Airport Collaborative Decision Making (A-CDM) Implementation in Australia

OVERVIEW

2025

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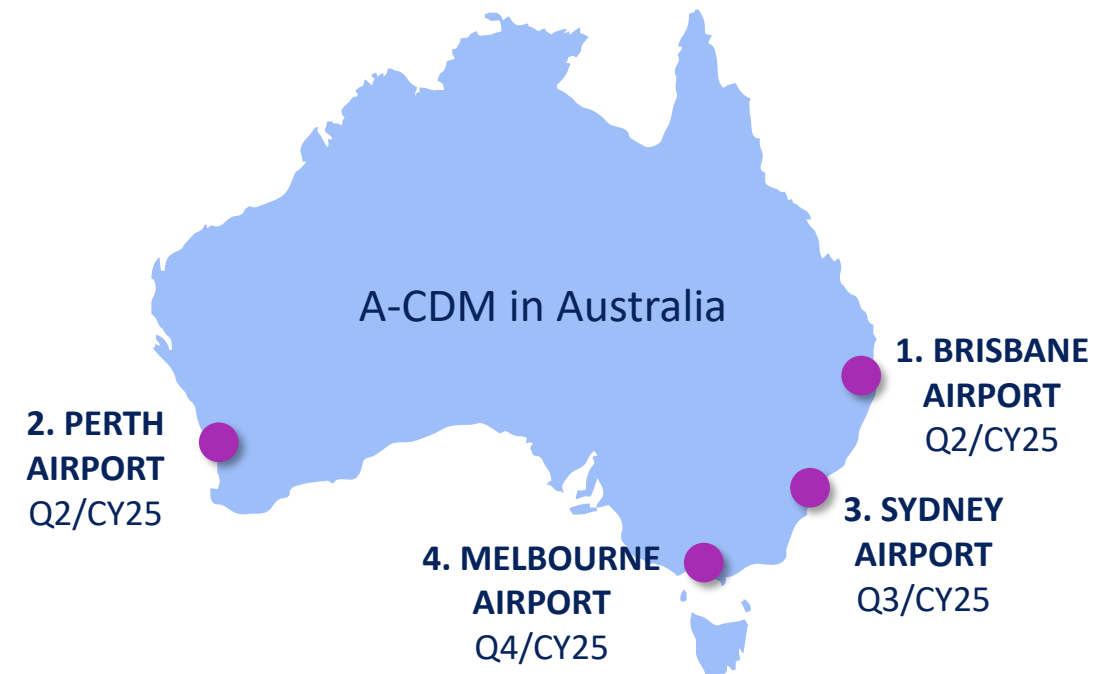**Purpose: An introductory pack providing an overview of the A-CDM Program in Australia.**

Key Topics

1. Airport Collaborative Decision Making (A-CDM) in Australia

Airservices, airlines and airports working together to optimise airport operations & air traffic predictability.

- Airservices is working in **partnership with our major airline and airport customers** to implement Airport Collaborative Decision Making (A-CDM) into Australia's four major airports – Brisbane, Perth, Sydney, and Melbourne.

- A-CDM will be delivered through a **staged rollout, one airport at a time**, with all four airports expected to be operational by end 2025.

- A-CDM is implemented in over 50 airports globally. This is a world first **multi-airport program** designed to harmonise operations across our four major airports, reduce implementation costs, and elevate the benefits of A-CDM to a whole-of-network perspective.

- A-CDM in Australia is enabled through the **A-CDM Aerobahn** suite of tools provided by Saab Sensis.

A-CDM in Australia

1. BRISBANE AIRPORT
Q2/CY25

2. PERTH AIRPORT
Q2/CY25

3. SYDNEY AIRPORT
Q3/CY25

4. MELBOURNE AIRPORT
Q4/CY25

A-CDM PARTNERS
airservices australia | Virgin australia | SYD Sydney's Airport | rex. | BNE BRISBANE AIRPORT | Alliance | MELBOURNE AIRPORT | QANTAS | Perth Airport

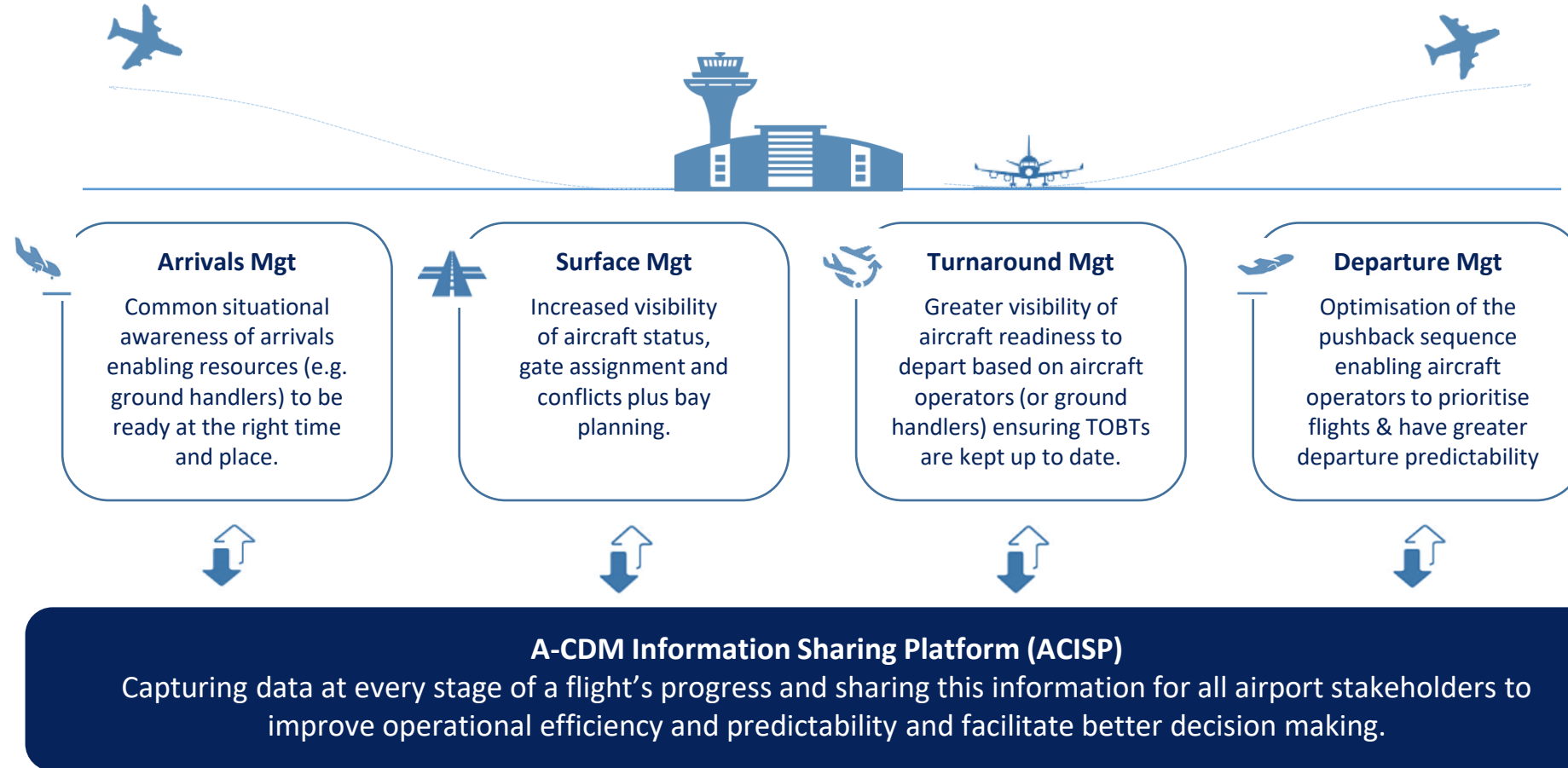# A-CDM

The implementation of A-CDM will improve airport operations through the sharing of data via a common platform to make informed decisions to efficiently manage the arrival, turnaround and departure phases of aircraft.
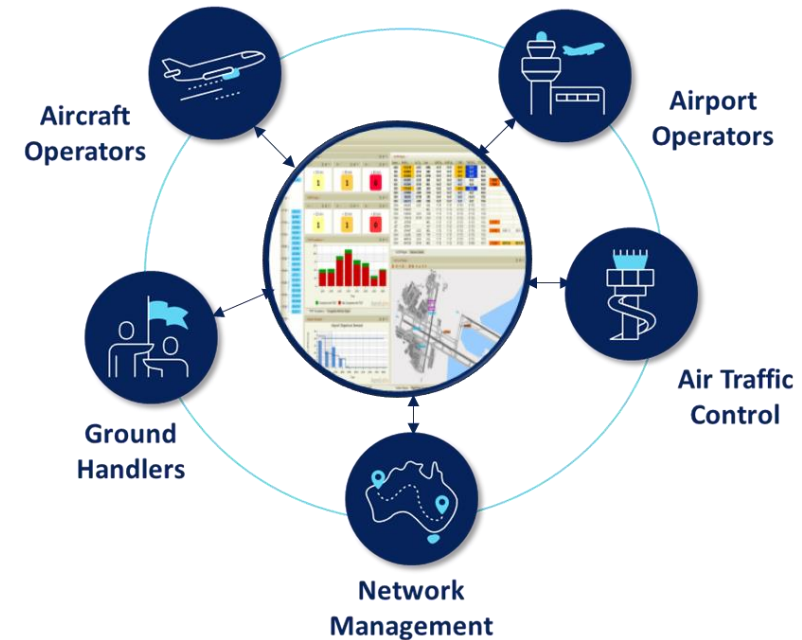
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Arrivals Mgt

Common situational awareness of arrivals enabling resources (e.g. ground handlers) to be ready at the right time and place.

Surface Mgt

Increased visibility of aircraft status, gate assignment and conflicts plus bay planning.

Turnaround Mgt

Greater visibility of aircraft readiness to depart based on aircraft operators (or ground handlers) ensuring TOBTs are kept up to date.

Departure Mgt

Optimisation of the pushback sequence enabling aircraft operators to prioritise flights & have greater departure predictability

A-CDM Information Sharing Platform (ACISP)

Capturing data at every stage of a flight's progress and sharing this information for all airport stakeholders to improve operational efficiency and predictability and facilitate better decision making.

2. Why an ANSP driven integrated A-CDM

A-CDM is a joint industry initiative with airport, airline partners and Airservices to improve airport operations.

KEY OBJECTIVES

- To improve predictability

- To improve on-time performance

- To optimise use of resources

- To optimise the use of airport infrastructure

- To improve Air Traffic Flow Management (ATFM) compliance

- To reduce taxi-out times

- To reduce recovery time from adverse events

- To improve network management

"Airports, Aircraft Operators and Airservices Australia collaborating through real-time data sharing to optimise airport operations."
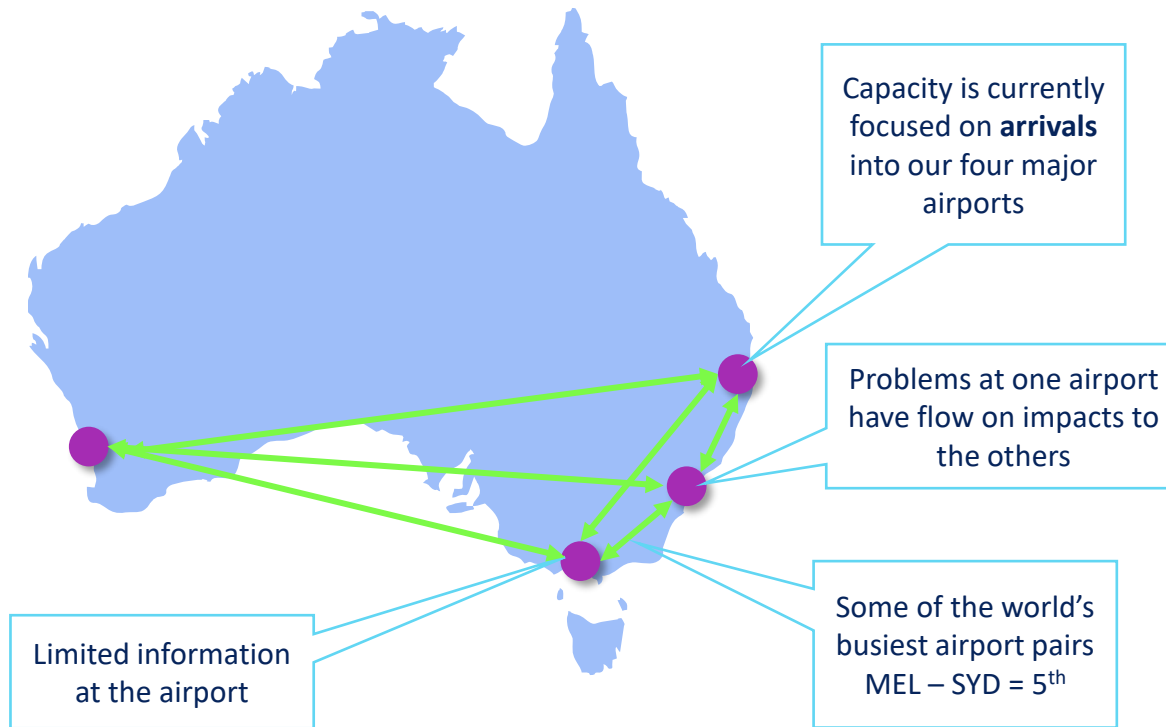
3. Benefits of an integrated A-CDM

A-CDM delivers significant benefits and outcomes for individual operators and the industry overall.

Situational Awareness	Operational Efficiency	Asset & Resource Utilisation	Customer Experience	Cost Savings	Environmental Benefits
Common, real-time situational awareness of local / network pain points	Optimising the push-back sequence to reduce taxi-out times, improved ATFM compliance and network management	Better utilisation and unlocking of latent airspace, runway and gate capacity	Improved on time performance, customer experience, predictability and recovery from adverse events	Cost savings by reduced inefficiencies and improved operational predictability	Lowered CO2 emissions through reduced taxi time and fuel burn

Network Benefits delivered by A-CDM

A-CDM optimises and unlocks runway and gate capacity and enables situational awareness across the network.

Capacity is currently focused on **arrivals** into our four major airports

Problems at one airport have flow on impacts to the others

Limited information at the airport

Some of the world's busiest airport pairs MEL – SYD = 5th

OUR UNIQUE NETWORK ENVIRONMENT

A-CDM becomes a new control lever to optimise whole of network performance by:

- Providing real time information at each major airport

- Reducing taxi delays through optimised departure sequencing

- Enabling more sophisticated departure management capability improving enroute flow

- Improving ATFM compliance as the departure sequence takes into account CTOTs

- Improving recovery from adverse events reducing the flow on impact at the other airports

- Providing strategic awareness of what's happening and what's coming across the whole network through the NOMC

A-CDM improving recovery

ADVERSE CONDITIONS – real time information & departure sequencing to improve recovery

- Leading into adverse conditions, the current CDM focus is on managing arrival demand through adjusting airport arrival acceptance rates and associated GDP revisions without considering the impact of departure demand.

- This impacts recovery with large departure delays occurring as arrival demand has been prioritised with flow on impact to arrival flows at the destination airport.

- The impact of an adverse event at one airport, may therefore ripple unpredictably throughout the network and lengthen the time it takes for all stakeholders to recover.

- With A-CDM, real-time operational information is shared between all airport stakeholders. Combined with pre-departure sequencing, A-CDM provides improved visibility of real-time arrival and departure demand throughout the network. It also enables CDM to include considerations of arrival and departure balancing, to ensure a smoother recovery from an adverse event, and mitigate the impact on the remainder of the network.

4. Key elements of A-CDM

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A-CDM is underpinned an information sharing platform comprising six key elements*.

1. INFORMATION SHARING
A-CDM provides common situational awareness for all stakeholders (air traffic control, airlines, airports, ground handlers) – read more here.

2. MILESTONE APPROACH
A-CDM captures flight progress data in real time according to 16 standardized milestones – read more here.

3. PRE-DEPARTURE SEQUENCING
A-CDM uses data within the system to establish an optimised pre-departure sequence to reduce taxi out delays, provide predictability and reduce congestion – read more here.

A-CDM Information Sharing Platform

4. VARIABLE TAXI TIME
A-CDM calculates the estimated time that an aircraft spends taxiing between parking bay/stand & runway thus providing predictable & accurate estimates of in blocks and take off times – read more here.
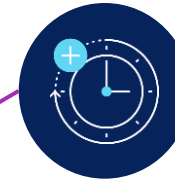
5. RECOVERY FROM ADVERSE EVENTS
Through information sharing and pre-departure sequencing, A-CDM enables a more timely recovery from adverse conditions considering arrival & departure demand – read more here.

6. COLLAB. MGT OF FLIGHT UPDATES
A-CDM integrates of airport operation information into whole-of-network mgt, providing improved visibility of real-time arrival and departure demand throughout the network – read more here.
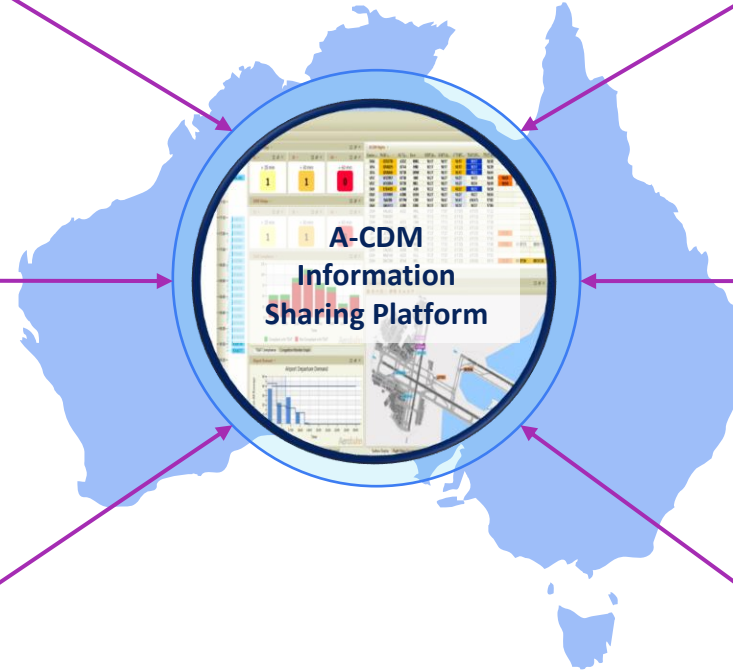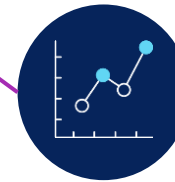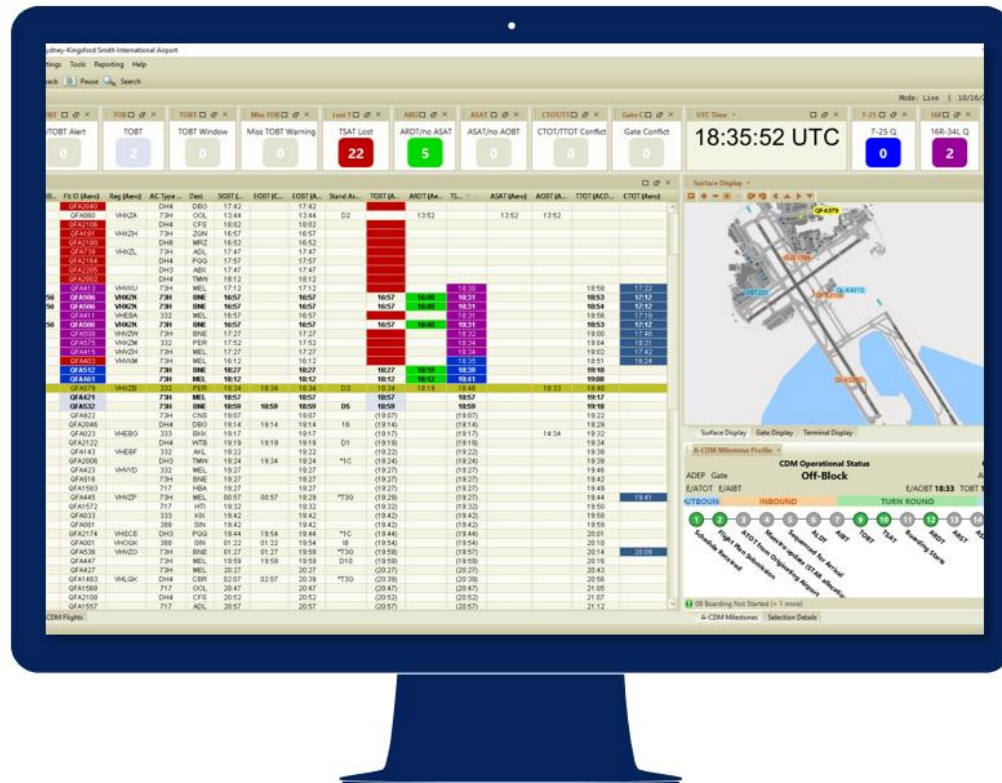
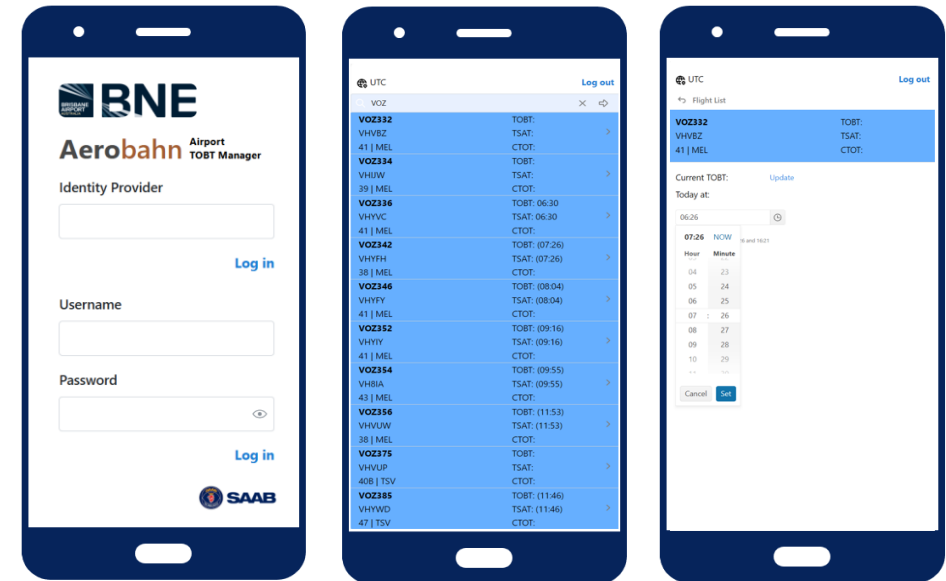*The Australian implementation is based on the Eurocontrol definition of A-CDM.

5. A-CDM Interfaces

Aircraft operators can update TOBTs via the A-CDM portal, web application or through airline system interfaces.

A-CDM Workspace (Web Portal)
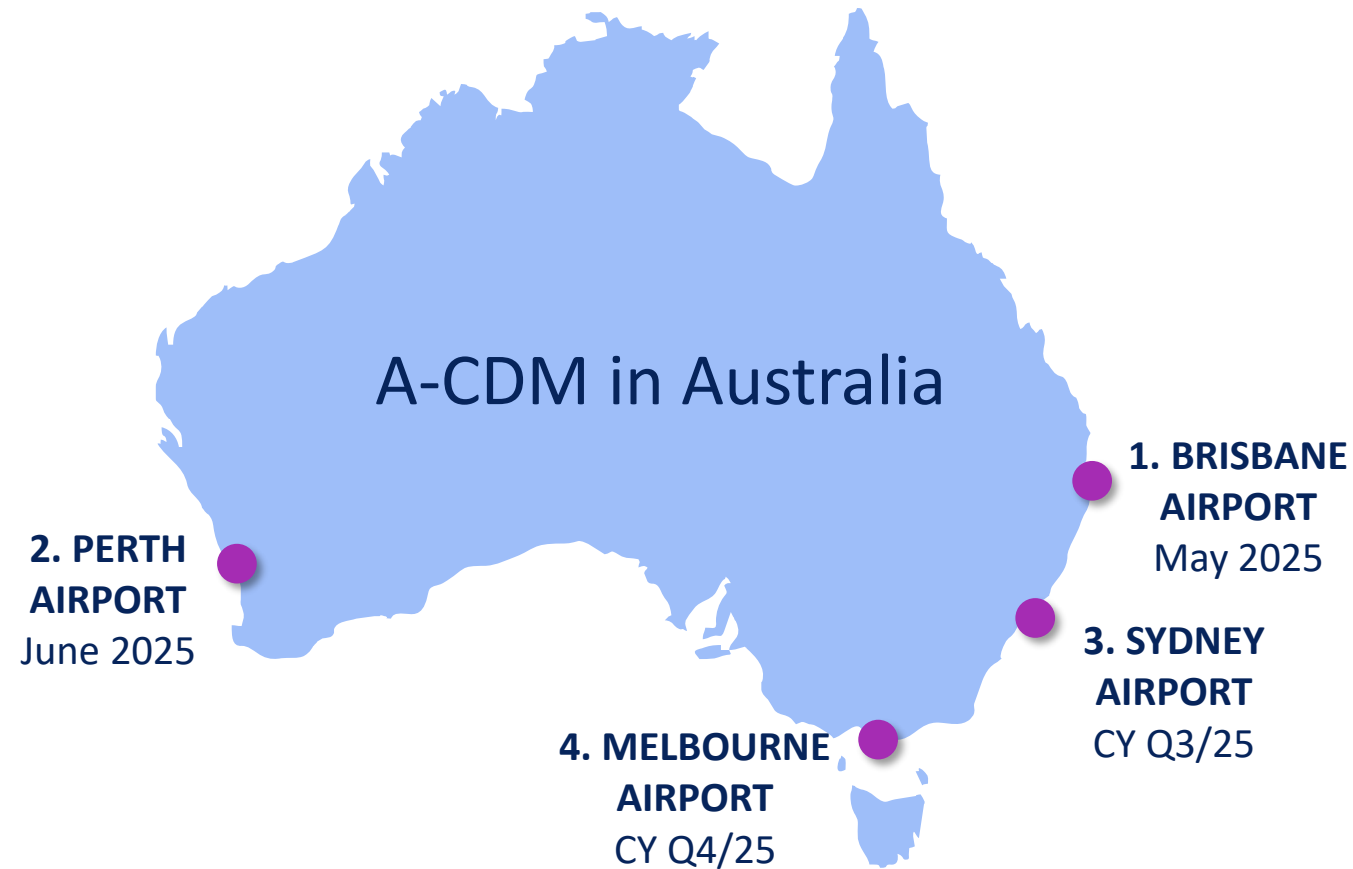

A-CDM TOBT Mobile Application

A web application enabling designated users
(ie. ground handling agents) to easily update TOBTs.

A PC based application providing situational awareness on all aircraft
movements at each A-CDM airport plus ability to update TOBTs.

6. A-CDM Implementation Timeline

A staged implementation, one airport at a time, fully operational by end 2025.

A-CDM in Australia

1. BRISBANE AIRPORT
May 2025

2. PERTH AIRPORT
June 2025

3. SYDNEY AIRPORT
CY Q3/25

4. MELBOURNE AIRPORT
CY Q4/25

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Thank you

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