

2nd Airport-CDM@FRA Forum



***Airport
CDM
@
FRA***



Airport CDM

„Definition and partners“

Airport CDM is an operational overall process (concept/procedure) supporting an optimized turnround process at an airport. It is the basis for the connection to the European ATM network.

ATC Tower

***All airlines und
ground handling
agents***

***Air Traffic Flow
Management
(CFMU)***



***Airports
Apron Control
Airport Traffic
Ops Centre***

Airport CDM is one operational process



- ***Airports are becoming the „bottleneck“ in the European ATM-System***
- ***Operational processes at airports require optimal adjustment between all partners involved***
- ***Airport Slots / Airport Schedule are currently not consistently respected***
- ***ATFM Slots (CTOT) are often not respected***
- ***The “first come first served” principle no longer applies***
- ***Airline preferences and priorities are not always taken into account***
- ***No unitary European procedure exists - harmonisation***
- ***No connection to the European ATM-System***

Transparency + Information Sharing
„Common situational awareness for all partners has to be assured“



Airport CDM is one operational process

„ATC flight planning / landing / turn-round / take off“

**ATC Flight planning
EOBT-3h**

**Landing of connected
Inbound-Flight**

**Turnround
(Pax/Cargo/Fuel/...)**

**Take Off
(Sequencing/Off-Block/...)**

Airport CDM process from EOBT-3h (Dep) till Take Off

**Airport CDM partner
Information Sharing / Common Situational Awareness / Procedures**

Link day of operation with schedule planning

„Comparison and correlation of ATC-flight plan, Airport Slot and Airport flight data“

Table with columns: FLIGHT, ORIGIN, DESTINATION, STATUS, etc.

ATC flight plans

Table with columns: FLIGHT, ORIGIN, DESTINATION, STATUS, etc.

Airport flight data base

Table with columns: FLIGHT, ORIGIN, DESTINATION, STATUS, etc.

CSA-(Common Situational Awareness) Tool

Table with columns: FLIGHT, ORIGIN, DESTINATION, STATUS, etc.

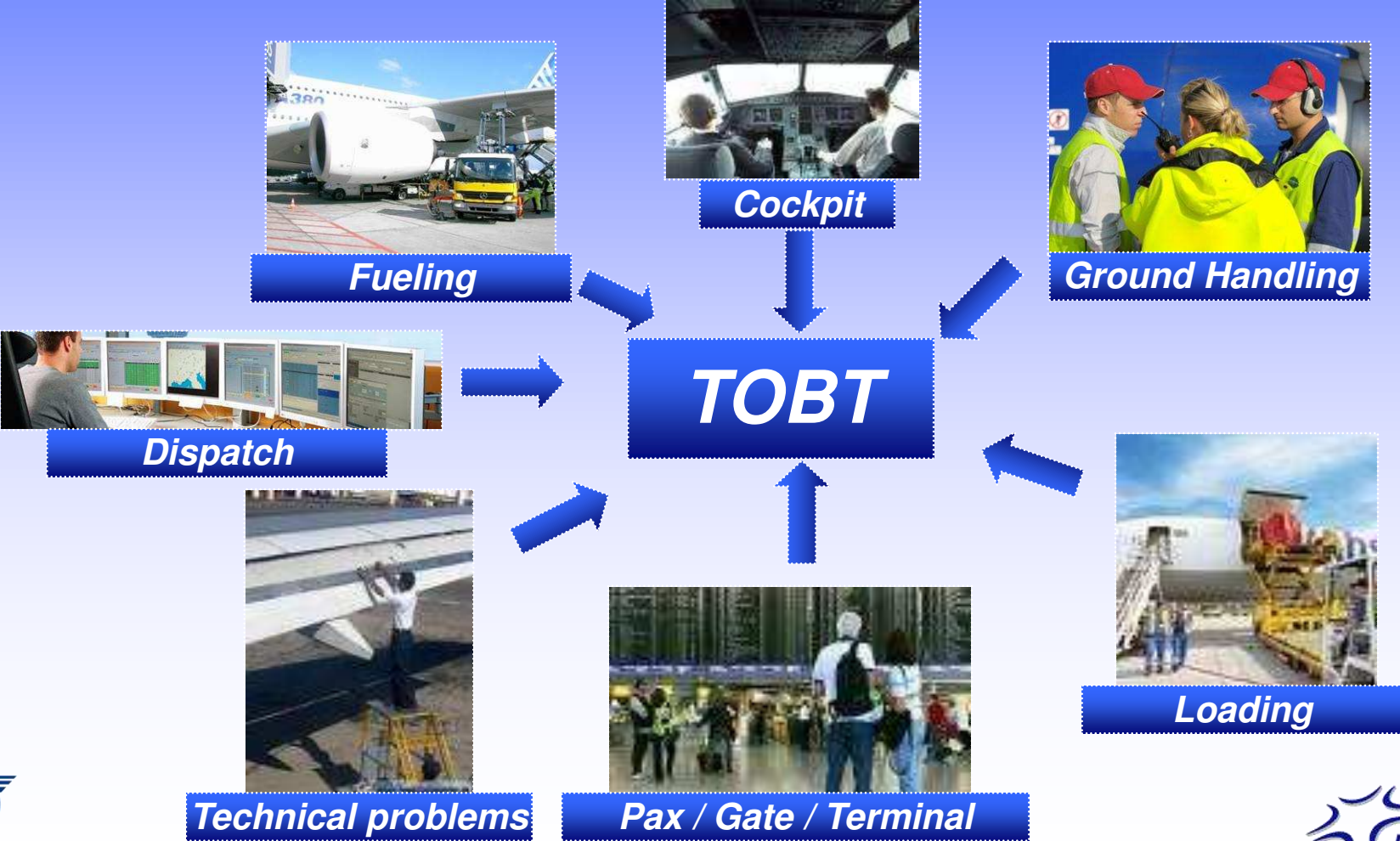
Coordinated Airport Slot



TOBT = Airline commitment

„Introduction of Target Off Block Time (TOBT) as an estimate of „Aircraft Ready“

Impact on TOBT calculation:



Airport CDM

„Essential A-CDM contents 6“

TSAT = Airport CDM commitment

„Introduction of Target Start Up Approval Time based on TOBT, EXOT, CTOT and real operational capacity as driver for the „Pre Departure Sequence“

Impact on TSAT calculation



Weather situation



Traffic Demand



Infrastructural
constraints



Operational capacity

Pre departure sequencing

NR	MAS	CSN	TSAT	TOBT	CTOT	SID	EOBT	MDI
1	<	AFR1123	06:10	06:10*	07:01	CIV	06:10	
2	<	DLH826	06:35	06:35	CIV	06:35		
3		DMM1	06:38	06:35	07:50	CIV	06:45	
4	+	LNX29N	06:50	06:50*	MIQ	06:50		
5	<	DITAN	07:00	07:00*	RID	07:00		
6		DIDAK	07:01	07:00*	07:32	RID	07:15	
7		NZE309G	07:18	07:15*	MIQ	07:15		
8	+	DLH214	07:16	07:15	ANK	07:15		
9		NIS805	07:30	07:30	ANK	07:30		
10		DLH5UV	07:55	07:55	CIV	07:55		
11		DLH4YF	08:00	08:44	MIQ	08:00		
12	<	DLH7AF			MIQ	06:45		
13	+	BAG7102			MIQ	07:05		
14	+	BAG7082			CIV	07:10		
15	+	BAG10A			ANK	07:10		
16	+	DLH48H		07:27	ANK	07:10		
17	+	BAG154G			CIV	07:15		
18	+	DLH83K			EVI	07:15		
19	+	DLH6HV		07:56	CIV	07:20		
20	+	QV17087			MIQ	07:20		
21	+	QV1081			CIV	07:30		
22		OLT631			EVI	07:40		
23	+	QV18085			ANK	07:40		
24		LCL9722		08:30	RID	07:55		
25		DLH19H		09:33	CIV	07:55		

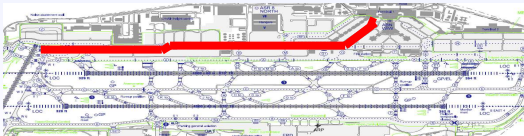
NZE309G-CDORQ -CZE:
11 (KNT) =11 (XTD) +0 (RDY) +0 (DCT)
CAP: 60 POS: T11 SID: MIQ7H
STT: 07:15 T 07:26
© 07:49 Verbindung zum Dienst ist OK.



TOBT



De-icing



EXOT = Taxi time

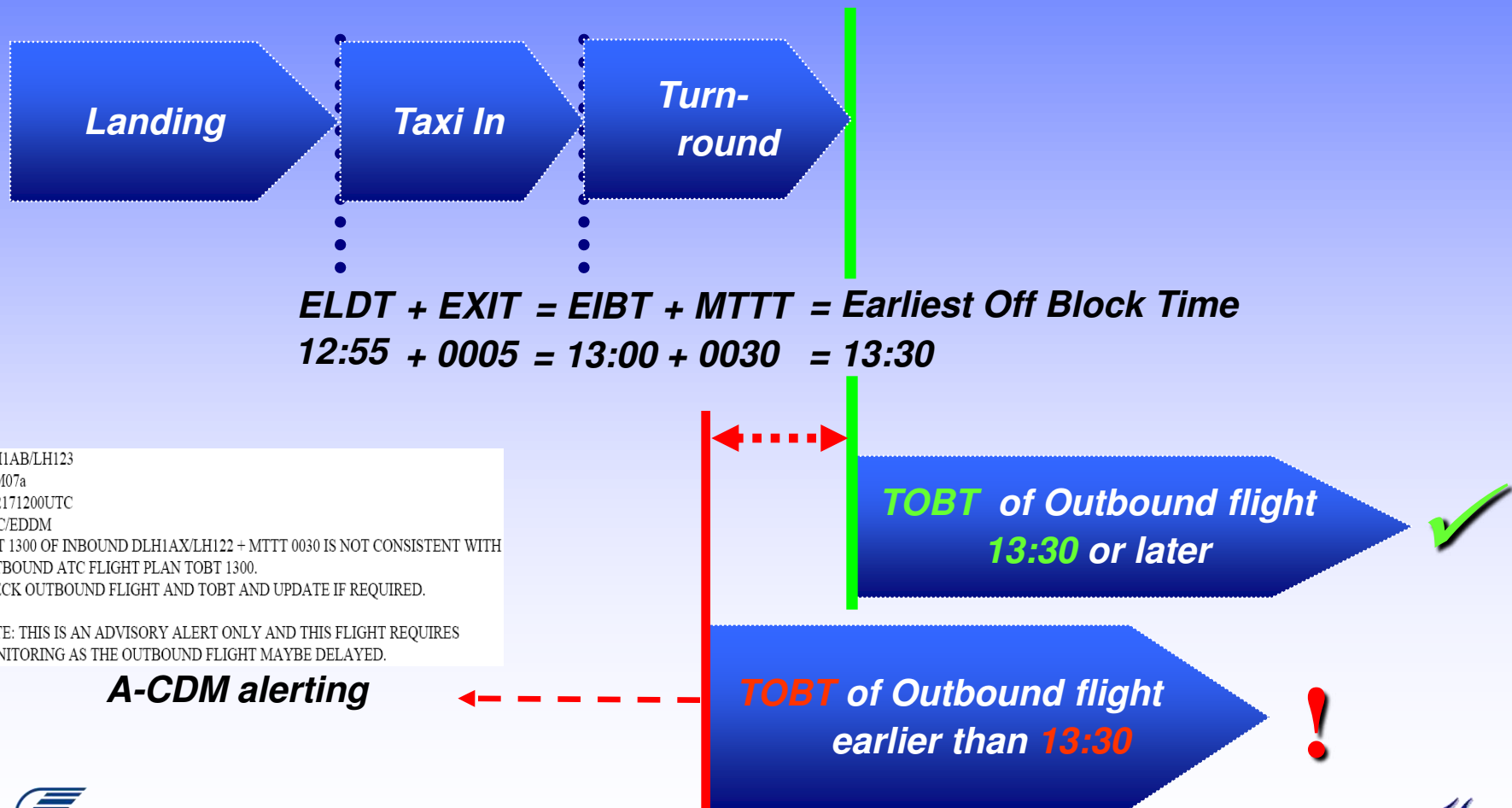
TSAT

TTOT



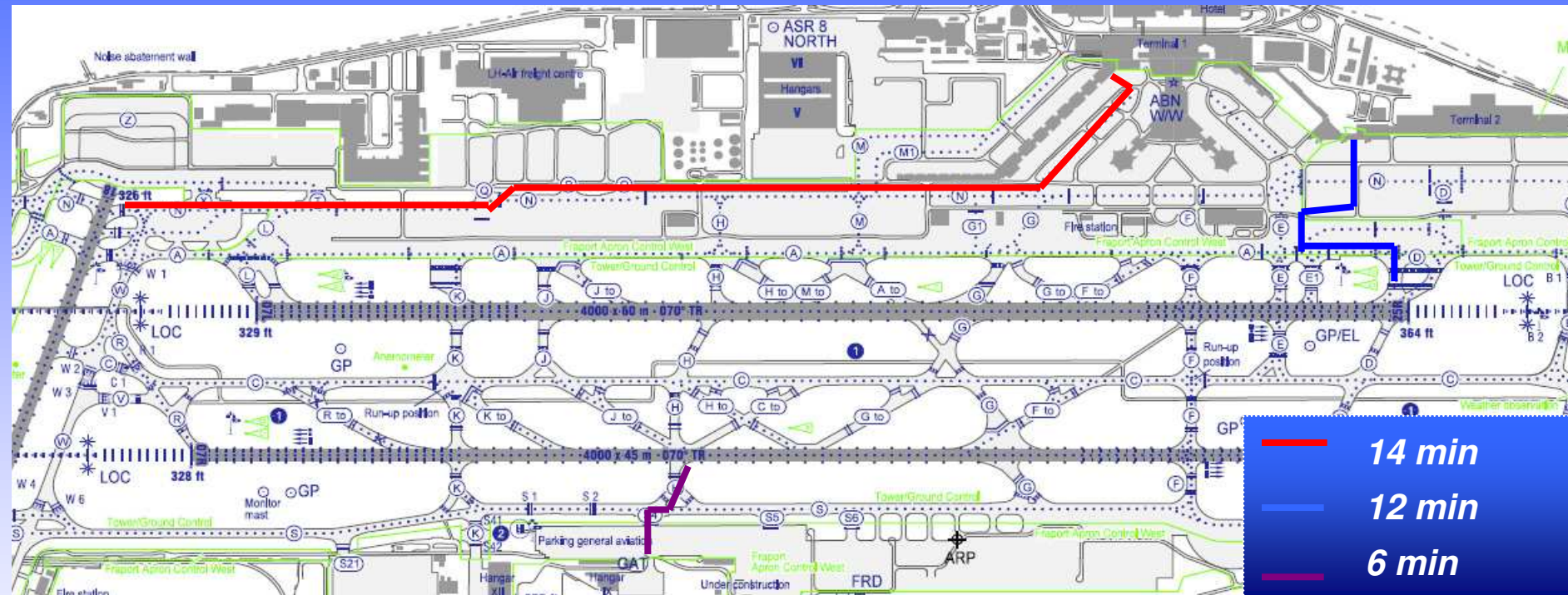
Feasibility of flight turnround

„Permanent matching and correlation of related In- and Outbound flight times and data“



Use of variable taxi times (VTT)

„ Replaces CFMU Default Taxi Times“



CFMU „Default Taxi Time“ 15 min

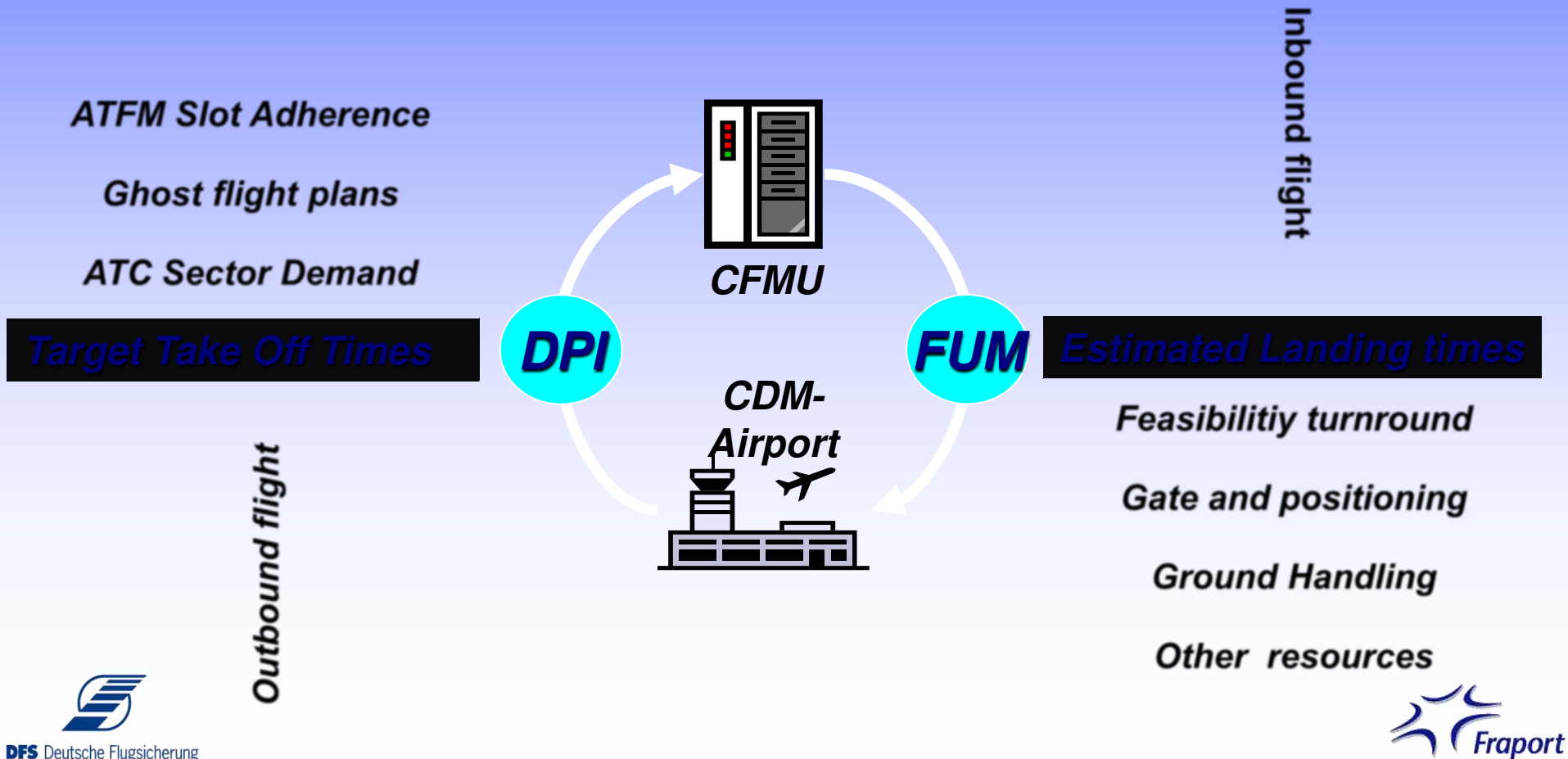
= lack of take off prediction quality (TTOT)
= non realistic CTOT for regulated flights

A-CDM VTT considers:

Parking position / day / hour / Rwy in Use
= optimized Pre Dep Sequencing (TSAT)
= High quality of Take Off predictability (TTOT)
= realistic CTOT for regulated flights

Linking the airport into the network

„Reliable In- and Outbound estimated/target times through automated data exchange with ATFM (CFMU)“



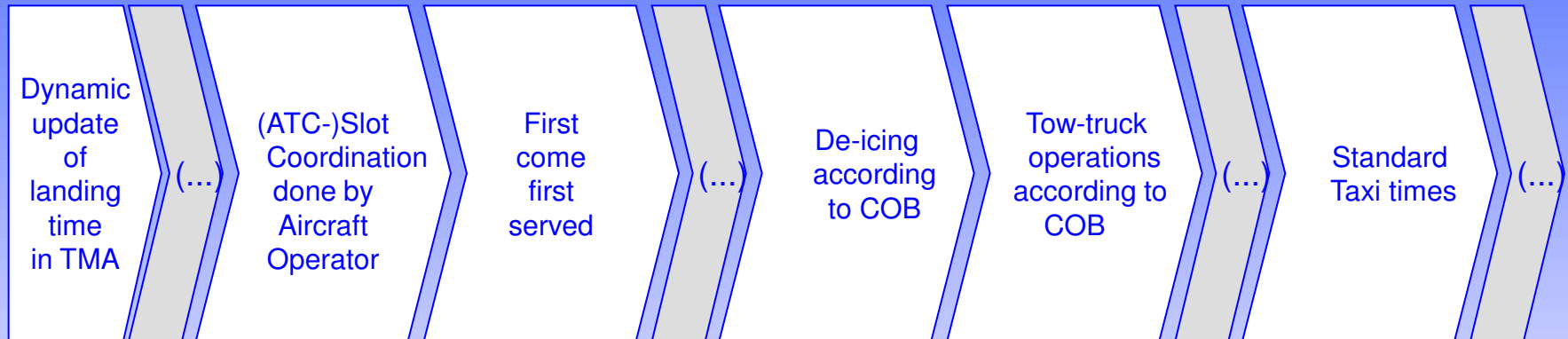
Is it
a technical system?



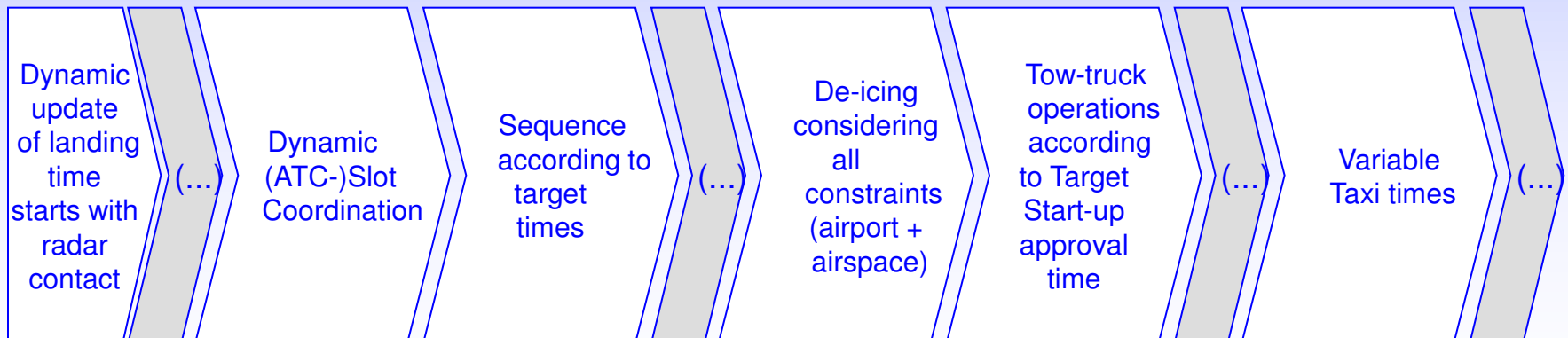
It is a philosophy:

- Act on shared information**
- Transparency**
- No blame culture**

It is a set of procedures



Optimizing the turnaround process



It is a European standard adapted for FRA

by operational people who are focused on optimizing the overall system:





-It will offer the best information there is about your inbound flight



-It will deliver precise information about when to expect start-up



-It will give you transparency



-It will give easy access to information



-It will harmonise terminology

„ What does A-CDM expect from you?



**-To share relevant information
with your partners**



**-To deliver the best information you have
about the ready time of your outbound flight**

Thank You for Your Attention

