Airport Collaborative Decision Making (A-CDM)

Airport Collaborative Decision Making (A-CDM) will make it faster, simpler and more efficient to manage aircraft movements through the collaborative sharing of accurate, real-time data and insights. By transforming the current localised picture of aircraft movements, A-CDM will enable airlines, airports and others to optimise end-to-end operations, improve performance, and better service their customers.

What is A-CDM?

A-CDM is an operating concept that will improve the way airports, airlines, aircraft operators, ground handling agents and Air Traffic Control work collaboratively to streamline airport operations.

A-CDM has been proven around the world and delivers optimised use of airport capacity and improved predictability of operations for airlines, airports and the travelling public.

How does A-CDM work?

The foundation of A-CDM is an information sharing platform (ISP) that provides accurate and timely information for A-CDM partners.

At present, localised systems and unrelated sources of data are used to manage aircraft movements through the arrival, turnaround, and departure phases of a flight. A-CDM resolves this by providing a common picture that will enable gate allocations to be optimised, ground handling resources to know when and where to be ready, and air traffic control to better sequence departing aircraft. In turn, this gives airlines more certainty about when a flight will be approved for take-off.

Delivering together

Airservices Australia is working in partnership with our major airline and airport customers to lead the implementation of A-CDM at Sydney, Melbourne, Brisbane and Perth airports in 2025.

In taking a lead role, Airservices is committed to delivering a single A-CDM solution to harmonise operations across all the four major airports, reduce duplication costs and elevate the benefits of A-CDM to a whole-of-network perspective by integrating the solution into our Network Operations Management Centre (NOMC).





Key features of A-CDM

A-CDM aligns with Airservices' aspiration to be a digitally enabled business powering enhanced performance for airlines and airports.

Key features of the A-CDM service incl.

- Common situational awareness across all A-CDM partners providing improved predictability, enabling collaboration and improved decision making.
- The introduction of surface management capability will reduce surface bottlenecks, tarmac delays and gate confliction.
- New departure management capability will optimise push back sequence to assist the flow of departing aircraft onto the active departure runways and providing airlines with predictability of departure time.
- Integration with airport and airline turnaround management and arrival management systems will be enhanced beyond the current localised view to better prepare inbound aircraft for its following outbound flight.
- Reporting dashboard for A-CDM partners to identify ways of improving operations and asset utilisation.

Key benefits of A-CDM

Industry and environmental benefits

- A-CDM will enhance airline, airport and passenger experience by making departure management more predictable, improving use of runway and gate capacity, and reducing the time aircraft are waiting on taxiways prior to take-off.
- A-CDM provides a common picture that optimises gate allocations, allows ground handling resources to be ready when needed, gives airlines more certainty about when a flight will take-off, reduces gate changes and improves the passenger experience.
- A-CDM is expected to result in 70,000 hours of reduced taxi time to 2033.
- A-CDM is expected to deliver airline fuel cost savings in the order of \$100m to 2033.



Optimised gate allocations



Ground handling readiness



Take off predictability



Enhanced customer and passenger experience through improved predictability and fewer delays



Cost savings by reduced inefficiencies and operational predictability



Lowered Co2 emissions through reduced taxi time

Further information

For further information or questions, please contact the <u>A-CDM Program</u>.