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UNITING AVIATION

# Asia/Pacific SAR Problem Areas

Len Wicks

*Regional Officer Air Traffic Management,  
ICAO Asia/Pacific Regional Office (Bangkok)*

SAR Seminar Workshop, August 2016





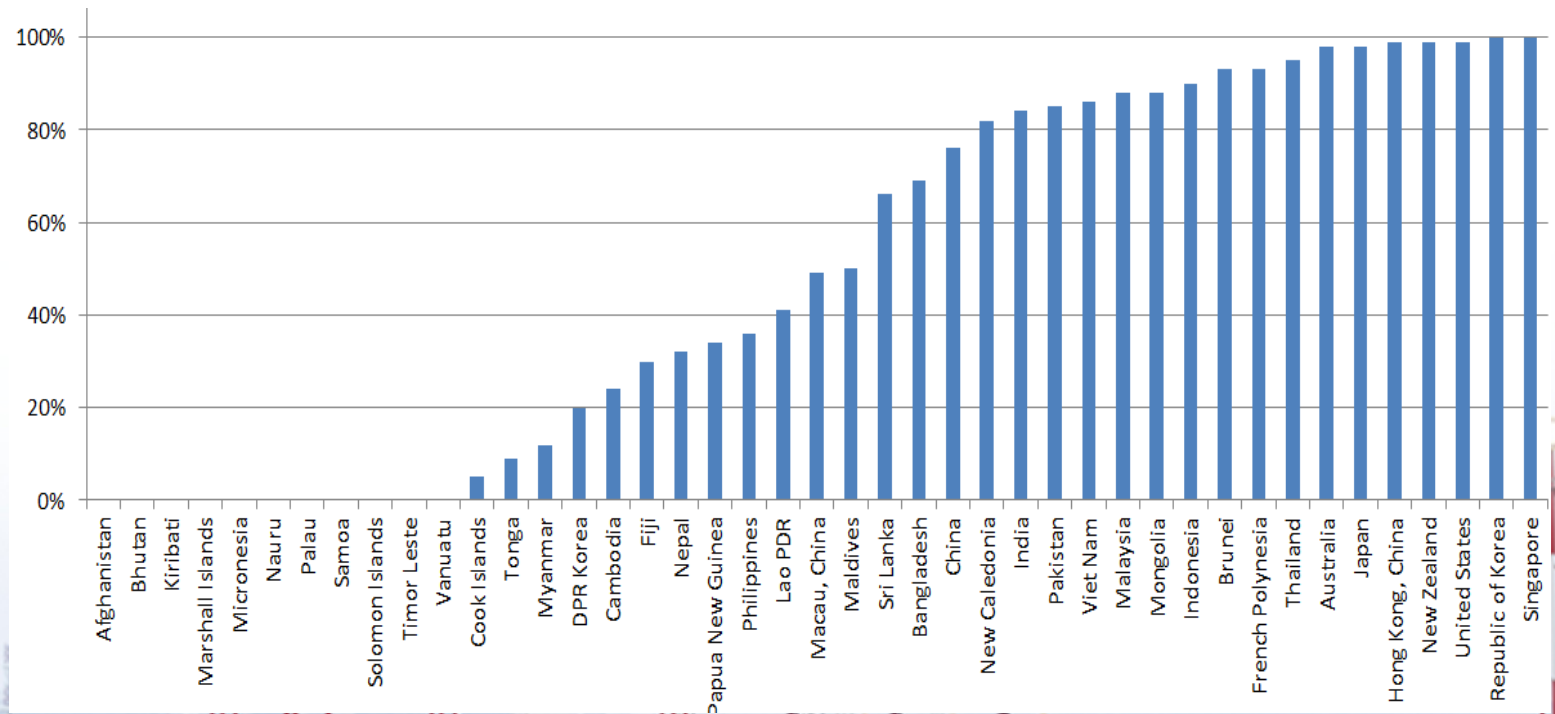
# Contents

- Regional SAR Issues
- Latent Safety Issues Affecting SAR
- Aviation Culture
- Regional SAR Initiatives



# Regional SAR Issues

The overall SAR capability ranking of Asia/Pacific States (SAR Capability Matrix) indicates many small States have SAR deficiencies, and these frequency have large remote areas...



# Regional SAR Issues

## Poor SAREX

- Choreographed events that do not demonstrate or test the SAR system (no search), participants are warned and demonstrate in front of senior officials where people are afraid to make mistakes, and it is really just a crash fire exercise





# Regional SAR Issues

## Poor SAREX

- Ceremonies and glossy magazines,  
...and no (or poor) post-SAREX 'lessons learnt' debrief



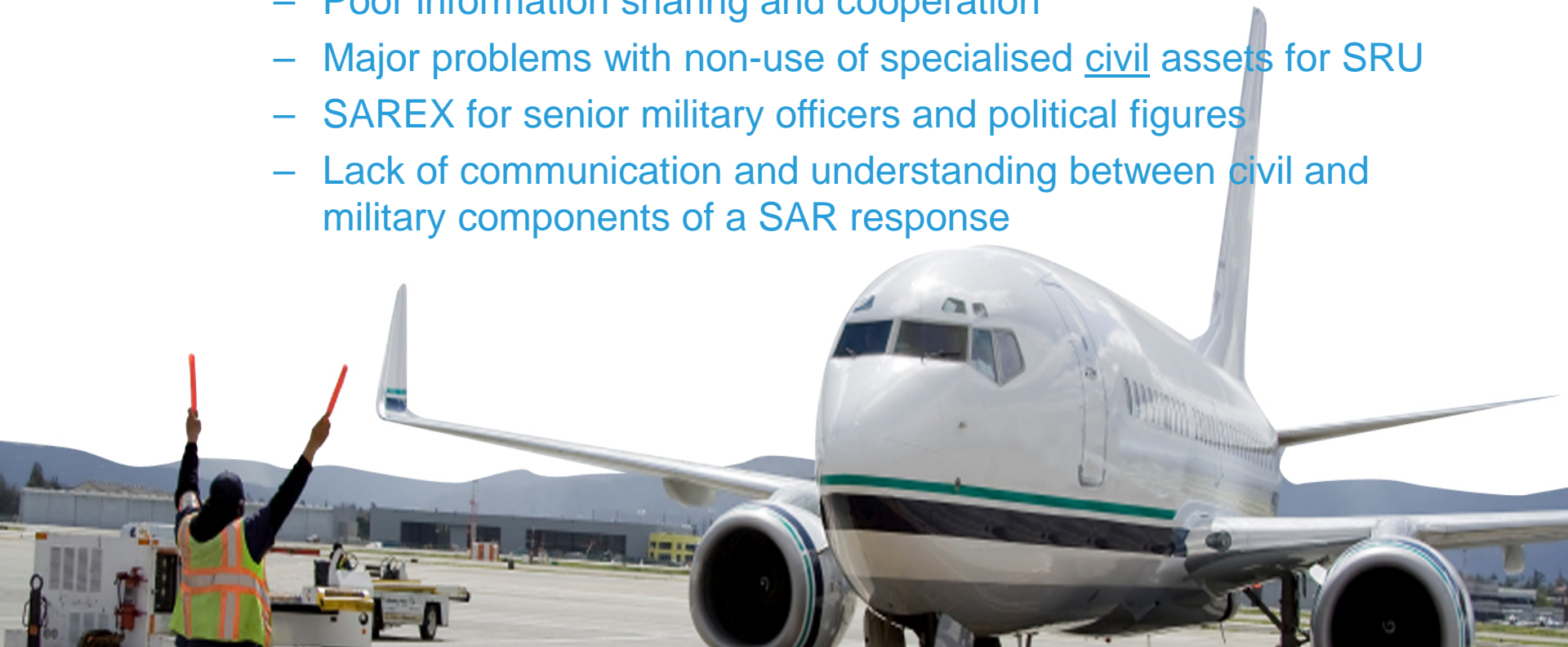
# Regional SAR Issues

- Poor project management change processes
  - non-compliance with Annex 15 promulgation requirements (advanced notice) when implementing changes to procedures and capabilities
  - Lack of understanding of SAR priorities
  - Appears to be largely caused by a lack of management skills and knowledge, and a 'civil service' government department paradigm



# Regional SAR Issues

- Civil/military cooperation deficiencies
  - Poor information sharing and cooperation
  - Major problems with non-use of specialised civil assets for SRU
  - SAREX for senior military officers and political figures
  - Lack of communication and understanding between civil and military components of a SAR response



# Regional SAR Issues

- SAR Agreements
  - States have problems with an inter-governmental SAR Agreement as they often have political involvement
    - (therefore we not insist that they are called ‘Agreements’...
    - we urge States to enact simple arrangements on a technical basis..., and to enact something rather than nothing (i.e.: in stages)!





# Regional SAR Issues

- USOAP CMA
  - Misunderstanding about the Universal Safety Oversight Audit Programme (USOAP) ANS 'Inspectorate' requirements
  - Poor external oversight (potential conflict of interest with the senior managers not being held accountable to anyone but themselves)

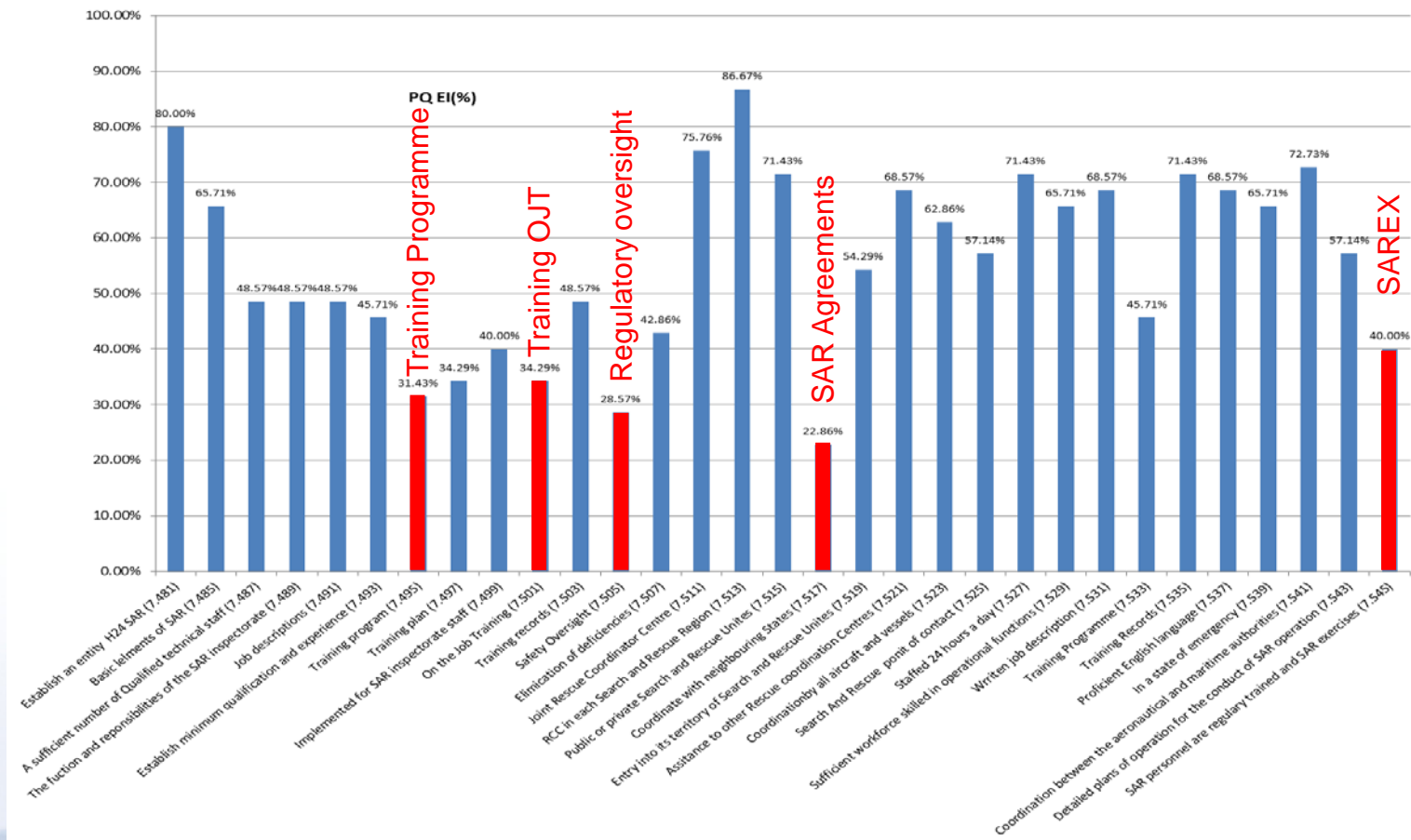




# Regional SAR Issues

- An analysis of the 35 USOAP SAR-related Protocol Questions (PQs) in 2015 indicated an overall Effective Implementation (EI) of only **50.7%** for the Asia/Pacific. The 14 SAR-related questions that are the focus of priority correction action plans:
  - 23% - PQ 7.517 (**SAR coordination with neighbouring States**);
  - 29% - PQ 7.505 (**effective SAR safety oversight**);
  - 31% - PQ 7.495 (**SAR inspectorate training programme**);
  - 34% - PQs 7.497, 7.501 (SAR inspectorate periodic training plan and OJT);
  - 40% - PQs 7.499, 7.545 (SAR inspectorate training implemented; and SAR personnel regular training and appropriate SAR exercises arranged);
  - 43% - PQ 7.507 (elimination of deficiencies identified by SAR inspectors);
  - 46% - PQs 7.493, 7.533 (SAR inspector minimum qualifications and experience and RCC and RSC training programme); and
  - 49% - PQs 7.487, 7.489, 7.491, 7.503 (sufficient SAR safety oversight staff, functions and responsibilities of the SAR inspectorate, SAR inspector job descriptions and SAR inspectorate training records system).

# Regional SAR Issues



# Regional SAR Issues

- English Language Proficiency (ELP) issues
  - Particularly regarding 'non-normal' situation like emergencies
- Use of Personal Electronic Devices (PED) in operational areas
  - Potential for interference with electronic systems
  - Distraction of operational personnel
- Lack of Aviation Culture





# Latent Safety Issues Affecting SAR

- Widening gap between advanced States and lesser developed administrations
  - The No Country Left Behind (NCLB) programme is trying to address this but NCLB is focussed on the State regulator and ASBU Block 1, 2 and 3 may exacerbate the gap without established regional safety bodies



# Latent Safety Issues Affecting SAR

- Widening gap between advanced States and lesser developed administrations
  - Safety regulation is of variable quality from USOAP results, many with an inappropriate safety culture, poorly remunerated staff or lack of resource compared to ANSPs, and potential conflicts of interest
  - Collaboration and joint service provision/research & development in accordance with Seamless ATM thinking is more vital than ever!



# Latent Safety Issues Affecting SAR

- Looking Closer at Safety Culture
  - Some States have allowed aspects of national culture to affect operational areas, instead of instilling a uniform 'aviation culture'
    - Examples are multi-level hierarchical structures with managers who issue decrees in a non- 'Just Culture' environment – limiting the flow of information (open reporting) and acting in a non-consultative and punitive manner



# Latent Safety Issues Affecting SAR

- Poor ATM project management change processes
  - example: non-compliance with Annex 15 promulgation requirements (advanced notice) when implementing changes to ATC procedures
  - example: implementation of new instrument procedures without conducting a proper safety case, and insufficient ATC/pilot training
    - appears to be largely caused by a lack of management skills and knowledge, and a 'civil service' government department paradigm





# Latent Safety Issues Affecting SAR

- Civil/military cooperation deficiencies
  - example: major problems within Chinese airspace (affecting large parts of the Asia/Pacific Region) which may result in increased ATC workload and traffic complexity



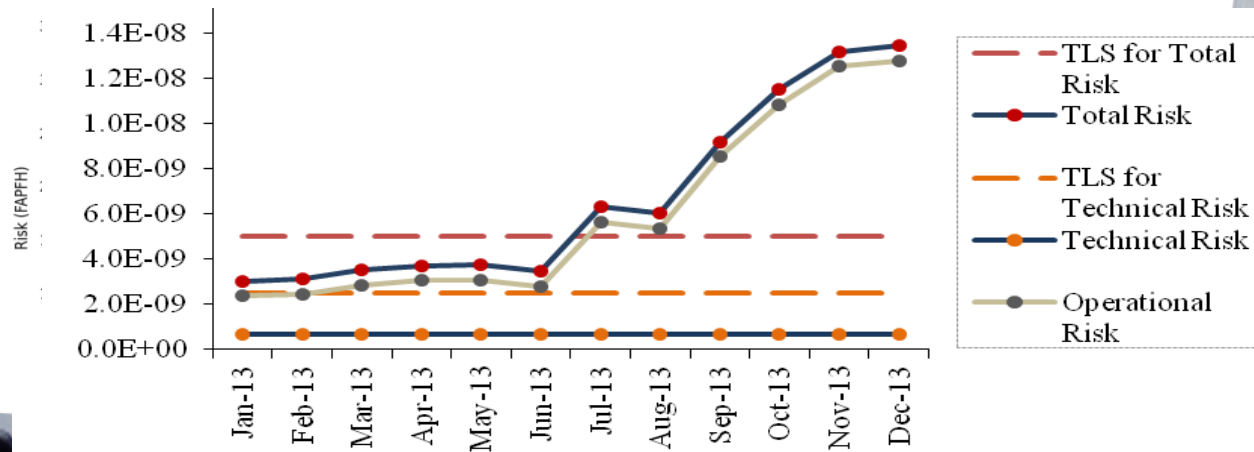
# Latent Safety Issues Affecting SAR

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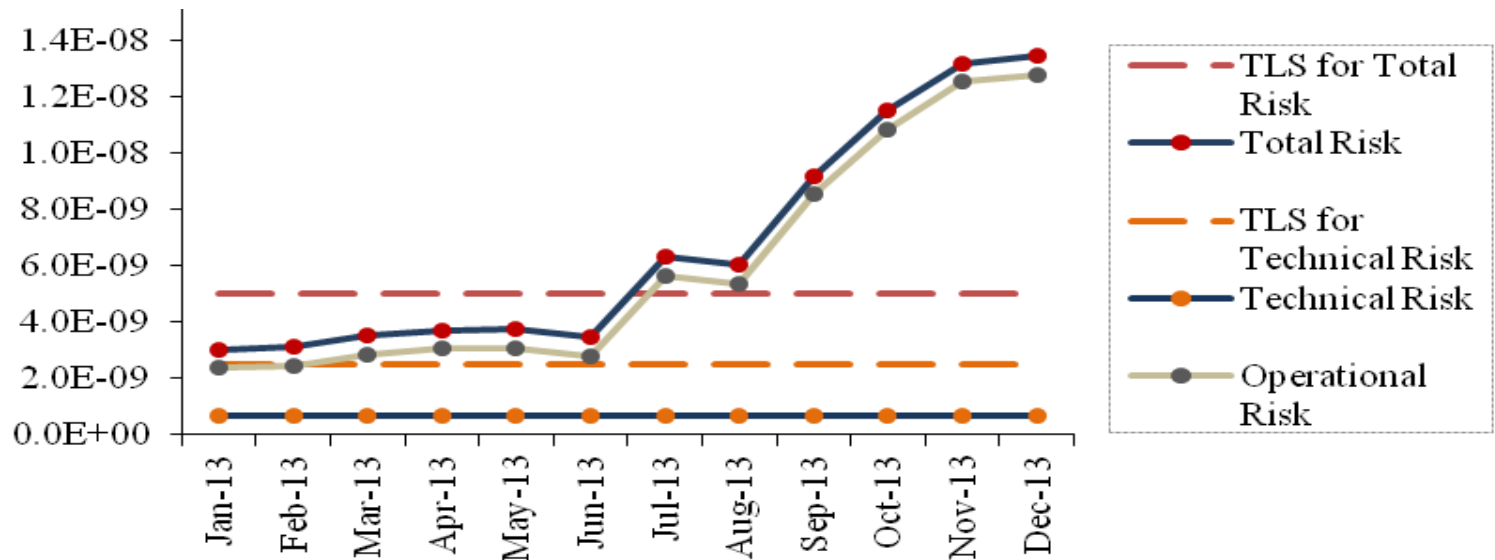
# Aviation Culture

- Looking Closer at Safety Culture
  - Safety issues are sometimes hidden (reporting) and corrective (short-term) action is taken to fix problems instead of preventive (systemic) actions



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# Aviation Culture

## Responsible Management

- Proactive, Safety Priority
- Informed, Open Communication
- Team Management Approach

## Just Culture

- Open Reporting to Management
- Non-Punitive
- Focus on Preventive, not Corrective Action

## AVIATION CULTURE

## Human Factors

- Ergonomic Designs, Human-in-the-Loop Systems
- Fatigue Management
- Training and Use of Simulators
- Safety Nets and Contingency Planning

## Organisational Culture

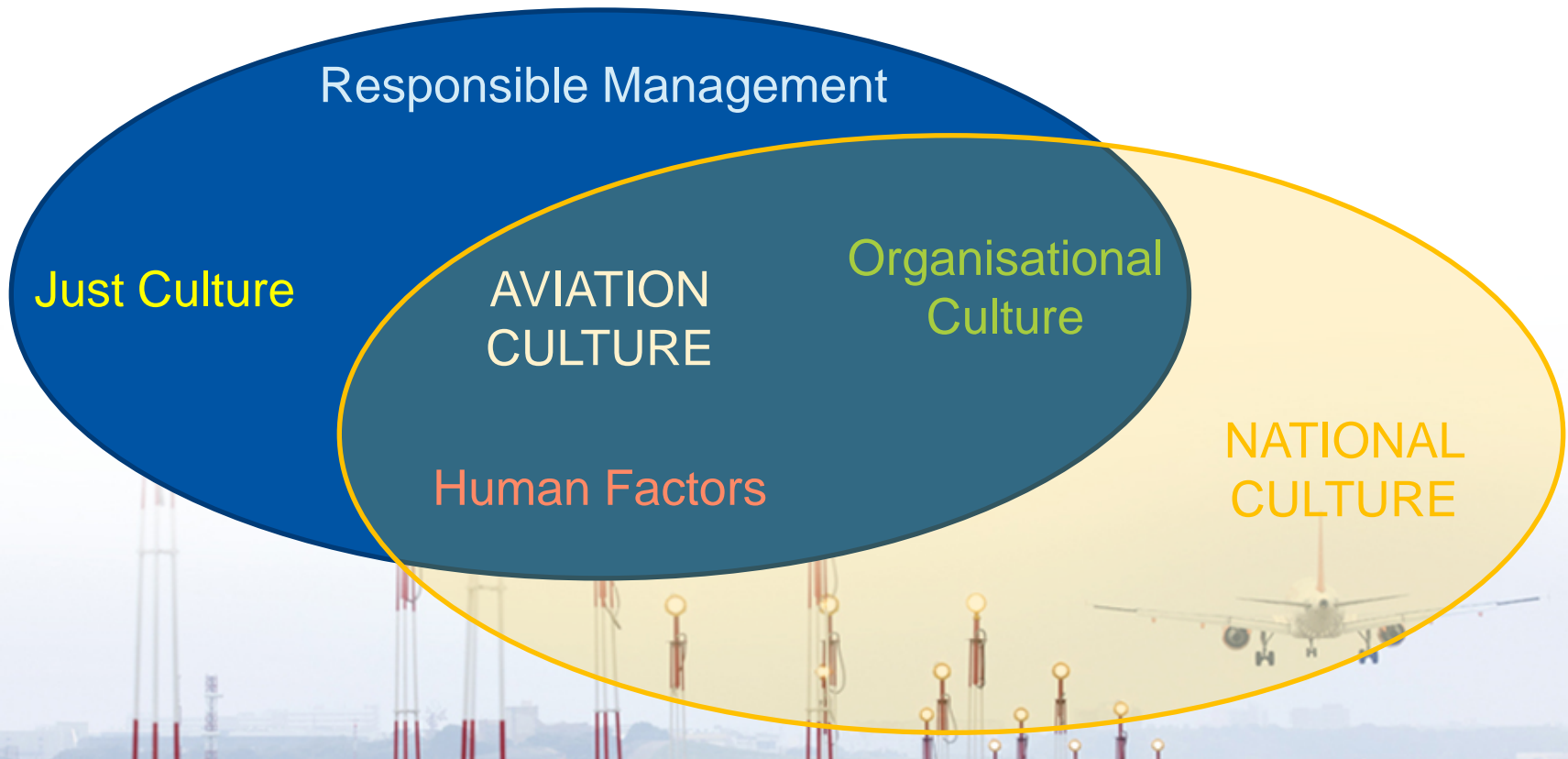
- Effectively Driven by Management
- Imbedded Safety Review and Assessment Teams
- Organic: Responding to the Environment to Learn and Improve



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# Aviation Culture



# Regional SAR Initiatives

- Australia has an Indian Ocean programme assisting States on its SRR boundary to enhance capability for SAR collaboration
- New Zealand has an active programme in the Pacific helping to train and even provide small island nations with SAR vessels
- The Association of Southeast Asian Nations (ASEAN) has a Workgroup seeking to harmonise SAR systems and to integrate ASEAN capability





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THANK YOU

*Aviation is safe because it has the culture to learn and react*

<http://www.icao.int/safety/globaltracking>