ICAO UNITING AVIATION

REGIONAL GASP-NASP WORKSHOP

18-19 Oct 2023
Doha, Qatar

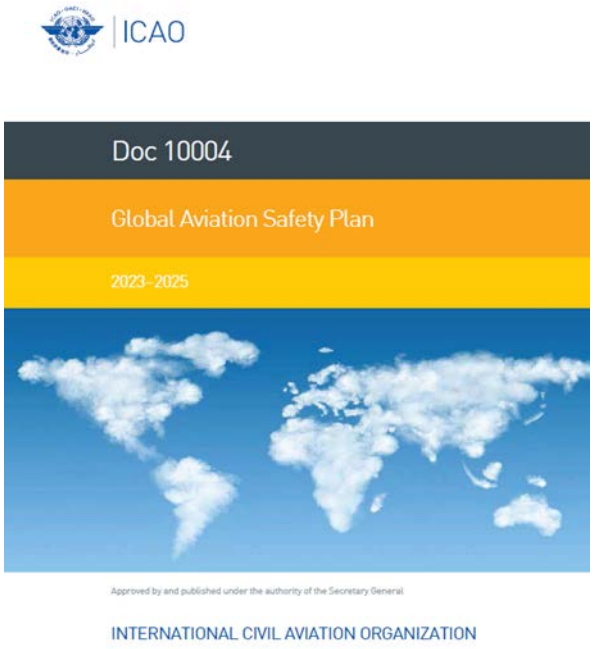
Module Objective

- Understand Global Aviation Safety Plan (GASP) and MID-RASP
- Understand the Global Aviation Safety Roadmap and the Use of Roadmap to develop NASP
- Develop National Aviation Safety Plan (NASP)

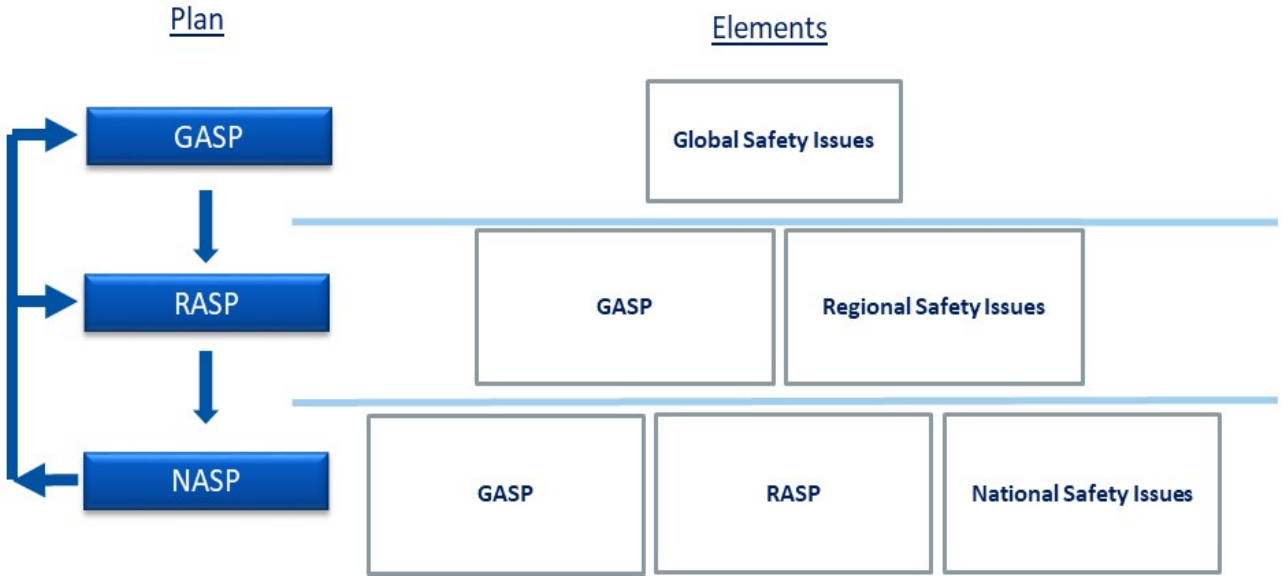
GLOBAL AVIATION SAFETY PLAN (GASP)

GASP

- Global strategy for the continuous improvement of aviation safety
- Provides Framework for regional and national aviation safety plans development and implementation
- Promotes harmonization and coordination of efforts



Relationship between GASP, RASP and NASP



GASP-Study Group

ACI AIRPORTS COUNCIL INTERNATIONAL · canso civil air navigation services organisation · EUROCONTROL · FLIGHT SAFETY FOUNDATION · IATA · ICAO · ICCAIA · IFALPA The Global Voice of Pilots

Subgroups of GASP-SG

Subgroup	*Responsibilities*

Organizational Issues (ORG)	• Organizational challenges
	  • Effective safety oversight
	  • SSP/SMS
	• NASP/RASP content (Doc 10131)
	• RASGs and other implementation mechanisms
	• ORG Roadmap content (Doc 10161)
	• Global aviation disruption events (from ORG side)

Operational Issues (OPS)	• Operational safety risks (incl. hazards / deficiencies) • G-HRCs • Performance-based approaches & SRM • OPS Roadmap (Doc 10161) • Emerging issues • Global aviation disruption events (from risk side)
Safety Performance Measurement (SPM)	• GASP Goals, Targets and Indicators • GASP update process / target development • Alignment with other Global Plans • Guidance on indicators and SPM (Doc 10162)

Role of ICAO

ICAO plays a role in supporting and monitoring the achievement of the GASP goals at the global, regional and national levels.

- promote collaboration at the global level
- coordinate activities of the RASGs
- ensure close coordination between RASGs and PIRGs
- encourage the active participation of States and industry in the RASGs

Roles of States

- Address SSC as priority
- Acquire necessary expertise
- Develop & Implement NASP
- Participate in RASG
- Provide technical assistance to other States

Roles of RASGs

- Support and monitor progress towards achievement of GASP goals
- Develop and implement RASP consistent with GASP
- Structure work in line with GASP
- Participate in RASG
- Identify safety risks and issues of priority, coordinate SRAs/encourage States to initiate action

Roles of industry

- Actively support achievement of GASP Goals by being involved in RASP & NASP
- Review Roadmap to identify SEIs
- Participate in RASG
- Implement SMS to continually identify hazards and address safety risks

Priorities in Safety

- Organizational challenges/issues
  - ✓ Ensuring effective safety oversight
  - ✓ Ensuring effective safety management as part of SSP
- Appropriate infrastructure to support safe operations
  - ✓ The BBB is an independent framework
  - ✓ ASBU framework defines a group of operational improvements within some areas
- Operational safety risks
  - ✓ High risk categories of occurrences (HRCs): LOC-I, CFIT, MAC, RE, & RI
  - ✓ States, regions and industry should consider the G-HRCs
- Emerging safety issues
  - ✓ Concepts of operations, technologies, public policies, business models
- Disruption Events
  - ✓ COVID-19 pandemic

6 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 use of industry programmes & **safety information sharing networks** by service providers
6. Ensure appropriate infrastructure is available to support safe ops

GASP 2023-2025

Goal	Target	Indicators
Goal 1: **Achieve a continuous reduction of operational safety risks**	**1.1** Maintain a **decreasing trend** of global accident rate.	• 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) • Percentage of occurrences related to high-risk categories (HRCs)

GASP 2023-2025

Goal	Target	Indicators
Goal 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: a. by 2024 – 75 per cent EI score b. by 2026 – 85 per cent EI score c. by 2030 – 95 per cent EI score	• Number of States that met the EI score as per the timelines • Number of States that have fully implemented the priority PQs • Percentage of required corrective action plans (CAPs) submitted by States (using OLF) • Percentage of completed CAPs per State (using OLF)

GASP 2023-2025

Goal	Target	Indicators
Goal 3: **Implement effective State safety Programmes (SSPs)**	**3.1** By **2023,** all States to implement the **foundation of an SSP.**	• Number of States having implemented the SSP foundation PQs • Percentage of required CAPs related to the SSP foundation PQs submitted by States (using OLF) • Percentage of required CAPs related to the SSP foundation PQs completed per State (using OLF)
	3.2 By **2024,** all States to publish a national aviation safety plan **(NASP).**	• Number of States having published their NASP
	3.3 All States to work towards an **effective SSP** as follows: **a. by 2025 – Present** **b. by 2028 – Present and effective**	• Number of States having an SSP that is present • Number of States having an SSP that is present and effective • Number of States that require applicable service providers under their authority to implement an SMS

GASP 2023-2025

Goal	Target	Indicators
Goal 4: **Increase collaboration at the regional level**	**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 SSP implementation.**	• Number of States seeking assistance, by using a regional safety oversight mechanism, another State or other safety oversight organization's ICAO recognized functions • Number of States that submitted a draft NASP to an ICAO Regional Office • Number of States registered in the NASP Online Community
	4.2 By **2023**, all regions to publish an updated regional aviation safety plan (**RASP**), in line with the 2023-2025 edition of GASP.	• Number of regions having published an updated RASP

GASP 2023-2025

Goal	Target	Indicators
Goal 4: **Increase collaboration at the regional level**	**4.3** **By 2025**, all States to contribute information on **operational safety risks,** including SSP safety performance indicators (SPIs), and **emerging issues**, to their respective regional aviation safety group (RASG).	• Number of States registered to the Secure Portal on Operational Safety Risks and Emerging Issues • Number of States that are sharing their SSP SPIs with RASGs • Number of reports received via the Secure Portal on Operational Safety Risks and Emerging Issues and validated • Number of studies/analyses conducted by RASGs based on reports received via Secure Portal on Operational Safety Risks and Emerging Issues • Percentage of safety enhancement initiatives completed by RASGs on safety risk management • Number of regions having a mechanism to collect and process data on operational safety risks and emerging issues

GASP 2023-2025

Goal	Target	Indicators
Goal 5: **Expand the use of industry Programmes and safety information sharing networks by service providers**	**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 NASPs and RASPs.	• Number of service providers using globally harmonized metrics for their SPIs • Percentage of service providers participating in the corresponding ICAO-recognized industry assessment Programmes • Number of States and regions reporting increased and improved provision of safety information by industry to assist in the development of NASPs and RASPs • Number of RASPs developed in consultation with industry • Number of States having established safety data collection and processing systems (SDCPS) to facilitate participation in a safety information-sharing network • Number of service providers contributing to an SDCPS or a safety information sharing network

GASP 2023-2025

Goal	Target	Indicators
Goal 6: **Ensure the appropriate infrastructure is available to support safe operations**	**6.1 by 2025,** maintain an increasing trend of States with air navigation and aerodrome infrastructure that meets relevant ICAO Standards.	• Number or percentage of infrastructure-related air navigation deficiencies by State, against the regional air navigation plans • Number or percentage of States having implemented infrastructure-related PQs linked to the basic building blocks

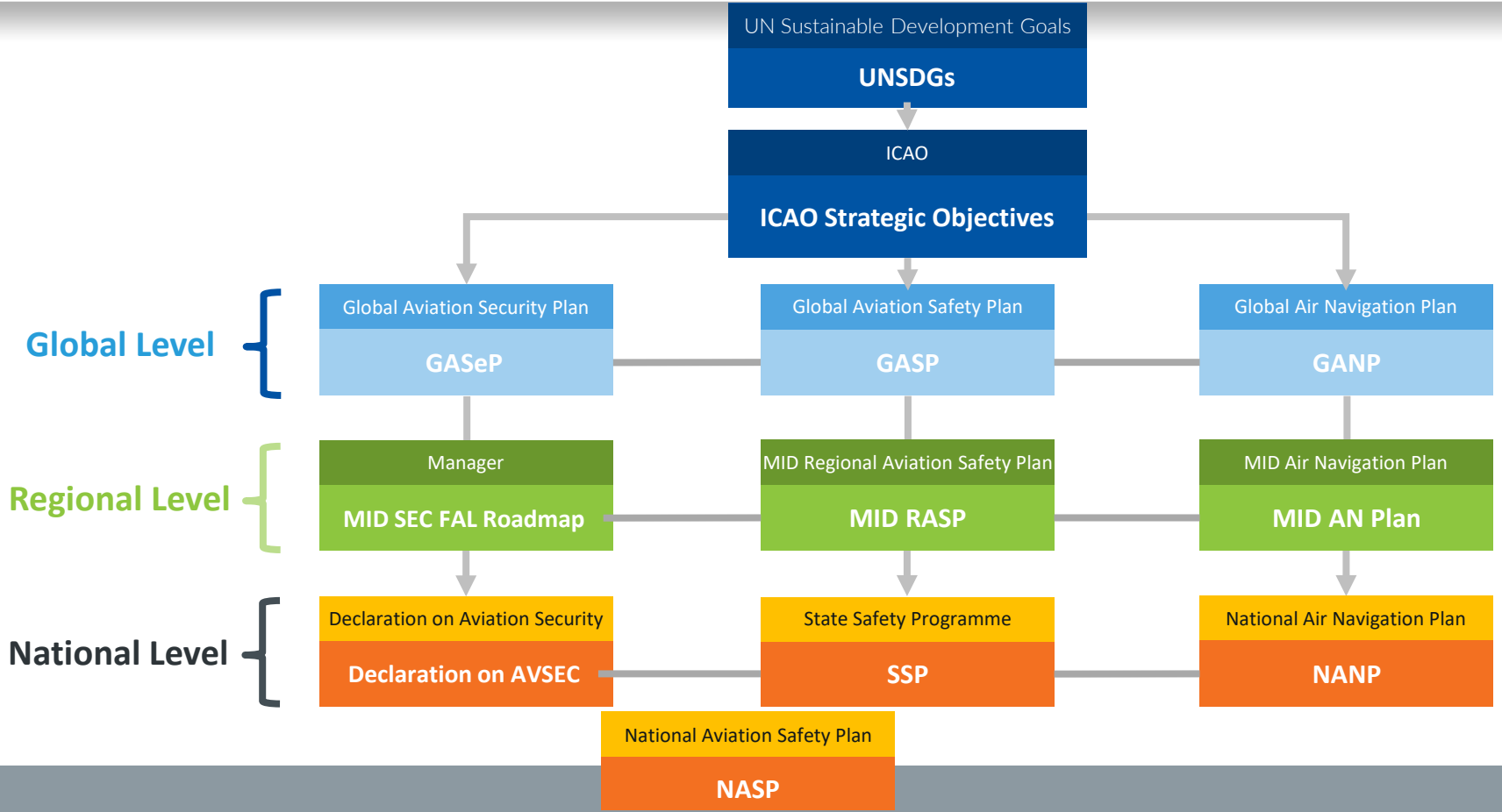
MID-RASP

MID-RASP 2023-2025 Edition

The MID-RASP 2023-2025 Edition presents the **strategic direction** for the **management of aviation safety** at the regional level to:

- **support effective** implementation of States' Safety Programmes **(SSP)** and Safety Management System (SMS) including the development of **NASP**
- **strengthen States Safety Oversight capabilities**, and **risk-based approach** to managing safety
- focus on MID Region **strategic safety priorities**: Organizational challenges/issues, operational safety risks, and emerging risks
- provide **strategy for improving safety** within a **specified timeframe**, through **defined SEIs** in a coordinated, cooperative and **collaborative approach** among States, international organizations, and industry to **achieve Safety Targets** agreed
- outline to all stakeholders where the different **regional entities** involved in the management of aviation safety should **target resources**.
- **emphasize the commitment** of States, international organizations, and industry to aviation safety.

Relationship between MID-RASP and other Plans

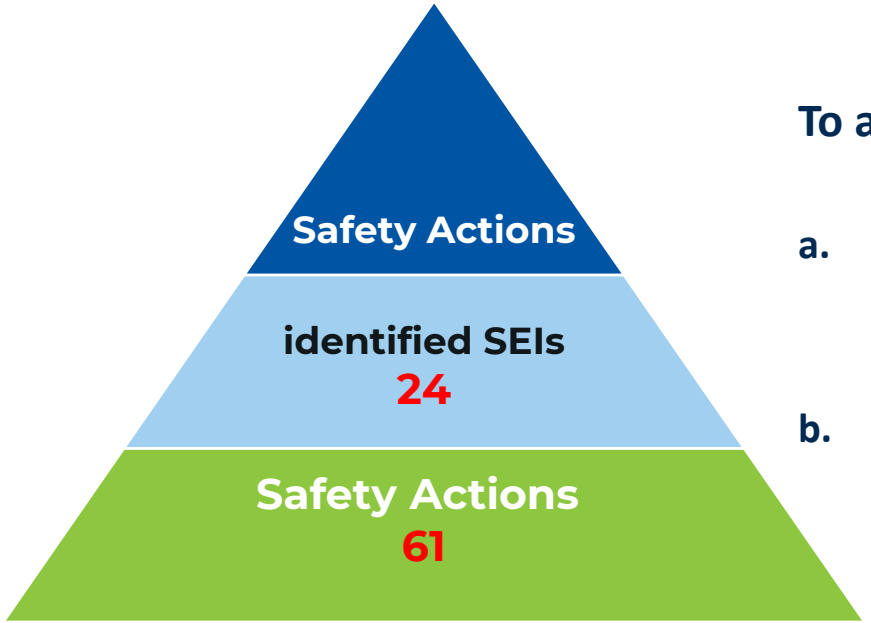


Strategic Safety Priorities

Safety monitoring and implementation

- The **MID Region Safety Performance Monitoring provides** a **regional specific goals** and **supports the region's strategic approach** to managing safety at the regional level.
- MID region safety indicators and targets were aligned with the 2023-2025 GASP goals and targets as relevant in the MID Region
- RASG-MID would continuously **monitor the implementation of the identified SEIs in the MID-RASP** and measure safety performance of the regional civil aviation system, to ensure the intended targets are achieved, using the **MID Region safety Performance Monitoring**
- **For each Goal** established in the MID Region Safety Performance Monitoring, **identified SEI(s) be mapped** to it including their respective actions.

Reinforce efficient and effective cooperation and collaboration with all stakeholders, avoiding duplication and optimizing the allocation of resources



To address:

a. **Regional operational risks including emerging risks: 9 SEIs & 22 actions**

b. **Organizational issues including emerging risks: 15 SEIs and 39 actions**

Group Discussion

Have you any tips to share on how GASP & MID-RASP can support the development of NASP ?

GLOBAL AVIATION SAFETY ROADMAP

Global Aviation Safety Roadmap (Doc 10161)

For the 2023-2025 edition of the GASP, the global aviation safety roadmap was **migrated to a standalone manual**

- The Global Aviation Safety Plan (Doc 10004), as a **high-level document** containing the global safety strategy
- The Global Aviation Safety Roadmap (Doc 10161), as detailed **guidance for the development of an action plan**, with specific safety enhancement initiatives (SEIs), for inclusion in regional and national aviation safety plans (RASPs and NASPs)

Structure of Roadmap

- Roadmap outlines specific SEIs associated with GASP goals and targets as well as the G-HRCs.
- Each SEI is supported by set of actions
- Roadmap includes specific initiative for 3 different stakeholders
  - ✓ States
  - ✓ Regions
  - ✓ Industry
- Success achievement relies upon close coordination and cooperation of all stakeholders

Structure of Roadmap

The global aviation safety Roadmap is composed of two pieces:

1. Organizational challenges/issues: ORG Roadmap
2. Operational safety risks: Ops Roadmap

- Note. Although the roadmap does not contain SEIs to address emerging issues, these should be noted as part of the RASP or NASP. Additional guidance on emerging issues in presented in the GASP

Structure of Roadmap

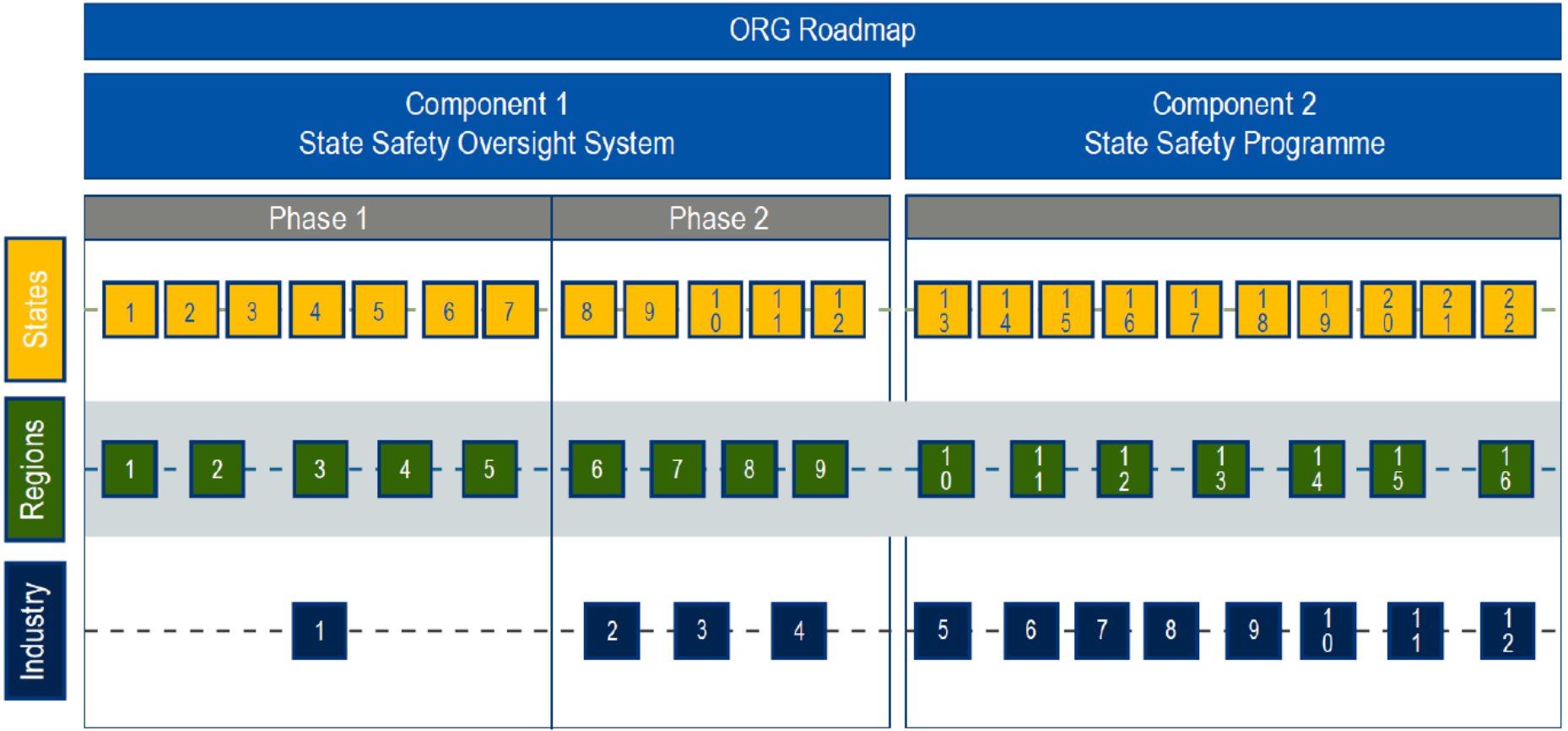
1. ORG Roadmap provides SEIs to meet GASP goals related

   - ✓ States' safety oversight capabilities
   - ✓ SSP implementation
   - ✓ industry's implementation of SMS

2. OPS Roadmap provides SEIs to meet GASP goals related

   - ✓ continuous reduction of ops safety risks
   - ✓ SRM activities to address the G-HRCs

ORG Roadmap


ORG Roadmap
Component 1
State Safety Oversight System
Component 2
State Safety Programme
Phase 1
Phase 2
States
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Regions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Industry
1 2 3 4 5 6 7 8 9 10 11 12

Operational Safety Risks Roadmap

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

Operational Safety Risks Roadmap

- The SEIs presented in the OPS roadmap are considered global safety enhancements, applicable to all States, regions and industry
- They should be implemented to mitigate the risks associated with the G-HRCs.
- The OPS roadmap identifies the SEIs for each G-HRC

  - ✓ This is not an exhaustive list.
  - ✓ Stakeholders should verify the latest version of the RASP, for R-HRCs applicable to their region.
  - ✓ Stakeholders should conduct analyses of data and reports to validate the effectiveness of the implemented SEIs.
  - ✓ Stakeholders can then derive contributing factors through data analysis.

Operational Safety Risks Roadmap

- The OPS roadmap is not a substitute for the SRM activities

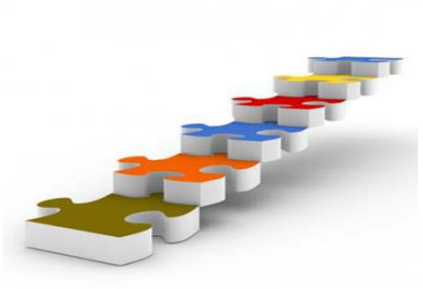
  - ✓ that need to be conducted by individual States as part of their SSP and by service providers through their SMS.
  - ✓ A safety management approach to targeting the N- or R-HRCs can result in successful mitigation strategies.

- Once SSP and SMS are implemented in accordance with Annex 19 and have reached a certain maturity level in terms of safety data analysis,

  - ✓ stakeholders can refine their SEIs in relation to the G-HRCs suitable to their operational context

Use Roadmap to develop NASP

- States should use Doc 10161 *"Roadmap"* to develop NASP
  - ✓ That define specific SEIs to improve aviation safety (action plan)
- GASP illustrates steps of NASP development process
- Chapter 2 of Doc 10131 provides guidance for the NASP development process that may be used



Group Discussion

1. Can you explain how you use the Global Aviation Safety Roadmap to develop your State SEI?

2. Challenges

Monitoring Implementation of Regional and National Aviation Safety Plans (Doc 10162)

- Provides States and regions with **guidance on data sources** for indicators used to measure the achievement of the NASP and RASP goals, respectively.

- Clarifies the use of the GASP indicators, which **serve as examples** that may be used to measure progress in achieving goals and targets, in line with the GASP

Monitoring Implementation of Regional and National Aviation Safety Plans (Doc 10162)

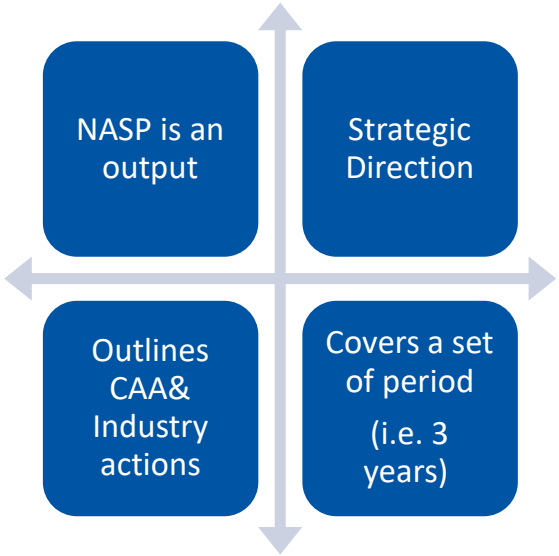
- The indicators are **used to measure the achievement** of the GASP goals.
- **Data sources are needed** to measure the status of GASP indicators, and subsequently for those of NASPs and RASPs
- **A GASP Indicator Form** was developed for each indicator, to provide States and regions with clear guidance and definitions, and to ensure ICAO collects consistent, reliable data.

SSP AND NASP

Relationship Between SSP and NASP

Where there is an SSP in place:

Scenario 2 – A State with mature safety data analysis aspects

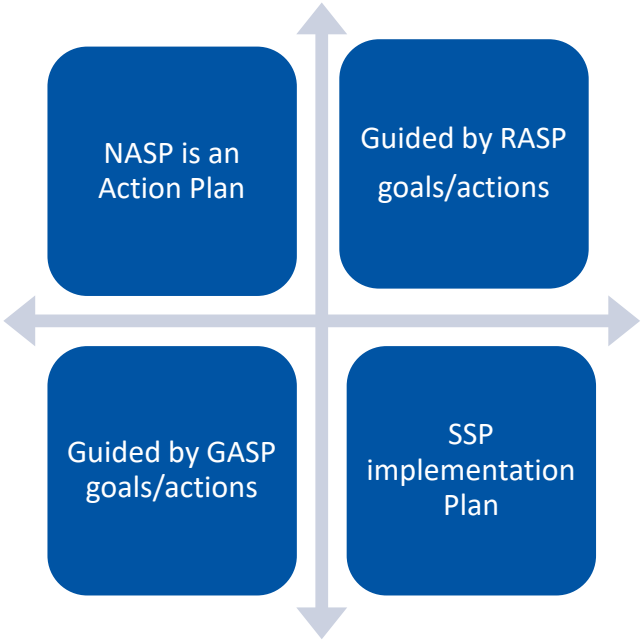


NASP is considered as one of the key documents produced as part of the SSP documentation. NASP complements the SSP

Relationship Between SSP and NASP

Where there is not an SSP in place:

Scenario 1 – A State without mature safety data analysis aspects



Group Discussion

Scenarios:

1. Where there is an SSP in place
2. Where there is not an SSP in place

Which one of the above scenarios your State considered to develop the NASP and challenges faced?

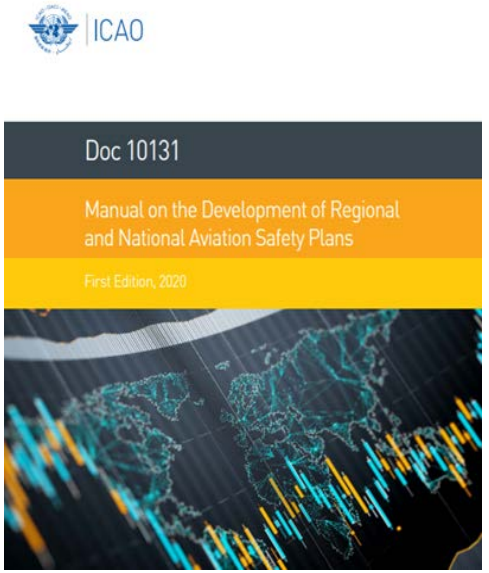
NATIONAL AVIATION SAFETY PLAN (NASP)

National Roles and responsibilities

- A40-1 on ICAO global planning for safety and air navigation
  - recognizes the importance of effective implementation of national aviation safety plans
- It resolves that States should develop and implement NASPs
  - In line with GASP goals and targets
- Each State should produce a NASP
  - If State has implemented an SSP, the plan should be linked to this Programme
  - If State has other national plans, NASP should be linked to these, as appropriate

NASP

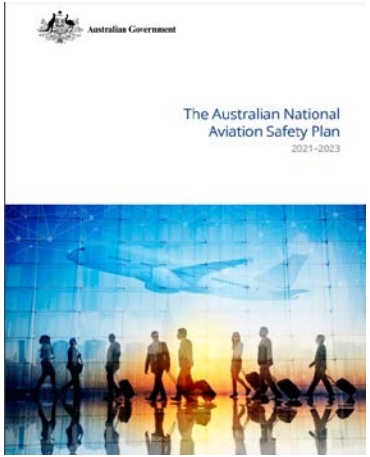
- The national aviation safety plan (NASP) contains the **strategic direction of a State for the management of aviation safety** for a set time period.
- NASP lists national safety issues, sets national aviation safety goals and targets, and
- presents a series of safety enhancement initiatives **(SEIs) to address identified safety deficiencies** and **achieve** the national safety **goals and targets**.



Benefit of developing NASP

- SSP documentation generally not public and written for SMEs
- NASP allows State to clearly communicate its strategy for improving safety at national level to all stakeholders
- Transparent means to disclose how CAAs and others safety work
- Illustrates how planned SEIs will help the State meet established goals
- NASP contains information on safety performance measurement
    - demonstrate the positive impact of investments or justifies need for additional resources.

Examples of existing plans



Content of NASP

NASP should include

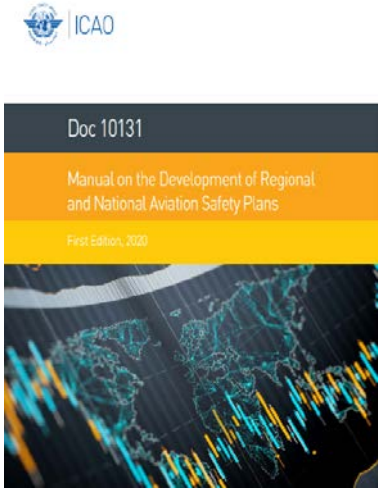
- ✓ Safety goals, targets and indicators in line with GASP
- ✓ In line with RASP
- ✓ Series of SEIs to address safety issues

Address safety issues across different sectors of aviation

- ✓ Commercial air transport airplane and helicopter
- ✓ General aviation
- ✓ Aerodromes & Ground handling
- ✓ ATM/ANS
- ✓ Drone Operations
- ✓ Design and production
- ✓ Maintenance and continuing airworthiness management

Content of NASP

1. Introduction
2. Purpose of NASP
   - including links to 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 operational safety risks and initiatives planned to address them
5. Description of Organizational challenges & initiatives to address them
   - such as challenges related to SSP implementation
6. Description of how State will measure safety performance
   - to monitor NASP implementation and effectiveness



New guidelines and template

- ICAO developed new guidance (Doc 10131)
- Provides guidelines for NASP and RASP
- Explains in detail content to be included in the plan

Appendix A to chapter 4

Appendix A to Chapter 4

NATIONAL AVIATION SAFETY PLAN TEMPLATE

SECTION 1. INTRODUCTION

1.1 Overview of the NASP[1]

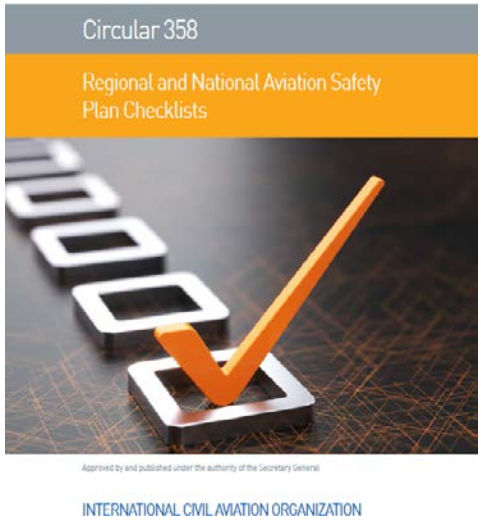
[State] is committed to enhancing aviation safety and to the resourcing of supporting activities. The purpose of this national aviation safety plan (NASP) is to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a national aviation safety strategy. A safe aviation system contributes to the economic development of [State] and its industries. The NASP promotes the effective implementation of [State's] safety oversight system, a risk-based approach to managing safety, as well as a coordinated approach to collaboration between [State] and other States, regions and industry. All stakeholders are encouraged to support and implement the NASP as the strategy for the continuous improvement of aviation safety.

The NASP of [State] is in alignment with the ICAO *Global Aviation Safety Plan* (GASP, Doc 10004) and the [name of the regional aviation safety plan (RASP)].

[Signature]
[Name]
[Title (e.g. *Director General of Civil Aviation or Minister of Transport*)

Cir358- checklists

- Provides checklists for RASP and NASP
- To verify plan completeness
  - In line with GASP, and
  - Doc 10131



Group Discussion

Learned lessons and challenges faced while developing the NASP ?

NASP DEVELOPMENT PROCESS

Overview

- ❑ Development process
- ❑ 8 steps to develop NASP
- ❑ Additional information

NASP Development Process

a. **identifies** hazards and safety deficiencies;

b. contains a **list of prioritized national safety issues**, based on the identified hazards and safety deficiencies (in the form of national operational safety risks and organizational challenges);

c. **sets national s**afety goals and targets (in other words, the strategic direction for the management of aviation safety);

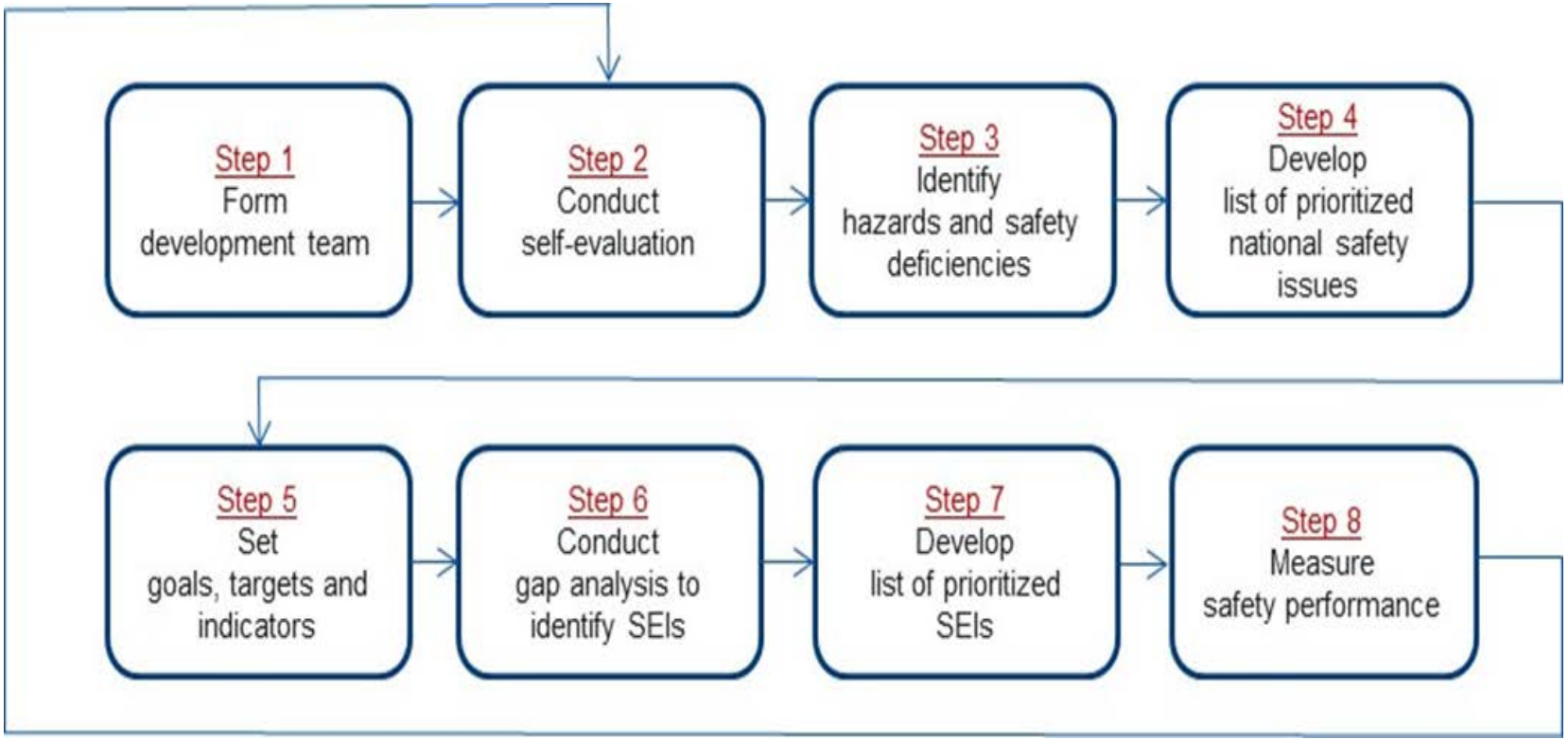
d. presents the **specific safety enhancement initiatives (SEIs**) (in other words, an action plan); and

e. **defines how the State** will **measure safety performance to monitor** the implementation of the NASP and its effectiveness.

NASP Development Process

Note 1. The NASP should ideally connect with other national plans, some of which may or may not be exclusively focused on civil aviation (for example, air navigation, economic development, security). This connection ensures the integration of the NASP to other areas of aviation and raises the visibility of aviation-related initiatives at the broader national level.

NASP Development Process



Step 1: Form Development Team

- Begin by assigning responsible entity to lead NASP development
  - ✓ e.g. CAA
- Once State has assigned a responsible entity
  - ✓ that entity should form NASP development team
  - ✓ identify stakeholders early in process
  - ✓ team is responsible for completing steps 2 to 8
- Output from this step: NASP development team membership list

Group Discussion

Have you any idea to share of how the NASP development Team can facilitate good communication and support the development of NASP?

Step 2: Conduct Self-assessment

- Conduct evaluation of current situation in State
  - ✓ to understand current operational context
  - ✓ in which NASP will be implemented
  - ✓ activity referred to as “self-assessment” (output from step 2)
- Understanding ops context to include
  - ✓ analysis of established capabilities
  - ✓ system size & level of complexity
  - ✓ available resources

Step 2: Conduct Self-assessment

- Assess
  - ✓ traffic volume in State, incl. anticipated growth or decline
  - ✓ maturity of different sectors, e.g. CAT-Aeroplane, helicopter ops, aerodromes & GH, GA, ATM, Drones ops, Design and production, Maintenance and continuing airworthiness management
  - ✓ common hazards or challenge
- Also look at
  - ✓ level of EI of CEs of safety oversight system
  - ✓ status of SSP implementation & continuous maintenance
- Why?
  - ✓ to develop an understanding of current SSO capabilities, SSP, & operational context

E-tools Available on ICAO iSTARS

iSTARS tools to assist States to identify specific deficiencies related to safety oversight and SSP implementation		
Tools to determine the EI score and identify existing safety deficiencies, as well as the safety oversight index for the three functional categories	USOAP Protocol Questions	PQ Tester
	Level of Implementation and SSCs	Safety Audit Information
	Summary of State Safety Indicators	State Safety Briefings
	USOAP CMA OLF tools	
	Risk-based prioritization for operations, air navigation and support functions	Safety Oversight Index
SSP implementation	State safety programmes	SSP Gap Analysis
	Status of SSP prerequisite protocol questions	SSP Foundation Tool

https://istars.icao.int/Sites

USOAP-CMA OLF

a. completion/updates of the State aviation activity questionnaire (SAAQ)

b. completion/updates of the compliance checklists through the electronic filing of differences system (CC/EFOD)

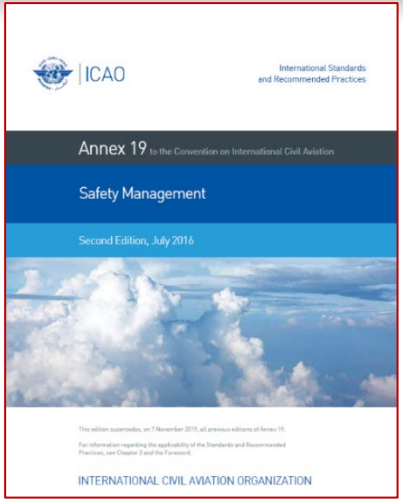
c. completion/updates of the USOAP CMA self-assessment

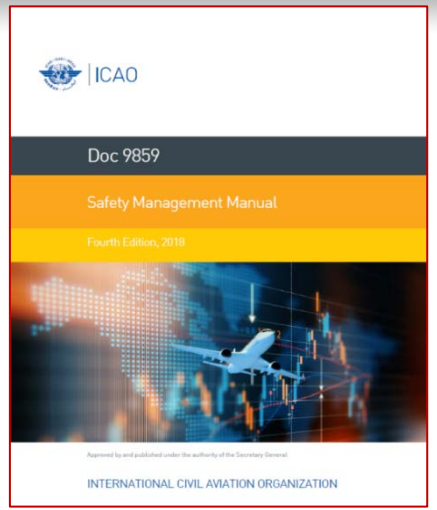
d. completion/updates of the State corrective action plan (CAP)

e. response to mandatory information requests; and

f. access to all safety–related information generated by USOAP CMA activities

SSP implementation





PQ No.	Protocol Question	References in ICAO Guidance Material	SSP Component	Maturity Levels — Guidance for Review			
				Not Present and Not Planned	Not Present but Being Worked On	Present	Present and Effective
SSP.GEN.05	How has the State established and communicated its safety policy?	SMM 8.3.6	State Safety Policy, Objectives and Resources	Based on current situation in State	Based on State's work in progress	1. There is a clear high-level management commitment to safety, including the allocation of resources, on behalf of the relevant State authorities. 2. The safety policy is endorsed by all relevant State authorities who participate in the implementation and maintenance of the SSP. 3. The safety policy expresses the need to foster a positive safety culture, including a non-punitive approach. 4. The safety policy outlines actions that are not tolerable (e.g. wilful misconduct, gross negligence, etc.).	1. Sufficient resources are allocated within the State authorities who participate in the implementation and maintenance of the SSP, and are monitored and reviewed regularly. 2. The safety policy is reviewed periodically and amended accordingly, if needed, to reflect any significant changes within the State aviation system. 3. All relevant State authorities who participate in the implementation and maintenance of the SSP are actively operating in a manner that reflects the safety policy and its purpose and in accordance with their respective responsibilities. 4. Safety culture concepts are being applied as part of the State's enforcements actions.

use the USOAP CMA SSP Implementation Assessment (SSPIA) Self-Assessment (available on the OLF)

www.icao.int/SMI

Group Discussion

Can you share your experience in defining your State operational context including State's strengths and enablers while conducting the self-assessment?

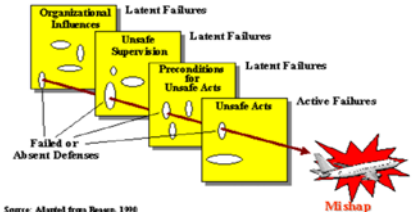
Step 3: Identify Hazard & Safety Deficiencies

- Identify series of hazards & safety deficiencies to be addressed
  - ✓ as well as stakeholders to be involved in addressing them
  - ✓ based on results of self-assessment
  - ✓ also refer to GASP & RASP
- In context of NASP
  - ✓ Operational safety risks
  - ✓ Organizational issues
  - ✓ Emerging issues
- Conduct data-driven analyses to
  - ✓ determine operational safety risks and contributing factors leading to national high-risk categories of occurrences (N-HRCs)
  - ✓ as well as any systemic safety deficiency

Step 3: Identify Hazard & Safety Deficiencies

The development team may identify hazards and safety deficiencies based on analyses from:

a. mandatory reporting systems
b. voluntary reporting systems, with appropriate protection of the information
c. accident and incident investigation reports
d. safety oversight activities
e. SSP
f. USOAP data
g. safety indicators and statistics
h. regional analysis conducted by entities such as the RASG, RSOO, PIRG, and/or RAIO and any resulting R-HRCs
i. G-HRCs, and organizational challenges described in the GASP.



Step 3: Identify Hazard & Safety Deficiencies

a. The development team may identify additional stakeholders with supporting capabilities

b. Additional resources and other strengths or opportunities that can assist it in addressing the safety issues and enable SEIs

c. Stakeholder mapping should include all stakeholders that can contribute to the success of the NASP

Step 3 — Identify Hazard & Safety Deficiencies

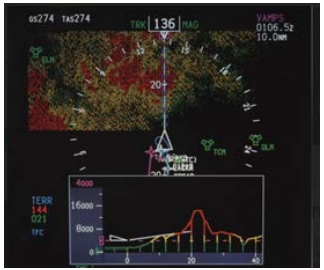
Prepare a list of identified hazards and safety deficiencies.

Describing a series of:

a. National operational safety risks, including the G- and R-HRCs (that may be applicable from the GASP & RASP)

b. Organizational challenges/issues that exist in the State

c. Emerging risks



Group Discussion

1. What are the greatest safety risks and safety deficiencies identified in your State?

2. Share any identified limitations/challenges

Step 4: Develop List of Prioritized National Safety Issues

- Identification of hazards & safety deficiencies enables team to
  - ✓ define a series of national safety issues
  - ✓ which will later be transformed into national safety goals & targets
- During this step
  - ✓ review list of hazards & safety deficiencies
  - ✓ determine which ones should be given priority
  - ✓ as national safety issues to be addressed in the NASP
- Use quantitative approach to define national safety issues of priority
  - ✓ if not feasible >>> rely on the knowledge and expertise of the team
- Priority should be given to issues that have the greatest impact on safety

Step 4: Develop List of Prioritized National Safety Issues

- For ops safety risks
  - ✓ categorize certain types of events as national N-HRCs
  - ✓ consider them of utmost priority
  - ✓ because of number of fatalities and risk of fatalities associated with such events
- For organizational challenges
  - ✓ categorize as national safety issues
  - ✓ consider them of utmost priority
  - ✓ because they are systemic issues, which impact effectiveness of risk controls
- For Emerging Risks
  - ✓ categorize as national safety issues
- As output from this step, prepare a list of national safety issues of priority

Group Discussion

1. Can you share your State list of prioritized national safety issues to be addressed in the NASP?

2. Challenges

Step 5: Set Goal, Targets & Indicators

- Use list of national safety issues
  - ✓ to set national safety goals and targets
- National safety issues that were given priority consider them of utmost priority
  - ✓ can be formulated into statements that set goals and targets
  - ✓ within NASP
- **SMART** approach may assist stakeholders in staying focused and motivated, by ensuring a clear direction and by helping to set achievable targets to promote implementation
- Output from this step: list of national safety goals, targets and indicators

Group Discussion

1. Process used to set the national safety goals and targets
2. Provide some examples of national safety goals and targets
3. Challenges

Step 6: Conduct Gap Analysis to identify SEIs

- Once team has set national safety goals and targets
  - ✓ needs to identify series of SEIs
  - ✓ that will enable their achievement
- Conduct a gap analysis
  - ✓ to identify specific steps to take
  - ✓ to reach each national safety goal and associated targets

Step 6: Conduct Gap Analysis to identify SEIs

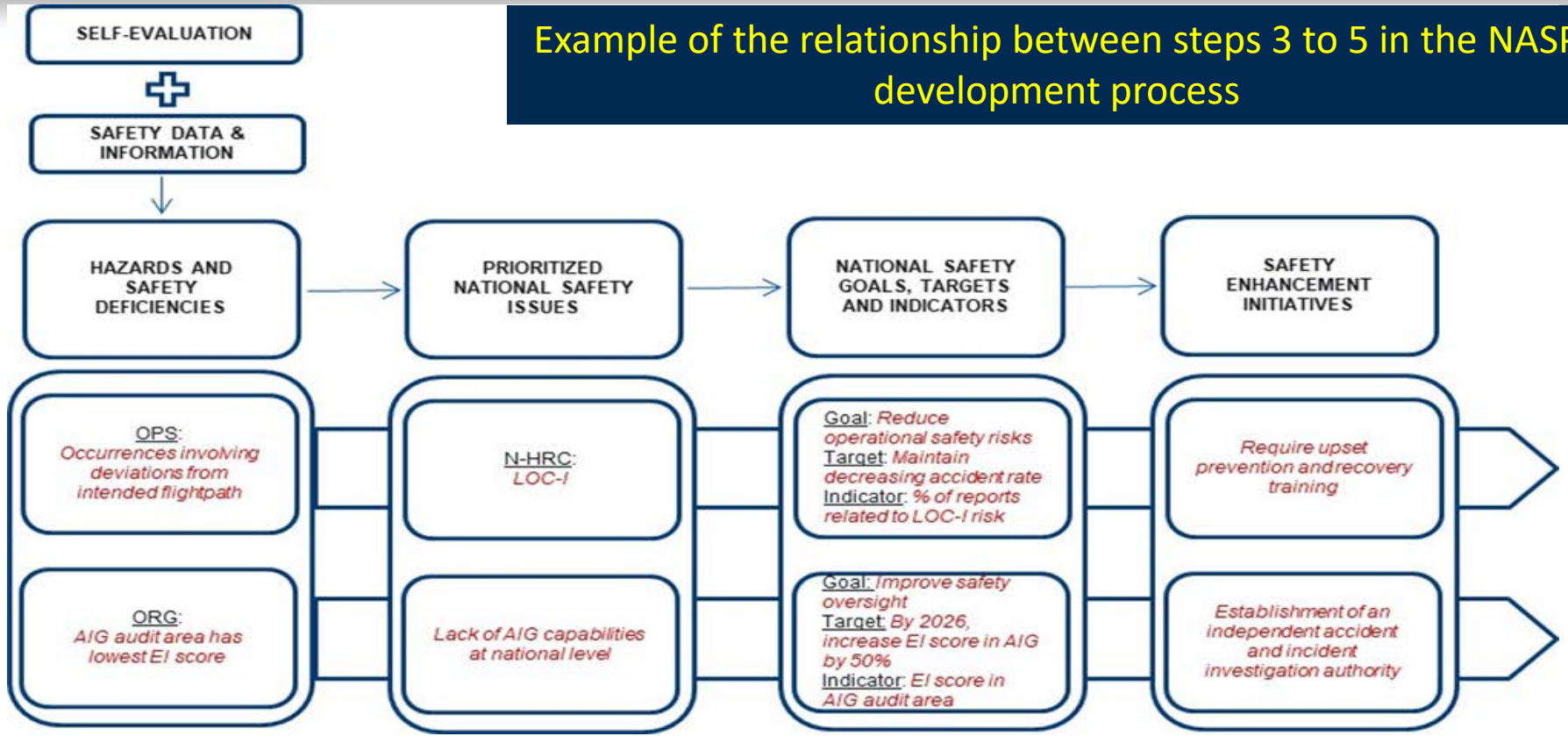
- Team should not only focus on weaknesses it needs to address
  - ✓ also identify strengths within State
  - ✓ that can facilitate closing gap
  - ✓ such as existing economic frameworks, access to training, etc.
- To develop SEIs for NASP>> conduct the gap analysis
  - ✓ using Global Aviation Safety Roadmap (Doc 10161)
- Compilation of SEIs will form the action plan
  - ✓ that supports safety strategy presented in NASP

Use of Roadmap

- Roadmap contains a series of SEIs
  - ✓ providing detailed actions
  - ✓ to be taken when addressing identified hazards and safety deficiencies
- Using the roadmap, team should
  - ✓ select which SEIs
  - ✓ and specific actions will be implemented
  - ✓ in what order
  - ✓ – >>> List of SEIs is output from this step

Use of Roadmap

Example of the relationship between steps 3 to 5 in the NASP development process



Group Discussion

1. Can you share some examples using the relationship between steps 3 to 5 in the NASP development process

2. Challenges

Step 7: Develop List of Prioritized SEIs

- Review list of potential SEIs
  - ✓ by reviewing gaps & associated SEIs
- Select SEIs relevant to State & its operational context
  - ✓ by listing them in order of priority
- When reviewing gaps identified, evaluate
  - ✓ safety impact
  - ✓ ability of (or ease of implementation for) State
    - to effect the change for each gap

Step 7: Develop List of Prioritized SEIs

Ease of Implementation

- Although the development team should consider the impact on safety as the primary method to prioritize the list of potential SEIs, it should also **assess the ability of the stakeholders** to make the changes and adapt to a new situation. The evaluation of the ability to effect a change should include:

  - ✓ the existence of political will to change; and
  - ✓ the availability of resources necessary to implement the change.

Step 7: Develop List of Prioritized SEIs

- As output from step 7 >> generate prioritized list of SEIs
  - ✓ List forms action plan to achieve national safety goals and targets
- Once a list of potential prioritized SEIs is developed
  - ✓ team is ready to begin drafting NASP
- NASP does not have to contain all actions for each SEI in detail
  - ✓ some SEIs may be presented in a stand-alone document
    - containing detailed implementation plan
  - ✓ NASP should provide summary of SEIs
  - ✓ Link or reference to detailed implementation plan may be included in NASP

Step 8: Measure Safety Performance

- Final step is divided into two separate tasks
  - ✓ Definition of process to monitor implementation of NASP and effectiveness
  - ✓ Actual measurement of safety performance
- For 1st task: include description of aspects
  - ✓ refer to Doc 10131, Chapter 4, 4.3.6 for detailed guidance
- Once process for monitoring implementation is completed (output)
  - ✓ team has all content necessary to finalize the drafting of NASP
  - ✓ use NASP template presented in Doc 10131 or develop own

Step 8: Measure Safety Performance

- After NASP has been finalized
  - ✓ Handover SEIs to organizations or individuals responsible for implementation
- Measure safety performance
  - ✓ to monitor implementation of NASP
  - ✓ assess its actual effectiveness in terms of improving safety
- Periodically monitor implementation of SEIs
  - ✓ to ensure actions are being accomplished, that they are effective
  - ✓ any difficulties with implementation are dealt with > then redo cycle

Group Discussion

1. Which mechanism your State is using to monitor the effective implementation of NASP SEIs?

2. Challenges

Additional information

- GASP public website
  - *www.icao.int/gasp*
- Useful documentation (free from website)
  - ✓ GASP: Doc 10004 2023-2025 edition will be published soon
  - ✓ Doc 10131 Second Edition, templates for NASP/RASP.
  - ✓ Cir358- checklists for completeness of NASP/RASP
  - ✓ Doc 10161: Global Aviation safety Roadmap
  - ✓ Doc 10162: Monitoring Implementation of Regional and National Aviation Safety Plans
- NASP online community: *http//login.icao.int* (ICAO secure Portal)
- http://www.icao.int/NASPlibrary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THANK YOU!