

New Global Reporting Format for Runway Surface Condition

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Operations



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IATA Overview



293

Member
Airlines



82%

Of total
air traffic



54

Offices in
53 Countries



IATA IS THE
GLOBAL
TRADE
ASSOCIATION
FOR THE
WORLD'S
AIRLINES



OUR MISSION & VISION

IATA's **mission** is to represent, lead, and serve the airline industry.



Vision

"Working together to shape the future growth of a safe, secure and sustainable air transport industry that connects and enriches our world."



Runway Excursions

Defining the problem...

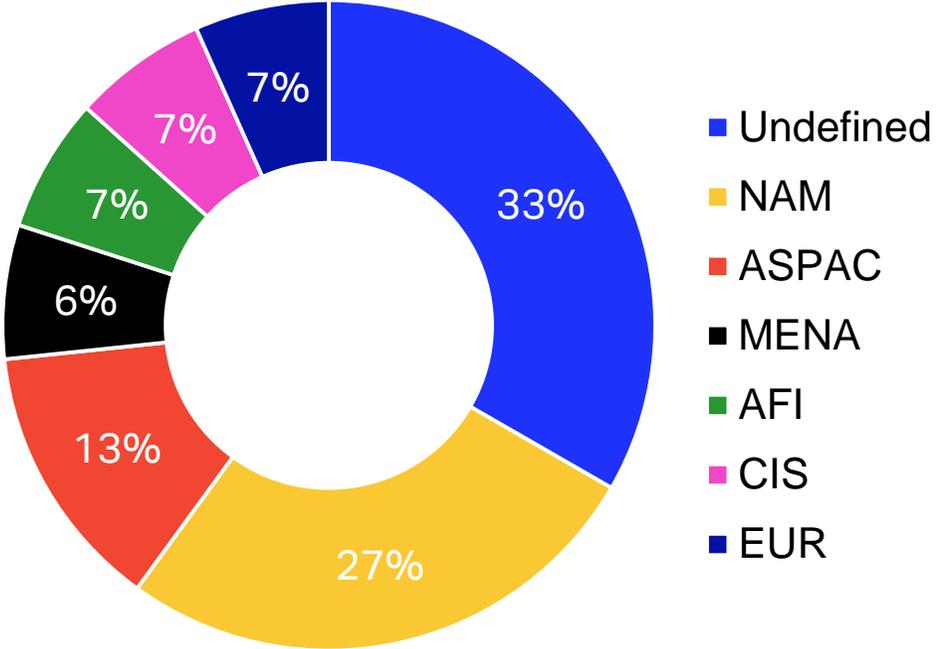
Incident and Accident Data



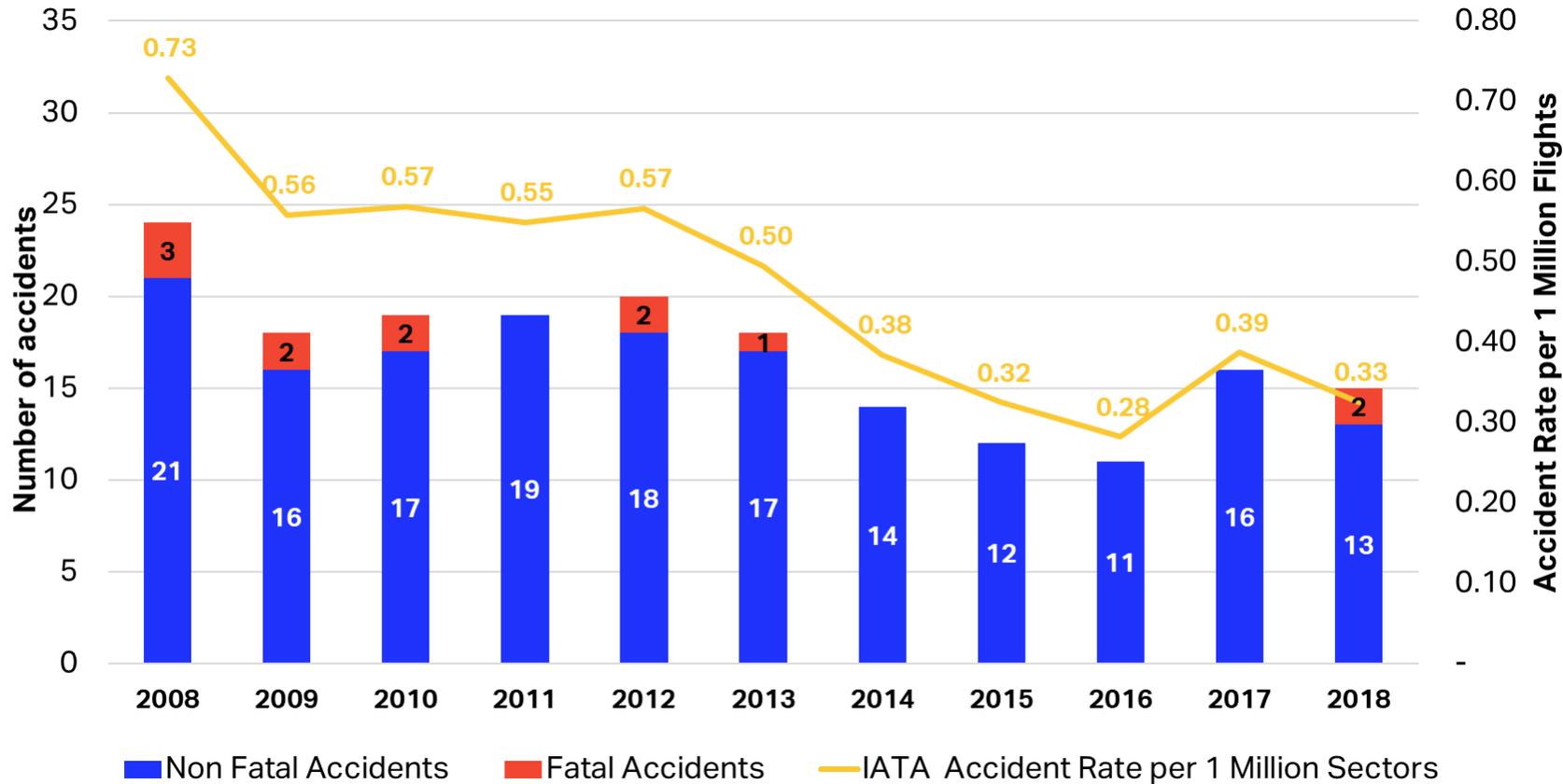
IATA Analysis
found one runway
excursion reported
for every 1.3
million flights*

*Source IATA GADM

Distribution by Region



Runway excursions represented 24% of all accidents in 2018

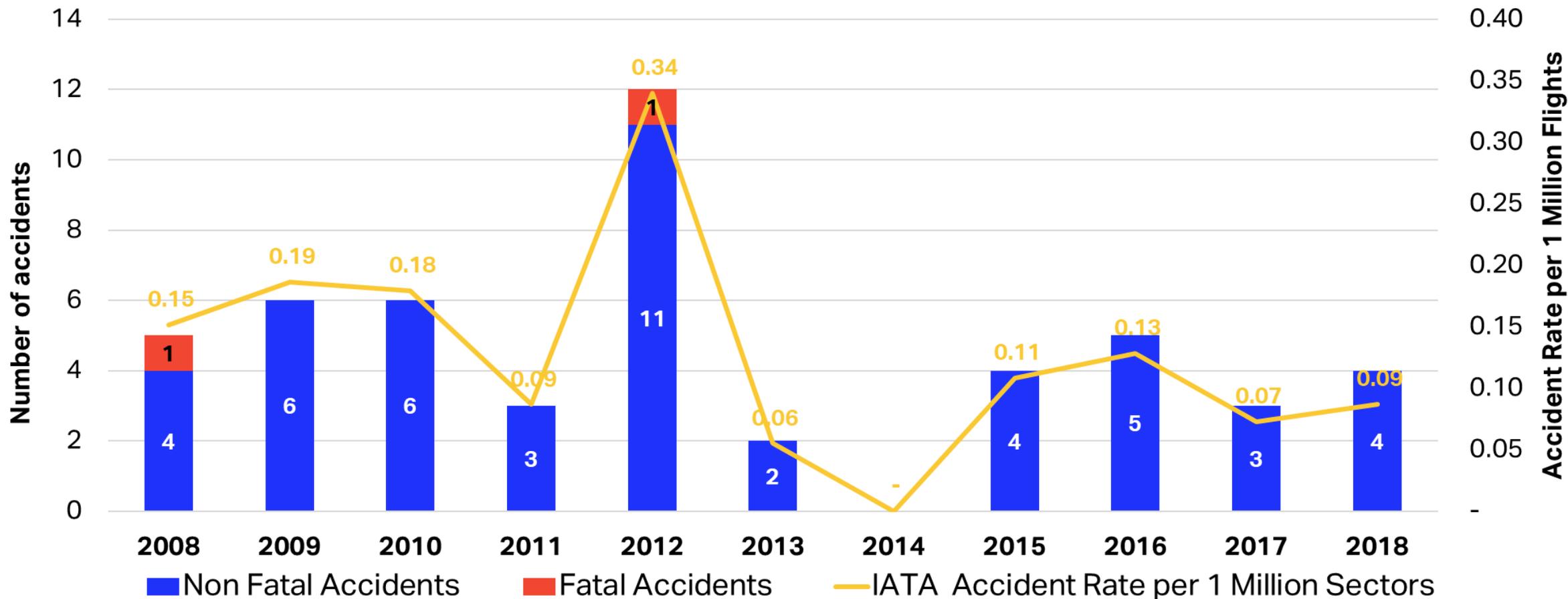


- Since 2008, there have been **186 runway excursions** that met the IATA Accident definition. **52%** (96) of these accidents were a **runway overrun**, and **48%** (90) a lateral excursion.

Accident data updated as of 1st January 2019



Contaminated runway was a contributing factor in 57% of 186 runway excursions accidents analyzed

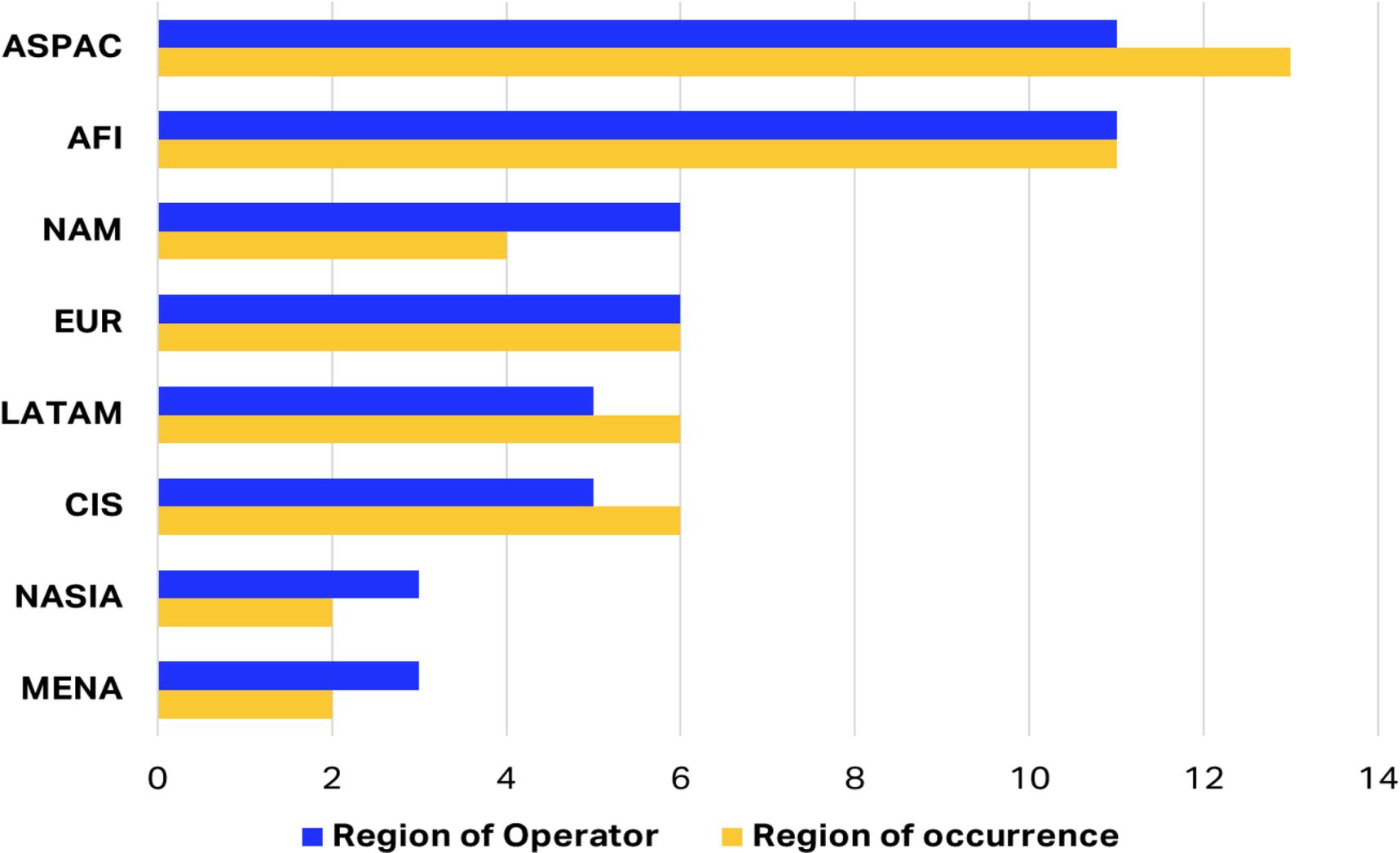


Accident data updated as of 1st January 2019



Number of Accidents by IATA region

ASPAC and AFI regions stand out in RWY excursion accidents with contaminated runway as a contributing factor



Accident data updated as of 1st January 2019



Top contributing factors in runway excursions with contaminated runways

Latent Conditions

- Safety management
- Regulatory Oversight
- Flight Ops: Training Systems

Errors

- Manual Handling/ Flight Controls
- SOP Adherence/ Cross-verification – Intentional
- Failure to go around

Threats (environmental)

- Airport facilities
- Meteorology
- Wind/wind shear/gusty wind

Undesired Aircraft States

- Long/floated/bounced landing
- Unstable approach
- Continued landing after unstable approach
- Loss of aircraft control while on ground

The Roadmap to Global Reporting Format (GFR)

In 2005, a Southwest Airlines Flight 1248 Boeing 737-700 ran off the end of runway 31C after landing at Chicago Midway International Airport.

2005

2007

NTSB recommended Operators conduct standardized landing assessments prior to every landing.



The Roadmap to GRF

- **Assessment to use approved performance data, actual arrival conditions, a means of correlating the airplane's braking ability with runway surface conditions using the most conservative interpretation available.**

The Roadmap to GRF

FAA formed the Take-off and Landing Performance Assessment Aviation Rule-making Committee (TALPA ARC) to address runway overruns;

2006

Outcome of TALPA ARC made recommendations to FAA:

2009

2008

ICAO establish the Friction Task Force, following outcome of state questionnaire on Runway Surface Friction Characteristics.

The Roadmap to GRF

Continued-Runway Condition Assessment Matrix (RCAM) **developed** and validated over **two years, resulting in changes to the runway condition reporting system (NOTAM).**

2009

Following this, various actions were taken by FAA to implement TALPA actions.

2015–2016

2012

OEMs e.g. Airbus and Boeing published landing distance data, **supporting** the use of RCAM.



The Roadmap to GRF

- **The core outcomes of TALPA ARC- Runway Condition Assessment Matrix (RCAM) to create a Runway Condition Report (RCR) were key to developing the ICAO GRF.**
- **ICAO FTF was tasked with updating many ICAO Annex's (3, 6, 8, 11, 14 and 15) as well as many other documents. They produced the ICAO Circular 329, '*Assessment, Measurement and Reporting of Runway Surface Conditions*'.**

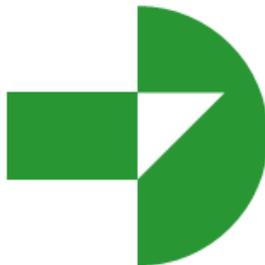
GRF Challenges



Implementation-the states, airports and operators need to have made the necessary changes to their **legislation, procedures and policy.**



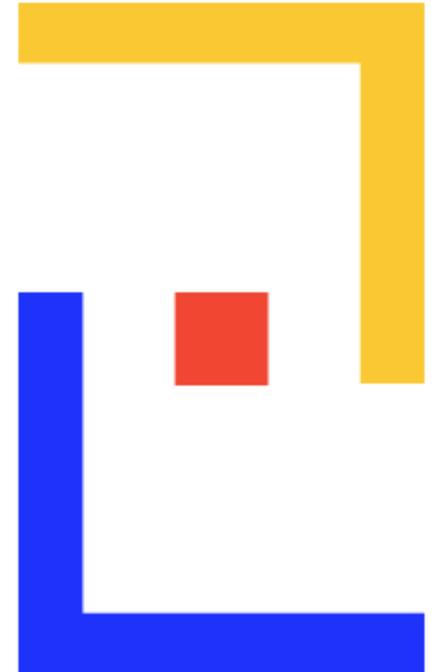
Awareness-all the applicable personnel need to be aware of this new format.



Training-to ensure staff are trained.

IATA's Position on GRF

One global standard for assessing and reporting runway surface conditions is a first for our industry and welcomed by our members and should help to drive down the number of runway excursion incidents where a contaminated runway was a contributing factor.



Thank you

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