International Civil Aviation Organization

Thirteenth Meeting of the Air Traffic Management Sub-Group (ATM/SG/13) of APANPIRG

Singapore, 25 – 29 August 2025

Agenda Item 5: ATM Systems (Modernization, Seamless ATM, CNS, ATFM)

A-CDM IN AUSTRALIA

(Presented by Australia/Airservices)

SUMMARY

This paper presents the experience of Airport Collaborative Decision Making (A-CDM) in Australia with the first two airports, Brisbane and Perth now live, including the approach, compliance achieved so far, challenges and learnings, early benefits, and future development.

1. INTRODUCTION

1.1 Airservices, in partnership with our major airline and airport customers on behalf of industry, is midway through the implementation of A-CDM at Australia's four busiest ports – Brisbane, Perth, Sydney, Melbourne. A-CDM will be delivered through a staged rollout, one airport at a time, with all four airports expected to be operational by late 2025.

1.2 This multi-airport program is designed to harmonize and standardize processes across all ports, reducing implementation costs and elevating the benefits of A-CDM to a whole-of-network perspective. Brisbane and Perth airports are already live, Sydney and Melbourne airports are yet to come in Q3 and Q4 2025. This paper shares the approach and experience to date.

2. DISCUSSION

Approach to A-CDM

2.1 A-CDM is part of a suite of Air Traffic Flow Management (ATFM) initiatives Australia has deployed to improve air traffic network management. These ATFM initiatives include the Ground Delay Program (GDP) which has been operational for over a decade, and the newly implemented Digital Twin ATFM emulator which was implemented in 2024.

2.2 The A-CDM approach in Australia uses the European A-CDM model (Doc 9971 Part III Chapter 1 paragraph 1.6.8) with all six elements deployed: information sharing, milestone approach, pre-departure sequencing, variable taxi time, adverse conditions and collaborative management of flight updates.

2.3 A-CDM procedures for Australia were developed in partnership with airline and airport operators based on international best practices for A-CDM. The A-CDM procedures can be found in the A-CDM Procedure Manual (available on the NOMC portal at www.airservicesaustralia.com), and supplemented by operating procedures for ATC in the Manual of Air Traffic Services (MATS) and flight crews in the Australian AIP.

2.4 This multi-airport whole-of-network approach has required significant technical effort to implement the supporting technology. Airservices, partner airlines and airports systems have been integrated into the Aerobahn Collaborative Information Sharing Platform (ACISP) providing accurate, real-time information for improved situational awareness and decision making.

2.5 Other airport stakeholders, e.g. smaller domestic airlines, ground handlers, fixed base operators and General Aviation (GA) have been provided with access to Aerobahn through Single Sign On (SSO) to enable TOBT updates and situational awareness. Most international airlines have designated responsibility for TOBT updates to their local ground handers.

Implementation Challenges

2.6 Australia has a diverse aviation environment which includes a high number of smaller airlines and a significant amount of GA activity at larger capital city airports. This made coordinating the large number of airport stakeholders a challenging task. Initial engagement with partner airlines to mobilize implementation proved challenging when A-CDM implementation was competing with other operational priorities within each organization during the post COVID recovery.

2.7 Configurable Visual Docking Guidance Systems in Australia have not been widely adopted as yet, this has made communication of the TOBT and TSAT values when they are updated by live data challenging under some circumstances.

2.8 The proliferation of GA flights not being operated under a Flight Number Callsign or IATA code has also raised some challenges, as typical A-CDM solutions do not cater for flights operating under the registration mark of the aircraft – a common occurrence in Australia.

Performance

2.9 Early A-CDM performance reporting is focused on Target Off Block Time (TOBT) quality and Target Start up Time (TSAT) delay due to ATC operational factors when compared to Actual Off Blocks Time (AOBT). Over time, as A-CDM procedures are embedded and system data is validated, other metrics such as departure predictability (a key indicator for on-time performance) and taxi time reduction will be tracked and reported.

2.10 In May 2025, Brisbane Airport went live with A-CDM. Compliance thus far has been excellent, averaging 83% for TOBT compliance. This can be attributed to the efforts of all stakeholders to embrace the new procedures and prepare local teams for the new ways of working. Early benefits experienced so far relate to improved coordination and communication between ground handlers and airlines with greater accountability and focus on achieving readiness. In addition, Brisbane Airport has recently integrated data from A-CDM into their own systems, reducing manual arrival and off block data entry for Operations Centre staff. We expect to see more benefits at Brisbane Airport as we enter the convective season with increased disruption due to thunderstorms affecting the aerodrome.

2.11 Perth Airport went live with A-CDM on Friday 18 July 2025. The Perth Airport Departure GDP had previously been managing departure demand during peak periods. A-CDM is a significantly more sophisticated departure management capability and has already reduced and spread delay more equitably for all operators during peak demand periods. TOBT compliance during this period has averaged 82%.

Benefits realization and next steps

2.12 Preparation is now underway for implementation at our two busiest ports – Sydney Airport in early September 2025 and Melbourne Airport in mid-October 2025.

2.13 Completion of all four ports will enable whole-of-network benefits to be realized, with real-time information providing increased insight and predictability of how the network will perform. Already we are seeing the impact of A-CDM on ATFM compliance with increased ATFM compliance for departures from Brisbane. This improvement has flow on impacts to the wider network and arrivals into other ports.

2.14 Key benefits already being realized include improved communication and coordination between airlines and ground handlers (as reported by airlines), improved departure flow management and recovery from disruptions, optimization of the departure sequence based on changes in real-time and a more equitable spread of delays at times of high demand. Over time, as all ports come online and processes embed, we look forward to further benefits for each airport and across the network.

2.15 We expect that there will be an adjustment period as operators observe and learn from the system, operating concept in action, and embed the new procedures. We anticipate the system and procedures will be further optimized as we become familiar with and maximize the opportunity of A-CDM in Australia.

2.16 We acknowledge the tremendous efforts by all partner airlines, host A-CDM airports, international and smaller domestic airlines, general aviation, ground handlers and fixed base operators.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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