

Procedures for EOBT Update and CTOT Management

- Republic of Korea -

(ATFM/SG/14) Bangkok, Thailand, 22-26 April 2024



Air Traffic Management Office
MOLIT, Republic of Korea

CTOT Management

Protecting/Freezing/Locking of CTOT sequence

Re-allocating Backward

Slot Improvement

EOBT Update

Update EOBT with always accurate value

Update EOBT by DLA/CHG, not CNL/FPL

Distinguish between FPL's EOBT and DLA/CHG's



Frequently Asked Questions at ATFM

Q1. How far back in the sequence will I be pushed if I don't meet the CTOT?

Q2. In situations where I can comply with CTOT, do I need to update my EOBT?

Q3. Can I update my EOBT by resubmitting an FPL after sending a CNL message?

Q4. Can I update my type of aircraft or route by resubmitting an FPL after sending a CNL message?

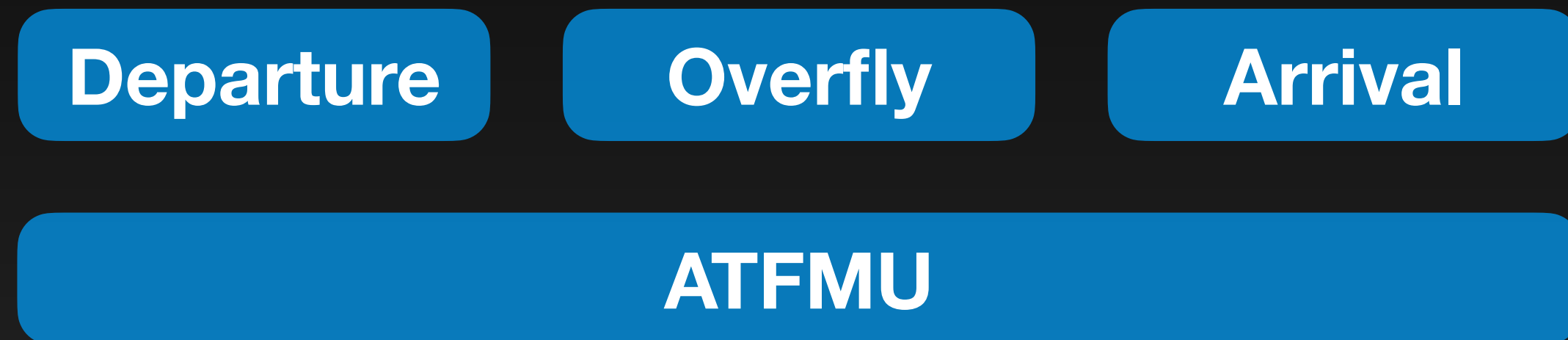


Introduction - Questions



To avoid confusion among stakeholders, We should provide clear answers to these questions.

[Centralized ATFM]



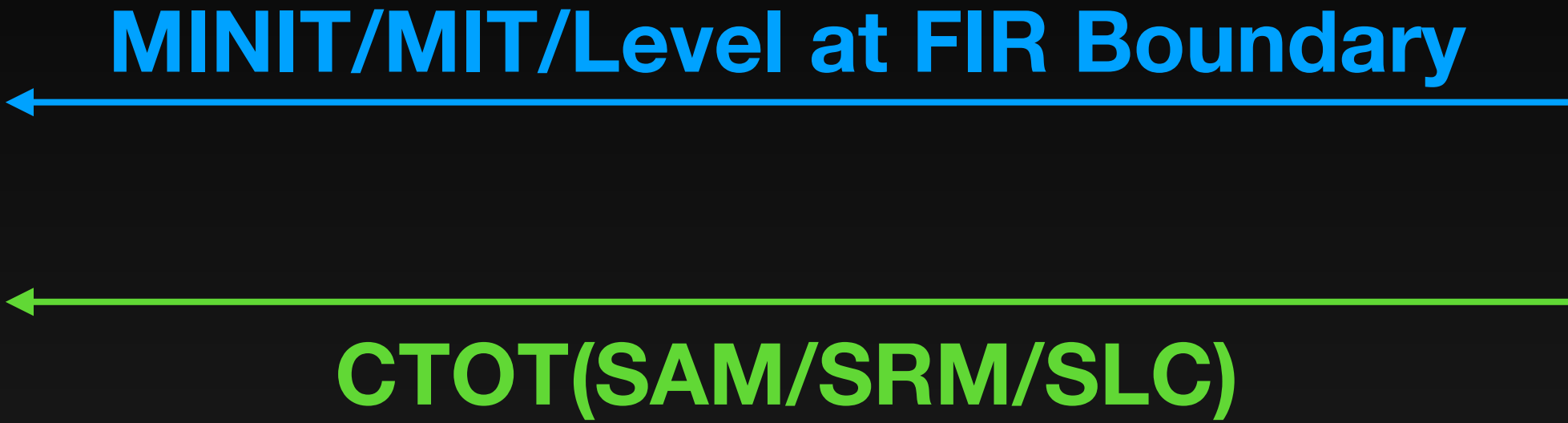
[Distributed ATFM]



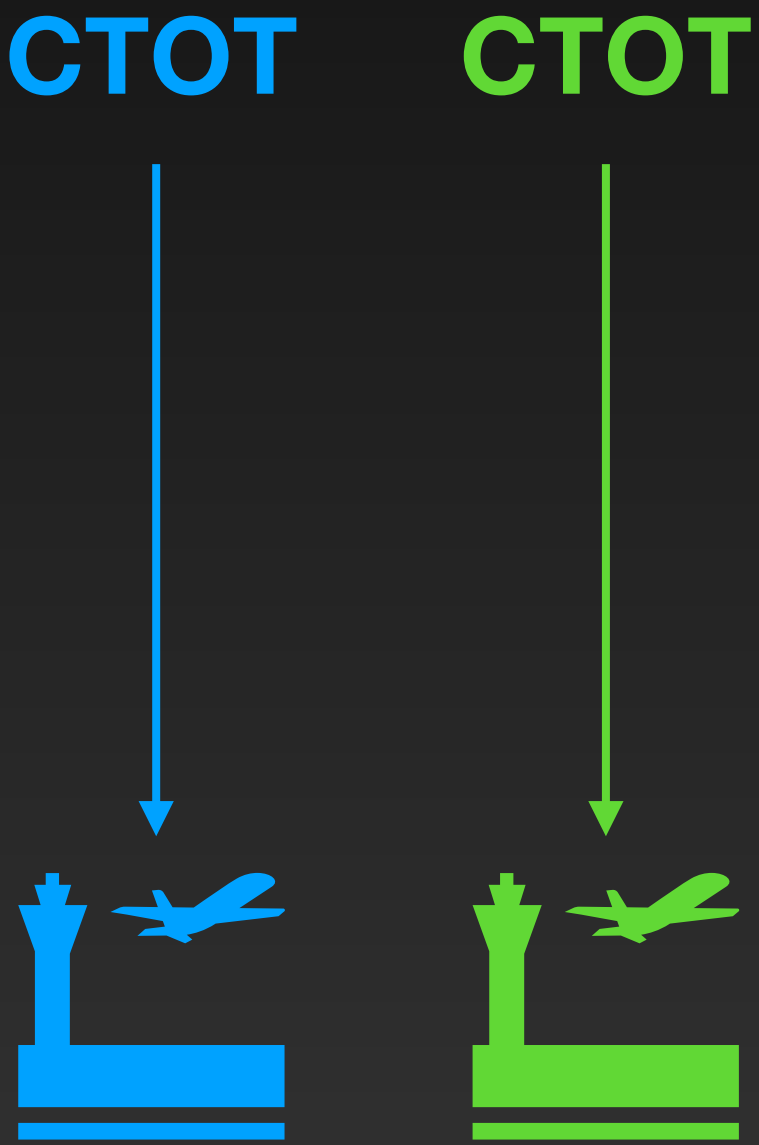
Centralized ATFMU has uniform answer and criteria.

Distributed ATFMUs have their own answers and criteria.

Facilitating
ATFMU

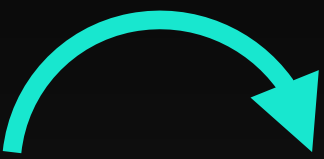


Initiating
ATFMU



	MINIT/MIT	Multi-Nodal CTOT
CTOT Management (Algorithm)	Facilitating ATFMU	Initiating ATFMU
Coordinations with Stakeholders	Facilitating ATFMU	Facilitating ATFMU





	MINIT/MIT	Multi-Nodal CTOT
CTOT Management (Algorithm)	Facilitating ATFMU	Initiating ATFMU
Coordinations with Stakeholders	Facilitating ATFMU	Facilitating ATFMU

The more Multi-Nodal ATFM, the less the Facilitator is involved in CTOT Management.
Initiator will manage the ATFM Slots and CTOTs(Re-allocating Backward, Slot Improvement, etc).

Q1. How far back in the sequence will I be pushed if I don't meet the CTOT?

	MINIT/MIT	Multi-Nodal CTOT
CTOT Management (Algorithm)	<u>Facilitating ATFMU</u>	<u>Initiating ATFMU</u>
Coordinations with Stakeholders	<u>Facilitating ATFMU</u>	Facilitating ATFMU



CTOT Management : Procedure for Re-allocating Backward

Q. How far back in the queue will I be pushed if I don't meet the CTOT?

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E	RKSI	WSSS	1005	1044	1109	1330	39
F	RKPK	VVCR	1030	1111	1126	1345	41
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I	RKSI	VVCR	1030	1136	1201	1430	66
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1 B's request for a New CTOT via telephone at 1000



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4 Re-allocate G~Q backward by one slot and issue New CTOTs

5 Re-allocate B to the backward slot and issue a New CTOT



[CTOT - 90 minutes]

Protecting / Freezing / Locking the CTOT sequence takes effect when the current time reaches 90 minutes before the issued CTOT.

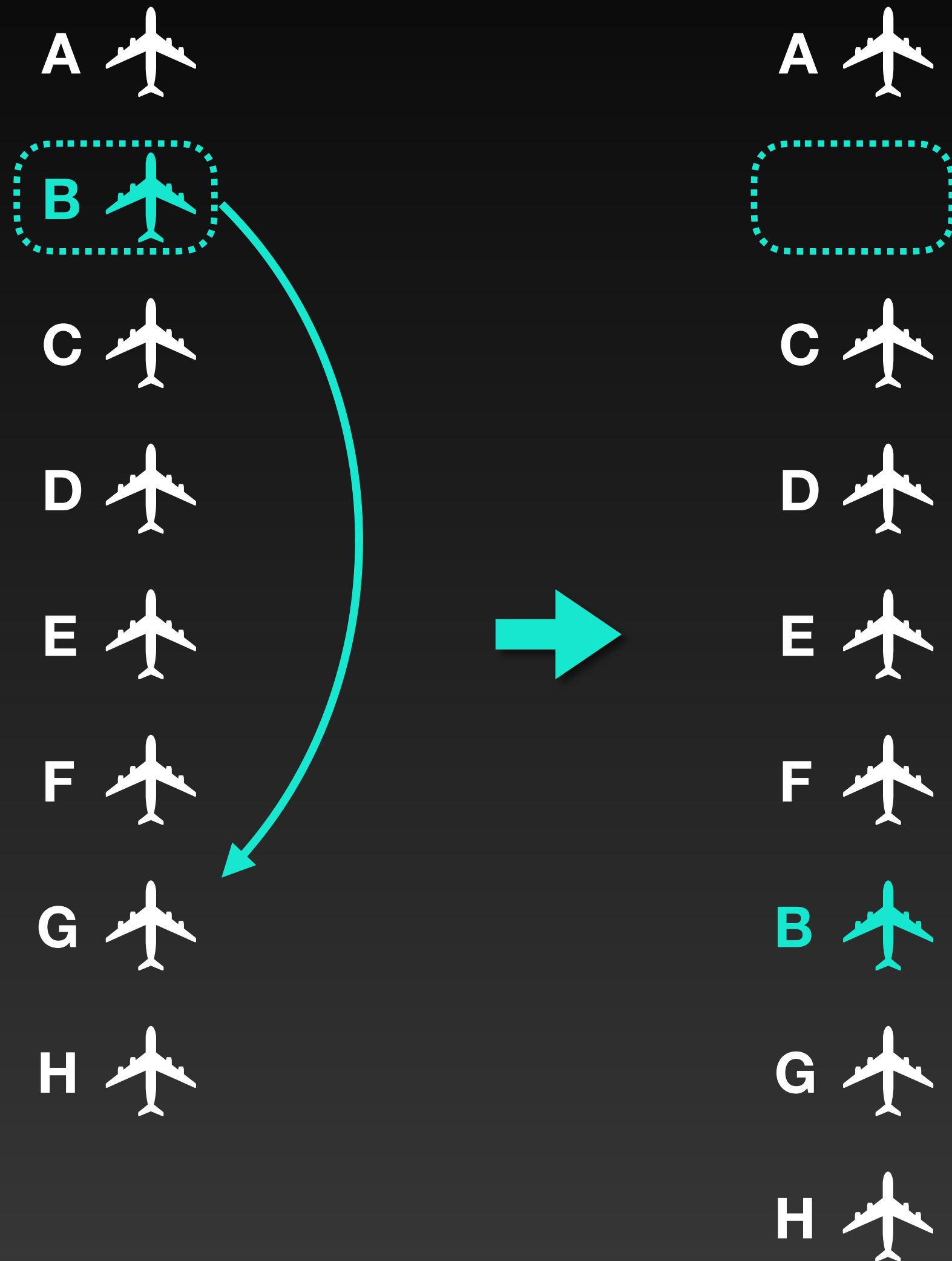
The reason why the Protection start time is based on CTOT rather than EOBT is because EOBT is a variable.

The A/O can update the EOBT to the correct time.

However, if the EOBT is updated and the Protection start time is pushed back, the A/O may unintentionally be pushed to the back of the sequence.



CTOT Management : Procedure for Slot Improvement



When an aircraft is re-allocated backward,
An empty slot occurs.

The larger the scale of the regulation causing large-scale delays,
the more essential it is to improve slots.
It's very inefficient to just throw away empty/better slots.

CTOT Management : Procedure for Slot Improvement

A 



C 

D 

E 

F 

B 

G 

H 

We can utilize the empty slot to **improve the slots** on other aircrafts.

How can we determine whether other aircrafts can comply with the better slot?

CTOT Management : Procedure for Slot Improvement

Phone

EOBT

TOBT



A-CDM
Information

Providing slot improvement procedures requires accurate and realistic OBT information.

TOBT and A-CDM information is very accurate, but the timing is different from EOBT.
(For Incheon Airport, it should be entered no later than 40 minutes before EOBT.)

CTOT Management : Procedure for Slot Improvement

A-CDM information(TOBT, ARDT, Status)

STATUS	SOBT	ACGT	MTTT	EOBT	TOBT	T.TYPE	T.I.TIME	CTOT▼	TTOT	TSAT	ASBT	ARDT
SCH	14:30		00:45	14:30	14:30	A		15:50	15:50	15:31		
INI	14:10	11:18	00:50	14:10	14:10	M	2024-01-12 13:20	14:50	14:50	14:33		
BOR	12:55	12:30	01:00	13:15	13:30	M	2024-01-12 12:51	13:52	13:52	13:33	12:54	
TAX	12:35	11:27	01:00	12:35	12:35	M	2024-01-12 11:05	13:35	13:36	13:05		
DEL	02:20	23:57	01:20	12:00	12:00	A			12:23	12:00		
TAX	12:45	12:10	00:35	12:45	12:45	M	2024-01-12 11:40		13:22	12:59	12:03	12:33
OBK	12:50	12:15	00:35	12:50	12:50	M	2024-01-12 11:40		13:42	13:19	12:23	12:50
OBK	12:50	12:00	00:50	12:50	12:50	M	2024-01-12 12:00		13:34	13:13	12:24	12:44
TAX	12:50	11:14	01:00	12:50	12:50	M	2024-01-12 12:00		13:30	13:02		
TAX	12:55	11:17	00:35	12:55	12:55	M	2024-01-12 11:40		13:27	13:06	12:31	12:47
TAX	13:05	10:25	00:45	13:05	12:50	M	2024-01-12 11:44		13:25	12:53		
TAX	13:05	11:32	01:00	13:05	12:55	M	2024-01-12 12:52		13:32	13:15	12:45	12:53
RDY	13:05	12:11	00:45	13:05	12:58	M	2024-01-12 12:55		13:58	13:39	12:42	13:01
RDY	13:05	11:41	01:00	13:05	13:05	M	2024-01-12 11:40		14:02	13:41	12:42	13:05
OBK	13:10	11:06	01:00	13:10	13:05	M	2024-01-12 12:59		13:40	13:20	12:36	13:03
RDY	13:10	11:22	01:00	13:10	13:05	M	2024-01-12 11:49		13:48	13:28	12:39	13:04
RDY	13:10	11:55	00:50	13:10	13:20	M	2024-01-12 13:17		14:12	13:52	12:42	13:17
OBK	13:15	12:40	00:35	13:15	13:15	M	2024-01-12 11:47		13:44	13:21	12:36	13:06
RDY	13:15	12:05	00:45	13:15	13:15	M	2024-01-12 12:10		13:50	13:31	12:40	12:56
RDY	13:20	12:02	00:40	13:20	13:05	M	2024-01-12 12:14		13:46	13:27	12:34	12:56

ARDT(Actual Ready Time for movement)

RDY(Ready)

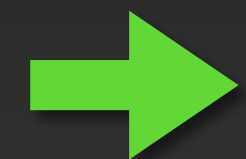
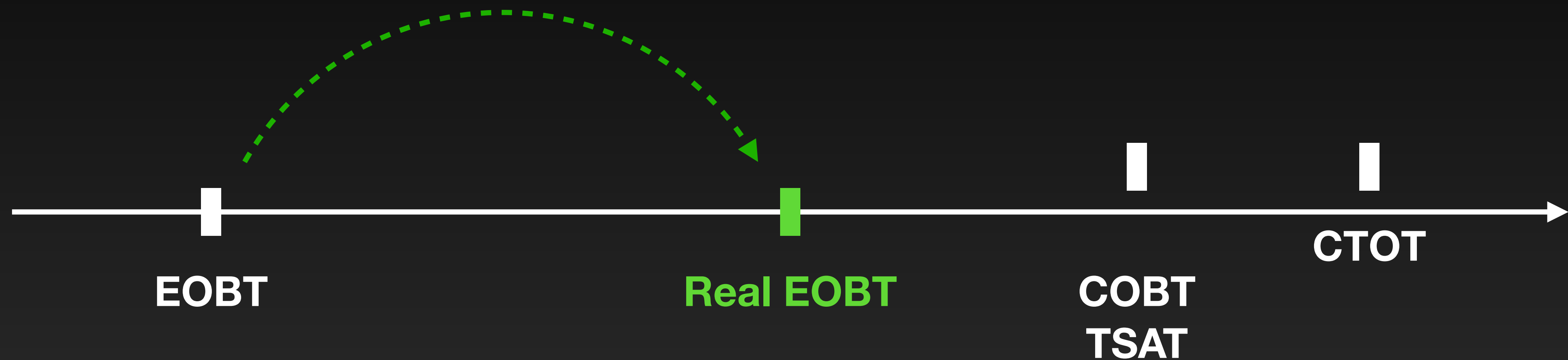
We can improve the slot without asking the A/Os if they can comply with the better slots.

However, if we improve the slot according to TOBT or EOBT, we need some buffer time.

This is because if we change the CTOT, it will affect the entire PDS of DMAN.

We plan to set the timing of slot improvements (deadlines, buffer time, etc.) with DMAN and pilot it this year.

Q2. In situations where I can comply with CTOT, do I need to update my EOBT?



We plan to provide guidance to airlines so that they can update EOBTs for aircraft that have been issued CTOTs.

ACRID	EOBT	COBT	ATFM Delay
ABC123	0100	0200	60 Minutes



ACRID	EOBT	TOBT	COBT	ATFM Delay
ABC123	0100	0140	0200	60 Minutes



ACRID	EOBT	TOBT	COBT	ATFM Delay
ABC123	0140	0140	0200	20 Minutes



ACRID	EOBT at FPL	EOBT at DLA/CHG	TOBT	COBT	ATFM Delay
ABC123	0100	0140	0140	0200	60 Minutes



Flight Plan (FPL) Management	<ul style="list-style-type: none">• Ensure updated FPLs are filed at least 3 hours prior to EOBT.
DLA /CHG Message	<ul style="list-style-type: none">• Submit DLA or CHG messages via AFTN for delay of more than 15 minutes. <i>*Do not update EOBT as a result of an ATFM measure*</i>
	<div>W6A2N1G</div> <div>*</div> <div>*Do not update EOBT as a result of an ATFM</div>

This is how it is currently written in the AMNAC COP

If I receive a slot, do I need to update my EOBT / TOBT?	
<p>The EOBT / TOBT of a flight shall be accurate; it must always provide the earliest EOBT / TOBT you may comply with. This is not related to the slot provided.</p> <p>Note that if the regulation was lifted / improved, your flight could be re-calculated based on wrong ETO data because it was not updated accordingly.</p>	
What happens if I update my EOBT after I have received a slot?	What happens if I update my TOBT after I have received a slot?
<p>If the new EOBT still enables the flight to depart according to its CTOT, the slot will not be recalculated.</p> <p>If a recalculation is necessary (e.g. DLA / CHG was received with an EOBT that places the ETOT after the CTOT tolerance window), the next available slot will be issued in a SRM. To avoid a substantial delay it is therefore important to update the EOBT as soon as practicable.</p>	<p>If the new TOBT still enables the flight to depart according to its CTOT, the slot will not be recalculated.</p> <p>If a recalculation is necessary (e.g. T-DPI-s was received with the TTOT after the CTOT tolerance window), you will receive either SRM, SLC or FLS. To avoid a substantial delay it is therefore important to update the TOBT as soon as practicable. A T-DPI-s message can as well push the flight outside of the Regulation period, in such a case you will receive an SLC.</p>

Q3. Can I update my EOBT by resubmitting an FPL after sending a CNL message?

Q4. Can I update my type of aircraft or route by resubmitting an FPL after sending a CNL message?

DLA/CHG is advised to change EOBT, Type of aircraft, Route, etc.

If a second FPL is submitted after CNL,

the sequence of CTOT for ATFM or TTOT/TSAT for A-CDM may be penalized.

This is related to the penalties for not meeting the 3-hour FPL rule.



CTOT Management

Protecting/Freezing/Locking of CTOT sequence

Re-allocating Backward

Slot Improvement

EOBT Update

Update EOBT with always accurate value

Update EOBT by DLA/CHG, not CNL/FPL

Distinguish between FPL's EOBT and DLA/CHG's





Thank you for your attention

(ATFM/SG/14) Bangkok, Thailand, 22-26 April 2024



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