IAA   **Dublin Airport**

Airport Collaborative Decision Making (A-CDM)
Target Start Up Approval Time (TSAT) & Target Take Off Time (TTOT)
Leaflet #3 – September 2016

TSAT Definition:

The Target Start-Up Approval Time (TSAT) is the time that an aircraft can expect start-up approval from ATC in accordance with the Dublin A-CDM procedures. The TSAT is issued by the Pre-Departure Sequencing (PDS) tool operated by the IAA and takes into account the Target Off-Block Time (TOBT), the Target Take Off Time (TTOT), current traffic situation, weather conditions, taxi times, etc. and external influences of the Air Traffic Flow Management (ATFM) from Network Manager Operations Centre (NMOC).

TTOT Definition:

The TTOT (Target Take Off Time) is the planned take-off time, taking into account TOBT / TSAT and Estimated Taxi-Out Time (EXOT).

Aim of TSAT & TTOT:

The aim of the TSAT is to indicate to pilots the time that Start Up Approval can be expected (+/(-)5 minutes). The aim of the TTOT is to indicate the expected take-off time (+/(-)5 minutes) that will maximise runway capacity.

TSAT and TTOT Process:

The following TSAT and TTOT processes will apply at Dublin Airport:
- At TOBT (-)40mins, the Pre-Departure Sequencer (PDS) will issue a TSAT
- TOBT's require updating if they differ by 5 minutes from the previous declared TOBT
- Once the TSAT is issued, the TOBT can be changed a maximum of three times
- If a fourth change to TOBT is required after the TSAT is issued, then the TSAT will be cancelled and the flight will be re-sequenced. The next available TSAT will be issued. (This procedure may change to allow more changes to TOBT in light of experience)
- Pilots will call at TOBT (+/(-) 5 minutes) to confirm ready
- ATC will give push & start at TSAT +/(-)5 minutes
- Taxi times from individual stands will be used by the Pre Departure Sequencer (PDS) to determine the TTOT
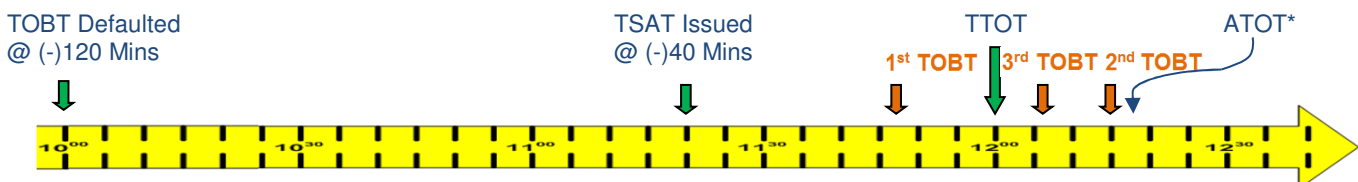- Take-off clearance will be given at TTOT +/(-)5 minutes

Accurate TOBT's provided by Airlines (or their agent), will ensure accurate TSAT's & TTOT's will be issued by ATC.

TSAT and TTOT Responsibility:

The Aircraft Operator (or their agent) is responsible for providing accurate TOBT's. Based on the declared TOBT, the Pre-Departure Sequencer (PDS) will issue the TSAT and TTOT, taking into account the current traffic situation, taxi times from each stand and CTOT's***. The IAA is responsible for the operation of the PDS and as required, will modify certain parameters within the system such as runway in use, taxi times, runway holding queue length, etc.

At TOBT, the flight crew is responsible for calling ATC to confirm that their flight is ready to push & start. ATC will acknowledge the call. At TSAT, it is the responsibility of ATC to call the aircraft and give push & start clearance. **It is vitally important that flight crews listen out on ground frequency at their TSAT and await their turn to push & start.** Flights that miss their TSAT will be removed from the sequence until a new TOBT for that flight is input by the Aircraft Operator or their handling agent. Once a new TOBT is declared, the next available TSAT will be issued.

Example of TOBT, TSAT & TTOT sequence (for SOBT / EOBT of 12:00):

		1 PAX missing	Last PAX arrived	
TOBT Updates	1st TOBT 11:47	2nd TOBT 12:15	3rd TOBT 12:06	ATOT* 12:18
Issued TSAT	TSAT 11:50	TSAT 12:17	TSAT 12:08	
Issued TTOT	TTOT 12:00	TTOT 12:27	TTOT 12:18	
			EXOT** 10mins	

* Actual Take Off Time (ATOT)   **Estimated Taxi-Out Time (EXOT)   *** Calculated Take Off Time (CTOT)

Rev 2

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