

**57<sup>th</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

*Incheon, Republic of Korea  
4 – 8 July 2022*

**AGENDA ITEM 4: AIR NAVIGATION**

**STRENGTHENING REGIONAL COOPERATION FOR  
EFFICIENT AIR TRAFFIC FLOW MANAGEMENT**

Presented by Republic of Korea, Japan and Hong Kong China

**SUMMARY**

APANPIRG has introduced distributed Multi-Nodal ATFM network as a core concept for the APAC region's ATFM considering its regional characteristics, emphasizing close cooperation between States/Administrations. Accordingly, the Republic of Korea, Japan and Hong Kong China propose several improvements to establish a more efficient procedure for cross-border ATFM cooperation based on the findings discovered in the operational trials with participating States/Administrations.

## **STRENGTHENING REGIONAL COOPERATION FOR EFFICIENT AIR TRAFFIC FLOW MANAGEMENT**

### **1. INTRODUCTION**

1.1 In order to reduce airborne delays due to demand-capacity imbalance, ICAO requires ATFM to be introduced for aerodrome or airspace where demand exceeds capacity (Doc.4444 3.2.1), and the number of States/Administrations introducing ATFM is increasing accordingly.

1.2 Although Europe and North America are operating with centralized ATFM units, ICAO APAC introduced distributed multi-nodal ATFM network for cross-border ATFM in as a core concept for the APAC region in order to complement domestic ATFM within States'/Administrations' FIRs (e.g. Japan) and established the APAC Framework for Collaborative ATFM, taking into the consideration of the composition of the region with a high percentage of small States/Administrations and a high proportion of international flights in the region.

1.3 Since the establishment of the multi-nodal ATFM network, ATFM measures such as Ground Delay Programme (GDP) are implemented in the region among participating States/Administrations. However, more participation from other States/Administrations in the region are needed for a more efficient ATFM network.

1.4 Therefore, at this meeting, we will share the process on how Republic of Korea, Japan, Hong Kong China and related States/Administrations have pursued to strengthen cooperation, and propose improvements for more efficient cross-border ATFM cooperation procedures based on the findings.

### **2. DISCUSSION**

2.1 In accordance with ICAO ATFM manual (Doc.9971-Manual on Collaborative ATFM), ICAO explained that regional ATFM is essential to distribute ATFM delay fairly across flights without creating bias towards specific flights.

2.2 Given that international flights account for 64%, 53% and 100% of air traffic in the Republic of Korea, Japan and Hong Kong China respectively, it is essential to strengthen cross-border ATFM cooperation. Therefore we are making efforts to link sub-regions by promoting operational trials among related States/Administrations.

#### **Progress on the cooperation of ATFM in APAC region**

2.3 In accordance with the recommendation of ICAO; the Republic of Korea, Japan, Hong Kong China and related States/Administrations have been conducting a total of 12 GDP operational trials in 2021 through the initiation of Hong Kong China, one of the core team members of AMNAC (Asia/Pacific Multi-Nodal ATFM Collaboration).

2.4 In 2022, with the introduction of ATFM in Taipei ACC, EATMCG (East-Asia Air Traffic Management Collaboration Group) members are conducting GDP operational trials and is working on enhancing the individual ATFM system.

2.5 At the same time, NARAHG (Northeast Asia Regional ATFM Harmonization Group) members, the Republic of Korea, Japan and China, are promoting the tri-partite connection of the ATFM Systems with the aim of completion in 2023. Once the connection is completed, real-time ATFM based on the data exchange will be conducted.

**Findings and room for improvement**

2.6 During the first few GDP operational trials, a huge amount of time was taken to understand and link ATFM systems established by individual States/Administrations.

2.7 Therefore, it is suggested to iron out standard cross-border GDP trial procedures such as pre-operation consultation, standard scope of data exchange, etc. This allows other States/Administrations to establish ATFM with the best practices.

2.8 It is also suggested to incorporate standard GDP trial procedures into Asia/Pacific Framework for Collaborative ATFM as an appendix. Standardized guidelines would be beneficial for States/Administrations that have not had ATFM procedure in place yet to implement ATFM in the future.

2.9 The Republic of Korea, Japan, and Hong Kong China propose to discuss the detailed procedures through the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG).

**3. ACTION BY THE CONFERENCE**

3.1 The Conference is proposed to:

- a) Encourage Regional Member States/Administrations to participate the GDP trial which enhance close cooperation between States/Administrations for a smooth and efficient ATFM;
- b) Request ICAO APAC Regional Office coordinate with ATFM/SG to review the GDP trial procedures; and
- c) Discuss any relevant matters as appropriate.

— END —