AIRPORT COLLABORATIVE DECISION MAKING (A-CDM)

ROME - FCO

FLIGHT CREW BRIEFING

Version 1.2
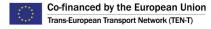
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1. GENERAL INFORMATIONS

European airports are becoming the restricting bottleneck to the overall ATM system for the current volume of traffic and the further expected growth of demand in the aviation sector. Hence the need to develop an accurate coordination system through the exchange of detailed information in real time between all the stakeholders in order to improve performance and optimize resources. For this purpose, the airport "Leonardo Da Vinci" of Rome – FCO has reorganised the operational procedures in accordance concerning the Airport Collaborative Decision Making (A-CDM).

One of the main objectives of A-CDM is to estimate the "Target Take Off Time" (TTOT) as thoroughly as possible in order to improve the "en route" and "sector" planning by the European ATM; this can be reached by implementing a series of "DPI" (Departure Planning Information) and "EFD" (ETFMS Flight Data messages) sent to CFMU.

Therefore Airport CDM can be considered as a basis for connecting the airport to ATM system.

A-CDM procedure begins with the ATC flight plan transmission 3 hours before the EOBT (Estimated Off Block Time) and continues through 16 milestones that describe the status of the flight in all its phases up to the take off (ATOT – Actual Take Off Time). TOBT (Target Off Block Time) and TSAT (Target Start-up Approval Time) are two of the main innovative concept introduced; the first one represent the time that an Aircraft Operator or Ground Handler estimates that an aircraft will be ready; the second represents the time provided by ATC taking into account TOBT, CTOT and/or the traffic situation that an aircraft can expect start-up clearance.

2. TARGET OFF BLOCK TIME - TOBT

The TOBT is the time when the AO/GH estimate that an aircraft will be ready, all doors closed, boarding bridge removed, push back vehicle available and ready to start-up / push back immediately upon reception of the clearance from the TWR.

The system calculates the TOBT automatically starting from EOBT–2h and updates the value each time a new ELDT of the incoming aircraft status is available. For aircrafts which are not part of a direct turnaround (the turnaround process lasts for more than 2 hours), the incoming flight is not linked to the departing one and the TOBT of the originating flight is the EOBT (Estimated Off Block Time).

Once the TOBT has been generated, the AO/GH is responsible for its correctness and adherence; if the automated TOBT could not be respected, the AO/GH can modify / re-enter it without limitations before EOBT – 40' and not more than 3 times later (in any case the system will monitor the congruence of the entered data).

TOBT can be reported in one of the following ways:

- A-CDM Platform (FAST – Fiumicino Airport Sharing Tool);
- ADBM system;
- AMB system;
- Standard SITA TELEX.

3. AIRCRAFT READY PROCEDURE

The Ready Time (defined in the existing AMS procedures on the AIRPORT RULES MANUAL) represents the interface between the airport turnaround processes and the ATC pre-departure sequence. This milestone is checked by Airport Coordination Centre Operators through TVCC. The Flight shall be READY before TOBT+5min, otherwise it is suspended from the pre-departure sequence. In this case the AO/GH shall declare a new TOBT (at least 5min later than the time of system input).

The ARDT (Actual Ready Time) will be issued not earlier than TOBT – 5'; if the aircraft, after the ARDT, is effectively not ready, the TOBT and the TSAT are cancelled and a new TOBT shall be declared.

4. TARGET START-UP APPROVAL TIME – TSAT

The TSAT is issued 40 minutes before the reported TOBT and represent the time provided by ATC taking into account TOBT, CTOT and/or the traffic situation that an

aircraft can expect start-up – push back approval. It gives reliable information on the pre-departure sequence.

The TSAT will be transmitted to the pilot in command by the Airport Coordination Centre Operators when they issue the ARDT and, internally, by the AO/GH.

5. START-UP and PUSH BACK

The Pre Departure Sequence will be compiled in accordance with the TSAT and not with the start-up request.

The ASAT (Actual Start-Up Approval Time) will be issued by the TWR within TSAT + 5' or ARDT + 5', depending on which of the two values is greater.
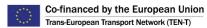
6. VARIABLE TAXI TIME CALCULATOR

In order to calculate the TSAT and the CTOT/TTOT, the A-CDM platform uses a variable value of the taxi time chosen from:

1. Average value of VTT related to the previous season, keeping into account the following aspects:
    - Stands splitting according to the type (push-back or self manouvring) and push-back procedures;
    - Take Off/Landing Runway;
    - Time slots of 30 min.
2. "Rolling Average Value", i.e. the average value of VTT noticed in the immediate previous time slot.

7. A-CDM PRECEDURE : Q&A

7.1 TOBT

1. Where does the TOBT come from if my flight is taking off on time?

The TOBT comes from an automatic calculation made by the A-CDM Platform taking into account all the most updated informations. If a flight is expected to take off on time, the TOBT will be equal to the EOBT.

2. When do I need to update my TOBT?

When it becomes clear that it's impossible to respect the TOBT issued by the platform due to a delay in the turnaround processes or when it's possible to recover a delay, the AO/GH can manually modify the TOBT. The platform checks the consistence of this value; if any inconsistencies occur, the platform will reject the TOBT.

3. Could I leave earlier?

If you are ready to leave earlier, you should advise your AO/GH to submit a revised TOBT; The TOBT should always be kept accurate to ensure that this time can be fed into the pre-departure sequence calculation (TSAT). The good and accurate management of the TOBT plays a fundamental role in A-CDM and needs to be improved from today's operation. In any case the minimum TOBT is always the EOBT-5'

4. Who is responsible for entering the TOBT? And how can it be input?
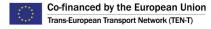
The responsible for the TOBT input is the AO/GH. There are several ways to input this data:

- A-CDM Platform (FAST – Fiumicino Airport Sharing Tool)
- ADBM system
- AMB system
- SITA TELEX

7.2 READY

1. How the actual AMS procedure will change?

With the new AMS procedure, the pilot shall contact the Airport Coordination Centre (VHF 121.725 MHz) not before TOBT-5' and not later than TOBT+5'; otherwise the TOBT will be cancelled and a new TOBT has to be input by the AO/GH. The Airport Coordination Centre will communicate the TSAT(Target Start up Approval Time) to the pilot who shall <u>monitor</u> the Delivery Frequency (VHF 121.8 MHz) waiting for the start-up approval.

2. What happens if, after the ready clearance (ARDT), the aircraft is not actually ready to move?

TOBT and TSAT will be cancelled and a new TOBT shall be declared.

7.3 TSAT

1. How can I obtain the TSAT?

Fiume Ramp will inform you about your TSAT as soon as they give you the ready clearance. It will also be displayed in the A-CDM Platform that will accessible by AO/GH.

2. How will I know that my TSAT has changed?

Fiume delivery will notify you any change of TSAT after the ARDT.

3. How is TSAT calculated?

TSAT is automatically calculated and updated taking into account several aspects such as TOBT, CTOT, traffic situation, variable taxi time etc.

4. When is the TSAT issued?

The TSAT is issued 40 minutes before the TOBT; once it has been issued, the TOBT can be manually changed up to 3 times, thereafter it will be cancelled.

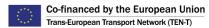**5. What do I have to do if I have missed my TSAT?**

Please contact your AO/GH in order to updated the TOBT.

6. After having received the "Ready" status from Airport Coordination Centre, how the Start-up precedure will change?

After having received the "ready" status by the Airport Coordination Centre, the pilot shall monitor the Delivery Frequency (VHF 121.8 MHz) waiting for the start-up approval.

7. When I'll receive the Actual Start-up Approval Time (ASAT)?

ASAT will be issued by the TWR within TSAT+5' or ARDT+5' depending on which one of the two is greater.

8. A-CDM CONTACTS

For further informations, please contact:

cdm@adr.it