

# MID Annual Safety Report

Preliminary Analysis  
Sixth Edition

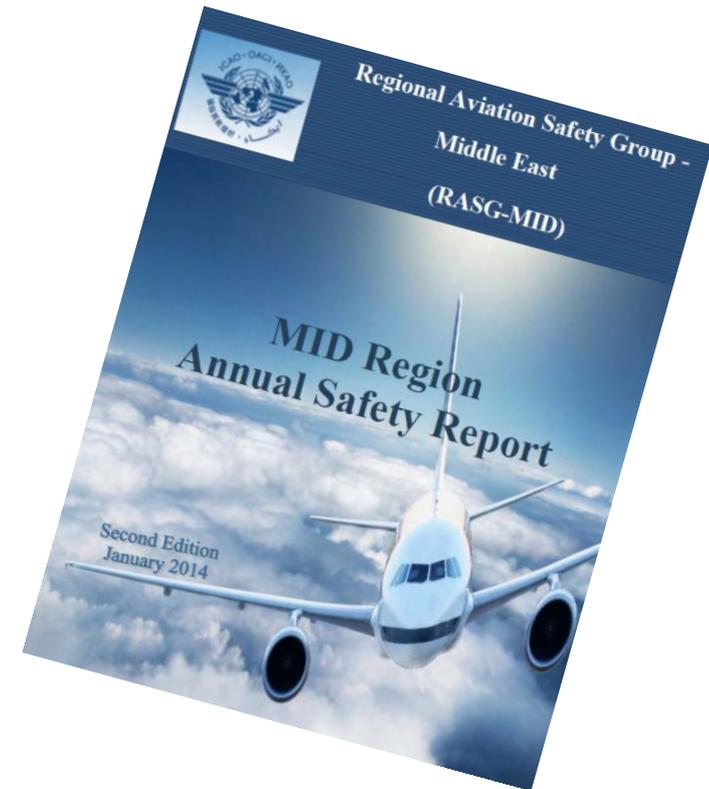
**Presented by:**

ASRT Rapporteur, Rose Al Osta



# Objectives of ASRT

- Gathering safety information
- Identification of safety focus areas
- Production the annual safety report
  - 1<sup>st</sup> Edition, Nov 2012
  - 2<sup>nd</sup> Edition, Jan 2014
  - 3<sup>rd</sup> Edition, March 2015
  - 4<sup>th</sup> Edition, May 2016
  - 5<sup>th</sup> Edition, Jan 2017
  - 6<sup>th</sup> Edition, In progress ←



# Data Collection & Sources

## Methodology

- Existing safety databases of different aviation stakeholders
- Surveys
- Experts opinion
- Industry meetings

## Data sources for ASR (6<sup>th</sup> edition)



# ASR Content (6<sup>th</sup> edition)

RASG-MID uses different types of safety information



# Safety Data Analysis

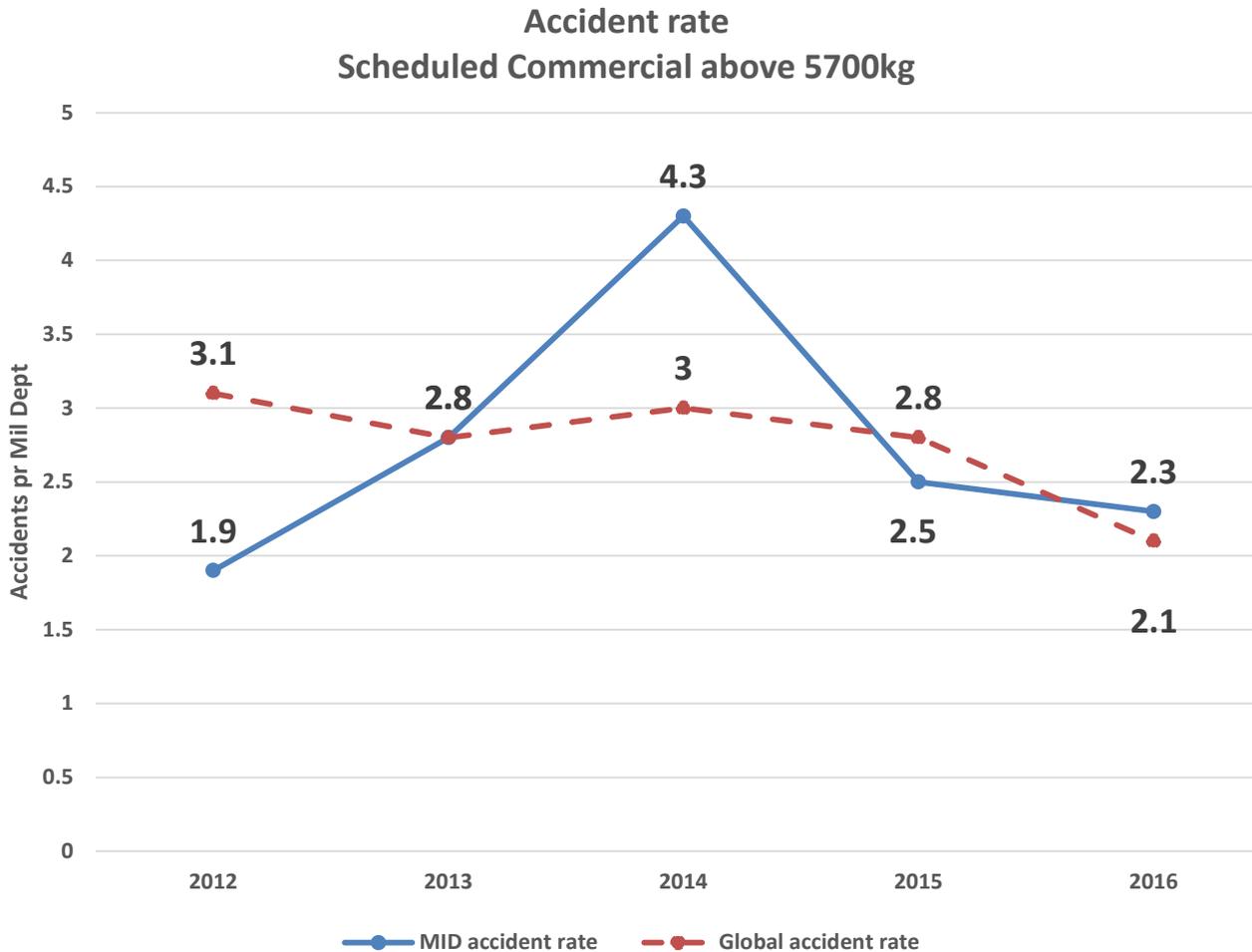
## Risk assessment based on:

- ✓ Frequency
- ✓ Severity (fatality)

Accident category	# accidents	Frequency	Severity	Frequency * Severity
RS	8	1	3	3
SCF	3	2	2	4
OTH	2	3	N/A	N/A
UNK	2	3	N/A	N/A
TURB	1	4	3	12

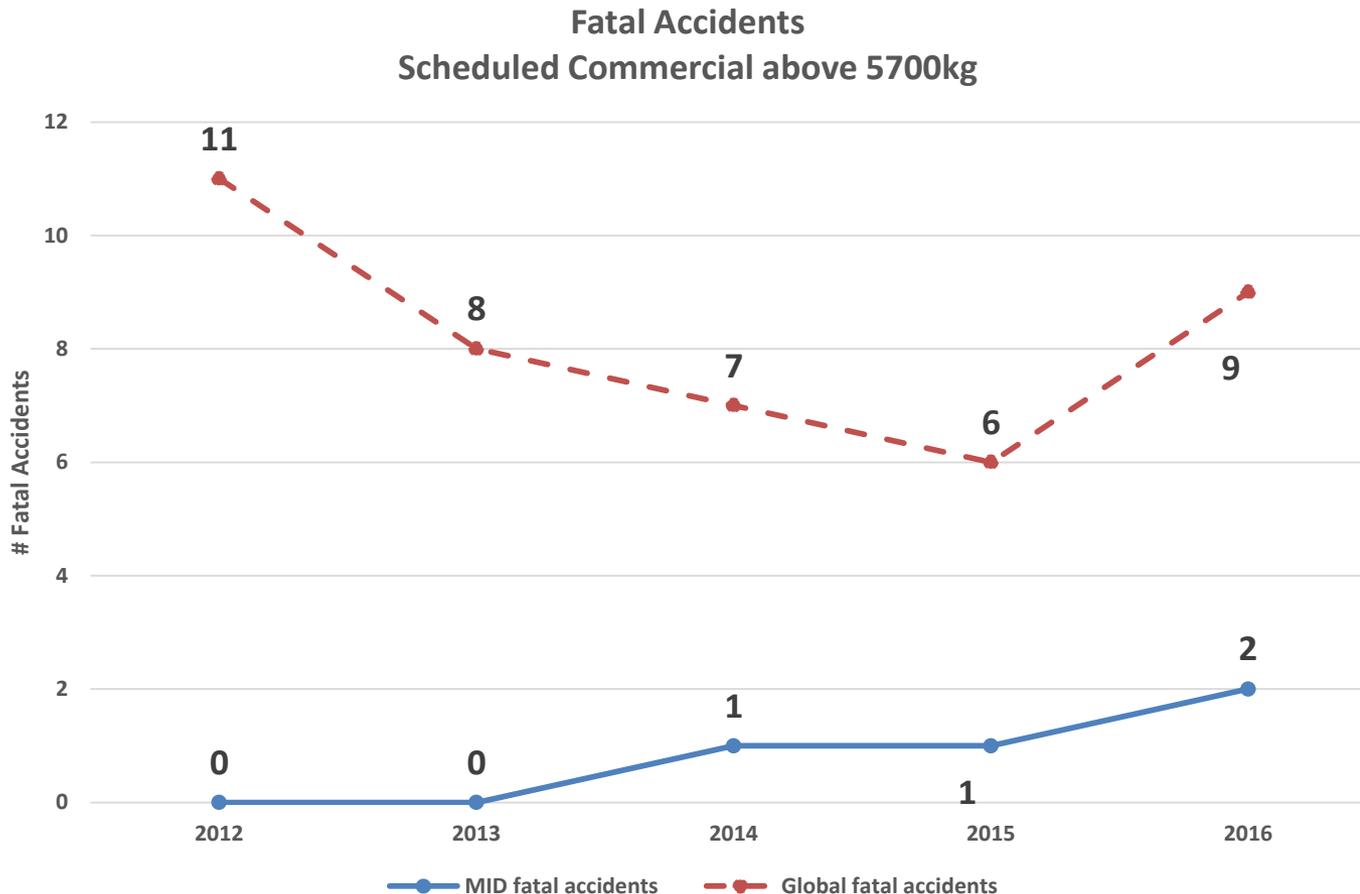


# Reactive Safety Analysis – Accident rates



- **Reduced accident rate for 2016 compared to 2015**
- **Above global rate in 2016**
- **Matched 5 yr average global rate! (avg global = 2.8)**

# Reactive Safety Analysis – Fatal Accidents



- Accident rate for MID fatal accidents (2012-2016) is 0.64
- Above global accident rate for World fatal accidents (2012 – 2016) which is 0.26
- Fatalities in  
2014 = 38  
2015 = 224  
2016 = 67

# Reactive Safety Analysis

- **Top contributing factors**

- Safety management
- Regulatory oversight
- Airport facilities (Poor/faint marking signs)
- Flight crew errors related to manual handling/ flight controls
- Contained engine failure/ Power plant malfunction



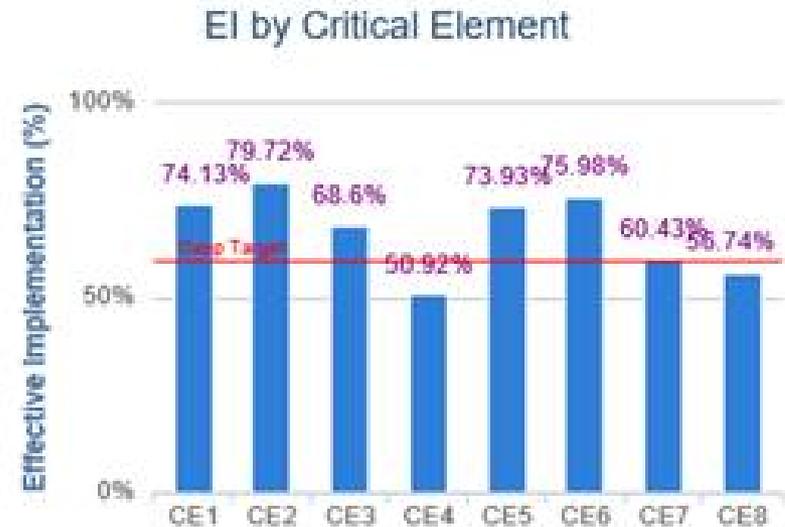
# Proactive Safety Analysis - USOAP

- 13 out of 15 States have been audited
- Overall MID EI = 70.11% which is above Global average (64.71%)



# Proactive Safety Analysis - USOAP

- 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%)



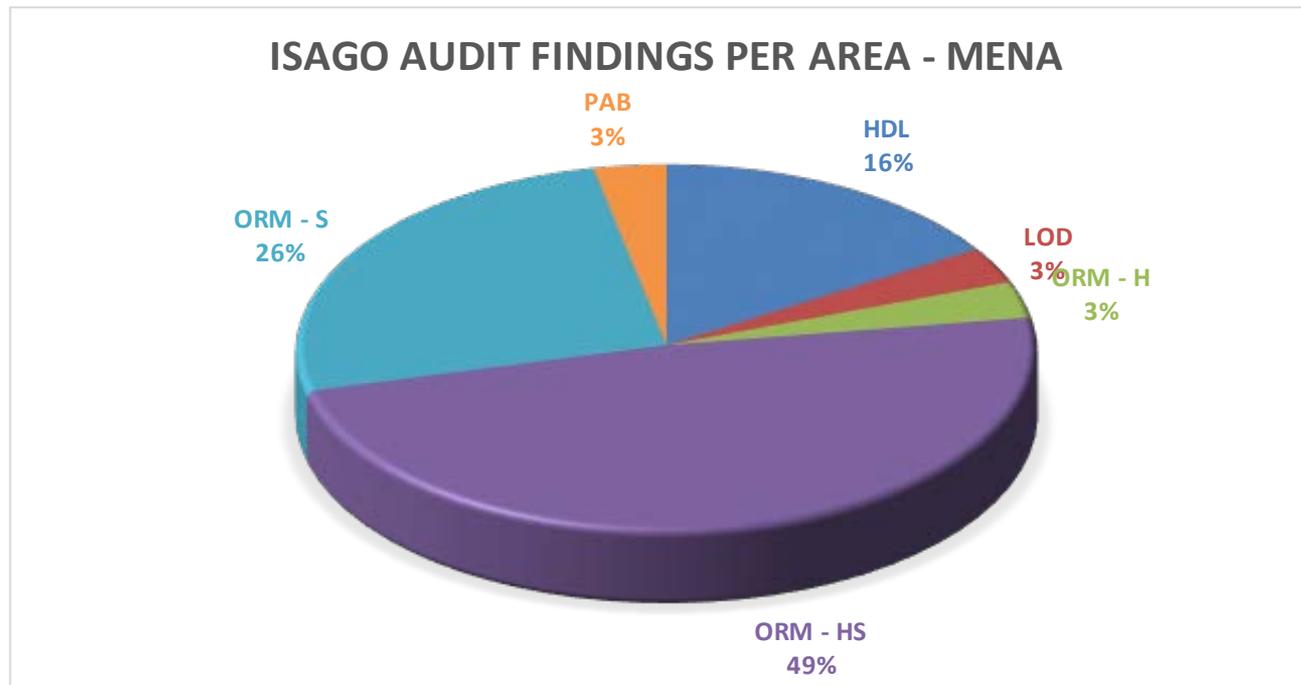
# Proactive Safety Analysis - IOSA

- **All MID accidents rate among non-IOSA registered operators was above the world average by an average of 8.55 (2012-2016)**
- **27 audits were performed in the MENA Region with an average of 5.8 findings per audit.**
- **Findings were mainly in the areas of:**
  - ✓ **Maintenance (MNT),**
  - ✓ **Flight Operations (FLT),**
  - ✓ **Organization Management (ORG),**
  - ✓ **Ground Handling Operations (GRH),**
  - ✓ **Cabin Safety (CAB)**



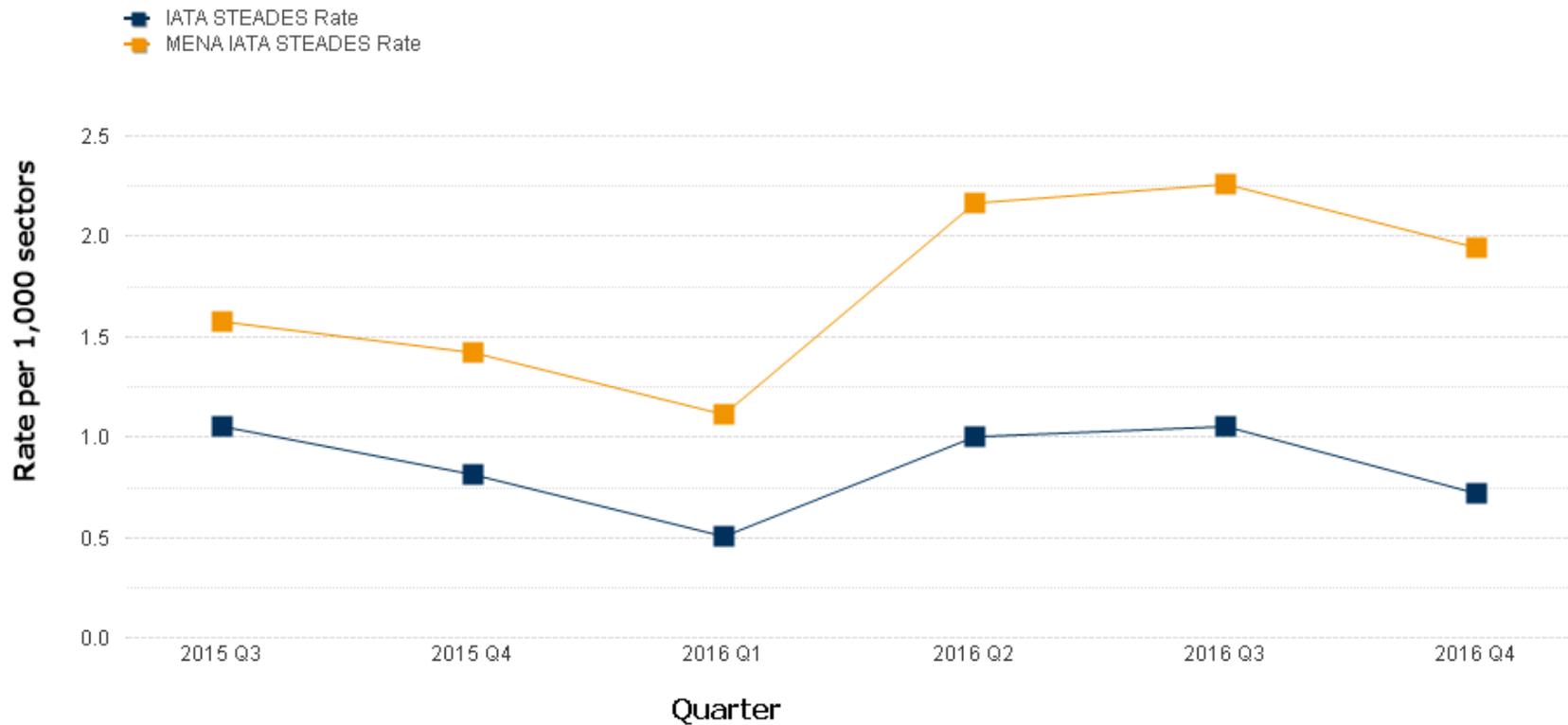
# Proactive Safety Analysis - ISAGO

- 15 audits in 2016 (5 initial and 10 renewals)
- Majority of findings were in the areas of:
  - ✓ Organization & Management
  - ✓ Aircraft Handling & Control (HDL)



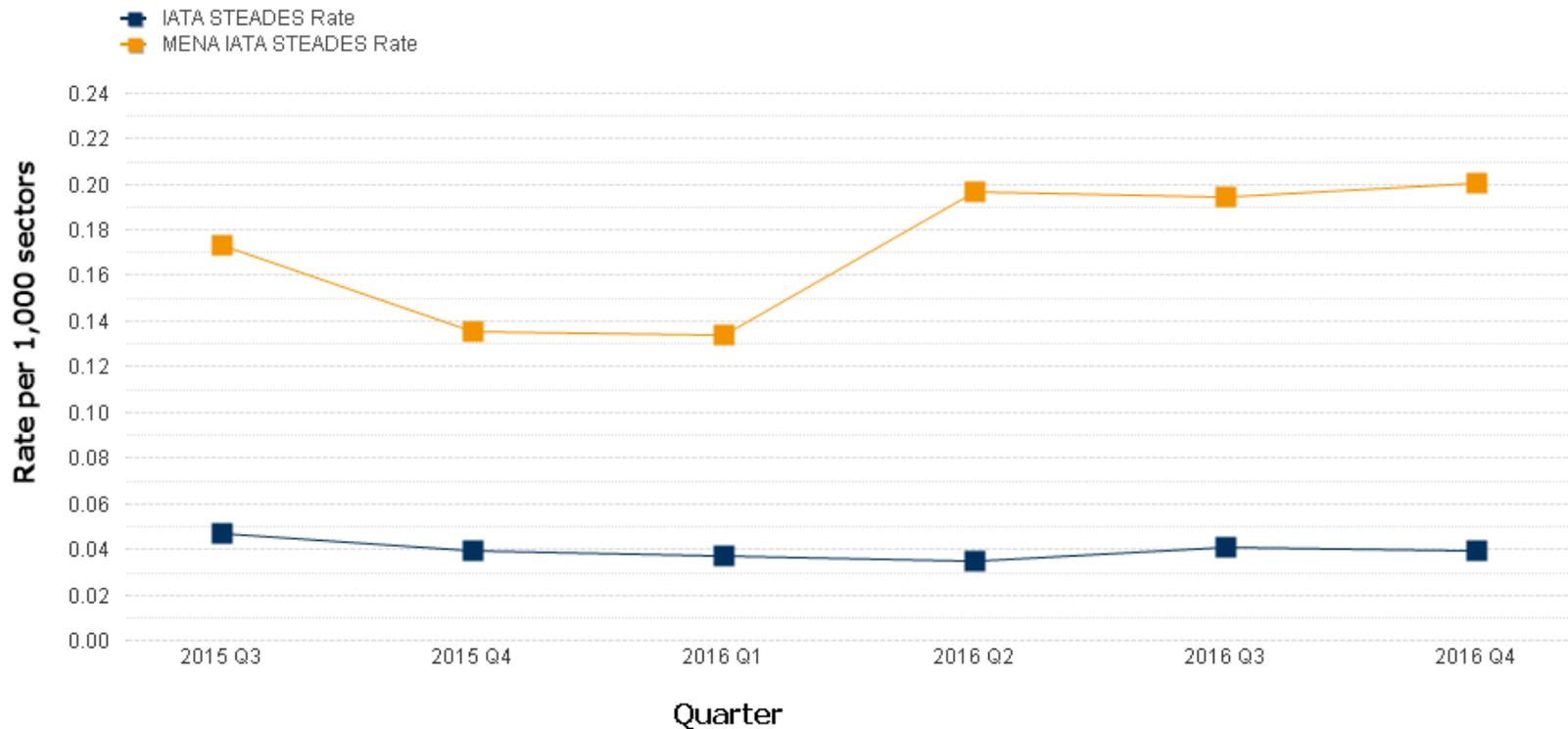
# Proactive Safety Analysis - Incidents

- **Bird Strikes – an increasing trend!**



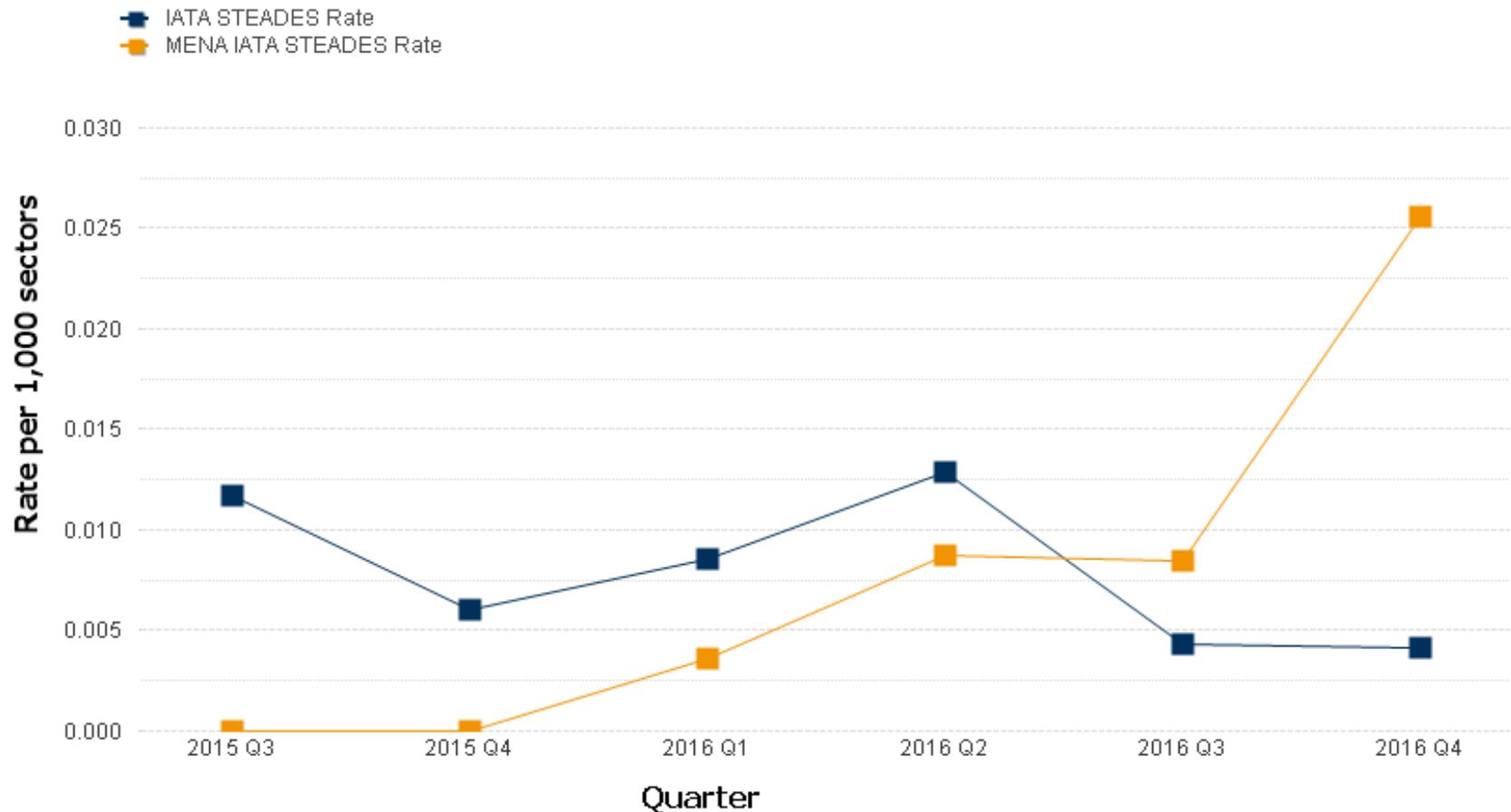
# Proactive Safety Analysis - Incidents

- **Deep landing – an increasing trend!**



# Proactive Safety Analysis - Incidents

- **Engine Stall – an increasing trend!**



# Predictive Safety Analysis

- **STEADES** utilized for trending purposes to analyze top contributing factors that would result in accidents
  - EGPWS/GPWS warning – a decreasing trend in 2016
  - Stall warning – no trend identified (higher MID incident rates)
  - TCAS RA – no trend identified (higher MID incident rates)
  - Unstable approaches – an increasing trend in 2016



# Focus Areas & Emerging Risks

- **Focus Areas for MID region for 2018** (based on 2012-2016 period)
  - Runway Safety (RS)
  - System/ Component Failure (SCF)
- **Regional emerging risks:**
  - Loss of Control In Flight (LOC-I)
  - Controlled Flight Into Terrain (CFIT)
  - RPAS/Drones
  - Wildlife & FOD
  - Laser attacks



**Thank you!**