



ICAO

الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



MIDANPIRG 21 and RASG-MID 11

ABU DHABI, UAE | MARCH 4-8, 2024





MID Annual Safety Report 12th Edition

Mohamed Chakib

*Regional Officer, Safety
Implementation*

ICAO MID Office

D Region Annual Safety Report

- ❑ Objective of ASRG
- ❑ Reactive safety information
- ❑ Proactive safety information
- ❑ Emerging Issues
- ❑ MID Region Safety Performance
- ❑ MID Region Safety Priorities



Objective of ASRG

- ❑ Gathering and Analyzing safety information
- ❑ MID Region Safety Priorities
- ❑ Production of the annual safety re

- 1st Edition, Nov 2012
- 2nd Edition, Jan 2014
- 3rd Edition, March 2015
- 4th Edition, May 2016
- 5th Edition, Jan 2017
- 6th Edition, June 2018
- 7th Edition, April 2019
- 8th Edition, April 20
- 9th Edition, March 2021
- 10th Edition, March 2022
- 11th Edition May 2023
- 12th Edition, in progress

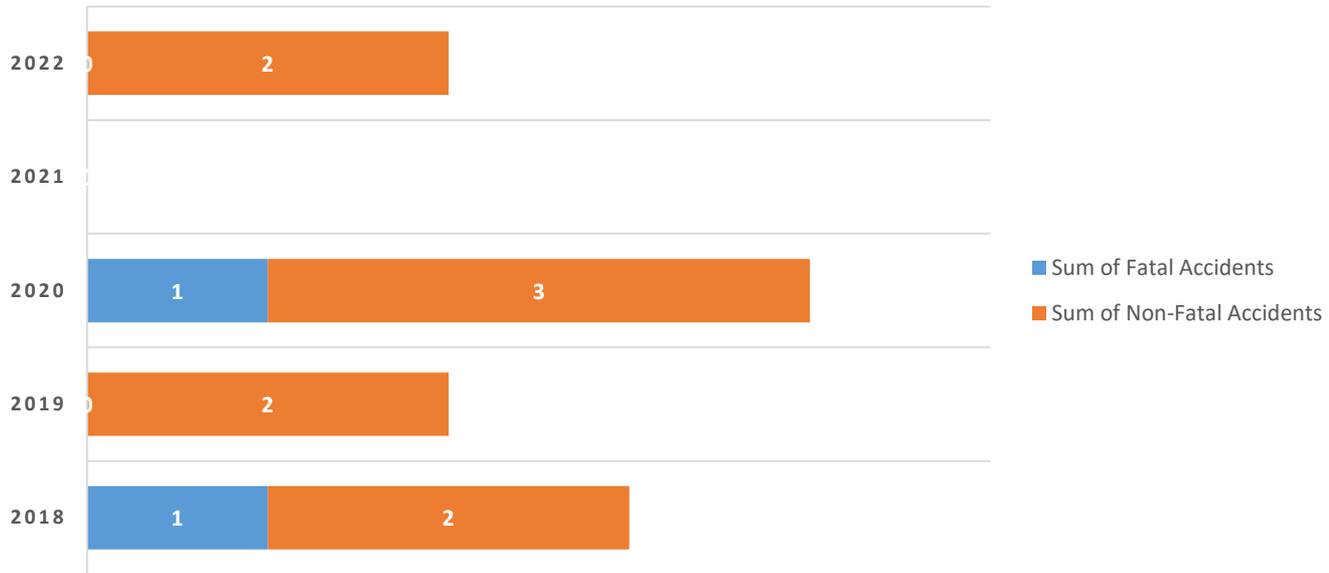


REACTIVE SAFETY INFORMATION

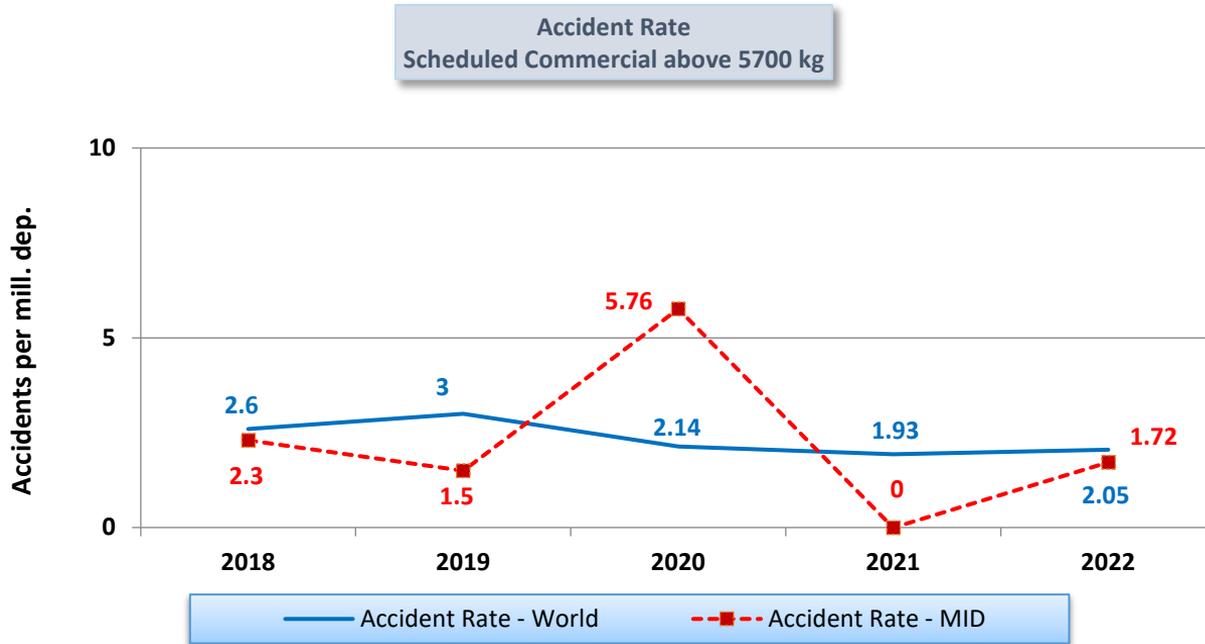
STATE OF OCCURRENCE

Number of Fatal Accidents & Accidents

11 Accidents



(Source OVSG Data & ICAO ASR 2023)



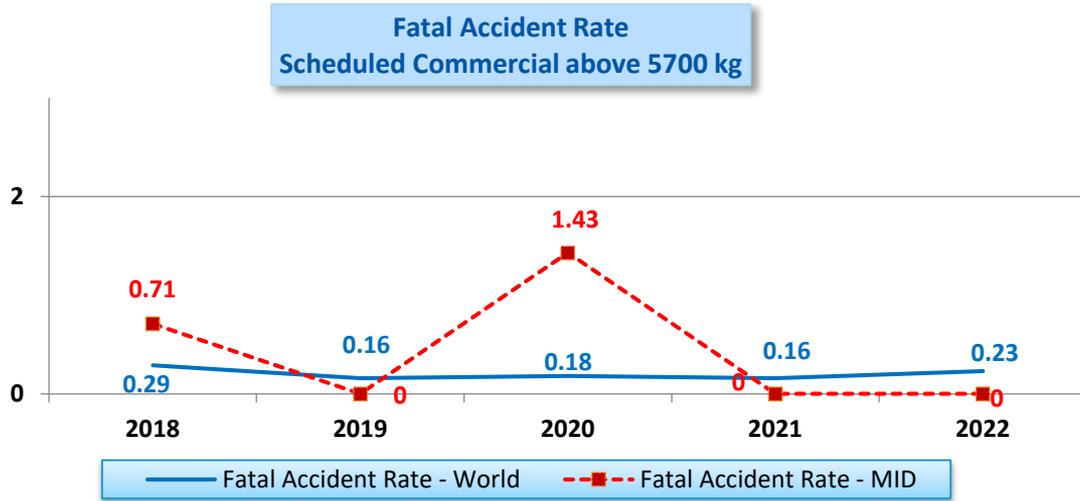
Average 2018-2022

Average MID
2.25

Average Global
2.45

(Source OVSG Data & ICAO ASR 2023)

Fatal Accidents per mill. dep.



Fatal Accident Rate
Scheduled Commercial above 5700 kg

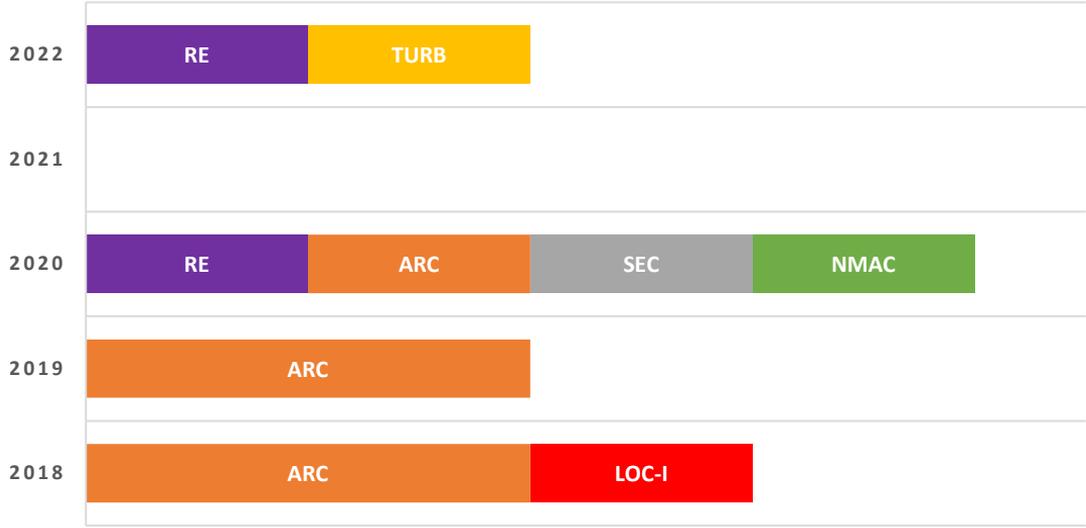
Average 2018-2022

Average MID
0.42

Average Global
0.20

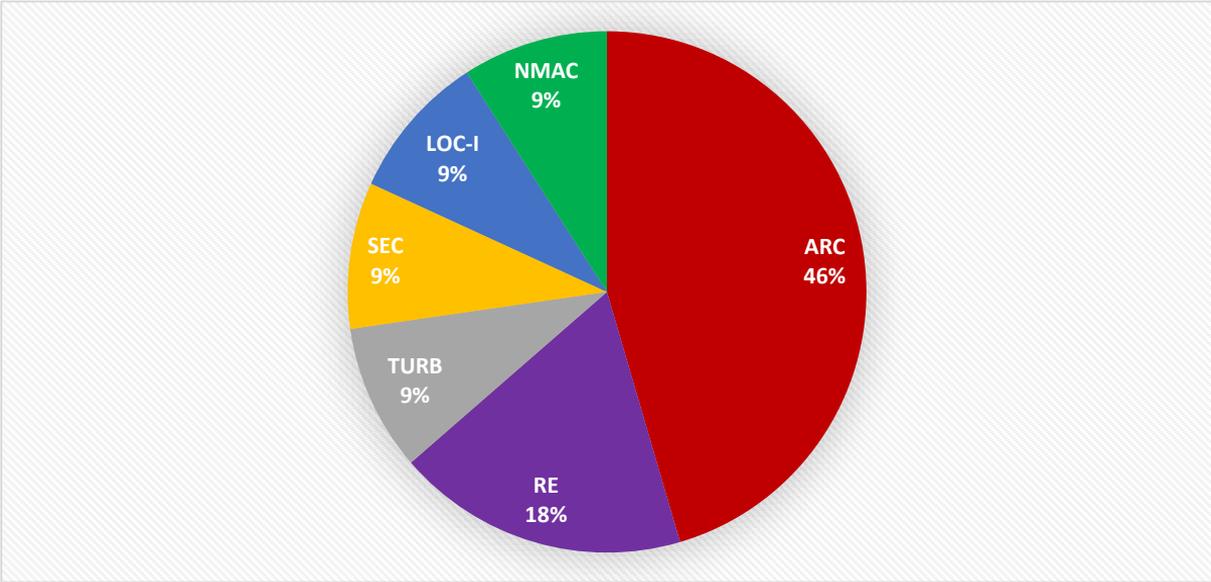
(Source OVSG Data & ICAO ASR 2023)

Distribution of Occurrence Category



Source OVSG Data & ICAO ASR 2023

Occurrence Category Distribution as Percentage



Source OVSG Data & ICAO ASR 2023

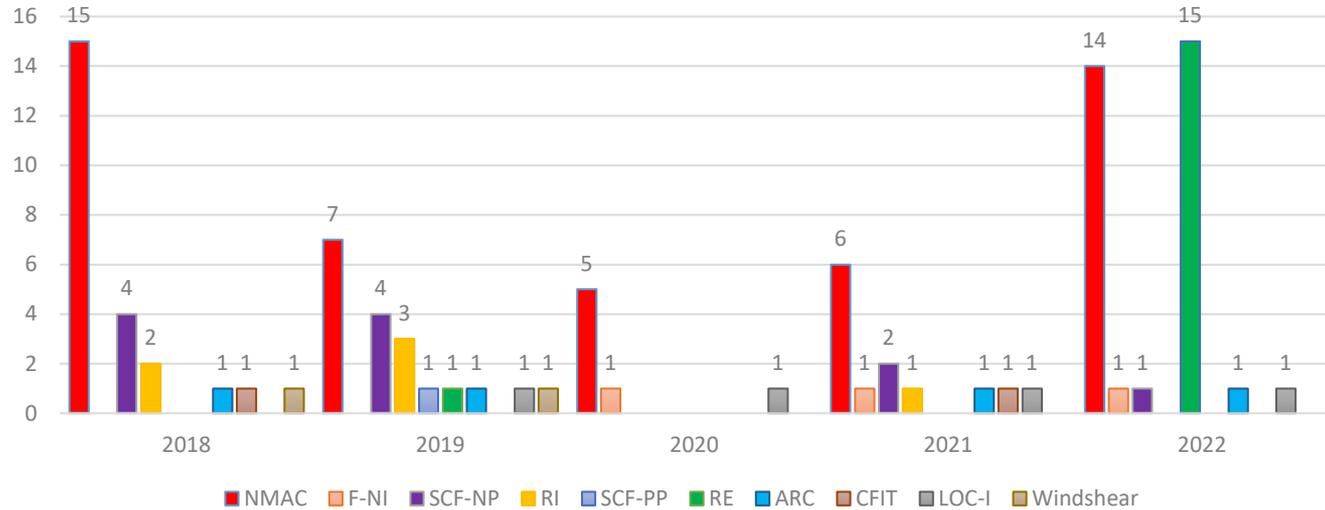
State of Occurrence

The Key risk area identified according to the State of occurrence's accidents data are:

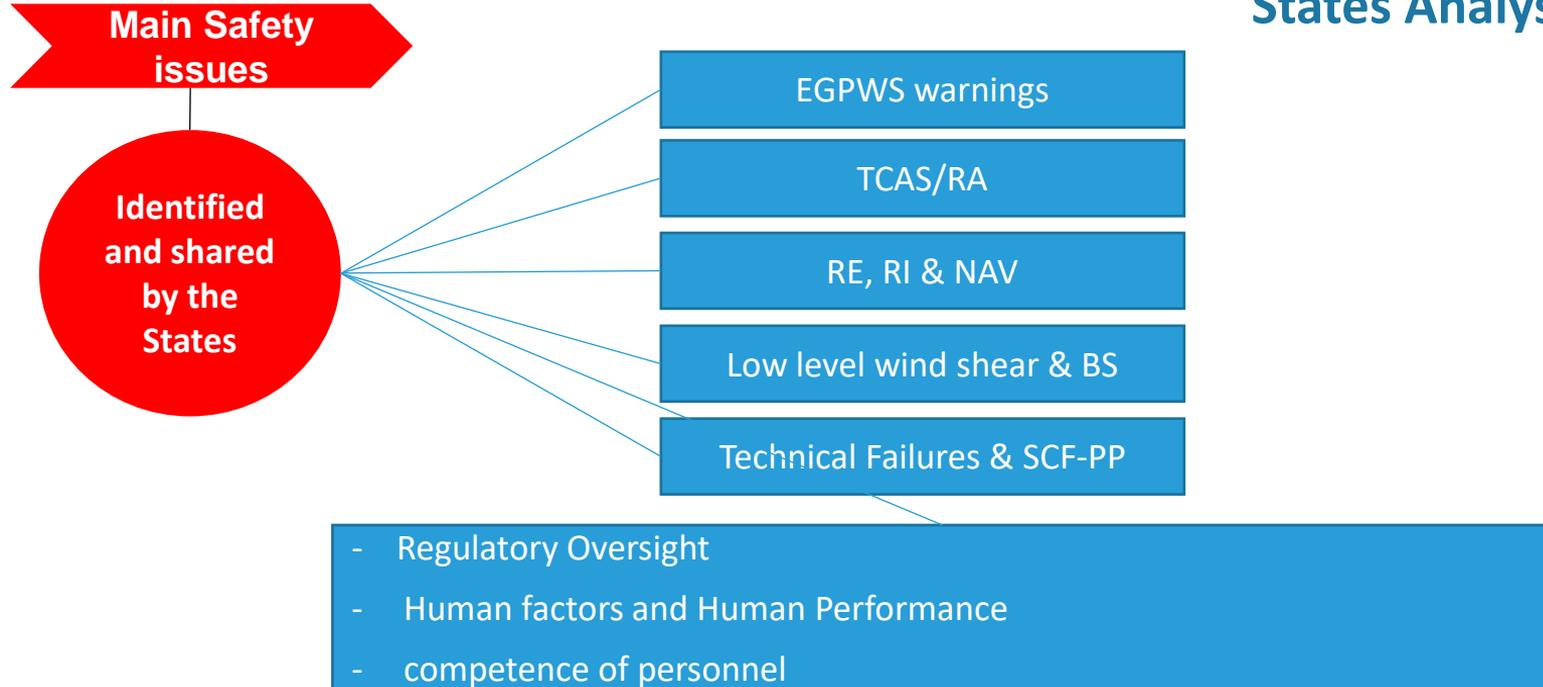
- 1 Loss of Control – Inflight – (LOC-I)
- 2 Runway Excursion (RE) and Abnormal Runway Contact (ARC) during landing
- 3 Security related-(SEC)
- 4 MID Air Collision-(MAC)

Serious Incidents reported by States

MID-Serious incident 2018-2022



States Analysis



PROACTIVE SAFETY INFORMATION

Organizational Issues



**STATES' SAFETY
OVERSIGHT
CAPABILITIES**



**SAFETY
MANAGEMENT**



**HUMAN FACTORS &
HUMAN
PERFORMANCE**

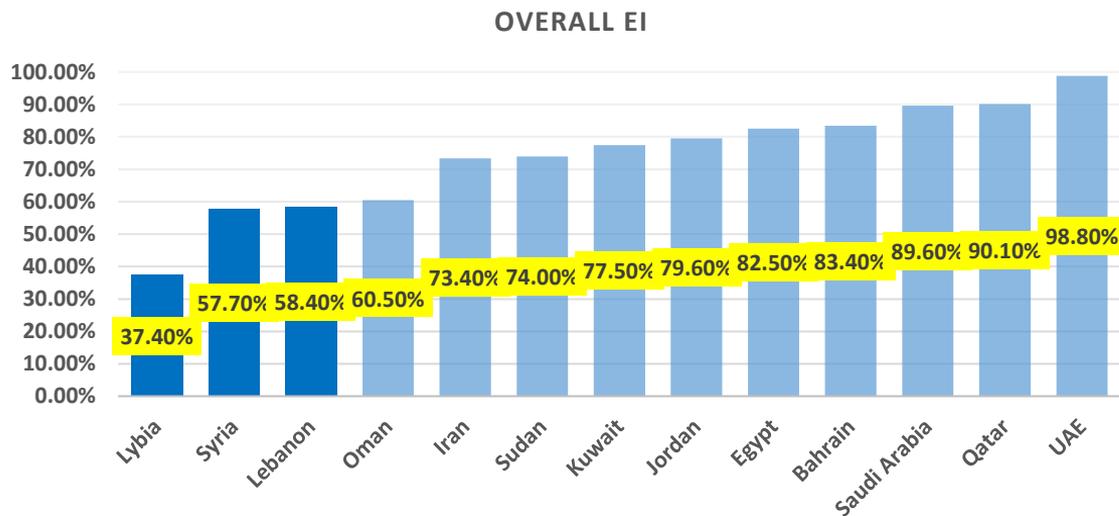


**COMPETENCE OF
PERSONNEL**



**RISK
INTERDEPENDENCIES**

USOAP



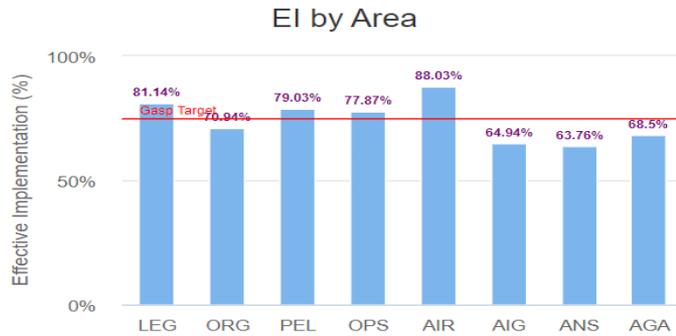
13 out of 15 States have been audited

Overall MID EI = 74, 07%
which is above Global average (68.81%)

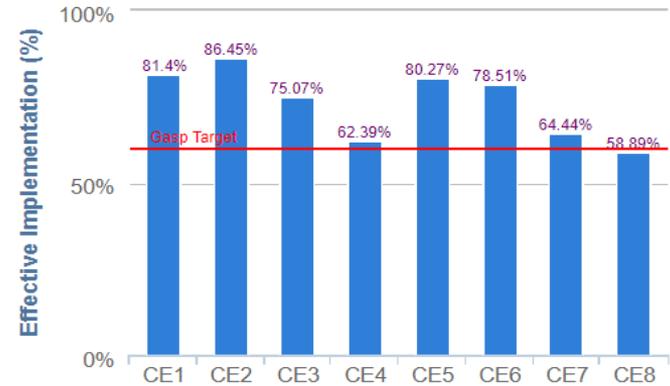
3 states are below 60%
(Libya, Syria, Lebanon)

NO SSC in MID Region

USOAP



5 areas and 5 critical elements are above 70%



CE4, CE7, & CE8 are the lowest in terms of EI (below 70%)

Source: ICAO iSTARS, as of 11 June 2023

MID Region State Safety Programme (SSP) Foundation

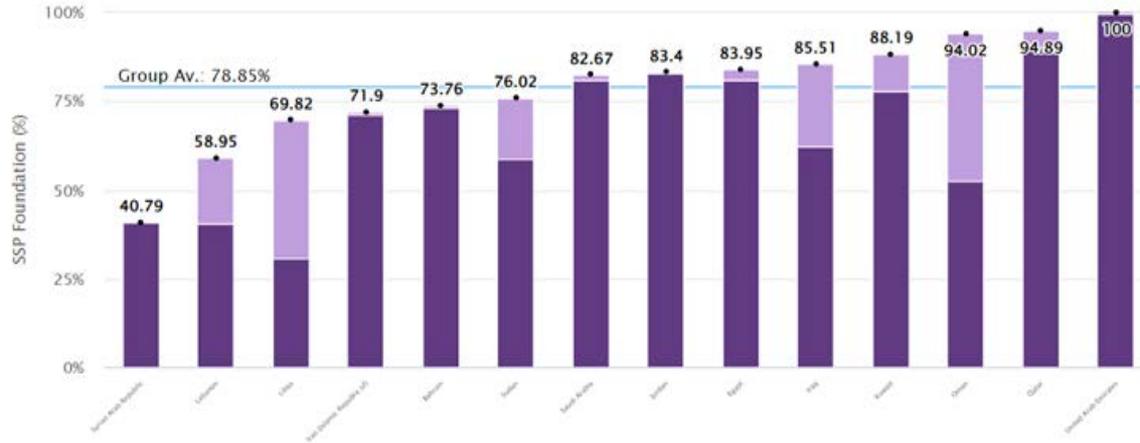


SSP Foundation

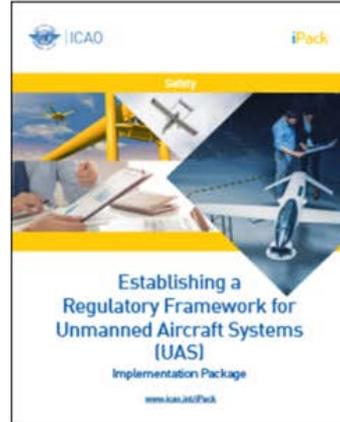
Overall EI for SSP foundation PQs for States in the MID Region is **78, 85%**.

Overall SSP Foundation by State

RASG-MID



Implementation Packages



- Aerodrome Restart, NASP, USOPA, & UAS iPacks have been deployed and completed to support States in the MID region.

Human Factors and Human Performance

- As the aviation system changes, it is imperative to ensure that human factors and the impact on human performance are taken into account, both at service provider and regulatory levels
- As new technologies emerge on the market and the complexity of the system continues increasing, it is of key importance to have the right competencies and adapt training methods to cope with new challenges.



Competence of Personnel

- Availability of well-trained and competent aviation personnel is paramount to the safety and resilience of the aviation industry. Some of States in MID Region has a mature and detailed regulatory framework in place to ensure proper training, licensing, adequacy of training devices and oversight.

- several factors are challenging this mature framework:
 - ✓ new technologies and increasing automation are changing the safety needs for aviation personnel and new training devices are emerging.
 - ✓ New aircraft types and technological advancements in virtual reality/artificial intelligence are revolutionizing pilot training altogether.



Risk interdependencies



CYBERSECURITY RISKS



GNSS INTERFERENCE RISKS



5G INTERFERENCE WITH RADIO ALTIMETER



AVIATION HEALTH SAFETY (AHS) RISKS



RISKS ARISING FROM CONFLICT ZONES

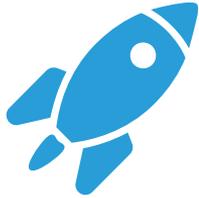


SECURITY RISKS WITH AN IMPACT ON AVIATION SAFETY



EMERGING ISSUES

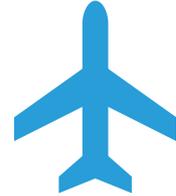
Emerging Issues



**UAS and manned
VTOL-capable aircraft**



**Artificial intelligence
(AI) in Aviation**

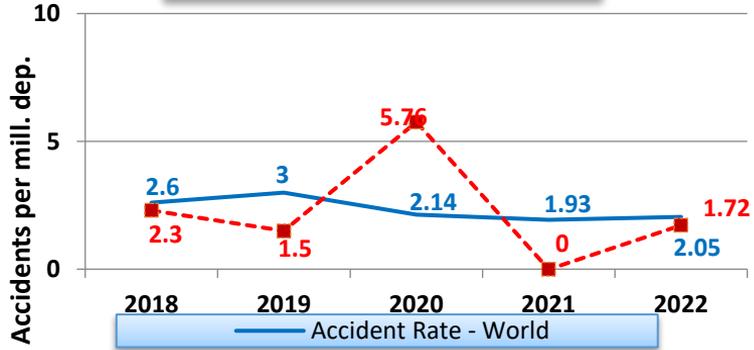


**Digitalization in the
aviation field**

MID REGION SAFETY PERFORMANCE

Goal 1: Achieve a Continuous Reduction of Operational Safety Risks

Accident Rate
 Scheduled Commercial above 5700 kg



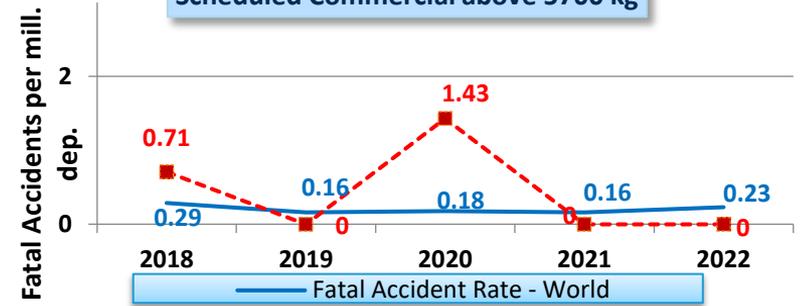
Safety Target

Reduce/Maintain the regional average rate of accidents to be in line with the global average rate

Average 2018-2022

Average MID	Average Global
2.25	2.34

Fatal Accident Rate
 Scheduled Commercial above 5700 kg



Safety Target

Reduce/Maintain the regional average rate of fatal accidents to be in line with the global average rate

Average 2018-2022

Average MID	Average Global
0.42	0.20



Goal 1: Achieve a Continuous Reduction of Operational Safety Risks



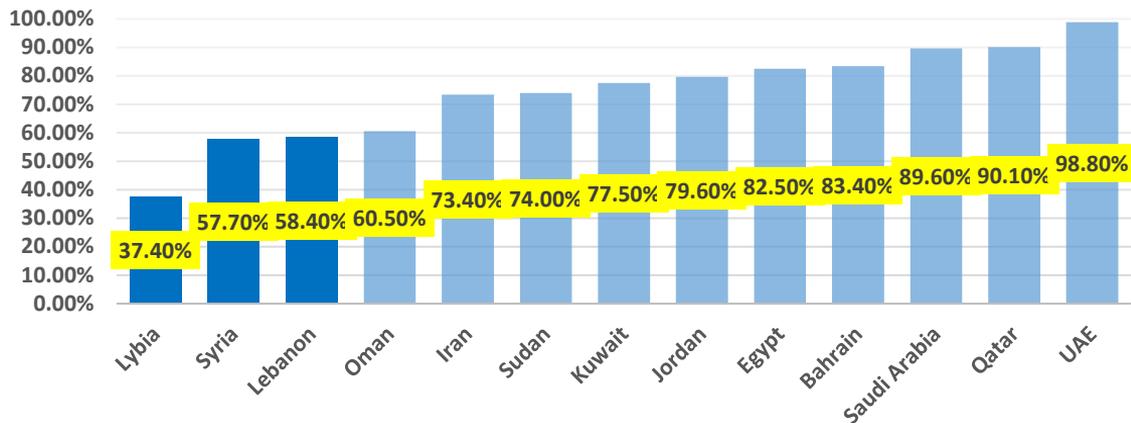


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Goal 2: Strengthen States' Safety Oversight Capabilities

OVERALL EI



Source: ICAO USOAP CMA On Line Framework (OLF), as of 20 July, 2023

13 out of 15 States have been audited

Overall MID EI = 74, 07%
which is above Global average (68.81%)

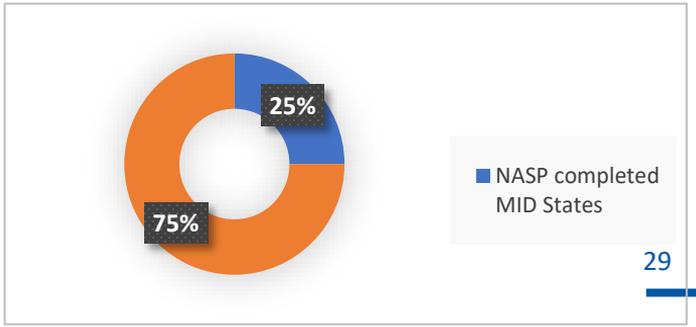
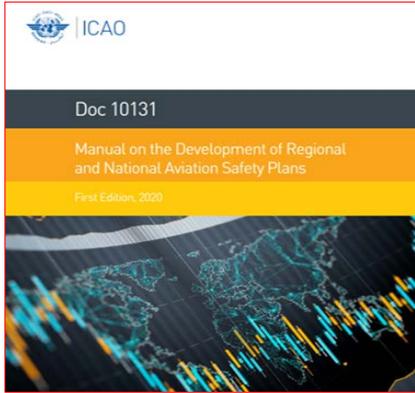
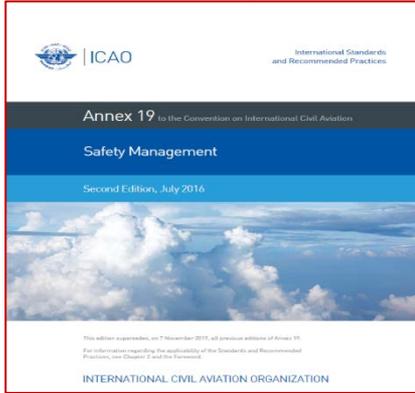
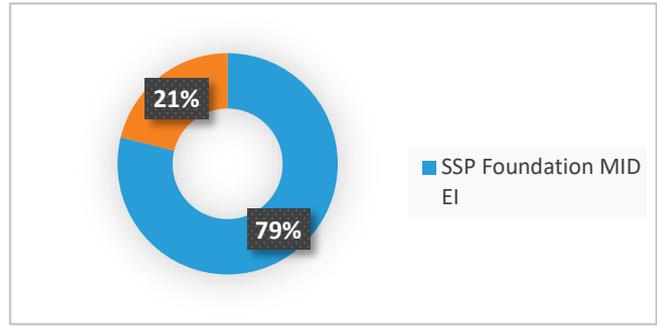
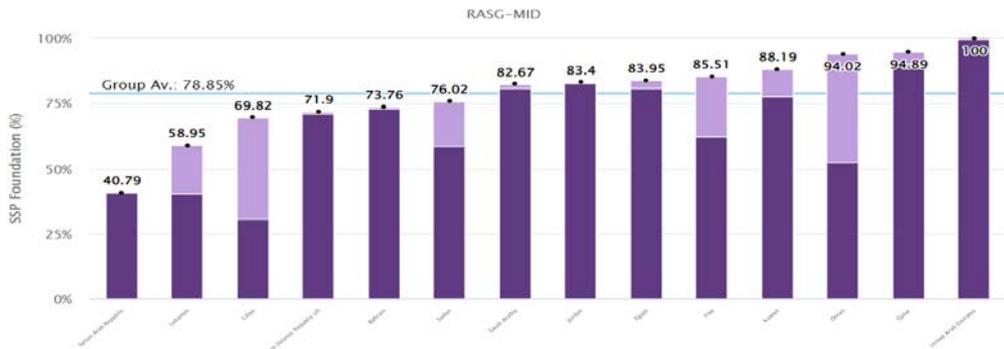
3 states are below 60%
(Libya, Syria, Lebanon)

NO SSC in MID Region

Regional average EI PPQs = 66

Goal 3: Implementation of Effective SSP

Overall SSP Foundation by State



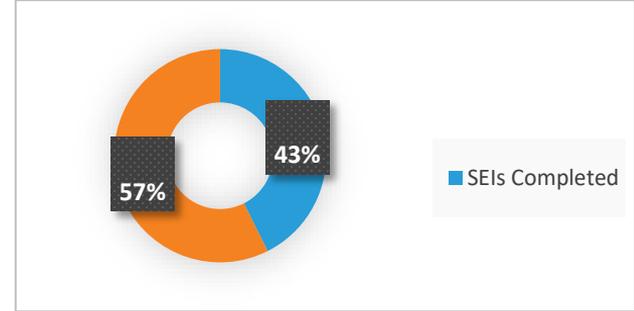
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Goal 4: Increase Collaboration at the Regional Level

Consolidated List of SEIs with their respective Safety Actions

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
Regional Operational Safety Risks					
Goal 1: Achieve a Continuous Reduction in Operational Risks					
G1-SEL-01:	Aircraft Upset in Flight (LOC-I)	A1- Guidance material on flight crew proficiency	IATA to be supported by Airbus		2023- 2025
		A2- Advisory Circular: Mode Awareness and Energy State Management Aspects of Flight Deck Automation	IATA to be supported by Airbus		2023- 2025
		A3- Conduct Upset Recovery capacity building activities	UPRT Workshop, Airbus, ICAO, Kuwait	Regional ICAO UPRT Workshop (jointly involving Airbus, ICAO, Kuwait) conducted in Kuwait 7-11 May 2023. Completed	2023-2025
		A4- Develop guidance material on the air cargo safety	Oman	Planned for 2024	2023-2025
G1-SEL-02:	Runway Safety- Runway Excursion	A1- Support States to implement the Global Reporting Format (GRF) Methodology through capacity building activities.	ICAO and ACI		2023-2025
		A2- MID Region Action Plan/Milestones on the Global Reporting Format (GRF) Implementation.	ICAO		2023-2025
		A3- Awareness Material on the vulnerabilities of BARO-VNAV approaches and mitigation actions	ICAO	Planned for 2024	2023-2025





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Goal 5: Expand the use of Industry Programmes



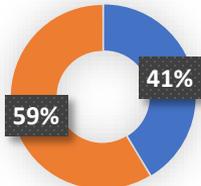
**MID RASP 2023-2025
Edition developed
and published**

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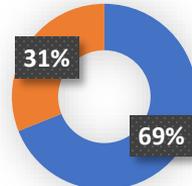
Goal 6: : Ensure Appropriate Infrastructure is available to Support Safe Operations

Aerodrome Certification



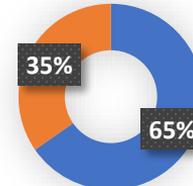
■ Aerodrome...

Runway Safety Team (RST)



■ RST...

GRF Plans implemented



■ GRF Plans...



MID REGION SAFETY PRIORITIES

Conclusion

MID Region Safety Priorities

Regional
Operational Safety
Risks

LOC-I, RE/ARC, MAC, CFIT, and RI

- States' Safety Oversight capabilities
- Safety Management
- Human Factors & Human Performance
- Competence of personnel
- Risk interdependencies

Cybersecurity risks
GNSS Interference Risks
5G interference with Radio Altimeter
aviation health safety (AHS) risks
Risks arising from conflict zones, and
Security risks with an impact on aviation safety.

Organizational
Issues

Emerging Issues

- UAS and manned VTOL-capable aircraft;
- Artificial intelligence (AI) in Aviation; and
- Digitalization in the aviation field.

12th MID Annual Safety Report Draft



SAFETY

MID Region Annual Safety Report



Sharing of Safety Data Analysis & safety information



States are encouraged to provide necessary safety information to the ICAO MID Office, by April 2025

The Draft of the 13th edition of the MID ASR will be presented to the ASRG/6 meeting for review.

Thank You

