

ICAO Safety Intelligence Programme

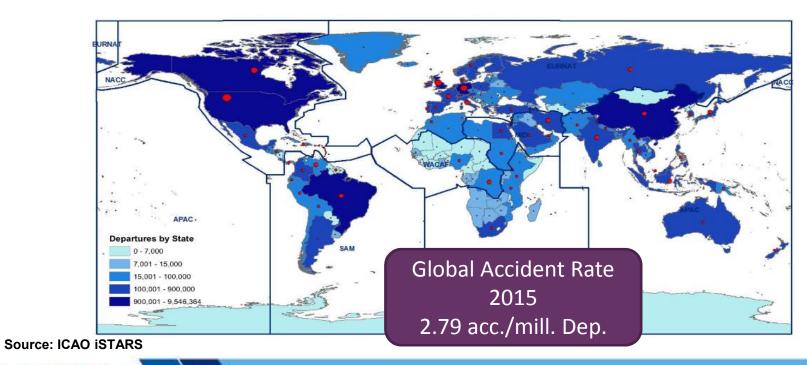
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**PRESENTED BY:** 

Marco MERENS
Chief, Integrated Aviation Analysis
ICAO

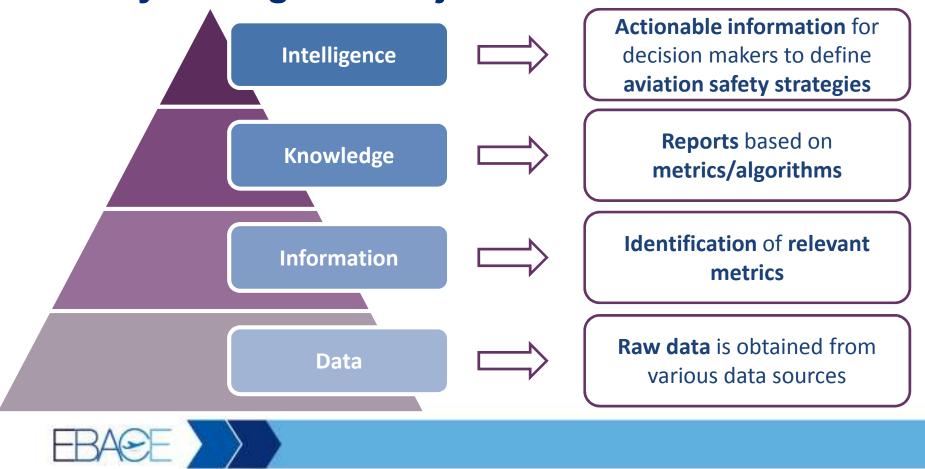


### **State of Global Aviation Safety**





### **Safety Intelligence Objectives**



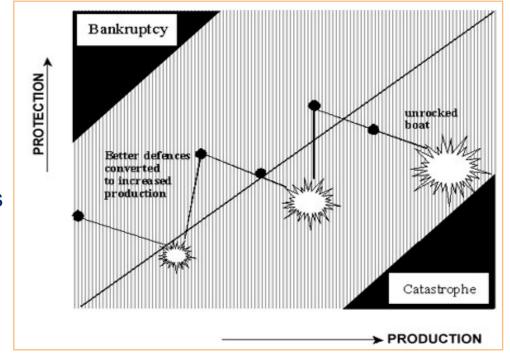
# The Safety Model

#### Protection

- Procedures
- Training
- Legislation/Standards
- Controls

#### Production

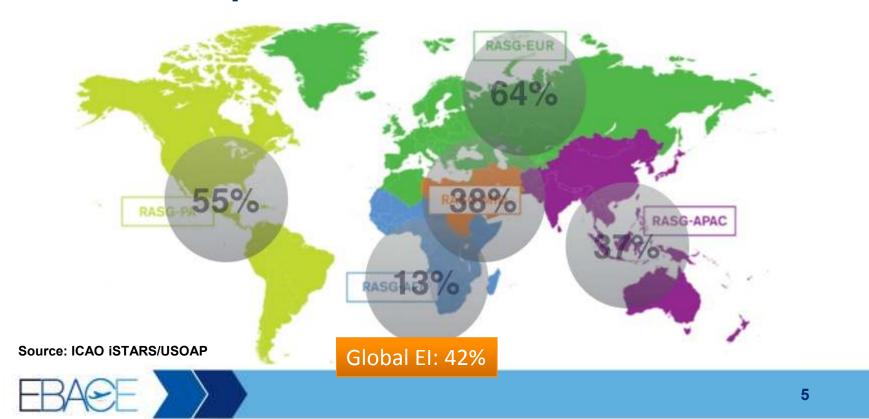
- Flights
- In-service time
- Usage



Sources: Reason, James. Managing the Risks of Organizational Accidents, 1997



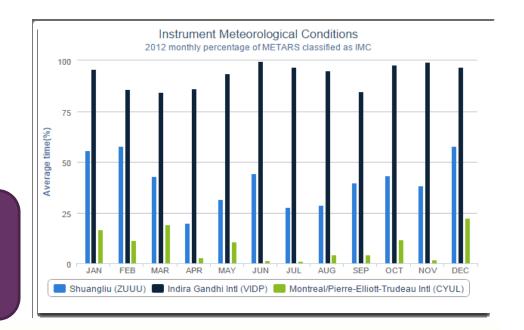
## Effective implementation of occurrence databases



## **Safety Analysis Backbone**

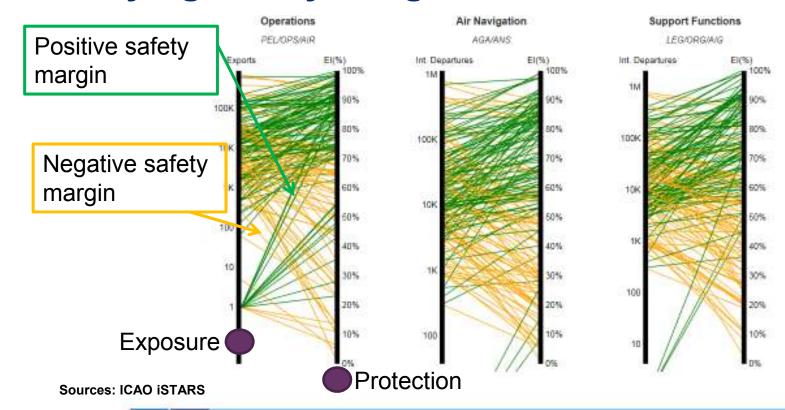
- 1. Identify Hazard
- 2. Quantify Hazard
- 3. Quantify Exposure
- 4. Identify Safety Margin

EXPOSURE VS HAZARD/PROTECTION



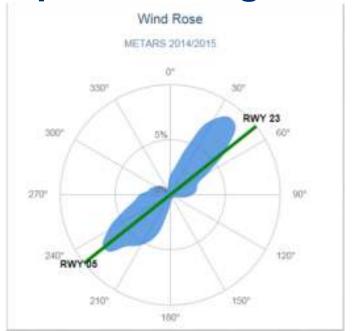


## **Quantifying Safety Margin for States**





Airport Briefings with tail wind analysis

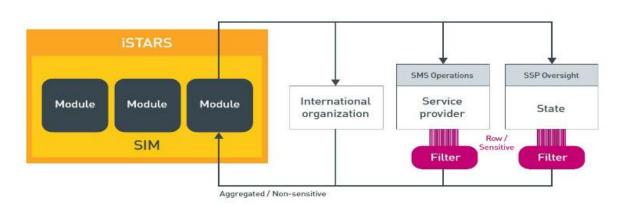


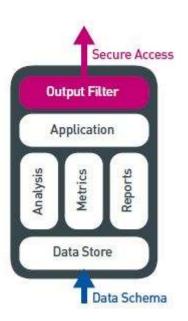


Source: ICAO iSTARS Airport Briefing App for Geneva airport



## **Safety Information Monitoring Service**





The ICAO Safety Information Monitoring Service (SIMS) supports
States and service providers in the process of **collecting**, **monitoring**, **visualizing** and thus, sharing progress of their State Safety Programme (SSP) and Safety Management System (SMS).

Source: http://www.icao.int/safety/Pages/Safety-Information-Monitoring-Service.aspx



### **Safety Intelligence Frameworks**



#### http://www.icao.int/safety/istars

- Accident, traffic, fleet and USOAP Audit Data
- Integrated safety analysis results



#### http://gis.icao.int

- Georeferenced Data visualization maps
- Routes, traffic and airspace maps



