

Top 5 Tips: A-CDM

The concept of airport collaborative decision-making (A-CDM) was pioneered more than twenty years ago, to improve punctuality and predictability at airports. Eurocontrol was particularly keen to see a-cdm implemented. Before that, airports had effectively been black holes, with air traffic control having no visibility on an aircraft's movements or activities until it started taxiing to the runway.

A-CDM is now the norm at many of Europe's biggest airports, and other regions are rapidly adopting the methodologies and supporting technologies needed for implementation. A-CDM helps optimize airside operations, improving planning horizons, and supplying predicted take-off times – all of which deliver not just cost savings but also environmental benefits. In coming years, the industry will continue the move towards Total Airport Management (TAM), and A-CDM is recognized as an important foundation in that transition.

So what should you focus on, when you're looking to implement A-CDM?



Sweating your existing assets

Find a supplier that helps you maximize and leverage existing solutions.

Many bigger airports are already enjoying the benefits of A-CDM. But if you're a smaller airport, you can be left wondering how to find the necessary budget and resources and then manage the increased complexity. You should look for A-CDM solutions that offer a lower barrier to entry, such as cloud solutions, or software as a service (SAAS). That way there's no capex involved, no need to replace existing systems, and no need to install complex new ones. Look for solutions that allow you to subscribe only to services that offer you maximum benefit, on a pay as you go basis.



Being able to dynamically change airport KPIs

In today's airports, flexibility is key.

All airports have changing requirements over time, both during the day, and also weekly and seasonally. They also need to be able to handle irregular operations, including weather-related incidents or delays. In Europe, for example, the focus is on long-haul arrivals in the early mornings, and then switches to local and regional departures later in the day. Many airports see tourist season peaks and quieter periods at other times of the year. You therefore need to help reduce your controller workload with managed departure and arrival streams. And to do that, you need to be able to dynamically – and quickly and easily – change your key performance indicators (KPIs).



Improve airport – and air space – efficiency

Reduce traffic jams at your airport - and in the skies.

We've all seen pictures of dozens of aircraft, queued up for takeoff, all with their engines running. This isn't just an inefficient use of resources, but it's also terrible for the environment. A well-implemented A-CDM solution says goodbye to all that, telling pilots when to start-up for optimal take-off and minimal taxi time. With departing aircraft sequenced in the exact order for takeoff, runway use is maximized, reducing delays and congestion, both on the ground and in the air. This also helps air traffic control not just in the immediate sector but in adjacent sectors too. With A-CDM there are no surprises, as you can share the optimal start-up and pushback times with all airport stakeholders, on any device, so everyone can plan accordingly.

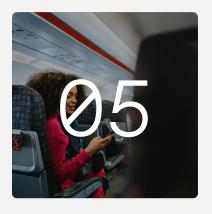


Achieve ACI carbon accreditation targets

Reduce airport emissions and improve the environment.

Aircraft engines running on the ground are the biggest single contributor to an airport's total emissions, but A-CDM can help you achieve your environmental and sustainability goals. By starting up engines at the optimal time and minimizing engine run time on the stand, on the apron and while taxiing, A-CDM delivers proven reductions in fuel burn and emissions of 7.7%.

New technology can also be used to create a heat map of the airport, recording exactly when and where emissions are caused, and how much at each location. Knowing what can and should be improved, you can use A-CDM tools to address and mitigate these issues. You can then feed fresh data back into the system after making changes, to see the concrete improvements, and use these in submitting for ACI carbon accreditation.



Increase mobility for more efficient collaboration

Share information between all stakeholders on any device.

Everyone working at the airport has access to some kind of mobile device – not necessarily a PC or laptop – so it's crucial to enable collaboration between them. Stakeholders should be able to update flight details, based on their role, notifying everyone of potential changes that may influence their operations. All stakeholders should be equipped with the latest real-time information at all times, fully empowering them to make decisions in the palms of their hands.