



International Civil Aviation Organization

**The Third Meeting of the APANPIRG ATM Sub-Group
(ATM /SG/3)**

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Agenda Item 4: ATM Systems (Modernization, Seamless ATM, CNS, ATFM)

ATFM AND CDM OPERATION IN EAST CHINA

(Presented by China)

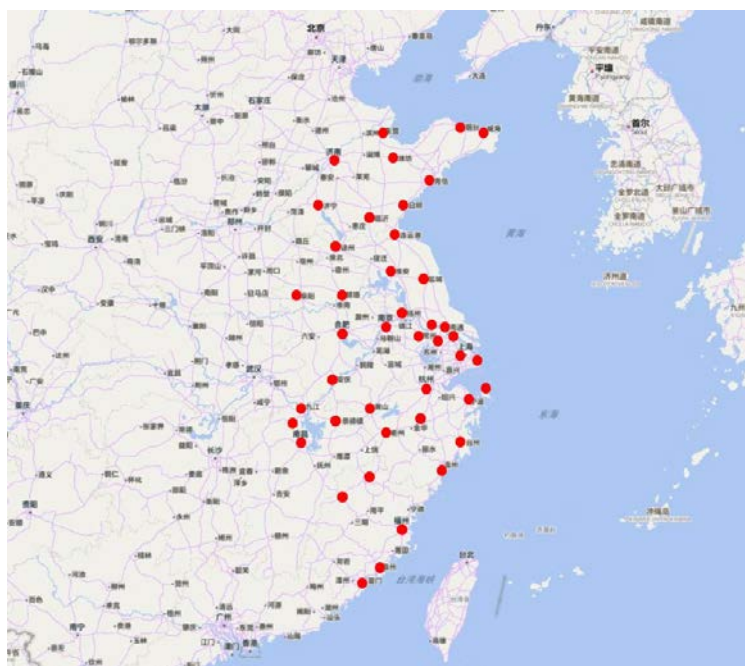
SUMMARY

This paper presents the process of the implementation of the air traffic flow management in Shanghai flight information region (FIR) by the East China Regional Air Traffic Management Bureau (ATMB), and the whole territory of 42 civil airports achieve through networking CDM operation. Including operating procedures, operating results and follow-up plans.

1. DISCUSSION

Operation Overview

1.1 Currently, a self-developed air traffic management (ATM) software is being used by the East China ATMB, which is in charge of the flight departure time pre-release of all outbound flights covering 42 airports, from the FMP seat of Shanghai Control Center and other 5 FMP seats of Jinan, QingDao, Hefei, Nanchang, and Xiamen.



1.2 Its divided into 5 operational levels according to the complexity based on different airports' operation scale and ground resources' organizing capabilities of these 42 airports:

- Level 1-- Access to departure time in advance in the form of TOBT manually input by operations personnel.;
- Level 2-- According to the previous flight' s operation information, system will automatically calculate and publish departure time 90mins before EOBT;
- Level 3-- The implementation of the data connection between operational units and CDM system;
- Level 4-- The release of CDM operation information to the public at the airport; and
- Level 5-- The implementation of ground recourse management based on mobile devices.

1.3 This is the layout of Shanghai Traffic Flow Management Office

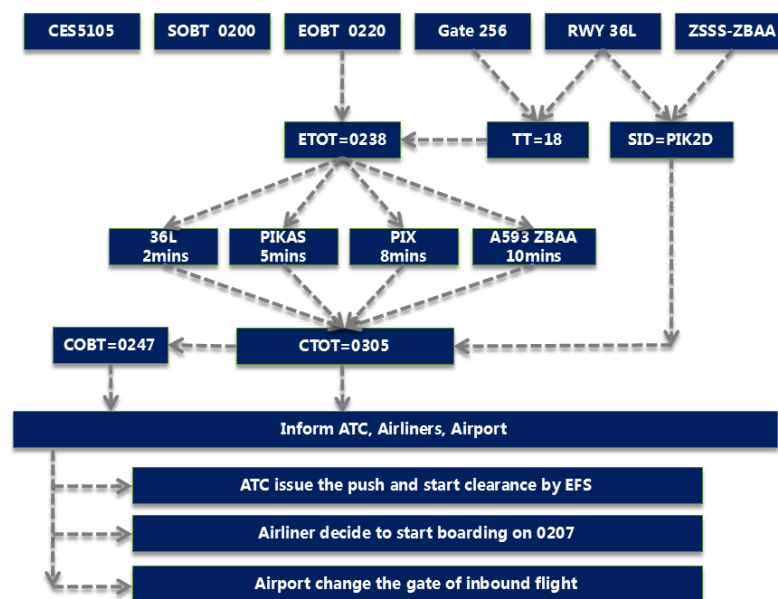


1.4 Before the commence of CDM running at an airport, the APT Authority and ATM Bureau will convene a meeting among all stakeholders, discussing CDM operational levels and the agency responsible for publishing CDM slots. The agency responsible for CDM slots is generally in line with airlines' business agencies. Each airline needs to clear the agency relationship of CDM slots publishing at local airports. For example:

- 60mins before EOBT, the duty manager of airlines may call to get CDM slot from local airport' s CDM seat.
- If the delay period is beyond airline' s expectation, airline can arrange late boarding flexibly to avoid passengers' long-time waiting in the cabin.
- Any operational coordination of slot time, only airport CDM controller can apply changes from ATMB FMP controller.
- Using this channel, airport can achieve the airport wide CDM slot time public and coordination.
- When airlines need to have quick turnaround, an authorized ATC controller can apply the new slot time by changing TOBT in advance.

1.5 This is the whole process of CDM operation in East China.

East China CDM Operation Process



Operation Results

1.6 Through the unified interval calculation, unnecessary MIT is avoided so that we can improve the utilization of air routes. Although delay still exists among airlines, the delay period has been effectively reduced.

1.7 CDM platform makes the operation more transparent, and the information in advance also helps airlines to acknowledge and react as early as possible to avoid operational risks and improve service quality.

Follow-Up Plans

1.8 We will work with adjoining areas on the experiment of using the same ATM platform for daily operation, in order to achieve further optimization of regulation operation and efficiency of time coordination within greater airspace. Because we hold the opinion that a unified platform should be in charge of the air traffic flow nationwide instead of the data connection of independent air-traffic systems of 7 regional ATMBs, as it's able to avoid low efficiency and increase the risk and cost during software updates as well as daily operation.

1.9 In October, East China Regional ATMB will work with South Korea and Japan's traffic management unit to discuss traffic management data docking program. We will use ADEXP telegraph or rent a private line to achieve data transfer operations between the three traffic management systems in these three countries. This will improve the quality of traffic flow management work in the Northeast Asia.

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