shall apply.

Objective
Increase the degree of safety of civil air transport.

Performance Indicator
- Number of serious incidents;

Measurement
- For CAT operations, the total number of serious incidents, occurred with the involvement of a Romanian civil aeronautical agent, is monitored, related to:
  - 10,000 movements;
  - 10,000 flight hours;
- For operations;
  - LAGA;
  - with parachutes

  The total number of serious incidents occurred with the involvement of a Romanian civil aeronautical agent, an aircraft registered in Romania or a pilot holding a license issued in Romania is monitored.

Performance target
- For CAT operations, the average of the total number of serious incidents, occurred over the last 4 years, with the involvement of a Romanian civil aeronautical agent is monitored, related to 10,000 movements, at 10,000 flight hours respectively, should to exceed the reference levels at EU level, established by means of EPAS 2019-2023 (no such reference levels are established in EPAS 2020-2024), namely the **average for the period 2011-2014**, i.e.:

SPI	Per 10,000 movements	Per 10,000 flight hours
Serious incidents average over 4 years		
	0.125	0.067
Serious incidents average, differentiated by groups of movements		
Group A: < 7,100	0.43	-
Group B: 7,100 - 35,099	0.22	-
Group C: 35,100 - 101,099	0,19	-
Group D: 102,100 - 199,999	0,13	-
Group E: > 199,999	0,12	-
Serious incidents average, differentiated by groups of flight hours		
Group A: < 14,000	-	0.32
Group B: 14,000 - 55,999	-	0.13
Group C: 56,000 - 155,999	-	0.10

[1] Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC (OJ L 295, 12.11.2010, p. 35).

Group D: 156,000 - 399,999	-	0.08
Group E: > 400,000	-	0.06
Serious incidents average by types of CAT operations		
Passenger transport (4 years)	0.13	0.07
Cargo transport (4 years)	0.32	0.13

- For operations:
  - LAGA, including;
  - with parachutes

Downward trend in the number of serious accidents, compared to the average over the last 5 years.

Field: Systemic

This field addresses system-wide problems that affect aviation as a whole. They often relate to deficiencies in organizational processes and procedures.

Action Area: Safety management - AS.01

Safety management is a major driver of the continuous improvement of air transport safety. However, it is necessary to continue efforts in this regard and the safety management systems (SMS) becoming more mature at the level of as many organizations, with the application of the last amendments to Annex 19 ICAO and the provisions of Regulation No 376/2014 on the reporting of civil aviation events.

1.

AS.01.01 - Development and monitoring of the National Programme for Civil Aviation Safety (PNSAC)

Description

ICAO Contracting States[1] have undertaken the obligation to develop at national level some national Programmes for civil aviation safety (*State Safety Programmes - SSP*), Annex 19 ICAO specifying the development framework for these Programmes. In Romania, the 3rd edition of the SSP is currently in force.

Starting with 2018, the development at national level of an SSP, correlated with the European Civil Aviation Safety Programme (*EASP*) has become a mandatory requirement, with the entry into force of Regulation (EU) No 2018/1139 (*New Basic Regulation*).

Objective

Romania's compliance with the provisions contained in Annex 19 ICAO and of Regulation (EU) No 2018/1139, regarding the development and monitoring of a PNSAC.

In the development and monitoring of PNSAC, the following aspects shall be monitored in particular:

- As a precondition for the implementation of the PNSAC, the efficient implementation of the requirements regarding the competent authority and the management of the deficiencies found in the oversight activity is ensured;
- Ensuring cooperation between the State authorities with duties in safety assurance in civil aviation;
- Ensuring competences of the inspectors to provide the oversight based on risk and performance;
- Ensuring the existence of risk and performance-based oversight policies and procedures, including describing the manner in which SMS is accepted and repeatedly monitored;

[1] Convention on International Civil Aviation, signed at Chicago on December 7, 1944 and ratified by Romania on April 30, 1965.

- Ensuring the existence of policies and procedures regarding data collection, analysis, exchange and protection in accordance with Regulation (EU) No 376/2014;
- Establishing a process for identifying SPI at the State level;
- Ensuring the dissemination of documents related to the SSP (including by making them available to the other Member States and EASA);
- Ensuring regular review and assessment of the effectiveness of PNSAC.

Corresponding action from EPAS 2020-2024

MST.001 - Member States will assign greater importance to the development and implementation of National Safety Programmes

Performance Indicator

The degree of implementation of the actions contained in '*Comparative analysis against ICAO requirements regarding PNSAC implementation*' (GAP Analysis), the edition in force.

Measurement

The degree of implementation posted on the ICAO secured website is monitored.

Performance target

100% implementation of the actions included in the GAP Analysis.

Alert level
n.a.

Measures to reach the performance target

1. Regular updating of the GAP Analysis in the ICAO iSTARS platform and ordering measures necessary to carry out the actions of the GAP Analysis **(SPI 2)**.

Responsible - BAS/CTS

2. Developing a procedure for establishing SPI at the State level.

Responsible - BAS

3. Closing the non-compliances resulting from EASA standardization visits within the time frames accepted by EASA **(SPI 1)**

Responsible – DANA/DN/DOACP

2.

AS.01.02 - Promoting the correct implementation of Safety Management Systems (SMS)

Description

The promotion of safety is one of the four components of PNSAC and is therefore addressed through the current document.

Basically, the promotion of safety is carried out both by specialized training of civil aeronautical personnel and by the exchange of safety information.

The action described in this chapter refers in particular to the exchange component of safety information, for promoting good practices and of supporting the aeronautical agents in the action of developing their own safety systems (SMS), according to the legal provisions or on a voluntary basis.

Objective

Support civil aeronautical agents in developing their own SMS.

Corresponding action from EPAS 2020-2024

MST.002 - Promotion of SMS

Performance Indicator

Safety promotion documents (SMS guidance materials, safety guides and bulletins specific to the identified national risk areas).

Meetings on safety issues with civil aeronautical agents.

Measurement

Number of safety promotion documents issued

Number of safety meetings organized with civil aeronautical agents

Performance target

Issue at least a constant number of safety promotion documents.

Organize at least a constant number of safety meetings with civil aeronautical agents.

Alert level

n.a.

Measures to reach the performance target

1. Post on the AACR website of the documents related to the SMS implementation, developed by ESSI working groups (ECAST, EHEST and EGAST)[2] and SMICG[3] or other organizations.

Responsible - BAS

2. Promote the documents provided for in section 1 through meetings with civil aeronautical agents, workshops, internal memos, etc.

Responsible – BAS/DOACP/DANA/DN

3. Update and develop own guidance materials in the field of SMS implementation and promotion thereof.

Responsible – BAS/DOACP/DANA/DN

4. Monitor the carrying out of the actions related to the promotion of the SMS implementation, contained in 'Planning the implementation of PNSAC' (edition in force).

Responsible - BAS

5. Promote the pNSAC within the civil aeronautical agents, in order to raise awareness of the obligation to implement its provisions in the parts of the industry, and monitor the method of implementation, as part of the oversight activity.

Responsible – BAS/DOACP/DANA/DN/GL-CAT/GL-ADR/GL-LAGA

[2] The European Strategic Safety Initiative (European Commercial Aviation Safety Team, European Helicopter Safety Team and European General Aviation Safety Team)

[3] Safety Management International Collaboration Group

3.

AS.01.04 - SMS assessment

Description

During 2017, EASA developed an SMS assessment tool of an organization. The tool has the advantage that it can be applied to any civil aviation organization that develops an SMS, regardless of the field in which it operates.

EASA fosters the use of this tool, first of all by the national authorities to support the oversight based on risk and performance, as well as by the civil aviation organizations, for self-assessing the maturity degree of their SMS. Furthermore, reporting to EASA of the manner of using the tool is fostered, with the aim of improving it.

The tool is used without prejudice to the obligations arising from the SES ATM Performance Scheme.

Objective

The use of the SMS assessment tool by the AACR, when assessing SMS organizations in all fields of civil aviation where the implementation of an SMS is mandatory, except for the ATM.

Corresponding action from EPAS 2020-2024

MST.026 - SMS assessment

Performance Indicator

The number of civil aviation organizations the SMS of which has been assessed by the AACR using the assessment tool developed by EASA, except for ATM.

Measurement

The percentage of civil aviation organizations the SMS of which has been assessed by AACR using the assessment tool developed by EASA, out of the total civil aviation organizations that are required to implement an SMS, except for ATM.

Performance target

The use of the SMS assessment tool by AACR, in assessing the SMS of all civil aviation organizations for which the implementation of an SMS is mandatory, except for ATM.

Alert level

n.a.

Measures to reach the performance target

1. Transposition of the SMS assessment tool, developed by EASA **(SPI 3)**;

   Responsible - BAS

2. Foster the use of the tool by civil aviation organizations for self-assessment of the maturity of their own SMS.

   Responsible – DOACP/DANA/DN

3. The use of the SMS assessment tool by AACR, in assessing the SMS of all civil aviation organizations for which the implementation of an SMS is mandatory, except for ATM.

   Responsible – DOACP/DANA/DN

4. Increase the capacity of AACR to assess SMS in all field, with special attention to:

   - Safety culture;
   - Management structure of the organization;
   - Interaction between the processes of risk identification and assessment and monitoring processes;

   Responsible – BAS/DOACP/DANA/DN

4.

AS.01.06 - Development and monitoring of the National Plan for Civil Aviation Safety (pNSAC)

Description

In accordance with the provisions of Annex 19 ICAO, as an integral part of the SSP or as a separate document, States have committed to develop National Plans for Civil Aviation Safety. These plans establish the national safety indicators with the safety targets and the corresponding alert thresholds, and the actions necessary for safety risk reduction.

Starting with 2018, the development at national level of a National Safety Plan, correlated with the European Plan for Aviation Safety (*EPAS*) has become a mandatory requirement, with the entry into force of Regulation (EU) No 2018/1139 (*New Basic Regulation*).

Objective

Romania's compliance with the provisions contained in Annex 19 ICAO and of Regulation (EU) No 2018/1139, regarding the development and monitoring of a pNSAC.

pNSAC should address the following issues:

- Describe the manner in which it is developed;
- Include safety objectives, safety indicators and targets;
- Reflect the actions included in the current EPAS edition
- Reflect the main risks highlighted at national level, in addition to those highlighted by means of EPAS.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety

Note: Action MST.028 includes the former actions of the previous EPAS edition: MST 004, 005, 006, 007, 010, 014, 016 and 018.

Performance Indicator

n.a.

Measurement

n.a.

Performance target

n.a.

Alert level

n.a.

Measures to reach the performance target

n.a.

5.

AS.01.05 - Correlation of pNSAC with SMS

Description

A number of actions aimed at raising the degree of safety in civil aviation are established through the pNSAC. The efficiency of these actions is measured by monitoring performance indicators, to which performance targets and alert levels are attached.

At least some of these performance indicators are applicable to aeronautical agents in different fields of civil aviation. Moreover, in the case of agents who develop, on a compulsorily or voluntarily basis, an SMS, these indicators must be included in their own SMS and monitored as such.

Safety Management Manual (Doc. 9859 ICAO, 3rd Edition) sets out, in Chapter 4 - *State Safety Programme*, the general framework of a National Safety Programme. One of the elements of this general framework (item 2.2 - Acceptance of the security performance of the service providers) provides that the safety Performance Indicators of the service providers, and the alert levels and their targets, should be accepted by the competent authority on an individual basis. When accepting them, it must also be aimed that they are congruent with the safety indicators applicable in the pNSAC.

Objective

Ensure that the safety performance indicators of the of the service providers that develop a SMS, and the alert levels and their targets, are congruent with the safety indicators applicable in the pNSAC.

Corresponding action from EPAS 2020-2024

n.a.

Performance Indicator

The number of civil aviation organizations the SMS of which includes safety performance indicators congruent with those applicable in the pNSAC, related to the total number of civil aviation organizations developing a SMS.

Measurement

The percentage of civil aviation organizations the SMS of which includes safety performance indicators congruent with those applicable in the pNSAC out of the total number of civil aviation organizations developing a SMS.

Performance target

All SMS should include safety performance indicators congruent with those applicable in the pNSAC.

Alert level
n.a.

Measures to reach the performance target

1. Appropriate amendment of the legislative framework;

   Responsible – BAS/DANA/DOACP

2. Aim that the safety performance indicators of the service providers that develop a SMS, and the alert levels and their targets, are congruent with the safety indicators applicable in the pNSAC, within the acceptance process of SMS.

   Responsible – DANA/DOACP

Action area: Competence of personnel

6.

AS.02.01 - LPR feedback (language proficiency requirements)

Description

The decision on *language proficiency requirements - LPRs* for pilots and traffic controllers was taken for the first time at the 32nd session of the ICAO Council in September 1998, in response to a series of fatal accidents in which the lack of English proficiency was an important factor. The aim was to improve the overall level of language proficiency and to reduce the communication shortcomings due to this cause.

Since the mentioned date, the LPRs have advanced beyond the implementation phase, moving to the post-implementation phase.

Although LPR systems have been established at national level, there are still difficulties in harmonising the testing method, which may constitute a safety risk, which is why EASA supports the continuation of the activities necessary for the implementation of LPR in cooperation with ICAO.

With a view to promoting best practices and harmonising testing methods for language proficiency, one of the activities carried out by EASA is the analysis at national level of the Member States of the way in which language proficiency assessments are carried out.

Objective

Increase flight safety by reducing the risk of ineffective communication or even miscommunication in situations where pilots and/or controllers find themselves in unexpected situations and need to resort to specific phrases.

Corresponding action from EPAS 2020-2024

MST.033 - Language proficiency requirements - exchange of best practices, identification of possible improvements to the uniform and harmonised implementation of language proficiency requirements

Performance Indicator

n.a.

Measurement

n.a.

Performance target

n.a.

Alert level

n.a.

Proposed measures

1. Preparation by Romanian Civil Aeronautical Authority (RCAA) of updated briefing on how language proficiency requirements are implemented in Romania, including the level to which training organisations offer English language training courses.

Responsible - DOACP, ATO

7.

AS.02.02. - Oversight capacity - reducing the risk of fraud in Part-147

Description

EASA is considering the review of Part-147, including by introducing new methods and technologies in terms of maintenance domain. One of the actions contemplated in this respect is to raise awareness of the methods of fraud occurring during examinations and to counter them.

Objective

Ensuring continuous improvement of the skills of aviation personnel, increasing the uniformity, efficiency, quality and safety of maintenance training processes.

Corresponding action from EPAS 2020-2024

MST.035 - Oversight capacity - cases of fraud in Part-147

Performance Indicator

n.a.

Measurement

n.a.

Performance target

n.a.

Alert level

n.a.

Measures to reach the performance target

1. Introduction of specific elements in the audit checklists of AMTO, focused on the risk of fraud during examinations.

Responsible - DOACP

2. Collection of data on actual fraud cases and exchange of information in this regard, as part of the collaborative oversight process.

Responsible - DOACP, AMTO

Action Area: Impact of security on safety

8.

AS.02.01 - Ensuring cyber security

Description

Cyber threats are constantly evolving, subjecting IT&C systems and networks to risks that can cause significant damage in all industrial, public and government sectors worldwide.

International civil aviation is vulnerable to cyber security risks, as awareness efforts at the regulatory, decision-making, managerial, development and operational levels have manifestly failed to deliver, have not been correlated and have not been integrated into the aeronautical specificity. Over the last years, processes have been initiated at international level for preparing the first strategies and standards in cyber security applied to civil aviation (including the EASA Strategy and the EPAS 2020-2024 action plan), generating obligations to adapt, corresponding to the regulations and national institutions/organizations.

In the absence of appropriate measures, Romanian civil aviation is exposed to cyber security threats and vulnerabilities, due to the use of aeronautical and general-purpose IT&C systems and networks. Recently, European and national regulations (in terms of protection of IT&C systems and networks, critical infrastructure protection, cyber security, data protection, and aeronautical security and safety), create the obligation to establish concrete institutional responsibilities and sets forth financing and development decisions (in infrastructure, technology, human resources, standardization and rules setting), in order to align national civil aviation with cyber security requirements.

Objective

Implementation of integrated cyber security measures at national civil aviation level.

Corresponding action from EPAS 2020-2024

n.a.

Performance indicator n.a.

Measurement

n.a.

Performance target

n.a.

Alert level

n.a.

Measures to reach the performance target

1. Development and implementation of a national strategy for cyber security of civil aviation, with medium to long term perspective.

   Responsible - DSAC

2. Develop a regulatory framework on cyber security for civil aviation, covering all areas of aviation. In addition, the development of standards and methodological benchmarks for the unitary application of cyber security measures, at the level of all entities in civil aviation.

   Responsible - DSAC

3. Develop applied cooperation in cyber security, with relevant institutions and authorities, at national and international level.

   Responsible - DSAC

4. Develop technical response capabilities for cyber security incidents.

   Responsible - DSAC

5. Develop culture and skills in cyber security of civil aviation.

   Responsible - DSAC

6. Development of a Cyber Security Management System, and its integration/harmonization with the existing Civil Aviation Management Systems.

   Responsible - DSAC

Action Area: Oversight and standardisation

The actions in this area are aimed at addressing problems that have been highlighted at EASA level during standardisation activities, in particular as regards the oversight responsibilities of the Member States.

The requirements for authorities contained in all the regulations specific to different domains of civil aviation define the obligations of the Member States to implement effective oversight of the organisations under their responsibility, in particular the introduction of the concept of risk-based oversight, in order to address safety issues effectively.

9.

AS.04.01 - Enhancing the capacity of oversight of competent authorities

Description

The present action focuses on three components:

a) Ensuring, within the competent authorities, adequate personnel;

b) Consistent application of the requirements regarding the authorities (ARx) contained in the regulations specific to the different domains;

c) Increasing the capacity of competent authorities to assess SMS in all organizations; Special attention shall be paid to the safety culture, the governance structure of the organisation, the interaction between the process of risk identification, their assessment and monitoring, the use of information resulting from nonconformities and safety information.

Objective

A strong oversight system throughout the EU, in which each competent authority has the capacity to fulfil its oversight obligations, with particular attention to safety risk management, information exchange and cooperation with other competent authorities. As important precursors, the aim is to implement SMS in all organisations and to provide adequate personnel in all competent authorities.

Corresponding action from EPAS 2020-2024 MST.032

- Oversight capacity

Performance Indicator

n.a.

Measurement

n.a.

Performance target

n.a.

Alert level

n.a.

Measures to reach the performance target

1. RCAA shall ensure that it has adequate personnel to carry out its safety oversight obligations.

Responsible - DOACP, DN, DANA, DSAC

2. The obligations of the authorities (ARx) are applied consistently and consistently in all specific domains of activity of RCAA.

Responsible - BMCC, DOACP, DN, DANA

3. The use of the SMS assessment tool in all domains subject to RCAA oversight, except in the field of ATM/ANS.

Responsible - DOACP, DN, DANA

Field: Operational

Action Area: CAT operations with aeroplanes

Includes actions aimed at reducing the main risks to the safety of CAT operations with aeroplanes.

10.

AO.01.01 - Reduction of the risk posed by 'Aircraft upset (LOC-I)' type events

Description

LOC-I type events (loss of control in flight) represent an extreme manifestation of a deviation from the expected flight path. The phrase *loss of control* covers only part of the cases in which an unintended deviation from the flight path is manifested.[1]

According to the Risk Portfolio for civil aviation in Romania - 2018, this type of event represents the highest risk for CAT operations with aeroplanes, representing the main cause of accidents resulting in fatalities.

Objective

Reduction of the frequency of occurrence of LOC-I type events.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.004 from the previous edition of EPAS - Including aspects related to '*Loss of control in flight - LOC-I*' in National Safety Programmes)

Performance Indicator

LOC-I type events for CAT operations performed by Romanian operators.

Measurement

The number of LOC-I type events for CAT operations performed by Romanian operators is measured.

[1] ECCAIRS Aviation 1.3.0.12 - Data Definition Standard English - Attribute Values - 29 April 2013. https://www.icao.int/safety/airnavigation/AIG/Pages/ADREP-Taxonomies.aspx https://www.icao.int/safety/airnavigation/AIG/Documents/ADREP%20Taxonomy/ECCAIRS%20Aviation%201.3.0.12%20(VL%20for%20AttrID%20%2032%20-%20Aircraft%20category).pdf

Performance target
Downward trend in the annual number of LOC-I type events.

Alert level
Whenever a LOC-I event occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - Activation of any flight envelope protection;
   - Icing in flight
   - Severe turbulence, windshear

   Responsible – DN/DOACP/DANA/ GL-CAT
2. Further development and monitoring of the application by the Romanian aircraft operators of specific pilot training Programmes to avoid LOC-I.

   Responsible - DOACP

11.

AO.02.01 - Runway safety - Reduction of the risk posed by 'Runway excursion (RE)' type events

Description

'Runway excursion' (RE) means exceeding the surface of the runway, in its axis or sideways. (ICAO)

Runway excursion occurs when an aircraft deviates from the runway uncontrollably during take-off or landing. The deviation may or may not be intentional.

Types of runway excursion can be:

- An aircraft taking off fails to lift off into the air or successfully stops take-off before reaching the designated runway end;
- An aircraft landing is incapable of stopping before reaching the end of the designated runway;
- An aircraft that deviates sideways during the take-off, take-off abortion or landing procedure.

The following categories of events do not fall within the ICAO ADREP definitions for runway excursion; however, they are deemed close enough to be included in this category, due to the similarity of the number of causal and contributory factors or risk mitigation methods:

- Aircraft trying to land and touches the ground before the runway in the perimeter of the aerodrome;
- The use for take-off/landing of a runway other than the designated one or of the taxiways.

According to the Risk Portfolio for civil aviation in Romania - 2019, this type of event represents the highest risk for CTA operations with aeroplanes, representing the main cause of accidents resulting in casualties and serious incidents.

Objective

Reduction of the frequency of occurrence of RE type events.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.007 from the previous EPAS edition - Including aspects related to '*Runway excursion - RE'* in the National Safety Programmes

Performance Indicator

RE type events for CAT operations.

Measurement

The number of REs occurred with the involvement of a Romanian civil aeronautical agent is monitored. The events of this type are highlighted in the airports in Romania and those in other countries.

Performance target

Downward trend in the number of RE, related to the average over the last 5 years.

Alert level

Whenever a RE event occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:

Aerodrome field:

- Ensuring the braking coefficient during operations and using the equipment for determining the braking coefficient, during summertime and wintertime;
- Training of airport staff regarding the future requirements set forth by the amendments to Annexes 14 and 15 ICAO and PANS-ADR, which will enter into force on November 4, 2020;
- Reporting of conditions on movement areas;
- Work under traffic pressure, inspection, clearing snow under traffic and reporting conditions.

Air operations field:

- Approach path management;
- High-speed rejected take-off;
- Landing in adverse met conditions.
- Training of navigation staff regarding the future requirements set forth by the amendments to Annexes 14 and 15 ICAO and PANS-ADR, which will enter into force on November 4, 2020;

Responsible – GL-AD/ GL-CAT

2. Continue promoting the implementation of the provisions of the European Action Plan for the Prevention of Runway Excursion, and those developed by other organizations

Responsible – BAS/DANA/DOACP/GL-AD/GL-CAT

12.

AO.02.02 - Runway safety - Reduction of the risk posed by 'Runway incursion (RI)' events

Description

(ICAO Doc 4444 – PANS-ATM):

The 'runway incursion' (RI) is any incident that occurs at the aerodrome and involves the incorrect presence of an aircraft or persons in a protected/restricted area designated for landing or take-off of aircraft.

'Incorrect presence' may be the consequence of a pilot's mistake to submit to a valid traffic control approval/clearance (ATC) or to comply with an incorrect traffic control approval/clearance.
The most common events of this type are[1]:

- Deviation of aircraft at runway entry contrary to ATC clearance/approval;
- Crossing the aircraft runway after landing contrary to ATC clearance/approval;
- ATC running clearance in conflict with other ATC clearance;
- Incorrect ATC clearance to occupy the runway;
- Towing the aircraft to cross the runway contrary to ATC clearance.

Objective

Reduction of the frequency of occurrence of RI type events.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.014 from the previous EPAS edition Including aspects related to '*Runway incursion - RI'* in the National Safety Programmes

Performance Indicator

RI type events for CAT operations.

Measurement

The number of RIs occurred with the involvement of a Romanian civil aeronautical agent is monitored. The events of this type are highlighted in the airports in Romania and those in other countries.

Performance target

Downward trend in the number of RI, related to the average over the last 5 years.

[1] Source: Eurocontrol Skybrary

Alert level
Whenever a RI event occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:

   Aerodrome field:
   - Access on the manoeuvre surface without observing the procedures;
   - Failure to follow the instructions of the control elements;
   - Deviation of ATC clearance.

   Air operations field:
   - Deviation of ATC clearance;
   - Perception and situational awareness;
   - Failure to follow the instructions of the control elements.

   Responsible – GL-AD/ GL-CAT

2. Promote the application of the provisions:
   a. Doc 9870: Manual of the Prevention of Runway incursion
   b. European Action Plan for the Prevention of Runway Incursion;
   c. Documents on this topic developed by other organizations.

   Responsible – BAS/DANA/DOACP/GL-AD/ GL-CAT

13.

AO.02.03 - Runway safety - Increased importance of Local Runway Safety Teams (LRST)

Description

Local Runway Safety Team (*LRST*) is a key element in the safety Programmes of the runway on an aerodrome, ensuring the concentration of all parties involved in the safety of the runway.

An LRST must be made up of at least all parties involved in take-off and landing operations, namely: The aerodrome operator, the aeronautical information provider, the air navigation service provider, the aerodrome operators, pilots' associations or local air traffic controllers, other relevant organizations operating on the manoeuvre surface, etc.

Objective

Stimulate proactive runway safety management and reduce specific risks, especially RE and RI type events (see AO.02.01 and OA.02.02).

Corresponding action from EPAS 2020-2024

n.a.

Performance Indicator

Number of LRST meetings.

Measurement

The number of LRST meetings organized at airports in Romania is measured.

Performance target

At least 2 LRST meetings organized annually in each airport.

Alert level

n.a.

Measures to reach the performance target

1. Drafting of guidelines on the establishment and operation of LRST.
   Responsible –BAS/DANA
2. Include the verification of the functioning of the LRST in the oversight audits.
   Responsible - DANA

14.

AO.02.04 Runway safety - Reduction of the risk posed by birdstrike/wildlife type events

Description

Bird strike type events are strictly defined as representing the collision between a bird and an aircraft in flight or in the take-off or landing phase.

This type of event is relatively common and represents a significant danger to flight safety. It can cause major structural damage, especially for small aircraft. Furthermore, these events can lead to loss of traction, especially in the case of jet engine aircraft, following the ingestion of birds in the engine. Such situations led to fatal accidents.

Bird strike type events can occur in any phase of the flight, but most likely occur in the take-off, initial climb, approach and landing phases, due to the concentration of birds in flight at low levels. Moreover, considering that the activity of most birds takes place during daytime, most of these events take place during this period.

Similarly, *wildlife* type events are defined as representing the collision between an animal, other than a bird, and an aircraft in flight or in the take-off or landing phase. These events also pose a significant danger to the safety of the flights, as there are situations in which they have resulted in fatal accidents.

Objective

Reduction of the frequency of occurrence of *bird strike/wildlife* type events.

Corresponding action from EPAS 2020-2024

n.a.

Performance Indicator

Number of *bird strike/wildlife* type events in airports in Romania.

Measurement

The number of *bird strike* and *wildlife* respectively type events in airports in Romania is measured separately, relative to the total number of movements in airports.

Performance target

Downward trend in number of *bird strike* and *wildlife* respectively type events, relative to the total number of movements on airports in Romania.

Alert level

Upward trend in the quarterly number of *bird strike* and *wildlife* respectively type events, relative to the total number of movements in airports in Romania.

Measures to reach the performance target

1. Promote the measures included in the Annual Analyse regarding *bird strike/wildlife* civil aviation type events, drawn up within AACR based on the provisions of the Order of the Ministry of Transport No 1309/2014 and verification of their application, as part of the oversight activity.

Responsible - DANA

2. Promote the measures contained in the guidelines prepared by specialized bodies, such as ICAO Doc 9137: Airport Services Manual Part 3 - Wildlife Control and Reduction, 4th edition, 2012.

Responsible - DANA

15.

AO.02.05 - Runway safety - Reduction of the risk posed by FOD on runways

Description
Foreign Object Debris (FOD) are objects found in an improper location which, as a result of their existence in that location, can cause damage to equipment or injury to persons. FODs include a wide range of materials, such as disassembled parts, paving fragments, catering items, building materials, stones, sand, luggage, animal scraps.

The main areas considered for this action are:

- Runway FOD (RWY FOD) - refers to various objects present on the runway that can affect high speed moving aircraft (landing or take-off). RWY FOD is the greatest safety hazard;
- FOD on trackway or on ramps (TWY/APRON FOD) - these types of FOD present a lower risk than RWY FOD. However, there have been situations where they have been moved on the runway, for example due to the jet of air produced by the aircraft;
- Maintenance FOD (MTN FOD) - refers to various objects used in maintenance activity that can cause damage to the aircraft.

Objective
Reduction of the frequency of occurrence of FOD events on the runway

Corresponding action from EPAS 2020-2024

n.a.

Performance Indicator
FOD type events on the moving areas, occurred in airports in Romania

Measurement
The number of FOD type events on the moving surfaces, occurred in the airports in Romania, broken down by RWY FOD, TWY/APRON FOD and MTN FOD is measured.

Performance target
Downward trend in the number of FOD type events, against the average over the last 5 years.

Alert level
Monthly growth above the average recorded in the same period in the last 5 years.

Measures to reach the performance target

1. Verification, as part of the oversight activity, of the manner in which the factors contributing to FOD type events are prevented from occurring, such as:
    - Deficiencies in the maintenance of buildings, equipment or aircraft;
    - Inadequate staff training;
    - Pressure on traffic restriction as little as possible;
    - Weather conditions;
    - Uncontrolled presence of vehicles on the moving areas.

    Responsible – DANA/DN

2. Ensure the existence of a FOD control Programme in each airport, as part of the oversight activity.

    Responsible – DANA/DN

3. Promoting documents on FOD topic issued by specialized bodies.

    Responsible – BAS/DANA/DN

16.

AO.03.01 - Reduction of the risk posed by 'Mid-air collision - (MAC)' type events

Description

This type of event refers to the potential collision between two aircraft in flight. Direct precursors are also included, such as loss of separation, real TCAS RA alerts (*Traffic Collision Avoidance System - Resolution advisories*, Airspace infringements.

Objective

Reduction of the frequency of occurrence of MAC type events.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.010 from the previous EPAS edition - Including aspects related to '*Mid-air collisions - MAC'* in the National Safety Programmes)

Performance Indicator

MAC type events occurred in Romania's airspace.

Measurement

The number of MAC type events occurred in Romania's airspace is measured.

Performance target

Downward trend in the annual number of MAC type events.

Alert level

Whenever a MAC type event occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - Improper conflict detection/incorrect pilot response;
   - Deviation of ATC clearance;
   - Airspace infringement

Responsible - GL-CAT

17.

AO.03.02 Reduction of the risk posed by 'Loss of separation between civil and military aircraft' type events

Description

Several events have been reported at European level, regarding the loss of separation between civil and military aircraft, and an increase in non-cooperative military traffic over the 'High Seas'.

Accordingly, at the request of the European Commission, EASA carried out a technical analysis of such events and issued several recommendations for the Member States, namely:

a) Full transposition and application of ICAO Circular 330;

b) Ensuring close coordination in order to develop, harmonise and publish operational requirements and instructions for State aircraft, so as to continuously take into account civil aviation activities;

c) Supporting the development and harmonisation at EU level of civil-military ATM coordination procedures;

d) Reporting relevant events to EASA;

e) Provision of primary radar data available by military units to civil ATM units.

Objective

Applying EASA recommendations in order to reduce the risk posed by 'Loss of separation between civil and military aircraft' type events.

Corresponding action from EPAS 2020-2024

MST.024 - Loss of separation between civil and military aircraft.

Performance Indicator

'Loss of separation between civil and military aircraft' type events occurred in Romania's airspace.

Measurement

The number of 'Loss of separation between civil and military aircraft' type events occurred in Romania's airspace is measured.

Performance target

Downward trend in the annual number of 'Loss of separation between civil and military aircraft' type events.

Alert level

Whenever there is a 'Loss of separation between civil and military aircraft' type event.

Measures to reach the performance target

1. Ensuring that the air navigation service provider fully applies the recommendation a) issued by EASA for the reduction of the risk posed by 'Loss of separation between civil and military aircraft' type events.

Responsible – DANA/DSAC/ROMATSA

2. Compliance of the RCAA with recommendation d).

Responsible - BAS

3. Coordination at RCAA/ROMATSA - AAMN level for the application of EASA recommendations b), c) and e).

Responsible – DANA/DSAC/ROMATSA

18.

AO.03.03 - Implementation of SESAR solutions regarding the reduction of the risk of MAC events en route or TMA

Description
This action is based on the assessment, together with the air navigation service provider, of the need to implement the SESAR solutions regarding the MAC.

These solutions need to be implemented insofar as this is feasible. SESAR

Solution Catalogue can be accessed at:
https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf

Objective
Reduction of the risk posed by MAC type events en route or TMA.

Corresponding action from EPAS 2020-2024
MST.030 - Implementation of SESAR solutions regarding the reduction of the risk of occurrence of MAC events en route or TMA

Performance Indicator
The number of MAC related SESAR solutions implemented.

Measurement

The number of MAC related SESAR solutions implemented is measured.

Performance target
n.a.

Alert level
n.a.

Measures to reach the performance target

1. Highlighting MAC related SESAR solutions.

Responsible - DANA

2. Assessment, together with the air navigation service provider, of the need and feasibility of implementing MAC related SESAR solutions.

Responsible – BAS/DANA/ROMATSA

3. Verification, as part of the oversight activity, of the manner of application of the highlighted SESAR solutions.

Responsible - DANA

19.

AO.04.01 - Ground Safety

Description
This action area refers to actions to reduce the risk of occurrence of events involving the collision of an aircraft with another aircraft, an obstacle or vehicle while the aircraft is moving, self-propelled or towed. This category also includes groundhandling related events (aircraft loading, fuelling, etc.). Collisions occurring on the runway are not included.

Objective
Reduction of the frequency of occurrence of 'ground safety'.

Corresponding action from EPAS 2020-2024
MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.018 from the previous edition EPAS - Including aspects related to '*Ground Safety* in the National Safety Programmes)

Performance Indicator
'Ground Safety' type events occurred with the involvement of a Romanian aeronautical agent.

Measurement
The number of 'Ground Safety' events occurred with the involvement of a Romanian aeronautical agent is measured, related to the number of movements in airports in Romania. The *TWY Incursion* type events shall be highlighted separately.

Performance target
Downward trend in the number of 'Ground Safety' type events /
100.00 total movements against the average over the last 5 years.

Alert level
Whenever the number of such events per quarter of year exceeds the quarterly average of such events in the last 5 years.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
    - Compliance with the provisions of the Platform Management Manual.
    - Serving under adverse weather conditions.
    - Communications and language barriers.

Responsible – DANA/GL-AD/BAS

20.

AO.05.01- Reduction of the risk posed by 'Terrain Conflict - Controlled flight into terrain (CFIT)' type events

Description
Collision or quasi-collision of a flight with the terrain, with a surface of water or obstacle, without indications of loss of control of the aircraft.[1]

Objective
Reduction of the frequency of occurrence of CFIT type events.

Corresponding action from EPAS 2020-2024
MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.0006 from the previous EPAS edition - Including aspects related to '*Controlled flight into terrain - CFIT*' in the National Safety Programmes

Performance Indicator
CFIT type events occurred in Romania's airspace.

Measurement
The number of CFIT type events in Romania's airspace is measured

Performance target
Downward trend in the annual number of MAC type events.

Alert level
Whenever a CFIT type event occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - False or disruptive ILS signal capture;
   - Deviation below glideslope;
   - Flight Management System incorrectly set.

Responsible – DANA/DOACP/GL-CAT

[1] ECCAIRS Aviation 1.3.0.12 - Data Definition Standard English - Attribute Values - 29 April 2013. https://www.icao.int/safety/airnavigation/AIG/Pages/ADREP-Taxonomies.aspx https://www.icao.int/safety/airnavigation/AIG/Documents/ADREP%20Taxonomy/ECCAIRS%20Aviation%201.3.0.12%20(VL%20for%20AttrID%20%2032%20-%20Aircraft%20category).pdf

21.

AO.06.01 Reduction of the risk posed by 'Fire, smoke and Gas Fumes' type events)'

Description
Uncontrolled fire on an aircraft, especially when it is in flight, is one of the most serious safety hazards. This action area also includes the fires occurring in the event of an aircraft crash.

In-flight fires may ultimately result in the loss of control over the aircraft, either due to the occurrence of structural failures or command systems, or due to crew incapacitation. Fires on the ground can take hold rapidly and lead to casualties if the emergency response is not swift enough. Furthermore, smoke and Gas Fumes, whether they are associated with fire or not, can lead to passenger or crew incapacitation, thus representing a major danger.

Objective
Reduction of the risk associated to 'Fire, smoke and Gas Fumes' type events.

Corresponding action from EPAS 2020-2024
MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.005 from the previous EPAS edition - Including aspects related to '*Fire, smoke and Gas Fumes*' in the National Safety Programmes

Performance Indicator
'Fire, smoke and Gas Fumes' type events occurred with the involvement of a Romanian aeronautical agent.

Measurement
The number of 'Fire, smoke and Gas Fumes' type events occurred with the involvement of a Romanian aeronautical agent is measured.

Performance target
Downward trend in the number of 'Fire, smoke and Gas Fumes' type events.

Alert level
Whenever there is a 'Fire, smoke and Gas Fumes' type event.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - Wiring damage;
   - Contamination of insulating surfaces;
   - Overheating of lithium batteries.

Responsible – BAS/DOACP/DN/GL-CAT/ GL-AD

2. Applying the recommendations issued by ICAO and EASA safety bulletins, regarding the hazards involved by lithium batteries or other fire related events.

Responsible – BAS/DANA/DOACP

22.

AO.07.01 - System/component failure - reduction of the risk associated with 'System/Component Failure or Malfunction - Power Plant (SCF-PP)' type events

Description
System/Component Failure or Malfunction - powertrain.[1]

Objective
Risk reduction associated with certain SCF-PP type events recorded by Romanian aircraft operators.

Corresponding action from EPAS 2020-2024
n.a.

Performance Indicator
Certain measured events (see paragraph below) of SCF-PP type recorded by Romanian aircraft operators.

Measurement
The number of SCF-PP type events is measured, related to the number of movements in the national airspace, recorded by the Romanian aircraft operators, in the 'engine failure' category.

Performance target
Downward trend in the number of SCF-PP type events from the categories mentioned in the previous paragraph.

Alert level
Whenever an event of this type occurs.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - Improper maintenance;
   - Component failure;
   - Fuel supply system malfunction.

Responsible – DN/DOACP/BAS/ GL-CAT

[1] ECCAIRS Aviation 1.3.0.12 - Data Definition Standard English - Attribute Values - 29 April 2013.
https://www.icao.int/safety/airnavigation/AIG/Pages/ADREP-Taxonomies.aspx
https://www.icao.int/safety/airnavigation/AIG/Documents/ADREP%20Taxonomy/ECCAIRS%20Aviation%201.3.0.12%20(VL%20for%20AttrID%20%2032%20-%20Aircraft%20category).pdf

23.

AO.07.02 - System/component failure - reduction of the risk associated with 'System/Component Failure or Malfunction - Non Powerplant (SCF-NP)' type events

Description
System/Component Failure or Malfunction - other than the powertrain.[1]

According to the Risk Portfolio for civil aviation in Romania - 2019, the SCF-NP type events with the highest risk are those of '*Depressurization*' type, being an important cause of serious incidents.

Objective
Risk reduction associated with certain SCF-PP type events recorded by Romanian aircraft operators.

Corresponding action from EPAS 2020-2024
n.a.

Performance Indicator
Certain measured events (see paragraph below) of SCF-PP type recorded by Romanian aircraft operators performing CAT operations.

Measurement
The number of SCF-PP type events related to the number of movements in the national airspace is measured, recorded by the Romanian aircraft operators, in the ' *Depressurization'* category. The 'return of the aircraft from take-off' type events due to causes other than SCF-PP type shall be highlighted.

Performance target
Downward trend in the number of SCF-PP type events from the categories mentioned in the previous paragraph.

Alert level
When the number of events per quarter exceeds the quarterly average of such events in the last 5 years.

Measures to reach the performance target

1. Highlighting the main precursors of SCF-NP type events related to *'Depressurization'* and the measures to reduce the risk posed by them.

Responsible - GL-CAT

[1] ECCAIRS Aviation 1.3.0.12 - Data Definition Standard English - Attribute Values - 29 April 2013.
https://www.icao.int/safety/airnavigation/AIG/Pages/ADREP-Taxonomies.aspx
https://www.icao.int/safety/airnavigation/AIG/Documents/ADREP%20Taxonomy/ECCAIRS%20Aviatio n%201.3.0.12%20(VL%20for%20AttrID%20%2032%20-%20Aircraft%20category).pdf

24.

AO.08.01 - Rate of occurrence of non-compliances as a result of ramp inspections

Description

'RAMP INSPECTION' as defined in Article 4 of Regulation (EU) No 965/2012 represents the means of assessing the level of safety achieved by an aircraft operator operating on national airports. Non-compliances (deviations from ICAO or European standards) can be found following ramp inspections. The rate of occurrence of non-compliances is a parameter computed by the method established by EASA and which represents an indicator of the level of flight safety at the level of the Romanian aircraft operators and, implicitly, of the safety level at the national level. The computing method of this parameter is given below.

Performance Indicator

Rate of occurrence of non-compliances as a result of ramp inspections

Measurement

For an aircraft:

$$\mathbf{Ra} = \frac{(C1 * 0,25) + (C2 * 1) + (C3 * 2)}{Ni}$$

C1 *- number of 1st category non-compliances;*
C2 *- number of 2nd category non-compliances;*
C3 *- number of 3rd category non-compliances;*
Ni *- number of inspections performed on an aircraft*
Ra *- rate of occurrence of non-compliances for an aircraft in one year.*

For an operator:

$$Rop = \frac{\sum_{i=1}^{n} Rai}{n}$$

Where:

- ***Rai*** is the rate of occurrence of non-compliances in each of the aircraft included in the AOC;
- ***n*** is the number of AOC inspected aircraft.

For Romanian Civil Aeronautical Authority (and country, respectively)

$$Rțară = \frac{\sum_{i=1}^{m} Ropi}{m}$$

Where:

- ***m*** is the number of Romanian aircraft operators inspected;

Performance target

The country rate should not exceed more than 10% of the European average value.

Alert level

- When the rate of a Romanian operator exceeds 1.5;
- When the country rate has an increasing trend from one measurement to another.

Measures to reach the performance target

1. Continued activity of the RAMP Working Group, established within the Romanian Civil Aeronautical Authority R.A.

Responsible - DOACP

2. Input in the SMS of each aircraft operator the specific response and solving procedure of non-compliances revealed by the RAMP inspections (SAFA/SACA).

Responsible - DOACP

3. Prioritization of AACR inspections and audits based on the score of aircraft operators resulting from non-compliances recorded by RAMP inspections.

Responsible - DOACP

4. Organizing work meetings with aircraft operators.

Responsible - DOACP

25.

AS.01.03 - Development of a regular dialogue with the Romanian aircraft operators regarding Flight Data Monitoring (FDM) Programmes

Description

Many safety indicators used to monitor safety performance at industry level are based on information from FDM Programmes. FDM is a proactive manner to use the safety information obtained from the operation, along with those provided by Air Safety Reports, in order to highlight the safety trends and eliminate the risk factors.

At the EASA level, a working group called *European Authorities coordination group on FDM (EAFDM) was created,* in order to support Member States in standardizing FDM events relevant to national Programmes for civil aviation safety.

FDM Programmes are mandatory for aeroplane operators with *Maximum Certified Take-Off Mass (MCTOM)* higher than 27,000 kg.

Objective

Foster the implementation by the Romanian aircraft operators of the FDM Programmes, and the inclusion therein of the events relevant to the risks identified at national level, included in the pNSAC.

Corresponding action from EPAS 2020-2024

MST.003 - Member States shall maintain a regular dialogue with national aircraft operators on flight data monitoring (FDM) Programmes

Performance Indicator

Inclusion in the FDM Programmes of the events relevant to the risks identified at national level, included in the pNSAC, by the Romanian aircraft operators for whom the implementation of the FDM Programmes is mandatory.

Measurement

The percentage of Romanian aircraft operators who included in their own FDM Programmes the events relevant to the risks identified at national level, contained in the pNSAC, out of the total number of Romanian operators for whom the implementation of FDM Programmes is mandatory.

Performance target

Inclusion in the FDM Programmes of the events relevant to the risks identified at national level, included in the pNSAC, by all Romanian operators for whom the implementation of the FDM Programmes is mandatory.

Alert level

n.a.

Measures to reach the performance target

1. Promoting documents developed by EAFDM, including 'GM for national aviation authorities on organizing a national forum on the FDM topic';

   Responsible – BAS/DOACP

2. Organize regular meetings with Romanian aircraft operators in order to:

   - Promote the benefits of FDM on operational safety;
   - Exchange of FDM information in the context of *Just Culture*;
   - Foster the operators to use documents on good practices, prepared by EAFDM or other bodies;
   - Foster the operators to include in their own FDM Programmes relevant events at least for the safety risks highlighted in this document (see Operational Action Field) and monitoring the evolution of this action.

     Responsible – BAS/SGL-FDM/DOACP

26.

AO.09.02 - General - Individual flight time specification schemes

Description
The aim of this action is to ensure that competent authorities have the necessary capacity to assess and approve individual flight time specification operator schemes.

In this respect, the competent authority should focus on verifying the effective implementation of the processes established to ensure the requirements on operators' responsibilities and to ensure adequate management of fatigue risks.

Objective

Increasing the level of flight safety through a combination of actions addressing safety issues in different domains.

Corresponding action from EPAS 2020-2024

MST.034 - Flight time specification schemes

Performance Indicator

n.a.

Measurement
n.a.

Performance target
n.a.

Alert level
n.a.

Measures to reach the performance target

1. RCAA shall ensure that inspectors involved in the oversight of flight operations have the necessary competencies to assess and approve individual flight time specification schemes.

Responsible - DOACP

FIELD: HELICOPTER OPERATIONS

This action area includes all helicopter operations. For comparison, EPAS 2020-2024 includes in this area of action the following actions performed with helicopters:

- Offshore (part of CAT);
- Other CAT operations performed by AOC holders;
- SPO/aerial work;
- Non-commercial operations.

27.

AO.09.01 - Increasing the safety degree of helicopter operations

Description
According to the *Risk Portfolio for civil aviation in Romania - 2019*, the main risk areas for helicopter operations are:

- LOC-I (*Loss of control in flight*), which represented the cause of all accidents resulting in fatalities within the type of operations reviewed, and the serious incident;
- LOC-G (*Loss of control on ground*), CFIT (*Controlled flight into terrain*), ARC (*Abnormal runway contact*) and SCF-PP (*System/component failure - powerplant*) are the main causes of accidents without casualties;
- MAC type events - AI (*Airspace infringement)* and are the main causes of the incidents.

The above risk areas largely coincide with those highlighted at EASA level through *Safety Report 2018*.

Objective
Monitor for the purpose of highlighting the control means of the risks associated with events in helicopter operations.

Raising awareness of risks and good practices among the community of helicopter operators

Corresponding action from EPAS 2020-2024
MST.015 - Helicopter safety events

Performance Indicator
LOC-I, LOC-G, CFIT, ARC, AI SCF-PP and SCF-NP type events in helicopter operations.

Measurement
The number of LOC-I, LOC-G, CFIT, ARC, AI type events is measured.
For the SCF-PP type events, the ones in the ' *tail rotor and main rotor failures or malfunctions*' category are measured.

For the SCF-NP type events, those in the '*loss of redundancy of essential systems - electrical, hydraulically, NAV, flight controls, landing gear' category* are measured.

Performance target
Downward trend in the annual number of MAC type events.

Alert level
Whenever an event of the type described above occurs in helicopter operations.

Measures to reach the performance target

1. Highlighting the main precursors of LOC-I, LOC-G, CFIT, ARC, AI, SCF-PP and SCF-NP type events in helicopter operations other than CAT, and the risk reduction measures posed by them.

   Responsible – GL-LAGA/ SGL-LAGA-HE

2. Organizing annual or bi-annual meetings with helicopter operators where documents drafted by EHEST, IHST, HeliOffshore, and those prepared within AACR level are promoted.

   Responsible – DOACP/ GL-LAGA/ SGL-LAGA-HE

28.

AO.09.02 - Implementation of SESAR solutions regarding the safe running of IFR operations

Description
This action is based on the assessment, together with the air navigation service provider and procedure developers, of the possibility of developing a network of routes in the lower airspace, which would facilitate the safe operation of the helicopters.
These solutions need to be implemented insofar as this is feasible. SESAR Solution Catalogue can be accessed at:
https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf

Objective
Reduction of the risk posed by the operation of helicopters.

Corresponding action from EPAS 2020-2024
MST.031 - Implementation of SESAR solutions aiming to facilitate safe IFR operations

Performance Indicator
The number of SESAR solutions aiming to facilitate safe IFR operations

Measurement
The number of implemented SESAR solutions aiming to facilitate safe IFR operations is measured.

Performance target
n.a.

Alert level
n.a.

Measures to reach the performance target

1. Highlighting SESAR solutions aiming to facilitate safe IFR operations.
   Responsible – DANA/DOACP
2. Assessment, together with the air navigation service provider and procedure developers, of the necessity and feasibility of implementing SESAR solutions aiming to facilitate safe IFR operations.
   Responsible – BAS/DANA/ROMATSA/GL-LAGA
3. Verification, as part of the oversight activity, of the manner of application of the highlighted SESAR solutions.
   Responsible - DANA

FIELD: GENERAL AVIATION OPERATIONS

Includes actions aimed at reducing the main risks to the safety of general aviation operations, with aircraft other than helicopters (aeroplanes, ULM, AUN). By comparison, the equivalent action area of EPAS 2020-2024 refers only to non-commercial general aviation operations, with aircraft registered with a mass of less than 5,700 kg.

29.

AO.10.01 - Systemic enablers - improve the dissemination of safety messages

Description
It covers actions that affect the general aviation system as a whole, covering several specific safety risks in this field.

The action consists in the dissemination of materials to promote the safety of general aviation operations, by means of the organization by the Romanian Civil Aeronautical Authority, the Romanian Air Club and/or associations in the field.

Objective
Reduction in the number of casualties occurred as a result of general aviation accidents.

Corresponding action from EPAS 2020-2024
MST.025 - Improve the dissemination of safety messages

Performance Indicator
Meetings on safety issues with civil aeronautical agents carrying out general aviation operations.

Measurement
Number of meetings on safety topics organized.

Performance target
Organize, with at least constant frequency, meetings on safety topics of general aviation operations

Alert level
n.a.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:

- Failure to comply with maintenance schedule requirements;
- Incorrect assessment of aircraft performance;
- Error identifying the landing gear and its condition.

Responsible - GL-LAGA

2. Organizing regular meetings with general aviation operators to disseminate specific safety information.

Responsible – DOACP/ DN/ GL-LAGA/ ACR/ AZLR

30.

AO.10.02 - Systemic enablers - Development of the Just Culture in general aviation

Description
It covers actions that affect the general aviation system as a whole, covering several specific safety risks in this field.

The action consists in including in the PNSAC certain provisions specific to the Just Culture in the general aviation, in order to foster the reporting of events and to favour the positive safety behaviour.

Objective
Foster reporting of events in general aviation.

Corresponding action from EPAS 2020-2024

MST. Development of Just Culture in general aviation

Performance Indicator

Number of reporting performed by civil aeronautical agents carrying out general aviation operations.

Measurement

Number of reporting made by general aviation operators.

Performance target

Increase the number of reporting by civil aeronautical agents carrying out general aviation operations

Alert level
n.a.

Measures to reach the performance target

1. Inclusion in the PNSAC of certain provisions specific to Just Culture in general aviation.

   Responsible – BAS/DOACP/DN

2. Promote the provisions regarding Just Culture among civil aeronautical agents carrying out general aviation operations.

   Responsible – BAS/DOACP/DN/ GL-LAGA/ ACR/ AZLR

31.

AO.10.03 - Loss of separation - Reduction of the risk posed by 'Airspace infringement' by general aviation aircraft type events

Description

The MAC type events considered in this action area constitute an extension of the events addressed in the AO.03.01. and AO.03.02 actions at general aviation operations.

At European level, it was pointed out that one of the main precursors of this event type is the 'Airspace infringement' type events, along with the complexity of the airspace organization and the technological aspects.

Objective

Reduction of the risk associated to 'Airspace infringement' type events in general aviation.

Corresponding action from EPAS 2020-2024

MST.028 - Member States shall develop and maintain a National Plan for Civil Aviation Safety (also includes the former MST.016 from the previous EPAS edition - Risks generated by the general aviation operations leading to airspace infringement

Performance Indicator

'Airspace infringement' type events occurred with the involvement of an operator/pilot in the area of responsibility of the Romanian competent authorities.

Measurement

The number of 'Airspace infringement' type events occurred with the involvement of an operator/pilot in the area of responsibility of the Romanian competent authorities is measured.

Performance target

Downward trend in the annual number of 'Airspace infringement' type events.

Alert level

When the number of events per quarter exceeds the quarterly average of such events in the last 5 years.

Measures to reach the performance target

1. Highlighting and applying the risk reduction measures posed by the main precursors of this type of events, namely:
   - Flights without bilateral radio talks with the ATC unit;
   - Poor/scarce communication between pilots and ATC unit;
   - Lack of adequate fitting of aircraft with specific equipment (radio 8.33 KHz, transponder).

Responsible – GL-LAGA/ ACR/ AZLR

2. As part of the oversight activity, the raise of quality of the support offered to the general aviation operators by the air navigation service provider shall be pursued (**FOT.010**)

Responsible – DANA/ ROMATSA

3. Develop an online platform for briefing general aviation operators, facilitating their access to aeronautical information through easy/intuitive graphics

Responsible – BAS/DOACP/DANA/ GL-LAGA/ACR/AZLR/ROMATSA

FIELD: AERODROMES

Description
This action is based on the assessment, together with the aerodrome operators and the air navigation service provider, of the need to implement SESAR solutions related to runway safety.

These solutions are designed to improve runway safety and must be implemented insofar as this is feasible.

SESAR Solution Catalogue can be accessed at:
https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf

32.

AO.02.06 - Runway safety - Implementation of SESAR solutions for runway safety

Objective
Increased safety of runway operations.

Corresponding action from EPAS 2020-2024
MST.029 - Implementation of SESAR solutions for runway safety.

Performance Indicator
Number of SESAR solutions for runway safety implemented.

Measurement

The number of SESAR solutions for runway safety implemented at least with one Romanian civil aeronautical agent is measured.

Performance target
n.a.

Alert level
n.a.

Measures to reach the performance target

1. Highlighting SESAR solutions for runway safety.

   Responsible – GL-AD/ROMATSA

2. Assessment, together with the aerodrome operators and the air navigation service provider, of the necessity and feasibility of implementing SESAR solutions related to runway safety

   Responsible –GL-AD/ROMATSA

3. Verification, as part of the oversight activity, of the manner of application of the highlighted SESAR solutions.

   Responsible - DANA

FIELD: DRONES

33.

AO.17.01 - Reduction of the risks associated with the operation of unmanned aircraft used in civil applications

Description

Unmanned aircraft - aircraft guided either by an autopilot on board, or by remote control from a ground control centre or other manned aircraft[1].

Subsequent to the entry into force of the provisions of Regulation (EU) No 1139/2018 and in harmonizing the European requirements regarding the planning and conduct of flight activities with unmanned aircraft in the European airspace,

a. the Commission Delegated Regulation (EU) 2019/945 of 12 March 2019 on unmanned aircraft systems and on third-country operators of unmanned aircraft systems from third countries were prepared and published;
b. Commission Implementing Regulation (EU) 2019/947 of 24 May 2019 on the rules and procedures for the operation of unmanned aircraft;

Consequently, as of July 1, 2019, in order to be able to market unmanned aircraft on the EU market, producers, importers and distributors are required to comply with the provisions of Regulation (EU) 2019/947.

Starting with July 1, 2020, for the planning and conduct of flight activities with unmanned aircraft in the EU airspace, including that of Romania, the operators of these aircraft shall have the obligation to comply with the requirements of the national statutory rules, and those of the Regulation (EU) 2019/947.

Objective

Reduction of the number of events caused by the operation of unmanned aircraft used in civil applications, in the national airspace.

Corresponding action from EPAS 2020-2024

n.a.

Performance Indicator

Events caused by the operation of unmanned aircraft used in civil applications in national airspace.

Measurement

The number of events occurred following the operation of unmanned aircraft used in civil applications in the national airspace/the number of unmanned aircraft registered is measured.

Performance target

Reduction of the number of events caused by the operation of unmanned aircraft used in civil applications in the national airspace/number of unmanned aircraft used in registered civil applications.

Alert level

n.a.

Measures to reach the performance target

1. 03.03 - Implementation of SESAR solutions related to the reduction of the risk of MAC events occurring en route or TMA

   Responsible – DN/DOACP/DANA

2. Application of all regulations and GM issued at European level in the field of operation of unmanned aircraft used in civil applications.

   Responsible – DN/DOACP/DANA

3. Promotion and raising awareness of the need for the safe operation of unmanned aircraft used in civil applications.

   Responsible – DN/DOACP/DANA/ BAS