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THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

Agenda Item 3: Enhancing the Global Air Navigation System

3.3: Air traffic flow management (ATFM)

**EVOLUTION OF AIRPORT COLLABORATIVE DECISION-MAKING (A-CDM) IN INDIA
FOR OPERATIONAL EFFICIENCY, HARMONIZATION AND ECONOMICALLY VIABLE
DEVELOPMENT OF CIVIL AVIATION**

(Presented by India)

EXECUTIVE SUMMARY

At busy airports, it is very common to see long queues of departing aircrafts at runway holding points waiting for take-off. Airports Authority of India (AAI) has developed an in-house airport collaborative decision making (A-CDM) system to mitigate this issue. After successful implementation of the system at high density Indian airports, AAI is looking forward to assist air navigation services providers (ANSPs)/airport operators in the Asia and Pacific Region to implement this system. India has already introduced air traffic flow management (ATFM) in Indian airspace including terminal airspace at busy airports. The process of integration of A-CDM with ATFM has already started. Hand-shaking of both systems will ensure optimum utilization of the systems and add to harmonization of airspace not only within India but also in adjoining airspace outside India.

1. INTRODUCTION

1.1 An efficient airport operation involves multiple partnering agencies like airport operators, airline operators, ground handling agencies, airport regulator, air traffic control to optimize aircraft movement considering safety, passenger comfort and commercial aspect. The continued success of the process largely depends upon how these partnering agencies (stakeholders) work in tandem to manage multiple activities by sharing relevant information among them. To facilitate this, a common information-sharing platform is introduced to serve the purpose of sharing this information in a comprehensive, robust and secured manner. To achieve this, AAI has developed an airport collaborative decision-making (A-CDM) system which has been successfully implemented at Mumbai, Chennai and Kolkata Airport.

1.2 The concept of A-CDM is included in ICAO Aviation System Block Upgrade (ASBU) Block B0-80 for implementation at all busy airports across the globe. Government of India's Civil Aviation Policy also mentions the need of A-CDM implementation at all major Indian airports for promoting sustainable aviation by reducing congestion. In-line with these guidelines, AAI took initiative to implement A-CDM at Mumbai Airport which is operational since 10-12-2015.

1.3 Testing for A-CDM interfacing with CATFM is being conducted in close collaboration with Mumbai and Delhi A-CDM.

2. DISCUSSION

2.1 The AAI developed the A-CDM platform at Chhatrapati Shivaji International Airport, Mumbai, which is one of **the world's busiest single-runway operations airports which could achieve fifty-four air traffic management (ATM) per hour.** With the experience gained from the successful implementation of A-CDM at Mumbai, AAI has also implemented A-CDM at Chennai and Kolkata airport.

2.2 The in-house team of AAI is going ahead with implementation of A-CDM at all the major airports in India. The team has taken up the implementation from planning stage through programming, development, testing, upgradation and maintenance.

2.3 The potential benefits of this system has been appreciated by all stakeholders at airports in India. Roadmap for A-CDM implementation in India has been drawn so that this system will be implemented at all busy airports by 2020-2021.

2.4 India has also implemented a nationwide central air traffic flow management (C-ATFM) system consisting of central command centre (CCC) at New Delhi and thirty-six flow management positions (FMP) located at various area control centers, approach control offices and aerodrome control towers across the country. Integration of A-CDM with ATFM is being taken up to realize optimal information flow between airports and the C-ATFM system.

2.5 Due to its expertise in all the project phases, India can extend support to other enthusiastic ANSPs/airport operators for A-CDM project implementation. This initiative will help in fostering the growth of aviation in a more harmonized way and ensure operational efficiency.

3. CONCLUSION

3.1 The meeting is invited to note the information as presented in the paper regarding progress made by India for implementation of A-CDM and collaborative initiatives in the spirit of "No Country Left Behind" with other Asia and Pacific (APAC) States.

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