

## Definition of A-CDM \_ Airport Collaborative Decision Making

A-CDM is a process that allows air traffic controllers, airport operators, aircraft operators(AO), ground handlers(GH), and air traffic flow managers to exchange operational information and work together to efficiently manage operations at aerodrome.



## Objective and Expected Outcome

Improve aircraft departure flow by sharing and managing the milestone information among partners.

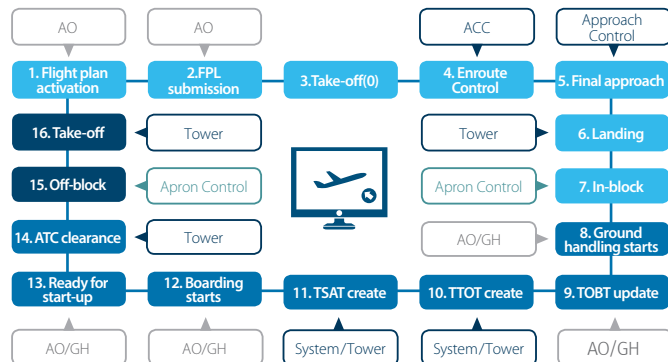


Establish a **collaborative process** for flight information sharing

Implement A-CDM and **Target Departure Time Management (TOBT, TSAT, TTOT)**

Delay management & Improvement of airport operation efficiency

## A-CDM Milestones and Process



## Major Milestones

### 1. TOBT (Target Off-Block Time)

The time when an aircraft is expected to be fully ready to move immediately upon reception of push-back clearance from the Apron Control Tower.



All Doors Closed



Boarding Bridges removed



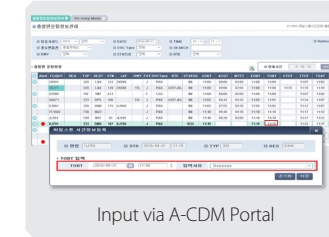
Pushback vehicle available



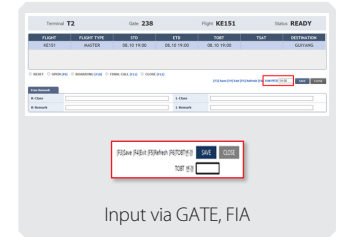
Pilot ready to depart

AO/GH input TOBT(Target Off Block Time)

- Target Confidence Level : +/- 5 mins
- If defers from EOBT for more than 15 mins, modify EOBT



Input via A-CDM Portal



Input via GATE, FIA

Before TSAT issuance by Incheon Tower,  
Input/modify without limitation

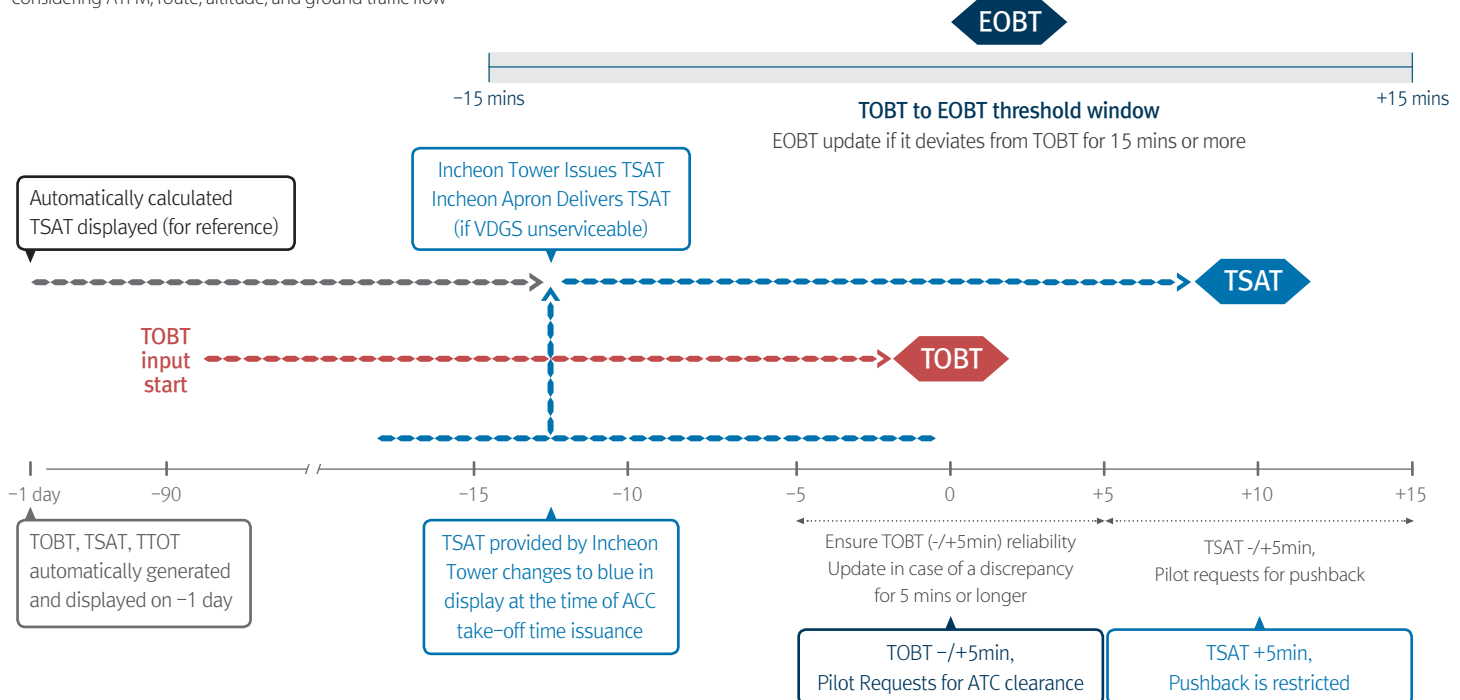


After TSAT issuance by Incheon Tower,  
Modification is restricted to 3 times or modify EOBT

Request to Apron Management Unit

## TOBT & TSAT Flow Chart

Based on TOBT, Incheon Tower creates TSAT and TTOT considering ATFM, route, altitude, and ground traffic flow



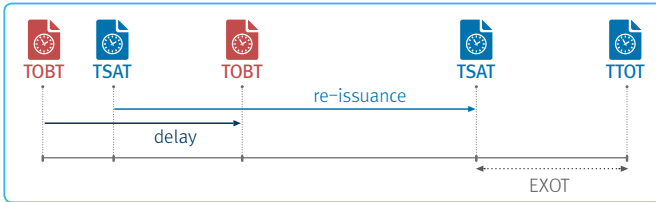
## Major Milestones

### 2. TSAT (Target Start-Up Approval Time)

The estimated time when Incheon Apron is expected to approve engine start-up and pushback for departure.

- **System TSAT** calculated by system based on TOBT
- **Incheon Tower TSAT** provided by ATC after TTOT agreement between ACC and TWR which is expressed in blue

#### •TSAT issue



### 3. TTOT (Target Take-Off Time)

The estimated time of take-off from the runway. Incheon Tower calculates TTOT, taking into account TOBT, CTOT, ATFM limitations, ground movement time, ATC separation and traffic conditions.

- **System TTOT** Take-off time calculated by system based on TOBT and TSAT(for reference)
- **Incheon Tower TTOT** Take-off time agreed between ACC and TWR which is expressed in blue

Alert	FLIGHT	REG	TYPE	DEST	STN	LMT	IRWY	FST	SVCType	RTE	STATUS	SCOT	ACDT	MTTI	COBT	TOBT	CTOT	TTOT	TSAT	A	
●	200911	320	LAX	128	20088	15L	J	PAX											11:35	11:19	
●	02985	76F	VNI	611			F	CGO											11:07	11:02	
●	GAB71	333	DPS	106			33L	J	PAX	0597.AG	INE	11:05	08:45	02:20	11:05	11:05			11:24	11:07	
●	VJ961	320	HAN	115	VJ960														11:12	11:07	
●	ZC162	738	WGO																11:17	11:12	
●	AL954	738	NRT	10	AL959														11:17	11:12	
●	KA701	333	DMK	107	KA700		J	PAX			SCH	11:15			11:15	11:15			11:22	11:17	
●	CZ340	321	HAK	105			J	PAX			INE	11:15	10:15	01:00	11:15	11:15			11:22	11:17	
●	VN831	321	DHD	132	VN830		J	PAX			INE	11:20	09:20	02:00	11:20	11:20			11:27	11:22	
●	CZ685	321	ILC	184	CZ685		J	PAX			SCH	11:20			11:20	11:20			11:27	11:22	

## How to use A-CDM Portal

Access Incheon Airport A-CDM website([www.airport.kr/acdm](http://www.airport.kr/acdm)) to create ID/PW ⇒ Integrated Information Team examines and approves the account

Via <http://es.airport.kr:21782/ui/Install/installIES.html>  
Install A-CDM Portal ⇒ is created in the background

Click the icon, Input ID/PW and OTP  
Log in ⇒ Start A-CDM Portal



## A-CDM System

Information sharing and management by integrating systems of Air Traffic Services, Airport Operators, Aircraft Operators, Ground handlers, etc.



## Role of A-CDM Partners

Partner	Main Role
Air Traffic Command Center	- Provide ATFM situation and CTOT
Incheon Tower	- Coordinate Take-off sequence considering TOBT, CTOT, ATFM, route, altitude, and traffic flow - Provide TTOT/TSAT if necessary(ATFM)
Incheon Apron	- Control Pushback considering TTOT and TSAT - Share information of de-icing - Delivers TSAT(if VDGS unserviceable)
Apron Management Unit	- Reflect EOBT change and TOBT after TSAT issuance
Aircraft Operator	- Monitor and input TOBT - Request EOBT change if necessary
Ground Handler	- Monitor Service Information and input TOBT



Operational Process : +82-32-741-5647 (09:00-18:00)  
System : +82-32-741-6320 (24 hrs)  
Additional info : [www.airport.kr/acdm](http://www.airport.kr/acdm)



# A-CDM

Airport  
Collaborative  
Decision  
Making



Incheon Airport

