Airport Collaborative Decision Making (A-CDM)

FAQS – GENERAL (INDUSTRY)

What's happening?

Airservices is leading a program 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) in 2025.

What is A-CDM?

A-CDM is a new way of working to improve the efficiency and predictability of airport operations and optimise departures.

Why are we implementing A-CDM in Australia?

The purpose of implementing A-CDM in Australia is to improve predictability and on-time performance, optimise the use of resources and airport infrastructure, improve ATFM compliance, reduce taxi-out times, reduce recovery time from adverse events and improve network management.

What are the benefits of A-CDM?

A-CDM will improve the efficiency and predictability of the arrival, turnaround and departure processes at our busiest airports leading to reduced taxi out times, reduced congestion and delays on the taxi ways and holding points resulting in less fuel burn and emissions plus an improved experience for the flying public.

How does A-CDM work?

A-CDM works by all airport stakeholders following agreed procedures and sharing real time data on a common information sharing platform to make informed decisions and efficiently manage the arrival, turnaround and departure phases of an aircraft.

What will change under A-CDM?

Once an airport becomes an A-CDM airport, airports, airlines, ground handlers, ATC and the NOMC will need to adhere to the new A-CDM procedures as per AIP (ENR 1.4) <u>AIP Sup 45/25</u>. The most important procedural change is that an aircraft operator (or designated ground handler) must have a TOBT (Target Off Block Time) to depart and request startup / pushback within the TOBT compliance window (-5/+5 mins of TOBT). Operators will also have a TSAT (Target Start Up Approval Time) which is the estimated time they can expect to receive startup / pushback clearance from ATC.

Who is impacted by A-CDM?

All stakeholders at an A-CDM airport will be required to make changes to the way they work including domestic and international airlines, ground handlers, fixed base operators, freight operators, and general aviation.

What is a TOBT?

The TOBT is the Target Off Block Time. This is the time that an aircraft operator (or designated ground handler agent) estimates that an aircraft will be ready (doors closed, boarding bridge removed, push back vehicle available) ready to start up / push back immediately upon reception of clearance from ATC.

The TOBT is important because it: 1) provides a timely, accurate and reliable estimate to the airport community of an aircraft's 'readiness to go' and early



heads up on any delays, 2) feeds into the predeparture sequence and calculation of the TSAT to optimise the departure sequence, minimise apron and taxiway congestion and avoid runway wastage, 3) helps aircraft operators and ground handling agents allocate resources effectively, ie. the right people go where they need to be at the right time.

The TOBT is calculated automatically by the A-CDM system once a flight plan is entered and automatically updated as an aircraft moves through the stages of a flight. Automatic calculation stops 30 mins prior to create a stable TSAT. To provide an accurate operational picture and pre-departure sequence, it is important that the TOBT is kept up to date to an accuracy of +/- 5 minutes.

If there are any anticipated changes to the TOBT, an aircraft operator (or their designated ground handler) must promptly and as early as possible update the TOBT to an accuracy of +/- 5 minutes and ensure that the flight crew are ready to depart within the +/-5 TOBT window.

The TOBT is updated through the A-CDM System (portal) or TOBT Web Application.

What is a TSAT?

The TSAT is the time that the flight crew expects to receive start-up/pushback clearance by ATC. It is calculated in the A-CDM system which works out the optimum departure sequence for ALL departing aircraft using the aircraft's readiness (as indicated by the TOBT) and other variables such as runway capacity, departure queue length, departure rate, taxiway congestion, wake turbulence category, CTOT (if a GDP is in place), parking bay position and enroute & airspace restrictions. The TSAT compliance window commences from TSAT – 5 mins and aircraft will receive start or pushback approvals as operations permit.

Who updates a TOBT?

An aircraft operator is responsible for updating their TOBT. However, they might assign this responsibility to their ground handler.

How do you update a TOBT?

A TOBT can be updated via the A-CDM system portal or TOBT web application. Some partner airlines might opt to update the TOBT via their native systems.

Who has access to the A-CDM system?

Access to the A-CDM system is provided for our major airline and airport partners plus the major ground handling agents who provide services for international and domestic airlines. Other airport stakeholders (eg. FBOs, smaller domestic operators, freight operators) will also be able to get access.

How often is A-CDM used?

Once an airport becomes an A-CDM airport, the A-CDM procedures will apply 24/7 (unless the A-CDM system is down or there are any other technical issues). Otherwise, A-CDM will become the new way of working for an A-CDM airport.

What happens in the advent of a major incident (eg. weather event)?

A-CDM enables a smoother recovery in the advent of a major incident or weather event through real-time operational information being 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.

Will A-CDM replace the GDP / Harmony?

No. The Ground Delay Program (GDP) is an important program to mitigate and reduce airborne delay. GDPs will continue to be run once A-CDM is live for all four GDP airports (BNE, PER, SYD, MEL). The current GDP departure program (GDP-D) in Perth will be be replaced by A-CDM once Perth Airport becomes an A-CDM airport.

Will an aircraft still need to align to GDP compliance?

Yes. However, once A-CDM is live at an airport, GDP compliance will change from COBT (Calculated Off Blocks Time) to CTOT (Calculated Take Off Time). This is because A-CDM manages the pre-departure sequence and taxi-out phase requiring compliance to change from push-back/start-up (COBT) to take-off time (CTOT).

If a GDP is in place for your destination airport, the CTOT issued by Metron Harmony will be incorporated into the calculation of the Target Start Approval Time (TSAT – the time you are predicted to get ATC clearance to start or push back). Aircraft operators will be given start-up / pushback clearance within the TSAT compliance window in time to meet their CTOT.

In the case of late non-compliance with GDP CTOT due to actions by ATC (due to operational issues), no penalty will be imposed. In the case of late noncompliance with GDP CTOT resulting from an operator TOBT update, you must obtain a revised GDP CTOT which will generate a new TSAT.

For the first three months post go-live, there will be no penalties to anyone late non-compliant with their CTOT.

How does A-CDM improve the information available to operators now?

A-CDM is enabled by Aerobahn A-CDM which is an information sharing platform provided by Saab for partners to access A-CDM services. It has a webbased user interface and features flight lists, airport maps showing aircraft positions on the airport surface, TOBT management, pre-departure sequence management, day of operations dashboards and much more.

Once A-CDM is operational at an airport, information in the A-CDM system will be the single source of "truth" in terms of times for aircraft movements at the airport. The system updates every 10 seconds with data from Airservices, airlines and airports. Any delays incurred during any phase of the flight will be automatically captured and transferred via the A-CDM system.

How is A-CDM being implemented in Australia?

A-CDM is being implemented in a staged approach, one airport at a time.

Which Australian airports are A-CDM airports?

A-CDM is being implemented at Australia's four busiest airports – Sydney, Melbourne, Brisbane and Perth – starting with Brisbane in Q2/CY2025. All airports will be fully operational by end 2025.

When will A-CDM be implemented at these ports?

- Brisbane Airport 10 May 2025
- Perth Airport 14 June 2025
- Sydney Airport August 2025
- Melbourne Airport October 2025

Has this technology been delivered anywhere else?

Yes. A-CDM is a proven operating capability in over 50 airports globally. Other airports have installed a single location A-CDM. This is a world first multi-location project.

Where can I go for more information?

- Visit: <u>www.airservicesaustralia.com</u>
- Login: <u>NOMC Portal</u>
- Read: <u>AIP Sup H45/25</u>
- Email: <u>acdmprogram@airservicesaustralia.com</u>