International Civil Aviation Organization

The Seventh Meeting of the Asia/Pacific
Aerodrome Assistance Working Group (AP-AA/WG/7)

Bangkok, Thailand, 27 to 30 May 2025

Agenda Item 3: **Aerodrome Certification and Safety Management System**

SAFETY PROMOTION INITIATIVES AT INDIRA GANDHI INTERNATIONAL AIRPORT

(Presented by India)

SUMMARY

Fact sheet of IGI Airport: Delhi airport is identified by the IATA code DEL and the ICAO code VIDP. It features four runways: 11L-29R (4400m), 11R-29L (4430m), 10-28 (3813m), and 09-27 (2816m). There are three terminals: Terminal 1 and Terminal 2 for domestic operations, and Terminal 3 for both domestic and international flights.

In the 2023-24 period, the airport handled 73,673,708 passengers, facilitated 456,183 aircraft movements, and managed 1,003,306 tons of cargo. Additionally, it has a 2.1 km long elevated cross taxiway, which contributes to an annual reduction of 55,000 tons of CO_2 emissions.

Safety Management System (SMS): The safety management practices implemented by Delhi International Airport Limited (DIAL) at IGI Airport outlines the organization's commitment to health, safety, and well-being for its employees and stakeholders. DIAL as a responsible corporate understands the social and economic importance of health, safety & wellbeing of its employee and stakeholders working at IGI Airport. To ensure the same DIAL has established and maintains a robust Safety Managements System (SMS) at IGI Airport. Over the years, DIAL SMS has achieved significant enhancement in safety awareness among the employees and staff from our stakeholders, contractors and service providers.

1. INTRODUCTION

1.1 **Foundation and Frameworks:**

- ICAO SMS: DIAL SMS is aligned with the International Civil Aviation Organization (ICAO) Safety Management System (SMS) framework, adhering to guidelines from ICAO Annex 19, ICAO Document 9859, and the Civil Aviation Requirements (CAR) issued by India's Directorate General of Civil Aviation (DGCA).

- ISO 45001:2018: DIAL has established and implemented the ISO 45001:2018 Occupational Health & Safety Management System (OH&SMS), achieving certification.

1.2   Key Components of DIAL SMS:

i.   Safety Policy: Serves as the foundation for robust safety performance and compliance, promoting health and safety measures and preventing harm.

ii.   Emergency Response Plan: The Airport Emergency Plan (DAEP) is developed per DGCA and ICAO standards. The Aerodrome Rescue & Fire Fighting (ARFF) team conducts regular emergency exercises to ensure preparedness.

iii.   Safety Occurrence Management: DIAL maintains a reporting system for all safety occurrences (incidents, accidents, near misses), investigating each to determine root causes and initiate corrective actions. Data collected is used for trend analysis and shared in committee meetings.

iv.   Safety Risk Management: This continuous process involves hazard identification, risk assessment, mitigation, and acceptance. DIAL actively assesses hazards through various channels and updates a hazard database for ongoing risk management.

v.   Safety Assurance:

- Performance Monitoring: DIAL monitors safety performance using Safety Performance Indicators (SPIs) and Safety Performance Targets (SPTs) to enable continual improvement.

- Continuous Improvement: A trained Internal Auditor team conducts regular audits and inspections, with outcomes shared for necessary action. A Work Permit System is also in place to manage potentially hazardous work.

vi.   Safety Promotion: DIAL focuses on safety training, education, and general awareness initiatives for employees and stakeholders across various domains, including SMS/OH&SMS and specific operational training.

vii.   Safety Communication: A non-punitive safety reporting system encourages employees to report hazards. Recognition programs are in place to reward safe behaviours and hazard reporting.

1.3   Safety Consultation and Participation: DIAL has established various safety committees (SRC, RSTM, ASCM, TSCM) to ensure effective communication and collaboration among stakeholders in aviation safety.

Four Pillars and eleven elements of safety management system

1.   Safety policy and objectives.
- State safety legislative framework
- State safety responsibilities and accountabilities
- Accident and incident investigation
- Enforcement policy

2.   Safety risk management.
- Safety requirements for the service provider's SMS
- Agreement on the service provider's safety performance

3.   Safety assurance; and
   • Safety oversight
   • Safety data collection, analysis and exchange
   • Safety-data-driven targeting of oversight of areas of greater concern or need

4.   Safety promotion
   • Internal training, communication and dissemination of safety information
   • External training, communication and dissemination of safety information

2.   DISCUSSION

2.1   Safety Pillar: Safety Promotion Initiatives taken at IGI Airport:

Internal training, communication and dissemination of safety information
DIAL provides training and fosters awareness along with two-way communication of safety relevant information to promote the development of an organizational culture that fosters an effective and efficient SSP.

Internal trainings:
   • Safety Management System (SMS) Training (for all employees)
   • Hazard Identification & Risk Assessment Training
   • Incident & Accident Reporting Procedures
   • Emergency Response Training
   • Human Factors
   • Fatigue Risk Management
   • Regulatory Compliance & Updates (DGCA/ICAO/ ACI requirements)
   • Safety Culture Awareness Programs.
   • FOD management
   • Window of Circadian Low
   • Human Factors (for GHA's, Self-handlers and, MROs, etc.)
   • Jet blast and ingestion
   • Low visibility procedure.
   • Monsoon preparedness
   • Airfield driving training

Communication and dissemination of Safety Information
   • Safety Bulletins & Newsletters
   • Regular Safety Briefings & Meetings
   • Focused group meetings (dedicated safety discussions through ASCM)
   • Incident Reports & Lessons Learned (without blame culture)
   • Safety Alerts & Advisories
   • Regulatory Updates & Best Practices
   • Standard Operating Procedures (SOPs) & Guidelines
   • Case Studies of Past Incidents & Accidents
   • Posters & Visual Aids
   • Safety campaign (Twice a year)
   • Emergency Response & Crisis Management Drills
   • FOD management

External training, communication and dissemination of safety information
DIAL provides training and fosters awareness along with two-way communication of safety relevant information to promote the development of an organizational culture that fosters an effective and efficient SSP.

External Training
- Module changed and made it specific to IGI Airport.
- Hazard Identification & Risk Mitigation Workshops
- Incident & Accident Investigation Training (for external agencies)
- Emergency Response & Crisis Management Drills
- FOD management
- Window of Circadian Low
- Human Factors (for GHA's, Self-handlers and MROs)
- Jet blast and ingestion
- Low visibility procedure.
- Monsoon preparedness
- Airfield driving training Defensive Driving training for HMV (Heavy Motor Vehicle) drivers holding a valid ADP
- Ensure implementation of month's training on specialised equipment (MDL, LDL, EBT, passenger coach, push-back/tow-truck).
- Drivers' skill check – Random 15-20 personnel holding an ADP is examined by self & ground handling agencies on monthly basis and reviewed monthly.
- Weekly briefing for drivers on apron rules and regulations.
- Safety campaign (Twice a year)

Change management training: -
- Change of catering entry process to ensure the safety of catering personnel.
- Head of stand road marking changed to continuous line which shows over- taking is prohibited
- Nomenclature of IGI Airport.
- Change pushback procedure on stand. (leading to taxiway)

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3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a)   note the information contained in this paper; and

b)   discuss any relevant matters as appropriate.

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