

Airport Collaborative Decision Making (A-CDM)

Information Sharing – AOS

Leaflet #5 – November 2016

Introduction:

A-CDM is a concept that promotes effective collaboration between partners, using improved quality of information and more timely exchange of information, which is interpreted in exactly the same way by all partners. A-CDM brings substantial benefits to all partners by improving the quality of information on which decisions are made. This will lead to enhanced operational efficiency and facilitate optimum use of available capacity. More efficient use of resources, and improved event punctuality as well as predictability are the targeted results. Timely shared information is paramount to enable each partner to react early enough to update their milestones in real-time.

Dublin Airport will use their existing IT systems for A-CDM information sharing; that is, Airport Operation System (AOS). AOS will primarily display:

- ➔ Accurate arrival information through Flight Update Messages (FUM) from Network Manager Operations Centre (NMOC).
- ➔ Various interfaces to & from airlines, handling agents and IAA.
- ➔ Target Off-Block Time (TOBT), which will be input & maintained by the airlines or handling agents and forwarded onto ATC Dublin.
- ➔ Target Start Up Approval Time (TSAT), calculated by ATC Dublin via the Pre-Departure Sequencer (PDS).

The screenshot shows a flight schedule table with columns: FR No, C/Sign, Rego, A/C, Flight Status, Dep, CDM Dep, SOBT, EOBTL, AOBT, ATOT, Stand, Departure Gates, Rwy, ASBT, AEBT, CTOT, TOBT, TSAT, TTOT, MTTT, and MM Dep. Red arrows point to specific areas: 'Flight Details' (C/Sign, Rego, A/C), 'A-CDM Status' (Flight Status, Dep, CDM Dep), 'TOBT Maintenance (input, update & deletion)' (TOBT), 'TSAT Notification' (TSAT), and 'Visual Milestone Status (DEP)' (MM Dep). A 'Typical Alerts' box highlights an alert for flight FR7034: 'UAT: Received TOBT 08/11/2016 1640 (UTC) is out of ATC Flight Plan EOBT 08/11/2016 1555 (UTC) tolerance window. Check outbound flight and TOBT and update if required. NOTE: EOBT AND TOBT SHALL NOT DIFFER BY MORE THAN 15 MINUTES. THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START UP / PUSHBACK CLEARANCE MAY NOT BE GRANTED UNTIL DISCREPANCY IS RESOLVED.'

Image: Extract from Airport Operation System (AOS) test environment (subject to change)

Alerts:

Alerting is an important result of information sharing and information processing. Once new information is entered in the AOS system, it must be validated so that the value of the new information is compliant with tolerances and limits. Alerts will be automatically generated within the AOS system and issued to users for resolution should an inconsistency be detected. An example of this would be were the turnaround time of the aircraft goes below the Minimum Turn-round Time (MTTT) declared by the airline. In this case you would receive an alert to amend the arrival / departure times so the flight turnaround complies with the MTTT declared.

Swapping Flights:

After a TSAT has been calculated and published, it may be possible to swap the sequence ordering of two flights under very strict conditions. Swapping of flights may be facilitated provided the flights are of similar type, same operator, similar location, etc. An example of this would be, when a flight has to meet a curfew at an airfield but a TSAT will not facilitate this. An airline may request that this flight be swapped with another flight of the same airline to allow the aircraft reach its destination airfield before the curfew). The final decision on swapping flights will rest with the ATC Station Manager. It is not envisaged that swapping flights will be used on a regular basis.

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Webpage: <https://www.dublinairport.com/regulation-and-planning/regulatory/airport-cdm>

EUROCONTROL website: <http://www.euro-cdm.org/>

