CDM

AIRPORT COLLABORATIVE
DECISION MAKING

PRAGUE ♥ YOU

*Prague Airport implemented new procedures
which aim at improving Air Traffic Flow and Capacity Management
by reducing delays, improving the punctuality of events
increasing safety and optimizing the utilization of resources,
while reducing the impact of the airport operations on the environment.*

**Pilot? Air Traffic Controller? Handling Supervisor? Airport Dispatcher?
This leaflet reveals what the CDM brings you.**

Prague Airport

The reason for change…

In the absence of CDM, operational decisions may often be incorrect, or do not get made at all. Partners may make conflicting decisions as the result of lack of information or the receipt of information that has diverging meaning to different partners.

CDM: the right concept for modern civil aviation

As the name implies, CDM is about partners working together and making decisions based on more accurate and higher quality information. All airport partners have the same operational picture, with the same meaning to all involved. It allows each CDM Partner to optimise their decisions in collaboration with other Partners, knowing their preferences and constraints with the actual and predicted situation.

An improved punctuality, predictability, safety, better use of resources and reduced impact of airport operation on the environment is the result.

Air Traffic Control

Aircraft Operators

- Improve predictability
- Improve on-time performance
- Reduce taxi fuel
- Reduce other ground movement costs
- Optimise/enhance use of ground handling resources
- Optimise/enhance use of stands, gates and terminals
- Optimise the use of the airport infrastructure and reduce congestion
- Reduce wastage of ATFM slots
- Flexible predeparture planning
- Reduce apron and taxiway congestion

CFMU
Central Flow Management Unit

Ground Handling

Airport Operations

Source: EUROCONTROL

Who will benefit from CDM? All partners!

For the **Airport Operator**, improved use of stands / gates will increase potential capacity utilization. More stable traffic flow and reduced taxi times will lead to fewer queues at the runway or congestion on the apron or taxiways. Further, CDM increases operational safety and reduces the environmental impact of airport operations.

Air Traffic Control will benefit from reduced workload of Air Traffic Controllers as well as from improved runway and capacity planning. More accurate take off time predictions will lead to more accurate calculations of the network demand. This enhanced flow and capacity management will result in better slot compliance and reduced number of missed slots.

As **an Aircraft Operator** you will have an improved awareness about the status and location of the aircraft. Together with sequence information and better arrival times, more accurate fleet predictions will be the result. Fuel burn due to shorter queues at the threshold will be reduced, which reduces costs and the impact on the **environment**.
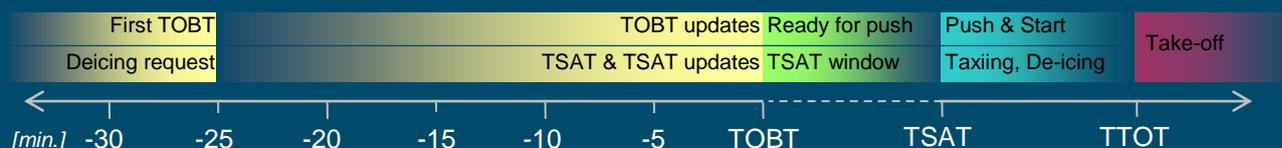
The Ground Handler will benefit from more accurate arrival times, which allows for more accurate planning with more efficient use of resources.

Passengers will benefit from reduction in delays, and fewer missed connections. After disruptions recovery will be faster. Also for arrivals more accurate information can be delivered to public displays and service desks.

Source: EUROCONTROL

Roles and responsibilities

Local CDM procedures are applied to all IFR flights 24/7.

| First TOBT | TOBT updates | Ready for push | Push & Start | Take-off |
| Deicing request | TSAT & TSAT updates | TSAT window | Taxiing, De-icing | |

[min.] -30 -25 -20 -15 -10 -5 TOBT TSAT TTOT

Ground Handling Agent (GHA)

✈ During handling the GHA shall report the target off-block time (TOBT). The first TOBT shall be introduced into the CDM Platform at least 25 MIN prior to its own value. Update of the TOBT shall be provided whenever the assumption changes by more than 2 MIN. The lowest acceptable value of the update is the current time + 5 MIN.

✈ The GHA shall report the de-icing request of the flight crew to the CDM platform at least 25 MIN prior to the TOBT time. Late de-icing request will be accepted, but cause a delay of the flight.

✈ The GHA shall inform the crew about the TSAT and all its updates.

ATC – Control Tower

✈ ATC assigns the optimum time of start-up, respectively push-back (TSAT) so that the aircraft can taxi to a RWY holding point continuously, preferably without any delay. If the flight is regulated, the TSAT calculation is based on the CTOT, otherwise on the EOBT. Another important variable for TSAT calculation of all flights is the TOBT.

Aircraft Operator

✈ The aircraft operator shall provide continuous updates of the EOBT in the flight plan.

  o In case the TOBT is greater than the EOBT + 15 MIN, the ACFT operator has to send DLA message.

  o There are no REA messages after the NMOC connection, the TOBT value represents your readiness.

  o No DLA message needed in case of any difference between the TOBT and TSAT value

Flight Crew (IFR only)

✈ The crew shall confirm the TOBT time with GHA and report all facts that can affect the TOBT to the GHA.

✈ The de-icing request shall be reported to the GHA by the crew at least 25 MIN prior to the TOBT. Late de-icing request will be accepted, it can, however, cause a delay.

✈ From the TOBT time on, the crew shall monitor the RUZYNE DELIVERY frequency and be ready to receive and carry out ATC instructions.

✈ At the TSAT time (tolerance -5 to +5 MIN) the crew shall contact ATC, report TSAT and request start-up clearance. If the crew does not make the request in given time, a new TSAT is assigned to the flight, which can cause a delay.

= *see your flight documentation - Start-Up and Taxi Procedures or AIP CR - LKPR AD 2.22.3.3.2 – CDM Procedures* =

TOBT and TSAT available also on VDGS

If you're allocated on the nose-in stand equipped with VDGS, you can check your latest TOBT and TSAT also on this display.

These times are in UTC.

De-icing

De-icing should be requested at least 25 MIN prior to TOBT via your Ground Handler. Later de-icing request will be accepted but can cause a delay.

The crew shall contact GHA with the requested range.

DPI messages - Prague/Ruzyne airport is fully implemented A-CDM airport

DPI messages provide the NMOC more recent and more accurate flight data updates before take-off to obtain more accurate traffic prediction. These updates are based on the local CDM process. DPIs can adjust potential CTOT to locally predicted take-off time.

Remember… each partner is important for success of the CDM!

What is your role in the game?

Pilots,
the CDM is here to save the ground engine time, thus taxi fuel by reduced queuing at the RWY holding point or at the de-icing spots. To achieve this, CDM must sometimes hold your aircraft at the stand.
Ask your Ground Handling Agent if any CDM question!

Ground Handling Agent

Send and update the TOBT!

Inform the Flight Crew about the TSAT incl. updates!

Report De-icing request into the system!

Allocate De-icing Stands!

Airline

Inform the Ground Handling Agent about all events that may affect the TOBT!

Update the Flight Plan!

Flight crew

Inform the GHA about all events that may affect the TOBT.

Report your request for De-Icing to the GHA!

Call ATC for Start Up at TSAT ±5 min!

Air Traffic Control Tower

Provide the TSAT!

Approve Start Up Request at TSAT ±5 min!

Provide DPIs to Network Manager.

Airport Operator

Use CDM data for allocation of resources!

Manage the Airport Operational Database!

Manage and supervise the CDM!