

#### **Outline**

- → APAC-Regional Aviation Safety Plan; 2020-2022 and 2023-25 Versions
- → AP-RASP Goals, Targets and Indicators
- → AP-RASP Goals
- → AP –RASP Targets for 2023-2025
- → Organizational Challenges
- → Regional Operational Safety Risks
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- → Relationship between the GASP, the AP RASP and the NASP
- → Regional Aviation Safety Roadmaps/SEIs
- → Responsibility for the AP-RASP Development, Implementation and Monitoring
- → AP –RASP Validation workshop



### **APAC - Regional Aviation Safety Plan AP-RASP**

- → The AP-RASP is the strategic Policy document prescribing mechanism for continuous enhancement of Safety supplemented by two Implementation Roadmaps,
- → Contains the strategic direction of the APAC region for the management of aviation safety for a period of three years starting from 2020-2022 as the first edition and 2023 to 2025 as the Second edition,
- → Lists regional safety issues, sets regional aviation safety goals and targets,
- → Presents a series of safety enhancement initiatives (SEIs) to address identified safety deficiencies and achieve the regional safety goals and targets.
- → The AP-RASP promotes:
  - The effective implementation of safety oversight systems of States in RASG-APAC,
  - A risk-based approach to managing safety at the regional level, as well as
  - Collaboration between States in the region, RSOOs, RAIO, other regional and international organizations, and industry.





#### Objectives of AP – RASP

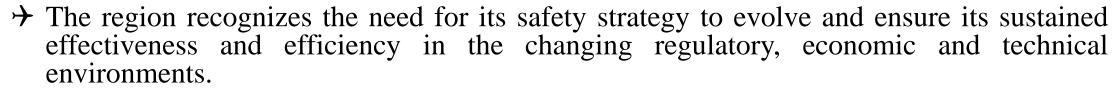
- → The key objective of the AP-RASP is:
  - → to provide strategic direction and policy for the APAC Regional Sates based on the Global Aviation Safety Plan (GASP) Document,
  - → to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a regional aviation safety strategy,
- → Based on above objective, APAC Region will strive to continually enhance regional aviation safety performance,
- → Implement and monitor identified SEIs of the two Road Maps,
- → Enhance coordination for all stake holders by providing a collaborative framework for States, industry and other stake holders.





#### **AP-RASP Goals, Targets and Indicators**

- → The AP-RASP 2023–2025 Edition is aligned with the GASP 2023-2025 edition recognizing adoption of the Five goals and the four global high-risk categories of occurrences (G-HRCs),
- → AP-RASP 23-25 has allotted more prominence and focus on the most important Safety Areas for the APAC region based on the local data;
  - → Improving Safety Oversight Capabilities of individual Staes, seeking support from the partners,
  - → Enhancing Regional EI Score of USOAP, current EI average score is below the global Average score,
  - → Seek support for the PSIDS states in improving Safety,





#### **AP-RASP Goals**

- → Goal I. Reduction in Operational Risks;
- → Goal II. Improvements in Safety Oversight and Compliance;
- → Goal III. Consistent and effective safety management system (SMS) and SSP;
- → Goal IV. Data-driven regulatory oversight; and
- → Goal V. Enhanced aviation infrastructure (physical and institutional).
- Only five (05) Goals adopted from GASP 23-25 and Goal # 6 of GASP has been considered for future adoption by APAC, based on RASG-APAC states inputs.

#### **Regional Goal I: Reduction in Operational Risks**

T1\*: Maintain a 3-year moving average decreasing trend of fatal accidents per million departures,

T2\*: Maintain a 3-year moving average decreasing trend of LOC-I-related accidents per million departures,

T3\*: Maintain a 3-year moving average decreasing trend of RS-related accidents per million departures

T4\*: States/ Administrations and industry to update the online SEI monitoring tools on their status of implementation of all applicable priority RASG-APAC/ APRAST SEIs (Ops Actions) [by 2025]

T5: States/ Administrations with effective safety oversight capabilities (i.e. which have, or are expected to meet, GASP Goal 2 and have attained Level 4 SSP implementation), should actively lead RASG-APAC's safety risk management activities [by 2025]

T6\*: States/ Administrations should contribute information on safety risks, including SSP safety performance indicators (SPIs), to RASG-APAC [by 2025]

#### Regional Goal II: Improvements to safety oversight and compliance Targets

T7: Conduct workshops and seminars relating to ANS, AIG, AGA at least yearly [from 2023 to 2025]

T8\*: Endeavour to have no Significant Safety Concerns (SSCs) under the USOAP Continuous Monitoring Approach (CMA), and to resolve any SSCs promptly within the time frame specified in the Corrective Action Plan and agreed to by ICAO [from 2023 to 2025]

T9\*: Increase the number of IOSA registered APAC airlines and ISAGO registrations by 50% over July 2016 figures (82 and 51 respectively) [by 2025]

T10\*: States to progressively enhance safety oversight capability to achieve at least 75% EI in USOAP CMA, and to achieve an APAC average overall USOAP EI score higher or equal to the global average [by 2024]

## Regional Goal III: Implementation of Effective SMS and SSP Targets

T11\*: States should implement an SSP that is present [by 2025]

T12\*: States should publish national aviation safety plans (NASP) [by 2024]



Regional Goal IV: Data-driven regulatory oversight promoting safety Data sharing; **Targets** 

T13 Develop a regional mechanism for data collection, analysis and sharing [by 2025]

T14\* Pursue a 50% increase in participation in flight data sharing initiatives by APAC Air Operators, with aircraft of mass 27,000kg above, over July 2019 figures (15) [by 2025]



## Regional Goal V: Enhanced aviation infrastructure (physical and institutional) Targets

T15\* States should achieve at least 75% EI in AGA of USOAP CMA, and an APAC average USOAP EI score in AGA higher or equal to the global average [by 2025]

T16\* States should achieve at least 75% EI in AIG of USOAP CMA, and an APAC average USOAP EI score in AIG higher or equal to the global average [by 2025]

T17\* Certify all aerodromes the APAC region that are used for international operations [by 2025]

T18\* States should establish an independent accident and incident investigation authority (AAIA) as required by Annex 13, as well as related investigation system and procedures [by 2025]

#### **Organizational Challenges**

- → Two most common organizational challenges faced by States of APAC region are the lack of effective safety oversight capabilities and huge challenges due to difficulties in implementing an SSP as well as SSP.
- → Effective safety oversight;
  - Effective implementation of the eight CEs of the State's safety oversight system in all relevant areas, as appropriate to their aviation system and complexity,
- → State Safety Programme
  - The implementation of SSP has remained to be a challenge in the region, due to lack of safety education, fear of safety reporting, lack of safety data protection and safety promotion.





### **Operational Safety Risks**

- → APAC Regional High Risk Categories (R-HRC)s are in line with those listed in the 2023-2025 edition of the GASP (G-HRCs):
- Controlled Flight into Terrain (CFIT);
- Loss of Control In-Flight (LOC-I);
- Runway Excursion (RE);
- Runway Incursion (RI);
- Except for Mid-Air Collisions (MAC)]; for the triennium of 2023-2025, the addition of MAC has been put on hold as at Q4 2022 pending the formal recommendations by the IAT to the APRAST's SRP WG into the list of regional HRCs.





#### **Emerging Issues**

- → Operation of RPAS within the vicinity of aerodromes;
- → Frequency interference, in particular the use of 5G telecommunication system, especially within the vicinity of aerodromes; Bird Strikes and Wildlife Hazard;
- → Laser strikes/attacks during approaches,
- → Wind farms in the vicinity of aerodromes
- → Cyber security
- → The installation of solar farms in the vicinity of aerodromes.

Note: Issue of glare and glint to ATC and pilots.





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#### Custodians Roles and Responsibilities Oversee implementation of AP-RASP Actions and achievement of Targets ICAO-APAC Regional Office Include AP-RASP Actions in yearly Workplans of APRAST and other regional platforms and mechanisms, including APAC COSCAPs (Administrator of AP-RASP) Advise on available Mechanisms/ Tools to facilitate implementation of Actions Oversee that top APAC safety risks and challenges are identified and addressed APRAST Co-Chairs (especially emerging issues with high and widespread impact), and ensure achievement of objectives and Targets Report progress status of AP-RASP implementation and achievement of Targets to RASG-APAC Present proposed revisions to the AP-RASP, following endorsement by APRAST, to RASG-APAC for approval Develop second-order indicators, as appropriate, to measure and track progress of SRP WG the achievement of Targets Prepare AP-RASP progress reports customised for every RASG-APAC and APRAST meeting

**AP-RASP Stake Holders Roles and Responsibilities** 



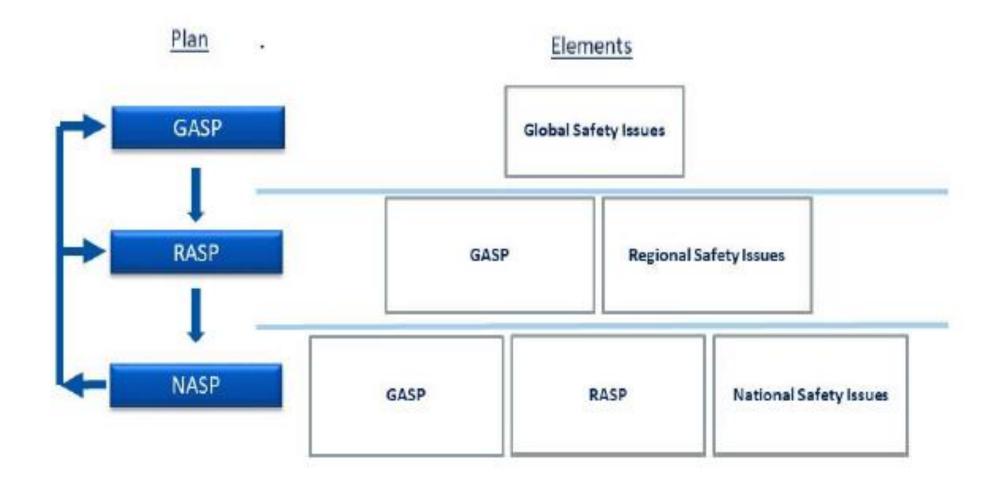
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#### Custodians Roles and Responsibilities Develop clear guidelines for States/ Administrations to indicate their SEI WG implementation status for each Ops Action Develop indicators to track and analyse the relevance and effectiveness of Org and Ops Actions, in close coordination with the SRG WG Work with Action Custodians to track and analyse the progress of implementation of all AP-RASP Actions Support their respective States/ Administrations and industry stakeholders with COSCAPs and PASO implementation of the AP-RASP and its Actions Formed to review and develop the AP-RASP for the next triennium AP-RASP Ad-hoc WG Present the updated AP-RASP to APRAST for endorsement Action Custodians Appointed by APRAST to lead the group of stakeholders identified in the AP-RASP to further develop specific details for implementation of their respective Actions Provide updates to SEI and SRP WGs and ICAO-APAC on the progress status of their Actions

**AP-RASP Stake Holders Roles and Responsibilities** 

Table 2. Custodians responsible for the administration of AP-RASP, and their roles

## Relationship between the GASP, the AP-RASP and the NASP





## (AP-RASP) Regional Aviation Safety Plan Implementation Roadmaps; ORG and OPS

- → The regional aviation safety roadmap outlines specific SEIs associated with the AP-RASP goals and targets, as well as the R-HRCs.
- → Each SEI is supported by a set of action Items.
- → SEIs are directed to three different sets of stakeholders: individual States; regions; and industry.
- → Successful achievement of the SEIs relies upon the close collaboration and cooperation of all key aviation stakeholders.
- → The regional aviation safety roadmap is composed of two parts
  - Organizational challenges
  - Operational safety risks



#### AP-RASP Validation workshop

- → AP-RASP 20-22 version was validated by AP-RAST and recommended for RASG-APAC to endorse.
- → Endorsed in 2019 November and published in APAC RO website in January 2020.
- → Learning from other regional good practices AP-RASP 26-28 version may hold:
- → Workshop after development of the first draft by AP-RASP Subgroup,
- → To validate the draft AP-RASP ICAO RO Secretariat will arrange the workshop,
- → The draft AP-RASP will be submitted to be endorsed by the RASG-APAC



### Project Risk Factors identified and Mitigation Measures

- Lack of understanding of the expectations of the AP-RASP Actions;
- Mitigation Actions:
  - APRAST/ ICAO-APAC and custodian of the NASP to provide additional clarification on the expectations of the Actions.
- Limited manpower and financial resources to fully implement Actions or develop indicators to and keep track of implementation of AP-RASP Actions and achievement of Targets;
- Mitigation Actions:
  - Custodian of the NASP to provide support, either directly or through partial delegation of responsibility to other local agencies.
  - Approach ICAO-APAC, PASO and COSCAPs for advice on technical assistance avenues,
  - Attend NASP workshops.
- Lack of relevant skills and knowledge to effectively implement and monitor targets and indicators at the regional level;
- Mitigation Actions:
  - Collate relevant documentation/ educational material to support development of skills and knowledge where these are inadequate

### Project Risk Factors identified and Mitigation Measures

- Lack of timely, consistent, quality data and systems to support monitoring of targets and indicators
  - Relevant domestic agencies/ bodies to collate relevant documentation/educational material to support development of quality data collection mechanisms and monitoring of targets and indicators.
  - All stakeholders should contribute data and information as necessary for the monitoring
    of targets and indicators, or otherwise communicate reason(s) for not being able to do
    so, so that such reasons can be addressed.
- Inefficient approval processes (for Actions which require swifter decisionmaking and actions
  - Regular meetings and/or correspondences may be required to expedite decisions where
     lack of such decisions impacts timely implementation of the NASP Actions.
- tack of coordination and cooperation between Administrator, Custodians and Stakeholders: Ensure formal communication mechanisms to ensure there is a coordinated effort to support information flow and encourage cooperation between stakeholders.





## Thank You!