



International Civil Aviation Organization

# The Big Picture

**Regional Runway Safety Seminar – Asia-Pacific (APAC)**

21-24 May, 2012 in Bali, Indonesia

**Mohamed El Amiri**, Deputy Director, Air navigation Bureau, ICAO

# ICAO 37<sup>th</sup> Assembly *October 2010* Resolution A37-6 (1/2)



*The Assembly:*

1. *Urges* States to take measures to enhance runway safety, including the **establishment of runway safety programmes** using a **multidisciplinary approach**, that include at least regulators, aircraft operators, air navigation services providers, aerodrome operators and aircraft manufacturers to prevent and mitigate the effects of runway excursions, runway incursions and other occurrences related to runway safety;
2. *Resolves* that ICAO shall actively **pursue runway safety using a multidisciplinary approach**; and  
(...)

# ICAO 37<sup>th</sup> Assembly *October 2010* Resolution A37-6 (2/2)



Associated practice no. 1:

- The runway safety programmes should be based on **inter-organizational safety management** including the **creation of local runway safety teams that address prevention and mitigation of runway excursions, runway incursions and other occurrences related to runway safety.**



# ICAOs Runway Safety Programme

## ➔ Outcomes of GRSS:

- Identification of hazards requires **collaboration** of all stakeholders
- **Solutions** need to be **standardized** to international standards and **harmonized** to facilitate efficient international operations
- **Runway Safety Teams** – should be established locally and hosted by the airports
- **RSP partners have committed** to work together to compile and promote proven solutions and endorse best practices

## ➔ Regional Runway Safety Seminars (RRSSs):

- Promote and enhance implementation of solutions through multidisciplinary RSTs

## ➔ Runway Safety Website [www.icao.int/RunwaySafety](http://www.icao.int/RunwaySafety) :

- Easy access to information on public website
- Development of RST Action Plan Tool
- Share documents and toolkits from RSP Partners





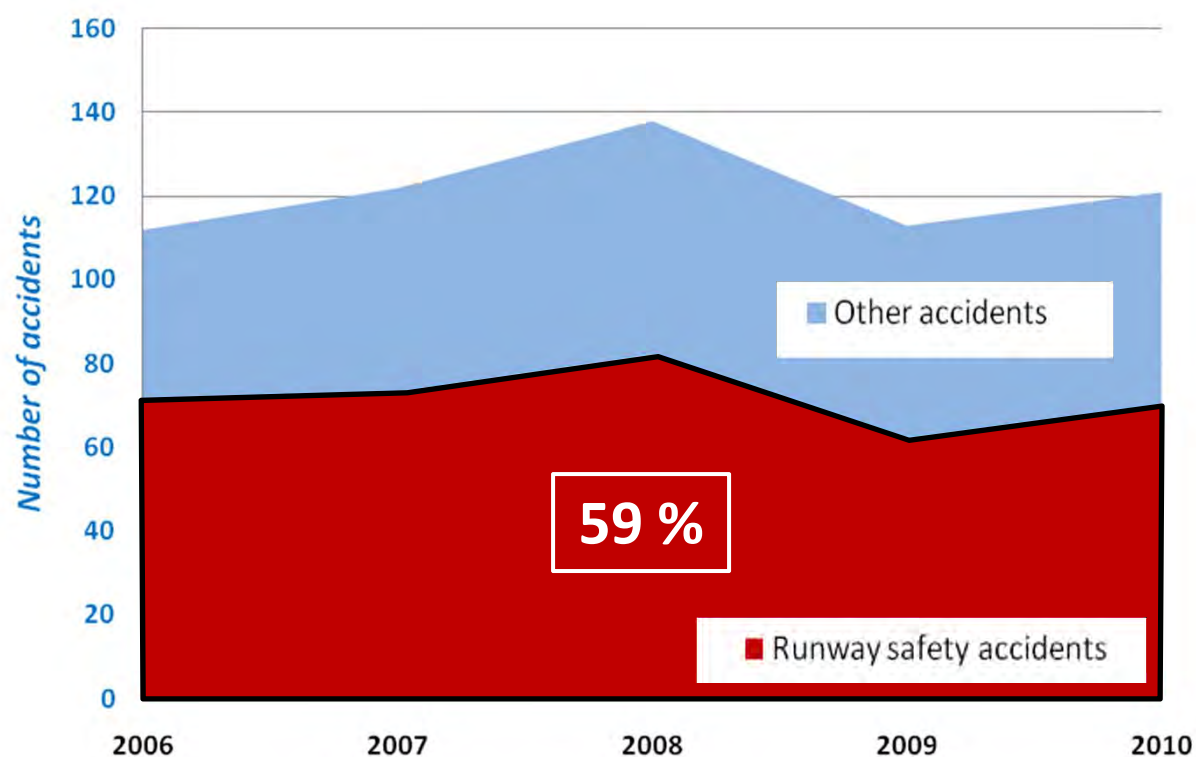
## Objectives of this RRSS

- Improve runway safety outcomes
- The establishment of RSTs
- Provide tools for use by RSTs
- Develop a regional strategy to establish, promote and provide ongoing support to RSTs

# Runway Safety Overview

## Runway Safety Accidents

Scheduled Commercial Traffic – MTOW > 2 250 kg (Yrs 2006- 2010 )



### Runway Safety Accidents

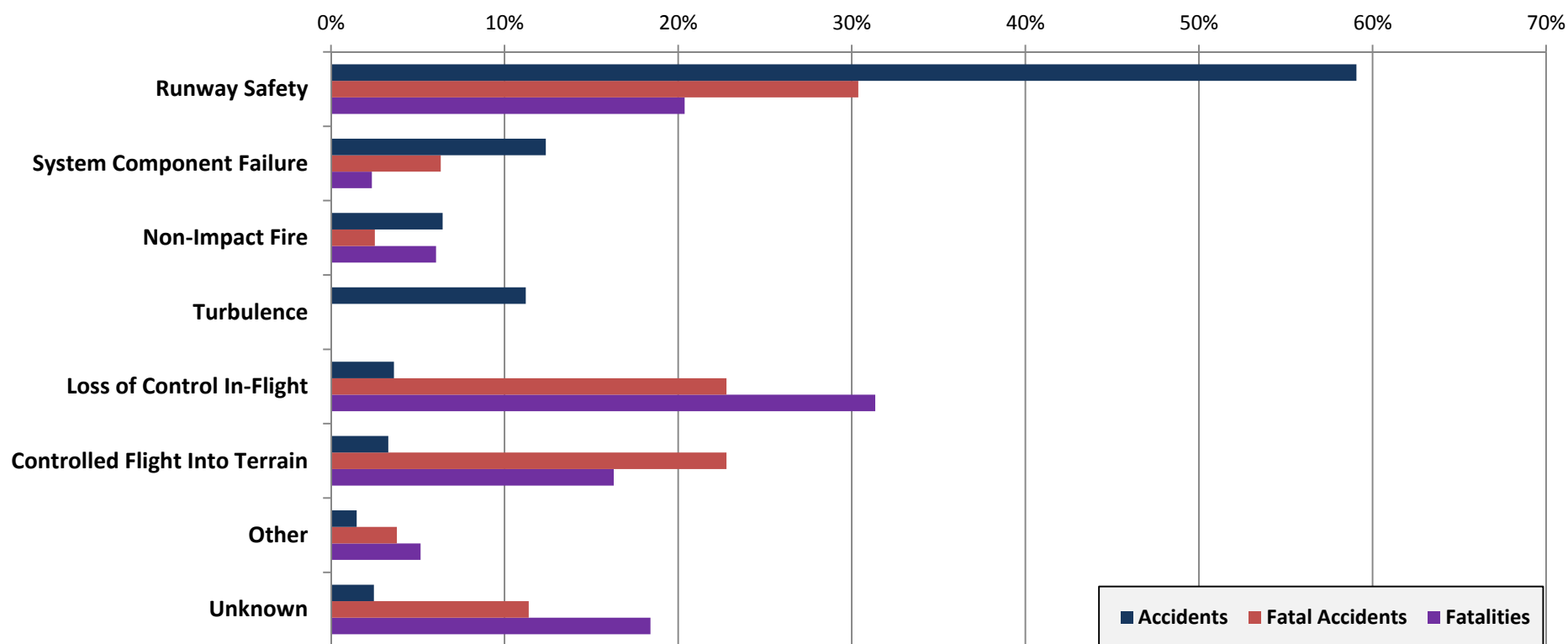
- Abnormal Runway Contact
- Bird strike
- Ground Collision
- Ground Handling
- Runway Excursion
- Runway Incursion
- Loss of Control on Ground
- Collision with obstacle(s)
- Undershoot / Overshoot
- Aerodrome

# Runway Safety Overview

Worldwide

## Accidents & Related Fatalities by Occurrence Categories

Scheduled Commercial Traffic – MTOW > 2 250 kg (Yrs 2006- 2010 )

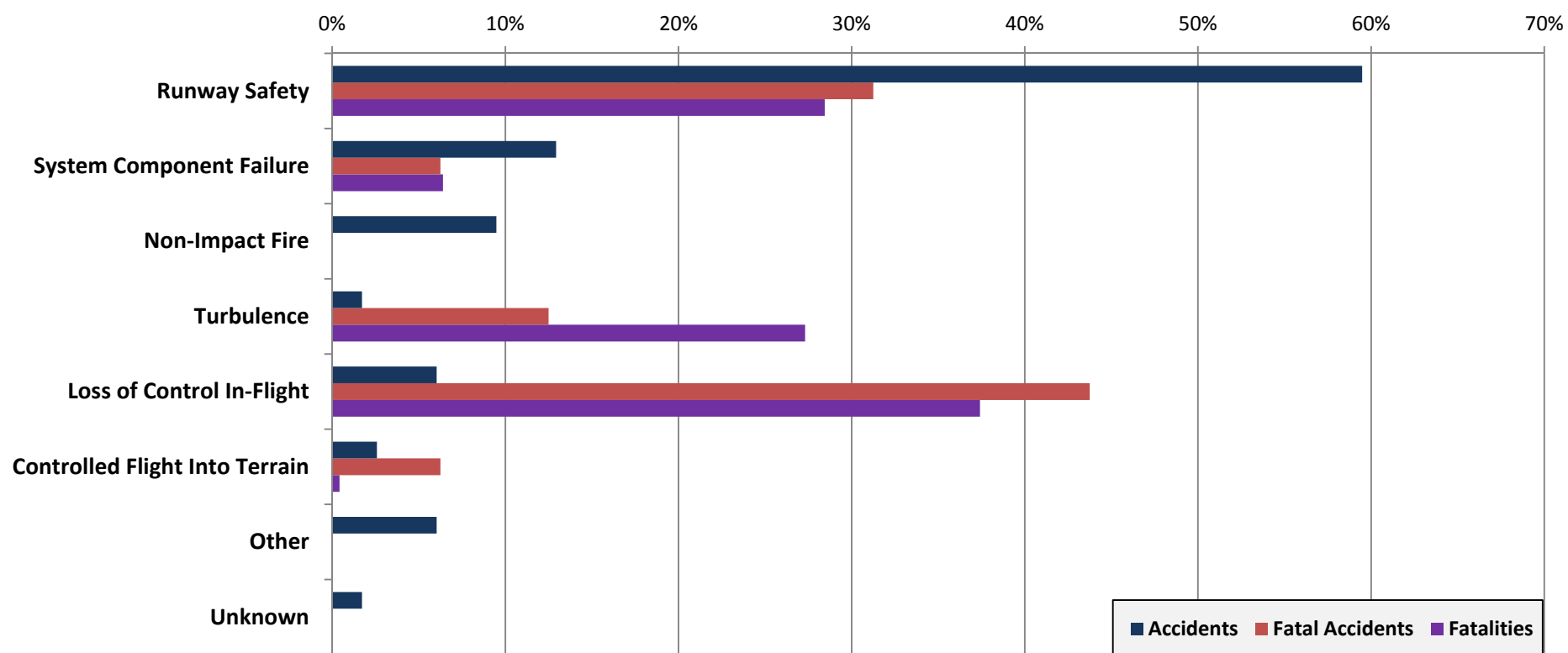


# Runway Safety Overview

Focus on APAC Region

## Accidents & Related Fatalities by Occurrence Categories

Scheduled Commercial Traffic – MTOW > 2 250 kg (Yrs 2006- 2010 )



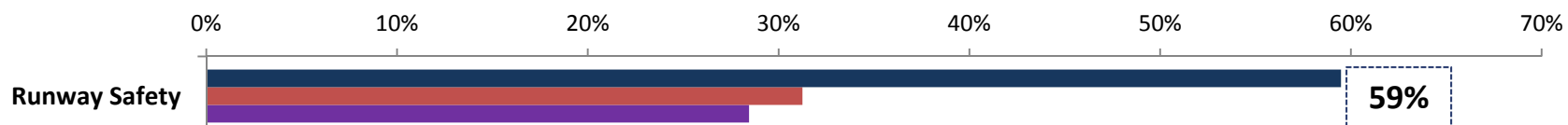


# Focus on Runway Safety Related Accidents

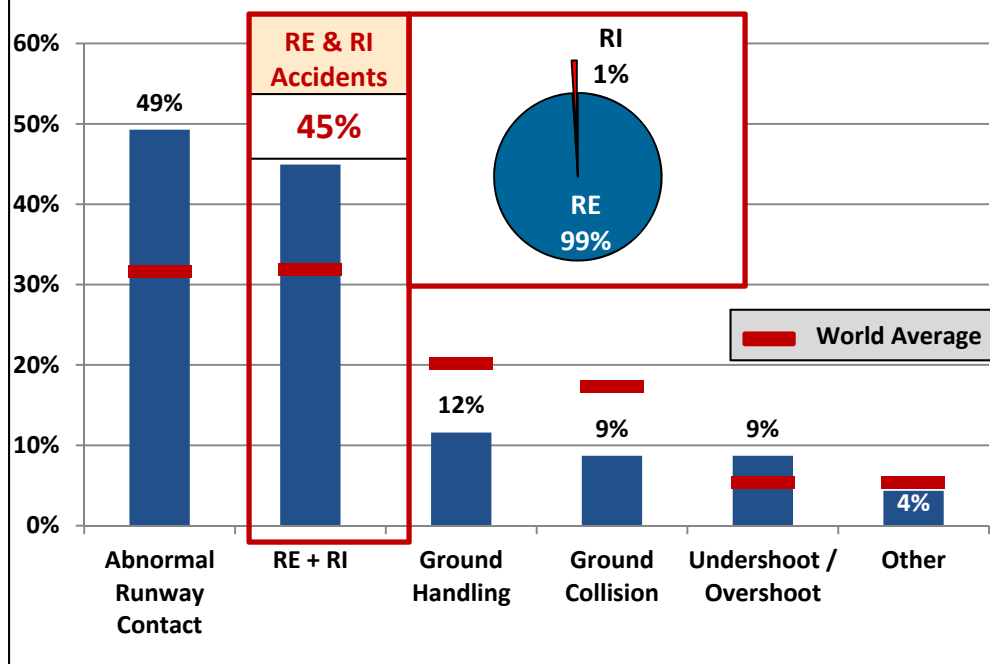
Focus on APAC Region

## Accidents & Related Fatalities by Occurrence Categories

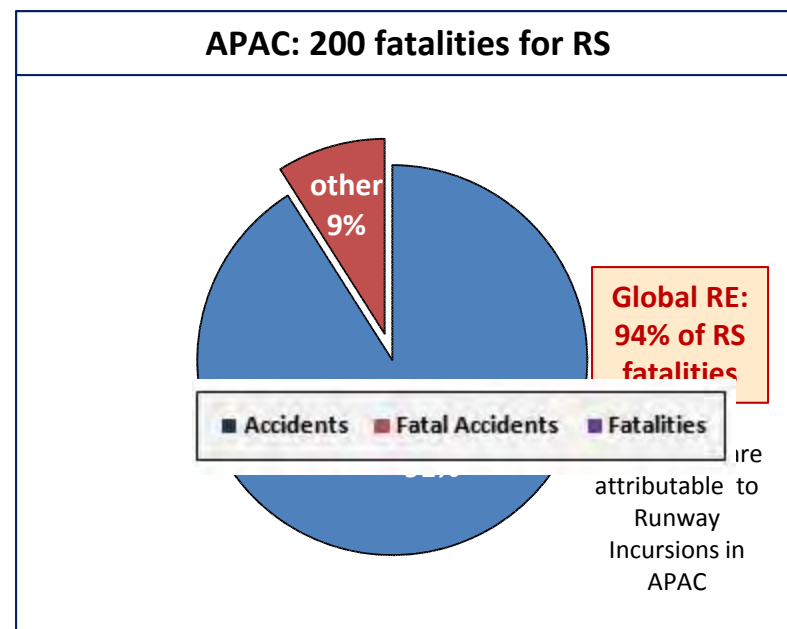
Scheduled Commercial Traffic – MTOW > 2 250 kg (Yrs 2006- 2010 )



### 69 accidents by occurrence category

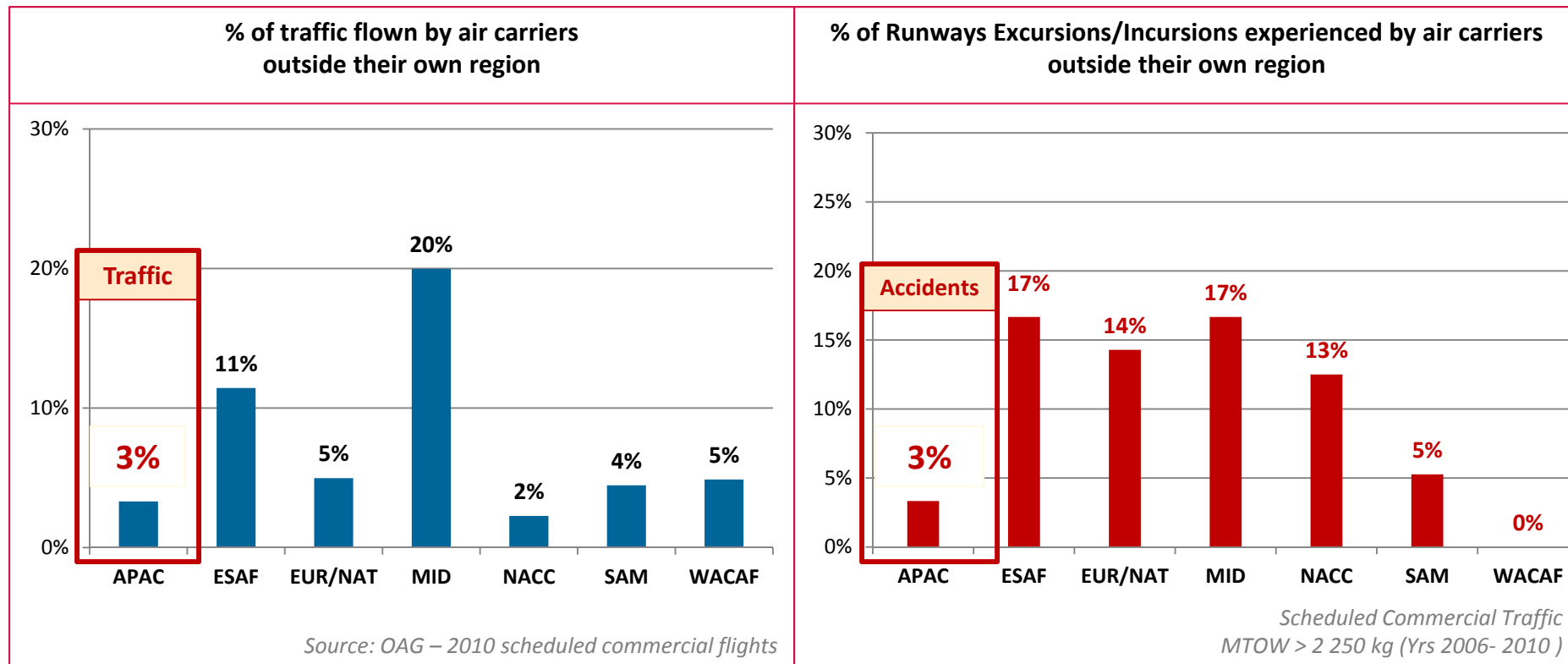


### APAC: 200 fatalities for RS



# Focus on Runway Excursions / Incursions

## Focus on APAC Region

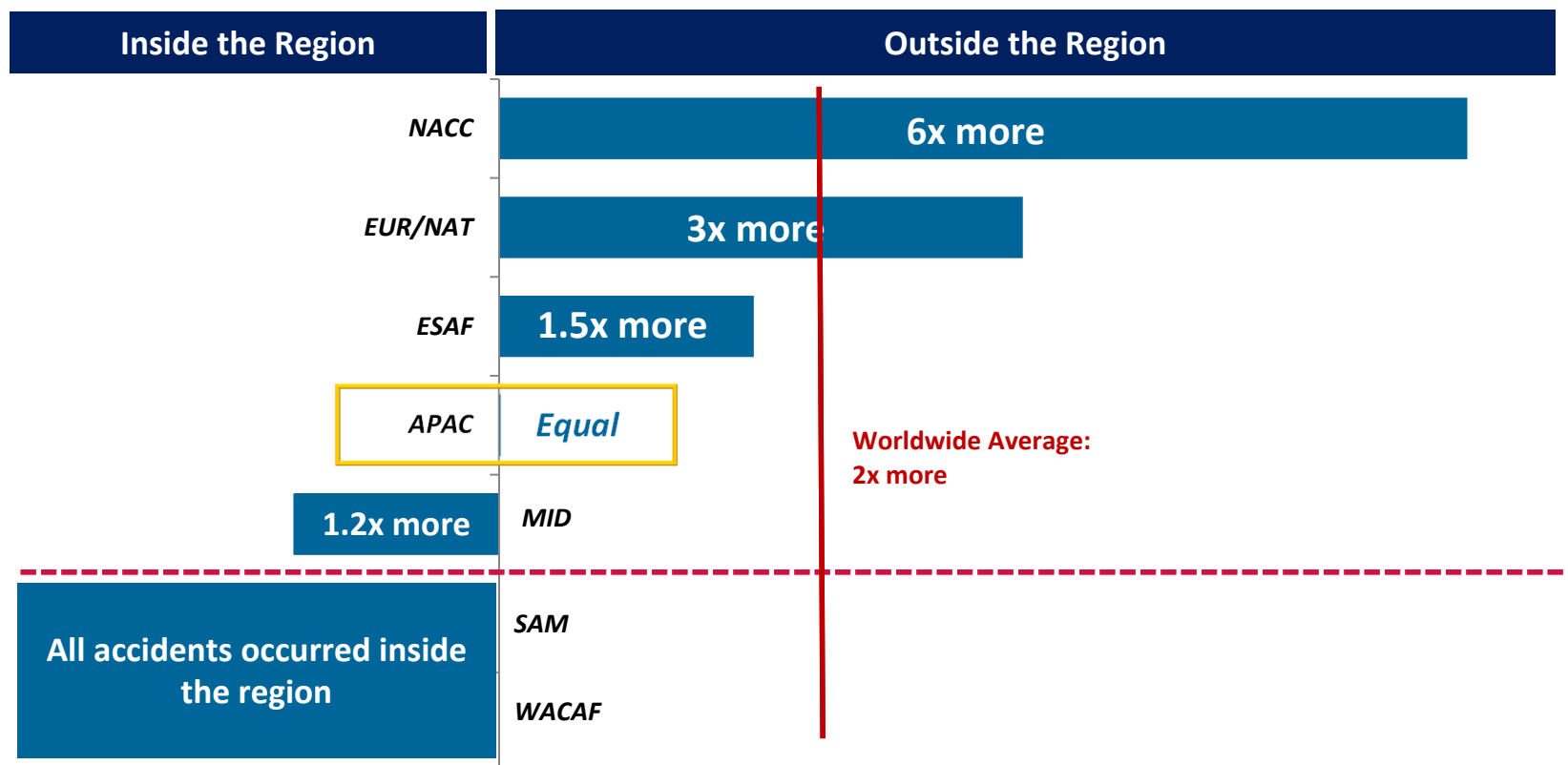


- Air Carriers of the APAC Region flew **3%** of their **total traffic** outside the region.
- Air Carriers of the APAC Region experienced **3%** of their **total accidents** outside the region.

# Focus on Runway Excursions / Incursions

Focus on APAC Region

Probability of air carriers experiencing an Excursion or Incursion Accident  
Inside or Outside their Region



**APAC carriers are equally at risk of experiencing a Runway Excursion/ Incursion outside the APAC region as within the region.**



## Interesting ALA Facts

- Approach and landing (from outer marker in to landing) comprise 4% of the flight time, yet account for 45% of the hull losses
- The ALA rate for freight, ferry, and positioning flights (no pax) is 8 times higher than the rate for pax flights
- The accident risk is 5 times greater for commercial aircraft flying a non-precision approach compared with those flying a precision approach
- In 75 % of the ALA accidents, a precision approach aid was not available or not used