

# Turvallisuusriskien hallinta

3.11.2015,  
Janne Lumia





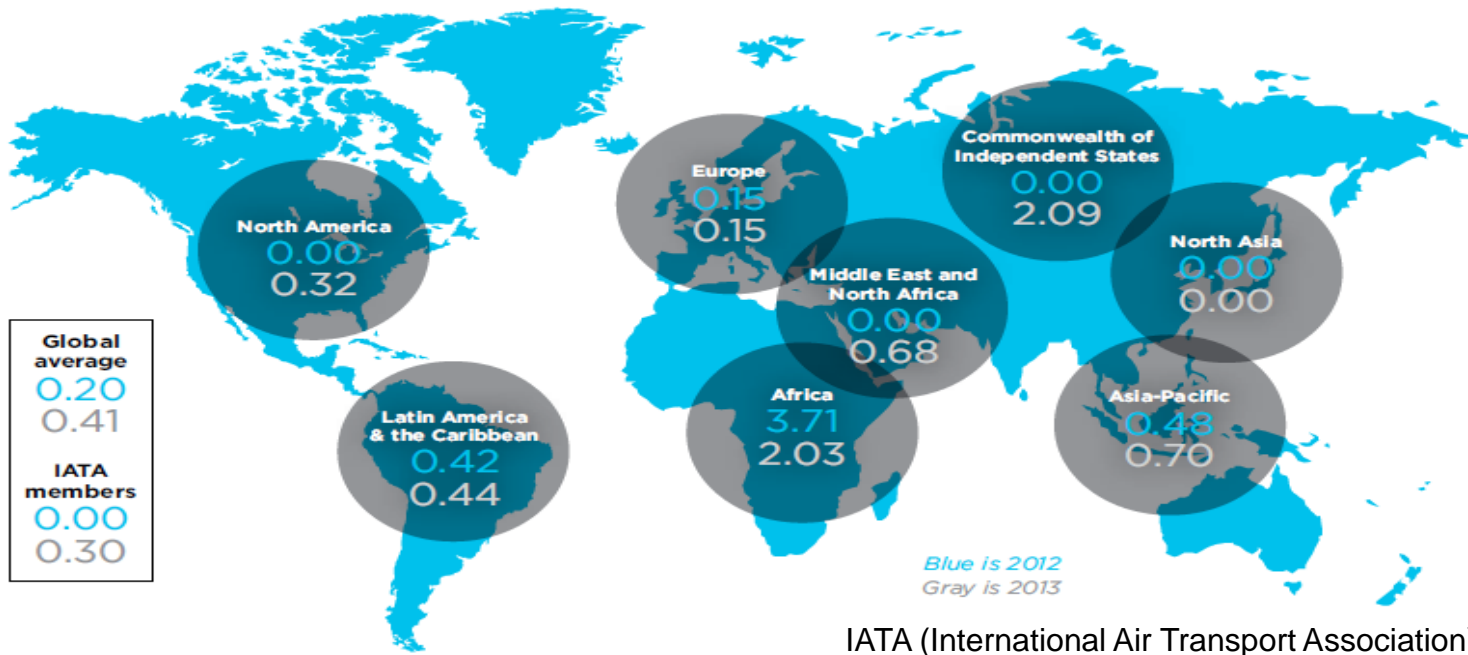
**A new Silk Road for the 21<sup>st</sup> century**



**10**



## Western-built jet hull-loss rate per million sectors



One flight per day -> accident after 18000 years



# Safety = Risk Mitigation

1. Probability as low as reasonably possible
2. Consequences as low as possible

## Wasawings, Ilmajoki accident 1988















# **Risk Mitigation at all organisational levels**



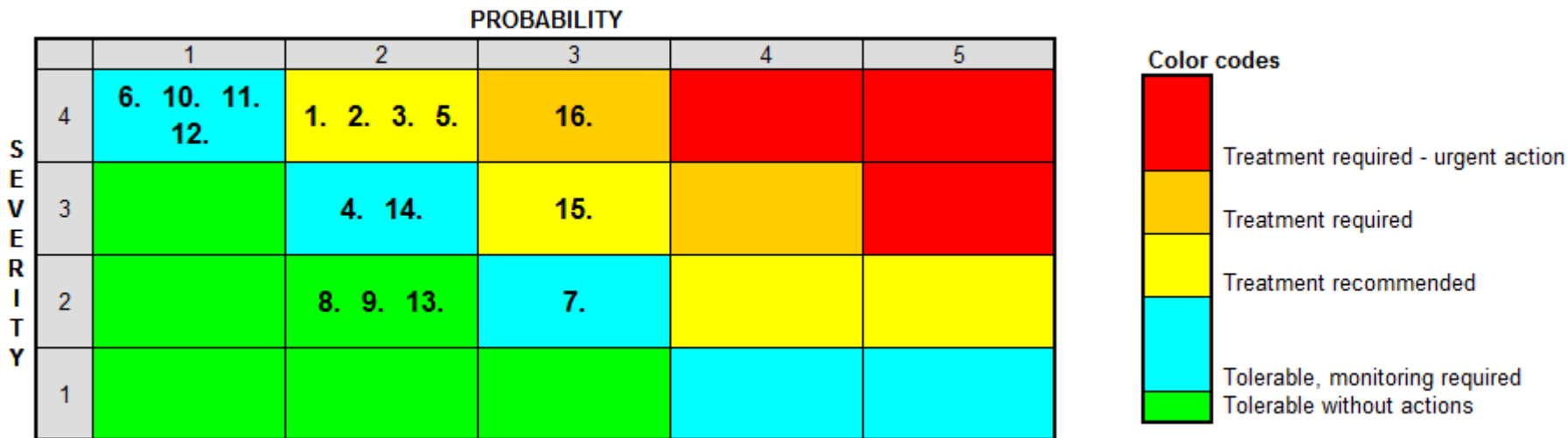
# Risk Assessments

- Risk assessment of all changes
  - Process
  - Instructions
  - Organisation
- Risk assessment of current processes
  - Reporting
  - External incidents
  - Flight data

Just Culture  
Feedback



# Risk Assessment, CKG Opening



- Poor ATC language
- Unreliable weather forecast
- Earthquake
- Poor quality fuel

Acceptable Level of Safety



**A350**  
**A321 "sharklet"**  
**Subcontracted Cabin Crew**  
**New FOPS organisation**



# Risk Assessment, LHR flight

- TAF EGLL 021655Z 0218/0324 VRB03KT 3000 BR SCT005  
BECMG 0218/0221 BKN003  
PROB30 TEMPO 0218/0221 0800 FG BKN001  
PROB40 0221/0309 0400 FG BKN001  
BECMG 0309/0312 8000 NSW SCT012  
TEMPO 0313/0324 BKN014  
PROB30 TEMPO 0318/0324 BKN008=
- METAR COR EGLL 021720Z AUTO VRB02KT 1200 R27L/P1500 R27R/P1500 BR  
NCD 12/11 Q1021 TEMPO 1500 BR BKN005=



# **Turvallisuus Täsmällisyys Taloudellisuus**





# **Risk Mitigation at all organisational levels**