



Cooperation between China and Europe in A-CDM

Presented by China



♦ What is EU-China APP

◆ A-CDM cooperation activities

◆ A-CDM Implementation Study Report



1. What is EU-China APP

The Europe-China Aviation Partnership Project (EU-China APP) aims to further deepen cooperation between China and the EU in civil aviation authorities, and closely integrate technical cooperation and policy dialogue, thereby strengthening the economic partnership between China and the EU in the field of civil aviation.

Since September 2015, the EU-CHINA APP has carried out activities in the fields of safety management, airworthiness, air traffic management, general aviation, UAV, environmental protection, and new technology applications. Based on the EU-China APP framework, China and Europe have carried out a series of A-CDM activities.



Considering China and Europe have developed A-CDM technical standards and have multiple airports operating A-CDM, cooperation in the A-CDM field will start with comparative and differential research on A-CDM between China and Europe.

Determine the sample airport: Amsterdam Schiphol Airport and Guangzhou Baiyun Airport.



(1) Visit Schiphol Airport

In September 2019, three European experts visited Schiphol Airport in Amsterdam. European experts met with all partners involved in the development and implementation of A-CDM at Schiphol Airport, visited the Schiphol Airport Operations Center, discussed performance measurement standards with stakeholders, and potential future developments outside of A-CDM (such as the Airport Operations Center APOC, Airport Operations Plan AOP, etc.)



(2) Visit Baiyun Airport

In November 2019, three European experts visited Baiyun Airport in Guangzhou. European experts visited the Baiyun Airport Operation Center, China Southern Airlines Flight Operation Center, Guangzhou ACC, etc. and got detailed understanding of data sharing, milestone management, TSAT calculation, A-CDM/ATFM interoperation, and attended a meeting of **Baiyun Airport Operation Management Committee**, which is cross departmental unit including ANSP, APOC, airlines and ground handles, to observe the implementation of procedures such as key resource allocation, flight classification disposal, adverse conditions disposal.







(3) Workshop in Chengdu

From December 2019 to January 2020, European experts compiled detailed on-site visit data, consulted relevant information from ICAO, EASA and IATA, and completed the "A-CDM Implementation Study Report" on comparison and differentiation of China Europe A-CDM.

In May 2024, a workshop on China Europe A-CDM comparison was held in Chengdu. At the workshop, both sides shared the latest development of China Europe A-CDM, airport digital twin, airport smart operation, and discuss the "A-CDM Implementation Study Report".









Year of implementation	Number of Airports	A-CDM Airports (China)
2018	10	Beijing Capital, Shanghai Pudong, Shanghai Hongqiao, Guangzhou, Kunming, Chengdu Shuangliu, Shenzhen, Xi'an, Chongqing, Hangzhou
2019	26	Nanjing, Xiamen, Zhengzhou, Changsha, Wuhan, Haikou, Urumqi, Tianjin, Sanya, Harbin, Guiyang, Dalian, Shenyang, Jinan, Nanning, Lanzhou, Fuzhou, Taiyuan, Changchun, Nanchang, Hohhot, Shijiazhuang, Ningbo, Wenzhou, Zhuhai, Hefei
2020	2	Yinchuan, Yantai
2021	2	Beijing Daxing, Qingdao
2024	1	Chengdu Tianfu



The A-CDM Implementation Study Report consists of 16 chapters, mainly including background introduction, research methods, introduction to A-CDM implementation in China and Europe, detailed comparison of 8 aspects, regional/country harmonization, recommendations and conclusions, etc.



A-CDM IMPLEMENTATION STUDY REPORT – GUANGZHOU BAIYUN AIRPORT – JANUARY 2020

EU-China Aviation Partnership Project





The comparison of 8 aspects:

- (1) **Regulations for A-CDM.** The report lists the policy provisions for promoting the implementation of A-CDM at the government level between China and Europe, as well as the A-CDM certification procedures for both sides.
- (2) **A-CDM development and implementation.** The report describes the time required and technical standards for the completion of A-CDM construction at airports between China and Europe.
- (3) Involvement of major stakeholders. The report compared the responsible parties for A-CDM construction, with China being the airport company and Europe taking various forms (such as ANSP leading or airport company leading); It describes the "Operations Management Committee" model adopted by Chinese airports, which integrates ANSP, airlines, ground services, fuel and other units to form a three-level organizational structure, namely the strategic level, management level, and execution level.



- (4) **A-CDM communication plan and training.** The European airport website releases the A-CDM concept and training plan, while the Chinese airport website releases flight information.
- (5) Information exchange and data sharing. Both A-CDM parties have achieved data sharing among stakeholders locally; The Chinese side has developed a national operation data sharing platform for data sharing between ANSP, airlines, and airports; Europe adopts a centralized approach, which centrally manages flight plans and airspace, as well as implements ATFM based on agreements between member states.
- (6) The role of technology in A-CDM. The report describes the advanced technologies adopted by Guangzhou Baiyun Airport to promote the implementation of A-CDM, including hardware servers, handheld intelligent terminals, and onboard units (OBUs); Guangzhou Baiyun Airport has specially deployed high-speed wireless networks to support high-speed real-time data exchange and high-definition video transmission, achieving high-speed mobilization of airport ground support resources.



- (7) **Performance indicators.** European experts believe that direct comparisons between Chinese and European airports are not appropriate, as different performance indicators and measurement techniques can make such direct comparisons unreliable and misleading; The report analyzed the indicators of flight on-time rate, average short-term takeoff delay time, and long-term delayed flights at Guangzhou Baiyun Airport, and the improvement before and after the implementation of A-CDM; Listed the improvement of indicators such as ground average taxi-time and CTOT compliance after the implementation of A-CDM at Amsterdam Schiphol Airport, analyzed the reduction of carbon emissions and the economic benefits it brings.
- (8) **Strategic supervision and management.** The report describes that the implementation of European A-CDM requires support from stakeholders to sign memos of understanding and appropriate service level agreements. The European A-CDM Implementation Manual provides airports with a template for such documents; The Guangzhou Baiyun Airport Operation Management Committee has formulated a charter, which defines the responsibilities of all members of the committee to carry out resource allocation, efficiency evaluation and optimization, etc.

Thank you

Liu Hong

Operation Supervisory Center of CAAC

liuhong@caac.gov.cn