



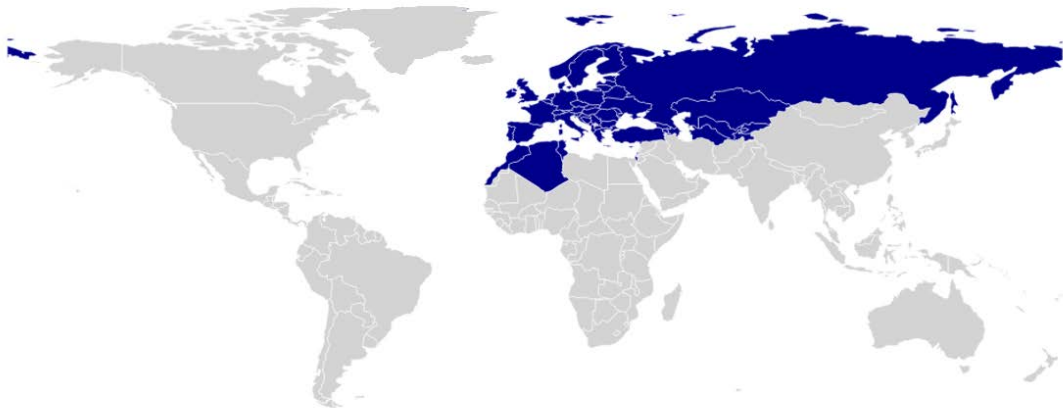
ICAO

SAFETY

EUROPEAN AVIATION SYSTEMS PLANNING GROUP

EUR 2023 Annual Safety Report

2023 Edition



European and North
Atlantic Office

The Annual Safety Report and other EASPG related documentation can be downloaded at:
<https://www.icao.int/EURNAT/Pages/EUR-and-NAT-Document.aspx>

Introduction

Aligned with the 2023-2025 edition of the *Global Aviation Safety Plan (GASP, Doc 10004)*, the European Regional Aviation Safety Plan (EUR RASP) outlines strategic direction for the management of aviation safety in the EUR Region. The EUR RASP 2023-2025 provides a summary of the regional initiatives to address the high-risk categories of occurrences (HRCs) set out in the GASP, while supporting the achievement of the GASP goals and EUR RASP targets summarized below:

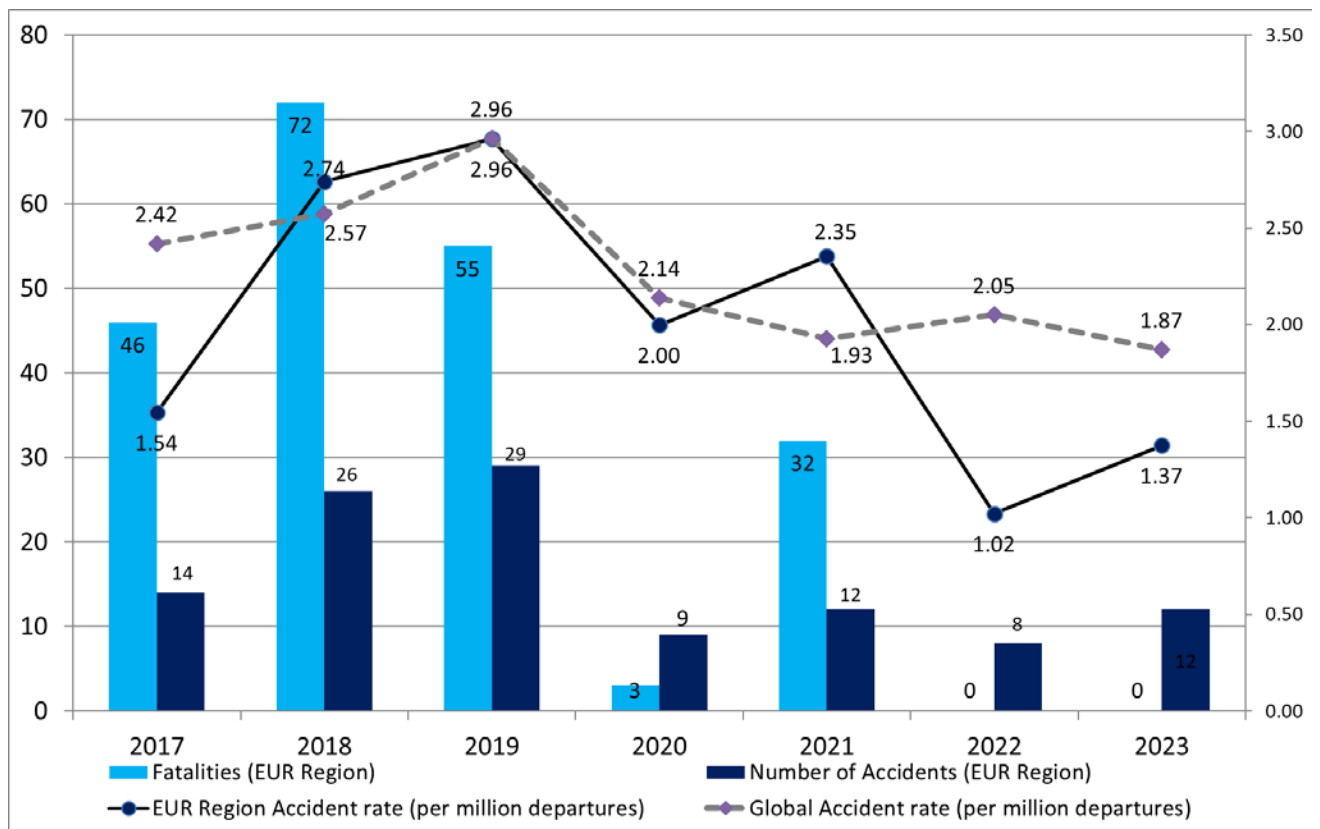
GASP Goals	EUR RASP Targets (2023-2025)
Goal 1: Achieve a continuous reduction of operational safety risks	1.1 – EUR States to maintain a decreasing trend of regional accident rate
Goal 2: Strengthen States' safety oversight capabilities	2.1 – EUR States to improve their score for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system (with focus on priority PQs) as follows: 75% by 2024; 85% by 2026 and 95% by 2030
Goal 3: Implement effective State safety programmes (SSPs)	3.1 - By 2023, all EUR States to implement the foundation of an SSP 3.2 - By 2024, all EUR States to publish a National Aviation Safety Plan (NASP) 3.3 All States to work towards an effective SSP as follows: a) by 2025 – Present b) by 2028 - Present and effective
Goal 4: Increase collaboration at the regional level	4.1 - By 2023, EUR States that do not expect to meet GASP Goals 2 and 3, to seek assistance to strengthen their safety oversight capabilities or facilitate SSP implementation 4.3 - By 2025, all States to contribute information on operational safety risks, including SSP safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (<i>for EUR, EASPG RESG</i>)
Goal 5: Expand the use of industry programmes and safety information sharing networks by service providers	5.1 - Maintain an increasing trend in EUR industry's contribution in safety information sharing networks, including harmonized SPIs as part of their safety management system (SMS), to EUR States and EUR region to assist in the development of national and regional aviation safety plans
Goal 6: Ensure the appropriate infrastructure is available to support safe operations	6.1 - By 2025, maintain an increasing trend of EUR States with air navigation and aerodrome infrastructure that meets relevant ICAO Standards

This ICAO EUR 2023 Annual Safety Report (EUR 2023 ASR) presents a series of Safety Performance Indicators (SPI) for 2023, including metrics such as the number of fatalities, accident rate, effective implementation of the safety oversight system and implementation of State Safety Programmes (SSPs). These metrics aim to measure the EUR Region's progress towards the EUR RASP targets and ultimately towards the GASP goals 1 to 6.

Accident statistics and analysis

In 2023, the number of accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg and occurring in one of the 55 States in the EUR Region has increased compared to 2022. There were 12 such accidents that occurred in 2023, with none of these accidents resulting in fatalities. This resulted in a regional accident rate of 1.37 accidents per million departures, up 34% from the 2022 rate of 1.02 accidents per million departures.

12 ↗	1.37 ↗	0	0.00	0	0.00	16.67% ↗
2023 EUR Number of accidents (a/c ≥ 5700 kg only)	2023 EUR Accident rate per million departures	2023 EUR Number of fatal accidents	2023 EUR Fatal accident rate per million departures	2023 EUR Number of fatalities	2023 EUR Fatality rate per million passengers carried	2023 EUR Accidents related to HRCs
(8 in 2022)	(1.02 in 2022)	(Same as in 2022)	(Same as in 2022)	(Same as in 2022)	(Same as in 2022)	(12% in 2022)

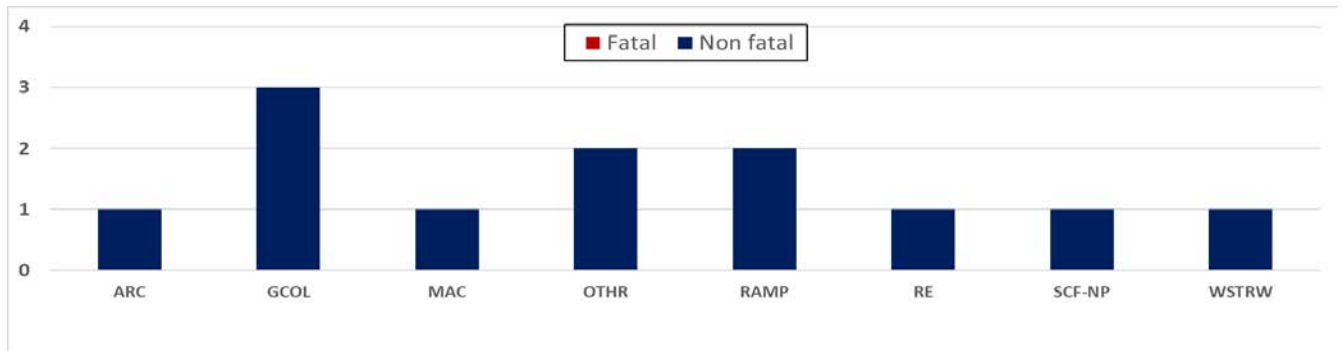


The vision of the Global Aviation Safety Plan (GASP) and of the EUR RASP is to achieve and maintain the goal of zero fatalities in commercial operations. Five high-risk categories of occurrences (HRCs) need to be addressed to mitigate the risk of fatalities: controlled flight into terrain (CFIT), loss of control in-flight (LOC-I), runway excursion (RE), runway incursion (RI) and mid-air collision (MAC). For States in the EUR Region, HRCs represent 16.67% of all accident categories for accidents involving scheduled commercial operations with aircraft of maximum mass of over 5700 kg. This is an increase from the figure in 2022 (12%).

The list of accidents in the EUR Region in 2023, as validated by ICAO Occurrence Validation Study Group (OVSG) is as follows:

Date of Occurrence	State Of Occurrence	Registration	Aircraft Type	Phase Of Flight	Fatalities	Occurrence Category
02-Jan-23	Netherlands	PH-HXJ	BOEING 737	Standing	0	RAMP
21-Jan-23	Germany	9H-QDU	BOEING 737	Standing	0	OTHR
10-Apr-23	Ireland	EI-DHH	BOEING 737	Landing	0	ARC
24-Jul-23	Italy	N189DN	BOEING 767	En Route	0	WSTRW
09-Aug-23	Spain	EC-MVI	ATR ATR72	Landing	0	RE
18-Aug-23	France	A6-EOM	AIRBUS A380	Approach	0	MAC
30-Aug-23	France	F-GSQT/ N411DX	BOEING 777	Taxi	0	GCOL
10-Sep-23	Italy	HA-LXF	AIRBUS A321	Maneuvering	0	OTHR
19-Sep-23	Spain	EC-MJU / D-ABOJ	BOEING 737	Taxi	0	GCOL
10-Oct-23	United Kingdom	EI-EGD	BOEING 737	Taxi	0	GCOL
29-Oct-23	Morocco	LZ-MDI	AIRBUS A320	Standing	0	RAMP
31-Oct-23	United Kingdom	G-CMJM	ATR ATR72	Take-off	0	SCF-NP

The breakdown of the 2023 accidents by Occurrence Categories can be found in the figure below:





Legend:

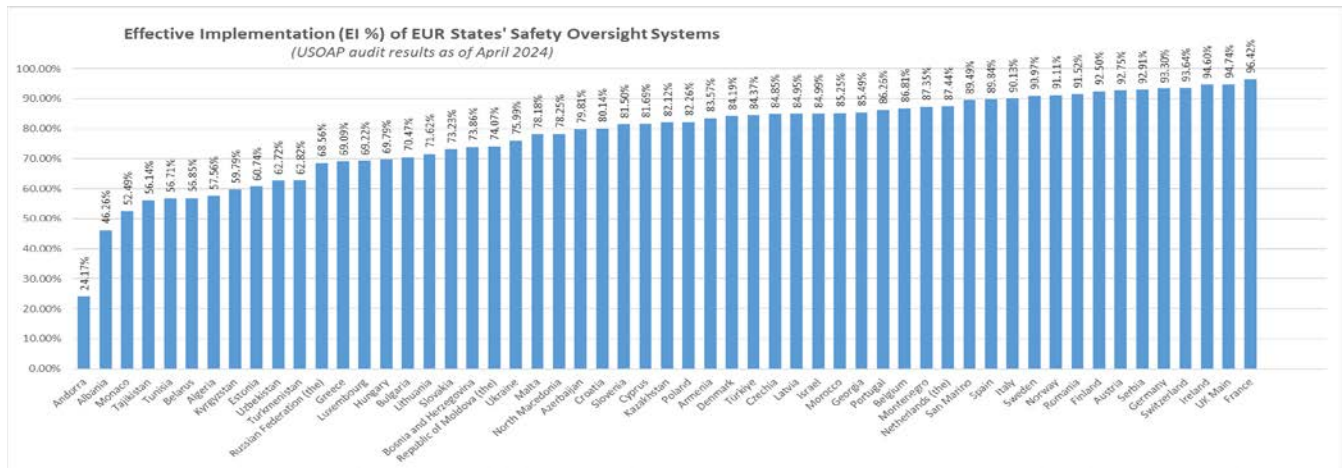
Occurrence Category	Occurrence Category Name	Occurrence Category Description
ARC	Abnormal Runway Contact	Any landing or takeoff involving abnormal runway or landing surface contact
GCOL	Ground Collision	Collision while taxiing to or from a runway in use.
MAC	Airprox/TCAS Alert/Loss Of Separation/Near Midair Collisions/Midair Collisions	Air proximity issues, Traffic Collision Avoidance System (TCAS)/Airborne Collision Avoidance System (ACAS) alerts, loss of separation as well as near collisions or collisions between aircraft in flight.
OTHR	Other	Any occurrence not covered under another category.
RAMP	Ground Handling	Occurrences during (or as a result of) ground handling operations.
RE	Runway Excursion	A veer off or overrun off the runway surface.
SCF-NP	System/Component Failure Or Malfunction (Non-Powerplant)	Failure or malfunction of an aircraft system or component other than the powerplant.
WSTRW	Wind Shear Or Thunderstorm	Flight into wind shear or thunderstorm.

Annex 13 — Aircraft Accident and Incident Investigation requires that the State of Occurrence forward a notification of an accident to ICAO when the aircraft involved is of maximum mass of over 2 250 kg or is a turbojet-powered aeroplane. In 2022, there were 55 such accidents, including 20 fatal accidents, resulting in 51 fatalities. The data for 2023 cannot be provided in this report since it was not fully available and could not be validated.

States' safety oversight capabilities

The Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP CMA) results show an average Effective Implementation (EI) score for States in the EUR Region of 77.74%, up from the 2022 value of 77.2%. USOAP CMA results also show that 63.64% of the States in the EUR Region have already achieved the target of 75% EI by 2024, as outlined in the 2023-2025 edition of the GASP.

77.74%  Average USOAP EI score for EUR States (77.2% in 2022)	35 (63.64%)  of EUR States with an EI > 75% (34 (62%) in 2022)	20 (36%) of EUR States with an EI > 85% (Same as in 2022)	1 (2%) of EUR States with an EI > 95% (Same as in 2022)
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The USOAP CMA measures the effective implementation of a State's safety oversight system. In 2023, 6 USOAP-CMA related activities were completed in 5 States of the EUR Region, while one had to be postponed.

State	Type of USOAP Activity	Dates	Status
Greece	Audit	6 to 18 Dec 2023	Completed
Kyrgyzstan	Audit	13 to 25 Sep 2023	Completed
Morocco	ICVM	4 to 11 Oct 2023	Completed
Uzbekistan	Audit	17 to 29 May 2023	Completed
Czechia	Focused audit	2 to 6 Oct 2023	Completed
	SSPIA	9 to 19 Oct 2023	Completed
Türkiye	Audit	--	Postponed

A Significant Safety Concern (SSC) occurs when the State allows the holder of an authorization or approval to exercise the privileges attached to it, although the minimum requirements established by the State and by the Standards set forth in the Annexes to the Convention are not met, resulting in an immediate safety risk to international civil aviation. In 2023 there was 1 unresolved SSC within EUR Region, as follows:

State	SSCs	SSC Areas				
		Airworthiness	Operations	Licensing	Aerodromes	Air Navigation
Russian Federation	1	x				



<p>65.4% ↗ of priority PQs implemented by EUR States <i>(65% in 2022)</i></p>	<p>The GASP and the EUR RASP call for States to improve their score for the Effective Implementation (EI) of the Critical Elements (CEs) of the State's safety oversight system, with a particular focus on the priority PQs. Priority PQs are defined as a subset of protocol questions (PQ) that, if found not satisfactory, may indicate a lack of capability by a State to identify and/or resolve operational safety and fundamental accident investigation deficiencies effectively. The level of implementation of priority PQs by EUR States is 65.4%.</p>
<p>75% ↘ of required corrective action plans (CAPs) submitted by EUR States <i>(76% in 2022)</i></p>	<p>When deficiencies in the form of non-satisfactory PQs have been identified a State's safety oversight system, Corrective Action Plans (CAP) should be submitted by States to ICAO, with specific actions and estimated implementation dates to correct the deficiencies identified.</p> <p>Initial proposed CAPs and subsequent CAP updates should meet the following six criteria:</p> <ul style="list-style-type: none">• Relevant — CAPs should address the issues and requirements related to the finding and corresponding PQ and Critical Element (CE).• Comprehensive — CAPs should be complete; including all elements or aspects associated with the finding.• Detailed — CAPs should be laid out in a step-by-step approach, as required, to outline the implementation process.• Specific — CAPs should identify who will do what, when, in coordination with the responsible office or entity.• Realistic — CAPs should be realistic in terms of contents and implementation timelines.• Consistent -- CAPs should be consistent in relation to other CAPs and with the State self-assessment.
<p>23.4% ↘ of CAPs completed by EUR States <i>(24% in 2022)</i></p>	<p>For the EUR Region, 75 % of required CAPs have been submitted to ICAO and 23.4% have been reported as completed.</p>

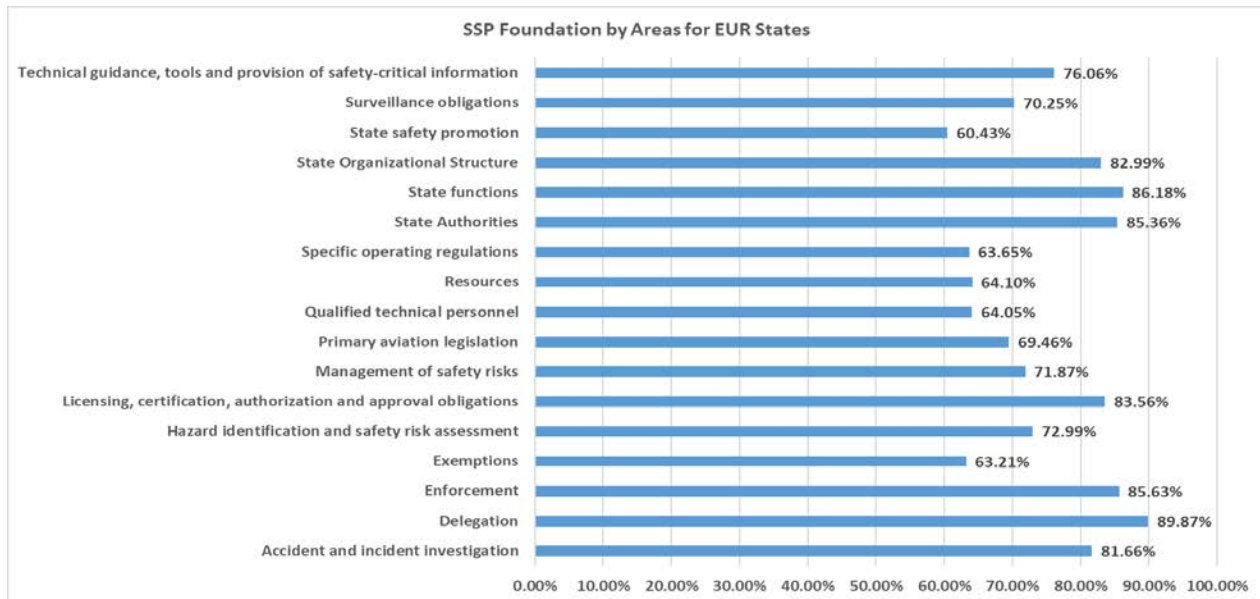
Implementation of State safety programmes

A State safety programme (SSP) is an integrated set of regulations and activities aimed at improving safety. The “Foundation of an SSP” refers to a subset of the Universal Safety Oversight Audit Programme (USOAP) protocol questions (PQs) that have been identified as fundamental for the sustainable implementation of a full SSP. EUR States have on average implemented 78.81% of these SSP foundational PQs. 34.5 % of EUR States have implemented at least 90% of the foundation of an SSP.

<p style="font-size: 1.2em; font-weight: bold; color: #4F81BD;">19 (34.5%) ↘</p> <p>EUR States having implemented at least 90% of the foundation of an SSP</p> <p style="font-size: 0.9em; color: #666;">(24 (44%) in 2022)</p>	<p style="font-size: 1.2em; font-weight: bold; color: #4F81BD;">78.81% ↘</p> <p>Average SSP foundation implementation of EUR States</p> <p style="font-size: 0.9em; color: #666;">(82.64% in 2022)</p>	<p style="font-size: 1.2em; font-weight: bold; color: #4F81BD;">45 (82%) ↗</p> <p>EUR States that require all applicable service providers under their authority to implement an SMS</p> <p style="font-size: 0.9em; color: #666;">(as reported via EUR RASP 2023 Survey, Question 1)</p> <p style="font-size: 0.9em; color: #666;">(10 (18%) reported under EFOD in 2022)</p>	<p style="font-size: 1.2em; font-weight: bold; color: #4F81BD;">33 (60%) ↗</p> <p>of EUR States have issued a national aviation safety plan</p> <p style="font-size: 0.9em; color: #666;">(as reported via EUR RASP 2023 Survey, Question 48)</p> <p style="font-size: 0.9em; color: #666;">(30 (55%) in 2022)</p>
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Note: The above information is based on the USOAP OLF 2023 data averaged for the United Kingdom and Great Britain and Kingdom of the Netherlands that includes their crown dependencies and overseas territories, which affects their EI and consequently the EUR average EI compared to 2022.

SSP foundational PQs are grouped into subject areas derived from Annex 19. The level of implementation of these SSP subject areas for States in the EUR region is as follows:



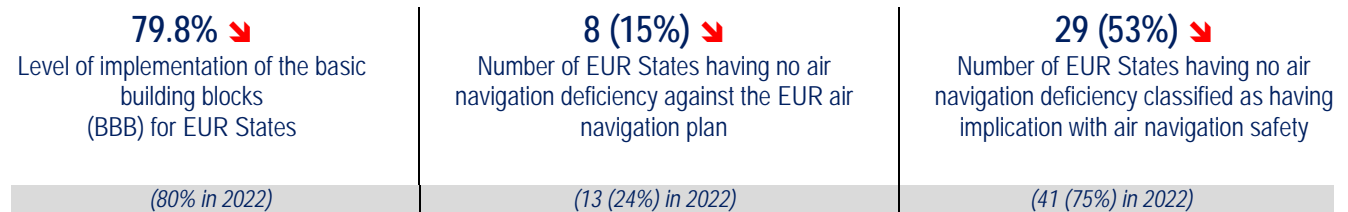
Effective SSPs include the implementation of SMS by service providers within individual States. In the EUR Region, States require that service providers implement an SMS, as part as their safety management system obligations defined in Annex 19. Compared to 2022 (when data was derived from EFOD) the data in this report is based on information collected from the EUR RASP 2023 Survey. Good progress is demonstrated with 82% of EUR States reporting that they require all applicable service providers under their authority to implement an SMS.

Every State should develop a national aviation safety plan (NASP), in line with the GASP goals, targets and global high-risk categories of occurrences (G-HRCs). The NASP is the means to demonstrate commitment to the

implementation of activities for improvement of safety in the State. 60% of the 55 EUR States have issued a NASP.

Air navigation and aerodrome infrastructure

GASP Goal 6 focuses on the need to ensure that appropriate infrastructure is available to support safe operations, while the EUR RASP calls for all States to implement the air navigation and airport core infrastructure. The Basic Building Blocks (BBB) are a baseline defined by the basic services agreed by the States under the Convention on International Civil Aviation, so that international civil aviation may be developed in a safe and orderly manner. The BBB framework describes the backbone of any robust air navigation system by defining the essential air navigation services to be provided for international civil aviation according to ICAO SARPs and Procedures for Air Navigation Services (PANS).



The level of provision of essential air navigation services (BBBs) and the capability to oversee them, measured by the effective implementation of the USOAP PQs linked to the BBBs is 79.8% for EUR States. The relationship between the BBBs and USOAP PQs is available at <https://www4.icao.int/ganportal/bbbsusoapmapping>.

Note: The above information is based on the USOAP OLF 2023 data averaged for the United Kingdom and Great Britain and Kingdom of the Netherlands that includes their crown dependencies and overseas territories, which affects their EI and consequently the EUR average EI compared to 2022.

An Air Navigation Deficiency is a situation when a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO SARPs, or Procedures for Air Navigation Services (PANS) and which has a negative impact on safety, regularity and/or efficiency of international civil aviation. In the EUR Region, 29 (53%) States have no air navigation deficiency classified as having implications with air navigation safety, while 8 (5%) States have no air navigation deficiency against the EUR air navigation plan. As of April 2024, 5 (five) deficiencies having a direct impact on safety, requiring immediate corrective actions, were identified in the EUR region. An additional 43 deficiencies classified as having top priority requirements necessary for air navigation safety were identified, and 39 with intermediate requirements necessary for air navigation regularity and efficiency.

