



# Airport CDM Departure Sequence Exercise

ICAO SAM 3<sup>rd</sup> Workshop

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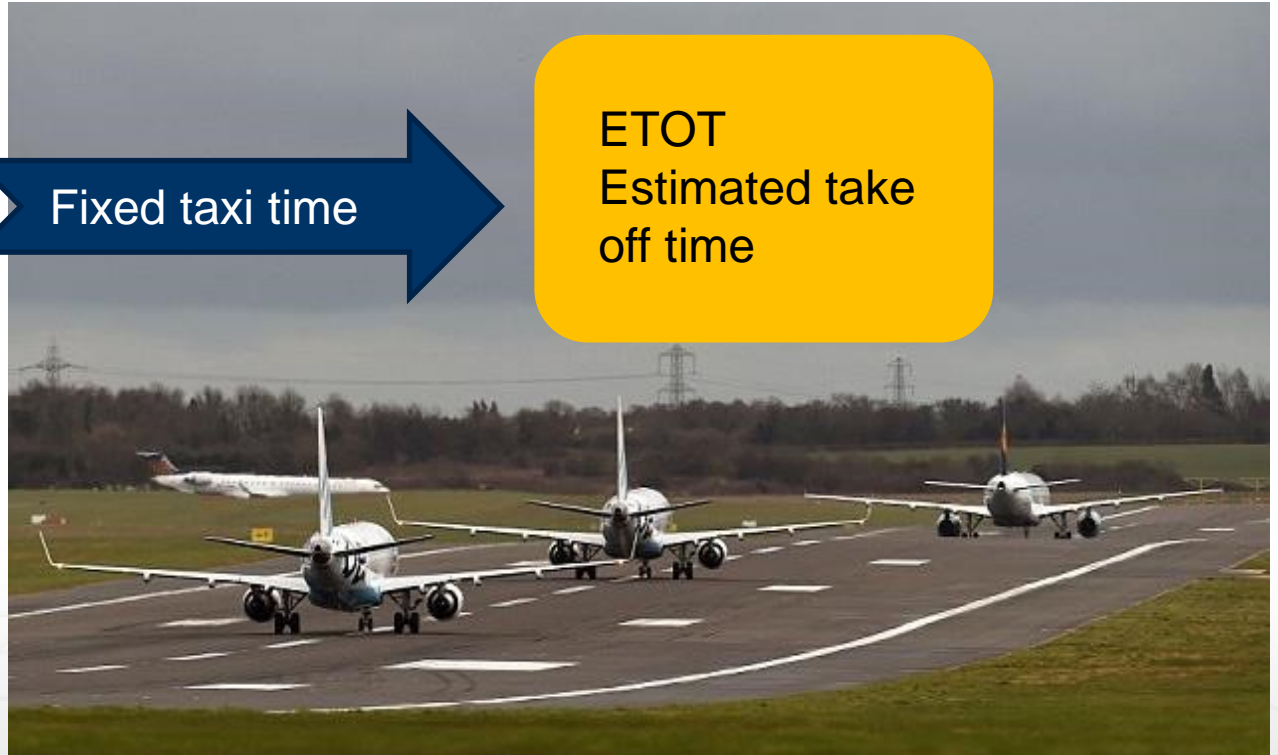
# Sequence - Flight Plan data [FPL]

**EOBT**  
Estimated off  
block time  
Updated by AO

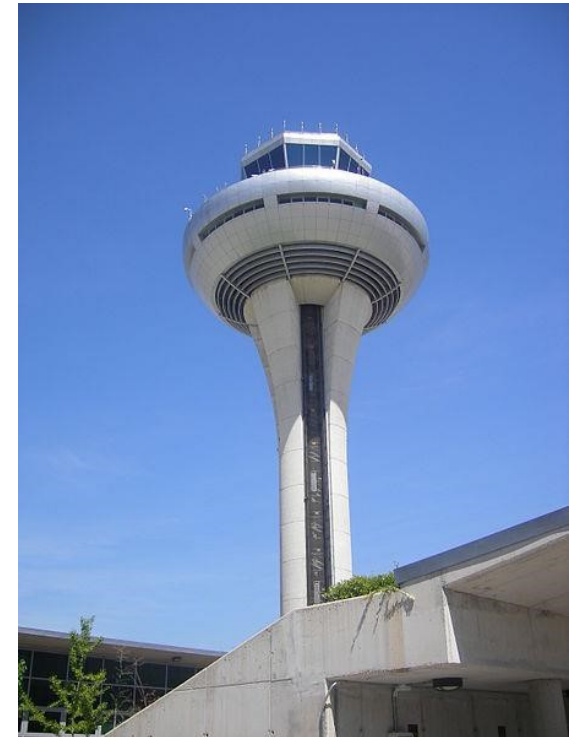
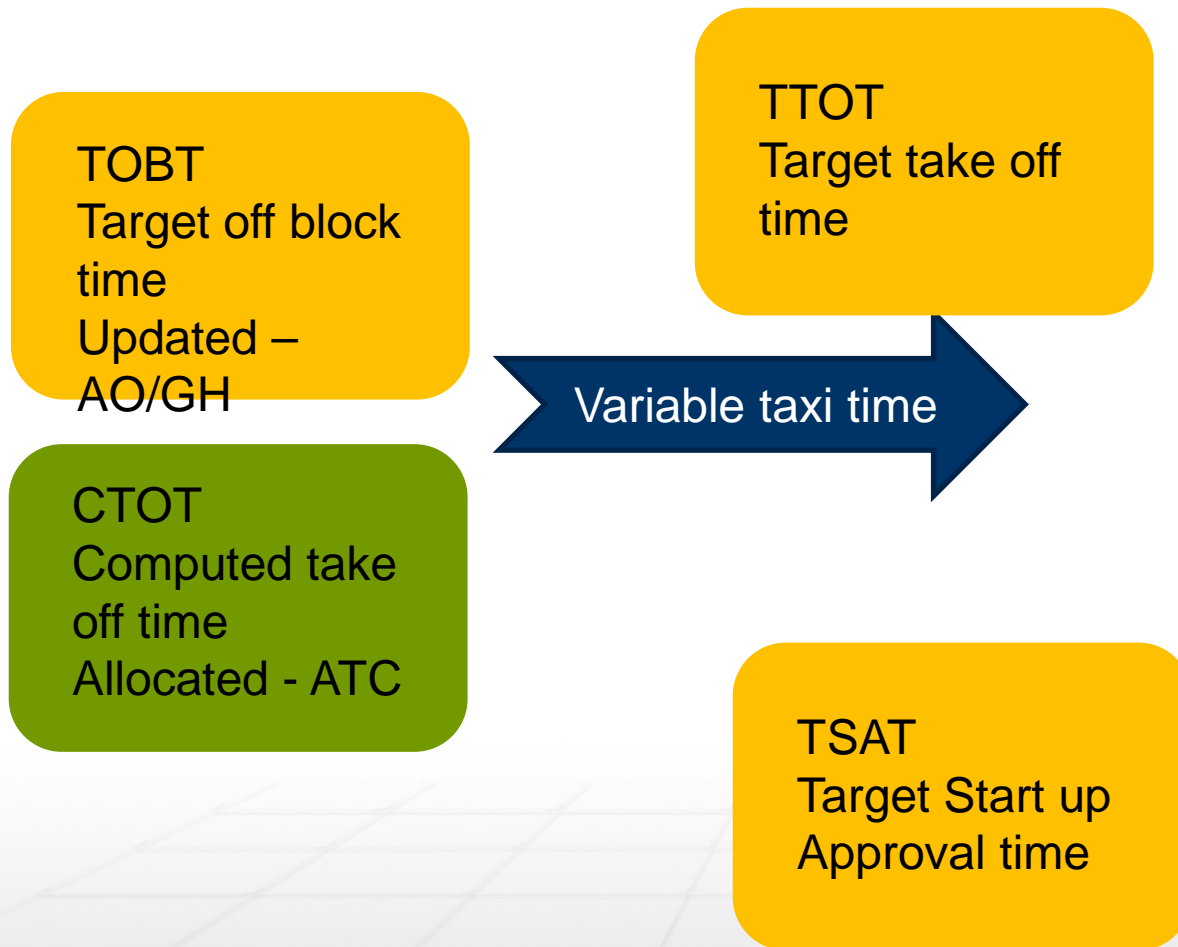
**CTOT**  
Computed take  
off time  
Allocated - ATC

Fixed taxi time

**ETOT**  
Estimated take  
off time



# Sequence – TOBT / TSAT based



# Benefits – TOBT / TSAT based

Elimination of departure regulations

Ground asset allocation at known start-up time

Accountability for start-up and push-back delay

On-stand delay absorption [“green delay”]

Optimization of runway departure sequence



# Sequence Calculation – Basic

Callsign	EOBT	CTOT	Fixed tax	Seq TOT
AAA001	1300	~	15	1316
AAA002	1300	~		1318
AAA003	1300	~		1320
AAA004	1300	~		1322
AAA005	1300	~		1324

*Departure rate = 2' [30/60]*



# Sequence Calculation – Basic

Seq Ref	Callsign	EOBT	TOBT	Fixed Taxi	Vari Taxi	ETOT	CTOT	TTOT	TSAT
13:00									
13:02									
13:04									
13:06									
13:08									
13:10									
13:12									
13:14									
13:16									
13:18									
13:20									
13:22									
13:24									
13:26									
13:28									
13:30									
13:32									
13:34									
13:36									
13:38									
13:40									
13:42									
13:44									
13:46									
13:48									
13:50									
13:52									
13:54									
13:56									
13:58									

*Departure rate = 2' [30/60]*



# Sequence Calculation – FPL with CTOT

	Callsign	EOBT	CTOT	Fixed tax	Seq TOT		
		Callsign	EOBT	CTOT	Fixed tax	Seq TOT	
	AAA001						
	AAA002						
	AAA003		AAA003	1300	~	1316	
	AAA004		AAA005	1300	~	1318	
	AAA005	1320					
		1322					
			AAA004	1300	1323	1324	
			AAA001	1300	1325	15	1326
			AAA002	1300	1326		1328

*Departure rate = 2' [30/60]*



# Sequence Calculation – TOBT / TSAT

Callsign	EOBT	TOBT	CTOT	Variable	TTOT	TSAT	
AAA001	1300	1305	1325	21	1326	1305	
AAA002	1300	1300	1326	18	1328	1310	
AAA003	1300	1255		17	1312	1255	
AAA004	1300	1308	1323	16	1324	1308	
AAA005	1300	1250		19	1310	1251	

*Departure rate = 2' [30/60]*





# Sequence Calculation – Data

Callsign	EOBT	TOBT	Fixed taxi	Vari Taxi	ETOT	CTOT	TTOT	TSAT
AAA001	13:00	13:05	00:15	00:21		13:25		
AAA002	13:00	13:00	00:15	00:18		13:26		
AAA003	13:00	12:55	00:15	00:17				
AAA004	13:00	13:08	00:15	00:16		13:23		
AAA005	13:00	12:50	00:15	00:19				
AAA006	13:05	13:10	00:15	00:19		13:32		
AAA007	13:10	13:09	00:15	00:12		13:34		
AAA008	13:10	13:10	00:15	00:12		14:04		
AAA009	13:10	13:16	00:15	00:18		13:35		
AAA010	13:10	13:01	00:15	00:20				
AAA011	13:20	13:22	00:15	00:11				
AAA012	13:20	13:30	00:15	00:14				
AAA013	13:25	13:25	00:15	00:21				
AAA014	13:25	13:15	00:15	00:23				
AAA015	13:25	13:25	00:15	00:11		14:10		
AAA016	13:30	13:28	00:15	00:16		14:03		
AAA017	13:30	13:30	00:15	00:13		13:59		
AAA018	13:30	13:33	00:15	00:09		13:58		
AAA019	13:30	13:40	00:15	00:09				
AAA020	13:35	13:30	00:15	00:06				

*Departure rate = 2' [30/60]*



# Thank you

