Cabin Safety - Integration of SMS and SSP Presented by Emily Manduku

KCAA - FOI Cabin Safety

### **SSP – SMS** Zero fatalities in commercial operations by 2030 and beyond



## Cabin operations and the State Safety Programme

- An SSP encompasses the 4 components: State safety policy, objectives and resources; State safety risk management; State safety assurance; and State safety promotion.
- As part of its SSP, every signatory State should apply the concept of SRM to all aspects of cabin operations, including:
- i. rulemaking and surveillance related to cabin operations, including passenger safety aspects;
- ii. issuing regulatory exemptions or alleviations;
- iii. revising operator procedures and documentation (e.g. CCOM);
- iv. operator's cabin crew training content;
- v. cabin crew performance, including during incidents and accidents; 2-8 Manual on Safety Management in Cabin Operations
- vi. approval/certification of equipment and furnishings on board aircraft, including new products and retrofits of cabin interiors;
- vii. analysis of the operational environment and its impact on operational safety at the national level
- A review of the effectiveness of the operator's SRM process and change management procedures by the State important when evaluating proposed changes to operator procedures, training content and delivery methods, as well as the introduction of new pieces of equipment, products and services in the cabin
- Cabin safety aspects should feature prominently in the NASP to communicate the value and need for activities related to cabin operations and the safety of the flying public addressing specific operational safety risks the State and its national operators will work to mitigate (e.g. unruly passengers, lithium battery fires in the cabin, turbulence-related injuries, etc.).

### ICAO's Cabin Safety Programme Focuses on:



## Cabin operations and the safety management system

Leadership; key roles related to cabin operations SMS should be included. These encompass the following positions under the areas of operations and training:



## Cabin operations and the safety management system



Outline levels of management defining who has authority to make decisions regarding safety risk tolerability specific to cabin operations-related issues. Cabin operations and the safety management system (contd.)

- Safety Risk Management;
- Establishment of procedures to conduct safety risk assessments of cabin operations in a consistent and systematic manner.
- Define methodology to be used to determine safety risk tolerability to guide on recommended actions based on the results of the assessment
- Employ a data-driven approach to validate the results based on evidence

# Cabin operations and the safety management system (contd.)

- Safety reporting; mandatory safety reporting (MOR) systems and occurrences that the operator must report to the State may include, but are not limited to:
- i. evacuation of crew and/or passengers;
- ii. use of fire extinguishing or suppression agents;
- iii. fire, smoke and fume events;
- iv. events requiring the use of emergency systems or equipment;
- v. anticipated emergency landing;
- vi. bomb threats, hijack or similar events, security breaches, unruly passengers, stowaways and severe turbulence;
- vii. crew incapacitation
- viii. spillage, leakage or any event related to the transport of dangerous goods;
- ix. decompression

- The **quality of a report** will influence if and how the operator may use it within its SMS.
- Address subject matter or the problem being reported; detailed enough to sufficiently describe the occurrence;
- Encourage reporting of minor events as part of the overall safety reporting system
- Outline a process to collect, analyse and provide feedback to cabin crew members who report hazards or an occurrences

# Cabin operations and the safety management system (contd.)

- **Training;** should address hazard identification, effective communication and quality of reporting as part of the operator's safety risk management.
- ERP; Cabin ops representatives should be included in the planning, preparation, execution and evaluation of ERP periodic exercises

## Cabin safety's contribution to the SSP

SMS

- Purpose, and implementation
- Objectives of SPIs and SPTs, defined target levels
  - Safety Enhancement Initiatives

Standards in training and education of cabin crew

Risk assessment and mitigation strategies

Reporting and investigation of incidents

HRC – Survivability rates during accidents and incidents



Cabin safety contributes to the prevention of accidents and incidents, the protection of the aircraft's occupants, through proactive safety management, including hazard identification and safety risk management, and the increase of survivability in the event of an emergency situation.

## Challenges

#### Operational

- Evolving technologies (e.g., inflight Wi-Fi, personal electronic devices)
- Increase in passenger numbers and diverse demographics
- Unruly pax
- Increased cabin baggage
- Health risks
- Threats of terrorism and security breaches

#### Organizational

- Lack of/inadequate cabin safety SMS leadership
- Lack of defined SPIs and SPTs
- Training standards inadequacy
- Minimal useable cabin safety data to aid decision-making (quality and quantity of safety reports) – 'Reporting culture'
- Poor fatigue management Rostering policies
- Competing priorities (Covid restart)

#### **Opportunities for Improving Cabin Safety**

- Enhanced infrastructure to support safety reporting Use of robust C-EFB Data collection
- Establishing cabin safety SMS leadership- vision and safety culture
- Collaboration of safety activity at regional level and creating sharing networks
- Enhanced training programs for cabin crew:-Implementation of the CBTA.
- Adoption of integrated Safety Models
- Strengthening security measures: Enforcement policies on unruly pax





#### Conclusion

- Employ a data-driven decision making approach in cabin safety to provide measurable indicators and analyze trends – ultimately feeding into the SSP
- Implement CBTA training to refine crew KSAs for better safety outcomes during emergencies
- Stricter unruly pax penalty policies
- Regional collaboration
- SEI's for continuous improvement

Cabin safety leadership to steer a positive safety culture

Ongoing vigilance and improvement 'safety first is not necessarily safety always'





Thank you!