Safety Risk Management at the State Level

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Annex 19: Safety Management

General Content Today
- State Safety Programmes (SSP)
- SMS for Service Providers
- Protection of Safety Information

Proposed Additions to SSP
- Safety Management at the State Level
- Safety Performance Improvement
- Emergency Response Planning
Case study

US FEDERAL AVIATION ADMINISTRATION
Overview of U.S. Safety Management

• The U.S. SSP provides the overarching framework for the U.S. safety system
• The FAA SMS provides the details of the FAA approach to safety management, showing how the US will meet most of the tenets of SSP
• The Risk-Based Decision Making Initiative enables the FAA SMS by putting in place the tools and processes to proactively address emerging safety risk using consistent, data-informed approaches to support system-level, risk-based decisions
U.S. SSP Document

- Describes how the U.S. meets the 11 ICAO SSP Framework elements
  - U.S. currently meets SSP intent and most elements through implementation of FAA SMS and SMS in the Lines of Business (LOBs)
- Focuses on roles of FAA and National Transportation Safety Board (NTSB)
  - Although multiple U.S. Government agencies may contribute to U.S. SSP
- Foreword, signed by the FAA Administrator and NTSB Chairperson
- Will be reviewed on a regular basis to ensure it reflects evolving aviation safety standards and practices
FAA SMS Order

- FAA Order 8000.369A, *Safety Management System*, Purpose:
  - Ensure commonality and alignment of SMS implementation across the FAA
- Content:
  - Explains the SMS principles and requirements
  - Establishes the FAA SMS Executive Council and FAA SMS Committee
  - Standardizes terminology for SMS
  - Requires FAA organizations to:
    - Establish guidance for their own SMS activities and their industry segment on implementing SMS
    - Develop and maintain SMS implementation and/or continuous improvement plans
FAA Strategic Initiatives

**Risk-Based Decision Making**
Build on SMS principles to address emerging safety risk by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.

**Global Leadership**
Improve safety, air traffic efficiency, and environmental sustainability across the globe through an integrated, data-informed approach that shapes global standards and enhances collaboration and harmonization.

**National Airspace System**
Lay the foundation for the NAS of the future by accelerating prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services.

**Workforce of the Future**
Prepare FAA’s human capital for the future, by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the U.S. has the world’s safest and most productive aviation sector.

**Foundation for Aviation System of the Future**
Summary

• The U.S. is integrating their safety management activities to have cohesive approach, whereby:
  – The U.S. SSP provides the overarching framework for the U.S. aviation safety system
  – The FAA SMS provides the details of the approach
  – The Risk-Based Decision Making Initiative enables the FAA SMS by putting in place the tools and processes to proactively address emerging safety risk.
UK Approach Similar to FAA

- UK has similar structures and documents to the FAA approach
- Two features spotlighted for discussion
  - Risk Wheel
  - Safety Model
Risk Exposure to UK Citizens is not all regulated by UK CAA

- UK citizens travel on many non-UK airlines and visit foreign destinations
- All flights use unregulated ground services
- Generated new international partnership projects
### PRIORITY ROOT CAUSES

**PEOPLE**
- Pilot Performance
- Fatigue Management
- ATCO Performance
- Engineer Performance
- Ground Staff Performance
- Automation / HMI

**TECHNOLOGY**
- Helicopter Tech Reliability
- Precision Approaches
- Un-stabilised Approaches
- TCAS / EGPWS Available/
  Correct Response
- Pilot Information
- Production Supply Chain
- Lithium Batteries

**OPS ENVIRONMENT**
- Helicopter Ops Environment
  CAT in Class G
- Ground Operations/ De-Icing
- Some Foreign Operators
- Destination Hotspots
- Weather / Turbulence
- New Business Models
- CAS Infringement
- Laser Threat
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<th>UK Examples</th>
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<td><strong>Strategic Planning</strong></td>
<td>- Strategic Initiatives to allow for a more cohesive approach to enhance safety</td>
<td>- Strategic initiatives to improve actions targeted to risk and better integrated internationally</td>
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| **Systematic**                  | - FAA SMS including hazard identification and risk mitigation  
- Integrates SMS in core activities  
- Performance Based Oversight | - CAA SMS including hazard identification and risk mitigation  
- Integrates SMS in core activities  
- Performance Based Oversight |
| **Annex 19 Amdt 1 max interpretation** | **Collaborative**  
- US CAST FAA - Industry  
- International work e.g. SM ICG  
- ASIAS ‘big data’ system | **Proactive**  
- Strategic Initiatives  
- Measure Continuous Improvement  
- Safety data analysed & shared |
| **Annex 19 Amdt 1 max interpretation** | **Reactive**  
- Clear FAA & NTSB responsibilities  
- Event causes investigated, analysed and addressed  
- Safety Oversight focus on risk  
- Training & Publications | **Reactive**  
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**Strategic Planning**

- Strategic Initiatives to allow for a more cohesive approach to enhance safety

**Systematic**

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Case study
SMALLER STATES
What if I am a Small State: Scalability

**Larger / Mature**
- Use extensive data analysis from own industry reports to determine risk profile
- Programmes to generate best practice/technology for all areas of aviation
- Programmes to explore where issues may arise in (inter)national systems

**Smaller/ Emerging**
- Use internationally published data analysis for main risks and add key local hazards
- Apply internationally published best practice/tools to target selected risks
- Workshop with all front line disciplines present to discuss local hotspot situation
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