



EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

Global Runway Safety Symposium

Harmonisation

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May 2011

ICAO, Montreal

Your safety is our mission.



What are the different models in regulating safety ?

- Introduction
- Systematic safety
- Prescriptive regulation
- Objective based regulation
- Performance based regulation
- The way forward
- EASP



- ▶ **total system approach** is based on the fact that the aviation system components – products, operators, crews, aerodromes, ATM, ANS, on the ground or in the air - are part of a single network



Prescriptive regulation

- Binding standards set.
Inspections check compliance.
- Pro – easy to understand
- Con – absolute and inflexible
- Example: ICAO Annex 14
- 2.11.1 Information concerning the level of protection provided at an aerodrome for aircraft rescue and fire fighting purposes **shall** be made available.



Objective based regulation

- Objective, goal or target is set. Advisory material provided. Demonstrations needed.
- Pro – flexibility. Different solutions possible
- Con – continued achievement not guaranteed

- Example: Large Aeroplane CS 25.1309

- (b) The aeroplane systems and associated components, considered separately and in relation to other systems, must be designed so that -
 - (1) Any catastrophic failure condition
 - (i) is **extremely improbable**;



Performance based regulation

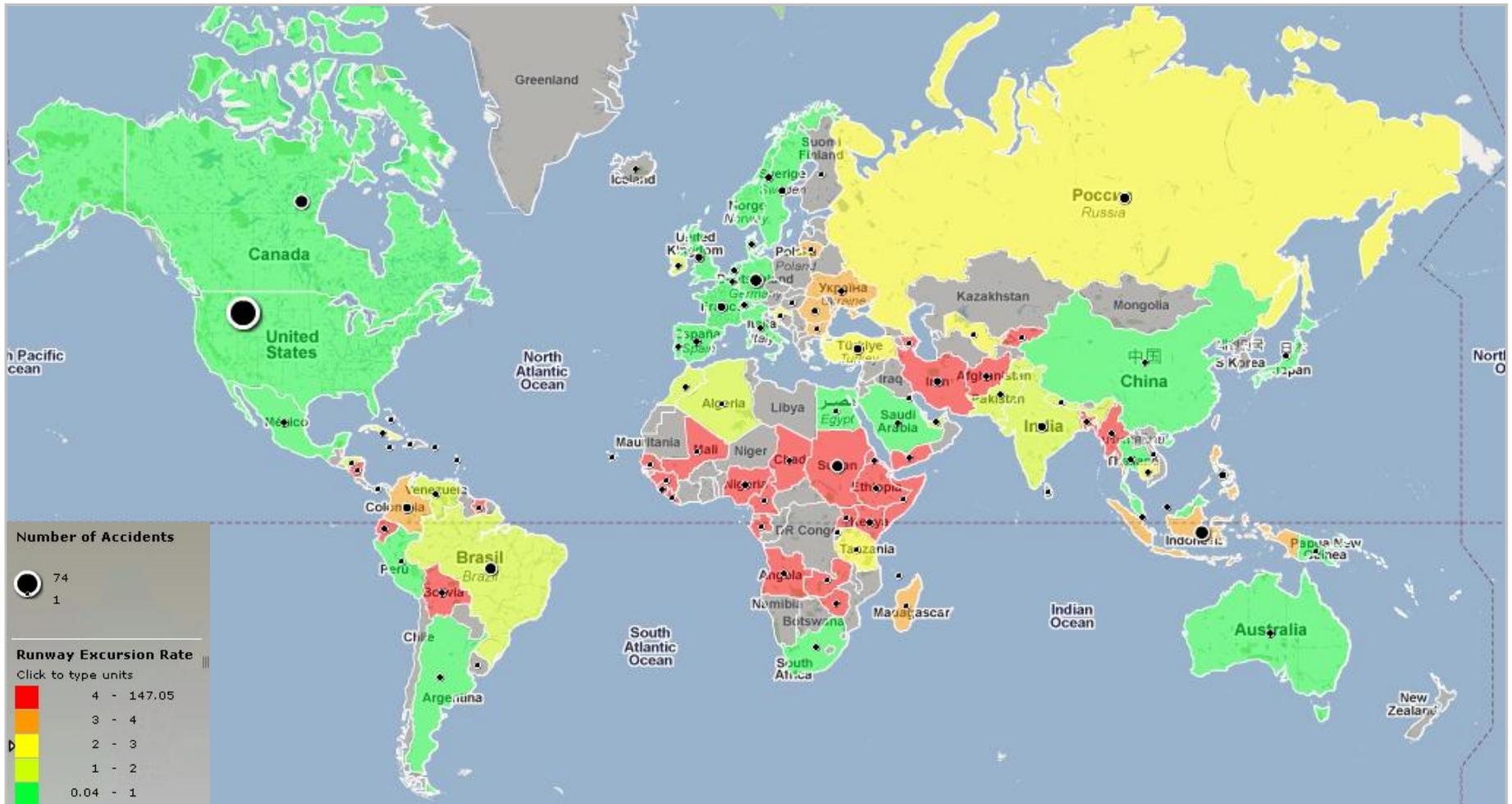
- A measurable level of performance is periodically monitored and reviewed. Performance is established, maintained or improved.
- Pro – continuous monitoring, transparency and mechanism for improvement
- Con - requires intelligent definition and application
- Example: Commission Regulation (EU) 691/2010 on the performance scheme for air navigation services and network functions defines **safety key performance indicators**



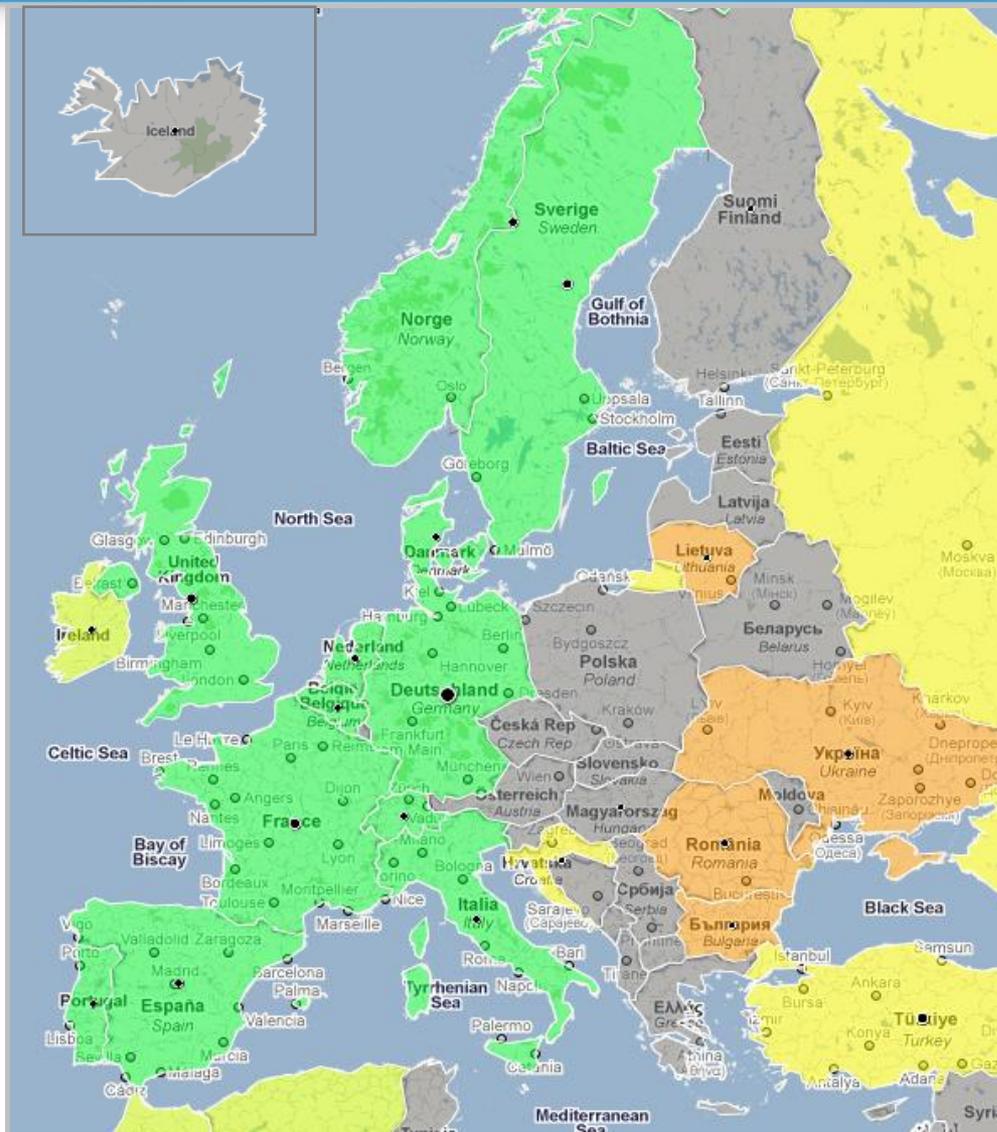
Why change?

- Need for change
 - Growth in a dynamic industry;
 - Complexity, interconnection and interactivity and
 - Lessons learned and commitment to continuous improvement
- Some prescription needed;
- Objectives good for design requirements and
- SPIs – 3 levels

Worldwide Runway Excursions



EASA MS Runway Excursions



➤ Strategy

- The European Safety Strategy is a set of ***policies and objectives*** which are laid down by the European Commission

➤ Programme

- The European Aviation Safety Programme is an integrated set of ***regulations and activities*** aimed at improving safety

➤ Plan

- The European Aviation Safety Plan is a high level safety issues ***assessment*** and related ***action*** plan

- **Safety Management implementation means:**
 - Identifying hazards
 - Managing risks
 - Action plans
 - Performance goals and indicators
 - Continuous monitoring

- **Meeting the challenges of the future**