



ICAO

Doc 10162

Manual on Monitoring Implementation of Regional and National Aviation Safety Plans

First Edition, 2023



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



| ICAO

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FOREWORD

Assembly Resolution A41-6: ICAO global planning for safety and air navigation calls for each State to develop and implement a national aviation safety plan (NASP) in line with the *Global Aviation Safety Plan* (GASP, Doc 10004) goals, targets and the global high-risk categories of occurrences (G-HRCs). The NASP should contain indicators to monitor its implementation and to measure progress towards achieving the respective NASP goal(s).

While the GASP establishes a global safety strategy, including goals, targets and indicators, regional aviation safety plans (RASP) should be developed and coordinated through the regional aviation safety groups (RASGs) to address specific regional safety issues, in line with the GASP goals and targets. The RASP should contain indicators to measure progress towards achieving the respective RASP goal(s).

This manual was developed to provide States and regions with guidance on data sources for indicators used to measure the achievement of the NASP and RASP goals, respectively. It includes a GASP Indicator Form, developed for each indicator, to provide States and regions with clear guidance and definitions, and to ensure ICAO collects consistent, reliable data.

This manual should be used in conjunction with the *Global Aviation Safety Plan* (Doc 10004) the *Global Aviation Safety Roadmap* (Doc 10161) (forthcoming) and the *Manual on the Development of Regional and National Aviation Safety Plans* (Doc 10131).

This manual was developed with input from experts from civil aviation authorities, industry, as well as regional and international organizations, and thereafter submitted for extensive peer review, taking into account feedback from the expert community. ICAO gratefully acknowledges the contributions of the ICAO Global Aviation Safety Plan Study Group (GASP-SG) and individual experts who provided support, advice and input for this manual.

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GLOSSARY

Contributing factors. Actions, omissions, events, conditions, or a combination thereof, which, if eliminated, avoided or absent, would have reduced the probability of the accident or incident occurring, or mitigated the severity of the consequences of the accident or incident. The identification of contributing factors does not imply the assignment of fault or the determination of administrative, civil or criminal liability.

Hazard. A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note.— The types of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in Annex 13 – Aircraft Accident and Incident Investigation, Attachment C.

Maximum mass. Maximum certificated take-off mass.

Safety. The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety enhancement initiative (SEI). One or more actions to eliminate or mitigate operational safety risks or to address an identified safety issue.

Safety oversight. A function performed by a State to ensure that individuals and organizations performing an aviation activity comply with safety-related national laws and regulations.

Safety performance. A State or a service provider's safety achievement as defined by its safety performance targets and safety performance indicators.

Safety performance indicator. A data-based parameter used for monitoring and assessing safety performance.

Safety performance target. The State or service provider's planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

Safety risk. The predicted probability and severity of the consequences or outcomes of a hazard.

State safety programme (SSP). An integrated set of regulations and activities aimed at improving safety.

ABBREVIATIONS AND ACRONYMS

ACI	Airports Council International
ADREP	Accident/Incident Data Reporting
CAP	Corrective action plan
CANSO	Civil Air Navigation Services Organisation
CE	Critical element
CFIT	Controlled flight into terrain
EFOD	Electronic Filing of Differences
EI	Effective implementation
EUROCONTROL	European Organisation for the Safety of Air Navigation
GASP	Global aviation safety plan
G-HRC	Global high-risk category of occurrence
HRC	High-risk category of occurrence
IATA	International Air Transport Association
LOC-I	Loss of control in-flight
MAC	Mid-air collision
NASP	National aviation safety plan
OAG	Official Airline Guide
OVSG	Occurrence Validation Study Group
PQ	Protocol Question
RASG	Regional aviation safety group
RASP	Regional aviation safety plan
RE	Runway excursion
RI	Runway incursion
RSOO	Regional Safety Oversight Organization
SARPs	Standards and Recommended Practices
SDCPS	Safety data collection and processing systems
SEI	Safety enhancement initiative
SPI	Safety performance indicators
SSC	Significant safety concern
SSP	State safety programme
SSPIA	State safety programme implementation assessment
USOAP	Universal Safety Oversight Audit Programme

Chapter 1

INTRODUCTION

1.1 BACKGROUND

1.1.1 Safety is aviation's top priority and Assembly Resolution A41-6: ICAO global planning for safety and air navigation recognizes the importance of a global framework in support of the Safety Strategic Objective of the International Civil Aviation Organization (ICAO). The *Global Aviation Safety Plan* (GASP, Doc 10004), available at www.icao.int/gasp, presents the global strategy for the continuous improvement of aviation safety. Its purpose is to continually reduce fatalities, and the risk of fatalities associated with accidents, by guiding the harmonized development and implementation of regional and national aviation safety plans.

1.1.2 The GASP establishes a global safety strategy, including goals, targets and indicators. The GASP goals are the results towards which efforts in aviation safety are directed. They present the desired outcomes that ICAO's Safety Strategy (as presented in the GASP) aims to produce. The GASP goals are high-level outcomes that States, regions or industry aim to achieve, with each containing specific targets. Targets are specific desired outcomes from the actions taken by States, regions and industry to achieve the goals, at a certain point in time. The GASP targets identify to whom the specific actions are directed (for example, States). Each GASP target also includes examples of indicators that stakeholders may use to measure progress towards achieving the respective GASP goal. Some goals contain more than one target and each GASP target is linked to a series of sample indicators. Indicators are a measurement index used to evaluate whether the GASP yields the expected results by States, regions and industry. While targets are intended to be specific, indicators may not be an exact measurement of the goal, but rather, an indirect means to measure the achievement of the goal by providing general information related to it. For example, one GASP goal relates to achieving a continuous reduction of operational safety risks through the associated target aiming to maintain a decreasing trend of the global accident rate. However, it may be difficult to measure the accident rates for every sector of aviation. Therefore, the accident numbers may be one of the indicators to measure progress towards achieving this goal.

1.1.3 Although the GASP provides a global perspective, regional aviation safety plans (RASP) should be developed and coordinated through the regional aviation safety groups (RASGs) to address specific regional safety issues, in line with the GASP goals and targets. The RASP should contain indicators to measure progress towards achieving the respective RASP goal(s).

1.1.4 Assembly Resolution A41-6 also calls for each State to develop and implement a national aviation safety plan (NASP), in line with the GASP goals, targets and the global high-risk categories of occurrences (G-HRCs). The NASP should also be developed having close regard for the RASP, while acknowledging that each State may have its own specific safety issues and priorities, including addressing significant safety concerns (SSCs). The NASP presents the strategic direction for the management of aviation safety at the national level, for a set period (for example, over the next five years). It should contain indicators to monitor its implementation and to measure progress towards achieving the respective NASP goals.

1.1.5 Indicators being used to measure safety performance of a RASP or NASP should be consistent with, or linked to those in, the GASP. However, the indicators presented in the GASP are only examples, unlike the goals and targets. When the GASP is adapted at the regional and national levels, respectively, regions and States may use the examples of indicators to develop regional and national indicators found in the RASP and NASP. However, not all indicators presented in the GASP need to be duplicated in a RASP or NASP.

Note.— In the context of the GASP and the RASP, the term “region” refers to a group of States and/or entities working together to enhance aviation safety within a geographic area. The RASG is the regional entity responsible for the development and implementation of the RASP.

1.1.6 Feedback received on the 2020-2022 edition of the GASP included States needing assistance on how to use GASP indicators in the context of their NASP and national safety performance measurement. It also included requests for additional guidance on how to measure each GASP indicator and clarify data sources or calculations. GASP indicators were even mistakenly viewed as mandatory; these are only examples (refer to 1.1.5).

1.2 PURPOSE

This document provides States and regions with guidance on data sources for indicators used to measure the achievement of the NASP and RASP goals, respectively. To address the feedback received, ICAO and its GASP Study Group (GASP-SG) conducted a review of all the indicators in the 2023-2025 edition of the GASP. The review showed that the majority of GASP indicators were clear and readily measurable – the “who, when and how” were known and the information needed to measure them is provided by ICAO or other international organizations who run industry programmes. Several GASP indicators are fully available and readily measurable. A few GASP indicators were identified as needing more work to make them clear and readily measurable – this included guidance on how to measure them and how to gather the data. A GASP Indicator Form was developed for each indicator to provide States and regions with clear guidance and definitions, and to ensure that ICAO collected consistent, reliable data.

1.3 APPLICABILITY

The content of this document is presented as guidance and should not be considered as the sole means to develop and use indicators to measure safety performance in the context of a NASP or RASP. States should consult specific requirements within their region and align their efforts with their respective RASP, where applicable.

Chapter 2

GASP INDICATORS

2.1 GENERAL

This chapter provides additional guidance for States and regions (and the regional aviation safety group (RASGs)) to gather data for each indicator and measure the progress made towards achieving the goals and targets, presented in national aviation safety plan (NASPs) and regional aviation safety plan (RASPs), respectively. It clarifies the use of the Global Aviation Safety Plan (GASP) indicators, which serve as examples to measure progress in achieving goals and targets, in line with the GASP.

2.2 CONTENT

The GASP indicators provide evidence about whether the desired outcomes occurred and measure the progress in the activities related to the GASP targets. They are written in a manner that references quantitative data (for example, number or percentage). Some indicators refer to occurrences (for example, number of accidents) that are deemed an outcome of deficient management of aviation safety. Others refer to activities conducted by States or other stakeholders (for example, completion of corrective action plans (CAPs)), deemed to improve the management of aviation safety. Ultimately, the indicators measure the achievement of the GASP goals. Data sources are needed to measure the status of GASP indicators and subsequently, for those of NASPs and RASPs. Currently, some data sources are readily available to ICAO, while others reside with individual States, regional entities or industry. Challenges in obtaining this data may render the measurement of safety performance difficult. Therefore, a series of the GASP Indicator Forms are presented in this document.

2.3 LAYOUT OF INDICATORS

The appendix to this chapter presents the GASP indicator (GASP-I) form. Indicator forms were created for all 36 indicators presented in the 2023-2025 edition of the GASP. Use of this form is not mandatory and is not intended to replace any existing Standards and Recommended Practices (SARPs). Below is guidance on how to complete the form and on the terms presented in it:

- a) rationale: an explanation of how the indicator connects to a specific GASP target and what the measurement and monitoring of the indicator supports;
- b) limitations: the scope or the extent of the variable or entity that the indicator measures;
- c) definition of terms: if applicable, a definition of any technical, specific or project-related terminology used in naming or defining the indicator that may not be widely known or understood;
- d) calculation method: if applicable, the specific or technical formula available for the calculation of the indicator value;

- e) data set(s): the data that is needed for measuring the indicator;
 - f) availability: the listed datasets may have different levels of availability, varying from “1” for unavailable data, “2” for partially available data and “3” for fully available data; and
 - g) provider: the provider of the data or the source where the data comes from.
-

Appendix A to Chapter 2

GLOBAL AVIATION SAFETY PLAN INDICATOR (GASP-I) FORMS

GASP Indicator (GASP-I) Form
GASP-I.1.1.01

<i>GASP-I.1.1.01</i>	<i>Number of accidents</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>The number of accidents is a key reactive safety indicator. States in which accidents occur are required to notify ICAO if the aircraft is of maximum mass of over 2 250 kg.</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting
Calculation method	<p>Count the accidents involving scheduled commercial operations if:</p> <ul style="list-style-type: none"> a) the date of occurrence is between 1 January and 31 December of the year in question; b) a notification and/or an ADREP report was forwarded to and received by ICAO; c) the circumstances of the accidents match those defined for “accident” in Annex 13; and d) the aircraft involved in the accident is of maximum mass of over 5 700 kg.

<i>GASP-I.1.1.01</i>	<i>Number of accidents</i>
Data sets	Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	ICAO ADREP database

GASP Indicator (GASP-I) Form
GASP-I.1.1.02

<i>GASP-I.1.1.02</i>	<i>Number of accidents per million departures (accident rate)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>This safety indicator has been widely used by ICAO since 2008. It can be found in the global Annual Safety Reports and on the ICAO public website. It is the most common reactive indicator measuring safety levels and is connected to risk exposure (number of million departures).</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>. – The Official Airline Guide (OAG) makes available to ICAO traffic data for scheduled operations with aircraft > 5 700 kg. – Validated OAG traffic data for year <i>n</i> is available in March of year <i>n+1</i>.
Definition of terms	<p>The term "accident" is defined in Annex 13, Chapter 1. Definitions</p> <p>ADREP: Accident/Incident Data Reporting</p>
Calculation method	<p>Indicator = N/D, where:</p> <ul style="list-style-type: none"> a) <i>N</i> is the number of accidents involving scheduled commercial operations with aircraft of maximum mass of over 5 700 kg for the year in question; and b) <i>D</i> is the number of scheduled commercial departures (from iSTARS 'State Traffic' application), divided by 1 000 000.
Data sets	<p>Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations.</p> <p>OAG dataset for ICAO.</p>

<i>GASP-I.1.1.02</i>	<i>Number of accidents per million departures (accident rate)</i>
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none">– ICAO ADREP database– iSTARS Application "ADREP et al."– iSTARS Application "State Traffic"

GASP Indicator (GASP-I) Form
GASP-I.1.1.03

<i>GASP-I.1.1.03</i>	<i>Number of fatal accidents</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>The number of accidents is a key reactive safety indicator. States in which accidents occur are required to notify ICAO if the aircraft involved is of maximum mass of over 2 250 kg or is a turbojet-powered aeroplane.</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year n is available in March of year n+1.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting. – A fatal accident is an accident in which a person is fatally injured as a result of: <ul style="list-style-type: none"> a) being in the aircraft; or b) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or c) direct exposure to jet blast, <p>except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.</p> – For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

<i>GASP-I.1.1.03</i>	<i>Number of fatal accidents</i>
Calculation method	Count the accidents involving scheduled commercial operations if: <ul style="list-style-type: none"> a) the date of occurrence is between 1 January and 31 December of the year in question; b) a notification and/or an ADREP report was forwarded to and received by ICAO; c) the circumstances of the accidents match those defined for "fatal accident" in Annex 13; and d) the aircraft involved in the accident is of maximum mass of over 5 700 kg.
Data sets	Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none"> – ICAO ADREP database – iSTARS Application "ADREP et al."

GASP Indicator (GASP-I) Form
GASP-I.1.1.04

<i>GASP-I.1.1.04</i>	<i>Number of fatal accidents per million departures (fatal accident rate)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>This indicator complements GASP-I.1.1.02 by focusing on fatal accidents. It is connected to risk exposure (number of million departures).</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>. – The Official Airline Guide (OAG) makes available to ICAO traffic data for scheduled operations with aircraft > 5 700 kg. – Validated OAG traffic data for year <i>n</i> is available in March of year <i>n+1</i>.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting. – A fatal accident is an accident in which a person is fatally injured as a result of: <ul style="list-style-type: none"> a) being in the aircraft; or b) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or c) direct exposure to jet blast, <p>except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.</p> – For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

GASP-I.1.1.04	Number of fatal accidents per million departures (fatal accident rate)
Calculation method	Indicator = N/D , where: <ol style="list-style-type: none"> a) N is the number of accidents involving scheduled commercial operations for which: <ol style="list-style-type: none"> 1) the date of occurrence is between 1 January and 31 December of the year in question; 2) a notification and/or an ADREP report was forwarded to and received by ICAO; 3) the circumstances of the accidents match those defined for "fatal accident" in Annex 13; and 4) the aircraft involved in the accident is of maximum mass of over 5 700 kg; and b) D is the number of scheduled commercial departures globally (from iSTARS 'State Traffic' application), divided by 1 000 000.
Data sets	<ul style="list-style-type: none"> – Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations. – OAG dataset for ICAO.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none"> – ICAO ADREP database – iSTARS Application "ADREP et al." – iSTARS Application "State Traffic"

GASP Indicator (GASP-I) Form
GASP-I.1.1.05

<i>GASP-I.1.1.05</i>	<i>Number of fatalities</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>The number of fatalities is a key reactive safety indicator and is related to the GASP aspirational safety goal of zero fatalities in commercial operations by 2030 and beyond. States in which accidents occur are required to notify ICAO if the aircraft involved is of maximum mass of over 2 250 kg or is a turbojet-powered aeroplane.</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting. – A fatal accident is an accident in which a person is fatally injured as a result of: <ul style="list-style-type: none"> a) being in the aircraft; or b) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or c) direct exposure to jet blast, <p>except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.</p> – For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

GASP-I.1.1.05	<i>Number of fatalities</i>
Calculation method	Count the number of fatally injured persons in all accidents involving scheduled commercial operations for which: <ul style="list-style-type: none"> a) the date of occurrence is between 1 January and 31 December of the year in question; b) a notification and/or an ADREP report was forwarded to and received by ICAO; c) the circumstances of the accidents match those defined for "accident" in Annex 13; and d) the aircraft involved in the accident is of maximum mass of over 5 700 kg.
Data sets	Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none"> – ICAO ADREP database – iSTARS Application "ADREP et al."

GASP Indicator (GASP-I) Form
GASP-I.1.1.06

<i>GASP-I.1.1.06</i>	<i>Number of fatalities per passengers carried (fatality rate)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.</p> <p>The number of fatalities is a key reactive safety indicator and is related to the GASP aspirational safety goal of zero fatalities in commercial operations by 2030 and beyond. It is connected to risk exposure (number of passengers carried).</p>
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>. – Validated data for year <i>n</i> on passengers carried is available on ICAO DATA+ in March of year <i>n+1</i>.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting. – A fatal accident is an accident in which a person is fatally injured as a result of: <ul style="list-style-type: none"> a) being in the aircraft; or b) direct contact with any part of the aircraft, including parts which have become detached from the aircraft; or c) direct exposure to jet blast, <p>except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew.</p> – For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

GASP-I.1.1.06	<i>Number of fatalities per passengers carried (fatality rate)</i>
Calculation method	<ul style="list-style-type: none"> – Indicator = N/D, where: <ul style="list-style-type: none"> a) N is the number of fatally injured persons in all accidents involving scheduled commercial operations for which: <ul style="list-style-type: none"> 1) the date of occurrence is between 1 January and 31 December of the year in question; 2) a notification and/or an ADREP report was forwarded to and received by ICAO; 3) the circumstances of the accidents match those defined for “accident” in Annex 13; 4) the aircraft involved in the accident is of maximum mass of over 5 700 kg; 5) the accident aircraft was involved in scheduled commercial operations; and b) D is the total number of passengers carried on scheduled services.
Data sets	<ul style="list-style-type: none"> – Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations. – Traffic data collected by ICAO.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none"> – ICAO ADREP database – iSTARS Application "ADREP et al." – ICAO DATA+ Air Carrier Traffic

GASP Indicator (GASP-I) Form
GASP-I.1.1.07

<i>GASP-I.1.1.07</i>	<i>Percentage of occurrences related to high-risk categories</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 1.1: Maintain a decreasing trend of global accident rate.
Limitations	<ul style="list-style-type: none"> – The State of Occurrence shall forward a notification of an accident to ICAO when the aircraft involved is of a maximum mass of over 2 250 kg or is a turbojet-powered aeroplane, as required by Annex 13 – <i>Aircraft Accident and Incident Investigation</i>, paragraph. 4.1. – The State conducting the investigation shall send Accident/Incident Data Reporting (ADREP) to ICAO for accidents to aircraft over 2 250 kg, as required by Annex 13, Chapter 7. – ICAO maintains an ADREP database with the notifications and ADREPs it receives. – A validation of the ADREP database is performed annually by a group of experts (the Occurrence Validation Study Group (OVSG)) only for accidents and some serious incidents involving civil-operated fixed-wing aircraft of a maximum mass of over 5 700 kg. This validation does not include, as of April 2020, helicopter accidents or aircraft between 2 250 kg and 5 700 kg. – Validated ADREP data for year <i>n</i> is available in March of year <i>n+1</i>.
Definition of terms	<ul style="list-style-type: none"> – The term “accident” is defined in Annex 13, Chapter 1, Definitions. – ADREP: Accident/Incident Data Reporting – The 2023-2025 edition of the GASP defines global high-risk categories of occurrences (G-HRCs) as being: <ul style="list-style-type: none"> a) controlled flight into terrain (CFIT); b) loss of control in-flight (LOC-I); c) mid-air collisions (MAC); d) runway excursions (RE); and e) runway incursions (RI). – Occurrence categories are defined by the Commercial Aviation Safety Team/ICAO Common Taxonomy Team (CICTT) taxonomy available at: https://www.icao.int/safety/airnavigation/AIG/Pages/Taxonomy.aspx
Calculation method	<ul style="list-style-type: none"> – Indicator for HRC 'CFIT' = 100 * N/D, where: <ul style="list-style-type: none"> a) <i>N</i> is the number of accidents involving scheduled commercial operations for which: <ul style="list-style-type: none"> 1) the date of occurrence is between 1 January and 31 December of the year in question;

GASP-I.1.1.07	<i>Percentage of occurrences related to high-risk categories</i>
	<ul style="list-style-type: none"> 2) a notification and/or an ADREP was forwarded to and received by ICAO; 3) the circumstances of the accidents match those defined for "accident" in Annex 13; 4) the aircraft involved in the accident is of maximum mass of over 5 700 kg; 5) the occurrence category has been determined to be CFIT by the OVSG; and <p>b) <i>D</i> is the value of GASP.SPI.1.1.01 for the year in question.</p> <ul style="list-style-type: none"> – Repeat the same operation for LOC-I, MAC, RE and RI.
Data sets	Notifications and ADREP reports sent by States to ICAO under Annex 13 obligations.
Availability (1-3)	3: Accident notification and ADREP reports are already available in the ICAO ADREP database. No further reporting by States is required.
Provider	<ul style="list-style-type: none"> – ICAO ADREP database – iSTARS Application "ADREP et al."

GASP Indicator (GASP-I) Form
GASP-I.2.1.01

<i>GASP-I.2.1.01</i>	<i>Number of States that met the EI score as per the timelines</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 2.1: States improving their score for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system (with a focus on priority Protocol Questions (PQs)) as follows:</p> <ul style="list-style-type: none"> a) by 2024 – 75 per cent; b) by 2026 – 85 per cent; and c) by 2030 – 95 per cent.
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) audits focus on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the CEs of a safety oversight system, which enable the State to ensure the implementation of ICAO's safety-related Standards and Recommended Practices (SARPs) and associated procedures and guidance material. – ICAO may not have enough resources to update the EI scores of each State on a yearly basis or, in particular, in the years 2024, 2026 and 2030. This will result in an inaccurate result. – Depending on the time elapsed since the last USOAP audit and the update of the EI score for a given State, the indicator may not reflect the actual safety oversight capabilities in that State. – Migration from 2017 to the 2020 PQ edition will affect the EI values for all the USOAP activities of States and regional organizations, as indicated on the USOAP Continuous Monitoring Approach (CMA) Online Framework (OLF).
Definition of terms	<p>USOAP CMA: Universal Safety Oversight Audit Programme Continuous Monitoring Approach.</p> <p>ICAO carries out USOAP CMA activities in line with the <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i> (Doc 9735) to determine the safety oversight capabilities of States by assessing their effective implementation of the eight CEs in eight audit areas (that is, primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG), personnel licensing and training (PEL), aircraft operations (OPS), airworthiness of aircraft (AIR), aircraft accident and incident investigation (AIG), air navigation services (ANS) and aerodromes and ground aids (AGA)) through PQs.</p> <p style="text-align: center;">Overall EI for a State is:</p> $EI (\%) = \frac{\text{Number of satisfactory PQs}}{\text{Total number of applicable PQs}} \times 100$
Calculation method	<p>Number of States that have an overall EI equal to or above the threshold (75 per cent by 2024; 85 per cent by 2026; 95 per cent by 2030) as of 31 December of each year in the reference period (defined as 2022-2025 for the 75 per cent target, 2026-2029 for the 85 per cent target and starting 2030 for the 95 per cent target).</p>

<i>GASP-I.2.1.01</i>	<i>Number of States that met the EI score as per the timelines</i>
Data sets	– USOAP CMA PQs and EIs – Results for all audited States are recorded in the USOAP CMA OLF website using the following link: www.icao.int/usoap .
Availability (1-3)	3: EIs for every State are available on the USOAP CMA OLF and in iSTARS.
Provider	USOAP CMA OLF

GASP Indicator (GASP-I) Form
GASP-I.2.1.02

<i>GASP-I.2.1.02</i>	<i>Number of States that have fully implemented the priority Protocol Questions</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 2.1: 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 Protocol Questions (PQs)) as follows:</p> <ul style="list-style-type: none"> a) by 2024 – 75 per cent; b) by 2026 – 85 per cent; and c) by 2030 – 95 per cent.
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) audits focus on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the CEs of a safety oversight system, which enable the State to ensure the implementation of ICAO's safety-related Standards and Recommended Practices (SARPs) and associated procedures and guidance material. – ICAO may not have enough resources to update the EI of each State on a yearly basis or, in particular, in the years 2024, 2026 and 2030. This will result in an inaccurate result. – Depending on the time elapsed since the last USOAP audit and the update of the EI score for a given State, the indicator may not reflect the actual safety oversight capabilities in that State. – Migration from 2017 to the 2020 PQ edition will affect the EI values for all the USOAP activities of States and regional organizations, as indicated on the USOAP Continuous Monitoring Approach (CMA) Online Framework (OLF).
Definition of terms	<ul style="list-style-type: none"> – USOAP CMA: Universal Safety Oversight Audit Programme Continuous Monitoring Approach <p>ICAO carries out USOAP CMA activities in line with the <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i> (Doc 9735) to determine the safety oversight capabilities of States by assessing their effective implementation of the eight CEs in eight audit areas (that is, primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG), personnel licensing and training (PEL), aircraft operations (OPS), airworthiness of aircraft (AIR), aircraft accident and incident investigation (AIG), air navigation services (ANS) and aerodromes and ground aids (AGA)) through PQs.</p> <p style="text-align: center;">Overall EI for a State is:</p> $EI (\%) = \frac{\text{Number of satisfactory PQs}}{\text{Total number of applicable PQs}} \times 100$ <ul style="list-style-type: none"> – Priority PQs: Set of PQs which are fundamental for a State safety oversight system. These PQs are highlighted in the ICAO OLF and are available in the 2020 edition of the USOAP CMA PQs.

GASP-I.2.1.02	<i>Number of States that have fully implemented the priority Protocol Questions</i>
Calculation method	Count the number of States whose EI for priority PQs is 100 per cent.
Data sets	<ul style="list-style-type: none"> – USOAP CMA PQs and EIs – Results for all audited States are recorded in the USOAP CMA OLF website using the following link: www.icao.int/usoap
Availability (1-3)	3: EIs for every State are available on the USOAP CMA OLF and in iSTARS
Provider	<ul style="list-style-type: none"> – USOAP CMA OLF – ICAO iSTARS Application “USOAP DataTables”

GASP Indicator (GASP-I) Form
GASP-I.2.1.03

GASP-I.2.1.03	<i>Percentage of required corrective action plans submitted by States (using the online framework)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 2.1: 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 Protocol Question (PQs)) as follows:</p> <ul style="list-style-type: none"> a) by 2024 – 75 per cent; b) by 2026 – 85 per cent; and c) by 2030 – 95 per cent.
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) audits focus on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the CEs of a safety oversight system, which enable the State to ensure the implementation of ICAO's safety-related Standards and Recommended Practices (SARPs) and associated procedures and guidance material. – This indicator measures the fulfillment of corrective action plans (CAPs) by States on the online framework (OLF), but ICAO may not necessarily have validated the CAP.
Definition of terms	<ul style="list-style-type: none"> – USOAP CMA: Universal Safety Oversight Audit Programme Continuous Monitoring Approach <p>ICAO carries USOAP CMA activities in line with the <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i> (Doc 9735) to determine the safety oversight capabilities of its Member States by assessing their effective implementation of the eight CEs in eight audit areas (that is, primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG), personnel licensing and training (PEL), aircraft operations (OPS), airworthiness of aircraft (AIR), aircraft accident and incident investigation (AIG), air navigation services (ANS) and aerodromes and ground aids (AGA) through Protocol Questions (PQs)).</p> <p style="text-align: center;">Overall EI for a State is:</p> $EI (\%) = \frac{\text{Number of satisfactory PQs}}{\text{Total number of applicable PQs}} \times 100$ <ul style="list-style-type: none"> – Corrective action plan (CAP): A plan of action to eliminate the cause of a deficiency or finding. When ICAO issues a finding, that is, when the status of a PQ changes to not satisfactory as a result of a USOAP Continuous Monitoring Approach (CMA) activity, in response the State must develop a CAP. The State shall develop an acceptable CAP and submit it to ICAO through the USOAP CMA OLF.
Calculation method	<p>Indicator = 100* N/D, where:</p> <ul style="list-style-type: none"> a) <i>N</i> is the number of CAPs submitted by States on the OLF; and b) <i>D</i> is the number of non-satisfactory PQs of all States.

<i>GASP-I.2.1.03</i>	<i>Percentage of required corrective action plans submitted by States (using the online framework)</i>
Data sets	<ul style="list-style-type: none">– USOAP CMA PQs and EIs– Results for all audited States are recorded in the USOAP CMA OLF website using the following link: www.icao.int/usoap.
Availability (1-3)	3: CAPs for every State are available on the USOAP CMA OLF.
Provider	USOAP CMA OLF

GASP Indicator (GASP-I) Form
GASP-I.2.1.04

<i>GASP-I.2.1.04</i>	<i>Percentage of completed corrective action plans per State (using the online framework)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 2.1: 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 Protocol Questions (PQs)) as follows:</p> <ul style="list-style-type: none"> a) by 2024 – 75 per cent; b) by 2026 – 85 per cent; and c) by 2030 – 95 per cent.
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) audits focus on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the CEs of a safety oversight system, which enable the State to ensure the implementation of ICAO's safety-related Standards and Recommended Practices (SARPs) and associated procedures and guidance material. – This indicator measures the fulfilment of States in completing corrective action plans (CAPs) on the Universal Safety Oversight Audit Programme Continuous Monitoring Approach Online Framework (USOAP CMA OLF), but the CAP may not necessarily be validated by ICAO as acceptable or not. – Depending on the time elapsed since the last USOAP audit and the update of the EI score for a given State, the indicator may not reflect the actual safety oversight capabilities in that State. – Migration from 2017 to the 2020 PQ edition will affect the EI values for all the USOAP activities of States and regional organizations, as indicated on the USOAP CMA OLF.
Definition of terms	<ul style="list-style-type: none"> – USOAP CMA: Universal Safety Oversight Audit Programme Continuous Monitoring Approach <p>ICAO carries out USOAP CMA activities in line with the <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i> (Doc 9735) to determine the safety oversight capabilities of States by assessing their effective implementation of the eight CEs in eight audit areas (that is, primary aviation legislation and civil aviation regulations (LEG), civil aviation organization (ORG), personnel licensing and training (PEL), aircraft operations (OPS), airworthiness of aircraft (AIR), aircraft accident and incident investigation (AIG), air navigation services (ANS) and aerodromes and ground aids (AGA)) through PQs.</p> <p style="text-align: center;">Overall EI for a State is:</p> $EI (\%) = \frac{\text{Number of satisfactory PQs}}{\text{Total number of applicable PQs}} \times 100$

GASP-I.2.1.04	<i>Percentage of completed corrective action plans per State (using the online framework)</i>
	<ul style="list-style-type: none"> – Corrective action plan (CAP): A plan of action to eliminate the cause of a deficiency or finding. When ICAO issues a finding, that is, when the status of a PQ changes to not satisfactory as a result of a USOAP CMA activity, in response the State must develop a CAP. The State shall develop an acceptable CAP and submit it to ICAO through the USOAP CMA OLF.
Calculation method	<p>Indicator for State $n = 100 * N/D$, where:</p> <ul style="list-style-type: none"> a) N is number of CAP submitted and reported as "completed" by State n on the OLF; and b) D is the number of non-satisfactory PQs of State n.
Data sets	<ul style="list-style-type: none"> – USOAP CMA PQs and EIs – Results for all audited States are recorded in the USOAP CMA OLF website using the following link: www.icao.int/usoap.
Availability (1-3)	3: CAPs for every State with an indication of their status are available on the USOAP CMA OLF.
Provider	USOAP CMA OLF

GASP Indicator (GASP-I) Form
GASP-I.3.1.01

GASP-I.3.1.01	<i>Number of States having implemented the State safety programme foundation Protocol Questions</i>
Rationale	<ul style="list-style-type: none"> – Related to Global Aviation Safety Plan (GASP) Target 3.1: By 2023, all States to implement the foundation of a State safety programme (SSP). – Indicator will be used to motivate States to make necessary action to reach the GASP goal and targets.
Limitations	Indicator is based on the results of previous Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) activity that might be outdated and does not reflect the current situation with regards to SSP implementation. Also it is dependent on self-reporting by States via the online framework (OLF) of the completion of relevant corrective actions plans for protocol questions that were found unsatisfactory at the time of activity, that is, even if the State has implemented the foundation but has not reflected it on the OLF, then the indicator will be negative.
Definition of terms	<ul style="list-style-type: none"> – The term “foundation of an SSP” refers to a subset of USOAP Protocol Questions (PQs) that aim to assist States in building a solid safety oversight foundation for the implementation of an SSP. These are referred to as “SSP foundation PQs”. <p>The full list of SSP foundation PQs can be found using the SSP Foundation tool available via the ICAO integrated Safety Trend Analysis and Reporting System (iSTARS) at www.icao.int/safety/iStars</p> <ul style="list-style-type: none"> – “SSP foundation indicator” is defined in iSTARS as the percentage of PQs which are either validated by USOAP and/or submitted as completed through the corrective action plans (CAPs) on the USOAP CMA OLF.
Calculation method	The total number of States counted to have reached 100 per cent aggregated SSP foundation indicator (see SSP foundation tool in iSTARS).
Data sets	<ul style="list-style-type: none"> – List of SSP foundation PQs that were addressed as Satisfactory during the previous USOAP activity. – List of corrective actions plans marked as 100 per cent completed by States in the OLF for SSP foundation PQs that were not satisfactory as of previous USOAP CMA activity.
Availability (1-3)	3
Provider	USOAP CMA OLF

GASP Indicator (GASP-I) Form
GASP-I.3.1.02

GASP-I.3.1.02	<i>Percentage of required corrective action plans related to the State safety programme foundation Protocol Questions submitted by States (using the online framework)</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 3.1: By 2023, all States to implement the foundation of a State safety plan (SSP).
Limitations	<ul style="list-style-type: none"> – The indicator is based on self-reporting by States via the online framework (OLF) and submission of relevant corrective action plans for Protocol Questions (PQs) that were found unsatisfactory at the time of activity, that is, even if the State has implemented the foundation but has not reflected it on the OLF, then the indicator will be negative. – Finally, the indicator talks about the submission of corrective action plans (CAPs) and not implementation of CAPs hence it is not clear how monitoring of this indicator will contribute to the achievement of the GASP goal.
Definition of terms	<ul style="list-style-type: none"> – The term “foundation of an SSP” refers to a subset of Universal Safety Oversight Audit Programme (USOAP) PQs that aim to assist States in building a solid safety oversight foundation for the implementation of an SSP. These are referred to as “SSP foundation PQs”. – Corrective action plan (CAP): the plan that should be prepared by State to address the specific non-satisfactory PQ. The plan can consist of separate steps. – A submitted CAP is the CAP prepared by the State, uploaded to the OLF and actually “submitted” to ICAO by clicking on the submit button.
Calculation method	<p>Indicator = $100 * N/D$, where:</p> <ul style="list-style-type: none"> a) <i>N</i> is the overall number of SSP foundation PQs (initially) identified as non-satisfactory with CAP submitted by States; and b) <i>D</i> is the total number of non-satisfactory SSP foundation PQs for all States.
Data sets	<ul style="list-style-type: none"> – USOAP CMA activity results and list of SSP foundation PQs. – List of CAPs developed for non-satisfactory PQs and submitted to ICAO.
Availability (1-3)	3: Already available in OLF and in iSTARS.
Provider	<ul style="list-style-type: none"> – USOAP CMA OLF – iSTARS Application "SSP Foundation"

GASP Indicator (GASP-I) Form
GASP-I.3.1.03

GASP-I.3.1.03	<i>Percentage of required corrective action plans related to the State safety programme foundation Protocol Questions completed per State (using the online framework)</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 3.1: By 2023, all States to implement the foundation of a State safety programme (SSP).
Limitations	<p>The indicator is based on self-reporting by States via the Online Framework (OLF) for completion of relevant corrective actions plans for protocol questions that were found unsatisfactory at the time of activity, that is, even if the State has implemented the foundation but has not reflected it on the OLF, then the indicator will be negative.</p> <p>Since it is self-reporting the data is not validated by ICAO and may not reflect the actual status of PQ implementation in the State.</p>
Definition of terms	<ul style="list-style-type: none"> – The term “foundation of a State safety programme (SSP)” refers to a subset of Universal Safety Oversight Audit Programme (USOAP) Protocol Questions (PQs) that aim to assist States in building a solid safety oversight foundation for the implementation of an SSP. These are referred to as “SSP foundation PQs”. – Corrective action plan (CAP): the plan that should be prepared by State to address the specific non-satisfactory PQ. The plan can consist of separate steps. – A submitted CAP is the CAP prepared by State, uploaded to the OLF system and actually “submitted” to ICAO by clicking on the submit button. – A completed CAP is the status of the submitted CAP as indicated by the State on the OLF following its actual completion; all steps in the CAP should be reported by State as 100 per cent completed.
Calculation method	<p>Indicator for State $n = 100 * N/D$, where:</p> <ul style="list-style-type: none"> a) N is the overall number of SSP foundation PQs identified as non-satisfactory with CAP submitted and reported to be 100 per cent completed by State n; and b) D is the total number of non-satisfactory SSP foundation PQs for State n.
Data sets	<ul style="list-style-type: none"> – USOAP Continuous Monitoring Approach (CMA) activity results and list of SSP foundation PQs. – List of CAPs developed for non-satisfactory PQs and submitted to ICAO.
Availability (1-3)	3: Already available in OLF and in iSTARS.
Provider	<ul style="list-style-type: none"> – USOAP CMA OLF – iSTARS Application "SSP Foundation"

GASP Indicator (GASP-I) Form
GASP-I.3.2.01

<i>GASP-I.3.2.01</i>	<i>Number of States having published their NASP</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 3.2: By 2024, all States should publish a national aviation safety plan (NASP).</p> <p>Assembly Resolution A41-6 on ICAO global planning for safety and air navigation calls for all States to develop and implement national aviation safety plans, in line with the GASP goals, targets and the global high-risk categories of occurrences (G-HRCs).</p> <p>The NASP is the means to demonstrate commitment to the implementation of activities for improvement of safety in the State.</p>
Limitations	Information on NASP is sent by States to ICAO on a voluntary basis. Regional aviation safety groups (RASGs) therefore need to be the primary source of information, however no database or programme to capture the information is available at the RASG level.
Definition of terms	NASP: National aviation safety plan. The NASP presents the strategic direction for the management of aviation safety at the national level, for a set time period (for example, over the next five years). It outlines to all stakeholders where the civil aviation administration (CAA) and other entities involved in the management of aviation safety should target resources over the coming years. The NASP should be developed in alignment with the GASP and the regional aviation safety plan. However, priority should be given to national safety concerns, including addressing significant safety concerns (SSCs). National safety enhancement initiatives (SEIs) should be based on the State's self-assessment.
Calculation method	Number of States that, during the year in question, have made their RASGs aware of the availability of their NASPs and/or have made their NASP publicly available.
Data sets	<ul style="list-style-type: none"> – RASGs meeting documentation (reports, working papers and information papers) – NASPs are listed on the GASP public site at: www.icao.int/nasplibrary .
Availability (1-3)	2: Information on NASPs from States should be systematically included in RASG meeting agendas.
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.3.3.01

<i>GASP-I.3.3.01</i>	<i>Number of States having a State safety programme (SSP) that is present</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 3.3: All States to work towards an effective State safety programme (SSP) as follows:</p> <p>a) by 2025 – Present¹; and</p> <p>b) by 2028 – Present and effective.</p>
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) SSP implementation assessment (IA) focuses on a State's capability in implementing and maintaining an effective SSP by assessing the SSP Protocol Question (PQ). – SSPIA results are not yet widely available, and not all States have undergone an SSPIA yet. – Updating the frequency of USOAP SSPIA does not necessarily provide the actual State's SSP maturity status. – SSPIAs provide implementation levels per PQ, but not an aggregated score for all domains for a State. – The indicator value might vary largely between self-assessment and SSPIA. – There might be States without self-assessment or SSPIA.
Definition of terms	<p>The term “present” is based on the maturity levels established in the SSPIA.</p> <p>As part of the assessment tool, five maturity levels were determined and criteria were developed for levels 2 and 3 for each PQ. The five determining maturity levels are:</p> <p>0: Not present and not planned;</p> <p>1: Not present but being worked on;</p> <p>2: Present;</p> <p>3: Present and effective; and</p> <p>4: Present and effective for years and in continuous improvement.</p>
Calculation method	Count the number of States for which all SSPIA PQs have been assessed by ICAO as at least <i>2-Present</i> , or self-assessed by State as at least <i>2-Present</i> .
Data sets	<ul style="list-style-type: none"> – USOAP Continuous Monitoring Approach (CMA) SSPIA results – USOAP CMA SSPIA self-assessment

1. The terms “present” and “present and effective” are based on the maturity levels established in the ICAO SSPIA.

<i>GASP-I.3.3.01</i>	<i>Number of States having a State safety programme (SSP) that is present</i>
Availability (1-3)	3
Provider	USOAP CMA Online framework (OLF)

GASP Indicator (GASP-I) Form
GASP-I.3.3.02

<i>GASP-I.3.3.02</i>	<i>Number of States having a State safety programme (SSP) that is present and effective</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 3.3: All States to work towards an effective State safety programme (SSP) as follows:</p> <p>a) by 2025 – Present; and</p> <p>b) by 2028 – Present and effective².</p>
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) SSP implementation assessment (IA) focuses on a State's capability in implementing and maintaining an effective SSP by assessing the SSP Protocol Question (PQ). – SSPIA results are not yet widely available, and not all States have undergone an SSPIA yet. – Updating the frequency of USOAP SSPIA does not necessarily provide the actual State's SSP maturity status. – SSPIAs provide implementation levels per PQ, but not an aggregated score for all domains for a State. – The indicator value might vary largely between self-assessment and SSPIA. – There might be States without self-assessment or SSPIA.
Definition of terms	<p>The term “present and effective” is based on the maturity levels established in the SSPIA.</p> <p>As part of the assessment tool, five maturity levels were determined and criteria were developed for levels 2 and 3 for each PQ. The five determining maturity levels are:</p> <p>0: Not present and not planned;</p> <p>1: Not present but being worked on;</p> <p>2: Present;</p> <p>3: Present and effective; and</p> <p>4: Present and effective for years and in continuous improvement.</p>
Calculation method	Count the number of States for which all SSPIA PQs have been assessed by ICAO as at least <i>3-Present and effective</i> , or self-assessed by State as at least <i>3-Present and effective</i> .
Data sets	<ul style="list-style-type: none"> – USOAP CMA SSPIA results – USOAP CMA SSPIA self-assessment

² The terms “present” and “present and effective” are based on the maturity levels established in the SSPIA.

GASP-I.3.3.02	<i>Number of States having a State safety programme (SSP) that is present and effective</i>
Availability (1-3)	3
Provider	USOAP CMA Online Framework (OLF)

GASP Indicator (GASP-I) Form
GASP-I.3.3.03

GASP-I.3.3.03	<i>Number of States that require applicable service providers under their authority to implement a safety management system (SMS)</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 3.3: All States to work towards an effective State safety programme (SSP) as follows:</p> <p>a) by 2025 – Present; and</p> <p>b) by 2028 – Present and effective.</p> <p>Under Annex 19 – <i>Safety Management</i>, paragraph 3.3.2.1, States shall require that service providers under their authority implement an SMS.</p>
Limitations	<p>SSP implementation assessment (IA) Protocol Questions (PQs) include questions on the regulatory requirements that have been promulgated by States for service providers to implement an SMS acceptable to the State.</p> <p>The indicator does not take account of possible regional organizations built on a common set of regulations with specific coordination procedures applicable to the notification of differences.</p>
Definition of terms	<ul style="list-style-type: none"> – Service providers required to implement an SMS in accordance with Annex 19 are: <ul style="list-style-type: none"> a) approved training organizations in accordance with Annex 1 – <i>Personnel Licensing</i> that are exposed to safety risks related to aircraft operations during the provision of their services; b) operators of aeroplanes or helicopters authorized to conduct international commercial air transport, in accordance with Annex 6 – <i>Operation of Aircraft, Part I – International Commercial Air Transport – Aeroplanes</i> or Part III – <i>International Operations – Helicopters</i>, Section II, respectively; c) approved maintenance organizations providing services to operators of aeroplanes or helicopters engaged in international commercial air transport, in accordance with Annex 6, Part I or Part III, Section II, respectively; d) organizations responsible for the type design or manufacture of aircraft, engines or propellers in accordance with Annex 8 – <i>Airworthiness of Aircraft</i>; e) air traffic services (ATS) providers in accordance with Annex 11 – <i>Air Traffic Services</i>; and f) operators of certified aerodromes in accordance with Annex 14 – <i>Aerodromes, Volume I – Aerodrome Design and Operations</i>. – SSPIA: State safety programme implementation assessment – SSPIA PQs regarding regulatory requirements on SMS are PQs numbers: SSP.OPS.01, SSP.AIR.01, SSP.PEL.01, SSP.ANS.01 and SSP.AGA.01.

GASP-I.3.3.03	<i>Number of States that require applicable service providers under their authority to implement a safety management system (SMS)</i>
Calculation method	<ul style="list-style-type: none"> – Number of States that have filed in the compliance checklist (CC) on the Electronic Filing of Differences (EFOD) for Standard 3.3.2.1 of Annex 19: <ul style="list-style-type: none"> a) no difference; b) a difference more exacting or that exceeds the SARP (Category A); or c) a difference different in character or other means of compliance (Category B).
Data sets	Universal Safety Oversight Audit Programme Continuous Monitoring Approach Online Framework (USOAP CMA OLF) - CC/EFOD module
Availability (1-3)	3
Provider	State CC/EFOD

GASP Indicator (GASP-I) Form
GASP-I.4.1.01

GASP-I.4.1.01	<i>Number of States actively seeking assistance, by using a regional safety oversight mechanism, another State or other safety oversight organization's ICAO-recognized functions</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 4.1: By 2023, States that do not expect to meet GASP Goals 2 and 3 to seek assistance to strengthen their safety oversight capabilities or facilitate State safety programme (SSP) implementation.</p> <p>This indicator provides information on the level of assistance requests States make to ICAO, Regional Safety Oversight Organizations (RSOOs), Regional Accident and Incident Investigation Organizations (RAIOs) or to other States.</p>
Limitations	<p>The term "assistance" may be interpreted differently by various RSOOs, RAIOs or States.</p> <p>The source of this indicator is the information shared during PIRGs and RASGs meetings. PIRG/RASG meeting agenda may not systematically include updates on assistance requested by States.</p> <p>Regional organizations/RSOOs may have implemented specific regulatory provisions that lay down specific conditions for seeking/ providing assistance. The existence of such provisions may bias this indicator.</p>
Definition of terms	<ul style="list-style-type: none"> – RSOO: Regional Safety Oversight Organization – RAIO: Regional Accident and Incident Investigation Organization – ICAO-recognized functions include: <ul style="list-style-type: none"> a) safety oversight functions; b) (State-specific) safety management functions; and c) accident investigation functions under GASOS; – EI: Effective Implementation – States that do not expect to meet GASP Goals 2 and 3 are those States for which the global effective implementation (EI) is <75% or overall SSP foundation is <90%.
Calculation method	<p>Indicator=100*N1/N2, where:</p> <ul style="list-style-type: none"> a) N1 is the number of States that do not expect to meet GASP Goals 2 and 3 and have reported to their RASG or ICAO Regional Offices that they are seeking assistance to strengthen their safety oversight capabilities; and b) N2 is the number of States that do not expect to meet GASP Goals 2 and 3.
Data sets	RASGs meeting documentation/African Civil Aviation Commission (AFCAC) database on implementation of Africa-Indian Ocean (AFI) safety targets (under development).

GASP-I.4.1.01	<i>Number of States actively seeking assistance, by using a regional safety oversight mechanism, another State or other safety oversight organization's ICAO-recognized functions</i>
Availability (1-3)	3
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.4.1.02

<i>GASP-I.4.1.02</i>	<i>Number of States that submitted a draft national aviation safety plan to an ICAO Regional Office</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 4.1: By 2023, States that do not expect to meet GASP Goals 2 and 3 to seek assistance to strengthen their safety oversight capabilities or facilitate State safety programme (SSP) implementation.</p> <p>In connection with GASP.I.3.2.01 - Number of States having published their NASP.</p>
Limitations	The source of this indicator is the information shared during regional aviation safety group (RASG) meetings. However, meeting agenda may not systematically include the updates on the development and publication of NASPs of all States.
Definition of terms	<ul style="list-style-type: none"> – NASP: National aviation safety plan – The <i>Manual on the Development of Regional and National Aviation Safety Plans</i> (Doc 10131) contains detailed guidance for regions and States to develop their regional aviation safety plan (RASPs) and NASPs, respectively, as well as templates for these plans and checklists to verify completeness of the plans, in line with the GASP.
Calculation method	Number of States that have not yet published their NASP but have submitted a draft NASP to its accredited ICAO Regional Office.
Data sets	<ul style="list-style-type: none"> – RASG meeting documentation – NASPs are presented on GASP public site at: www.icao.int/nasplibrary
Availability (1-3)	1
Provider	State

GASP Indicator (GASP-I) Form
GASP-I.4.1.03

<i>GASP-I.4.1.03</i>	<i>Number of States registered in the national aviation safety plan online community</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.1: By 2023, States that do not expect to meet GASP Goals 2 and 3 to seek assistance to strengthen their safety oversight capabilities or facilitate State safety programme (SSP) implementation.
Limitations	The number of participants on the NASP Online Community may not reflect the actual level of collaboration.
Definition of terms	The NASP Online Community is a forum for States, regional entities, and other stakeholders involved in the development of a NASP to access resources, exchange information, and obtain feedback from experts in the aviation community on the development and implementation of a NASP. See: https://www.icao.int/safety/GASP/Pages/nasp-community.aspx
Calculation method	Count the number of States registered in the NASP Online Community.
Data sets	NASP Online Community secure site: https://www.icao.int/safety/GASP/Pages/nasp-community.aspx
Availability (1-3)	3
Provider	NASP Online Community secure site.

GASP Indicator (GASP-I) Form
GASP-I.4.2.01

<i>GASP-I.4.2.01</i>	<i>Number of regions having published an updated regional aviation safety plan</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.2: By 2024, all regions to publish an updated regional aviation safety plan (RASP).
Limitations	None.
Definition of terms	RASP: Regional aviation safety plan The role of the RASGs within the GASP includes developing, supporting implementation of, and monitoring a RASP consistent with the GASP.
Calculation method	Number of RASGs that have a published regional aviation safety plan.
Data sets	<ul style="list-style-type: none"> – RASG meeting documentation. – RASPs are presented on GASP public site at: www.icao.int/rasp
Availability (1-3)	3
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.4.3.01

<i>GASP-I.4.3.01</i>	<i>Number of States registered on the Secure Portal on Operational Safety Risks and Emerging Issues</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).
Limitations	Registered States may not contribute information on operational safety risks, including SSP SPIs, and emerging issues.
Definition of terms	The <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> is housed on the ICAO Secure Portal site, as part of "ICAOReporting" pages, located at: https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Calculation method	The number of States that have registered on the <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> .
Data sets	ICAO Secure Portal site / ICAO Reporting https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Availability (1-3)	3
Provider	States, ICAO

GASP Indicator (GASP-I) Form
GASP-I.4.3.02

GASP-I.4.3.02	<i>Number of States that are sharing their State safety programme safety performance indicators with regional aviation safety groups</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).</p> <p>The purpose of this indicator is to encourage States to share information on safety risks with RASGs. A growing trend indicates increasing collaboration within RASGs.</p>
Limitations	<ul style="list-style-type: none"> – An improvement in the quality of the safety risks information may be independent of the trend of this number. – The definition of the database or programme to capture the data and the information must be decided upon. – Each State can have its own specific indicators to monitor its specific issues. Sharing this information will not necessarily enable aggregated safety analyses for the region.
Definition of terms	<p>Safety performance indicator: A data-based parameter used for monitoring and assessing safety performance.</p> <p>Emerging issues include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete typical data-driven analysis.</p>
Calculation method	<p>Indicator=$N1+N2+N3+N4+N5$, where:</p> <ul style="list-style-type: none"> a) $N1$ is the number of European (EUR) States that have shared their SSP SPIs with the European Region Aviation System Planning Group (EASPG) Regional Expert Safety Group (RESG (RASG-EUR)) during the year in question; b) $N2$ is the same for Africa-Indian Ocean (AFI) States to the Regional Aviation Safety Plan (RASG-AFI); c) $N3$ is the same for Asia and Pacific (APAC) States to RASG-APAC; d) $N4$ is the same for Middle Eastern (MID) States to RASG-MID; and e) $N5$ is the same for North American, Central American and Caribbean (NACC) and South American (SAM) States to RASG-Pan America (PA).
Data sets	RASG documentation
Availability (1-3)	2

GASP-I.4.3.02	<i>Number of States that are sharing their State safety programme safety performance indicators with regional aviation safety groups</i>
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.4.3.03

GASP-I.4.3.03	<i>Number of reports received via the Secure Portal on Operational Safety Risks and Emerging Issues</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).
Limitations	Potential lack of awareness by States on how to report.
Definition of terms	The <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> is housed on the ICAO Secure Portal site, as part of "ICAO Reporting" pages, located at: https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Calculation method	The number of validated reports from States and Regional Safety Oversight Organizations (RSOOs) received via the <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> .
Data sets	ICAO <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Availability (1-3)	3
Provider	States and RSOOs

GASP Indicator (GASP-I) Form
GASP-I.4.3.04

GASP-I.4.3.04	<i>Number of studies/analyses conducted by regional aviation safety group based on reports received via Secure Portal on Operational Safety Risks and Emerging Issues</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).
Limitations	<ul style="list-style-type: none"> – Availability of resources and experts within RASGs to assess the reports on a continuous basis and decide on possible actions. – Dependent on the number and quality of reports submitted to the portal.
Definition of terms	The <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> is housed on the ICAO Secure Portal site, as part of “ICAO Reporting” pages, located at: https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Calculation method	Count the number of studies/analyses conducted by regional aviation safety groups (RASGs) based on reports received via the <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> .
Data sets	RASG meeting documentation
Availability (1-3)	2
Provider	RASG

GASP Indicator (GASP-I) Form
GASP-I.4.3.05

GASP-I.4.3.05	<i>Percentage of safety enhancement initiatives completed by regional aviation safety groups (RASGs) on safety risk management</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).
Limitations	Dependent on the maturity level of State's SSP/regional discrepancy in the mechanism for incorporating new safety enhancement initiatives (SEIs).
Definition of terms	Safety enhancement initiative (SEI): One or more actions to eliminate or mitigate operational safety risks or to address an identified safety issue.
Calculation method	<ul style="list-style-type: none"> – Indicator = $\frac{n1+n2+n3+\dots+n193}{193 * \text{number of SEIs}}$ where <i>n</i> <<i>i</i>> is the number of SEIs reported as completed by State <<i>i</i>>. – Indicator = 100 * N / D, where: <ul style="list-style-type: none"> a) <i>N</i> is the number of SEIs completed by the RASG; and b) <i>D</i> is the total number of SEIs of the RASG. – This makes one indicator by RASG (five indicators).
Data sets	<ul style="list-style-type: none"> – Annual RASP survey results. – RASGs annual safety reports. – RASG meeting documentation.
Availability (1-3)	2
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.4.3.06

GASP-I.4.3.06	<i>Number of regions having a mechanism to collect and process data on operational safety risks and emerging issues</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 4.3: By 2025, all States to contribute information on operational safety risks, including State safety programme (SSP) safety performance indicators (SPIs), and emerging issues, to their respective regional aviation safety group (RASG).
Limitations	The data collection mechanism requires the relevant human resources and tools.
Definition of terms	The <i>Secure Portal on Operational Safety Risks and Emerging Issues</i> is housed on the ICAO Secure Portal site, as part of "ICAO Reporting" pages, located at: https://portal.icao.int/ICAOReporting/Lists/Emerging%20Issues/AllItems.aspx .
Calculation method	Count the number of RASGs having a mechanism to collect and process data on operational safety risks and emerging issues.
Data sets	RASG meeting documentation.
Availability (1-3)	2
Provider	RASGs

GASP Indicator (GASP-I) Form
GASP-I.5.1.01

GASP-I.5.1.01	<i>Number of service providers in States using globally harmonized metrics for their safety performance indicators</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plans (RASPs).</p> <p>The use of these harmonized metrics facilitates safety risk management at the regional and international levels.</p>
Limitations	<p>Each service provider should have its own specific indicators to monitor its specific issues. Using globally harmonized metrics will not necessarily support service providers in safety management, as it may not enable them to monitor their specific risks and safety issues.</p> <p>This safety performance indicator (SPI) relies on the availability of data provided by the various industry organizations.</p>
Definition of terms	<ul style="list-style-type: none"> – The term “globally harmonized metrics for SPIs” refers to the use of globally harmonized metrics for the development and monitoring of service providers' SPIs. – In the context of the GASP, the term “industry” refers to service providers, such as: aircraft operators; approved maintenance organizations; organizations responsible for the type design or manufacture of aircraft, engines or propellers; approved training organizations; air traffic services (ATS) providers; and operators of aerodromes, as well as non-governmental organizations (for example, international organizations) and other entities that form part of the aviation industry, as appropriate. – Some indicators are defined at www.icao.int/safety/Pages/Indicator-Catalogue.aspx
Calculation method	Count the number of service providers in States using globally harmonized metrics for their SPIs.
Data sets	<ul style="list-style-type: none"> – ICAO-recognized industry programmes (as presented in the GASP) – RASG meeting documentation (working papers, report) – Annual safety reports – Additional data may come from States to complement the above
Availability (1-3)	1
Provider	Industry, international organizations.

GASP Indicator (GASP-I) Form
GASP-I.5.1.02

GASP-I.5.1.02	<i>Percentage of service providers in States participating in the corresponding ICAO-recognized industry assessment programmes</i>
Rationale	<p>Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plans (RASPs).</p> <p>While such programmes do not replace the need for safety oversight by States, ICAO recognizes the benefits of these programmes, which have a positive effect on operational safety among service providers.</p>
Limitations	The definition of the database or programme to capture the information must be decided upon. Industry organizations may not track membership.
Definition of terms	<p>List of ICAO-recognized industry assessment programmes:</p> <ul style="list-style-type: none"> – Airports Council International (ACI) Airport Excellence (APEX) in Safety programme. – Civil Air Navigation Services Organisation (CANSO) maturity assessment within the Standard of Excellence in Safety Management Systems (SoE SMS). – Flight Safety Foundation (FSF) Basic Aviation Risk Standard (BARS). – International Air Transport Association (IATA) Operational Safety Audit (IOSA). – International Business Aviation Council (IBAC) International Standard for Business Aircraft Operations (IS-BAO).
Calculation method	<p>Indicator= $\frac{N1 + N2 + N3 + N4 + N5}{N}$ where the following numbers are reported annually by the industry international organizations to the RASGs or to ICAO:</p> <ul style="list-style-type: none"> a) <i>N</i> is the number of service providers; b) <i>N1</i> is the number of ACI members, who use APEX; c) <i>N2</i> is the number of CANSO members, who use CANSO SoE SMS; d) <i>N3</i> is the number of FSF members, who use BARS; e) <i>N4</i> is the number of IATA members, who use IOSA; and f) <i>N5</i> is the number of IBAC members, who use IS-BAO.

GASP-I.5.1.02	<i>Percentage of service providers in States participating in the corresponding ICAO-recognized industry assessment programmes</i>
Data sets	<ul style="list-style-type: none"> – RASGs meeting documentation (reports, working papers, and information papers). – Information from ACI, CANSO, FSF, IATA and IBAC on the participation of their members into their industry assessment programmes should be systematically included in the RASG meeting agenda. – SAAQ (State aviation activity questionnaire) for determining the number of service providers (USOAP CMA OLF).
Availability (1-3)	2
Provider	Industry, international organizations, RASGs

GASP Indicator (GASP-I) Form
GASP-I.5.1.03

GASP-I.5.1.03	<i>Number of States and regions reporting increased and improved provision of safety information by industry to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plan (RASPs)</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plans (RASPs).
Limitations	<ul style="list-style-type: none"> – Lack of data concerning the level of reporting of safety information by industry to States. – The development of NASPs by States is already measured by GASP.I.3.2.01, and the <i>Manual on the Development of Regional and National Aviation Safety Plans</i> (Doc 10131) stipulates that the NASP development process requires the involvement of all stakeholders within the State (for example, civil aviation authority, service providers, etc.). – Potentially relying on voluntary reporting.
Definition of terms	<i>Manual on the Development of Regional and National Aviation Safety Plans</i> (Doc 10131)
Calculation method	Number of States/regions reporting industry collaboration to assist in the development of NASPs and RASPs.
Data sets	<ul style="list-style-type: none"> – NASPs/RASPs – Surveys/ICAO communications
Availability (1-3)	2
Provider	States/regions

GASP Indicator (GASP-I) Form
GASP-I.5.1.04

<i>GASP-I.5.1.04</i>	<i>Number of regional aviation safety plans (RASPs) developed in consultation with industry</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plan (RASPs).
Limitations	The <i>Manual on the Development of Regional and National Aviation Safety Plans</i> (Doc 10131) already stipulates that the RASP development process should include consultation with States, industry and other stakeholders.
Definition of terms	<ul style="list-style-type: none"> – The <i>Manual on the Development of Regional and National Aviation Safety Plans</i> (Doc 10131) – RASPs are presented on GASP public site at: www.icao.int/rasp
Calculation method	Count the number of RASPs developed in consultation with industry.
Data sets	RASPs
Availability (1-3)	3
Provider	ICAO

GASP Indicator (GASP-I) Form
GASP-I.5.1.05

<i>GASP-I.5.1.05</i>	<i>Number of States having established safety data collection and processing systems (SDCPS) to facilitate participation in a safety information-sharing network</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plans (RASPs).
Limitations	The data collection mechanism requires the relevant human resources, tools and procedures.
Definition of terms	<ul style="list-style-type: none"> – SDCPS: Safety data collection and processing systems – SSPIA: State safety programme (SSP) implementation assessment
Calculation method	<ul style="list-style-type: none"> – Number of States having established SDCPS to facilitate participation in a safety information-sharing network. – Number of States having a maturity level assessed by ICAO as at least "2-<i>Present</i>", or self-assessed by State as at least "2-<i>Present</i>" (For all the SSPIA Protocol Questions (PQs) related to safety data analysis (SDA)).
Data sets	Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) Online Framework (OLF)
Availability (1-3)	3
Provider	ICAO

GASP Indicator (GASP-I) Form
GASP-I.5.1.06

GASP-I.5.1.06	<i>Number of service providers contributing to a safety data collection and processing system or a safety information sharing network</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 5.1: Maintain an increasing trend in industry's contribution in safety information sharing networks to States and regions to assist in the development of national aviation safety plans (NASPs) and regional aviation safety plans (RASPs).
Limitations	Lack of reporting mechanisms to know if (and which) service providers contribute to a safety data collection and processing system (SDCPS) or a safety information sharing network.
Definition of terms	<ul style="list-style-type: none"> – SDCPS: Safety data collection and processing systems – SSPIA: State safety programme (SSP) implementation assessment
Calculation method	<p>Indicator= $N1 + N2 + N3 + N4$, where:</p> <ul style="list-style-type: none"> a) <i>N1</i> is the number of Airports Council International (ACI) members that contribute to ACI's safety information sharing network; b) <i>N2</i> is the number of Civil Air Navigation Services Organisation (CANSO) members that contribute to CANSO's safety information sharing network; c) <i>N3</i> is the number of International Air Transport Association (IATA) members that contribute to IATA's safety information sharing network; and d) <i>N4</i> is the number of European Organisation for the Safety of Air Navigation (EUROCONTROL) members that contribute to EUROCONTROL's safety information sharing network. <p>These numbers would be reported by the industry international organizations, to the various RASGs.</p>
Data sets	Provided by international organizations.
Availability (1-3)	2
Provider	Regional aviation safety groups (RASGs)

GASP Indicator (GASP-I) Form
GASP-I.6.1.01

<i>GASP-I.6.1.01</i>	<i>Number or percentage of infrastructure-related air navigation deficiencies by State, against the regional air navigation plans</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 6.1: By 2025, maintain an increasing trend of States with air navigation and aerodrome infrastructure that meet relevant ICAO Standards.
Limitations	None.
Definition of terms	Air navigation deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices (SARPs), or Procedures for Air Navigation Services (PANS), and which has a negative impact on safety, regularity and/or efficiency of international civil aviation.
Calculation method	Number of infrastructure-related air navigation deficiencies by State, against the regional air navigation plans.
Data sets	Regional list of air navigation deficiencies.
Availability (1-3)	3
Provider	ICAO Planning and implementation regional group (PIRGs).

GASP Indicator (GASP-I) Form
GASP-I.6.1.02

GASP-I.6.1.02	<i>Number or percentage of States having implemented infrastructure-related Protocol Questions linked to the basic building blocks</i>
Rationale	Related to Global Aviation Safety Plan (GASP) Target 6.1: By 2025, maintain an increasing trend of States with air navigation and aerodrome infrastructure that meet relevant ICAO Standards.
Limitations	<ul style="list-style-type: none"> – Universal Safety Oversight Audit Programme (USOAP) audits focus on a State's capability in providing safety oversight by assessing whether the State has effectively and consistently implemented the critical elements (CEs) of a safety oversight system, which enable the State to ensure the implementation of ICAO's safety-related Standards and Recommended Practices (SARPs) and associated procedures and guidance material. – ICAO may not have enough resources to update the effective implementation (EI) of each State on a yearly basis. This could result in an inaccurate result. – Updating the frequency of USOAP audits does not necessarily provide the actual safety oversight capabilities in a State.
Definition of terms	<p>BBBs (Basic Building Blocks) are a baseline defined by the basic services agreed by the States under the <i>Convention on International Civil Aviation</i> (Doc 7300) to develop international civil aviation 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).</p> <p>The relationship between BBB and USOAP PQs is presented at https://www4.icao.int/ganportal/bbbsusoapmapping.</p>
Calculation method	<p>Indicator = $100 * N/193$, where:</p> <p><i>N</i> is the number of States for which all PQs linked to the basic building blocks (BBB) have been assessed as "Satisfactory"</p>
Data sets	USOAP Continuous Monitoring Approach (CMA) Online Framework (OLF)
Availability (1-3)	3
Provider	USOAP CMA OLF

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