



NATIONAL SAFETY PLAN 2021-2023



CIVIL AVIATION
DIRECTORATE
OF THE REPUBLIC
OF SERBIA

ACRONYMS AND ABBREVIATIONS

<i>ALoSP</i>	Acceptable level of safety performance
Directorate	Civil Aviation Directorate of the Republic of Serbia
<i>EAPAIRR</i>	European Action Plan to reduce the risk of unauthorized entry of aircraft into the airspace
<i>EAPPRE</i>	European Action Plan for the Prevention of Runway Excursion
<i>EAPPRI</i>	European Action Plan for the Prevention of Runway Incursions
<i>EASA</i>	European Union Aviation Safety Agency
<i>EASP</i>	European Aviation Safety Program
<i>EPAS</i>	European Civil Aviation Safety Plan
<i>EC</i>	European Commission
<i>ECAA</i>	European Common Aviation Area
<i>ECCAIRS</i>	European Co-ordination centre for Accident and Incident Reporting Systems
<i>EGAST</i>	European Union General Aviation Safety Team
<i>ESSI</i>	European Strategic Safety Initiative
<i>ICAO</i>	International Civil Aviation Organization
<i>SARPs</i>	Standards and Recommended Practices (<i>ICAO</i>)
<i>SMS</i>	Safety Management System
<i>SPI</i>	Safety Performance Indicator
<i>SRB</i>	Safety Review Board
<i>SRG</i>	Safety Risk Assessment Group
<i>SSP</i>	State Safety Program
<i>USOAP CMA</i>	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 Program (Official Gazette of RS No. 76/19) adopted by the Government.

Under 1.2.7 of the National Civil Aviation Safety Program, the Directorate is authorized to adopt the National Safety Plan that covers a particular period.

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

The National Safety Plan is a 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; international and national safety data; data collected during oversight; safety goals of the Republic of Serbia; *ICAO Global Aviation Safety Plan (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 (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 problems as a result of disruptions in air operations, including its return to normal flows. Therefore, this edition of the plan includes an analysis of the risks associated with the COVID-19 virus, in addition to the standard European division that covers three broad areas: systemic, operational, and safety issues arising from the introduction of new technologies. The plan also includes national issues related to safety challenges previously identified in the field of general aviation performed by aircraft that do not belong to complex motor aircraft. The National Safety Plan determines the activities and measures for the implementation of the National Safety Program. They were determined after an analysis of the safety situation, 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 is made in accordance with the *European Aviation Safety Plan (EPAS)*, where the activities are divided into the following categories:

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

The purpose of this structure 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 as a whole. Their connection to an individual occurrence or situation is not always obvious. They are hidden factors that become apparent only after being triggered by causal factors that play a significant role in the development of a safety occurrence. 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 Program

EPAS reference

MST.0001, MST.0028

Description

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

Activities

SYS.RS.001 (1)

The Directorate has developed and is implementing the National Safety Plan. Through the work of the Safety Risk Assessment Group, the achieved results are analyzed and proposals for updating the National Plan are given.

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

SYS.RS.001 (1). Continuous commitment.

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 it has developed *European Strategic Safety Initiative*.

Time frame

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

Results

SYS.RS.002 (1). The Directorate will post a link on its website -*Link*- for instructions *ESSI*.

Status

SYS.RS.002 (1). In development

SYS.RS.003 Use of data from Flight Data Recorders (Flight Data Monitoring – FDM)

Reference to EPAS

MST.0003

Description

FDM programs of the operator do not take into account all operational issues identified at the European level.

Activities

SYS.RS.003 (1).

Through the implementation of the oversight program, the Directorate will ensure that the operators define within their ***FDM*** programs the 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 publish information related to its work on its website ***FDM*** European Operators Forum (***European operators FDM forum - EOFDM***).

Time frame

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

Status

SYS.RS.003 (1). In development.

SYS.RS. 004 Availability of adequate staff (in terms of number and competence) within the civil aviation authorities

Reference to EPAS

MST. 0032

Description

The Directorate will provide the necessary number of qualified and competent staff in order to successfully supervise the implementation of the safety management system at all aviation entities in the Republic of Serbia.

Activities

SYS.RS.004 (1). The Directorate continuously pursues a proactive personnel policy in order to timely provide the necessary qualified personnel for the successful implementation of safety oversight.

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

EPAS reference

MST.0033

EPAS Vol III, Ch. 18. COVID-19

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

Description

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

Activities

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

Time frame

SYS.RS.005 (1). First quarter 2022.

Results

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

Status

SYS.RS.005 (1). A continuous task until the end of the pandemic ***COVID-19***.

OPERATIONAL ISSUES

Operational issues are most often identified through occurrence reporting and analysis. In Commercial Air Transport, the operational safety issues are divided 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 that precede the accident. These occurrences are usually preceded by other noticeable problems that debilitate the efficiency of the safety system. They may be related to weather conditions, air traffic services, airport services, flight crew procedures, etc.

It is important to note that certain issues such as unstable approaches, difficult weather procedures or inadequate flight crew actions have an impact on more than one area of identified risks. Also, the human factor affects 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 use safety indicators to cover the cases of aircraft taxiways or runway excursions and the contributory factors.

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

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

OPS.RS.001 (4). The Directorate will ensure that the plans and programs of basic, continuous, and refresher training include subjects on measures to prevent aircraft excursions from the taxiway or runway. (***GAPPRE*** recommendations ***OPS 3, ANSPI***). ***OPS.RS.001*** (5). The Directorate will ensure that an assessment of the preceding risk factors is included in the airport operator's safety management system ***RE*** (***GAPPRE ADR7, ADR8***).

OPS.RS.001 (6). The Directorate will continuously monitor the implementation of earlier 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). Continuous commitment.

Results

- OPS.RS.001** (1). The risk factors for taxiway or runway excursions are covered in the National Safety Plan under appropriate safety indicators.
- OPS.RS.001** (2). Aviation entities in the Republic of Serbia are familiar with the recommendations from **GAPPRE**.
- OPS.RS.001** (3). The occurrences leading to a taxiway or a runway excursion are included in **FDM** monitoring system of operators.
- OPS.RS.001** (4). **RE** preventive measures are involved in initial, continuing, and refresher training for pilots, air traffic controllers, and airport staff.
- OPS.RS.001** (5). Risk assessment of the factors leading to the **RE** is included in the airport operator safety management system.
- OPS.RS.001** (6). Continuous oversight is provided.

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). Continuous commitment.

OPS.RS.002 Unauthorized Entry of Aircraft into Notified Airspace (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 use safety indicators to cover the cases of notified airspace infringement and the contributory factors.
- OPS.RS.002** (2). The Directorate will ensure within the oversight program that the degree of compliance with the recommendations is verified *in the **EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction***.
- OPS.RS.002** (3). The Directorate will implement the activities in their entirety concerning the aviation authorities from ***EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction***.

Time frame

- OPS.RS.002** (1). Implemented.
- OPS.RS.002** (2). Second quarter 2022
- OPS.RS.002** (3). Second quarter 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). Checking the degree of compliance with the recommendations from *EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction* is included in the Directorate's oversight program.

OPS.RS. 002 (3). The activities in their entirety concerning the aviation authorities from *EAPAIRR-European Action Plan for Airspace Infringement Risk Reduction* are implemented.

Status

OPS.RS.002 (1). Implemented.

OPS.RS. 002 (2). In development

OPS.RS.002 (3). In development

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 aircraft collisions in the air.

Activities

OPS.RS.003 (1). The Directorate will provide safety indicators to comprise cases in which there is a risk of mid-air collisions.

OPS.RS.003 (2). The Directorate will prioritize the activities of the air operator's safety management system/FDM oversight program in relation to the risk of mid-air collisions and the factors leading it.

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

Time frame

OPS.RS.003 (1). Implemented.

OPS.RS.003 (2). Implemented.

OPS.RS.003 (3). Continuous commitment.

Results

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

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

OPS.RS. 003 (3). Monitoring of reported occurrences of the air operator in terms of the risk of mid-air collisions and the factors that precede it in order to identify potential risks in the operations of the operator.

Status

OPS.RS.003 (1). Implemented.

OPS.RS.003 (2). Implemented.

OPS.RS.003 (3). Continuous commitment.

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 include safety indicators in cases of controlled flight of aircraft into terrain and the factors that lead to that.

OPS.RS.004 (2). The Directorate will include in the monitoring program the issue of controlled flight of aircraft into terrain and the factors that may have preceded that.

OPS.RS.004 (3). Monitoring of reported occurrences of the air operator regarding 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). Continuous commitment.

Results

OPS.RS.004 (1). Risk factors for the 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 preceding factors is included in the Directorate's oversight programs.

OPS.RS.004 (3). Monitoring of reported occurrences of the air operator in terms of the risk of mid-air aircraft collisions and the preceding factors in order to identify potential risks in the operations of the operator.

Status

OPS.RS.004 (1). Implemented.

OPS.RS.004 (2). Implemented.

OPS.RS.004 (3). Continuous commitment.

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 to comprise cases of loss of control in-flight and the contributing factors.

OPS.RS.005 (2). The Directorate will include in the monitoring program the issue of controlled flight of aircraft into terrain and the contributing factors.

OPS.RS.005 (3). Monitoring of reported occurrences of the air operator regarding the risk of controlled flight of aircraft into terrain.

Time frame

OPS.RS.005 (1). Implemented.

OPS.RS.005 (2). Implemented.

OPS.RS.005 (3). Continuous commitment.

Results

OPS.RS.005 (1). Risk factors for controlled flight of aircraft into terrain are covered in the National Safety Plan through appropriate safety indicators.

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

OPS.RS.005 (3). Based on monitoring of the reported occurrences by the air operator in terms of the risk of mid-air aircraft collisions 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). Continuous commitment.

OPS.RS.006 Unauthorized 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 unauthorized taxiway or runway incursion, as well as the causes.

Activities

OPS.RS.006 (1). The Directorate will use safety indicators to cover the cases of aircraft taxiways or runway incursions and the 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 air operators in the case of taxiway or runway incursions and the preceding factors in order to identify potential risks in the operator's operations.

Time frame

OPS.RS.006 (1). Implemented

OPS.RS.006 (2). Implemented.

OPS.RS.006 (3). Continuous commitment.

Results

OPS.RS.006 (1). Risk factors for the taxiway or runway incursions are covered in the National Safety Plan by way of 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 functioning.

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

Status

OPS.RS.006 (1). Implemented.

OPS.RS.006 (2). Implemented.

OPS.RS.006 (3). Continuous commitment.

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 the causes that 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 program 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). Continuous commitment.

Results

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

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

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

Status

OPS.RS.007 (1). Implemented.

OPS.RS.007 (2). Implemented.

OPS.RS.007 (3). Continuous commitment.

OPS.RS.008 Safety of Ground Operations

EPAS reference

SI.0001 SI.1004 SI.0006 SI.1016 SI.4014

Description

The purpose of this activity is to reduce safety risks during the implementation of ground operations.

Activities

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

OPS.RS.008 (2). The Directorate will include in the oversight program the issue of ground operation.

OPS.RS.008 (3). Monitoring of the reported occurrences that took place during the implementation of ground activities.

Time frame

OPS.RS.008 (1). Implemented.

OPS.RS.008 (2). Implemented.

OPS.RS.008 (3). Continuous commitment.

Results

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

OPS.RS.008 (2). The issue of safety of ground operations is included in the oversight program of the Directorate.

OPS.RS.008 (3). Monitoring of the reported occurrences that took place during the implementation of ground operations.

Status

OPS.RS.008 (1). Implemented.

OPS.RS.008 (2). Implemented.

OPS.RS.008 (3). Continuous commitment.

OPS.RS.009 Helicopter Operation Safety

Reference to EPAS

EASA-European Rotorcraft Roadmap

It will be processed later.

OPS.RS.010 Airspace Infringement by General Aviation Aircraft

EPAS reference

EASA- General Aviation Road Map 2.0

Description

The purpose of this activity is to reduce the risk of airspace infringement by general aviation aircraft that do not belong to complex motor aircraft.

Activities

OPS.RS.010 (1). The Directorate will analyze the 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 2022

OPS.RS.010 (2). Third quarter 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 development.

OPS.RS.010 (2). In development.

OPS.RS.011 Danger of Bird Strike and Wildlife

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 impact.

Activities

OPS.RS.011 (1). The Directorate will publish rules, regulations and instructions related to the reduction of the danger of possible bird and wildlife impact.

Time frame

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

Results

OPS.RS.011 (1). Rules, regulations, and instructions related to reducing the risk of the possible impact of bird and wildlife strike have been published.

Status

OPS.RS.011 (1). In development.

SAFETY ISSUES ARISING FROM NEW TECHNOLOGIES

These issues will be taken into the consideration by way of regulatory activity and development projects at the European Union level, and the results of these activities will be incorporated in the following versions of the National 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 relate to general aviation operations performed by aircraft other-than complex motor aircraft. Within these activities, 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 over the aircraft due to stall and spin, in-flight information service, flight in mountainous terrain, carburetor icing in piston engines, safe use of advanced navigation devices, and the dangers 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

Description

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 procedures to avoid aircraft collisions.

Activities

NA.GA.001 (1). Based on the above recommendations, the Directorate will define supervisory activities that will include analysis and measures to reduce the risk of accidents of general aviation aircraft that may occur due to non-compliance with procedures to avoid mid-air collisions.

NA.GA.001 (2). Based on the same recommendations, the Directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) related to accidents of general aviation aircraft that may occur due to non-compliance with procedures to avoid mid-air collisions.

Time frame

NA.GA.001 (1). Second quarter 2022

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

Results

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

Status

NA.GA.001 (1). In development.

NA.GA 002 (2). In development.

NA.GA.002 Decision Making

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.

Activities

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

Time frame

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

NA.GA.002 (2). Second quarter 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 development

NA.GA. 002 (2). In development

NA.GA.003 Meteorological Situation Assessment

EPAS reference

SI.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 the meteorological situation.

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 cover aircraft accidents that may occur due to inadequate assessment of the meteorological situation.

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 cover aircraft accidents that may occur due to inadequate assessment of the meteorological situation.

Time frame

NA.GA.003 (1). Second quarter 2022.

NA.GA.003 (2). Second quarter 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 the meteorological situation.

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 the meteorological situation.

Status

NA.GA.003 (1). In development.

NA.GA.004 (2). In development.

NA.GA.004 Operations in 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 terrain 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 include accidents of general aviation aircraft that may occur due to flying in hilly and mountainous terrain 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 terrain or in their vicinity.

Time frame

NA.GA.004 (1). Second quarter 2022.

NA.GA.004 (2). Second quarter 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 hill 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 development

NA.GA.004 (2). In development

NA.GA.005 Carburetor Icing in Piston Engines

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 carburetors in piston engines.

Activities

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

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 carburetors in piston engines.

Time frame

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

NA.GA.005 (2). Second quarter 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 carburetors in piston engines.

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 carburetors in piston engines.

Status

NA.GA.005 (1). In development.

NA.GA.005 (2). In development.

NA.GA.006 Safe Use of Advanced Navigation Aids

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 improper use of navigation aids.

Activities

NA GA 006 (1). The Directorate will define activities that will include analysis and measures to reduce the risk of accidents of general aviation aircraft due to improper use 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 improper use of advanced navigation aids.

Time frame

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

NA.GA.006 (2). Second quarter 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 improper use of navigation aids.

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 improper use of navigation aids.

Status

NA.GA.006 (1). In development.

NA.GA.006 (2). In development.

NA.GA.007 Loss of Control of the Aircraft due to Stall or due to 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 the occurrence of spin and stall.

Activities

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

Time frame

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

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

Results

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

Status

NA.GA.007 (1). In development.

NA.GA.007 (2). In development.

NA.GA.008 Flight Information Service **(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 or inadequate use of the information obtained by the flight information service provider.

Activities

NA.GA.008 (1). The Directorate will define oversight activities that will cover general aviation aircraft accidents that may occur due to inadequate service or inadequate use of the information obtained by the flight information service provider.

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

Time frame

NA.GA.008 (1). Second quarter 2022.

NA.GA.008 (2). Second quarter 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 or inadequate use of the information obtained 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 or inadequate use of information obtained by the flight information service provider.

Status

NA.GA.008 (1). In development.

NA.GA.008 (2). In development.

NA.GA.009 Bird Strike Threat

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 monitoring activities that will include accidents of general aviation aircraft that can occur due to bird strikes.

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

Time frame

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

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

Results

NA.GA.009 (1). Defined oversight activities in order to improve safety related to the reduction of risk factors for accidents in general aviation aircraft that may occur due to inadequate decision-making.

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 improper use of navigation aids.

Status

NA.GA.009 (1). In development.

NA.GA.009 (2). In development.

NA.GA.010 Flying Displays for Pilots

Reference to *EPAS*

None

Description

The purpose of this activity is to reduce the risk of accidents that may occur as a result of flying displays for pilots.

Activities

NA.GA.010 (1). The Directorate will define supervisory activities that will include accidents that may occur as a result of flying displays for pilots.

NA.GA.010 (2). The Directorate will define activities to improve safety (instructions, seminars, procedures, etc.) that will cover accidents that may occur as a result of flying displays for pilots.

Time frame

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

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

Results

NA.GA.010 (1). Defined supervisory activities in order to improve safety related to the reduction of risk factors for accidents that may occur as a result of flying displays for pilots.

NA.GA.010 (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 use of navigation aids.

Status

NA.GA.010 (1). In development.

NA.GA.010 (2). In development.

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 icing of the airframe.

Activities

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

NA.GA.011 (2). Based on the recommendations in *EGAST (European General Aviation Safety Team)* The directorate will define activities in order to improve safety (instructions, seminars, procedures, etc.) that will include accidents of general aviation aircraft that may occur due to in-flight icing.

Time frame

NA.GA.011 (1). Third quarter 2022.

NA.GA.011 (2). Third quarter 2022.

Results

NA.GA.011 (1). Defined safety improvement oversight activities related to the reduction of accident risk factors in general aviation that may occur due to in-flight 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 icing.

Status

NA.GA. 011(1). In development.

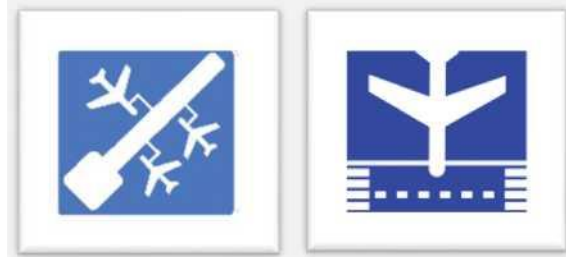
NA.GA.011 (2). In development.

SAFETY INDICATORS

ACCIDENTS



ACCIDENTS

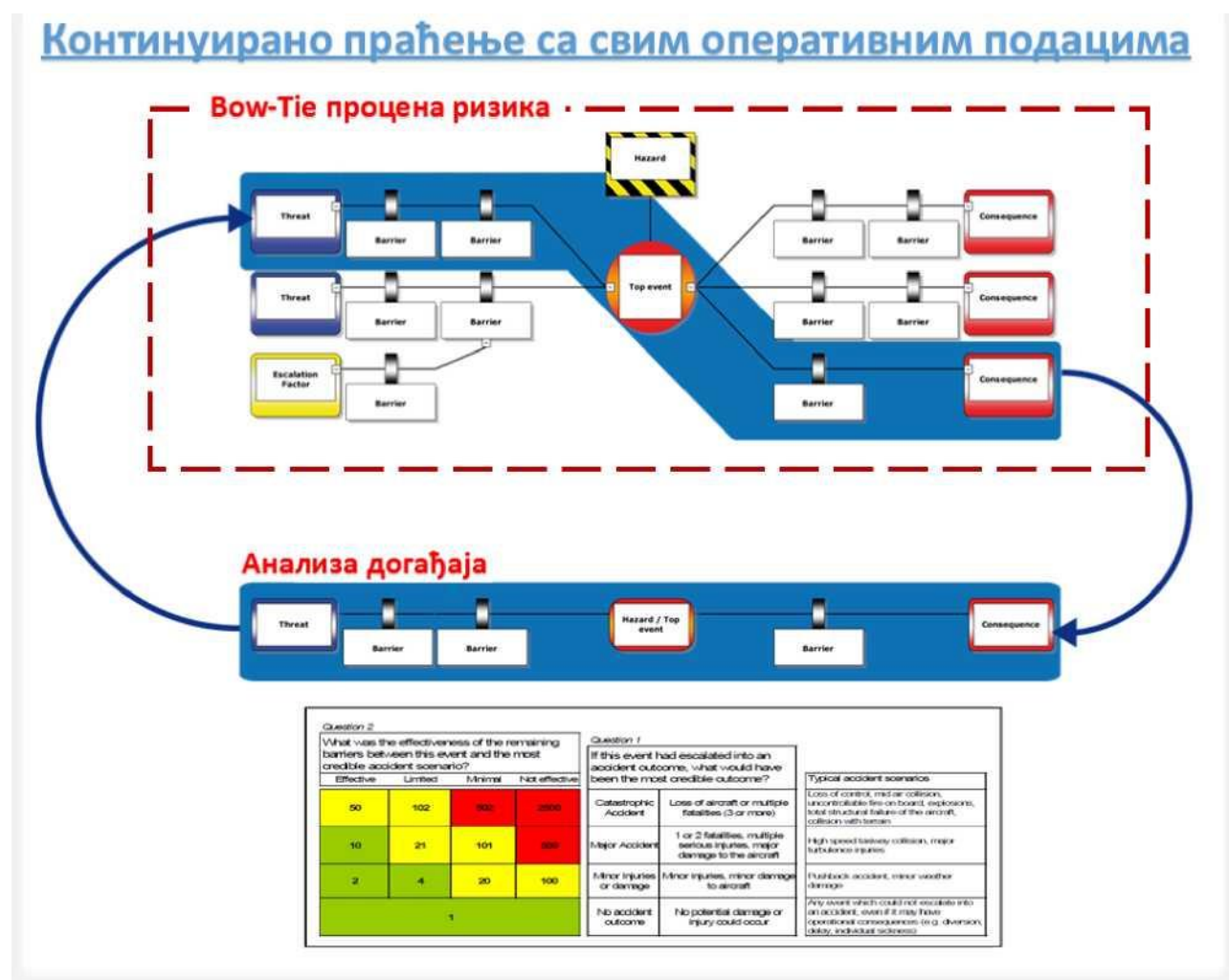


Safety Objectives and Safety Indicators in the Republic of Serbia

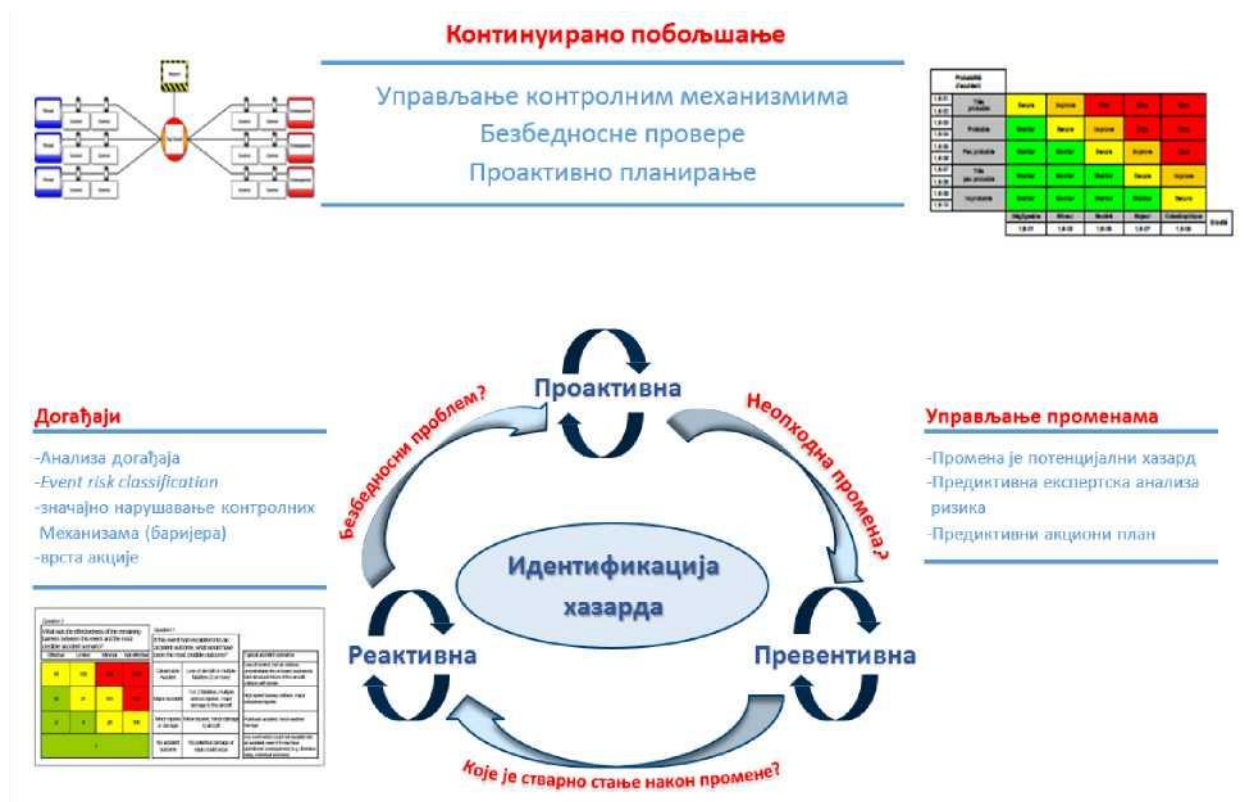
Safety level monitoring and safety analysis are aimed at reviewing the comprehensive level of security in civil aviation and are the basis for the adoption of measures to maintain the achieved and improve the existing level of safety.

Measures to maintain the achieved levels of safety and their improvement work through the prioritization of supervision in areas of increased risk (*Risk Based Oversight*), system actions (*Safety Promotion*) and immediate responses to perceived security concerns (*Safety Order / Directive*). The process of continuous monitoring is graphically shown in Figure 1.

Safety indicators are a major tool when analyzing data, allowing security risks and trends to be identified. Based on that, measures for reducing or eliminating the 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 defined on the basis of the principles of the European Program for Civil Aviation Safety (*EASP*).

Safety indicators are grouped into three categories:

First category of safety indicators are those that refer to the monitoring of events that resulted in accidents and serious incidents.

Second category of safety indicators are those that refer to the tracking of certain types of events that may escalate into an accident or serious incident. They are defined at the international level, by the International Civil Aviation Organization (*ICAO*).

Third category of safety indicators are those that refer to the monitoring of occurrences with consequences of minor importance (precursors) that contribute to the events monitored in the indicators of the second category. By monitoring and controlling (reducing/eliminating) safety risks for the occurrence of 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 is an occurrence related to operating an aircraft, in the case of a manned aircraft, which occurred from the moment a person boarded the aircraft with the intention of performing a flight until the moment when all persons disembark from the aircraft or, in the case of unmanned aircraft, which occurred from the moment the aircraft is ready to fly for the purpose of flight until the moment when the aircraft came to a complete stop at the end of the flight and the basic power plant is shut down, resulting in any of the following:

- Death or serious bodily injury due to being on board the aircraft, direct contact with any part of the aircraft, including parts detached from the aircraft, or due to direct exposure to the jet from the engine jet, except when death or a serious bodily injury occurred as a result of natural causes, self-harm, or is caused by other persons or when death and serious bodily injury occurred to stowaway passengers hiding outside the portions of aircraft accessible to passengers and crew,
- Aircraft damage, failure of its structure that adversely affects the strength of the structure or flight characteristics of the aircraft or requires major repair or replacement of a damaged component, except for failure or damage to the engine, when damage is limited to one engine (including its hoods or units) or, other than damage propeller, wingtips, antennas, probes, blades, tires, brakes, wheels, aerodynamic sheathing panels, panels, landing gear doors, windshields, aircraft sheathing panels (such as small dents or openings) or minor damage to the main rotor blades or blades tail rotor, landing gear and damage caused by hail or bird strike (including holes in the radar dome),
- The disappearance of aircraft or inaccessible.

Serious bodily injury is an injury that a person has suffered in an accident and a serious incident, and which has the consequence:

- Hospitalization longer than 48 hours, which begins within seven days from the day when the injury was related to an accident or serious accident,
- Any bone fracture (except simple fractures of fingers, toes or nose fracture),
- Lacerations that cause severe bleeding, damage to nerves, muscles or tendons,
- Injuries to any internal organ,
- Second or third degree burns or burns that cover more than 5% of the body surface,
- Confirmed exposure to infectious substances or harmful radiation.

Data Sources

The source of data is the system of mandatory and voluntary reporting of occurrences in civil aviation.

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 an annual basis.

Safety Objective

2022: Commercial air transport: No accidents

General aviation: No accidents

1.2 Serious incident

Definition

A **serious incident** is an occurrence that includes circumstances that indicate 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 as it comes to rest at the end of the flight and the primary propulsion system is shut down.

Serious incidents include cases such as dangerous approach, where it is necessary to take maneuvering avoidance action, cases where controlled flight into terrain is avoided, cases of rejected take-off in a closed or occupied runway, cases where take-off from a closed or busy taxiway or runway was performed, cases of landing or attempted landings on a closed or occupied runway, cases where the aircraft has not reached the intended take-off performance, fire, smoke in the flight and passenger cabin, in the cargo compartments, or engine fire, although the fire is extinguished, all cases that led to the use of additional oxygen, structural damage or damage to the powerplant, as well as turbine damage, multiple malfunctions of one or more systems affecting aircraft control, incapacitated flight crew members, lack of fuel leading to declaring an emergency situation, runway excursions classified as category A *ICAO Doc 9870*, take-off or landing accidents, cases of system failures or adverse weather conditions that have caused difficulties in operating the aircraft, failures of more than one system where system redundancy is lost. (*Reference: Regulation (EU) No 996/2010*).

Data Sources

The source of data is the system of mandatory and voluntary reporting of occurrences in civil aviation.

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: reduce the rate of serious accidents in relation to the volume of traffic (considering the five-year average)

General aviation: Reducing the number of serious accidents.

Safety Indicators of the Second Category

RUNWAY 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.	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.

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	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: 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 (<i>Mid-air Collisions and near misses-MAC</i>)	<p>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.</p> <ul style="list-style-type: none"> • 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) <p>This safety indicator covers all cases where the minimum separation is compromised between aircraft in flight and all TCAS RA cases.</p>	The main source of information is occurrence reporting.	<p>Abbreviation: MAC</p> <p>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.</p>	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.

CONTROLLED FLIGHT INTO TERRAIN

No.	Title	Definition	Data source	Measurement	Safety objective
2.4	Controlled flight into terrain and similar situations (<i>Controlled flight into terrain and similar situations-CFIT</i>)	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 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.

LOSS OF CONTROL IN FLIGHT

No.	Title	Definition	Data source	Measurement	Safety objective
2.5	Loss of control in flight (<i>Loss of control in flight - LOC-I</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.	The main source of 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.

GROUND HANDLING					
No.	Title	Definition	Data source	Measurement	Safety objective
2.6	Ground operations safety (<i>RAMP, G-COL, LOAD, DEICE</i>)	<p>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).</p> <p>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).</p> <p>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 anti-icing errors.</p> <p>Collisions caused by runway incursions are not covered by this safety indicator.</p>	The main source of information is occurrence reporting.	<p>Abbreviations: GH (RAMP, GCOL, LOAD, DE-ICE)</p> <p>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.</p>	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.

FIRE

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 <i>(Fire / smoke non impact F-NI)</i>	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 <i>(Other)</i>				

SAFETY INDICATORS OF THIRD CATEGORY

RUNWAY EXCURSION

No.	Title	Definition	Data source	Measurement	Safety objective
3.1	Unstabilized approach - UA	<p>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.</p> <p><i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (8))</i></p> <p>Unstabilized approach may result in runway excursion and/or controlled flight into terrain.</p>	The main data source is FDM. Data from reported events can also be used.	<p>Abbreviation <i>UA</i></p> <p>This indicator is monitored annually.</p>	<p>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.</p>
3.2	Landing gear and reverse thrust malfunctions <i>(Landing gear and reverse thrust malfunctions)</i>	<p>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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 2)</i></p>	The main source of information is occurrence reporting.	<p>Abbreviation LG / REV</p> <p>This indicator is monitored annually.</p>	<p>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..</p>

No.	Title	Definition	Data source	Measurement	Safety objective
3.3	Deficiencies in runway condition and related information <i>(Deficiencies in runway condition and related information)</i>	Cases where information on the condition of the taxiway or runway has not been provided or incorrect information has been provided (eg incorrect information for SNOWTAM, ATIS, and where ATS failed to provide correct information). <i>(Reference: Regulation (EU) 2015/1018 Annex I, 3 (1), 5 (6))</i> These cases can lead to runway excursions.	The main source of information is occurrence reporting.	Abbreviation <i>RWYCON</i> 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 <i>(Downwind landings and takeoffs)</i>	Cases where the wind speed exceeds the defined maximums (headwind, side wind, downwind), and the aircraft still continues to land or take off. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 2)</i> 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 <i>WIND</i> 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 <i>(Abnormal runway contact)</i>	Cases where abnormal runway contact occurs. (Hard/heavy landings, long/fast landings, off-center landings, tail strikes, etc). <i>Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (7), (11), 12</i> 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 I, 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: RTO 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 interrupted landing 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 I, 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: 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 <i>(Actual or attempted take-off, approach, or landing with incorrect configuration setting)</i>	Take-off or take-off attempt, approach, or landing in an incorrect configuration <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (6))</i>	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 <i>(Runway incursion by aircraft)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (2))</i>	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 <i>(Runway incursion with direct/indirect ATC contribution)</i>	Cases where the procedure <i>ATC</i> directly or indirectly led to a situation where the aircraft found itself on a taxiway or runway. <i>(Reference: Regulation (EU) 2015/1018 Annex III, 1.3 (7))</i>	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 <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: Unauthorized presence of aircraft on the taxiway or runway: Runway incursion: RI-VAP.
3.11	Runway incursion by vehicle or person <i>(Runway incursion by vehicle or person)</i>	Cases of the unauthorized presence of vehicles or people on the taxiway. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (2))</i>	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					
No.	Title	Definition	Data source	Measurement	Safety objective
3.12	Separation minima infringements caused by aircraft <i>(Separation minima infringements caused by aircraft)</i>	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. <i>(Reference Regulation (EU) 2015/1018 Annex III, 1 (2))</i>	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 <i>(Separation minima infringements with direct / indirect ATC contribution)</i>	Cases where ATC procedures cause a violation of the separation minimum between aircraft, aircraft, and terrain or between aircraft in controlled airspace. <i>(Reference Regulation (EU) 2015/1018 Annex III, 1 (2))</i>	The main source of information is occurrence reporting.	Abbreviation: <i>SMIATCO</i> 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 (<i>SMI UAS</i>)	Cases where unmanned aerial systems lead to an infringement of the minimum separation between aircraft in controlled airspace. (<i>Reference Regulation (EU) 2015/1018 Annex III, 1 (2)</i>)	The main source of information is 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 (<i>Airspace infringements</i>)	Airspace infringements including unauthorized penetration of airspace. (<i>Reference: Regulation (EU) 2015/1018 Annex III, 1 (10) (b)</i>)	The main source of information is occurrence reporting.	Abbreviation AI 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.
3.16.	Level bust (<i>Level bust</i>)	A level bust occurs when an aircraft deviates from the set flight level regardless of whether it infringes the separation minima with another aircraft. (<i>Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (4)</i>)	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. (<i>Reference Regulation (EU) 2015/1018 Annex 1,5 (2)</i>)	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 (<i>Lateral deviations from cleared flight path</i>)	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: Regulation (EU) 2015/1018 Annex 1, 1, 1.1 (1)</i> 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. (<i>Reference: Regulation (EU) 2015/1018 Annex 1, 1.3 (4)</i>)	The main source of information is occurrence reporting.	Abbreviation: NAVEERROR 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.

CONTROLLED FLIGHT INTO TERRAIN					
No.	Title	Definition	Data source	Measurement	Safety objective
3.19	Inadequate Separation <i>(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.)</i>	<p>Cases where inadequate separation in airspace where no minimum separation is prescribed.</p> <p><i>(Reference: Regulation (EU) 2015/1018 Annex III, 1 (3))</i></p>	The main source of data is occurrence reporting	<p>Abbreviation: IS</p> <p>This indicator is monitored annually.</p>	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 <i>(Ground Proximity Warning System GPWS terrain warnings)</i>	<p>Cases where the GPWS or EGPWS proximity warning system is activated. <i>(Reference (EU) 2015/1018 Annex 1, 5 (3))</i></p> <p>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.</p>	The main source of data is event reporting, in addition, data obtained by FDM can be used.	<p>Abbreviation: GPWS</p> <p>This indicator is monitored annually.</p>	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 <i>(Errors and omissions in aeronautical database)</i>	Cases where incorrect data is found in aeronautical databases, including out-of-date data, incorrect SID / STAR information. <i>(Reference: Regulation (EU) 2015/1018 Annex III, 2 (2))</i> 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 <i>(Operation with incorrect altimeter setting)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.4 (7))</i>	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
3.23	Continuation of an instrument approach below published minimums with inadequate visual references <i>(Continuation of an instrument approach below published minimums with inadequate visual references)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.3 (9))</i>	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

LOSS OF CONTROL IN FLIGHT

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: <i>SPEED</i> 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 severe turbulence or cases where crew and passengers have been injured or when an inspection of the aircraft is required after the flight. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 5 (11))</i>	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.
3.27	A significant wind-shear or thunderstorm encounter which has or could have endangered aircraft, persons in it or any other person <i>(A significant wind-shear or thunderstorm encounter which has or could have endangered the aircraft, its occupants or any other person)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 5 (12))</i>	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
3.30	Unintended flight in IMC or loss of reference in flight <i>(Unintended flight in IMC or loss of reference in flight)</i>	Events in which the pilot inadvertently enters instrumental meteorological conditions or loses situational awareness <i>(Reference Regulation (EU) 2015/1018 Annex I, 1.5(2))</i>	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 <i>(Inappropriate action by the crew, unsuitable use of aircraft systems and instruments)</i>	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 <i>(Reference Regulation (EU) 2015/1018 Annex I, 1.5(3))</i>	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. (<i>Reference: Regulation (EU) 2015/1018 Annex I, 1.4 (4)</i>) 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 (<i>Transport of dangerous goods</i>)	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. (<i>Reference: Regulation (E) 2015/1018 Annex I, 1.1 (2)</i>)	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 (<i>Deicing and anti-icing errors</i>)	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. (<i>Reference Regulation (EU) 2015/1018 Annex I, 1.5(2)</i>)	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 (<i>Weight and balance errors</i>)	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. (<i>Reference: Regulation (EU) 2015/1018 Annex IV, 2.3 (1)</i>) 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 Loss of control 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: <i>Loss of control in flight LOC-I, Runway excursions RE.</i>
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: <i>LOC I.</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. <i>Reference: Regulation (EU) 2015/1018 Annex I, 2.2)</i>	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. <i>Reference: Regulation (EU) 2015/1018 Annex I, 2.2)</i>	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 <i>(Occurrences in Minimum Equipment List and technical log use)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex II, 3 (8))</i>	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 <i>(Airworthiness or Maintenance deficiencies caused cases)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex II, 3 (11), (12), (13))</i>	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 <i>(Occurrences in maintenance operations)</i>	Cases where maintenance procedures were not complete or accurate or were not performed. <i>(Reference: Regulation (EU) 2015/1018 Annex II, 3 (12))</i> 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 <i>(Serious technical problems in aircraft during flight)</i>	Cases where technical failures cause flight interruptions and immediate danger procedures to be performed or aircraft to land. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 4)</i> Serious technical defects can lead to serious incidents and accidents.	The main source of information is occurrence reporting.	Abbreviation: TECHNICAL 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 and the cause of serious accidents and incidents.

No.	Title	Definition	Data source	Measurement	Safety objective
3.44	Any occurrence that led to the declaration of an emergency situation <i>(Any event leading to the declaration of an emergency — Mayday or PAN call)</i>	Occurrences leading to the declaration of a state of emergency. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 4(1))</i>	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.

GROUND HANDLING

No.	Title	Definition	Data source	Measurement	Safety objective
3.45	Damage during ground handling (<i>Ground handling damage</i>)	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. (<i>Reference: Regulation (EU) 2015/1018 Annex IV, 2.3 (12)</i>) 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.
3.46	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. (<i>Reference: EU Regulation 2015/1018 Annex IV, 1.1 (9)</i>)	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: G-COL.
3.47	Insufficient supervision on the platform (<i>Insufficient supervision at apron</i>)	Cases where, due to insufficient supervision on the platform, there was a situation where passengers found themselves in places where access was not allowed. (<i>Reference: Regulation (EU) 2015/1018 Annex IV, 1.1 (10)</i>)	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: GH.

No.	Title	Definition	Data source	Measurement	Safety objective
3.48	Presence of foreign objects on maneuvering surfaces and platforms (<i>Foreign Object Debris FOD in the maneuvering area and apron and damaged caused GCOL</i>)	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. (<i>Reference: Regulation (EU) 2015/1018 Annex I, 5 (5)</i>)	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/blocking 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 (<i>Reference: Regulation (EU) 2015/1018 Annex IV, 1.1</i>)	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: <i>RE</i> .
3.50	Impact of animals, including birds, on the runway or in the air (<i>Wildlife strike including bird strike</i>)	Contact with animals (including birds) on the runway or in the air (<i>Reference: Regulation (EU) 2015/1018 Annex I, 5. (4), Annex IV, 1.1 (2)</i>)	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, RE</i> .

FIRE					
No.	Title	Definition	Data source	Measurement	Safety objective
3.51	Refueling incidents and occurrences <i>(Fueling incidents)</i>	Cases where an accident or event occurred as a result of deviation from procedures. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.2 (1), Annex IV, 1.3 (5))</i>	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 <i>(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.)</i>	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. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 2.1 (4).)</i>	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.

OTHER					
No.	Title	Definition	Data source	Measurement	Safety objective
3.53	Occurrences caused by human error <i>(Occurrences caused by human error)</i>	Occurrences caused by human error. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 1.5 (3), Annex II, 3. (17), Annex IV, 2.3. (13))</i>	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. <i>(Fatigue during flight operations, aircraft maintenance, air navigation services, or ground handling)</i>	Cases where fatigue reduces work ability. <i>(Reference: Regulation (EU) 2015/1018 Annex I, 4 (11), Annex II, 3 (17), Annex III, 3. (6), Annex IV, 1.3 (8))</i>	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 <i>(Occurrences resulting from on job training)</i>	On-the-job training occurrences. <i>(Reference Regulation (EC) 216/2008)</i>	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 <i>(An aircraft flight interference, or an ATS unit or a radio communication transmission interference caused by high-powered lights lasers, UAS or model aircraft).</i>	<i>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))</i>	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. <i>(Occurrences related to Air Navigation Services, Degradation or total Loss of services or functions)</i>	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 <i>(Unmanned aircraft System - UAS incidents which could cause ground damage, injury, or airborne encounters)</i>	Occurrences regarding unmanned aircraft <i>(Reference Regulation (EU) 2015/1018 Annex III, 1 (2.))</i>	The main source of information is occurrence reporting.	Abbreviation: UAS 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".

No.	Title	Definition	Data source	Measurement	Safety objective
3.59	Degradation or total loss of services or function <i>(Degradation or total loss of services or function)</i>	Degradation or total loss of services or function <i>(Reference: Regulation (EU) 2015/1018 Annex IV, 2.2)</i>	The main source of information is occurrence reporting.	<i>Abbreviation</i> 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 <i>(Other)</i>	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.