



ICAO

International Civil Aviation Organization

Eleventh Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/11)

Video Teleconference, 2 – 6 August 2021

Agenda Item 3: Review of Current CDM/ATFM Operations and Problem Areas

ATFM COLLABORATION AMONG EATMCG MEMBERS USING MULTI-NODAL ATFM CONCEPT OF OPERATION

(Presented by Hong Kong China, Japan, Republic of Korea)

SUMMARY

This paper presents the latest development of ATFM Collaboration among EATMCG members using Multi-Nodal ATFM Concept of Operations (CONOPS).

1. INTRODUCTION

1.1 East-Asia Air Traffic Management Coordination Group (EATMCG) meetings have been held annually since 2007 and many ATM operational issues in East-Asia have been resolved through constructive discussions and mutual understanding during the meetings.

1.2 During the EATMCG/13 meeting held in December 2020, Hong Kong China raised an initiative to EATMCG members to run a series of Ground Delay Programme (GDP) operational trials to validate the CONOPS and develop internal handling procedures, in collaboration with Asia/Pacific Cross Border Multi-Nodal ATFM Collaboration (AMNAC) initiative. It is a major step forward to extend the coverage of the ATFM network to East Asia in the APAC region so as to realize regional interoperability and improve the overall network efficiency.

2. DISCUSSION

Collaboration between Japan and Hong Kong China

2.1 In August 2020, Air Traffic Flow Management Team of Hong Kong Civil Aviation Department and Air Traffic Management Centre (ATMC) of Japan Civil Aviation Bureau (JCAB) signed an MOU on the operational trial of GDP for Hong Kong International Airport (HKIA).

2.2 From August 2020 onwards, instead of applying MINutes-In-Trail (MINIT) at FIR boundary points, Hong Kong China initiated GDP whenever HKIA has a demand capacity imbalance for better network efficiency and to reduce lengthy coordination for MINIT implementation.

2.3 In the GDP, Hong Kong China sent CTOT to ATMC by e-mail and ATMC manually inputted the CTOT into their ATFM system. ATMC then used their ATFM system to inform operators and air traffic control agencies about the CTOT information received.

2.4 As of June 2021, no operational GDP was implemented because of the lack of traffic imbalance of demand and capacity at HKIA. However, in order to get both Hong Kong and Japan ATFM personnel ready for any unusual circumstances and to prepare for air traffic recovery, Hong Kong China has been conducting GDP trials up to twice a month since January 2021, with the active participation of Japan ATMC.

2.5 During the GDP trials, Hong Kong China issued no delay CTOTs (i.e. CTOT = EOBT + STT) to ATMC, and ATMC monitored the departure time of the constrained flights without passing the CTOTs to the ATC and aircraft so as to minimize the impact to the operations.

2.6 In the midst of current air traffic downturn, Airline Operators (AO) sometimes request to depart earlier than the flight plan time. In order to ensure the aircraft could depart within the agreed compliance window (CTOT -5/+10 mins) and to avoid inducing unnecessary delay to the aircraft, ATMC would coordinate with Hong Kong China for a new or revised CTOT.

2.7 It was noted that there is no issue in the CTOT notification and coordination process between ATMC and Hong Kong China in previous pilot trials. In case of a genuine GDP, ATMC will pass the CTOT to the aircraft and air traffic control agencies for execution.

2.8 There were a total of 26 flights captured in the GDP trial between Japan and Hong Kong China. The overall compliance rate is about 77%.

2.9 Hong Kong ATFM Team and Japan ATMC will continue to work on the feasibility of a 2-way CTOT exchange between the two parties.

Collaboration between Republic of Korea (ROK) and Hong Kong China

2.10 In July 2020, Hong Kong ATFM Team and ROK Air Traffic Command Centre (ATCC) ran a series of pilot trials of GDP for both HKIA and Incheon International Airport respectively.

2.11 It was noted that there is no issue in the CTOT notification and coordination process between Hong Kong ATFM Team and ROK ATCC during the pilot trials.

2.12 From January 2021, GDP trials were carried out once a month for ATFM personnel and local stakeholders of both sides to familiarize with the procedures.

2.13 There were a total of 52 flights captured in the GDP trial between ROK and Hong Kong China. The overall compliance rate is about 79%.

2.14 Hong Kong China and ROK are studying the feasibility of an operational agreement regarding implementing GDP at HKIA or at any international airports within Incheon FIR, whenever there is a demand and capacity imbalance.

Collaboration between Hong Kong China and Taipei Area Control Centre (ACC)

2.15 In June 2020, Hong Kong ATFM Team and Taipei ACC ran a series of pilot trials of GDP for flights from HKIA and Taipei Taoyuan Airport.

2.16 Taipei ACC, being relatively new to applying regional ATFM CONOPS, did not encounter any issues in the CTOT notification and coordination process between Hong Kong ATFM Team and Taipei ACC during the pilot trials.

2.17 From April 2021, GDP trials were carried out twice a month for ATFM personnel and local stakeholders of both sides to familiarize with the CONOPS and procedures.

2.18 There were a total of 49 flights captured in the GDP trial between Taipei ACC and Hong Kong China. The overall compliance rate is about 98%.

2.19 Taipei ACC and Hong Kong China are studying the feasibility of exchanging CTOT between the two parties and including other international airports within Taipei FIR. Taipei ACC is also actively developing its ATFM capabilities and is willing to play a role in regional air traffic flow management.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) encourage non-AMNAC members to consider joining the network and to share their experience;
- c) seek support from the ICAO to interconnect East Asia with South East Asia; and
- d) discuss any relevant matters as appropriate.

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