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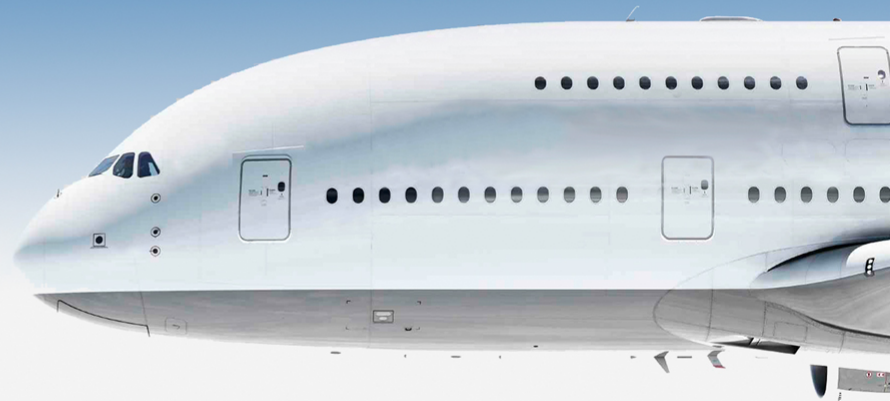


RASG-EUR Accident Investigation and ECCAIRS user Workshop

GASP 2020-2022 Update

ICAO EUR/NAT, Paris

8-10 April 2019





Global Aviation Safety Plan (GASP)

- Global strategy for safety improvement
- Framework for regional & national plans
- Promotes harmonization & coordination of efforts



Basic Principles for 2020-2022 Edition

- Contains vision, mission and values
- Restructured in different parts
- Clearly delineates responsibilities
- Aspirational Goal + Goals, Targets & indicators
- Applies risk-based approach (HRC)
- Roadmap more predominant



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GASP-Study Group





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GASP Vision

To achieve and maintain the goal of zero fatalities in commercial operations by 2030 and beyond



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GASP Mission

To continually enhance international aviation safety performance by providing a collaborative framework for States, regions and industry



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GASP Values

GASP values include:

- ✓ promoting positive safety culture
- ✓ promoting sharing & exchange of safety information
- ✓ taking data-driven decisions
- ✓ prioritizing actions through risk-based approach



Challenges & Priorities in Safety Planning

- Organizational challenges
 - Ensuring effective safety oversight
 - Ensuring effective safety management as part of SSP
- Operational safety risks
 - HRCs
 - Additional operational safety risks categories
 - Emerging issues



Key Concepts & Metrics

- Accident rate
- Priority PQs for safety oversight system
- SSP foundational PQs
- Safety oversight index





Accident Rate

- ICAO accident rate
 - based on scheduled commercial operations
 - involving fixed-wing aircraft with MTOW greater than 5700 kg
 - categorized using definition in Annex 13





Priority PQs

- Priority PQs for safety oversight system
 - Currently about 1,000 PQs
 - All PQs contribute equally to EI score
 - But they do not all equally impact ops safety risks
- Term “priority PQs” refers to PQs that have higher correlation to ops safety risks
- Identification of priority PQs is important so State can focus resources accordingly
- Whole set of PQs continue to be essential to comprehensively assess effective implementation of safety oversight system



SSP Foundational PQs

- Sub-set of USOAP PQs considered prerequisites
 - for sustainable implementation of full SSP
- States can prioritize and address these PQs
 - when conducting SSP Gap Analysis
 - or while defining SSP implementation plan
- Replaces 60% EI previously used as threshold to progress into SSP
- Full list of SSP foundational PQs available via iSTARS
 - www.icao.int/safety/iStars



SSP Foundation



Safety Oversight Index

- SOI is measurement of State safety oversight capabilities
- Every audited State has SOI
- It is number >0 where 1 represents level at which safety oversight capabilities indicate minimum expected capabilities
 - considering number of departures as proxy to size of that State's aviation system



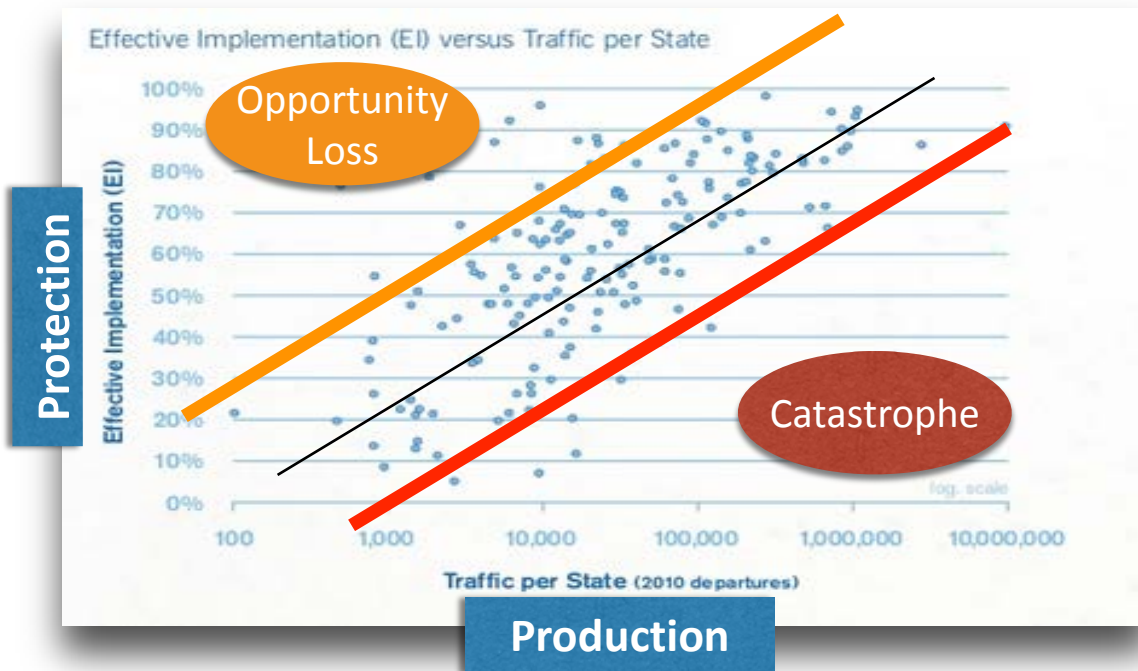
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USOAP EI vs Traffic





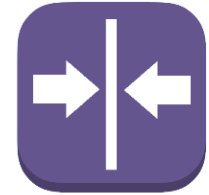
3 SOI Functional Categories

- Operations
 - groups EI scores for USOAP audit areas related to PEL, OPS and AIR
- Air navigation
 - groups EI scores for areas related to AGA & ANS
- Support functions
 - groups EI scores for areas related to LEG, ORG and AIG



SOI Calculation

- SOI is mathematical function
 - comparing State's EI score and traffic volume
 - to safety oversight target EI score
 - which is computed using global log-linear regression
- SOI will tend to decrease over time
 - if traffic increases and EI score remains unchanged
- Details on mathematical model used as well as rationales behind model available via the iSTARS at www.icao.int/safety/iStars





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**ZERO
FATALITIES**

Our
Aspirational
Safety Goal



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6 Proposed GASP Goals

1. Achieve continuous reduction of ops safety risks
2. Strengthen States' safety oversight capabilities
3. Implement effective State safety programmes
4. Increase collaboration at regional level
5. Expand the use of industry programmes
6. Ensure appropriate infrastructure is available to support safe ops





GASP Goals, Targets & Indicators





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National, Regional and Global HRC





New OPS Roadmap

- OPS roadmap addresses ops safety risks
- Based on HRCs identified in GASP
 - contains specific SEIs to address each of 5 HRCs
 - States, regions and industry should use OPS roadmap
 - to assist them in developing plan to mitigate risks associated with HRCs
- Unlike ORG roadmap, OPS roadmap is not divided into components or steps
 - SEIs can be accomplished in parallel





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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
1: Achieve a continuous reduction of operational safety risks	1.1: Maintain a decreasing trend of global accident rate.	<ul style="list-style-type: none">• Number of accidents• Number of accidents per million departures (accident rate)• Number of fatal accidents• Number of fatal accidents per million departures (fatal accident rate)• Number of fatalities• Number of fatalities per passengers carried (fatality rate)• % of occurrences related to high risk categories (HRCs)

➤ Corresponding iSTARS apps

**ADREP et al.**

Statistics and Data on Accidents and Incidents

**State Safety Briefing
2018**Summary of State Safety
Indicators - 2018 version**Regional Safety Briefing**A dashboard and details of
audit and accident data by
Region and Group



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
2: Strengthen States' safety oversight capabilities	2.1: All States to improve their score for the effective implementation (EI) of the critical elements (CEs) of the State's safety oversight system with focus on priority PQs) as follows: By 2022 – 75% By 2026 – 85% By 2030 – 95%	<ul style="list-style-type: none">• Overall EI score per State• Overall regional EI score• % of completed CAP per State – using the Universal Safety Oversight Audit Programme (USOAP) online framework (OLF)

➤ Corresponding iSTARS apps



USOAP Report

Detailed State results for the USOAP CMA Programm

**2018**

State Safety Briefing 2018

Summary of State Safety Indicators - 2018 version



Regional Safety Briefing

A dashboard and details of audit and accident data by Region and Group



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
2: Strengthen States' safety oversight capabilities	2.2: By 2022, all States to reach a safety oversight index greater than 1, in all categories	<ul style="list-style-type: none">• Number of States maintaining a safety oversight index greater than 1 in all categories• % of States maintaining a safety oversight index greater than 1 in all categories• % of each category with safety oversight index greater than 1 globally• Safety oversight index per State, per category

➤ Corresponding iSTARS apps



Safety Oversight Margins

Risk-based prioritization for operations, air navigation and support functions

Pending update



State Safety Briefing 2018

Summary of State Safety Indicators - 2018 version



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
3: Implement effective State safety programmes (SSPs)	3.1: By 2022, all States to implement the foundation of an SSP	<ul style="list-style-type: none">• Number of States having implemented the foundation of an SSP• % of each subject area implemented globally• % of required Corrective Action Plans (CAPs) related to the SSP foundation PQs submitted by States (using CMA OLF)

➤ Corresponding iSTARS apps



SSP Foundation

Status of SSP Foundation
Protocol Questions



SSP Gap Analysis - SMM 4th Ed.

State Safety Programmes



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
3: Implement effective State safety programmes (SSPs)	3.2: By 2025, all States to implement an effective SSP, as appropriate to their aviation system complexity	<ul style="list-style-type: none">• Number of States having implemented an effective SSP• Level of maturity achieved in SSP-related Protocol Questions (PQs), per State• Number of States that require applicable service providers under their authority to implement an SMS• Number of States that have implemented a national aviation safety plan

➤ Corresponding iSTARS apps



SSP Foundation

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**SSP Gap Analysis - SMM 4th
Ed.**

State Safety Programmes



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
4: Increase collaboration at the regional level	4.1: By 2020, States that do not expect to meet GASP Goals 2 and 3 by the predetermined dates, to use a regional safety oversight mechanism, another State, or other safety oversight organization's ICAO-recognized functions in assisting them to strengthen their safety oversight capabilities	<ul style="list-style-type: none">• Number of States requiring assistance/support• Number of States actively seeking assistance• Number of States that received assistance• Number of States offering assistance
	4.2: By 2022, all States to contribute information on safety risks, including SSP safety performance indicators (SPIs), to their respective regional aviation safety group (RASGs)	<ul style="list-style-type: none">• Number of States contributing information on safety risks to RASGs• Number of States that are sharing their SSP SPIs with RASGs• Number of States forwarding information on safety matters to States, RASGs or other stakeholders



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
4: Increase collaboration at the regional level	4.3: By 2022, all States with effective safety oversight capabilities, and an effective SSP, to actively lead RASGs' safety risk management activities	<ul style="list-style-type: none">• Number of States, with effective safety oversight capabilities, and an effective SSP, leading RASGs' safety risk management activities• Number of RASGs that have a regional aviation safety plan

➤ Corresponding iSTARS apps



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SSP Gap Analysis - SMM 4th Ed.

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Regional Safety Briefing

A dashboard and details of
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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
5: Expand the use of industry programmes	5.1: By 2020, all service providers to use globally harmonized SPIs as part of their safety management system (SMS)	•Number of service providers using globally harmonized metrics for their SPIs
	5.2 By 2022, increase the number of service providers participating in the corresponding ICAO-recognized industry assessment programmes	•Number of service providers participating in the corresponding ICAO-recognized industry assessment programmes



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GASP 2020-2022 Goals, targets and indicators

Goal	Target	Indicators
6: Ensure the appropriate infrastructure is available to support safe operations	6.1 By 2022, all States to implement the air navigation and airport core infrastructure	Number of States having implemented the air navigation and airport core infrastructure elements



National Roles & Responsibilities

- *A39-12 on ICAO global planning for safety and air navigation*
 - recognizes importance of effective implementation of a national aviation safety plan (NASP)
- It resolves that States should develop & implement NASPs
 - in line with GASP goals
- Each State should produce a NASP



National Aviation Safety Plan

1. Introduction
2. Purpose of NASP
 - including links to regional aviation safety plan (RASP) and GASP
3. State's strategic approach to managing safety in civil aviation
 - including national safety goals, targets and indicators
4. Description of national ops safety risks & initiatives planned to address them
5. Description of other safety issues & initiatives planned to address them
 - such as challenges related to SSP implementation
6. Description of how State will measure safety performance
 - to monitor NASP implementation



Link to NASP

- National goals, targets and indicators should be traced to those of GASP
 - and regional aviation safety plan
 - included in NASP
- Dates associated with GASP targets are final deadline
 - for State to meet GASP goals





Regional Aviation Safety Plan

1. Introduction
2. Purpose of RASP
 - including links to NASPs in region and GASP
3. Region's strategic approach to managing safety in civil aviation
 - including regional safety goals, targets and indicators
4. Description of regional ops safety risks & initiatives planned to address them
5. Description of other safety issues & initiatives planned to address them
6. Description of how State will measure safety performance
 - to monitor RASP implementation



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EUR Regional Aviation Safety Plan (EUR-RASP)

to support the
implementation of the GASP
and the associated Roadmap
in the EUR Region

<https://www.icao.int/EURNAT/EUR%20and%20NAT%20Documents/EUR%20RASP/EUR%20RASP%202019-2023.pdf>



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EASA



EUR RASP



Built on the experience gained with EPAS

- Safety improvements already achieved within the EASA system are transferred to the ICAO EUR



All 56 States are part of it (ICAO-EUR)

- Minimising the impact for States that are already part of EPAS
- Maximising the benefit for those States that are not part of EPAS



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Next Steps for GASP 2020-222

- 2020-2022 Edition GASP-SG draft completed
- Feedback from AN-Conf/13 & GASP Questionnaire included
- ANC final review in April 2018
- Will be submitted for Council approval in Spring Session
- Regional Workshops on developing a plan as of June
- GASP will be presented for endorsement at A40 (Q3 2019)
- Feedback, email: GASP@icao.int





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Thank you you for your attention
Спасибо за внимание.