

**58th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

*Dhaka, Bangladesh
15 to 19 October 2023*

AGENDA ITEM 3: AVIATION SAFETY

**STRATEGIES FOR ENHANCING AND SUPPORTING THE
SAFETY MANAGEMENT OF GROUND HANDLING**

(Presented by the Republic of Korea)

SUMMARY

The Republic of Korea has been proactively establishing and implementing the regulations for the safety management of ground handling since 2022, and after analyzing the implementation results for about 2 years, we have identified several challenges. This discussion paper presents the Republic of Korea's efforts to strengthen the safety management of ground handling as well as support the ground handling service providers based on the identified several challenges as the aviation industry is back on track.

STRATEGIES FOR ENHANCING AND SUPPORTING THE SAFETY MANAGEMENT OF GROUND HANDLING

1. INTRODUCTION

1.1 Ground handling plays an essential role in the aviation industry, but safety risks and deterioration of ground handling service quality are increasing due to staffing issues, insufficient quality management, and the lack of international standards and recommended practices.

1.2 ICAO Ground Handling Task Force (GHTF) has been developing SARPs in *Annex 14, PANS-aerodromes, and Doc 10121* since 2014. The adoption process of *Annex 14, Volume I* amendment proposals has begun through State Letter consultation in May 2023 pertaining to the safety management of ground handling.

1.3 The Republic of Korea proactively established the criteria and procedures to evaluate the performance capability of ground handling service providers, service agreements for mutual cooperation between airport operators and ground handling service providers, and quality assessment system to conduct continuous performance evaluation of the organizational operational adequacy, efficiency, safety management and environmental protection efforts of ground handling service providers (GHSPs), inducing voluntary improvement of ground handling service quality in cooperation with airport operators, ground handling service providers and other relevant organizations, as presented through DP/3/17 at DGCA 57 in July 2022.

1.4 After analyzing the safety management implementation results of ground handling for about 2 years, the following challenges have been identified.

- The GHSPs' business structure is too labor-intensive to afford the safety investment.
- Worker carelessness is the main cause of ground accidents or incidents, repeatedly.
- Manpower shortage and old ground support equipment (GSE)

1.5 Based on the identified challenges, the Republic of Korea has been taking various measures to strengthen safety management as well as improve operating conditions and working environments for GHSPs as the aviation industry is back on track.

2. DISCUSSION

Support for the ground handling service providers

2.1 High labor intensity is leading to reluctance to work and difficulty in attracting new workers, and small-scale GHSPs lack places for worker safety education and equipment practice.

2.2 We have been providing places for the safety education and equipment practice, expansion of airport bus late-night routes for late-night commuting, free parking and baggage handling support equipment such as transfer belt. We are also considering to allow foreign employment and autonomous GSE with the relevant authorities.

2.3 In addition, for airport decarbonization we have been providing subsidies to GHSPs for decommissioning old ground support equipment (GSE) that are more likely to cause accidents or incidents due to insufficient safety functions and converting them into eco-friendly GSE, while establishing a mid- to long-term plan to expand eco-friendly charging facilities for GSE.

		
<p>Transfer belt</p>	<p>Autonomous GSE</p>	<p>Place for safety education</p>

Expansion of safety facilities for workers and improvement of working environments

2.4 Despite the expansion of facilities such traffic safety signs, CCTVs, and pedestrian walkways at aprons from 2020 to 2022, ground accidents or incidents continue to occur due to the carelessness of on-site workers.

2.5 We are planning to install the following damage prevention facilities and equipment additionally to prevent ground accidents, reinforce the safety education for workers based on actual cases of ground accidents, and check the performance monthly by the end of this year.

- Remote Vehicle Control System that provides alert and auto-stop functions for step cars
- Rearview video and approach warning sound in belt loaders, refueling vehicles
- Footrest under the door for accident-prone vehicles

<p>Remote Vehicle Control System</p>	<p>Rearview video & warning sound</p>	<p>Footrest</p>
		

2.6 In consideration of poor working conditions such as lighting strikes, heat waves, severe cold, and outdoor & night work, we established the procedures in the aerodrome manual to immediately suspend ground handling when a lightning strike occurs within 5 km of the airport in August 2023, and installed additional break facilities and restrooms at aprons. Also we are planning to establish the lightning warning dissemination systems such as sirens, suspension broadcasts in stages.

Strengthening the safety management and improving regulations

2.7 Ground accidents or incidents are mainly caused by violations of safety rules such as speeding and failing to drive safely, as well as driver inattention, and the workers' safety awareness needs to be improved.

2.8 We have been conducting a special enforcement on safety violations at all airports for GHSPs, and strengthening safety awareness for information sharing and consultation on safety in the

movement area by increasing the frequency of the operation council from once a year to twice or more by the airport operator with GHSPs, airlines, etc.

2.9 Suspensions of work for violation of safety management standards is burdensome to other workers and can be circumvented by performing the suspension on an off-duty day, and in the event of a ground accident, there is a need to investigate data on GHSPs and request a situation report, but the legal basis is insufficient.

2.10 To tackle this issue, we have proposed an amendment to the Airport Facilities Act that would impose fines instead of suspensions to ensure effectiveness and establish inspection and investigation powers of the government (regional aviation offices) to secure its administrative power and better understand the safety management status of GHSPs in 2023.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Note the Republic of Korea's efforts in strengthening and supporting the safety management of ground handling;
- b) Encourage Member States and industry stakeholders to share their activities and challenges in the safety management of ground handling;
- c) Discuss any relevant matters as appropriate.

— END —

Executive Summary for consideration for inclusion in the Conference Report

**STRATEGIES FOR ENHANCING AND SUPPORTING
THE SAFETY MANAGEMENT OF GROUND HANDLING**

The Conference noted that ICAO Ground Handling Task Force (GHTF) has been developing SARPs in Annex 14, PANS-aerodromes, and Doc 10121 since 2014. The adoption process of Annex 14, Volume I amendment proposals has begun through State Letter consultation in June 2023 pertaining to the safety management of ground handling.

The Conference was informed that the Republic of Korea has been proactively establishing and implementing the regulations for the safety management of ground handling since 2022, and after analyzing the implementation results for about 2 years, we have identified several challenges. Based on the identified several challenges, the Republic of Korea has been taking various measures to strengthen safety management as well as improve operating conditions and working environment for GHSPs as the aviation industry is back on track.