International Civil Aviation Organization

Sixteenth Meeting of the Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision-Making Steering Group (ATFM & A-CDM/SG/16)

Bangkok, Thailand, 06 – 10 April 2026

Agenda Item 5: A-CDM Operations, Airport Capacity Optimization, Airport Operations Plan (AOP), and A-CDM/ATFM Integration

THE LATEST DEVELOPMENT OF TAM IN CHINA

(Presented by CHINA)

SUMMARY

This paper presents the GANP B2 tasks of A-CDM, namely APOC, AOP, and TAM. CAAC has formulated a 5-year plan to promote the implementation of TAM. In 2026, four large international airports will launch TAM trial projects to build new operating modes, system architectures, and cross-mode data sharing.

1. INTRODUCTION

1.1 The Global Air Navigation Plan (GANP, Doc 9750) specifies three airport collaborative decision making (A-CDM) tasks for the B2 phase under Performance Improvement Area 1 (Airport Operations) of the Aviation System Block Upgrades (ASBU) framework: A-CDM-B2/1 (Airport Operation Planning (AOP)), A-CDM-B2/2 (Airport Operations Centre (APOC)) and A-CDM-B2/3 (Total Airport Management (TAM)).

1.2 From 2017 to 2024, 41 large international airports in China have successively implemented A-CDM operations. A-CDM is an important technological means for Chinese airports to achieve digitalization. Through the Digital Capability Indicator (DCI) rules, unified definitions are achieved and data quality is standardized to ensure accuracy and timeliness. These data have been fully automated in China, and A-CDM has become an important digital infrastructure for Chinese airports.

1.3 Drawing on the successful application of A-CDM in the airport airside, it is technically feasible to extend CDM to the terminal and ground transportation center and integrate the overall airport operation into a coherent CDM process by combining digitalization and AI.

2. DISCUSSION

CAAC's plan for the development of TAM

2.1 According to ASBU, TAM is an extension and upgradation of A-CDM. From the overall perspective of airport performance management, it integrates the operations of the airfield area, terminal, and ground transportation center, integrates data such as flight, passenger, and baggage, and incorporates stakeholders into a coherent collaborative decision-making process to achieve intelligent and integrated management of the air and land sides, improve the airport's operational efficiency,

predictability, and other operational qualities. It relies on the APOC and AOP to achieve operational management.

2.2 CAAC has developed a five-year work plan (2025-2029) to promote TAM implementation, with key tasks including working group formation, technical standard development, trial program and industry-wide implementation.

2.2.1 In April 2025, the CAAC, in collaboration with industry stakeholders, set up a TAM Working Group to advance various implementation tasks.

2.2.2 After extensive discussions with the industry, CAAC issued the Technical Guide for TAM in July 2025, providing technical guidance for airport operators in building a TAM system.

2.2.3 In 2026, four major international airports initiated the TAM trial project.

2.2.4 Based on experiences from trial projects, it is expected that the TAM technical standards will be issued by 2028, and it will be gradually promoted in qualified airports.

The information about the trial project

2.3 The large international airports that will launch the TAM trial project in 2026 are Shanghai Pudong (ZSPD), Guangzhou Baiyun(ZGGG), Zhengzhou Xincheng (ZHCC), Urumqi Tianshan(ZWWW). These trial projects are expected to take 18 months to complete.

2.3.1 Shanghai Pudong Airport ranks first in China in terms of passenger and cargo throughput, with 5 runways, 2 terminals and 1 satellite hall. The ground transportation at Shanghai Pudong Airport includes expressways, subways and conventional railways.

2.3.2 Guangzhou Baiyun Airport ranks second in China in terms of passenger and cargo throughput, with 5 runways and 3 terminals. The ground transportation at Guangzhou Baiyun Airport includes expressways, subways, and conventional railways.

2.3.3 Zhengzhou Xinzheng Airport ranks 17th in terms of passenger throughput and 6th in terms of cargo throughput in China. It has 2 runways and 2 terminals. The ground transportation at Zhengzhou Xinzheng Airport includes expressways, subways, conventional railways, and high-speed railways.

2.4 The main tasks of the trial project include;

2.4.1 Operating mode: Firstly, the management mode will be changed from AOC, TOC, and GTC zone management to IOC (Integrated Operation Center). The airport operator is responsible for establishing APOC to provide a workplace and system platform for all stakeholders. All stakeholders will adopt a "face-to-face" centralized office approach, jointly develop and dynamically update the AOP, clarify performance goals, resource allocation, and operation plans, and be responsible for supervision and management.

2.4.2 System architecture: The TAM platform consists of a perception layer, a decision-making layer, and an execution layer. It uses technologies such as big data and AI to build an algorithmic model with adaptive learning and autonomous optimization capabilities to drive the operational system of various stakeholders.

2.4.3 Cross-mode data sharing: Establish a data sharing platform between civil aviation, taxis, buses, intercity railways, subways, and high-speed railways. It can facilitate passengers to obtain various transportation information to plan their itinerary. It also establishes a cross-transportation

coordination mechanism for evacuating stranded passengers in terminal buildings during large flight delays.

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.

— — — — — — — —

— END —