

Information Paper ??

Airport CDM Harmonised Alert Messages Document

Submitted by the Agency

SUMMARY

RECOMMENDATIONS

- 1) The agreed final document endorsed at the Airport CDM Procedures Group meeting (10-11/09/08) is included in the next edition of the Airport CDM Implementation Manual

Generic AIRPORT CDM Alert Messages

Acronyms

ACARS	Aircraft Communications Addressing and Reporting System
ACC	Area Control Centre
ACT	Activation (message)
A-DPI	ATC-Departure planning Information Message
AGHT	Actual Ground Handling Start Time
AIBT	Actual In-Block Time
ALDT	Actual Landing Time
AMAN	Arrival Manager
AO	Aircraft Operator
ASAT	Actual Start Up Approval Time
ATC	Air Traffic Control
ATOT	Actual Take Off Time
C-DPI	Cancel – Departure Planning Information Message
CFMU	Central Flow Management Unit
CTOT	Calculated Take Off Time (CFMU)
DCL	Departure Clearance
DMAN	Departure Manager
DPI	Departure Planning Information Message
E-DPI	Early – Departure Planning Information
EET	Estimated Elapsed Time
EIBT	Estimated In-Block Time
ELDT	Estimated Landing Time
EOBT	Estimated Off-Block Time
EXIT	Estimated Taxi-in Time
EXOT	Estimated Taxi-Out Time
FDPS	Flight Data Processing Systems
FIR	Flight Information Region
FPL	Filed Flight Plan
FSA	First System Activation
FUM	Flight Update Message
GH	Ground Handler
MTTT	Minimum Turn-round Time
MVT	Movement Message
SOBT	Scheduled Off-Block Time
STW	Slot Tolerance Window
T-DPI	Target – Departure Planning Information Message
TMA	Terminal Manoeuvring Area
TOBT	Target Off-Block Time
TSAT	Target Start-Up Approval Time
TTOT	Target Take Off Time
TWR	Aerodrome Control Tower
VTT	Variable Taxi Time

Airport CDM Alert Messages for Generic Airport CDM Processes

Introduction

This document serves the purpose of standardisation of Alert Messages initiated during the Generic CDM Procedures of the Turn-Round Milestone process. If standardisation is not applied, the risk may be that the Aircraft Operator/Ground Handler (AO/GH) receive different alert messages at different airports, and confusion may occur. The Alert Messages are recommended and can be sent any time but they are generally linked to specific milestones, subject to local implementation decisions.

Hierarchy of Discussion:

1. Description of messages
2. Content structure
3. Actual content

Below the three topics are elaborated.

Description of Messages

The messages below are sent to the appropriate Airport CDM partners, via the Airport CDM Information Sharing (ACIS) platform. Most of them are sent to the AO/GH in order to take action either locally or remotely. However other partners can also be informed.

CDM Messages Codes and Titles

ID	Code	Description	Link with CFMU DPI ERRor Reply Messages*	Applicable on Milestone Process
1.	CDM01	No Airport Slot Available, or Slot already correlated	N/A	1
2.	CDM02	SOBT vs. EOBT discrepancy	N/A	1
3.	CDM03	Aircraft Type discrepancy	<ul style="list-style-type: none"> DPI ARCTYP inconsistent with ARCTYP from Flight Plan 	1-14
4.	CDM04	Aircraft Registration discrepancy	<ul style="list-style-type: none"> DPI Registration inconsistent with registration from Flight Plan No Registration available in Flight Plan 	1-14
5.	CDM05	Destination discrepancy	N/A	1
6.	CDM06	Non-Airborne Alert	N/A	3
7.	CDM07	EIBT + MTTT discrepancy with EOBT	N/A	2-3
8.	CDM08	EOBT Compliance Alert	<ul style="list-style-type: none"> DPI OBT Inconsistent with EOBT from IFPS 	3-11
9.	CDM09	Boarding Not Started	N/A	11
10.	CDM10	TOBT Rejected or Deleted	N/A	9-14
11.	CDM11	TSAT Expired	N/A	13
12.	CDM12	No ATC flight plan available	<ul style="list-style-type: none"> Not existing flight 	1-14
13.	CDM13	Automatic TOBT Generation not possible		4-9

* Ref Document – CFMU Flight Progress Messages V1.500

1. CDM01 - No Airport Slot Available, or slot already correlated

Applicable on Milestone Process 1

- Message sent to AO/GH when the FPL can not be correlated with an existing Airport Slot.

2. CDM02 - SOBT vs. EOBT discrepancy

Applicable on Milestone Process 1

- Message to AO/GH where Initial EOBT falls outside of permitted SOBT window (local slot allocation rules will dictate parameters).

Example: If the SOBT is 2100 and the FPL EOBT is greater or less than 2100 then local rules may dictate whether the flight can proceed. In this case if the EOBT was changed to 0030 then the Airside Operations / Airport Slot Coordination may have to approve it, as it falls on the next day. (Local rules to be applied)

Note: Local procedures may include a discrepancy check as well between SIBT and EIBT for arrival flights

3. CDM03 - Aircraft Type discrepancy

Applicable on Milestone Processes 1-14

- Message to AO/GH and Airport Operator
- Where the Airport Database and the ATC Flight Plan have different aircraft type then an alert is raised.
- Where the Airport Database identifies a discrepancy with another source, e.g. movement message or FUM, then an alert is raised.
- If a type change occurs and the FPL shows for example B772 and the airport system is showing B744. It is up to the AO/GH to confirm which data is correct and either re-file the FPL or get the Airport Database updated through local procedures.

4. CDM04 - Aircraft Registration discrepancy

Applicable on Milestone Processes 1-14

- Message to AO/GH and Airport Operator
- Where the Airport Database identifies a discrepancy with another source, e.g. movement message or FUM, then an alert is raised.
- If the registration of the inbound aircraft does not match the planned aircraft rotation, this alert is raised.

5. CDM05 - First Destination discrepancy

Applicable on Milestone Process 1

- Message to AO/GH if discrepancy not resolved locally at the airport.
- First destination discrepancy can occur between Airport Operator information and FPL due to operational reasons, such as fuel stops or diversions.

6. CDM06 - Non-Airborne Alert

Applicable on Milestone Process 3

- Message to AO/GH
- This message could be useful for a long haul flight that did not take off from outstation based on ETOT outstation + EET from ATC Flight plan compared to EIBT at DEST (tolerance can set locally)*.

*The calculation will be non applicable when FUM messages are received.

7. CDM07 - EIBT + MTTT discrepancy with EOBT

Applicable on Milestone Processes 2 and 3

- Message to AO/GH to warn that inbound flight EIBT and turn-round MTTT is later than EOBT +15 minutes, and could affect outbound leg.

8. CDM08 - EOBT Compliance Alert

Applicable on Milestone Processes 3 -11

- Message to AO/GH when confirmed TOBT is outside EOBT \pm 15 minutes window.

9. CDM09 - Boarding Not Started

Applicable on Milestone Process 11

- Message to AO/GH to alert them that boarding has not started at a time parameter agreed locally before TOBT and therefore TOBT may not be achieved. AO/GH will take action as defined in local procedures

10. CDM10 - TOBT Rejected or Deleted

Applicable on Milestone Process 9 or later

- Message to AO/GH when the TOBT has been deleted, e.g. to inform remote Airline Operations, or in case when the maximum number of TOBT updates is exceeded.

11. CDM11 - Flight Not Compliant with TOBT / TSAT

Applicable on Milestone Processes 12 and 13

- Message to AO/GH when the flight is not ready at TOBT (+ local parameter)
- Message to AO/GH when the flight has not started or pushed at TSAT (+ local parameter)

Note. This alert will be subject to local / international procedures for how Ground/Apron Control positions operate with reference to start up /or start and push etc.

12. CDM12 – TSAT not respected by ATC

Applicable on Milestone Process 13

- Message to ATC when the flight not started or pushed at TSAT (+ local parameter)

Note. This alert will be subject to local / international procedures for how Ground/Apron Control positions operate with reference to start up /or start and push etc.

13. CDM13 - No ATC Flight Plan Available

Applicable at anytime during the milestones process

- In case the AO cancels the ATC FPL even when ground handling / turn-round takes place (e.g. change of route or EOBT in the FPL)

14. CDM14 - Automatic TOBT Generation not Possible

Applicable on Milestone Process 4-9

- Message to AO/GH when the first TOBT cannot be automatically generated because TOBT + taxi time EXOT is later then CTOT.

Note: Only applicable when TOBT is generated **automatically** and TOBT + EXOT would be after the slot tolerance window (CTOT + 10 min). AO/GH have to decide if CTOT is feasible (e.g. skip cleaning of the Acft) and set the TOBT manually. Otherwise the T-DPI-c out of the TOBT + EXOT is later then CTOT would lead to a new CTOT (potentially delayed).

Not applicable when the first TOBT is given manually by AO/GH

Content Structure

High Level Message Structure

1. Flight Identification / alert code / timestamp / origin
 - Flight ID is both ATC call sign and flight number
 - Alert Code is the alert message identification
 - Timestamp is time and date of event
 - Origin is both IATA and ICAO codes
2. Inconsistency detection
3. Action to take
4. Note referring to in-action consequences
 - Notes are mentioned outside message, subject to local procedures

Actual Content

This section contains examples of the above categories.

1. CDM01 - No Airport Slot available, or Slot already correlated

Flt ID/CDM01/Timestamp/ADEP

**Airport Slot SOBT not available or Slot already correlated.
Immediate update of ATC Flight Plan EOBT or request new Airport Slot.**

Sample Note: The Airport CDM process may be suspended until reception of your rectification.

2. CDM02 - SOBT vs EOBT discrepancy

FLT ID/CDM02/Timestamp/ADEP

**ATC Flight Plan EOBT is not consistent with Airport Slot SOBT.
Immediate update of Airport Slot or ATC Flight Plan EOBT needed.**

Sample Note: The Airport CDM process may be suspended until reception of your rectification.

3. CDM03 - Aircraft Type discrepancy

FLT ID/CDM03/Timestamp/ADEP

Aircraft Type inconsistency between ATC flight plan and Airport Database.

Immediate update of ATC Flight Plan or Airport Database needed.

Sample Note: The Airport CDM process will not be suspended but start-up / push back clearance may not be granted until discrepancy is resolved.

4. CDM04 - Aircraft Registration discrepancy

FLT ID/CDM04/Timestamp/ADEP

Aircraft Registration inconsistency between ATC flight plan and Airport Database.

Immediate update of ATC Flight Plan or Airport Database needed.

Sample Note: The Airport CDM process will not be suspended but start-up / push back clearance may not be granted until discrepancy is resolved.

5. CDM05 - Destination discrepancy

FLT ID/CDM05/Timestamp

Destination inconsistency between ATC flight plan and Airport Database.

Immediate update of ATC Flight Plan or Airport Database needed.

Sample Note: The Airport CDM process will not be suspended but start-up / push back clearance may not be granted until discrepancy is resolved.

6. CDM06 - Non-Airborne Alert

FLT ID/CDM06/Timestamp/ADEP

No information that inbound flight is airborne, SIBT / EIBT might not be respected. Check outbound flight and ATC flight plan and update if required.

Sample Note: This is an advisory alert only and this flight requires monitoring as the outbound flight maybe delayed.

7. CDM07 - EIBT + MTTT discrepancy with EOBT

FLT ID/CDM07/Timestamp/ADEP

EIBT of inbound FLT ID + MTTT is not consistent with outbound ATC Flight Plan EOBT. Check outbound flight and ATC flight plan and update if required.

Sample Note: This is an advisory alert only and this flight requires monitoring as the outbound flight maybe delayed.

8. CDM08 - EOBT Compliance Alert

FLT ID/CDM08/Timestamp/ADEP

**Received TOBT is out of ATC Flight Plan EOBT tolerance window.
Immediate update of ATC Flight Plan EOBT needed.**

Sample Note: The Airport CDM process will not be suspended but start-up / push back clearance may not be granted until discrepancy is resolved.

9. CDM09 - Boarding Not Started

FLT ID/CDM09/Timestamp/ADEP

**At TOBT – <local parameter> boarding was not initiated.
Update TOBT if needed**

Sample Note: The Airport CDM process will not be suspended but start-up / push back clearance may not be granted until discrepancy is resolved.

10. CDM10 – TOBT Rejected or Deleted

FLT ID/CDM10/Timestamp/ADEP

TOBT was rejected or deleted. A new TOBT is required.

Sample Note: The Airport CDM process may be suspended until reception of your rectification.

11. CDM11 - Flight not compliant with TOBT / TSAT

FLT ID/CDM11/Timestamp/ADEP

Flight not compliant with TOBT/ TSAT. This flight will be re-sequenced on receipt of new TOBT

Sample Note: The Airport CDM process may be suspended until reception of your new TOBT/FPL.

12. CDM12 - TSAT Not Respected by ATC

FLT ID/CDM12/Timestamp/ADEP

At TSAT plus tolerance aircraft has not been granted Start-Up or Pushback. This flight needs to be re-sequenced.

Sample Note:

13. CDM13 - No ATC Flight Plan Available

FLT ID/CDM13/Timestamp/ADEP

The ATC flight plan is not available. Submission of new ATC flight plan needed.

Sample Note: The Airport CDM process may be suspended until reception of your rectification.

14. CDM14 - Automatic TOBT Generation not possible

FLT ID/CDM14/Timestamp/ADEP

The TOBT could not be automatically generated because it does not match with the associated CTOT. Manual input of TOBT required.

Sample Note: The Airport CDM process may be suspended until reception of your rectification.