

International Civil Aviation Organization

Eighth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/8)

Bangkok, Thailand, 15 to 19 July 2024

Agenda Item 6: Airport Environmental Initiatives

EFFECTIVE AIRPORT NOISE MANAGEMENT FOR HARMONIOUS COEXISTENCE

(Presented by Republic of Korea)

SUMMARY

Since 1992, the Republic of Korea has been committed to managing airport noise through comprehensive measures. Guided by the Airport Noise Prevention and Areas Assistance Act and ICAO Doc 9829, these initiatives aim to enhance resident welfare, ensure a pleasant living environment, and support the sustainable growth of air traffic. Key projects include installing soundproofing and air conditioners, subsidizing electricity bills, and supporting TV reception fees. The Republic of Korea conducts noise impact assessments every five years, implements low-noise flight procedures, and supports resident-focused projects. Future plans involve refining noise charge classifications and expediting the installation of air conditioners through annual allowances for residents.

1. INTRODUCTION

- 1.1 Based on the Airport Noise Prevention and Areas Assistance Act and ICAO Doc 9829, the Republic of Korea is effectively managing airport noise to improve the welfare of residents, ensure a pleasant living environment, and support the sustainable growth of air traffic by preventing and mitigating airport noise and implementing related projects.
- 1.2 The Republic of Korea oversees noise management for civilian airports, while the Ministry of National Defense handles military airports. Key airport noise countermeasure projects include installing residential soundproofing facilities and air conditioners, subsidizing electricity bills, and supporting TV reception fees. Additionally, airport operators conduct various resident support projects.
- 1.3 To minimize aircraft noise, the Republic of Korea has established low-noise flight procedures, including runway operation changes, restrictions on engine run-ups, and delayed flap settings during landing.

2. DISCUSSION

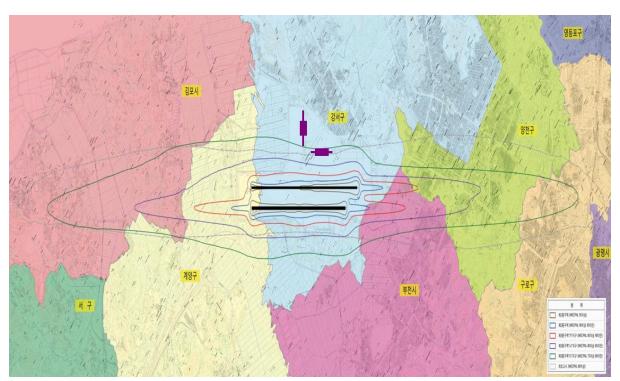
History of Airports Noise Management

2.1 Since 1992, the Republic of Korea has implemented measures to manage airport noise through the Aviation Act. In 2010, a dedicated law for airport noise management was enacted, leading to systematic and increased countermeasures, including a medium-term plan every five years.

Target of Airport Noise Management

The Republic of Korea conducts noise impact assessments around airports every five years, designating areas with noise levels exceeding 61 Lden dB(A) as requiring countermeasures. As of 2024, there are six airports with noise countermeasure projects covering 113 km², affecting 82,431 households and 218,959 residents. Additionally, areas with noise levels exceeding 57 Lden dB(A) are designated as nearby areas, covering 88 km² and affecting 189,700 households and 526,204 residents. Additionally, the Republic of Korea further subdivides noise management areas for more detailed control. Areas with noise levels above 79 Lden dB(A) are designated as Type 1 areas, those above 75 Lden dB as Type 2 areas, and those above 61 Lden dB as Type 3 areas. Moreover, Type 3 areas are further divided into subcategories A, B, and C. For more detailed information, please refer to the table below

Classification			Noise Level(Lden dB)
Requiring	Type 1		79 ↑
countermeasures Area	Type 2		75 ~ 79
	Type 3	A	70 ~ 75
		В	66 ~ 70
		C	61 ~ 66
Nearby Area			57 ~ 61



Details of Airport Noise Countermeasure Projects and Resident Support Projects

2.3 Under the Airport Noise Prevention Act, airport operators are responsible for implementing noise countermeasures. Annual projects include installing soundproofing and air conditioners in homes and schools, supporting public broadcasting subscription fees, partially subsidizing electricity bills for air conditioner use, and acquiring properties upon request in affected areas. Additionally, resident support projects include installing public facilities and income-increasing initiatives, with costs shared between local governments and airport operators. As a reference, acquiring properties is implemented in Type1, Type2, and up to Type 3 A areas.

Fundraising

2.4 Funding for noise countermeasures and resident support projects comes from airport operators' budgets and noise charges collected from airlines, based on aircraft noise levels.

Low-Noise Flight Operation

2.5 The Republic of Korea has established low-noise flight operation procedures at each airport to reduce aircraft noise, including runway operation changes, restrictions on engine run-ups, and delayed flap settings during landing, prioritizing safety.

Noise Policy Plan

2.6 As public welfare becomes increasingly important, the Republic of Korea plans to maintain and enhance airport noise management. Future plans include refining noise charge classifications and expediting air conditioner installations by providing residents with annual allowances for purchasing air conditioners.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the Republic of Korea's comprehensive approach and measures in managing airport noise and best practices and experiences in airport noise management from different member States.