



FOURTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 26 August to 6 September 2024

Agenda Item 3: Air Navigation System Performance Improvement

3.1: Proposals to improve the efficiency of air navigation services contributing to LTAG

COOPERATION BETWEEN CHINA AND EUROPE CIVIL AVIATION IN AIRPORT COLLABORATIVE DECISION-MAKING

(Presented by China)

EXECUTIVE SUMMARY

This paper presents the civil aviation cooperation between China and Europe in the field of airport collaborative decision-making (A-CDM) since 2019. Under the China-European Union Aviation Partnership Project, China and Europe started with comparative and differentiated research on A-CDM, on-site visits, developing research reports, organizing workshops and other activities, and finalizing the “A-CDM Implementation Study Report”.

1. INTRODUCTION

1.1 Airport collaborative decision-making (A-CDM) is an operational system proposed and developed by the European Organisation for the Safety of Air Navigation (EUROCONTROL), suitable for the integration of airside and landside operations at airports. The Civil Aviation Administration of China (CAAC) and the European Union Aviation Safety Agency (EASA) attach great importance to the implementation of A-CDM. In accordance with the Global Air Navigation Plan (GANP, Doc 9750) of ICAO, CAAC and EASA have developed implementation manuals and technical standards. With the support of stakeholders, as of May 2024, A-CDM operations were implemented 41 at airports in China and 33 airports in Europe.

1.2 In 2019, CAAC and EASA jointly carried out the China- European Union Aviation Partnership Project (China-EU APP), aimed at strengthening the economic partnership between China and the European Union in the field of civil aviation, and technical cooperation and policy dialogues in such areas as safety management, airworthiness, air traffic management, general aviation, unmanned aircraft systems (UAS), aviation environment, and new technology applications. Based on the China-EU APP framework, China and Europe have carried out a series of activities relating to A-CDM.

¹ Chinese and English versions provided by China

1.3 When developing the China-EU APP work plan, CAAC and EASA had extensive consultations and discussed in detail the specific cooperation content in various fields of civil aviation. Regarding cooperation in the A-CDM, considering that both parties have developed implementation standards for A-CDM technology with multiple airports operating A-CDM, cooperation in this field starts with comparative and differentiated research on A-CDM between China and Europe.

2. DISCUSSION

2.1 CAAC and EASA have determined the approaches and content for the research on A-CDM, mainly including: selecting airports operating A-CDM as samples, conducting on-site visits of the A-CDM operation of sample airports, composing research reports, and holding workshops, and based on which work plans are developed.

2.2 Determining the sample airports. After two rounds of communication in September and October 2018, both parties confirmed Amsterdam Schiphol Airport and Guangzhou Baiyun Airport as sample airports for A-CDM comparative research.

2.3 On-site visits

2.3.1 In September 2019, EASA selected three experts to conduct on-site visit at Schiphol Airport in Amsterdam, Netherlands. During this period, EASA experts met with all partners involved in the development and implementation of A-CDM at Schiphol Airport, visited the airport operations centre (APOC), discussed performance indicators with stakeholders, and potential future developments outside of A-CDM (such as the APOC, airport operations plan, etc.)

2.3.2 In November 2019, three EASA experts visited Guangzhou Baiyun Airport for five days. During this period, European experts visited the Guangzhou area control centre, operations control centre (OCC) of China Southern Airlines, OCC of Guangzhou Baiyun Airport, and apron (including apron and air traffic control towers) to gain a detailed understanding of the functions such as A-CDM system data sharing, milestone management and time prediction, ground release sequencing, A-CDM and air traffic flow management (ATFM) system data interaction, as well as the organizational structure of Operation Management Committee of Guangzhou Baiyun Airport and its flight classification and handling, key resource coordination, and implementation of operation procedures under adverse conditions.

2.4 Composing the research report. From December 2019 to January 2020, EASA experts compiled on-site visit data in detail, consulted relevant information from organizations such as the ICAO, EASA and IATA, and completed a comparative and differentiated research report titled “A-CDM Implementation Study Report”. The report consists of 16 chapters including background and executive summary, research methodologies, introduction to A-CDM implementation in China and Europe, detailed comparison of eight dimensions, regional/country harmonization, recommendations and conclusions, etc.

2.5 Organizing a workshop. After the completion of the A-CDM Implementation Study Report, the CAAC-EASA A-CDM Comparison and Differentiation Research Workshop was held in Chengdu, China from 22 to 23 May 2024 (originally planned to held from 26 to 27 February 2020). During the workshop, the two sides discussed the latest development of A-CDM, airport wide management, intelligent operation, airport digital twins among others. The workshop also discussed and reached conclusions on the 24 recommendations contained in the A-CDM Implementation Study Report.

3. **CONCLUSION**

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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