MID 7th Annual Safety Report

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Seventeenth Meeting of the Middle East Air Navigation
Planning and Implementation Regional Group
Seventh Meeting of the Regional Aviation Safety Group

الإجتماع السابع عشر للمجموعة الإقليمية لتخطيط وتنفيذ الملاحة الجوية
في الشرق الاوسط
الإجتماع السابع للمجموعة الإقليمية لسلامة الطيران بالشرق الأوسط

Today's Meeting

- ❑ **Objective of ASRT**
- ❑ **Reactive information data**
- ❑ **Proactive information data**
- ❑ **Focus Areas and Emerging Risks**
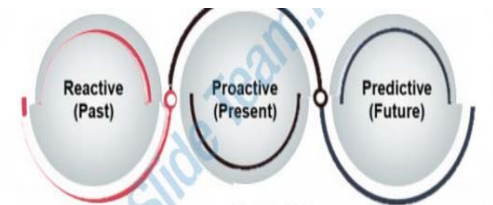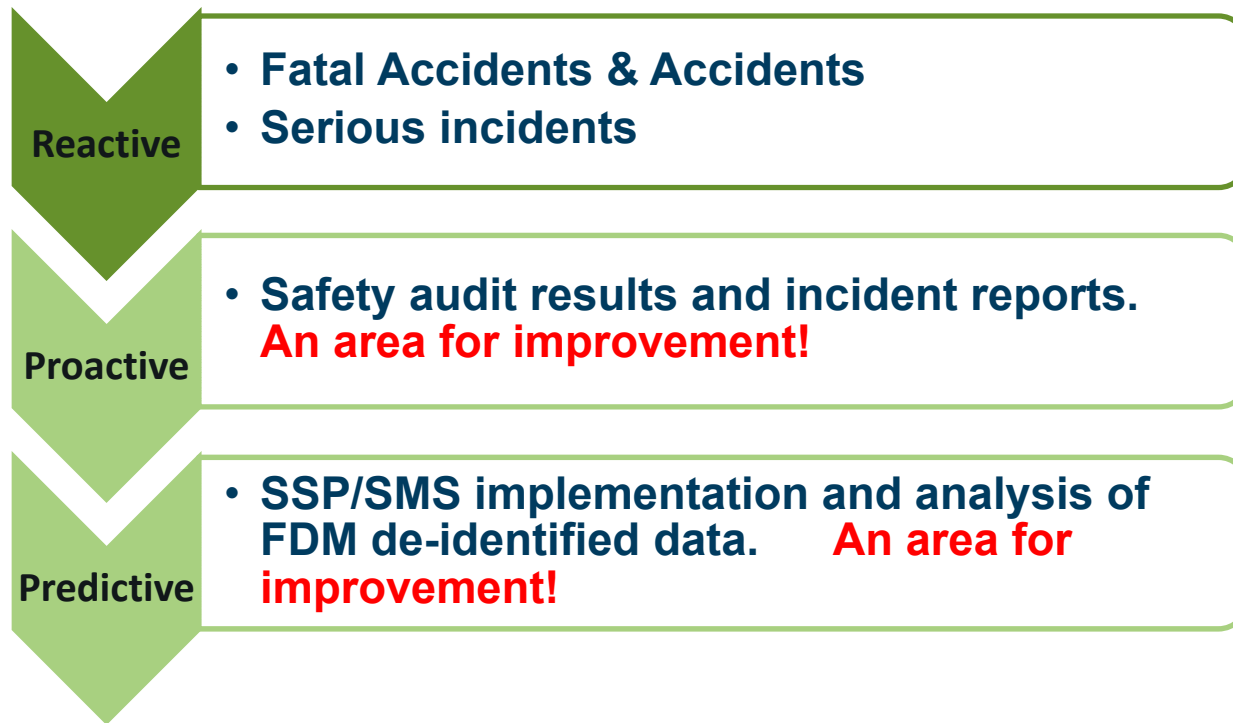- ❑ **Way forward**

Objective of ASRT

❑ Gathering and Analyzing safety information

❑ Identification of safety focus areas & emerging risks

❑ 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, In progress

ASR Structure-7th Ed

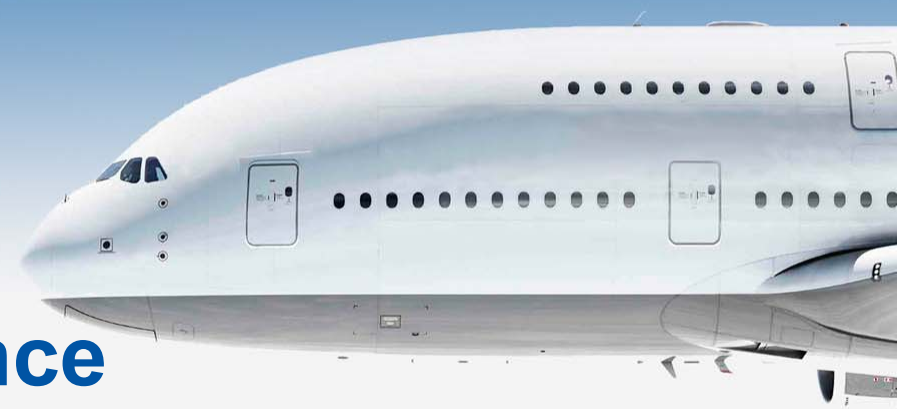**Reactive**
- **Fatal Accidents & Accidents**
- **Serious incidents**

Proactive
- **Safety audit results and incident reports.**
An area for improvement!

Predictive
- **SSP/SMS implementation and analysis of FDM de-identified data.   An area for improvement!**
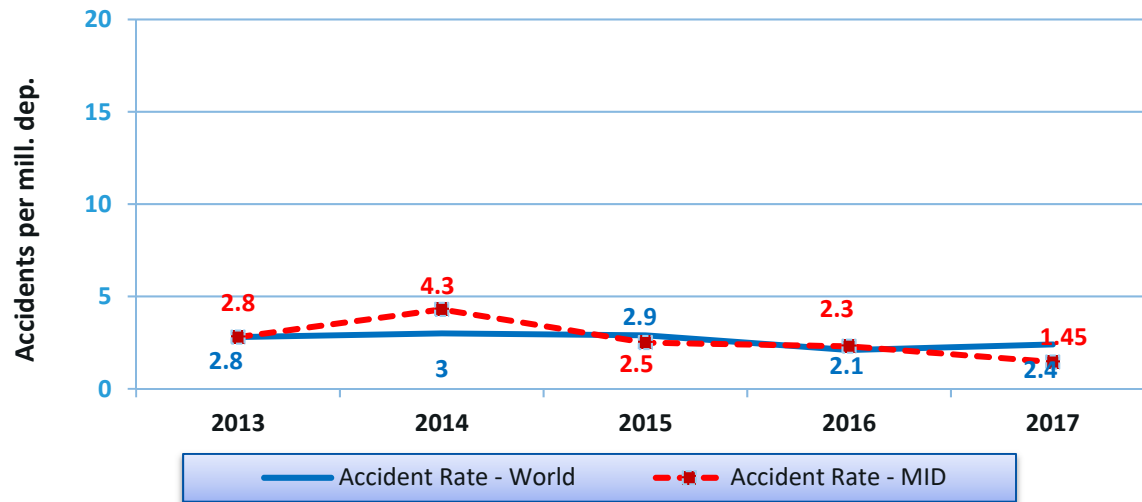
Reactive Safety Information

State of Occurrence

Accident Rate

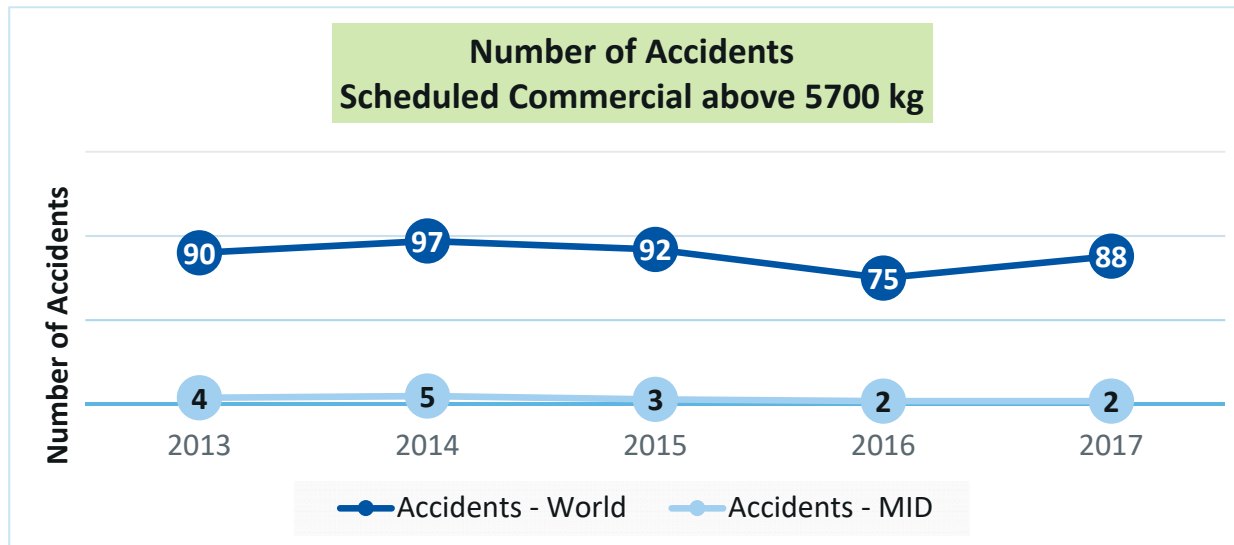**Accident Rate
Scheduled Commercial above 5700 kg**

(Source iSATRS as of 10 Oct 2018)

- **Reduced accident rate (1.45) for 2017 compared to 2016 (2.3)**

- **Below global rate in 2017**

- **No Fatal occurred during 2017**

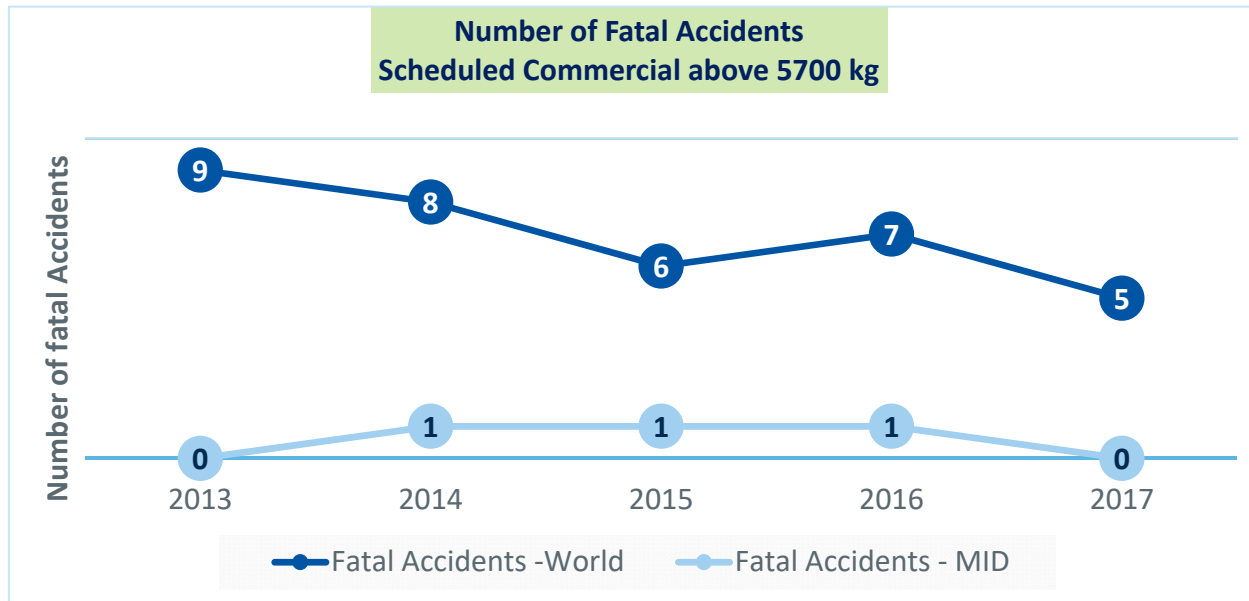- **5 year average MID Region (2.67) slightly above global rate! (avg global = 2.64)**

Number of Accident

Number of Accidents
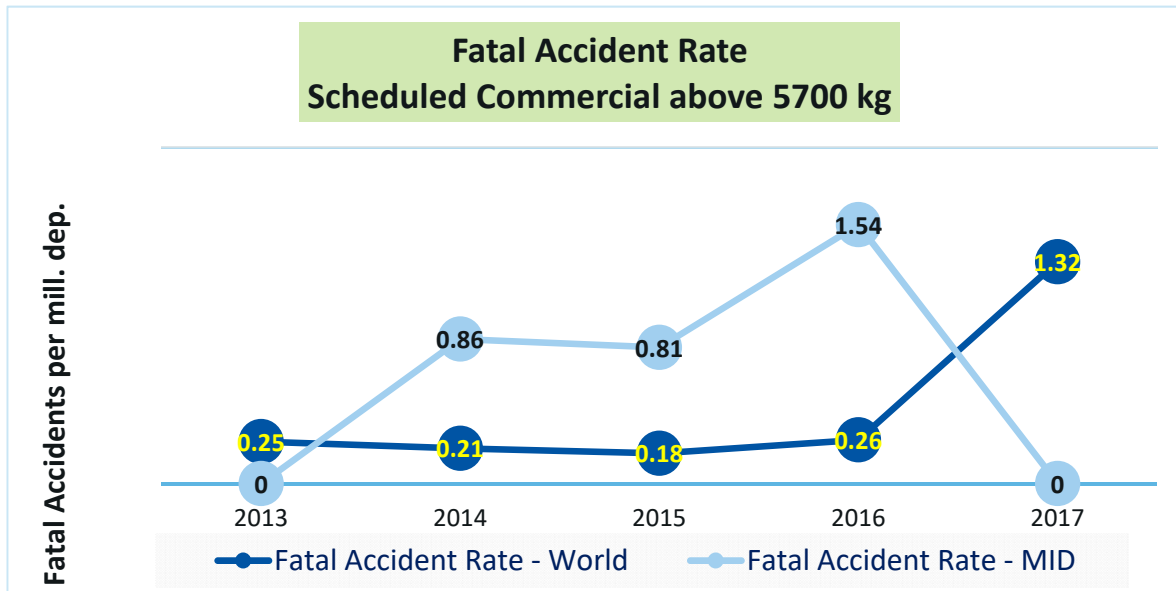**Scheduled Commercial above 5700 kg**

Number of Accidents

	2013	2014	2015	2016	2017
Accidents - World	90	97	92	75	88
Accidents - MID	4	5	3	2	2

(Source iSATRS as of 10 Oct 2018)

Number of Fatal Accident

**Number of Fatal Accidents
Scheduled Commercial above 5700 kg**

(Source iSATRS as of 10 Oct 2018)

Fatal Accident Rate

**Fatal Accident Rate
Scheduled Commercial above 5700 kg**

- **No fatal accident in 2017**
- **Average rate (2013-2017) is 0.64**
- **Slightly Above average global rate!**
  (avg global = 0.44)

(Source iSATRS as of 10 Oct 2018)

Fatalities

Fatalities
Scheduled Commercial above 5700 kg

Number of Fatalities

911

474

173

182

50

0   38   224   1   0

2013   2014   2015   2016   2017

Fatalities - World   Fatalities - MID
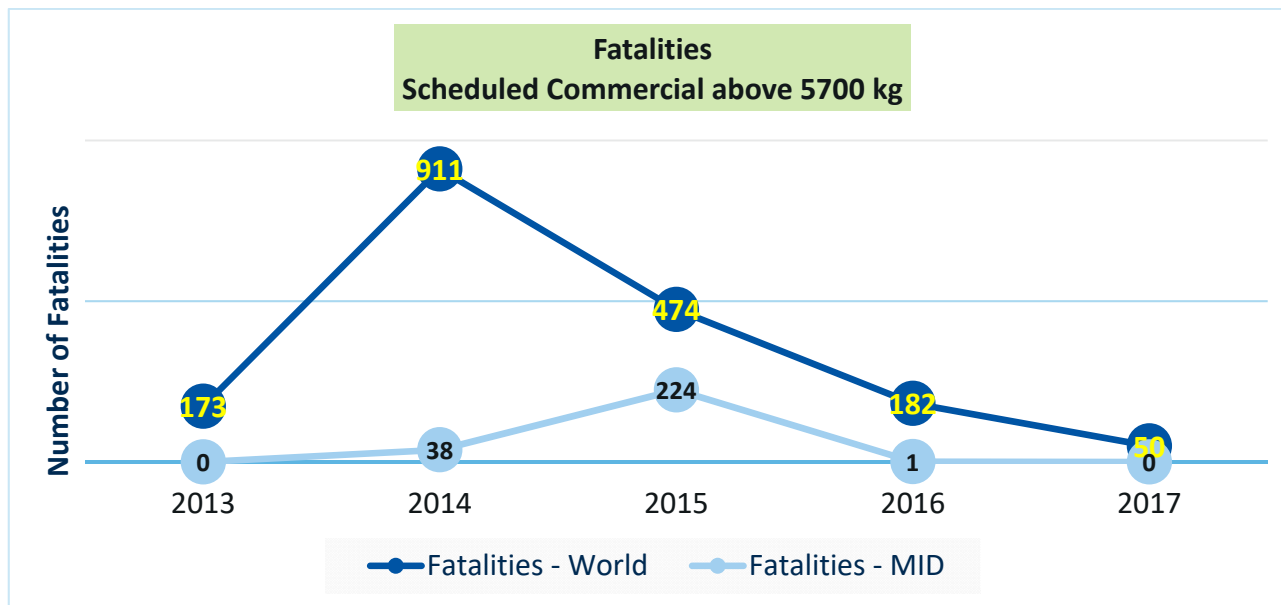
Fatalities:

- 2014 = 38
- 2015 = 224
- 2016 = 1

(Source iSATRS as of 10 Oct 2018)

Proactive Safety Information
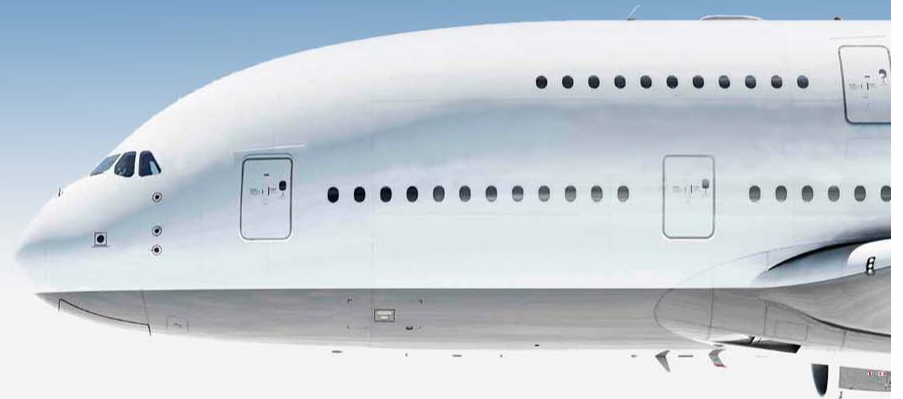
ICAO USOAP

Effective Implementation (EI)
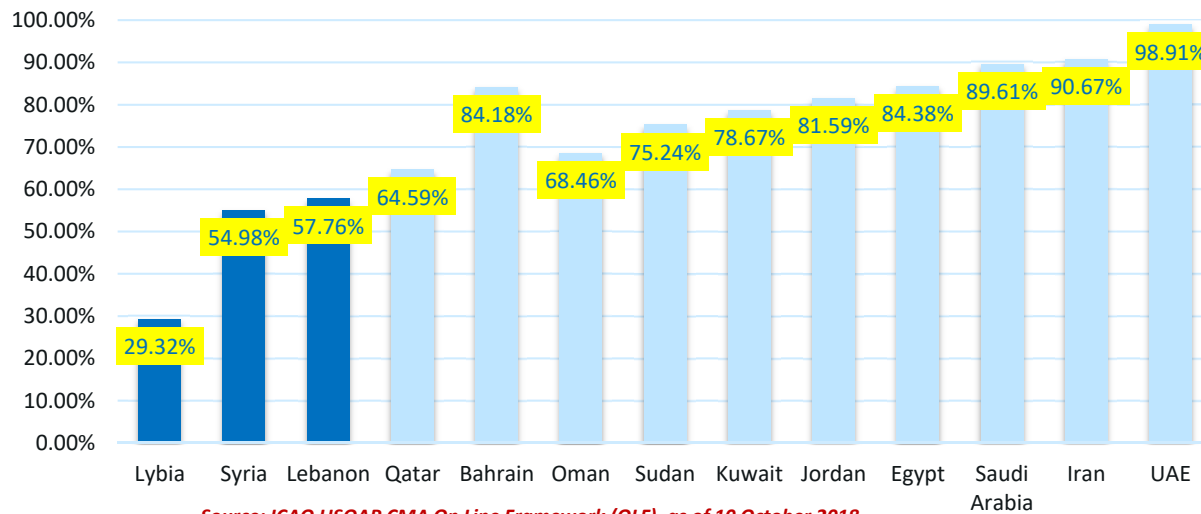
Source: ICAO USOAP CMA On Line Framework (OLF), as of 10 October 2018
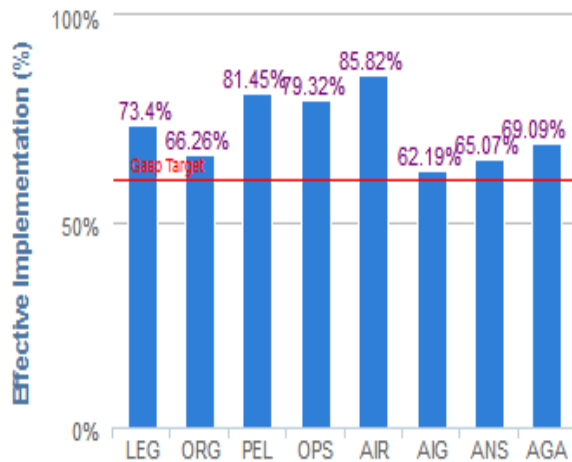
ICAO USOAP:

➢ **13 out of 15 States have been audited**

➢ **Overall MID EI = 73.24% which is above Global average (66.27%)**

➢ **10 States have achieved the target of 60% EI**

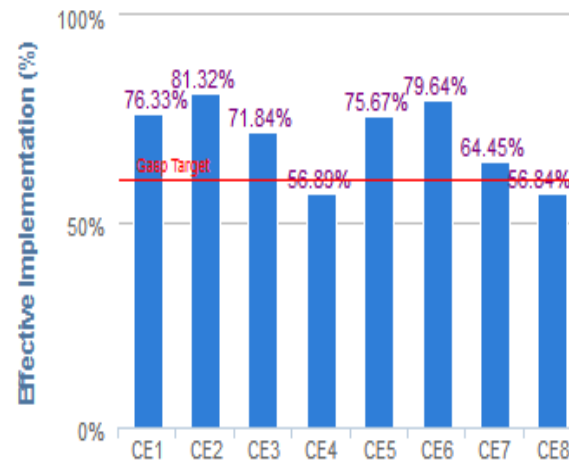➢ **3 states are below 60% (Libya, Syria, Lebanon)**

NO SSC in MID Region

ICAO USOAP

EI by Area

73.4%
66.26%
81.45% 79.32%
85.82%
62.19%
65.07% 69.09%

Gaap Target

LEG ORG PEL OPS AIR AIG ANS AGA

EI by Critical Element

76.33%
81.32%
71.84%
56.89%
75.67%
79.64%
64.45%
56.84%

Gaap Target

CE1 CE2 CE3 CE4 CE5 CE6 CE7 CE8

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

❑ **Critical elements CE4 (Qualified technical personnel), and CE8 (Resolution of Safety issues) are the lowest in terms of EI (below 60%)**
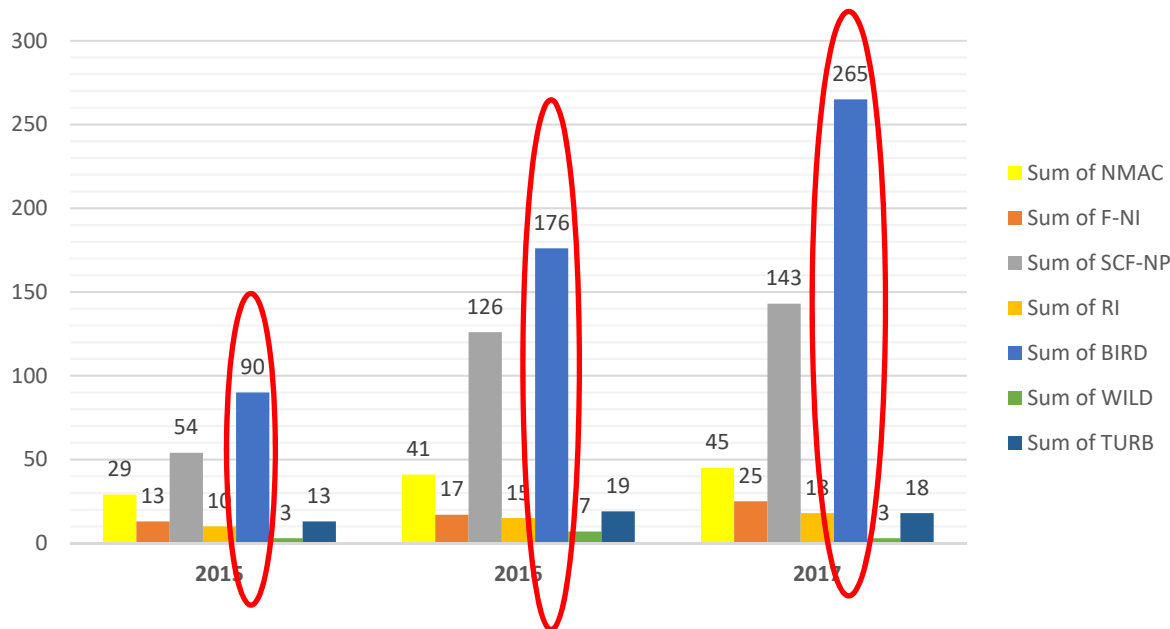
Source: ICAO iSTARS, as of 10 October 2018

Incidents Reported by the States

IATA IOSA

2017-IOSA % of findings per area

6%	6%
7%	20%
7%	
8%	17%
	29%
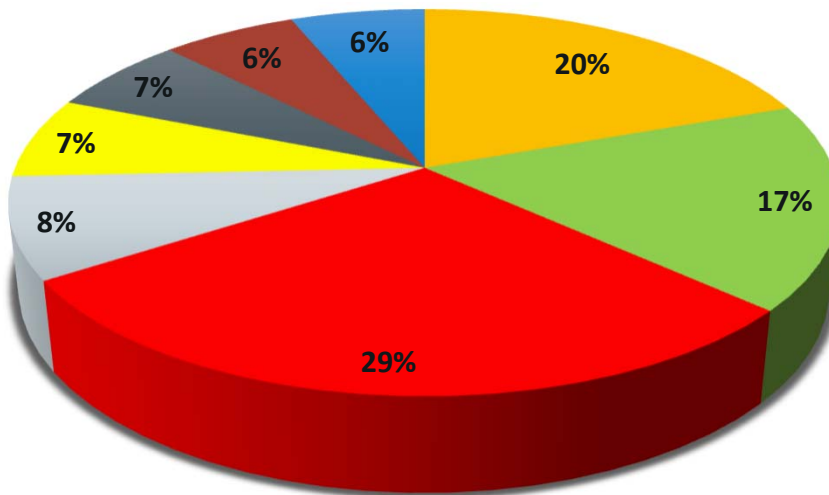
■ ORG ■ MNT ■ FLT ■ GRH ■ CAB ■ DSP ■ CGO ■ SEC

Findings were mainly in the areas:

- Flight Operations (FLT) (29.1%),
- Organization Management   (ORG)(19.49%),
- Maintenance (MNT) (17.23%) , and
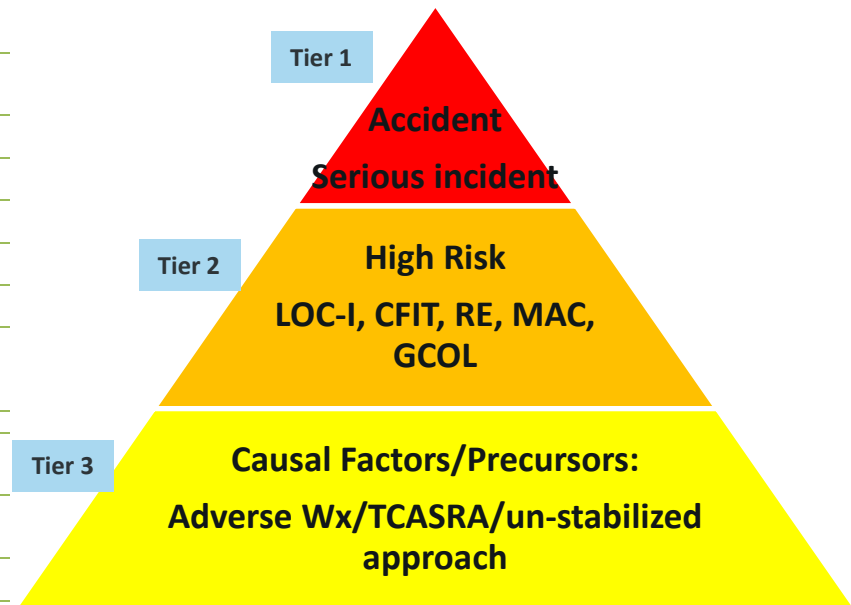- Ground Handling Operations (GRH) (8.47%).

Identification of Focus areas & Emerging Risks

Undesirable/Safety Event		Potential Accident Outcome						
Safety Event	Accident Severity	CFIT	LOC-I	MAC	GCOL	RE/ARC	Injury or Damage inflight	Inj Da Gr
Technical Problems with Landing Gear Collapse/not Extended during landing	Major				x			x
Contained engine Failure/Power Plant Malfunctions	Catastrophic	x	x				x	
Fire/Smoke-non impact	Catastrophic		x				x	x
Un-stable or non-compliant Approach	Catastrophic	x	x		x			x
Deviation from pitch or roll attitude	Catastrophic	x	x		x			
Security Risks with impact on safety	Catastrophic		x					
Tail/Cross wind/Winds hear	Major	x			x			x
Loss of separation in flight/ and or airspace/TCAS RA infringement	Catastrophic		x	x			x	
Runway Incursion	Catastrophic				x	x		x
Maintenance events and technical failures	Catastrophic	x	x		x		x	x
Contaminated runway/Poor braking action	Major				x			x
Birdstrike/Engine Bird ingestion	Catastrophic		x		x		x	x
Wake Turbulence	Catastrophic			x			x	
High energy go-around			x				x	

Tier 1
Accident
Serious incident

Tier 2
High Risk
LOC-I, CFIT, RE, MAC, GCOL

Tier 3
Causal Factors/Precursors:
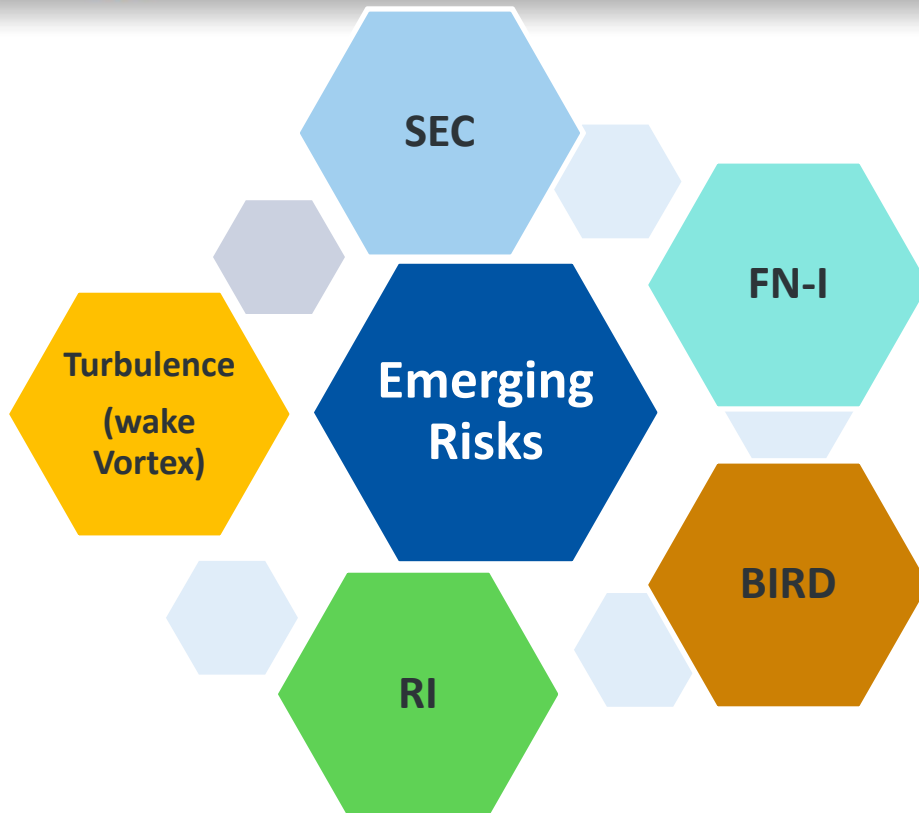Adverse Wx/TCASRA/un-stabilized approach
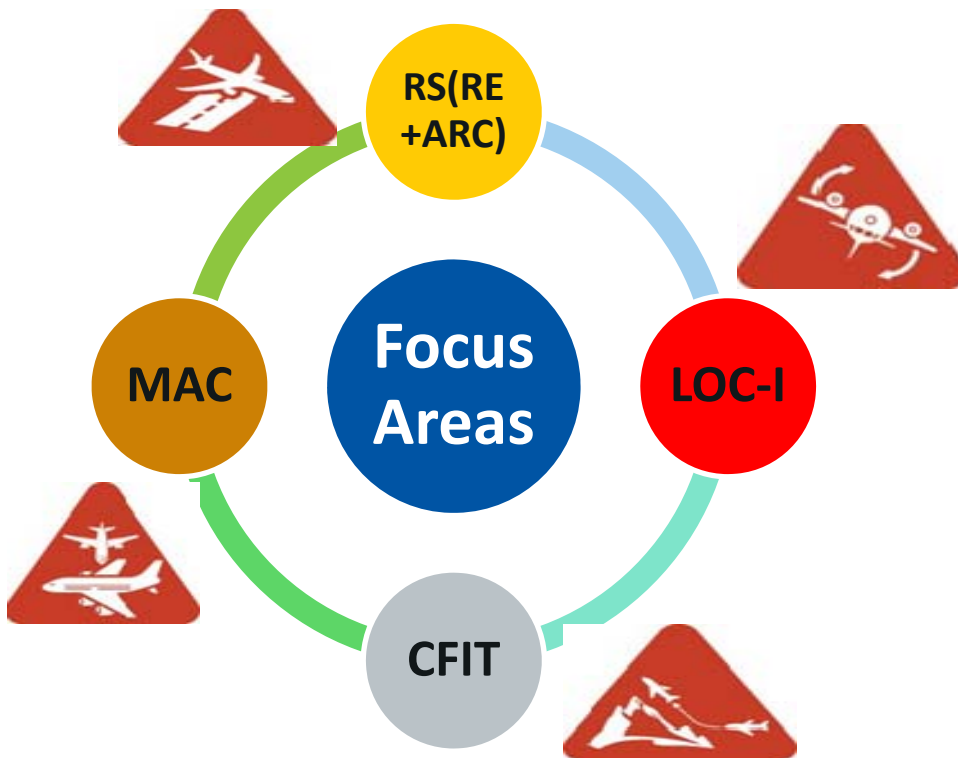
Focus Areas

☐ **Focus Areas:**

1. **Runway Safety (RS); (RE and ARC during landing);**

2. **Loss of Control-In Flight (LOC-I);**

3. **Controlled Flight Into Terrain (CFIT); and**

4. **Mid-Air Collision (MAC)**

SEC

FN-I

Turbulence (wake Vortex)

Emerging Risks

BIRD

RI

❑ **Emerging risks:**

1. **Security Risks with impact on safety-SEC;**
2. **Fire/smoke- (non-impact)- (FN-I);**
3. **Runway incursion (RI);**
4. **Birdstrike-(BIRD); and**
5. **Wake Vortex.**

Challenges

- ❑ **Accidents with the category "Unknown"**
- ❑ **Low level of incidents reporting by States (confidentiality concerns)**
- ❑ **Unavailability of predictive safety information**
- ❑ **Differences between organizations with respect to:**
  - **Taxonomy and classifications/categories**
  - **Reporting criteria (State of occurrence/operator/registry, MTOW..etc)**
  - **Regional distribution (MENA, MID...etc)**

Areas of improvement for future Editions

❑ **Monitor the effectiveness of the SEIs**

❑ **Add a safety recommendations section**

❑ **Expand the proactive section with incidents analysis provided by States**

CONTINUOUS IMPROVEMENT

way forward…

- **Develop a process for future work methodology**

- **Establishment of ASRT Core Team to support the Rapporteur & Secretariat in performing the root cause Analysis/contributory factors**

- **States to use the previous developed template which contains the focus areas and emerging risks to submit their occurrences as well as to share analysis data**

ICAO MID

MIDANPIRG/17
& RASG-MID/7

Cairo, Egypt, 15-18 April 2019

الإيكاو ٢٠١٩
٧٥ عاماً

ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok

ICAO 2019

75 YEARS
OF CONNECTING THE WORLD

الإيكاو ٢٠١٩

٧٥ عاماً
من الربط بين أرجاء العالم

THANK YOU