



ICAO

UNITING AVIATION

Middle East-Regional Aviation Safety Plan MID-RASP 2020-2022 Edition

Mohamed Chakib: RO-SAF/IMP
Webinar: 25 May 2021





- **MID-RASP constitutes the regional safety plan** for MID region, setting out the **strategic priorities, main risks** affecting the region aviation system and the necessary **actions to mitigate those risks** to further improve aviation safety
- The MID-RASP promotes the effective **implementation of safety oversight systems** of States in MID Region, a **risk-based approach** to managing safety at the regional level
- as well as a coordinated **approach to collaboration** between States in the region, regional organizations and industry.



- The purpose of GASP is to continually reduce fatalities, and the risk of accidents, by guiding the development of a harmonized aviation safety strategy and **the development and implementation of regional and national aviation safety plans.**
- MID-RASP **considers and supports the objectives** and **priorities of GASP** and emphasizes the importance of identifying and mitigating risks at MID region level
- The States NASPs to **be developed in alignment with the GASP and the MID-RASP.** However, **priority** should be **given to national safety concerns.** Moreover, the **NASP** should be also **aligned and coordinated with the MID-RASP's** (as appropriate).





- One of the GASP goals is for **States to improve their effective safety oversight** capabilities and to progress in the **implementation of SSPs**. These **objectives are addressed in MID-RASP**
- GASP **addresses high-risk categories** of occurrences, which are deemed global safety priorities. The same **is addressed in MID-RASP**
- The MID-RASP Edition 2020-2022 provides references to corresponding GASP 2020-2022 Safety Enhancement Initiatives (SEIs); covering **organizational issues and emerging risk** as well as **operational risks**.



Executive Summary

PART-I. Planning

1. Introduction

1.1 Objectives and principles

1.2 MID-RASP & GASP

2. How MID-RASP is structured

3. How MID-RASP is developed and monitored

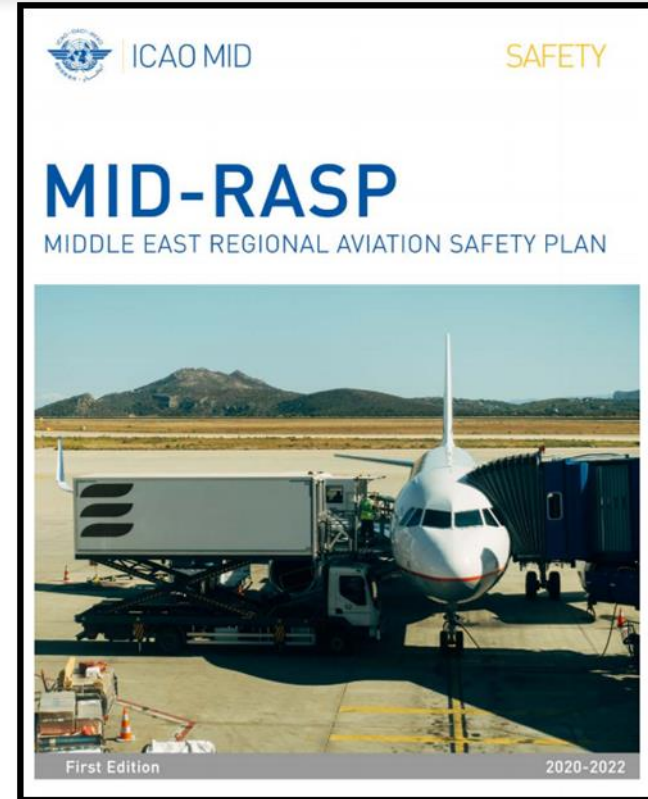
4. Operational Context

5. Strategic Priorities

5.1. Organizational Challenges/Issues

5.2. Regional Operational Safety risks

5.3. Emerging Safety Risks



How MID-RASP is structured

PART-II. Implementation

6. Safety performance monitoring and implementation

7. Safety Actions

7.1. Organizational Challenges & Emerging Risks

7.2. Regional Operational Safety Risks

TABLE OF CONTENTS

PART-I. PLANNING	4
1. INTRODUCTION	4
1.1 Objectives and Principles	4
1.2 MID-RASP and Global Aviation Safety Plan (GASP).....	4
2. HOW MID-RASP IS STRUCTURED	5
3. HOW MID-RASP IS DEVELOPED AND MONITORED	7
4. OPERATIONAL CONTEXT	9
5. STRATEGIC PRIORITIES	11
5.1 Organizational Challenges/Issues	13
5.1.1 Strengthening of States' Safety Oversight Capabilities	13
5.1.2 Improve Regional Cooperation for the Provision of Accident & Incident Investigation	14
5.1.3 Sharing of Safety Recommendations related to Accidents and Serious Incidents	14
5.1.4 Improve Implementation of ELP Requirements.....	15
5.1.5 Enhance State Oversight on Dangerous Goods.....	15
5.1.6 Improve the Status of Implementation of State Safety Programme (SSP) and Safety Management System (SMS)	15
5.1.7 Certification of International Aerodromes.....	16
5.1.8 Establishment of Runway Safety Teams at International Airports	16
5.2 Regional Operational Safety Risks	16
5.2.1 Address Operational Safety Risks in Commercial Air Transport (CAT) Aeroplane Operations above 5700 kgs.....	16
5.3 Emerging Risks	19
5.3.1 GNSS Outages/ Vulnerability.....	19
5.3.2 COVID-19 Pandemic Outbreak	20
5.3.3 Ensure the safe operations of UAS (drones).....	20
PART-II. IMPLEMENTATION.....	21
6. SAFETY MONITORING AND IMPLEMENTATION	21
7. SAFETY ACTIONS.....	22
7.1 Organizational Challenges and Emerging Risks	22
7.1.1 Goal 2: Strengthen States' Safety Oversight Capabilities.....	22
7.1.2 Goal 3: Ensure the Appropriate Infrastructure is available to Support Safe Operations	30
7.1.3 Goal 4: Expand the Use of Industry Programmes	34
7.1.4 Goal 5: Implementation of Effective SSPs and SMSS.....	35
7.1.5 Goal 6: Increase Collaboration at the Regional Level to Enhance Safety	39
7.2 Regional Operational Safety Risks	40
7.2.1 Goal 1: Reduction in Operational Risks	40



- **RASG-MD** is the **governing body** responsible for the **development, support implementation and monitoring** of the MID-RASP
- SEIG to **support the RASG-MID in the development/update of MID-RASP** and the monitoring of the implementation of SEIs related to identified safety issues
- The MID-RASP Edition 2020-2022 **covers the three-year period** between 2020 and 2022 and will be updated on a yearly basis.
- The MID-RASP is to **be endorsed by RASG-MID** at least every three years and as deemed necessary



The MID-RASP has been developed in congruence with the GASP, and supports its objectives, goals, targets and indicators.

- a. The MID-RASP structure adheres closely to GASP and the 'RASP template'
- b. The MID safety strategy is aligned with GASP 2020-2022 Edition, retained and included as an Appendix in the MID-RASP;
- c. MID-RASP safety actions were selected taking into consideration relevant SEIs for Region and Industry (applicable to regions) in the GASP 2020-2022 Edition.
- d. GASP SEIs for States and Industry (domestic) were not considered as these are more suitable to be included in the NASPs of the MID States.



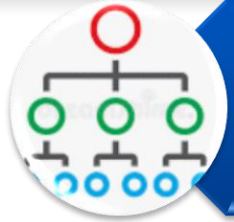
At the regional level, the MID-RASP commits RASG-MID to continue the following efforts as indicated below:

- a. Focus on the development of the current regional SEIs to address the global HRCs, and other priorities as identified for the MID region in a data-driven and strategic manner, which also includes organizational challenges and emerging risks.
- b. Continue implementation support to States and industry, including the development of improved guidance materials as well as the organization of workshops and training to provide assistance and guidance to MID States;
- c. Assist States in the implementation of SSP and SMS, and in the development of NASPs;
- d. Promote regional government and industry collaboration for sharing best practices in safety management;
- e. Put in place a structure for the collection, analysis and sharing of safety and operational data in the region to support a comprehensive approach to risk management, and facilitate initiatives to develop regional data collection, and analysis



States and industry are committed to the following efforts:

- a. Implement, as appropriate, the GASP SEIs and MID-RASP Actions in a data-driven, strategic and timely manner;
- b. Accord priority to the implementation of SSP and SMS;
- c. Use data-driven methodologies to identify HRCs, and implement collaborative solutions to reduce accident rates in the region, and likewise accord priority to the implementation of respective SEIs
- d. Consider various options to leverage ICAO-recognized industry assessment Programmes such as the IATA Operational Safety Audit (IOSA), IATA Safety Audit for Ground Operations (ISAGO) and IATA Standard Safety Assessment Programme (ISSA).



Organizational issues



Operational Safety Risks



Emerging risks





Organizational Challenges/Issues

States' Safety Oversight

Safety Management

Human Factors &
Competence of personnel

Accident and incident
investigation

Regional Operational Safety Risks-CAT Aeroplane

LOC-I

CFIT

RE

RI

MAC

Emerging Risks

COVID-19 Pandemic
Outbreak

GNSS Outages/
Vulnerability

Civil Drones (UAS/RPAS)

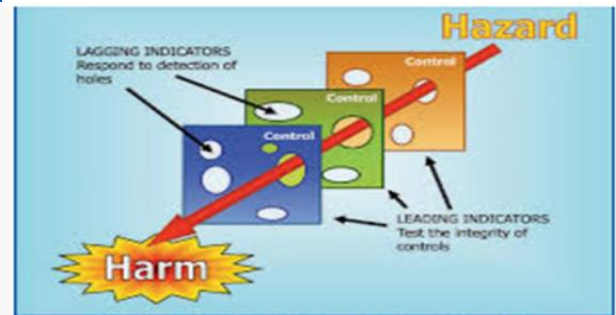
Impact of security on
safety





- The **MID Safety Strategy 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 2020-2022 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 strategy to this plan**
- **For each Goal** established in the MID Region Safety Strategy, **identified SEI(s) be mapped** to it including their respective actions.
- The MID safety strategy is included **as an appendix and became an integral part of MID-RASP**

-  **Goal 1:** Achieve a Continuous Reduction of Operational Safety Risks
-  **Goal 2:** Strengthen States' Safety Oversight Capabilities
-  **Goal 3:** Ensure the appropriate infrastructure for safe operations
-  **Goal 4:** Expand the use of Industry Programmes
-  **Goal 5:** Implementation of Effective SSPs and SMSs
-  **Goal 6:** Increase Collaboration at the Regional Level to Enhance Safety



MID Region Safety Indicators/Targets

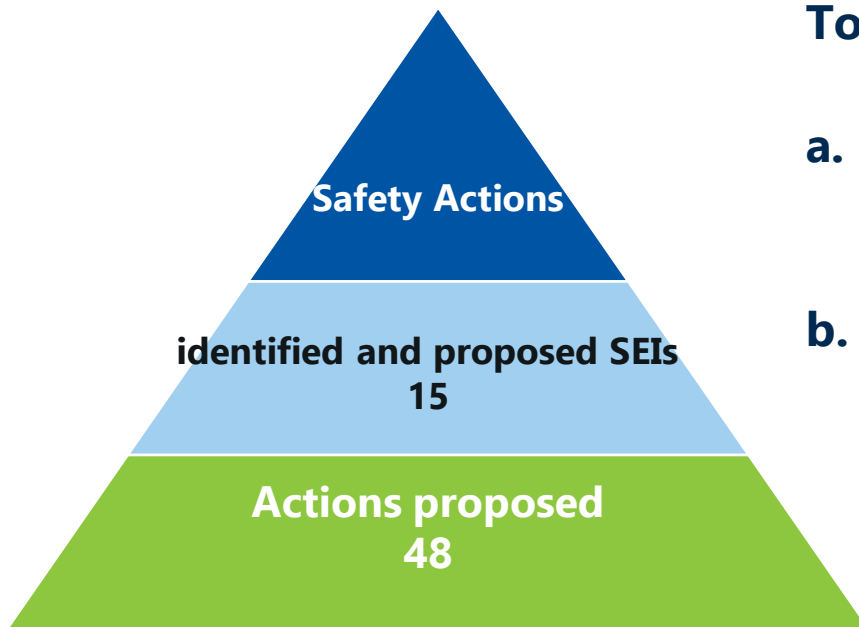
Aspirational Goal: Zero Fatality by 2030

Goal 1: Achieve a Continuous Reduction of Operational Safety Risks

Safety Indicator	Safety Target	Timeline	Links to GASP
Number of accidents per million departures	Regional average rate of accidents to be in line with the global average rate (baseline 2016)	2022	<i>Linked to Goal 1 and Target 1.1 of the GASP</i>
Number of fatal accidents per million departures	Regional average rate of fatal accidents to be in line with the global average rate (baseline 2016)	2022	
Number of fatalities per million departures	Number of fatalities per billion passengers carried (fatality rate) to be in line with the global average rate (baseline 2018)	2022	
Number of Runway Excursion accidents per million departures	Regional average rate of Runway Excursion accidents to be below the global average rate (baseline 2016)	2022	
Number of Runway Incursion accidents per million departures	Regional average rate of Runway Incursion accidents to be below the global average rate (baseline 2018)	2022	
Number of LOC-I related accidents per million departures	Regional average rate of LOC-I related accidents to be below the global rate (baseline 2016)	2022	
Number of CFIT related accidents per million departures	Regional average rate of CFIT related accidents to be below the global rate-(baseline 2016)	2022	
Number of Mid Air Collision (accidents)	Zero Mid Air Collision accident (baseline 2018)	2022	
Number of Near Mid Air Collision (serious incidents)	Regional average rate of Near Mid Air Collision (serious incidents per million departures) to be less than 0.1 All States to reduce the rate of Near Mid Air Collision (AIRPROX) within their airspace	2022	



1. A MID Region Annual safety report would be annually published to provide stakeholders with relevant up-to-date information on the progress made in achieving the regional safety goals and targets, as well as the implementation status of the SEIs.
2. MID-RASP SEIs and their respective actions as well as regional safety goals and targets; would be presented at every SEIG and RASG-MID meetings as well as safety seminars.
 - a. **Brief overview of the overall implementation of the MID-RASP;**
 - b. **Analysis on delay/ challenges encountered in implementation of SEIs and their respective actions; and**
 - c. **If regional safety goals and targets are not met, causes would be addressed and presented to relevant stakeholders.**



To address:

- a. **Regional operational risks: 5 SEIs & 17 actions**
- b. **Organizational issues and emerging risks: 10 SEIs and 31 actions**

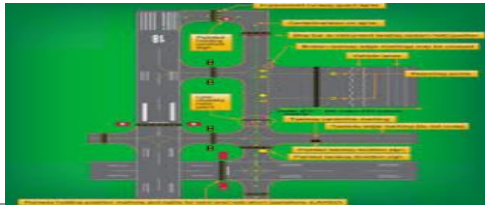
- **SEI Name:** Description of the SEI.
- **Target(s)/Metrics.** Targets which serve to fulfil their respective Regional Goal,
- **Rationale** behind the safety issue (why it has been identified as an issue);
- **What it is to be achieved** (objective);
- **How we intend to monitor improvement** in the future;
- **How we intend to achieve** the objective; here, the various actions contributing to mitigate the identified risk in that area are described.
 - **Actions:** The tasks required for the implementation. The Actions support the Targets of the Regional Goal
- **References:**
 - Indicates key existing global documents from which the Action is adopted, if applicable
 - Where the Actions stem from the SEIs in the GASP Roadmap, specific references are made for easier reference

Affected Stakeholders: ICAO, RASG-MID, States, Regional organizations, industry	
Example Action 1: Description of the Action to be taken	
Subtask(s) if needed to be added:	
Responsible entity/Owner: Appointed Group/State(s)/Organization(s) to further develop details for implementation of the respective Action	
Priority:	Low, Medium, High
Completion Date:	The date in which the respective Action is expected to be implemented
Status:	new, ongoing, on hold, completed
Example Action 2: Description of the Action to be taken	
Subtask(s) if needed to be added	
Owner(s): Appointed Group/State(s)/Organization(s) to further develop details for implementation of the respective Action	
Priority:	Low, Medium, High
Completion Date:	The year(s) in which the respective Action is expected to be implemented
Status :	new, ongoing, on hold, completed
EXPECTED OUTPUT	
Deliverable(s)	TIMELINE
Description of the Result to be achieved	The year(s) in which the respective Target is expected to be achieved

Goal 2: Strengthening states safety oversight capabilities



Safety Actions: Organizational issues & Emerging Risks



Safety Actions: Organizational issues & Emerging Risks

**Goal 4:
Expand the use of industry
Programmes**

**G4-SEI-01:
Promote the use of industry Programmes**





Safety Actions: Organizational issues & Emerging Risks

**Goal 5:
Implementation of effective
SSPs/SMSs**

**G5-SEI 1:
Safety Management**



International Standards
and Recommended Practices

Doc 9859

Safety Management Manual

Fourth Edition, 2018

Annex 19 to the Convention on International Civil Aviation

Safety Management

Second Edition, July 2016

This edition incorporates all amendments adopted by the Council prior to 3 March 2016 and superseded, on 7 November 2016, all previous editions of Annex 19.

For information regarding the applicability of the Standards and Recommended Practices, see Chapter 2 and the Foreword.

Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

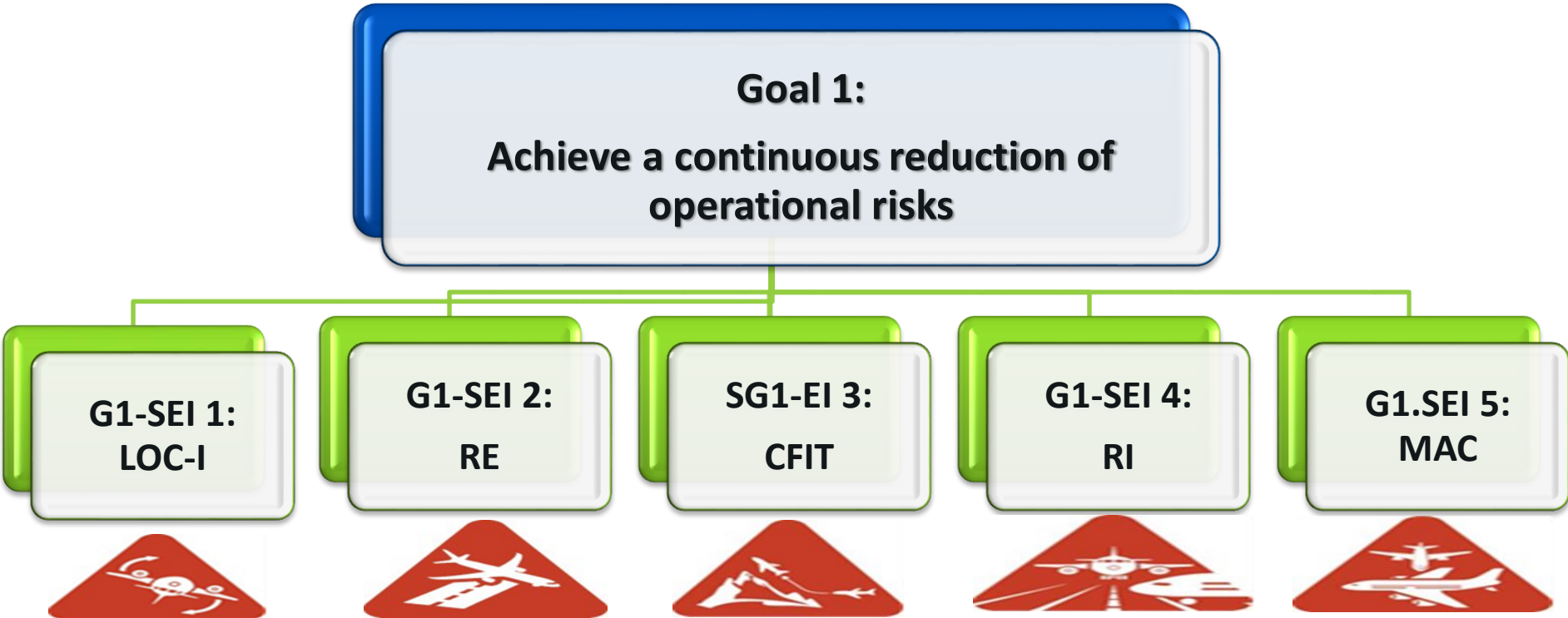
INTERNATIONAL CIVIL AVIATION ORGANIZATION



Goal 6: Increase Collaboration at the Regional Level to Enhance Safety



SEI(s) to be developed in the future



Goal 2: Strengthening states safety oversight capabilities

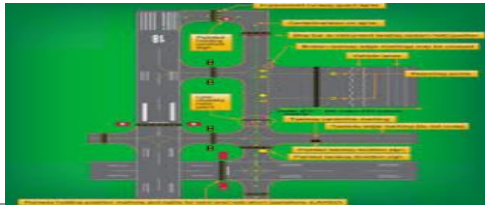




G2-SEI 1: Strengthening of state safety oversight

- A1.** Conduct capacity building activities
- A2.** Conduct technical assistance and NCLB missions
- A3.** Develop & implement NCLB Plans

Safety Actions: Organizational issues & Emerging Risks



Safety Actions: Organizational issues & Emerging Risks



G3-SEI 1: Certification of international aerodromes

A1. organize workshop/training on aerodrome design & operations

A2. Enhance CB for States & A/P Operator. A/D certification

A3. Develop GM/ BP

A4. Deployment of iPack on aerodrome Re-start



Safety Actions: Organizational issues & Emerging Risks

**Goal 5:
Implementation of effective
SSPs/SMSs**

G5-SEI 1: Safety Management



International Standards
and Recommended Practices

Doc 9859

Safety Management Manual

Fourth Edition, 2018

Annex 19 to the Convention on International Civil Aviation

Safety Management

Second Edition, July 2016

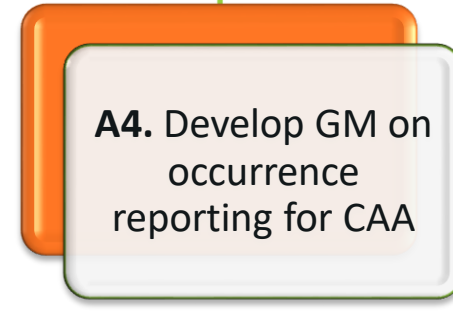
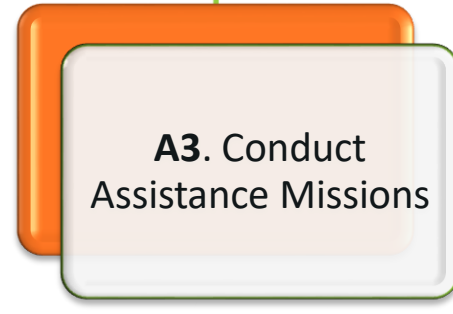
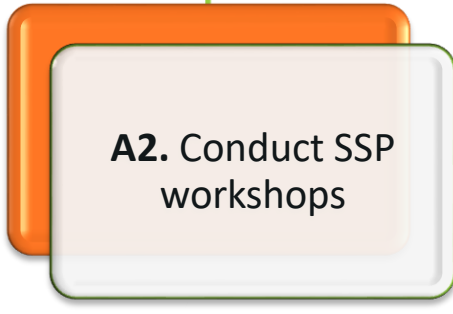
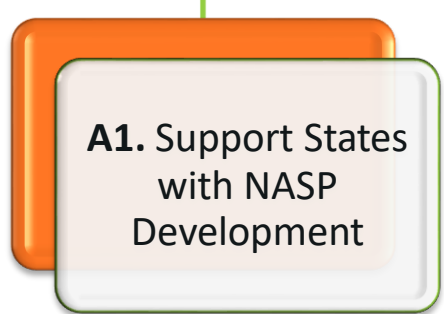
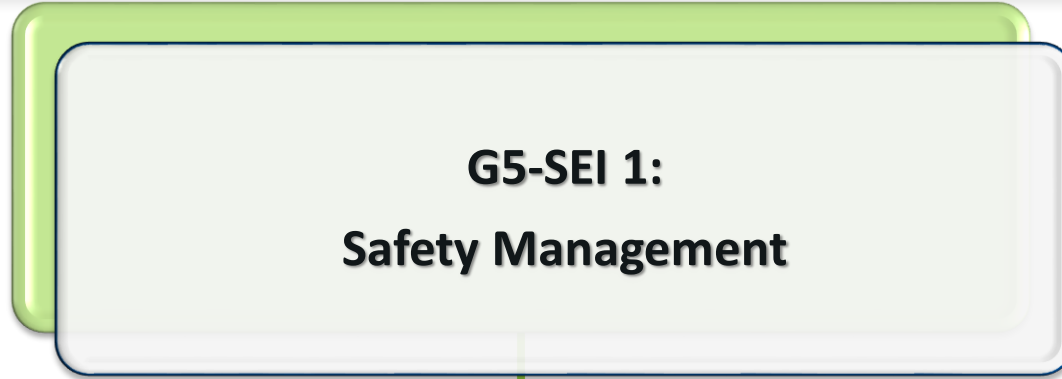
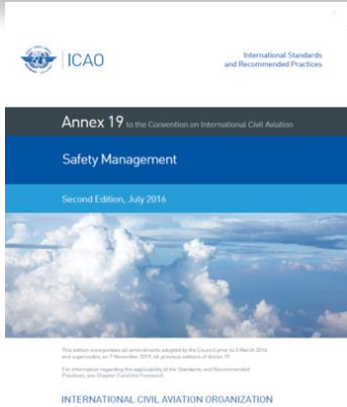
This edition incorporates all amendments adopted by the Council prior to 3 March 2016 and superseded, on 7 November 2016, all previous editions of Annex 19.
For information regarding the applicability of the Standards and Recommended Practices, see Chapter 2 and the Foreword.

Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

INTERNATIONAL CIVIL AVIATION ORGANIZATION

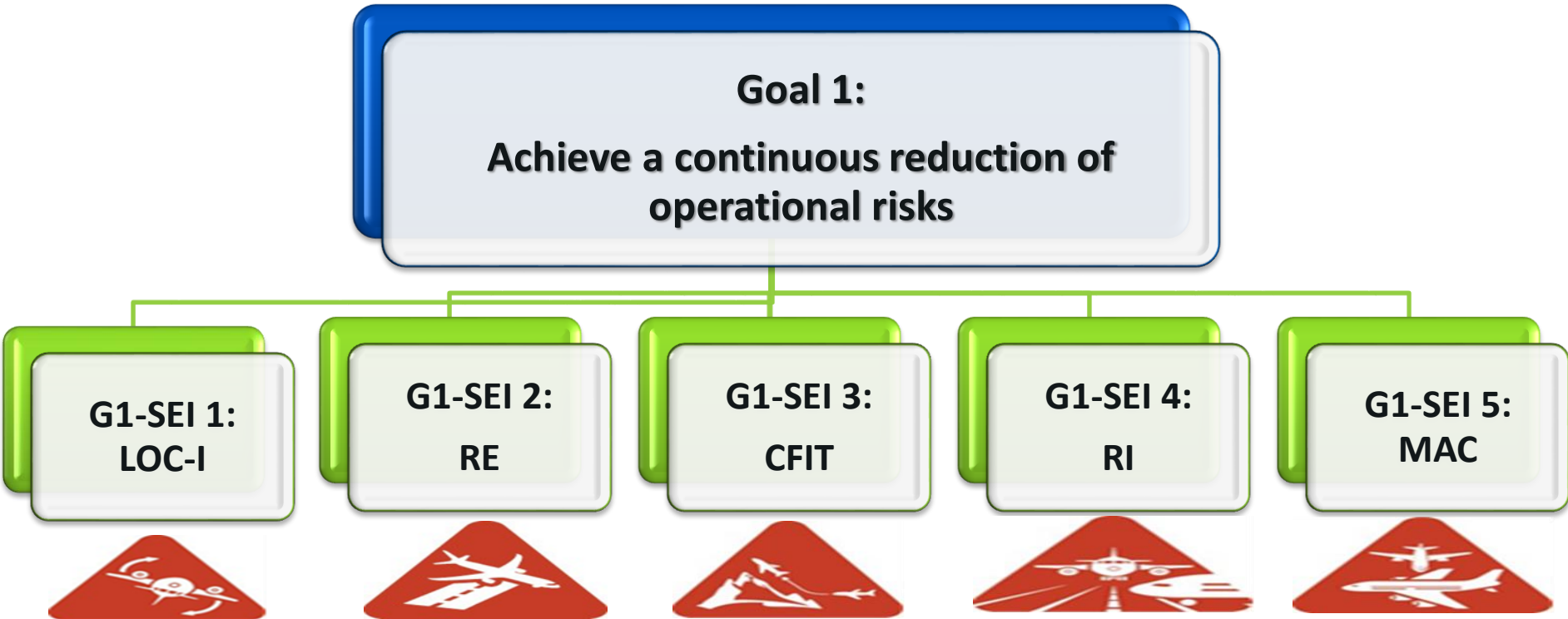
Safety Actions: Organizational issues & Emerging Risks

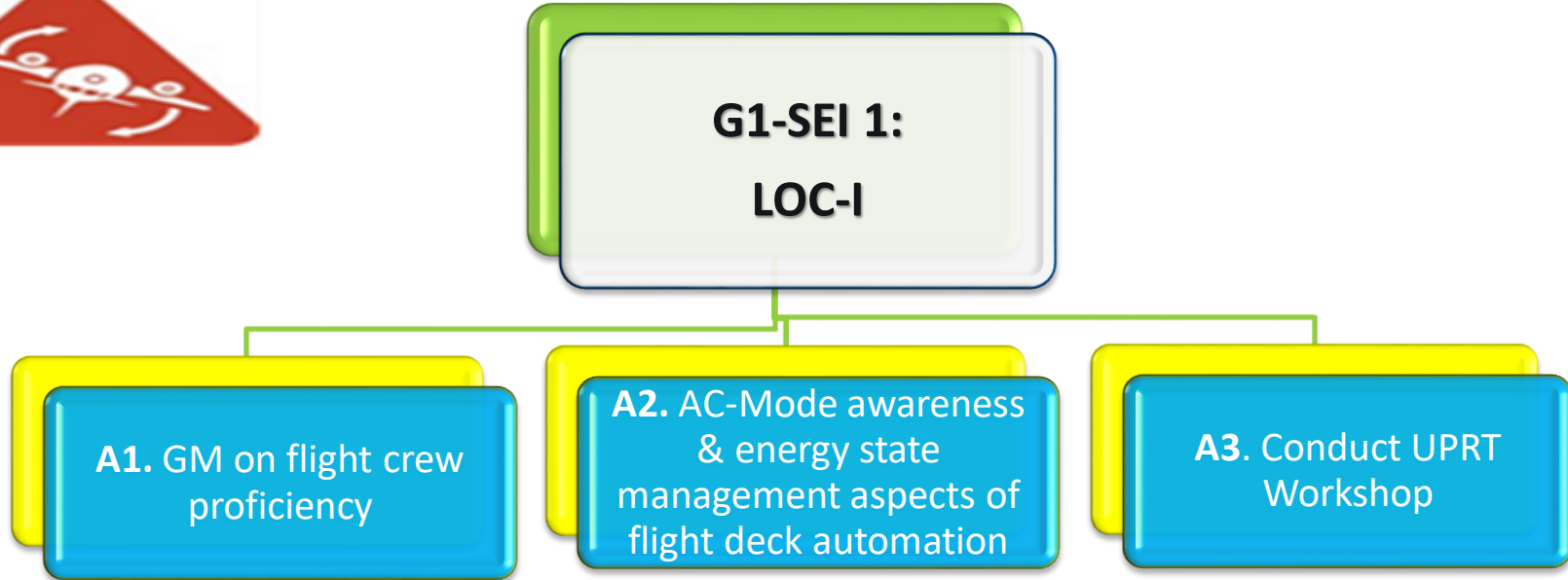


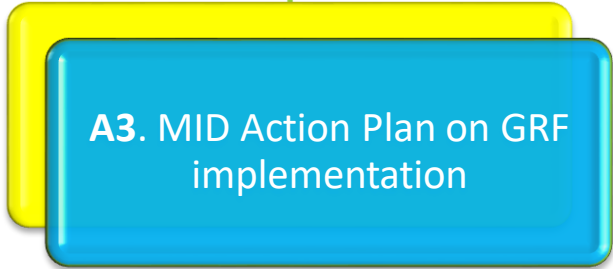
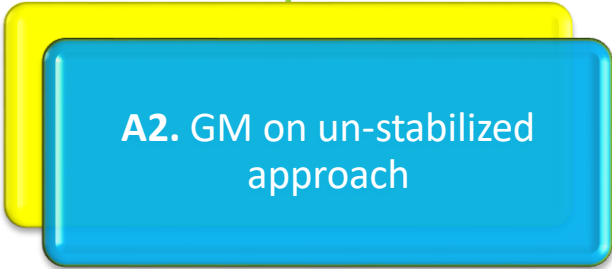
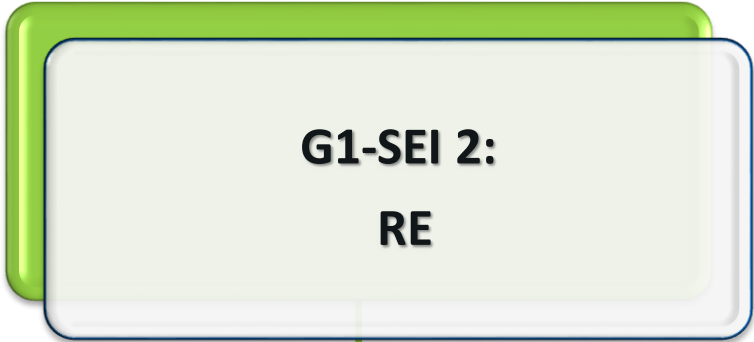


| ICAO

UNITING AVIATION

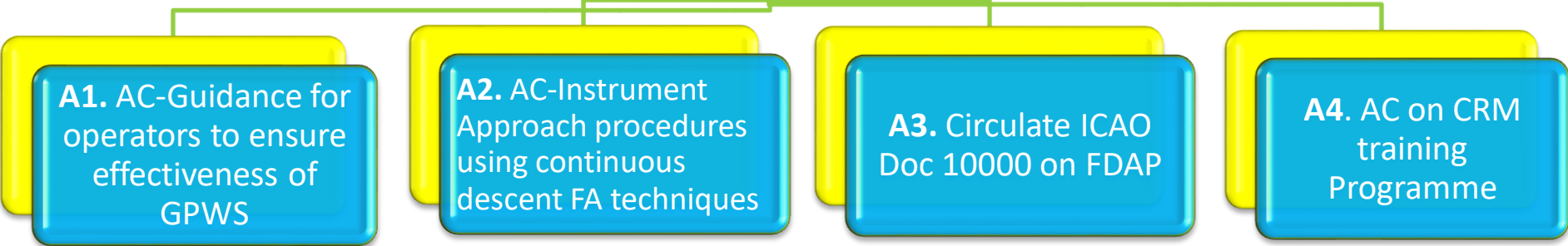








**G1-SEI 4:
CFIT**



**G1-SEI 5B: MAC****“Ensure the safe operations of UAS ”**

A1. Circulate ICAO Developed guidance and advisory circulars: Regulatory framework for the operations of UAS

A2. Organize workshops/Symposium

A3. Sharing of occurrences involving drones to perform tech. analysis

SEIs identified in MID-RASP and recommended as appropriate; to States for inclusion in their NASPs



G2-SEI-01:
Strengthening of States' Safety Oversight



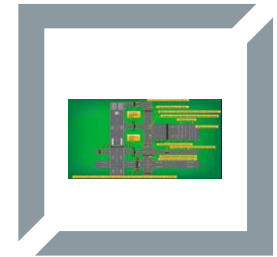
G2-SEI-04:
Enhance State Oversight on Dangerous Goods



G2-SEI-05:
Human factors and Competence of Personnel



G2-SEI-06:
Impact of security on safety



G3-SEI-01:
Certification of International Aerodromes



SEIs identified in MID-RASP and recommended as appropriate; to States for inclusion in their NASPs



G3-SEI-02:

Establish Runway Safety Team (RST) at International Aerodromes



G5-SEI-01:

Implement an effective Safety Management

SEIs identified in MID-RASP and recommended as appropriate; to States for inclusion in their NASPs



G1-SEI-01:
Aircraft upset in flight (LOC-I)



G1-SEI-02:
Runway Excursion (RE)



G1-SEI-03:
Runway Incursion (RI)



G1-SEI-04:
Controlled Flight into Terrain (CFIT)



G1-SEI-05:
5A- Mid Air Collision (MAC)-"Loss of separation between military and civil aircraft"
5B- Ensure the Safe Operations of UAS (drones)



THANK YOU!

