

# NATIONAL SAFETY PLAN





### ACRONYMS AND ABBREVIATIONS

**ALOSP** Acceptable level of safety performance

**Directorate** Civil Aviation Directorate of the Republic of Serbia

**EAPAIRR** European Action Plan to reduce the risk of unauthorized entry of aircraft into

the airspace

**EAPPRE** European Action Plan for the Prevention of Runway Excursion

**EAPPRI** European Action Plan for the Prevention of Runway Incursions

**EASA** European Union Aviation Safety Agency

**EASP** European Aviation Safety Programme

**EPAS** European Civil Aviation Safety Plan

**EC** European Commission

**ECAA** European Common Aviation Area

**ECCAIRS** European Co-ordination centre for Accident and Incident Reporting Systems

**EGAST** European Union General Aviation Safety Team

**ESSI** European Strategic Safety Initiative

International Civil Aviation Organization

**SARPs** Standards and Recommended Practices (*ICAO*)

SMS Safety Management System

**SPI** Safety Performance Indicator

**SRB** Safety Review Board

**SRG** Safety Risk Assessment Group

**SSP** State Safety Programmeme

Universal Safety Oversight Audit Programme - Continuous Monitoring

Approach

### **NATIONAL SAFETY PLAN FOR 2021 - 2023**

### INTRODUCTION

The Civil Aviation Directorate of the Republic of Serbia as a regulatory and supervisory body is responsible for air transport safety in the Republic of Serbia and as part of Its competencies implements the National Civil Aviation Safety Programme (Official Gazette of RS No. 76/19) adopted by the Government.

Under point 1.2.7 of the National Civil Aviation Safety Programme brought by Government of the Republic of Serbia, the Directorate is authorized to adopt the National Safety Plan that covers particular period.

This plan has been prepared for the period 2021-2023.

The National Safety Plan is the document that defines activities for achieving an acceptable level of safety in civil aviation. The National Safety Plan is based on: assessment of safety information collected through occurrence reporting, national and international safety data analysis, data collected during oversight activities, defined safety goals of the Republic of Serbia, *ICAO* Global Aviation Safety Plan - GASP 2020-2022), European Regional Safety Plan (European Regional Aviation Safety Plan - EUR RASP 2020 – 2022), Global Action Plan for the Prevention of Runway Excursions - GAPPRE), as well as the activities envisaged by the European Civil Aviation Safety Plan (EPAS 2021-2025).

In the past period, there was a pandemic of the COVID-19 virus, which significantly affected air transport and created new safety challenges as a result of disruption in commercial air transport operations, including its return to normal operations. Therefore, this edition of the plan includes an analysis of the risks associated with the COVID-19 virus, in addition to standard European classification that covers three broad areas: systemic, operational, and safety issues arose from the implementation of new technologies. The plan also includes national issues related to safety challenges previously identified in domain of general aviation performed by aircraft that are not belong to complex motor-powered aircraft. The National Safety Plan determines activities and actions for the implementation of the National Civil Aviation Safety Programme. They were determined after safety assessment, which identified safety issues at the national level, as well as safety issues identified at the Pan-European level by *EASA* through the *EPAS*.

The structure of the second edition of the National Safety Plan was made in accordance with the European Aviation Safety Plan (*EPAS*), where the activities were divided into the following categories:

- \* systemic issues;
- \* operational issues;
- \* safety issues arising from the integration of new technologies;
- \* national issues.

The purpose of this categorization is to provide a proactive and reactive approach to safety management in a comprehensive manner.

### SYSTEMIC ISSUE

Systemic issues are those related to civil aviation generally. Connection of these issues to an individual occurrence or situation is not always obvious. These connections are hidden factors that become perceptible only after being triggered by causal factors that play a significant role in the escalation of a safety occurrences. These issues are very often related to deficiencies in organizational processes and procedures.

# 1. SYS.RS.001 Development and Implementation of the National Civil Aviation Safety Programme

### EPAS reference

MST.0001, MST.0028

### **Description**

The purpose of this systemic activity is the development of the National Civil Aviation Safety Programme in Civil Aviation, and then the development of the National Safety Plan. The goals of the National Civil Aviation Safety Programme are realized through the implementation of the National Safety Plan, by active monitoring of its implementation and its continuous improvement.

### **Activities**

SYS.RS.001 (1)

The Directorate has developed National Safety Plan and work on its implementation is ongoing. Achieved results are to be analyzed by Safety Risk Assessment Group, which then is giving proposals for National Safety Plan updates accordingly.

### Time frame

**SYS.RS.001** (1). 01/01/2022

### Results

SYS.RS.001 (1). The National Safety Plan has been published and its implementation is ongoing.

### **Status**

 $\overline{SYS.R}S.001$  (1). Continuous action.

### SYS.RS.002 Promoting Safety Management Systems

### **EPAS** reference

MST.0002, SPT.0057

### Description

The purpose of the activity is to support aviation entities in the development and implementation of their safety management systems.

### Activities

**SYS.RS.002** (1).

The Directorate will publish the instructions that *European Strategic Safety Initiative* has been developed.

### Time frame

**SYS.RS.002** (1). First quarter of 2022.

### Results

SYS.RS.002 (1). The Directorate will publish a link on its web page (Link) for ESSI instructions.

**SYS.RS.002** (1). In progress

# SYS.RS.003 Flight Data Recorders data usage (Flight Data Monitoring – FDM) Reference to EPAS

MST.0003

### Description

Aircraft operators *FDM* programs do not take into account all operational issues identified at a European level.

### Activities

SYS.RS.003 (1).

Through the implementation of the oversight programme, the Directorate will ensure that the aircraft operators within their *FDM* programs define occurrences that are specified in the National Safety Plan, taking into account all operational issues identified at the European level.

### Results

SYS.RS.003 (1). The Directorate will on its web page publish information related to work of *FDM* European Operators Forum (*European operators FDM forum - EOFDM*).

### Time frame

SYS.RS.003 (1). First quarter of 2022

### Status

**SYS.RS.003** (1). In progress.

# SYS.RS.004 Staffing of civil aviation authorities (in terms of number and competence)

Reference to **EPAS** 

MST. 0032

### Description

The Directorate will provide the necessary staffing with qualified and competent staff in order to conduct oversight of implementation of the safety management system within all aviation entities in the Republic of Serbia.

### Activities

**SYS.RS.004** (1). The Directorate continuously pursues a proactive HR policy in order to provide the necessary qualified personnel in timely manner for the effective carrying off of safety oversight.

# SYS.RS.005 Safe return to normal operations after COVID-19 in all civil aviation domains

EPAS reference

### **MST.0033**

EPAS Vol III, Ch. 18. COVID-19

<u>SI-5001</u> (<u>Reduced oversight by competent authorities due to lockdown, SI-5002</u> (<u>Aviation personnel fatigue</u>), <u>SI-5005</u> (<u>Restarting a complex system is challenging</u>), <u>SI-5011</u> (<u>Rapid storage</u> and de-storage of aircraft may lead to technical failures</u>)

### Description

The Directorate will ensure carrying off oversight on safety management system at all aviation entities in the Republic of Serbia in *COVID-19* conditions.

### Activities

SYS.RS.005 (1). The Directorate will continuously oversee aviation entities to ensure a successful return to normal operations after COVID- 19 pandemic.

 $\frac{\text{Time frame}}{SYS.RS.005}$  (1). First quarter of 2022.

### Results

SYS.RS.005 (1). All aviation entities shall apply the necessary actions for safe return to normal operations.

 $\frac{\text{Status}}{SYS.RS.005}$  (1). An ongoing task till the COVID-19 pandemic is over.

### **OPERATIONAL ISSUES**

Operational issues are the most often identified through the occurrence reporting and analysis. In Commercial Air Transport, operational safety issues are categorized into eight different categories that include significant occurrences that could lead to an accident. These occurrences represent the last phase in a series of occurrences in chain that precede the accident. These occurrences are usually preceded by other noticeable problems that weaken efficiency of the safety system. They may be related to weather conditions, air traffic services, aerodrome services, flight crew procedures, etc.

It is important to note that certain issues such as unstable approaches, procedures in severe meteorological conditions or inadequate flight crew actions have an impact on more than one area of identified risks. Also, human factor issues affect various areas of identified safety risks.

### OPS.RS.001 Excursion of an Aircraft from a Taxiway or Runway (RE - Runway

Excursion)

EPAS reference

*MST.0029* 

SI-0019, SI-0035, SI-2007, SI-2010

### Description

The purpose of this activity is to reduce the risk of runway or taxiway excursions.

### Activities

*OPS.RS.001* (1). The Directorate will ensure that Safety indicators defined in SSP will cover cases of aircraft taxiway or runway excursions with related contributory factors.

*OPS.RS.001* (2). The Directorate will ensure that all aviation entities in the Republic of Serbia are aware of recommendations from *GAPPRE*.

*OPS.RS.001* (3). The Directorate will ensure, that the occurrences preceding excursions from taxiways or runways are included in operator's *FDM* (*GAPPRE* recommendations *OPS* 2, *OPS* 31).

*OPS.RS.001* (4). The Directorate will ensure that training plans and programs of basic, continuous, and refresher training include topics on prevention of aircraft taxiway or runway excursions. *(GAPPRE* recommendations *OPS* 3, *ANSP1*).

*OPS.RS.001* (5). The Directorate will ensure that assessment of the risk factors preceding RE is included in the aerodrome operator's safety management system *RE* (*GAPPRE ADR7*, *ADR8*). OPS.RS.001 (6). The Directorate will continuously monitor the implementation of previous activities.

### Time frame

OPS.RS.001 (1). Implemented.

OPS.RS.001 (2). Implemented.

OPS.RS.001 (3). Implemented.

OPS.RS.001 (4). Implemented.

OPS.RS.001 (5). Implemented.

OPS.RS.001 (6). Ongoing activity.

### Results

*OPS.RS.001* (1). The risk factors for taxiway or runway excursions are covered in the National Safety Plan with related safety indicators.

*OPS.RS.001* (2). Aviation entities in the Republic of Serbia are familiar with the recommendations from *GAPPRE*.

*OPS.RS.001* (3). Occurrences preceding excursions from taxiways or runways are included in operator's *FDM*.

*OPS.RS.001* (4). *RE* preventive measures are included in initial, continuing and refresher training for pilots, air traffic controllers, and aerodrome staff.

*OPS.RS.001* (5). Risk assessment of factors leading to the *RE* is included in the aerodrome operator safety management system.

OPS.RS.001 (6). Continuous oversight process is ensured.

### Status

OPS.RS.001 (1). Implemented.

OPS.RS.001 (2). Implemented.

OPS.RS.001 (3). Implemented.

OPS.RS.001(4). Implemented.

OPS.RS.001 (5). Implemented.

OPS.RS.001(6). Ongoing activity.

### OPS.RS.002 Airspace Infringement (Airspace Infringement Risks)

### Reference to **EPAS**

SI-0025

### **Description**

The purpose of this activity is to reduce the risk of airspace infringement.

### Activities

*OPS.RS.002* (1). The Directorate will provide safety indicators that covers the cases of airspace infringement and related contributory factors.

*OPS.RS.002* (2). Within the oversight programme, Directorate will ensure verification of compliance with the recommendations *from the EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction*.

*OPS.RS.002* (3). The Directorate will perform recommended actions for regulatory authorities from *EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction*.

### Time frame

OPS.RS.002 (1). Implemented.

*OPS.RS.002* (2). Second quarter of 2022

*OPS.RS.002* (3). Second quarter of 2022

### Results

*OPS.RS.002* (1). Risk factors for unauthorized entry of aircraft into the notified airspace are covered by the National Safety Plan through appropriate safety indicators.

*OPS.RS.002* (2). Verification of compliance with the recommendations from *EAPAIRR-European Action Plan* for *Airspace Infringement Risk Reduction* is included in the Directorate's oversight programme.

*OPS.RS.* 002 (3). Recommended actions for regulatory authorities from *EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction* have been taken.

### Status

OPS.RS.002 (1). Implemented.

*OPS.RS.* 002 (2). In progress.

*OPS.RS.002* (3). In progress.

### OPS.RS.003 Aircraft Collision in the Air (MAC-Mid-air collision)

### EPAS reference

*MST.0030* (Implementation of SESAR solutions aiming to reduce the risk of mid-air collision en-route and in terminal maneuvering areas),

SI-2001, SI-2002

### Description

The purpose of this activity is to reduce the risk of mid-air collisions.

### Activities

*OPS.RS.003* (1). The Directorate will provide safety indicators that covers cases of risk of mid-air collisions.

*OPS.RS.003* (2). The Directorate will prioritize the activities of oversight programme on aircraft operator's safety management system/FDM related to risk of mid-air collisions and the factors leading to them.

*OPS.RS.003* (3). The Directorate will continuously monitor the implementation of previous activities.

### Time frame

OPS.RS.003 (1). Implemented.

OPS.RS.003 (2). Implemented.

OPS.RS.003 (3). Ongoing activity.

### Results

*OPS.RS.003* (1). Risk factors of mid-air collisions of aircraft are covered in the National Safety Plan through appropriate safety indicators.

*OPS.RS.003* (2). The mid-air collisions and factors that precede them have priority in the oversight of the safety management system and *FDM* air operator.

*OPS.RS.* 003 (3). Monitoring of reported occurrences of the aircraft operator in terms of risk of midair collisions and the factors that precede them in order to identify potential risks in operations of aircraft operator.

### Status

*OPS.RS.003* (1). Implemented.

OPS.RS.003 (2). Implemented.

OPS.RS.003 (3). Ongoing activity.

### OPS.RS.004 Controlled Flight into Terrain (CFIT)

Reference to *EPAS* SI-2002, SI-2004, SI-2028

### **Description**

The purpose of this activity is to reduce the risk of controlled flight of aircraft into terrain, as well as to eliminate the causes that lead to the occurrence of controlled flight of aircraft into terrain.

### Activities

*OPS.RS.004* (1). The Directorate will provide safety indicators that cover cases of controlled flight of aircraft into terrain and related contributory factors.

*OPS.RS.004* (2). The Directorate will include in the oversight programme issues related to controlled flight of aircraft into terrain and the factors that may have preceded that.

*OPS.RS.004* (3). Monitoring of reported occurrences of the aircraft operator related to the risk of controlled flight of aircraft into terrain.

### Time frame

OPS.RS.004 (1). Implemented

*OPS.RS. 004* (2). Implemented.

OPS.RS.004 (3). Ongoing activity.

### Results

*OPS.RS.004* (1). Risk factors of controlled flight of aircraft into terrain are covered in the National Safety Plan through appropriate safety indicators.

*OPS.RS.004* (2). The issue of controlled flight of aircraft into terrain and the contributory factors is included in the Directorate's oversight programs.

*OPS.RS.004* (3). Monitoring of reported occurrences of the aircraft operator in terms of the risk of controlled flight of aircraft into terrain and contributing factors in order to identify operator's potential operational risks.

### Status

*OPS.RS.004* (1). Implemented.

OPS.RS.004 (2). Implemented.

OPS.RS.004 (3). Ongoing activity.

### OPS.RS.005 Loss of control in-flight (LOCI)

Reference to EPAS

MST. 0028

SI-0001, SI-0009, SI-0012, SI-0018, SI-0024

### Description

The purpose of this activity is to reduce the risk of loss of control in-flight, as well as to eliminate the causes that can lead to the loss of control in-flight.

### Activities

*OPS.RS.005* (1). The Directorate will provide safety indicators that cover cases of loss of control inflight and related contributing factors.

*OPS.RS.005* (2). The Directorate will include the issue of loss of control in-flight and related contributing factors in the oversight programme.

*OPS.RS.005* (3). Monitoring of reported occurrences by aircraft operator related to risk of loss of control in-flight.

### Time frame

*OPS.RS.005* (1). Implemented.

OPS.RS.005 (2). Implemented.

OPS.RS.005 (3). Ongoing activity.

### Results

*OPS.RS.005* (1). Risk factors of control in-flight are covered in the National Safety Plan with appropriate safety indicators.

*OPS.RS.005* (2). The issue of loss of control in flight and the factors that may precede it are included in the Directorate's oversight programme.

*OPS.RS.005* (3). Based on monitoring of the reported occurrences by the air operator in terms of the risk of loss of control in-flight and the preceding factors for identifying the potential risks in the operator's operations.

### Status

*OPS.RS.005* (1). Implemented.

OPS.RS.005 (2). Implemented.

OPS.RS.005 (3). Ongoing activity.

### OPS.RS.006 Aircraft Incursion onto Taxiway or Runway (RI-Runway Incursion)

Reference to EPAS

MST. 0028

SI-0005, SI-0006. SI-025

### Description

The purpose of this activity is to reduce the risk of taxiway or runway incursion, as well as the causes for such occurrences.

### Activities

*OPS.RS.006* (1). The Directorate will use safety indicators to cover the cases of aircraft taxiways or runway incursions and related contributory factors.

*OPS.RS.006* (2). The Directorate will ensure that all aviation entities in the Republic of Serbia are aware of the recommendations from *EAPRI-European Action Plan for the Prevention of the Runway Incursion*, that the recommendations *EAPRI* are implemented and to safety teams be established and functioning (*RST-Runway Safety Team*).

*OPS.RS.006* (3). Monitoring of reported occurrences by aircraft operators in the case of taxiway or runway incursions and preceding factors in order to identify operator's potential operational risks.

### Time frame

*OPS.RS.006* (1). Implemented.

OPS.RS.006 (2). Implemented.

*OPS.RS.006* (3). Ongoing activity.

### Results

**OPS.RS.006** (1). Risk factors for taxiway or runway incursions are covered in the National Safety Plan with appropriate safety indicators.

*OPS.RS.* 006 (2). Aviation entities in the Republic of Serbia are familiar with the recommendations from *EAPRI*, recommendations are implemented and safety teams (*RST-Runway Safety Team*) are established and they are functioning.

*OPS.RS.006* (3). Monitoring of reported occurrences by aircraft operators in the case of taxiway or runway incursions and preceding factors in order to identify operator's potential operational risks.

### Status

OPS.RS.006 (1). Implemented.

OPS.RS.006 (2). Implemented.

OPS.RS.006 (3). Ongoing activity.

### OPS.RS.007 Occurrence of fire, smoke or fumes in the aircraft (FIRE)

Reference to **EPAS** 

SI.1011, SI.1017, SI.1027

### Description

The purpose of this activity is to reduce the risk of uncontrolled fire, smoke or fumes in the aircraft, as well as to reduce the causes that could can lead to uncontrolled fire, smoke or fumes in the aircraft.

### **Activities**

*OPS.RS.007* (1). The Directorate will cover the occurrence of fire, smoke or fumes in the aircraft and the contributory factors.

*OPS.RS.007* (2). The Directorate will include in the monitoring programme the issue of fire, smoke or fumes in the aircraft and the contributing factors.

*OPS.RS.007* (3). Monitoring of reported occurrences in cases of uncontrolled fire, smoke or fumes onboard.

### Time frame

*OPS.RS.007* (1). Implemented.

OPS.RS.007 (2). Implemented.

OPS.RS.007 (3). Ongoing activity.

### Results

*OPS.RS.007* (1). Risk factors of fire, smoke or fumes onboard are covered in the National Safety Plan with appropriate safety indicators.

*OPS.RS.007* (2). The issue of the occurrence of fire, smoke or fumes in the aircraft and factors that may precede them, are included in the Directorate's oversight programme.

*OPS.RS.007* (3). Monitoring of reported occurrences of fire, smoke or fumes in aircraft in order to identify operator's potential operational risks.

### Status

OPS.RS.007 (1). Implemented.

OPS.RS.007 (2). Implemented.

OPS.RS.007 (3). Ongoing activity.

### OPS.RS.008 Safety of Ground Operations

### EPAS reference

Sl.0001 Sl.1004 Sl.0006 Sl.1016 Sl.4014

### **Description**

The purpose of this activity is to reduce safety risks in ground operations.

### **Activities**

*OPS.RS.008* (1). The Directorate will cover safety of ground operations with safety indicators.

*OPS.RS.008* (2). The issue of ground operations Directorate will include in the oversight programme.

*OPS.RS.008* (3). Monitoring of reported occurrences related to ground operations.

### Time frame

OPS.RS.008 (1). Implemented.

OPS.RS.008 (2). Implemented.

OPS.RS.008 (3). Ongoing activity.

### Results

*OPS.RS.008* (1). The safety factors of ground operations are covered in the National Safety Plan with appropriate safety indicators.

*OPS.RS.008* (2). Safety issues of ground operations are included in the oversight programme of the Directorate.

*OPS.RS.008* (3). Monitoring of reported occurrences related to ground operations.

### Status

*OPS.RS.008* (1). Implemented.

OPS.RS.008 (2). Implemented.

OPS.RS.008 (3). Ongoing activity.

### OPS.RS.009 Helicopter Operation Safety

### Reference to **EPAS**

EASA-European Rotorcraft Roadmap

To be developed.

### OPS.RS.010 Airspace Infringement by General Aviation Aircraft

### EPAS reference

EASA- General Aviation Road Map 2.0

### <u>Description</u>

The purpose of this activity is to reduce risk of airspace infringement by general aviation aircraft which are not complex motor-powered aircraft.

### **Activities**

*OPS.RS.010* (1). The Directorate will analyze activities from *EAPAIRR* relating to general aviation aircraft.

*OPS.RS.010* (2). The Directorate will carry out activities from *EAPAIRR* relating to general aviation aircraft.

### Time frame

*OPS.RS.010* (1). Third quarter of 2022.

*OPS.RS.010* (2). Third quarter of 2022.

### Results

*OPS.RS.010* (1). Activities from *EAPAIRR* relating to general aviation aircraft were analyzed.

*OPS.RS.010* (2). Observed and analyzed activities from *EAPAIRR* relating to general aviation aircraft have been implemented.

### Status

*OPS.RS.010* (1). In progress.

*OPS.RS.010* (2). In progress.

### OPS.RS.011 Bird Strike and Wildlife strike hazard

### Reference to **EPAS**

SI.1005, SI.4013, SI.5010.

### Description

The purpose of this activity is to reduce the risk of possible bird and wildlife strikes.

### Activities

*OPS.RS.011* (1). The Directorate will publish regulations and instructions related to the reduction of the hazard of possible bird and wildlife strike.

### Time frame

*OPS.RS.011* (1). 01/01/2022

### Results

*OPS.RS.011* (1). Regulations and instructions related to reducing the risk of the possible bird and wildlife strikes have been published.

### Status

*OPS.RS.011* (1). In progress.

### SAFETY ISSUES ARISING FROM NEW TECHNOLOGIES

These issues will be taken into the consideration by monitoring of regulatory activity and development projects at the European Union level, and results of these activities will be incorporated in following versions of the National Safety Plan.

### EPAS reference:

### Vol.III, Chapter 15

15.1.1 New business models

15.1.2 New products, systems, technologies and operations

15.1.3 SESAR deployment

15.1.4 All-weather operations (AWOs)

### **NATIONAL ISSUES**

National issues are related to general aviation operations performed by aircraft other than complex motor-powered aircraft. The Directorate will include in the National Plan the recommendations from the current European General Aviation Roadmap 2.0 (*EASA-General Aviation Road Map 2.0*) relating to: collision avoidance, decision-making process (in flight), meteorological situation assessments, loss of control in flight induced by stall and spin, flight information service, flight over mountainous terrain, piston engine carburetor icing, safe usage of advanced navigation devices, and the hazard of bird strikes.

### NA.GA.001 Collision Avoidance

### **EPAS** reference

SI-4009 (Deconfliction between IFR and VFR traffic),

PJ.11-A4 (Enhanced airborne collision avoidance for general aviation),

PJ.01-06 (Enhanced rotorcraft and general aviation operations around airports (TMA)) SESAR

### <u>Description</u>

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft, which may occur as a result of non-compliance with collision avoiding procedures.

### Activities

*NA.GA.001* (1). Based on the above recommendations, the Directorate will define supervisory activities that will include analysis and imposed measures to reduce the risks of accidents of general aviation aircraft that may occur due to non-compliance with collision avoiding procedures.

*NA.GA.001* (2). Based on the same recommendations, the Directorate will define safety improvement activities (instructions, seminars, procedures, etc.) related to accidents of general aviation aircraft that may occur due to non-compliance with collision avoiding procedures.

### Time frame

*NA.GA.001* (1). Second guarter of 2022.

*NA.GA.001* (2). Second quarter of 2022.

### Results

**NA.GA.001** (1). Safety oversight activities have been defined in order to improve enhance safety and they are related to the reduction of the risk of general aviation accidents that may occur due to non-compliance with collision avoiding procedures.

*NA.GA.001* (2). Activities have been defined in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of general aviation accidents that may occur due to non-compliance with collision avoiding procedures.

### Status

*NA.GA.001* (1). In progress.

*NA.GA 002* (2). In progress.

### NA.GA.002 Decision Making Process

Reference to EPAS

SI.4003

### **Description**

The purpose of this activity is to reduce the risk of general aviation accidents that may occur due to inadequate decision-making process.

### Activities

*NA.GA.002* (1). Based on the recommendations by the European General Aviation Roadmap 2.0 (*General Aviation Road Map 2.0*), the Directorate will, define oversight activities that will address aircraft accidents in flight that may occur due to inappropriate decisions of the aircraft crew.

NA.GA. 002 (2). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define activities, in order to improve safety (instructions, seminars, procedures, etc.) that will address aircraft accidents in flight that may occur due to inappropriate decisions of aircraft crews.

### Time frame

*NA.GA.002* (1). Second quarter of 2022.

*NA.GA.002* (2). Second quarter of 2022.

### Results

**NA.GA.002** (1). Defined oversight activities in order to improve safety related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to inadequate decision-making.

**NA.GA.002** (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due to improper decision-making.

### Status

*NA.GA.002* (1). In progress.

*NA.GA. 002* (2). In progress.

### NA.GA.003 Meteorological Situation Assessment

### EPAS reference

Sl.2019, EASA-Weather Information to Pilots Strategy Paper

### **Description**

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that may occur due to incorrect assessment of meteorological conditions.

### **Activities**

*NA.GA.003* (1). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define monitoring activities that will address aircraft accidents that may occur due to inadequate assessment of meteorological conditions.

*NA.GA.003* (2). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define activities to improve safety (instructions, seminars, procedures, etc.) that will address aircraft accidents that may occur due to inadequate assessment of meteorological conditions.

### Time frame

*NA.GA.003* (1). Second quarter of 2022. *NA.GA.003* (2). Second quarter of 2022.

### Results

**NA.GA.003** (1). Defined monitoring activities in order to improve safety related to the reduction of risk factors for aircraft accidents that may occur due to inadequate assessment of meteorological conditions. **NA.GA.003** (2). Defined activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to inadequate assessment of meteorological conditions.

### Status

*NA.GA.003* (1). In progress. *NA.GA.004* (2). In progress.

### NA.GA.004 Operations over Hilly and Mountainous Terrain

### Reference to **EPAS**

None

### **Description**

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that may occur due to flying in hilly and mountainous areas or in their vicinity.

### **Activities**

NA.GA.004 (1). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define oversight activities that will address accidents of general aviation aircraft that may occur due to flying in hilly and mountainous areas or in their vicinity.

NA.GA. 004 (2). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to reducing the risk of accidents of general aviation aircraft that may occur due to flying in hilly and mountainous areas or in their vicinity.

### Time frame

*NA.GA.004* (1). Second quarter of 2022. *NA.GA.004* (2). Second quarter of 2022.

### Results

**NA.GA.004** (1). Defined oversight activities in order to improve safety related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to flying in hilly and mountainous terrain or in their vicinity.

*NA.GA.004* (2). Defined activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to flying in hills and mountainous terrain or in their vicinity.

### Status

*NA.GA.004* (1). In progress.

*NA.GA.004* (2). In progress.

### NA.GA.005 Piston Engines Carburetor Icing

### Reference to **EPAS**

None

### Description

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that may occur due to icing of piston engines carburetors.

### Activities

*NA.GA.005* (1). The Directorate will define activities that will include analysis and imposed measures to reduce the risk of accidents of general aviation aircraft due to icing of piston engines carburetors.

*NA.GA.005* (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft that may occur due to icing of piston engines carburetors.

### Time frame

*NA.GA.005* (1). Second quarter of 2022.

NA.GA.005 (2). Second quarter of 2022.

### Results

**NA.GA.005** (1). Defined monitoring activities in order to improve safety related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to icing of piston engines carburetors.

*NA.GA.005* (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft that may occur due to icing of piston engines carburetors.

### Status

*NA.GA.005* (1). In progress.

*NA.GA.005* (2). In progress.

### NA.GA.006 Safe Usage of Advanced Navigation Devices

### Reference to **EPAS**

None

### Description

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that may occur due to inadequate usage of Advanced Navigation Devices.

### **Activities**

*NA GA 006* (1). The Directorate will define activities that will include analysis and imposed measures to reduce the risk of accidents of general aviation aircraft due to inadequate usage of Advanced Navigation Devices.

*NA.GA.006* (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due to inadequate usage of Advanced Navigation Devices.

### Time frame

*NA.GA.006* (1). Second quarter of 2022.

*NA.GA.006* (2). Second quarter of 2022.

### Results

**NA.GA.006** (1). Defined oversight activities in order to improve safety related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to inadequate usage of Advanced Navigation Devices.

*NA.GA.006* (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due to inadequate usage of Advanced Navigation Devices.

### Status

**NA.GA.006** (1). In progress. **NA.GA.006** (2). In progress.

### NA.GA.007 Loss of Control in flight due to Stall or Spin

### Reference to EPAS

None

### Description

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that may occur due to the loss of control as a consequence of spin and stall.

### **Activities**

**NA.GA.007** (1). The Directorate will define activities that will include analysis and imposed measures to reduce the risk of accidents of general aviation aircraft due to loss of control in flight as a consequence of spin and stall.

*NA.GA.007* (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due to loss of control in flight as a consequence of stall and spin.

### Time frame

NA.GA.007 (1). Second quarter of 2022.

*NA.GA.007* (2). Second quarter of 2022.

### Results

**NA.GA.007** (1). Defined oversight activities in order to improve safety related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to loss of control in flight as the consequence of stall and spin.

**NA.GA.007** (2). Defined activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of risk factors for accidents of general aviation aircraft that may occur due to loss of control in flight as a result of stall and spin.

### Status

NA.GA.007 (1). In progress. NA.GA.007 (2). In progress.

### NA.GA.008 Flight Information Service

### **EPAS** reference

None

### **Description**

The purpose of this activity is to reduce the risk of accidents in general aviation aircraft that may occur due to inadequate service provided or because of inadequate usage of information provided by the flight information service provider.

### Activities

*NA.GA.008* (1). The Directorate will define oversight activities that will address general aviation aircraft accidents that may occur due to inadequate service provision or inadequate usage of information provided by the flight information service provider.

*NA.GA.008* (2). The Directorate will define safety improvement activities (instructions, seminars, procedures, etc.) that will address general aviation accidents that may occur due to inadequate service provision or inadequate use usage of information provided by the flight information service provider.

### Time frame

*NA.GA.008* (1). Second quarter of 2022. *NA.GA.008* (2). Second quarter of 2022.

### Results

**NA.GA.008** (1). Defined oversight activities to improve safety related to the reduction of risk factors for general aviation aircraft accidents that may occur due to inadequate service provision or inadequate usage of information provided by the flight information service provider.

**NA.GA.008** (2). Defined activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of risk factors for general aviation aircraft accidents that may occur due to inadequate service provision or inadequate usage of information provided by the flight information service provider.

### Status

*NA.GA.008* (1). In progress. *NA.GA.008* (2). In progress.

### NA.GA.009 Bird Strike

Reference to EPAS SI.1005, SI.4003

### Description

The purpose of this activity is to reduce the risk of accidents of general aviation aircraft that can occur due to bird strikes.

### **Activities**

*NA.GA.009* (1). Based on the recommendations of the European General Aviation Roadmap 2.0, the Directorate will define oversight activities that will include accidents of general aviation aircraft that can occur due to bird strikes.

**NA.GA.009** (2). The Directorate will define safety improvement activities (instructions, seminars, procedures, etc.) that will address general aviation aircraft accidents that may occur due to bird strikes.

### Time frame

NA.GA.009 (1). Third quarter of 2022.

*NA.GA.009* (2). Third quarter of 2022.

### Results

**NA.GA.009** (1). Defined oversight activities for improvement of safety that are related to reduction of risk factors for accidents in general aviation aircraft that may occur due to due to bird strikes. **NA.GA.009** (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due to bird strikes.

### Status

*NA.GA.009* (1). In progress.

*NA.GA.009* (2). In progress.

### NA.GA.010 Safety at Flying Displays and Events

### Reference to **EPAS**

None

### **Description**

The purpose of this activity is to reduce the risk of accidents that may occur at flying displays and events.

### **Activities**

*NA.GA.010* (1). The Directorate will define supervisory activities that will include accidents that may occur at flying displays and events.

*NA.GA.010* (2). The Directorate will define activities to improve safety (instructions, seminars, procedures, etc.) that will address accidents that may occur as a result at flying displays and events.

### Time frame

*NA.GA.010* (1). Third quarter of 2022.

*NA.GA.010* (2). Third quarter of 2022.

### Results

**NA.GA.010** (1). Defined activities in order to improve safety that are related to the reduction of risk factors for accidents that may occur at flying displays and events.

**NA.GA.010** (2). The Directorate will define safety improvement activities (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents of general aviation aircraft due at flying displays and events.

### Status

*NA.GA.010* (1). In progress.

*NA.GA.010* (2). In progress.

### NA.GA.011 In-flight Icing

Reference to EPAS SI.0001, SI.0002

### Description

The purpose of this activity is to reduce the risk of accidents that may occur due to airframe icing.

### Activities

NA.GA.011 (1). Based on the recommendations EGAST (European General Aviation Safety Team), The Directorate will define oversight activities that will address accidents in general aviation that may occur due to airframe in-flight icing.

**NA.GA.011** (2). Based on the recommendations in **EGAST** (**European General Aviation Safety Team**), The Directorate will define safety improvement activities (instructions, seminars, procedures, etc.) that will address accidents of general aviation aircraft that may occur due to inflight airframe icing.

### Time frame

*NA.GA.011* (1). Third quarter of 2022. *NA.GA.011* (2). Third quarter of 2022.

### Results

NA.GA.011 (1). Defined oversight activities aiming improvement of safety related to the reduction of risk factors for accidents in general aviation that may occur due to in-flight airframe icing. NA.GA.011 (2). The Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to the reduction of the risk of accidents in general aviation that may occur due to in-flight airframe icing.

### Status

*NA.GA. 011(1)*. In progress. *NA.GA.011* (2). In progress.

# **SAFETY INDICATORS**

# **ACCIDENTS**



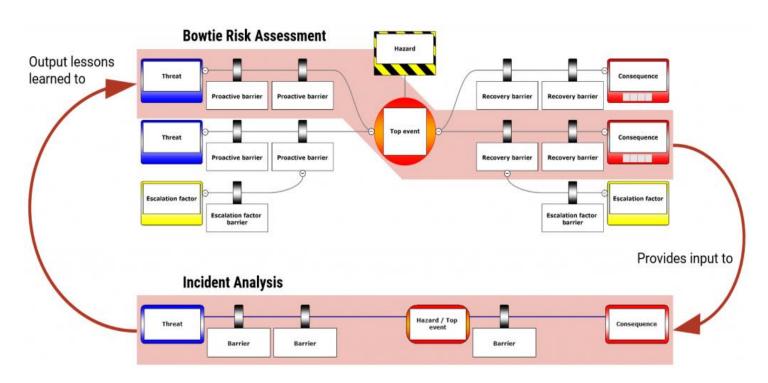
# ACCIDENTS

## Safety Objectives and Safety Indicators in the Republic of Serbia

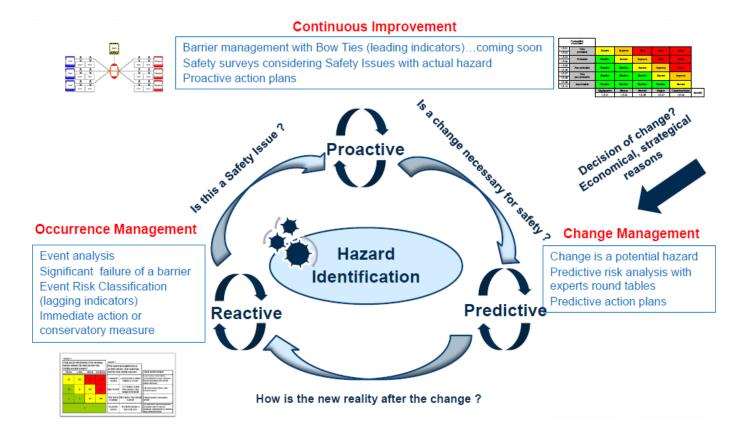
Monitoring of safety level and safety analysis enable comprehensive insight into level of safety in civil aviation and they are the basis for the adoption of safety assurance measures and measures for improvement of achieved levels of safety.

Measures to assure achieved levels of safety and safety improvement act through the prioritization of oversight in domains of increased risk (*Risk Based Oversight*), system actions (*Safety Promotion*) and Immediate reaction to safety problem (*Safety Order / Directive*). The process of continuous monitoring is graphically shown in Figure 1.

Safety indicators are a major tool for analyzing data, enabling–safety risks and trends to be identified. Based on that, measures for mitigation or eliminating identified safety risks are defined, and a graphic presentation of that process is given in Figure 2.



Picture 1



Picture 2

Safety objectives and safety indicators in the Republic of Serbia are based on principles of the European Programme for Civil Aviation Safety (*EASP*).

Safety indicators are grouped into three categories:

<u>Safety indicators of the first category</u> are those that refer to the monitoring of events that resulted in accidents and serious incidents.

<u>Safety indicators of the second category</u> are those that refer to the monitoring of certain types of events which may escalate into an accidents or serious incidents. They are defined at the international level, by the International Civil Aviation Organization (*ICAO*).

<u>Safety indicators of the third category</u> are those that refer to the monitoring of occurrences with consequences of minor severity (precursors) that contribute to the events monitored in the indicators of the second category. By monitoring and controlling (reducing/eliminating) safety risks for occurrences that are monitored by indicators of the third category, the probability of escalation into occurrences that belong to the indicators of the second category or the first category is reduced.

### 1. Safety indicators of the first category

### 1.1 Accident

### **Definition**

An **accident** means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

- (a) a person is fatally or seriously injured as a result of:
  - being in the aircraft, or,
  - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or,
  - direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
- (b) the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes) or minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike, (including holes in the radome); or
- (c) the aircraft is missing or is completely inaccessible;

A **serious injury** is defined as an injury which is sustained by a person in an accident and which:

- a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or
- b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- c) involves lacerations which cause severe hemorrhage, nerve, muscle or tendon damage; or
- d) involves injury to any internal organ; or
- e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- f) involves verified exposure to infectious substances or injurious radiation.

### **Data Sources**

The source of data is civil aviation mandatory and voluntary occurrence reporting systems.

### Measurement

The indicator is measured by the number of events in relation to the system exposure (number of fleet flight hours, number of controlled hours, number of operations, etc.) on annual basis.

### **Safety Objective**

2022: Commercial air transport: No accidents.

General aviation: No accidents.

### 1.2 Serious incident

### **Definition**

A serious incident means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft, which in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down. In the Annex of Regulation 996/2010 there is a list of examples of serious incidents.

### **Data Sources**

The source of data is civil aviation mandatory and voluntary occurrence reporting systems

### Measurement

The indicator is measured by the number of occurrences in relation to the system exposure (number of fleet flight hours, number of controlled hours, number of operations, etc.) in a given period of time.

### **Safety Objective**

**2022: Commercial air transport**: Reducing the rate of serious incidents in relation to traffic

volume (considering the five-year average).

**General aviation**: Reducing the number of serious incidents.

# SAFETY INDICATORS OF THE SECOND CATEGORY

RUN	NWAY EXCURSION				
No.	Title	Definition	Data source	Measurement	Safety objective
2.1	Uncontrolled aircraft excursion from taxiway or runway (Runway Excursions-RE)	A runway excursion means an uncontrolled departing of an aircraft from a taxiway or runway during take-off or landing. The excursion can be unintentional or intentional (for example, as a result of a certain maneuver).	The main source of information is occurrence reporting.	Abbreviation: RE It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	

RUN	RUNWAY INCURSION						
No.	Title	Definition	Data source	Measurement	Safety objective		
2.2	Real or potential unauthorized incursion to the taxiway or runway (Runway incursion RI-VAP)	A runway incursion is a situation where an aircraft, vehicle, or person is present on the taxiway or runway or in its protected area, without authorization or in any other unauthorized manner.  "Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft." ICAO	occurrence reporting.	Abbreviation: RI-VAP  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Reduction of the number of occurrences in relation to the analyzed period It is necessary to run a risk assessment of personal operations, determine the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.		

MID	AIR COLLISION				
No.	Title	Definition	Data source	Measurement	Safety objective
2.3	Mid-air Collisions and near misses-MAC (Mid-air Collisions and near misses-MAC)	Midair collision is a situation where an aircraft comes midair into contact with another aircraft. AIRPROX-aircraft proximity, near miss is a situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised.  • A-Risk of collision. The risk classification of an aircraft proximity in which serious risk of collision has existed.  • B-safety is compromised. The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised.  • C-No risk of collision.  The risk classification of an aircraft proximity in which no risk of collision has existed.  • D-Risk not determined. The risk classification of an aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination." (ICAO Doc 4444)  This safety indicator covers all cases where the minimum separation is compromised between aircraft in flight and all TCAS RA cases.	The main source of information is occurrence reporting.	Abbreviation:  MAC  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.

CO	CONTROLLED FLIGHT INTO TERRAIN							
No.	Title	Definition	Data source	Measurement	Safety objective			
2.4	Controlled flight into terrain and similar situations (Controlled flight into terrain and similar situations-CFIT)	Controlled Flight into Terrain occurs when an airworthy aircraft under the complete control of the pilot is inadvertently flown into terrain, water, or an obstacle. The pilots are generally unaware of the danger until it is too late. This safety indicator covers all cases where the minimum separation between aircraft in flight and obstacles is compromised.	The main source of information is occurrence reporting.	Abbreviation: C-FIT  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.			

LOS	OSS OF CONTROL IN FLIGHT						
No.	Title	Definition	Data source	Measurement	Safety objective		
2.5	Loss of control in flight (Loss of control in flight - LOC-I)	Loss of control of the aircraft in flight is a situation in which the pilot loses control of the aircraft in flight, resulting in a significant deviation from the intended flight path. Loss of control in flight may be temporary or complete and may be caused by human error, mechanical failure, or an external factor.	information is occurrence reporting.	Abbreviation: LOC-I  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.		

GR	OUND HANDLING				
No.	Title	Definition	Data source	Measurement	Safety objective
2.6	Ground operations safety (RAMP, G-COL, LOAD, DEICE)	This category includes collisions on the ground that may occur due to servicing, boarding, loading, or unloading of aircraft, when taxiing aircraft, the impact of a propeller blade, rotor or fan blade of aircraft, pushing and towing aircraft, this category also includes improper loading of aircraft and improperly secured cargo in aircraft, (RAMP). If a collision occurs on the ground while taxiing to or from the runway, where the aircraft comes into contact with another aircraft, vehicle, person, animal, object, or any other obstacle, while moving in any part of the airport, except in the case of aircraft towing, these cases fall into the category of collision while taxiing to or from a runway (GCOL). Ground operations safety includes two categories of collisions depending on whether the aircraft is self-propelled or not, as well as loading errors and de-icing and anticing errors. Collisions caused by runway incursions are not covered by this safety indicator.	The main source of information is occurrence reporting.	Abbreviations: GH (RAMP, GCOL, LOAD, DE-ICE)  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.

FIR	RE				
No.	Title	Definition	Data source	Measurement	Safety objective
2.7	Occurrence of fire or smoke in an aircraft in flight or on the ground that is not the result of an impact (Fire / smoke non impact F-NI)	The occurrence of fire or smoke in an aircraft in flight or on the ground which is not the result of an impact.	The main source of information is occurrence reporting.	Abbreviation: FIRE  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects.
2.8	Other Occurrences (Other)				

# SAFETY INDICATORS OF THIRD CATEGORY

RUN	WAY EXCURSION				
No.	Title	Definition	Data source	Measurement	Safety objective
3.1	Unstabilized approach - UA	An unstabilized approach is any situation where the approach of an aircraft is not stable in accordance with the criteria specified in the Operations Manual.  (Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (8))  Unstabilized approach may result in runway excursion and/or controlled flight into terrain.	The main data source is FDM. Data from reported occurrences can also be used.	Abbreviation: UA This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Runway excursion RE, Controlled flight into terrain CFIT.
3.2	Landing gear and reverse thrust malfunctions (Landing gear and reverse thrust malfunctions)	Cases involving failures of the landing gear and reverse thrust These cases include tire failures but exclude indicator errors. Failures of the landing gear and reverse thrust can lead to excursions from the taxiway or runway. (Reference: Regulation (EU) 2015/1018 Annex I, 2)	The main source of information is occurrence reporting.	Abbreviation: LG/REV This indicator is monitored annually.	2022: It is necessary to run risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: Runway excursion RE.

No.	Title	Definition	Data source	Measurement	Safety objective
3.3	Deficiencies in runway condition and related information (Deficiencies in runway condition and related information)	Cases where information on the condition of the taxiway or runway has not been provided or incorrect information has been provided (e.g. incorrect information for SNOWTAM, ATIS, and where ATS failed to provide correct information). (Reference: Regulation (EU) 2015/1018 Annex I, 3 (1), 5 (6))  These cases can lead to runway excursions.	The main source of information is occurrence reporting.	Abbreviation: RWYCON This indicator is monitored annually.	It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Runway excursion RE.
3.4	Downwind landings and takeoffs (Downwind landings and takeoffs)	Cases where the wind speed exceeds the defined maximums (headwind, side wind, downwind), and the aircraft still continues to land or take off. (Reference: Regulation (EU) 2015/1018 Annex I, 2)  These cases can lead to runway excursions.	The main data source is occurrence reporting, data obtained through FDM can be used as additional data.	Abbreviation: WIND  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Runway excursion RE.
3.5	Abnormal runway contact (Abnormal runway contact)	Cases where abnormal runway contact occurs. (Hard/heavy landings, long/fast landings, off-center landings, tail strikes, etc). <i>Reference:</i> Regulation (EU) 2015/1018 Annex 1, 1.3 (7), (11), 12 These cases can lead to runway excursions.	The main data source is occurrence reporting, data obtained through FDM can be used as additional data.	Abbreviation: ARC This indicator is monitored annually.	2022: It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second SPI category: Runway excursion RE.

No.	Title	Definition	Data source	Measurement	Safety objective
3.6	Cases of rejected take-off (Any rejected takeoff)	Cases where take-off was rejected. (Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (4))  Cases of rejected take-off at high speeds can lead to a runway excursion.	The main data source is occurrence reporting, data obtained through FDM can be used as additional data.	Abbreviation: <b>RTO</b> This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Runway excursion RE.
3.7	Inability to achieve the required or expected performance during take-off, go around or landing (Inability to achieve required or expected performance during take-off, go-around, or landing)	Cases where it was not possible to achieve the required or expected performance during take-off, landing, or go-around (Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (5))  Cases of rejected take-off at high speeds can lead to a runway excursion.	The main data source is occurrence reporting, data obtained through FDM can be used as additional data.	Abbreviation: TO/GO/ LNDG  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Runway excursion RE.

No.	Title	Definition	Data source	Measurement	Safety objective
3.8	Actual or attempted take-off, approach, or landing with incorrect configuration setting (Actual or attempted take-off, approach, or landing with incorrect configuration setting)	Take-off or take-off attempt, approach, or landing in an incorrect configuration (Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (6))	The main data source is occurrence reporting, data obtained through FDM can be used as additional data.	Abbreviation: CONFIG This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: Runway excursion RE, Loss of control in flight LOC-I.
3.9	Unauthorized presence of aircraft on the taxiway or runway, contrary to instructions received from the ATC (Runway incursion by aircraft)	Cases where the movement of the aircraft is contrary to the instructions received from ATC leading to a situation where the aircraft is on a taxiway or runway. (Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (2))	The main source of information is occurrence reporting.	Abbreviation: RI-VAP  It is necessary to monitor the total number of cases in relation to general air traffic and the values of the indicators of the group of targeted indicators for air navigation service providers.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Unauthorized presence of aircraft on the taxiway or runway: Runway incursion: RI- VAP.

No.	Title	Definition	Data source	Measurement	Safety objective
3.10	Unauthorized presence of aircraft on the taxiway or runway caused by ATC procedures (Runway incursion with direct/indirect ATC contribution)	Cases where the procedure ATC directly or indirectly led to a situation where the aircraft found itself on a taxiway or runway. (Reference: Regulation (EU) 2015/1018 Annex III, 1.3 (7))	The main source of information is occurrence reporting.	Abbreviation: RI-ATCO  This indicator is monitored annually. Each individual case of unauthorized presence of an aircraft on a taxiway or runway should be investigated to determine whether the event was caused by the operator or ATC.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Unauthorized presence of aircraft on the taxiway or runway: Runway incursion: RI-VAP.
3.11	Runway incursion by vehicle or person (Runway incursion by vehicle or person)	Cases of the unauthorized presence of vehicles or people on the taxiway. (Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (2))	The main source of information is occurrence reporting.	Abbreviation: RI-OTHER  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second SPI category: Unauthorized presence of aircraft on the taxiway or runway incursion - RI-VAP.

	MID AIR COLLISION	V			
No.	Title	Definition	Data source	Measurement	Safety objective
3.12	Separation minima infringements caused by aircraft (Separation minima infringements caused by aircraft)	This refers to situations where the prescribed separation minima between aircraft or between the aircraft and the airspace for which the separation minimum is prescribed have not been maintained. (Reference Regulation (EU) 2015/1018 Annex III, 1 (2))	The main source of information is occurrence reporting.	Abbreviation:  SMI  This indicator is monitored annually. It is necessary to investigate each individual case of violation of the minimum separation in order to determine whether the occurrence was caused by the actions of the operator or the actions of ATC.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.
3.13	Separation minima infringements with direct / indirect ATC contribution (Separation minima infringements with direct / indirect ATC contribution)	Cases where ATC procedures cause a violation of the separation minimum between aircraft, aircraft, and terrain or between aircraft in controlled airspace. (Reference Regulation (EU) 2015/1018 Annex III, 1 (2))	The main source of information is occurrence reporting.	Abbreviation: SMIATCO This indicator is monitored annually. It is necessary to investigate each individual case of violation of the minimum separation in order to determine whether the occurrence was caused by the actions of the operator or ATC.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.

No.	Title	Definition	Data source	Measurement	Safety objective
3.14	Separation minima infringements caused by UAS (SMI UAS)	Cases where unmanned aerial systems lead to an infringement of the minimum separation between aircraft in controlled airspace. (Reference Regulation (EU) 2015/1018 Annex III, 1 (2))	occurrence reporting.	Abbreviation: SMI UAS This indicator is monitored annually. It is necessary to investigate each individual case of violation of the minimum separation.	2022: Decrease in the number of occurrences compared to the analyzed period.  It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.
3.15	Airspace infringements (Airspace infringements)	Airspace infringements including unauthorized penetration of airspace. (Reference: Regulation (EU) 2015/1018 Annex III, 1 (10) (b))	The main source of information is occurrence reporting.	Abbreviation: <b>AI</b> This indicator is monitored annually. It is necessary to investigate each individual case of violation of the minimum separation in order to determine whether the occurrence was caused by the actions of the operator or <i>ATC</i> .	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.
3.16.	Level bust (Level bust)	A level bust occurs when an aircraft deviates from the set flight level regardless of whether it infringes the separation minima with another aircraft. (Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (4))	The main source of information is occurrence reporting.	Abbreviation: LB  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair Collision (MAC).

No.	Title	Definition	Data source	Measurement	Safety objective
3.17	ACAS-RA	Cases where ACAS-RA activation occurred. (Reference Regulation (EU) 2015/1018 Annex 1,5 (2))	The main source of information is occurrence reporting.	Abbreviation: ACAS-RA This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.
3.18	Lateral deviation from cleared flight path (Lateral deviations from cleared flight path)	Cases where the aircraft has deviated from the approved flight path, lateral deviation from the approved flight path by the ATS, SID / STAR deviation: Use of incorrect data or incorrect data entry in equipment used for navigation or calculation of performance, which may endanger the aircraft, persons in him or any other person. <i>Reference:</i> Regulation (EU) 2015/1018 Annex 1, 1, 1.1 (1)) Unintentional deviation from the intended or specified path that is twice less than the required navigation performance or deviation from the flight path can lead to loss of separation, air space infringement or near misses. (Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (4))	The main source of information is occurrence reporting.	Abbreviation: NAVERROR This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.

CON	CONTROLLED FLIGHT INTO TERRAIN							
No.	Title	Definition	Data source	Measurement	Safety objective			
3.19	Inadequate Separation (Inadequate separation - In the absence of prescribed separation minima, a situation in which aircraft were perceived to pass too close to each other for pilots to ensure safe separation.)	Cases where inadequate separation in airspace where no minimum separation is prescribed.  (Reference: Regulation (EU) 2015/1018 Annex III, 1 (3)	The main source of data is occurrence reporting	Abbreviation: IS This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to conduct a risk assessment of one's own operations, to determine the necessary activities, carry out the identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Midair collision and near misses MAC.			
3.20	Ground Proximity Warning System GPWS (Ground Proximity Warning System GPWS terrain warnings	Cases where the GPWS or EGPWS proximity warning system is activated. ( <i>Reference</i> (EU) 2015/1018 Annex 1, 5 (3)) In the case of activation of the GPWS proximity warning device, if the flight crew does not take action immediately, there is a controlled flight into terrain.	The main source of data is event reporting, in addition, data obtained by FDM can be used.	Abbreviation: GPWS  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Controlled flight into terrain C-FIT.			

No.	Title	Definition	Data source	Measurement	Safety objective
3.21	Errors and omissions in aeronautical databases (Errors and omissions in aeronautical database)	Cases where incorrect data is found in aeronautical databases, including out-of-date data, incorrect SID / STAR information. (Reference: Regulation (EU) 2015/1018 Annex III, 2 (2)) Errors and omissions in navigation databases can lead to infringements of separation standards or controlled flight into terrain.	The main source of information is occurrence reporting.	Abbreviation: NAV DAT  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Controlled flight into terrain C-FIT; and Mid-air collision and near misses MAC.
3.22	Operations with incorrect altimeter setting (Operation with incorrect altimeter setting)	Cases where the altimeter has been set incorrectly. This indicator includes cases where the change of altimeter setting from QNH to standard pressure, or vice versa is forgotten or where incorrect altimeter adjustment has occurred. (Reference: Regulation (EU) 2015/1018 Annex I, 1.4 (7))	The main source of information is occurrence reporting.	Abbreviation: ALT This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Controlled flight into terrain C-FIT.

No.	Title	Definition	Data source	Measurement	Safety objective
instrum below p minimu inadequ referen (Continua approach minimum	nuation of an ment approach published ums with quate visual nees uation of an instrument the below published ms with inadequate eferences)	Cases where there has been an instrumental approach below the prescribed minimum altitudes with inadequate visibility. This indicator includes the cases where the change of altimeter setting from QNH to standard pressure, or vice versa is forgotten or where incorrect altimeter adjustment has occurred. (Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (9))	The main source of information is occurrence reporting	Abbreviation: MIN ALT	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Controlled flight into terrain C-FIT

LO	SS OF CONTROL IN F	LIGHT			
No.	Title	Definition	Data source	Measurement	Safety objective
3.24	Cases of aircraft flying at a speed higher than the maximum prescribed or lower than the minimum prescribed (Low speed and high speed cases)	Cases where the air speed was higher than the maximum permitted speed, or below the minimum permitted speed, during any phase of a flight. (Reference: Regulation (EU) 2015/1018 Annex I, 1.4 (6)) Flying an aircraft below the minimum allowed speed leads to a loss of thrust. Flying the aircraft above the maximum allowed speed leads to endangering the air frame of the aircraft and loss of control over.	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation: SPEED  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.
3.25	Cases where an aircraft encounters wake turbulence from another aircraft. (Wake turbulence incidents)	Cases where an aircraft encounters wake turbulence. (Reference: Regulation (EU) 2015/1018 Annex I, 5 (7))	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation: WAKE This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.26	Severe turbulence encounter or any encounter resulting in injury to occupants or deemed to require a "turbulence check" of the aircraft	Cases of encountering sever turbulence or cases where crew and passengers have been injured or when an inspection of the aircraft is required after the flight. (Reference: Regulation (EU) 2015/1018 Annex I, 5 (11))	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation TURB This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.
	A significant wind- shear or thunderstorm encounter which has or could have endangered aircraft, persons in it or any other person (A significant wind-shear or thunderstorm encounter which has or could have endangered the aircraft, its occupants or any other person)	Flight through an area of significant wind shear and thunder storm endangering or that could have endangered the aircraft, persons in it or any other person.  (Reference: Regulation (EU) 2015/1018 Annex I, 5 (12))	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation: WSTR W This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.28	Cases of in flight icing that caused flight control difficulties, damage to the aircraft or loss or malfunction of any aircraft system (Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any aircraft system)	Icing encounter resulting in handling difficulties, damage to the aircraft or loss or malfunction of any aircraft system. (Reference: Regulation (EU) 2015/1018 Annex I, 5 (13))	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation: ICE This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.
3.29	A significant wind- shear or thunderstorm encounter which has or could have endangered aircraft, persons in it or any other person (A significant wind-shear or thunderstorm encounter which has or could have endangered the aircraft, its occupants or any other person)	Flight through an area of significant wind shear and thunder storm endangering or that could have endangered the aircraft, persons in it or any other person.  (Reference: Regulation (EU) 2015/1018 Annex I, 5 (12))	The main source of data is occurrence reporting, data can be collected additionally through FDM.	Abbreviation: WSTR W  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control of the aircraft in flight LOC-I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.30	Unintended flight in IMC or loss of reference in flight (Unintended flight in IMC or loss of reference in flight)	Events in which the pilot inadvertently enters instrumental meteorological conditions or loses situational awareness (Reference Regulation (EU) 2015/1018 Annex I, 1.5(2))	The main source of data is occurrence reporting.	Abbreviation: UIMC This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: LOC I.
3.31	Cases in which aircraft enters into an improper position due to inappropriate action of the crew (Inappropriate action by the crew, unsuitable use of aircraft systems and instruments)	Events in which due to improper action of the aircraft crew or improper use of systems and instruments occurs: controlled flight into terrain (CFIT), aircraft crash due to in-flight loss of control, taxiway or runway excursion, mid air collision or near miss (Reference Regulation (EU) 2015/1018 Annex I, 1.5(3))	The main source of data is occurrence reporting.	Abbreviation: AMAN  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: CFIT, LOC I, RE, MAC.

No.	Title	Definition	Data source	Measurement	Safety objective
3.32	Activation of any flight envelope protection, including stall warning, stick shaker, stick pusher and automatic protections	Activation of any protection system related to aircraft performance, including buoyancy loss warning, activation of command vibration warning, command suppressor and automatic protection. (Reference: Regulation (EU) 2015/1018 Annex I, 1.4 (4))  The main source of data is occurrence reporting, data can be collected additionally through FDM.	The main source of data is occurrence reporting and data can be collected additionally through FDM.	This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control in flight LOC-I.
3.33	Transport of dangerous goods)  (Transport of dangerous goods)	Cases where during the transport of dangerous goods it has been established that the dangerous goods are improperly prepared for transport by air, damaged during packing by fire in goods compartments or damaged during loading by fire in the goods compartments, cases where forbidden and undeclared dangerous goods are transported with fire occurrence in the passenger compartment, cases where there was fire or smoke of electronic equipment containing lithium batteries. (Reference: Regulation (E) 2015/1018 Annex I, 1.1 (2))	The main source of information is occurrence reporting.	Abbreviation: DG  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Fire/smoke non impact: F- NI, Loss of control in flight LOC-I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.34	Deicing and anti- icing errors (Deicing and anti-icing errors)	Cases where the air operator has not applied de-icing or anti-icing procedures or has applied incorrect procedures. These cases do not involve malfunctions of the de-icing or anti-icing system. (Reference Regulation (EU) 2015/1018 Annex I, 1.5(2))	The main source of information is occurrence reporting.	Abbreviation: DE-ICE This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of second category SPI: Loss of control in flight LOC-I, Runway excursions RE.
3.35	Cases caused by faulty calculations of the mass and center of gravity, or incorrect loading/unloading of aircraft (Weight and balance errors)	Cases involving all errors related to the calculation of the mass and center of gravity of the aircraft and / or incorrect loading / unloading of the aircraft. (Reference: Regulation (EU) 2015/1018 Annex IV, 2.3 (1))  Errors in calculating the mass and position of the center of gravity can lead to a shift in the center of gravity of the aircraft and loss of control of the aircraft in flight.	The main source of information is occurrence reporting.	Abbreviation: LOAD This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: Loss of control of the aircraft in flight Loc-I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.36	Failures of control system (Control system failures)	Cases involving one or more failures of control systems, including failure of control areas, failure of automatic control systems and related indicators. (Reference: Regulation (EU) 2015/1018 Annex I, 2)  Failure of the control systems affects the maneuverability of the aircraft and awareness of the situation.	The main source of information is occurrence reporting.	Abbreviation: FCONT This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of second category SPI: Loss of control in flight LOC-I, Runway excursions RE.
3.37	Cases where one of the systems that provides redundancy has failed (Loss of redundancy of a system)	Cases where one of the systems that provides redundancy has failed. (Reference Regulation (EU) 2015/1018 Annex I, 1.5(3))	The main source of information is occurrence reporting.	Abbreviation: REDUNDANT This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPIs: these cases may be related to loss of control in-flight. SPI: LOC I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.38	One engine inoperative on multi-engine aircraft	Occurrences where due to the failure of one engine on a multi-engine aircraft, an aircraft accident may occur due to loss of control over the aircraft in flight. Reference: Regulation (EU) 2015/1018 Annex I, 2.2)	The main source of data is occurrence reporting.	Abbreviation: SCF-PP  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category - SPI: LOC I, RE.
3.39	Engine failure on single-engine aircraft	Occurrences where due to the failure of one engine on single-engine aircraft, an aircraft accident may occur due to loss of control over the aircraft in flight.  Reference: Regulation (EU) 2015/1018  Annex I, 2.2)	The main source of information is occurrence reporting.	Abbreviation: SCF-PP  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: LOC I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.40	Occurrences in Minimum Equipment List and technical log use (Occurrences in Minimum Equipment List and technical log use)	Cases where failures on the minimum defect list have not been repaired for an extended period of time, including cases where the operator has used an extension of the time period within the minimum defect list. This category also includes errors when using the aircraft technical book. (Reference: Regulation (EU) 2015/1018 Annex II, 3 (8))	The main source of information is occurrence reporting.	Abbreviation: MEL  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: these cases may be related to Loss of control in flight – LOC I.
3.41	Occurrences in maintenance and airworthiness monitoring (Airworthiness or Maintenance deficiencies caused cases)	These cases include deficiencies in the system of maintenance and monitoring of continuous airworthiness (events related to Part-M organizations) such as airworthiness data are incomplete, inaccurate, airworthiness order tracking is not appropriate, certification problems or errors, assembly deficiencies, parts monitoring deficiencies, monitoring errors, maintenance procedures errors, incorrect entry in the aircraft technical log, etc. (Reference: Regulation (EU) 2015/1018 Annex II, 3 (11), (12), (13))	The main sources of data are event reporting, checks and inspections.	Abbreviation: MC This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: these cases may be related to the loss of control of the aircraft in flight - LOC I.

No.	Title	Definition	Data source	Measurement	Safety objective
3.42	Occurrences regarding maintenance of aircraft (Occurrences in maintenance operations)	Cases where maintenance procedures were not complete or accurate or were not performed. (Reference: Regulation (EU) 2015/1018 Annex II, 3 (12)) Aircraft maintenance must be performed according to established procedures. Lack of supervision during maintenance can lead to the aircraft not being navigable.	The main source of information is occurrence reporting.	Abbreviation: IM  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: these cases may be related to the loss of control of the aircraft in flight - LOC I.
3.43	Cases where technical failures cause flight interruptions and immediate danger procedures to be performed or aircraft to land (Serious technical problems in aircraft during flight)	Cases where technical failures cause flight interruptions and immediate danger procedures to be performed or aircraft to land. (Reference: Regulation (EU) 2015/1018 Annex I, 4) Serious technical defects can lead to serious incidents and accidents.	The main source of information is occurrence reporting.	monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: these cases may be related to the loss of control of the aircraft in flight - LOC I and the cause of serious accidents and incidents.

No.	Title	Definition	Data source	Measurement	Safety objective
	Any occurrence that led to the declaration of an emergency situation (Any event leading to the declaration of an emergency — Mayday or PAN call)	Occurrences leading to the declaration of a state of emergency. (Reference: Regulation (EU) 2015/1018 Annex I, 4(1)	The main source of information is occurrence reporting.	Abbreviation: PAN/MAYDAY  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: these cases may be related to Loss of control in-flight - LOC I.

GRO	OUND HANDLING				
No.	Title	Definition	Data source	Measurement	Safety objective
	Damage during ground handling (Ground handling damage)	Cases where the aircraft was damaged on the ground due to contact with another vehicle. This includes in particular cases immediately before take-off or after landing. (Reference: Regulation (EU) 2015/1018 Annex IV, 2.3 (12)) Damage to the aircraft can cause loss of control of the aircraft in flight if not detected in time. Also, repairs caused by these occurrences cause delays and additional costs.	The main source of information is occurrence reporting.	Abbreviation: GH This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: RAMP, LOC I.
	Push-back, power-back or taxi interference by vehicle, equipment or person	Cases where the movement of the aircraft has been obstructed by the vehicle, person or equipment during towing or taxiing. These cases include collisions - aircraft / aircraft and aircraft / vehicle. (Reference: EU Regulation 2015/1018 Annex IV, 1.1 (9))	The main source of information is occurrence reporting.	Abbreviation: PB  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: <i>G-COL</i> .
3.47	Insufficient supervision on the platform (Insufficient supervision at apron)	Cases where, due to insufficient supervision on the platform, there was a situation where passengers found themselves in places where access was not allowed. (Reference: Regulation (EU) 2015/1018 Annex IV, 1.1 (10))	The main source of information is occurrence reporting.	Abbreviation: APRON This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category.

No.	Title	Definition	Data source	Measurement	Safety objective
3.48	Presence of foreign objects on maneuvering surfaces and platforms (Foreign Object Debris FOD in the maneuvering area and apron and damaged caused GCOL)	The presence of foreign objects on maneuvering surfaces and platforms includes the presence of all objects and materials at the airport, in places where they should not be located and where they can cause damage to equipment and injuries to people. (Reference: Regulation (EU) 2015/1018 Annex I, 5 (5))	The main source of information is occurrence reporting.	Abbreviation: FOD This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: <i>G-COL</i> .
3.49	Events related to work/maintenance/bloc- king on or in the vicinity of runways or utilities	Occurrences in which due to operation/maintenance or blockage on the runway, the aircraft takes off from the taxiway or runway (Reference: Regulation (EU) 2015/1018 Annex IV, 1.1)	The main source of information is occurrence reporting.	Abbreviation: ARDM_M  This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: RE.
3.50	Impact of animals, including birds, on the runway or in the air (Wildlife strike including bird strike)	Contact with animals (including birds) on the runway or in the air (Reference: Regulation (EU) 2015/1018 Annex I, 5. (4), Annex IV, 1.1 (2))	The main source of information is occurrence reporting.	Abbreviation: WILD/BIRD This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second SPI category: <i>G-COL</i> , <i>RE</i> .

FIR	FIRE							
No.	Title	Definition	Data source	Measurement	Safety objective			
3.51	Refueling incidents and occurrences (Fueling incidents)	Cases where an accident or event occurred as a result of deviation from procedures. (Reference: Regulation (EU) 2015/1018 Annex I, 1.2 (1), Annex IV, 1.3 (5))	The main source of information is occurrence reporting.	Abbreviation: FUELLING This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: F-NI.			
3.52	Accidents and events where fluid leaks occurred (Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or which has or could have endangered the aircraft, its occupants or any other person.)	Cases where there has been a leak of any fluid on the aircraft resulting in a fire hazard or possible contamination of the aircraft structure, system or equipment that could have endangered the aircraft, persons in the aircraft, or any other person.  (Reference: Regulation (EU) 2015/1018 Annex I, 2.1 (4).	The main source of information is occurrence reporting.	Abbreviation: LEAKAGE  This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within its own operations. Related indicators of the second category of SPI: F- NI.			

OTH	ER				
No.	Title	Definition	Data source	Measurement	Safety objective
3.53	Occurrences caused by human error (Occurrences caused by human error)	Occurrences caused by human error. (Reference: Regulation (EU) 2015/1018 Annex I, 1.5 (3), Annex II, 3. (17), Annex IV, 2.3. (13))	The main source of information is occurrence reporting.	Abbreviation: PHUF  This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: These events may be related to multiple indicators of the second category.
3.54	Flight crew fatigue during flight, fatigue of operational personnel during the provision of air navigation services, fatigue of flight crew during aircraft maintenance or provision of ground handling services.  (Fatigue during flight operations, aircraft maintenance, air navigation services, or ground handling)	Cases where fatigue reduces work ability. (Reference: Regulation (EU) 2015/1018 Annex I, 4 (11), Annex II, 3 (17), Annex III, 3. (6), Annex IV, 1.3 (8))	The main source of information is occurrence reporting.	Abbreviation: FAT  This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: These occurrences may be related to multiple indicators of the second category.

No.	Title	Definition	Data source	Measurement	Safety objective
3.55	Occurrences resulting from on job training (Occurrences resulting from on job training)	On-the-job training occurrences. (Reference Regulation (EC) 216/2008)	The main source of information is occurrence reporting.	Abbreviation: TRAINING  This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: 1. These occurrences may be related to multiple indicators of the second category.
3.56	Interference with an aircraft, an ATS unit or a radio communication transmission including cases caused by firearms, fireworks, flying kites, laser illumination, high-powered lights lasers, Remotely Piloted Aircraft System (An aircraft flight interference, or an ATS unit or a radio communication transmission interference caused by high-powered lights lasers, UAS or model aircraft).	An aircraft flight interference, or an ATS unit or a radio communication transmission interference caused by firearms, fireworks, flying kites, laser illumination, high-powered lights lasers, UAS, model aircraft or similar means (Reference: Regulation (EU) 2015/1018, Annex III, 3. (2), (3))	The main source of information is occurrence reporting.	Abbreviation: LASER/COM/UAS This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: These occurrences can be related to more indicators of the second category.

No.	Title	Definition	Data source	Measurement	Safety objective
3.57	Occurrences related to Air Navigation Services, Degradation or total Loss of services or functions. (Occurrences related to Air Navigation Services, Degradation or total Loss of services or functions)	Occurrences of complete or partial loss of ANS services or functions (ATS, CNS, MET and AIS), ie complete and partial inability to provide services and perform functions within ATM (ASM and ATFCM), which includes absence or inaccurate, inadequate information issued by ATS, ATIS, MET and AIS. (Reference Regulation (EU) 2015/1018 Annex III,2)	The main source of information is occurrence reporting.	Abbreviation: ANS_FAILURE This indicator is monitored annually.	2022: Decrease in the number of occurrences compared to the analyzed period. These indicators are monitored in accordance with the values of the CNS group of indicators of the document "Air navigation in the Republic of Serbia, safety and capacity indicators in air navigation acceptable level of safety until 2022".
3.58	Unmanned aircraft System - UAS incidents which could cause ground damage, injury, or airborne encounters (Unmanned aircraft System - UAS incidents which could cause ground damage, injury, or airborne encounters)	Occurrences regarding unmanned aircraft (Reference Regulation (EU) 2015/1018 Annex III, 1 (2.))	The main source of information is occurrence reporting.	Abbreviation: UAS This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. These indicators are monitored in accordance with the values of the CNS group of indicators of the document "Air navigation in the Republic of Serbia, safety and capacity indicators in air navigation acceptable level of safety until 2022".

No.	Title	Definition	Data source	Measurement	Safety objective
3.59	Degradation or total loss of services or function (Degradation or total loss of services or function)	Degradation or total loss of services or function (Reference: Regulation (EU) 2015/1018 Annex IV, 2.2)	The main source of information is occurrence reporting.	Abbreviation ARDM_D  This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to run a risk assessment of its own operations, identify the necessary activities to reduce or eliminate risks, implement identified activities and monitor their effects. It is necessary to reduce the number of cases within our own operations. Related indicators of the second category of SPI: These events may be related to multiple indicators of the second category.
3.60	Other occurrences (Other)	These cases include occurrences that cannot be classified in any of the above occurrences.	The main source of information is occurrence reporting	This indicator is monitored on annually.	2022: Decrease in the number of occurrences compared to the analyzed period. It is necessary to conduct a risk assessment of one's own operations.