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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

MH/T 5103-2020

Replacing MH/T 5103-2004

**Technical specification for information integration system of
civil transportation airport
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces MH/T 5103-2004 "Civil Airport Information Integration System Technical Specifications". Compared with MH/T 5103-2004, the main internal the content changes are as follows.

- The name of the standard was revised from "Civil Airport Information Integration System Technical Specifications" to "Civil Transportation Airport Information Integration System Technical Specifications";
- Change to normative reference to CB/T 22239 (see Chapter 2);
- Modified the definition of terms (see Chapter 3, Chapter 3 of the 2004 edition);
- Modify the definition of abbreviations (see Chapter 4, Chapter 4 of the 2004 edition);
- Modified the basic regulations for the construction of civil transportation airport information integration system (see Chapter 5, Chapter 5 of the 2004 edition);
- Added the technical requirements for the airport operation database (see 6.1);
- Added the technical requirements of the enterprise service bus (see 6.2);
- Modified the functional requirements of the application software (see Chapter 6.3, Chapter 9 of the 2004 edition);
- Modified network technical requirements (see Chapter 7.1, 2004 edition);

- Modified the technical requirements of the server (see Chapter 7.2, 2004 edition);
- Modified database technical requirements (see Chapter 7.3, Chapter 8 of the 2004 edition);
- Modified the requirements of the data interface (see 8.1, Chapter 10 of the 2004 edition);
- Added the requirement of external interface (see 8.2);
- Added technical requirements for information security (see 9.1);
- Added technical requirements for operational safety (see 9.2);
- Added technical requirements for data security (see 9.3);
- Added technical requirements for network security (see 9.4);
- Increased the technical requirements for system performance (see Chapter 10);

This standard was proposed and interpreted by the Airport Department of the Civil Aviation Administration of China.

This standard is under the jurisdiction of the China Academy of Civil Aviation Science and Technology.

Drafting organizations of this standard. China Civil Aviation Information Network Co., Ltd., Guangzhou Baiyun International Airport Construction and Development Co., Ltd., Guangzhou Baiyun Cloud International Airport Co., Ltd.

1 Scope

This standard specifies the composition and requirements of the information integration system for civil transportation airports (including the civil part of the military-civilian airport).

This standard is applicable to the technical design and construction of the information integration system for civil transportation airports (including the civil part of a military-civilian airport).

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 22239 Information Security Technology Network Security Level Protection Basic Requirements

3 Terms and definitions

The following terms and definitions apply to this document.

Primary system

The current business system that provides services to the outside world supports the business operation within the system and satisfies the uninterrupted operation throughout the day.

Backup system

When the main operating system is down, switch to replace the main operating system.

Test system

Complete single system test, interface test and joint debugging test before the system goes online; meet other test requirements after going online.

Disaster recovery system the operation data backup or the operation system backup of the airport construction in a different place.

Information integration system an information system that provides an information sharing environment for civil transportation airports so that various information weak current systems operate automatically under unified flight information control System. The system supports the dispatching management of the airport's production and operation departments under unified coordination and command, and provides assistance to airports, passengers, and airlines.

Information services related to flight operations.

Public address system the broadcasting system involved in this specification refers specifically to business broadcasting, that is, audio broadcasting for daily operations in the terminal, including flight information.

Information announcement, boarding announcement, boarding urge announcement, final boarding announcement, etc.

Flight schedule information Flight plans issued regularly by civil aviation authorities, including flight numbers, entry and exit signs, flight tasks, attributes, aircraft types, departure Stations, stops, destination stations, take-off and landing time of each station, execution time and other information.

Aviation information message the aeronautical information telegrams related to flights sent, transmitted, and received through the air traffic control aeronautical telegram network, including the flight movement in AFTN Status messages and plan messages.

F1ight information

General term for flight plan information, flight status information and flight history information, including execution date, flight mission, flight number, aircraft type, Aircraft number, affiliated airline, attributes, departure station, stopover station, destination station, alternate station, take-off and landing time of each station, terminal number, customer class Information such as flight status and flight status.

3.10

Flight state

Carry out the current normal or abnormal operating status of the flight. The normal status includes check-in, deadline, over-station boarding, at this station, Encourage boarding, the end of boarding, take-off, arrival at the next station, take-off and arrival ahead, abnormal conditions include delay, cancellation, alternate landing, and return 3.11 Transportation resource Resources to provide services to passengers, including terminal buildings, VIP lounges, check-in counters, security check channels, waiting halls, boarding gates, baggage carousels, etc.

3.12

Apron resource

The resources to provide support services for aircraft, including aircraft seats, bridges, special vehicles, inspection and maintenance equipment, etc.

3.13

Flight plan

Flight plans generally include schedule plans, historical plans, next-day plans and temporary plans.

3.14

Constraint condition the use of flight resources depends on the conditions of related variables. The value range of variables has various restrictions, such as the position of the boarding gate and the bridge.

Should wait. Each restriction is called a restriction.

3.15

Allocation rules

Based on the contract and the actual situation of the airport, formulate resource allocation rules and realize the informatization of resource allocation rules.

3.16

Contract