



Outcome of ASRG/3

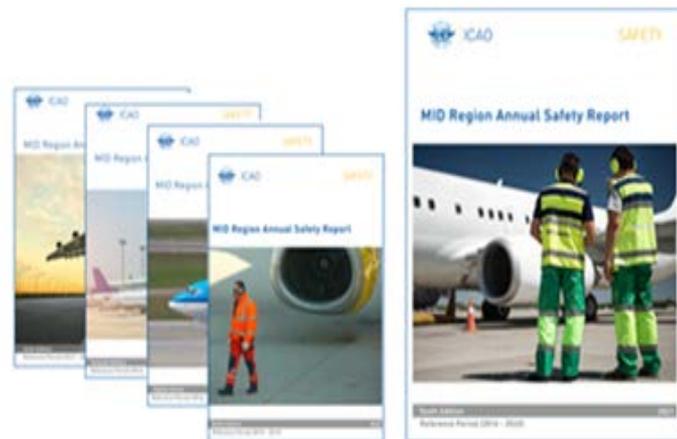
Mohamed Chakib

Regional Officer, Safety
Implementation,
ICAO MID Office

ASRG/3 Virtual Meeting

Third Meeting of the Annual Safety Report Group

1 July 2021



2021

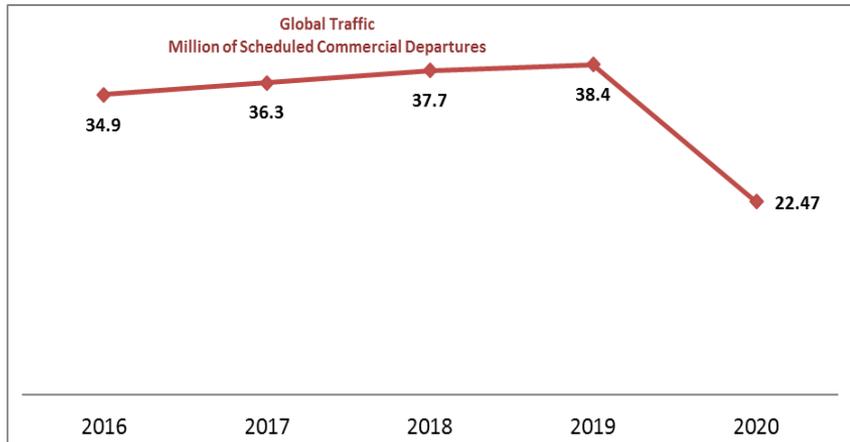
- ❑ Gathering and Analyzing safety information
- ❑ MID Region Safety Priorities
- ❑ Production of the annual safety report

- 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 2020
- 10th Edition, **in progress**

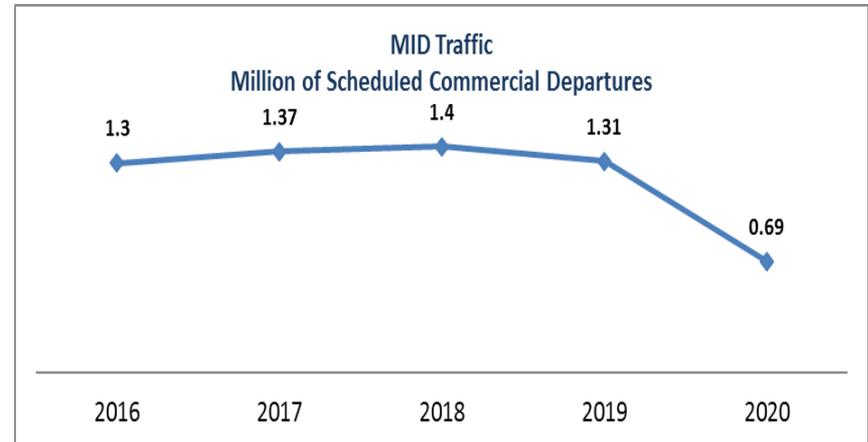


Traffic volumes

Global Traffic



MID Traffic





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UNITING AVIATION

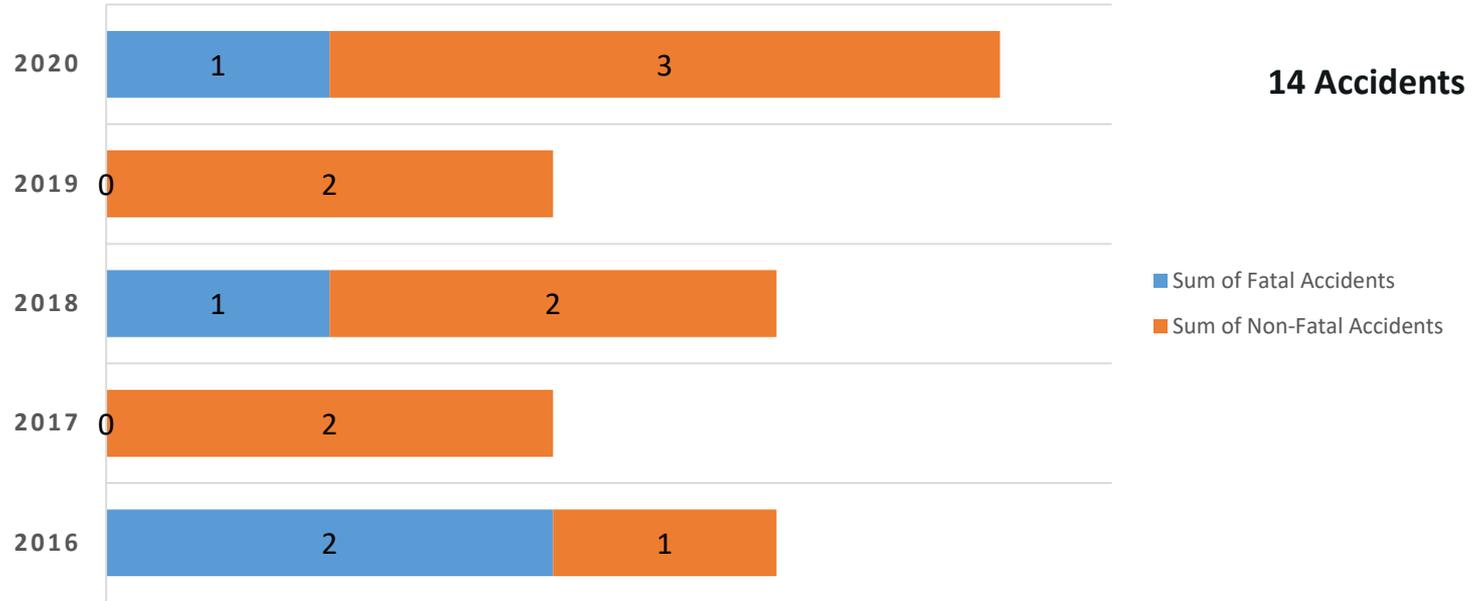
Reactive Safety Information

State of Occurrence



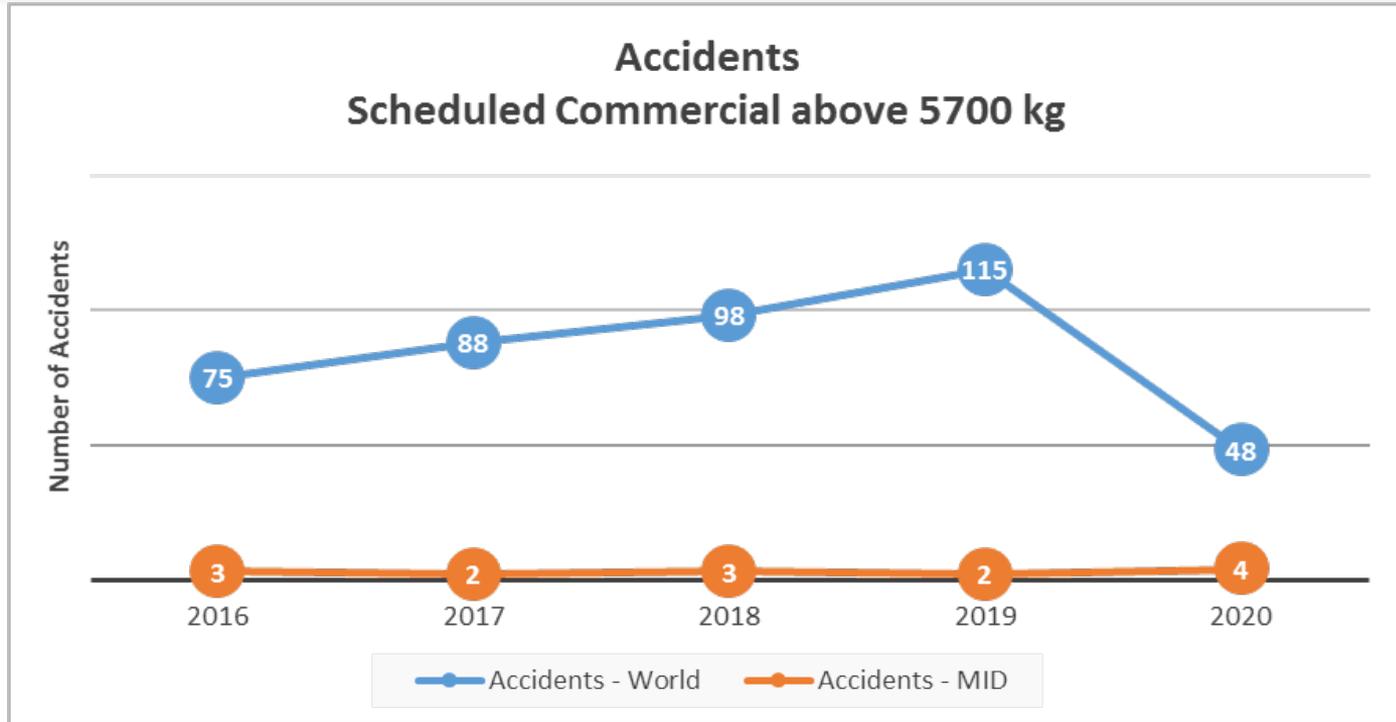


Number of Fatal Accidents & Accidents



(Source OVSG Data & ICAO ASR 2021)

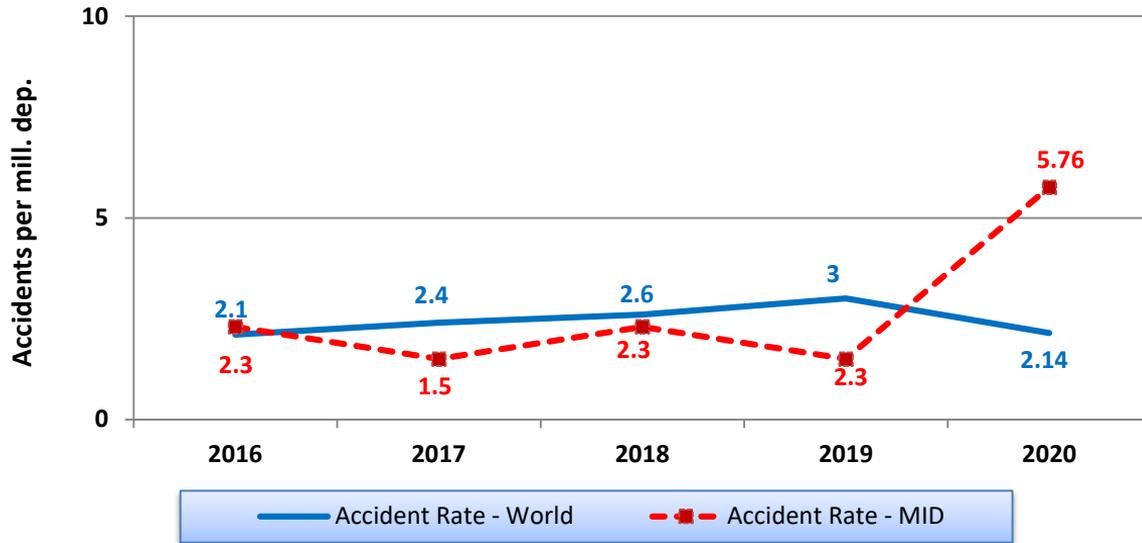
MID Accidents Vs. Global Accidents



Number of MID Accidents Vs. Number of Global Accidents Per Year (Source OVSG Data & ICAO ASR 2021)



**Accident Rate
Scheduled Commercial above 5700 kg**



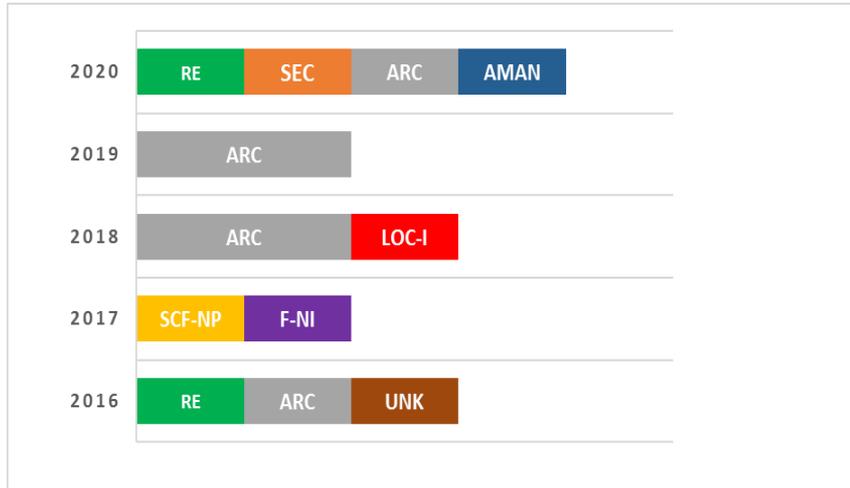
Average 2016-2020

**Average MID
2.67**

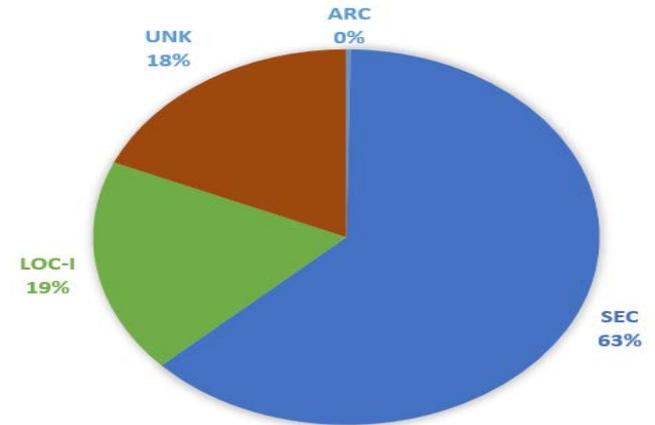
**Average Global
2.44**

(Source OVSG Data & ICAO ASR 2021)

Distribution of Occurrence Category



Fatalities Distribution





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)



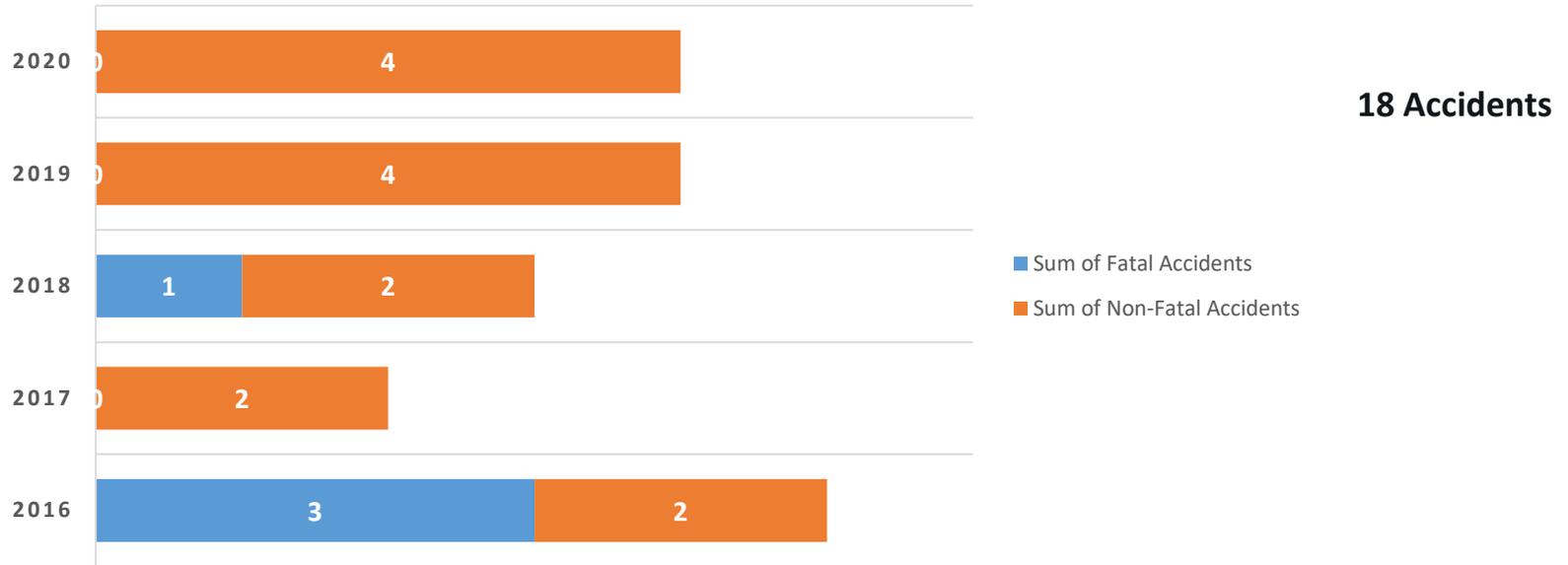
Reactive Safety Information

State of Registry & Operator





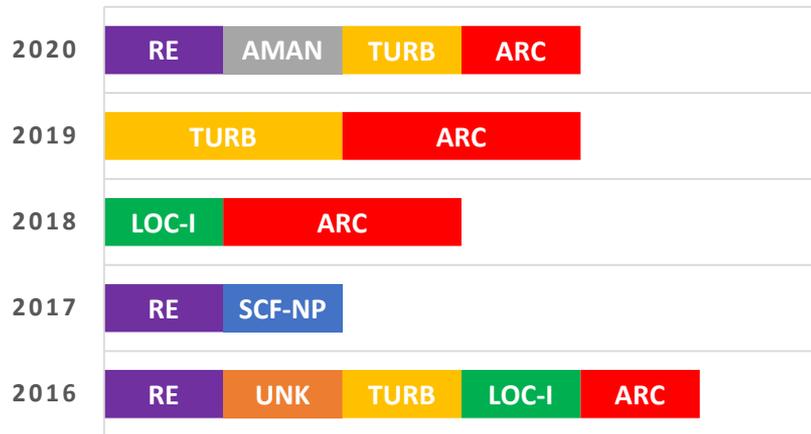
Number of Fatal Accidents & Accidents



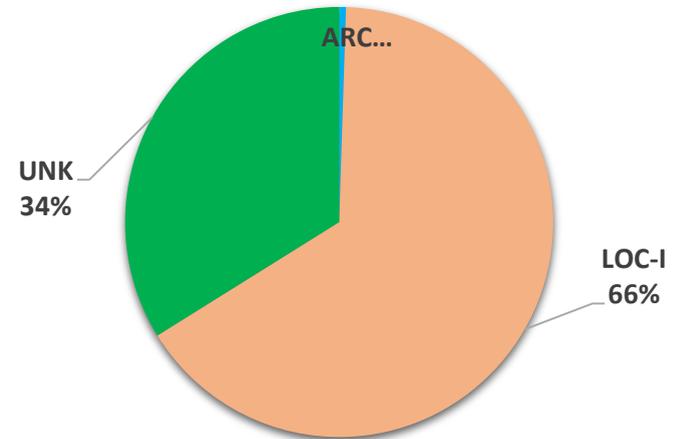
(Source OVSG Data & ICAO ASR 2021)



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UNITING AVIATION

Proactive Safety Information





Effective Implementation (EI)

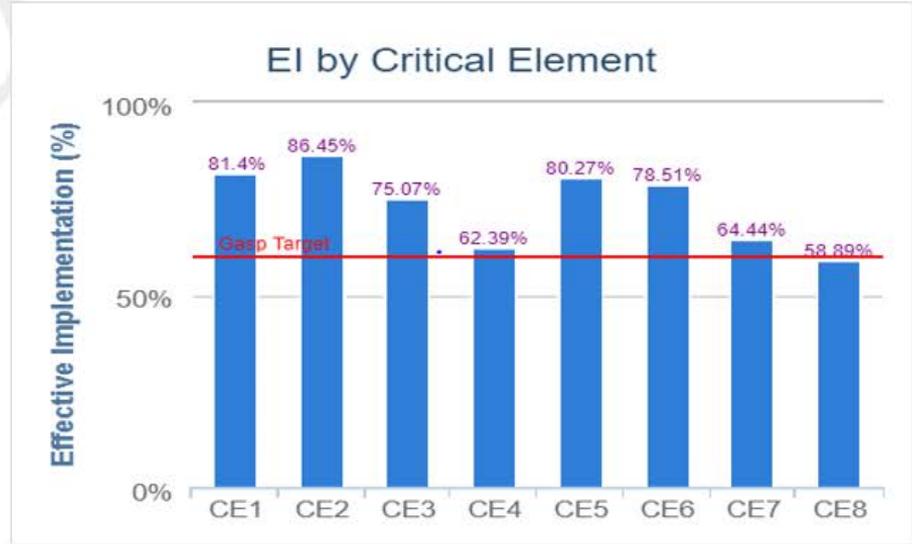
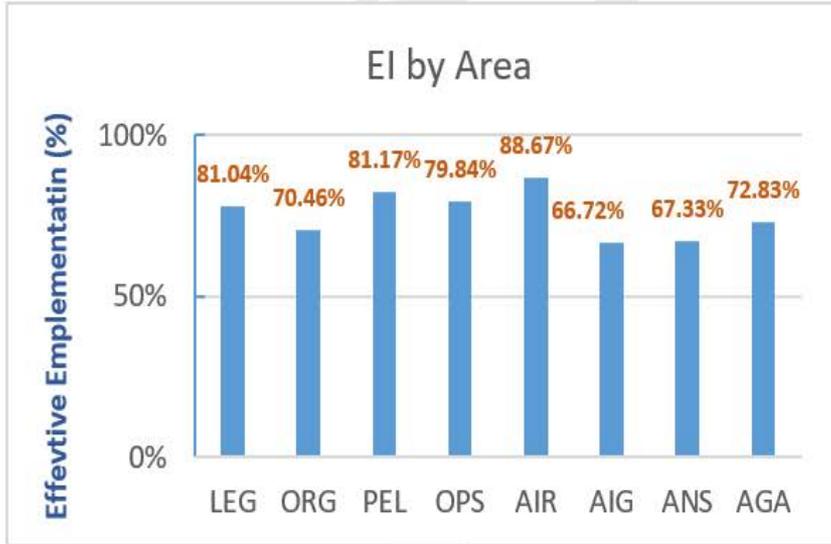


13 out of 15 States have been audited

Overall MID EI = 76% which is above Global average (68.68%)

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

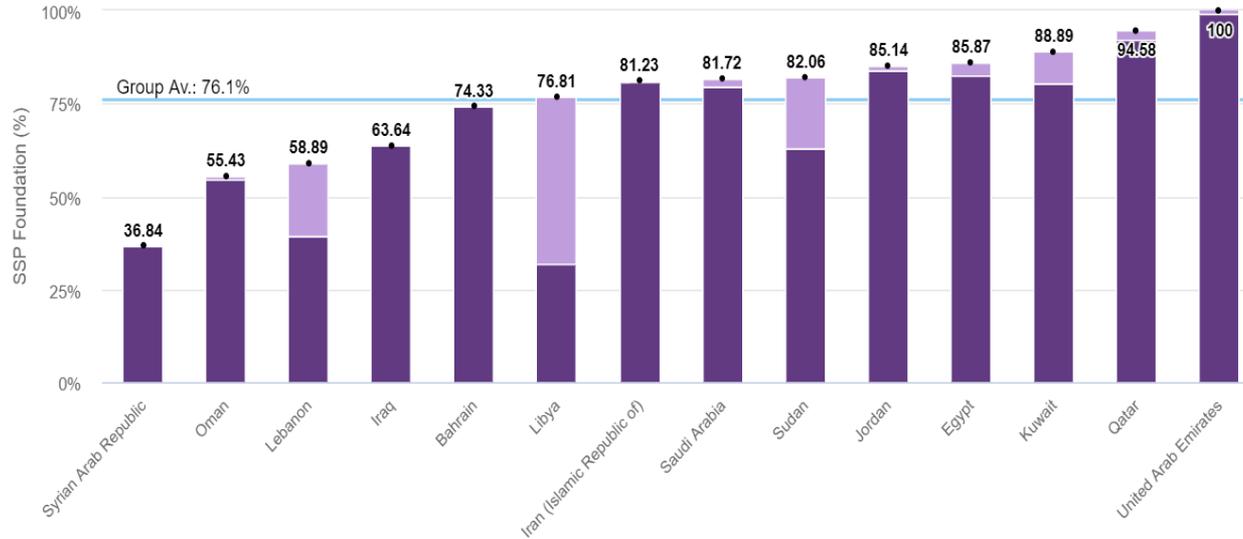
NO SSC in MID Region



8 areas and 6 critical elements are above the target of 60%

Critical element CE8 (Resolution of Safety issues) is the lowest in terms of EI (below 60%)

MID Region State Safety Programme (SSP) Foundation



SSP Foundation
Status of SSP Foundation Protocol Questions

Average EI for SSP foundation PQs for States in the MID Region is **76,1%**.

Source: iSTARS as of 24 May 2021)

MID Region Safety Priorities



Operational safety risks

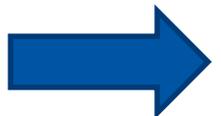
Organizational issues

Emerging safety risks

Prioritizing State Safety Risks

Root causes

- Human Factors
- Competence of personnel
- SSP/SMS implementation
- States' Safety Oversight capabilities
- Commercial Pressure
- New Business models
- Impact of security on safety
- Impact of socio-economic factors on safety



Safety issues

- Low Airspeed
- TCASRA
- EGPWS warning
- RI by A/C
- Unstable Approach

Potential High Risk Accidents

- Loss of Control In-flight
- Mid Air Collision
- Controlled Flight into Terrain
- Collision on Runway
- Runway Excursion

Regional Operational Safety Risks



Loss of Control In-flight



Runway Excursion/ARC



Controlled Flight into Terrain



Mid Air Collision

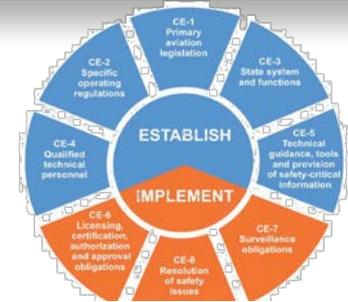


Runway Incursion



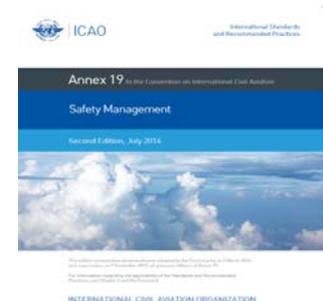
1 States' Safety Oversight capabilities

Effective implementation in certification, surveillance, and resolution of Safety concerns need to be improved



2 Safety Management

Implementation of SSP is one of the main challenges faced by the State in the MID Region



3 Human Factors and Competence of Personnel

CRM has been identified as most important human factors issue in the domain of commercial air transport



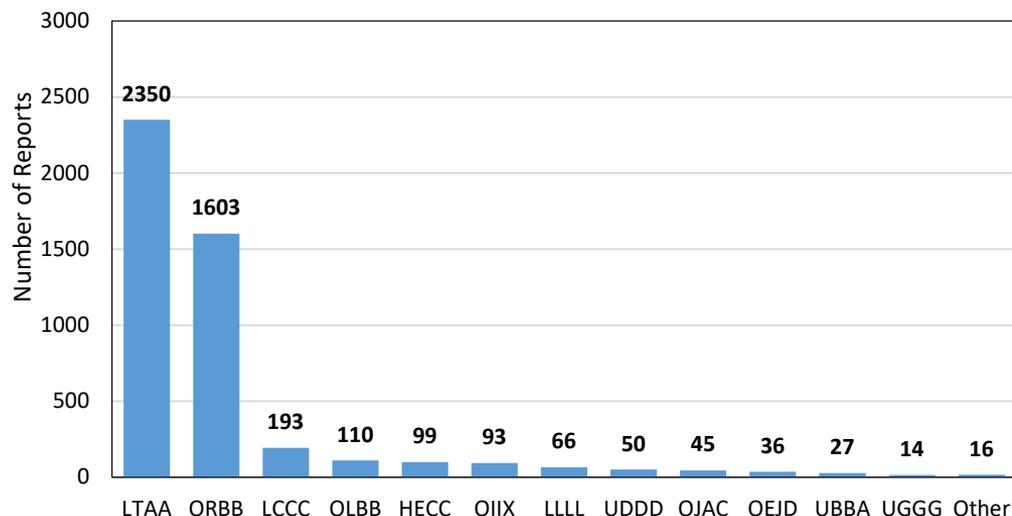
1. GNSS/GPS vulnerability

IATA Incident Exchange Database (IDX)

- A total of 3,373 Aviation Safety Reports
- GNSS/GPS Interference reports from January 2019 to December 2020.
- The majority of GNSS/GPS interference was reported in (Ankara FIR), (Baghdad FIR) and their respective borders, which sum up to 83.8% of total reports, followed by Nicosia FIR and Beirut FIR.

Number of Reports by FIR

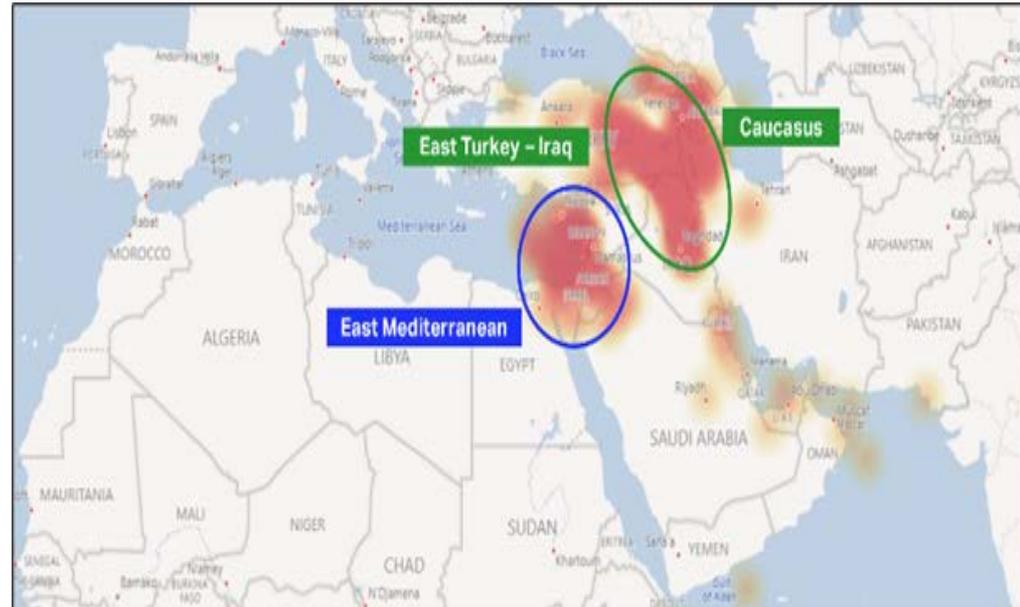
One report may contain GNSS/GPS interference across multiple FIRs.



GNSS/GPS vulnerability

Two major clusters were identified

- Eastern Turkish airspace to Iraq, Iran and Armenia (extended to the border between Armenia and Azerbaijan). 2020.
- Eastern Mediterranean airspace to Cyprus, Egypt, Lebanon and Israel (extended to a corridor between Israel and Jordan)



MID RPTF Framework & Composition



**Public Health
Requirements**



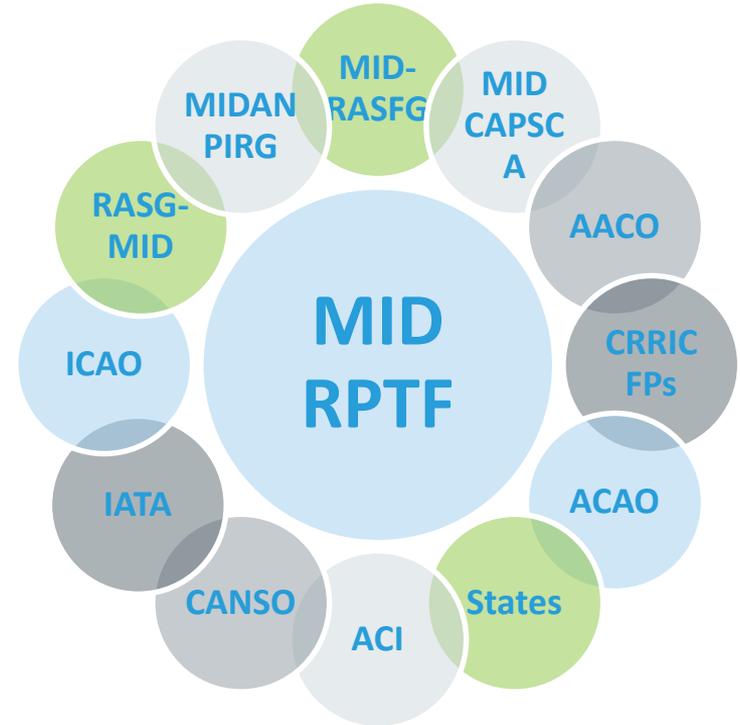
**Operational Safety
Measures**

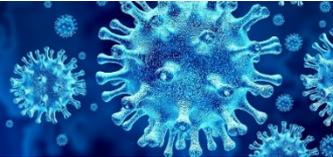


**Aviation Security &
Facilitation**



ANS/ATM





MID RPTF Main/Key Activities

Continuous sharing, communication and promotion of developed guidance material and best practices with MID States and stakeholders on operational safety measures, CAPSCA, AVSEC/FAL and ANS/ATM aspects

Continuous support to States on the use of TE system in line with Recommendation 12 (revised) by providing guidance and continuous coordination and communication

Continuous support to States on the implementation of the CAPSCA Programme

Encourage States to make use of industry guidance on vaccine transportation

Encourage States to report any deficiency/difficulty in the implementation of ICAO CART Recommendations 15 and 16

Encourage States to continue advocating and communicating the CART III Recommendations and guidance for States Administration in the decision-making process

Support State/ANSP readiness, ensuring a safe resumption of flight operations, by:

Supporting the development of business continuity surveys, to highlight issues like ATC licensing, availability of ANS staff (vaccination, skill levels...), calibration of NAVAIDs

Alleviating non-required ATFM measures during the low traffic period; exchanging expected traffic demand to enhance ATS units planning and readiness, support in implementing the ATFM when becomes required according to traffic growth

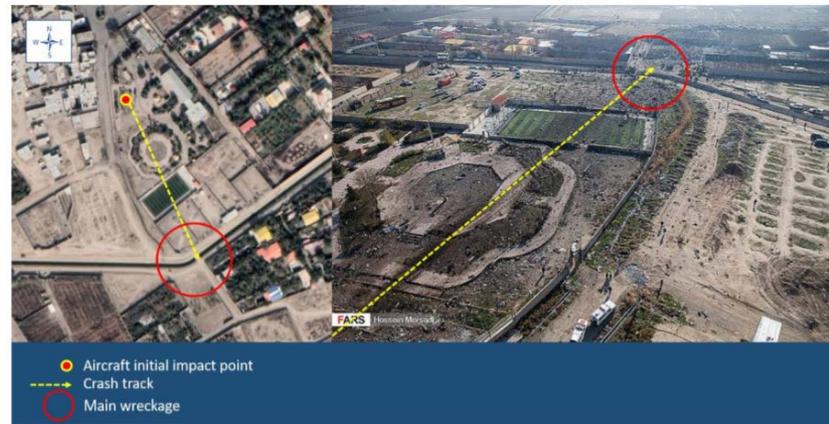
3. Ensure the Safe Operations of UAS (drones)

- The number of drones at the global level has increased
- Available evidence demonstrates an increase of drones coming into close proximity with manned aviation and the need to mitigate the associated risk
- The civil aviation authority is responsible for, inter alia, ensuring aviation safety and protecting the public from aviation hazards
- However, additional safety data and safety information are needed for further analysis to identify the underlying safety issues



4. Impact of Security on Safety

- The crash of flight MH17 immediately raised the question why the aero plane was flying over an area where there was an ongoing armed conflict.
- Thus, military or terrorist conflicts may occur in any State at any time and pose risks to civil aviation
- Similar events had occurred in the MID region
- This is why it's important for governments, aircraft operators, and other airspace users such as air navigation service providers (ANSPs), to work together to share the most up-to-date conflict zone risk-based information possible to assure the safety of civilian flights.



PS 752: Accident site scheme

MID Region Safety Priorities

10th MID Annual Safety Report Draft

Regional
Operational
Safety Risks

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

Organizational
Challenges/
Issues

- States' Safety Oversight capabilities
- Safety Management
- Human Factors & competence of personnel

Emerging Risks

- COVID-19 Pandemic outbreak
- GNSS/GPS Vulnerability
- Ensure Safe ops of UAS (Drones)
- Impact of security on safety



SAFETY

MID Region Annual Safety Report



Tenth Edition
Reference Period (2016 - 2020)

2021



Sharing of Safety Data & safety information



States are encouraged to provide necessary safety information to the ICAO MID Office, by March 2022

The Draft of the 11th edition of the MID ASR will be presented to the ASRG/4 meeting for review (July 2022).



Challenges

01 Challenge: Low level of safety information, and safety analysis shared by States (confidentiality concerns); and

02 Challenge: Low participation in the meeting from the States and organizations



THANK YOU!