



# SMS and Dangerous Goods

Oversight System



# Safety Management Systems (SMS)

- What is SMS?
- SMS Components
- State Safety Programme (SSP)
- Governing Documents
  - Annex 19
  - ICAO SMM
  - Annex's 6 and 18 (for Dangerous Goods)



# SMS Definition

- SMS is a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.



# The Four Components of SMS

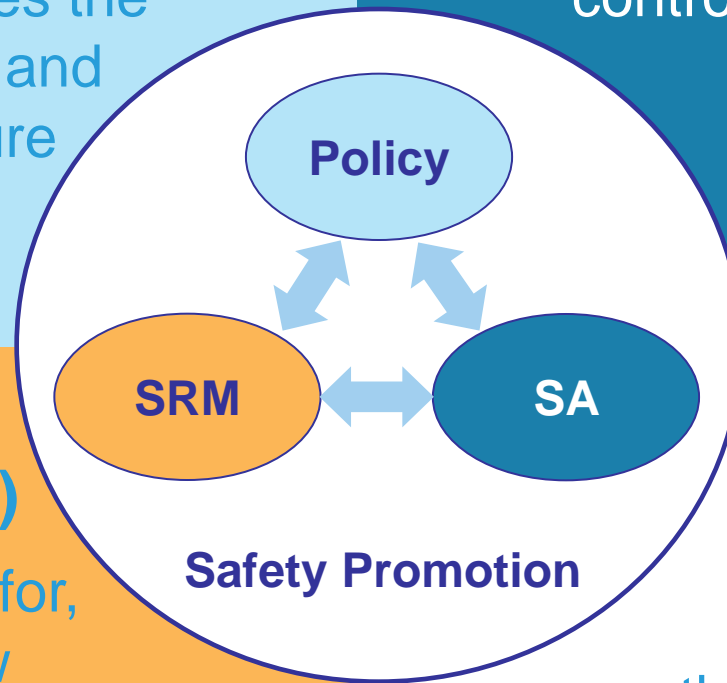
- Safety Policy
- Safety Risk Management (SRM)
- Safety Assurance (SA)
- Safety Promotion

## Safety Policy

Establishes senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals

## Safety Assurance (SA)

Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards



## Safety Risk Management (SRM)

Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk

## Safety Promotion

Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce



# Annex 19 – Safety Management

- Highlights the **importance of safety management** at the State level;
- Enhances safety by **consolidating safety management provisions** applicable to multiple aviation domains
- Facilitates the **evolution of safety management** provisions;
- An opportunity to **further promote the implementation of SMS and SSP** provisions; and
- A process established to **analyze feedback** received regarding Annex 19 and safety management implementation.



# Why SMS?

- Global Aviation system is changing rapidly
- Repetitive, recurrent common cause accidents (low hanging fruit) essentially eliminated
- Increase in system demand and complexity
- Dangerous Goods pose a risk to global aviation
- Continuous evolution in application of system safety concepts in the aviation system
- Provides a comprehensive, systemic, and consistent approach supporting:
  - The identification of systemic issues
  - Proactive approach to safety risk management and decisions based on risk rather than in reaction to an accident or incident



# State Safety Programme (SSP)

- Required by Annex 19
  - Appendix A contains framework
- *Guidance to States on SSPs is contained in the Safety Management Manual (SMM) (Doc 9859)*





# ICAO Definition of SSP

- Integrated set of regulations and activities aimed at improving safety
- Management system for management of safety by the State
- Designed to achieve an acceptable level of safety performance
- SSP framework includes SMS requirements for Product/Service Providers



# ICAO Annex 18 and 19 Interface

- **Annex 18 CHAPTER 8. OPERATOR'S RESPONSIBILITIES**
  - *Note 1.— Annex 19 includes safety management provisions for air operators. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).*
  - *Note 2.— The carriage of dangerous goods is included in the scope of the operator's safety management system (SMS).*
    - *DGP 24, November 2013*



# SMS and Dangerous Goods

- Annex 6
  - Contains SARPs for State and Operator Responsibilities
  - Chapter 14, Dangerous Goods
  - Appendix K – Dangerous Goods



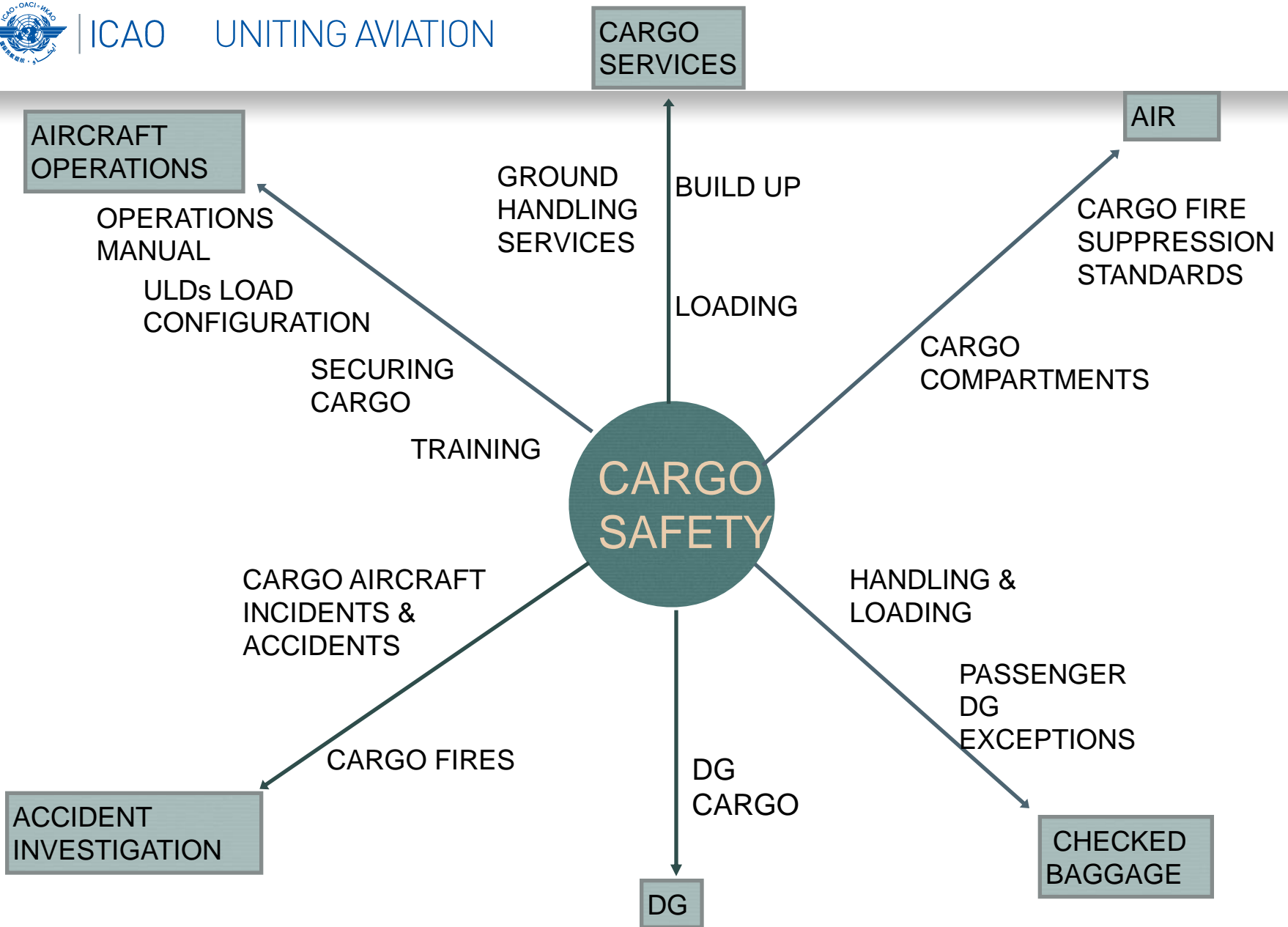
- **FAA and SMS/SSP**
- **Safety Oversight Operations**
  - Collaboration between Dangerous Goods and Flight Operations
  - Data Collection and Analysis
  - Air Operators SMS Approvals
  - Affirmation of Dangerous Goods System Performance as part of SMS
  - Risk based decision making

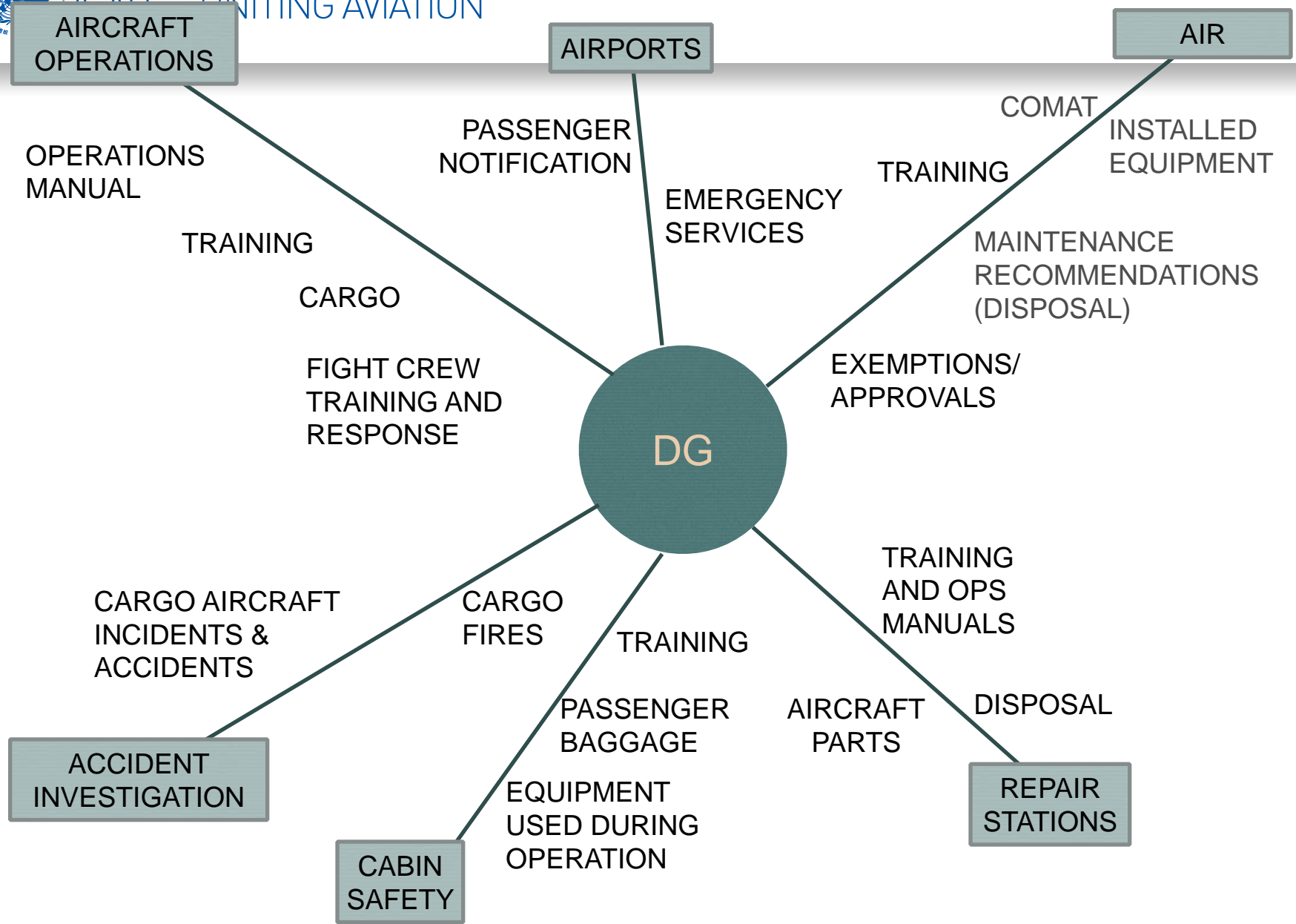


- **State Oversight for Dangerous Goods**
  - State Legislation in place requiring Operators to implement SMS
  - Scheduled Inspections Based on Risk
  - Dangerous Goods Inspectors coordinate with Flight Safety Inspectors on safety oversight inspection outcomes and information.
  - All data is entered into a single database. This eliminates database duplication and provides a framework for analysis and risk management.
  - Already realizing the benefits of this approach with safety related data results in identifying systemic issues with Dangerous Goods transportation



- **Dangerous Goods Inspections**
  - System Design Assessments (Manuals and Training Programs)
    - Policies, Processes, Procedures and Training
  - System Performance Assessments (Compliance Inspections)
    - Compliance with accepted or approved procedures and regulations.









- **Data Collection for Dangerous Goods**
  - The data collection is directed at gathering information on the system functions of Acceptance, Rejection, Handling, Storage, DG COMAT, Loading and Training.
  - The data collected allows us to focus on specific areas of concern or interest to evaluate system performance.
  - Risk based decision making to determine future inspection activity or targeted actions is based on data.



- Continue to collaborate with Flight Safety Organization
- Continue development of safety oversight systems and data collection methodologies
- Continue developing and improving FAA SMS



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