

# KUL A-CDM TRAINING MATERIAL (ATC)



# KUL A-CDM 101

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# History of global A-CDM developments

Firstly, implemented in Munich Airport in 2007 to improve the coordination and data sharing between the operational stakeholders relevant for the aircraft turnaround process with the aim to make the turnaround more predictable for all involved stakeholders.

ICAO has selected A-CDM to be a topic for their Global Air Navigation Plan's (GANP) Aviation System Block Upgrades (ASBU) to increase airport capacity at congested airports.

At the moment there are 33 fully implemented A-CDM airports in Europe and many more across the globe.



# Why do we need KUL A-CDM?

KUL's main objective in implementing A-CDM is to achieve:

- Operational Efficiency
- Resource Optimisation
- Capacity Optimisation
- Improved Planning



## This is the way we run our project



confidential, internal, open | author | presentation title

3

## Who are the stakeholders for our KUL A-CDM?



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# What is KUL A-CDM about : The six A-CDM Elements

These six A-CDM elements define the higher-level framework of an A-CDM implementation:



The A-CDM process focusses on the extended turnaround of an aircraft from its departure through the arrival and turnaround at KUL until its departure from KUL.

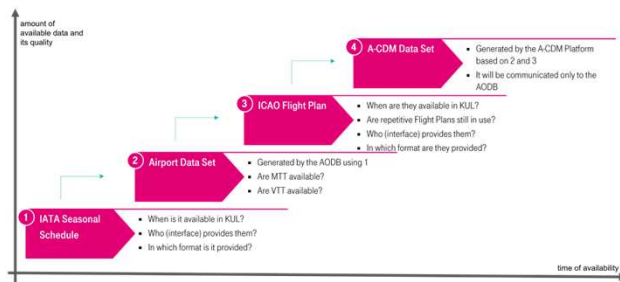
## Information Sharing

Within the Information Sharing element the data needed to run the successful and efficient A-CDM process is defined.

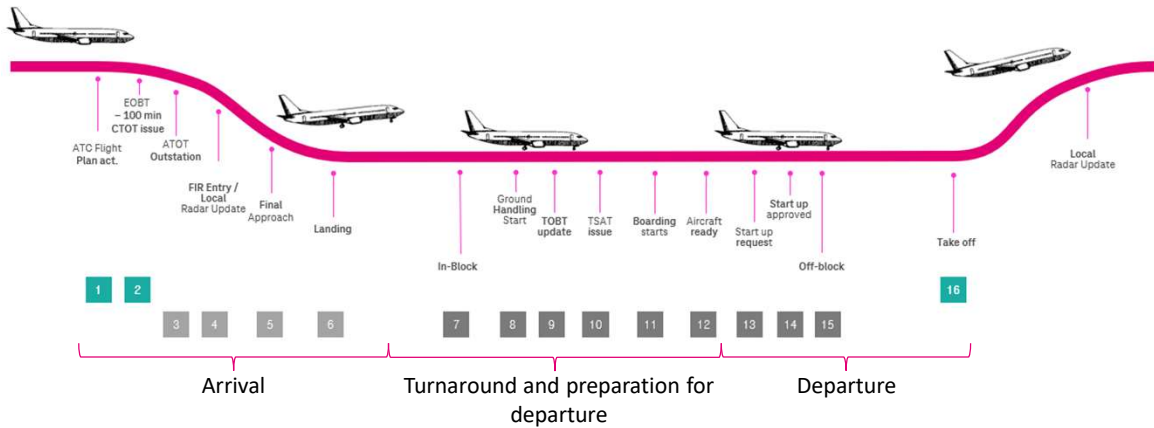
The sources of data are identified and agreements on the system-to-system integration and the data format are made.

Where possible and meaningful automatic data generation and exchanges between systems should be implemented.

In the end all A-CDM Stakeholders improve from this Information Sharing, as the data will be shared back with them for everyone's benefit.



## The Milestone Approach



The Milestone Approach defines a standard turn around process for aircrafts operating at KUL and can be followed by every aircraft operator.

Should an aircraft operator decide to implement more milestones, then they should feed into the 16 A-CDM milestones or at least into the TOBT.

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## Variable Taxi Times

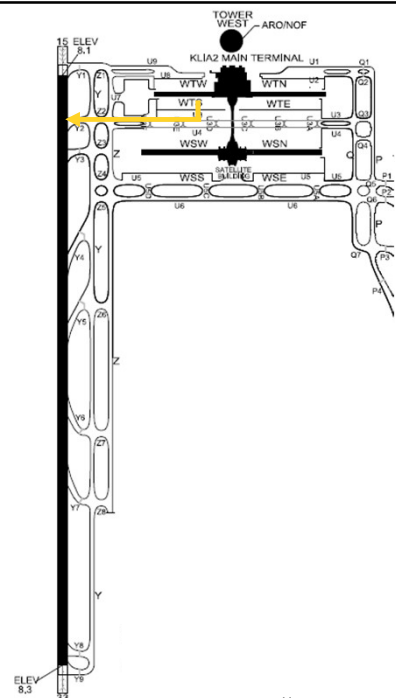
With Variable Taxi Times the In-Block Time and Take Off Time predictions can be improved massively for the benefits of Ground Handlers and ATC.

Variable Taxi Times are used as Master Data in ACIP and DMAN for the following automatic calculations:

Actual Landing Time + Estimated Taxi In Time = Estimated In Block Time

Target Off Block Time + Estimated Taxi Out Time = Target Take Off Time

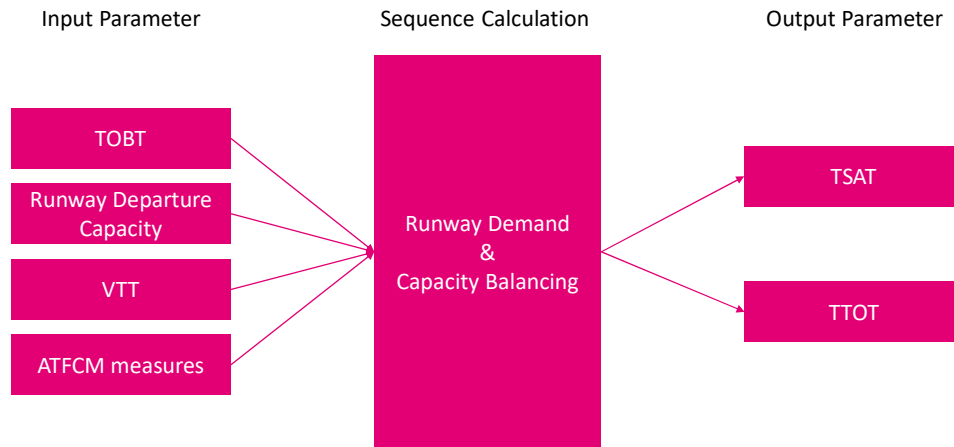
RWY	Parking Stand	VTT [min]
33	K8	6
15	Q10	13



Source: <https://aip.caam.gov.my/>

## Collaborative Pre-Departure Sequencing

Transitioning from „First-Come-First-Served“ to „Best-Planned-Best-Served“, while maintaining the best possible flow.  
Reduction of inefficient waiting times at the runways for departing aircrafts (reduction of queuing).



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## CDM in Adverse Conditions

The most dominant Adverse Conditions for Kuala Lumpur International Airport have been discussed and defined during the development of the Concept of Operations (ConOps) project phase and are documents in the ConOps Document.

The adverse conditions are defined as the followed:

- Thunderstorm
- Heavy rain
- Haze
- Floods
- Windshear



How and by whom those adverse conditions need to be managed will be explained in the detailed trainings for the respective stakeholders.

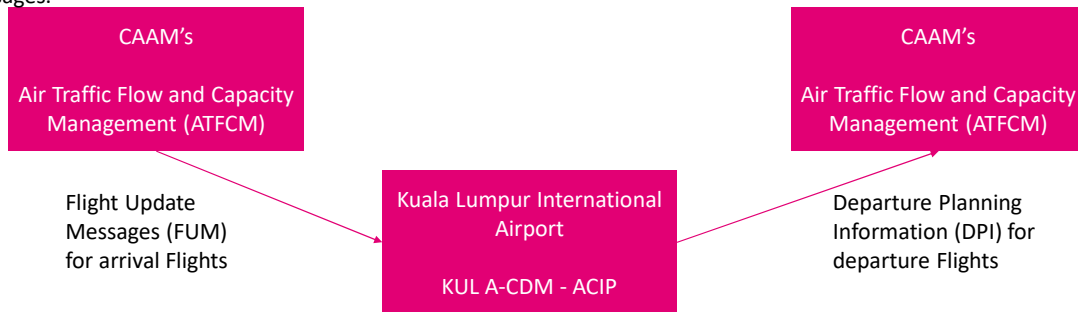
10

## Collaborative Management of Flight Updates

The Collaborative Management of Flight Updates functions as the technical connection between the KUL A-CDM supporting IT system called ACIP and the Air Traffic Flow and Capacity Management (ATFCM) system managing the en-route flights within the Malaysian Airspace System as well as cross border.

The data stream and data sets giving information into ACIP on arrival flights into KUL are called Flight Update Messages.

The data stream and data sets giving information into ATFCM on departing flights from KUL are called Flight Update Messages.



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## Main actions of the operational stakeholders

### Airlines

- Maintain Flight Plans (ICAO and IATA) up-to-date
- Manage the TOBT for every of their flights, if not delegated to Ground Handling

### Ground Handling

- Manage the TOBT on behalf of the airlines, if delegated to them

### Airport Operations

- Manage the Flight Plan Matching
- Supervise the KUL A-CDM Process

### Local Air Traffic Control

- Manage Start Up Process based on TSAT
- Manage Runway utilization by use of Departure Manager System

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## Main actions of the administrative stakeholders

Airport ITD

- Administrate User Accesses
- Administrate the ACIP



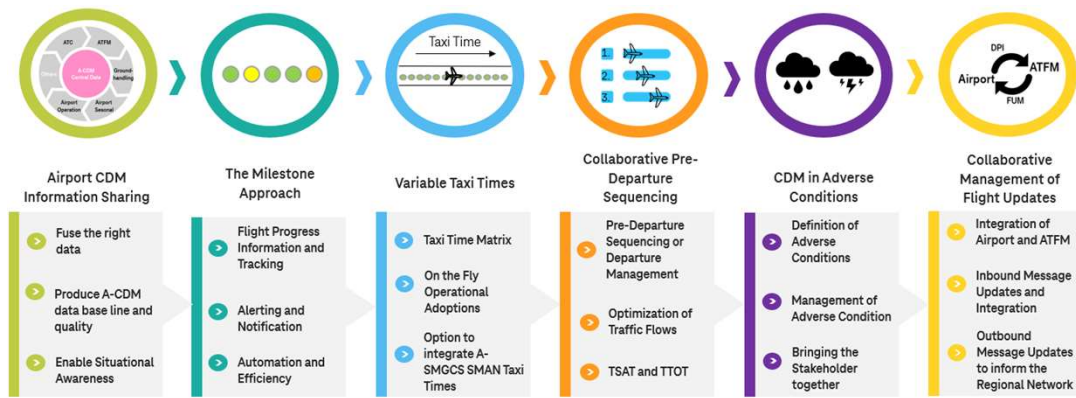


# KUL A-CDM Process for Air Traffic Control (ATC)

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## Recap: The six A-CDM Elements



A very important date for the A-CDM process and overall airport operations is the Target Off Block Time (TOBT)

1

## Recap: Information Sharing

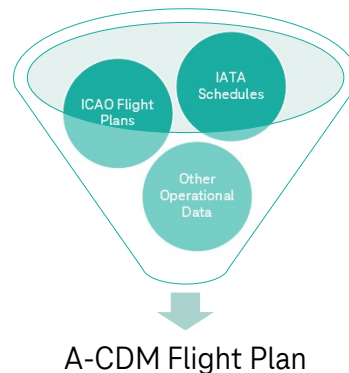
**IATA Schedules** are planning information published by the airlines to support long term planning of their stakeholders.

- Not all airlines do update their schedules after they have been initially issues
- Therefore, the data might not always be up to date when using it at the day of operations

**ICAO Flight Plans** are filed by airlines with Air Navigation Service Providers (CAAM) to announce flights and cannot be issues earlier than 7 days prior to day of operations.

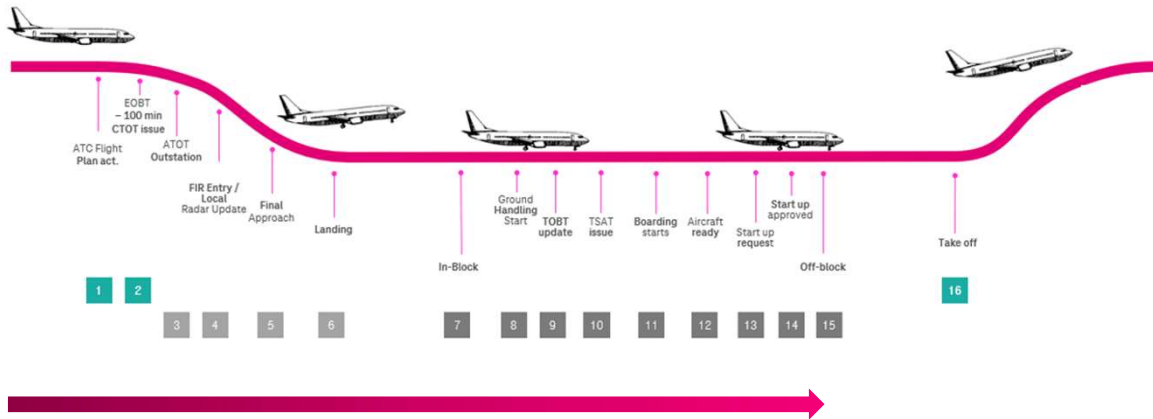
- The data within IATA Schedules and ICAO Flight Plans are not always matching even though they are issued for the same flight (Aircraft Registration, EOBT, Aircraft Types do vary very often)

To run A-CDM for benefit of all stakeholders, all planning data needs to be aligned and of highest possible quality.



2

## Recap: The Milestone Approach



The target of the Milestone Approach is to achieve the best possible TOBT, which should be stable as early as possible

This does not mean, that the first TOBT can be a perfect match once the aircraft blocks off, but the aim shall always be to have the best possible (at that time) known TOBT in ACIP.

3

## Recap: Variable Taxi Times

With Variable Taxi Times the In-Block Time and Take Off Time predictions can be improved massively for the benefits of Ground Handlers and ATC.

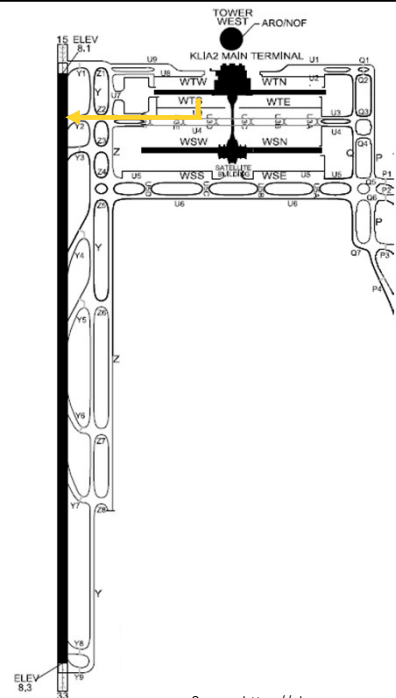
Variable Taxi Times are used as Master Data in ACIP and DMAN for the following automatic calculations:

$ALDT + EXIT = EIBT$

$TOBT + EXOT = TTOT$

RWY	Parking Stand	VTT [min]
33	K8	6
15	Q10	13

The more accurate the Taxi Times are, the better the TTOT can be forecasted by the DMAN and be achieved during operations.



Source: <https://aip.caam.gov.my/>



## Recap: CDM in Adverse Conditions

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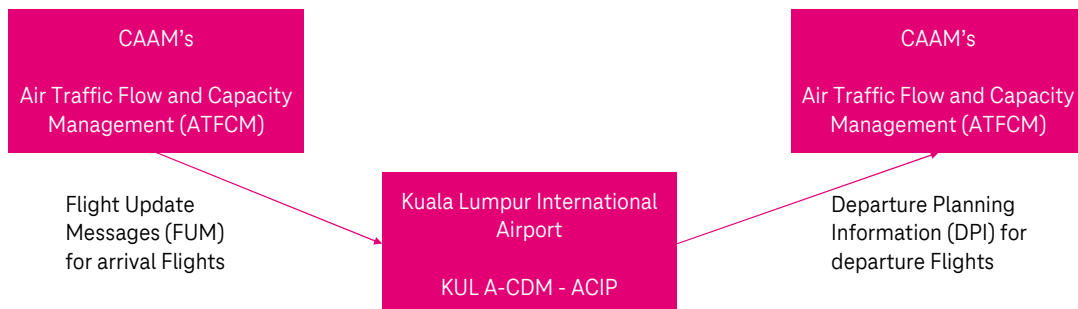
5

## Recap: Collaborative Management of Flight Updates

The Collaborative Management of Flight Updates functions as the technical connection between the KUL A-CDM supporting IT system called ACIP and the Air Traffic Flow and Capacity Management (ATFCM) system managing the en-route flights within the Malaysian Airspace System as well as cross border.

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## Rational behind the A-CDM Timestamps

First Letter	Letter two and three	Last Letter
<p><u>S</u>cheduled Source: Airlines IATA schedules via airport Up to 6-month-old</p>	<ul style="list-style-type: none"> <li>• LD = LanDed</li> <li>• IB = In-Block</li> <li>• OB = Off-Block</li> <li>• RD = ReaDy</li> <li>• SR = Start-up Request</li> <li>• SA = Start-up Approval</li> <li>• TO = Take-Off</li> </ul>	Just T for Time
<p><u>E</u>stimated Source: Airlines ICAO Flight Plans via CAAM Up to 6-days-old</p>		
<p><u>T</u>arget Source: Airlines/Ground Handling Up to 90 minutes old</p>		
<p><u>C</u>alculated Source: ATC Up to 100 minutes old</p>	<p>Examples:</p> <p>ALDT = Actual LanDing Time EIBT = Estimated In Block Time TOBT = Target Off Block Time TTOT = Target Take Off Time</p>	
<p><u>A</u>ctual Source: Various 100% quality</p>		

7

## Definition of TOBT and what it is used for

The Target Off Block Time (TOBT) is the central time of the A-CDM process for which all relevant stakeholders should do their best possible to achieve it.

Even though if everyone was trying their best and the TOBT cannot be achieved, then the TOBT responsible person shall update it as soon as possible.

To keep the A-CDM process as stable and fair as possible for the benefit of all stakeholders involved, multiple rules for TOBT updates have been defined and documented in this chapter and all stakeholders are requested to follow them.



**Note: Low quality TOBT will directly impact TSAT and TTOT and therefore the performance of your runway!**

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## Definition of the TOBT responsible person

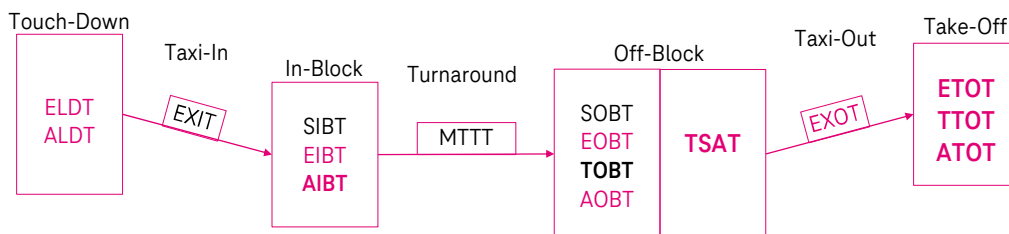
### 2.2.5 TOBT Responsible Person

The TOBT is considered to be an integral part of the A-CDM flight plan for flights being operated from an A-CDM airport. The ownership of flight operations and therefore also flight plans solely lies with aircraft operator.

Therefore, the responsibility of keeping TOBT for a flight always up to date lies with the airline or air transport service provider. However due to today's decentralized operations some airline or air transport service providers might not have a local operations presence anymore. Being on site and knowing the details of every turnaround is the key for a good TOBT quality, it has become best practice, that airlines or air transport service providers, who cannot ensure their local presence and therefore TOBT quality source their TOBT management to a locally present company like their ground handling service provide.

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## KUL A-CDM supports CAAM'S runway management



The KUL A-CDM process supplies ATC with the best possible TOBT, which is then used by CAAM's DMAN to calculate the optimal TSAT and TTOT for that specific flight while taking the other traffic demand into consideration

Note: Magenta colored time stamps are provided by CAAM!

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## **KUL A-CDM – going into the details**

The sequence of the six elements has been changed in the following slides by intention to support the red line for this training

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## **Management of Adverse Conditions**

Interaction with your DMAN, if:

1. Reduction of runway capacity due to increase arrival and departure separation
2. Pilots are taxiing slower, which leads to an increase of Estimated Taxi Out Time compared to the values used by the DMAN
3. Closure of a runway – zero runway capacity for a defined period of time

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## Definition of TSAT and procedure

The Target Start up Approval Time (TSAT) is a defined time window during which the pilot in command shall request the start up for its flight. The start up request can be placed any time within the time window as of the operational needs of the pilot in command but shall not be placed outside of the window (earlier or later).

### A.2 TSAT tolerance window

The TSAT tolerance window is defined as TSAT – 5 minutes to TSAT + 5 minutes, in which the pilot shall request Engine Start Up and Push back Approval as described in Milestone 13 (see chapter 3.13) and Milestone 15 (see chapter 3.15).

Example: TSAT is 08:05 (UTC)

TSAT tolerance window starts at 08:00 (UTC) and ends at 08:10 (UTC).

If ASRT/ASAT has not been set at TSAT + 9 minutes then TOBT will be deleted automatically:  
*CDM\_AutoLooseSlotASAT = 9 minutes.*

13

## ATC involvement in KUL A-CDM for the Arrival Flights

No changes or amendments to existing working procedures.

Automatic data exchange of important flight information between CAAM and MAHB systems, like:

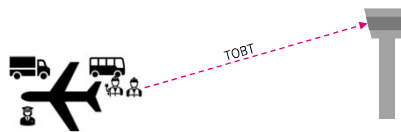
1. CAAM provides the ICAO Flight Plans
2. CAAM provides Flight Update Messages for the flights arriving into WMKK
3. CAAM provides other data, which has not been available with the airport prior to A-CDM, like information for go-arounds and diverted aircrafts as of existing standard procedures

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## ATC involvement in KUL A-CDM for the Turnaround

ATC is not involved in the turnaround process as such.

No actions needed to be done by ATC, but you benefit from the improved turnaround by getting the best possible TOBT from the Ground handling/Airline stakeholders of KUL A-CDM.



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## ATC involvement in KUL A-CDM for the Departing Flights

Automatic data exchange of important flight information between CAAM and MAHB systems, like:

1. CAAM provides the ICAO Flight Plans
2. CAAM provides TSAT and TTOT for departure flights based on TOBT provided by KUL A-CDM
3. CAAM provides other data, which has not been available with the airport prior to A-CDM, like return-to-stand and take-off abortion as of existing standard procedures.

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## Start Up Request 1/2

**KUL A-CDM brings changes to the Start Up Request process, which are also documented in the AIP.**

**Pilots are only allowed to call for start-up during the TSAT tolerance window.**

**Start-up requests prior to the TSAT tolerance window shall be rejected adding “to call back within TSAT tolerance window”**

### Milestone 13 process steps:

No	Step	Responsible	System/ Tool
1	Pilot-in-Command requests Start Up (and Push back) within the TSAT tolerance window (see also Annex A.2) at Lumpur Ground.	PIC	VHF Radio
1a	If the Startup Request is before the TSAT tolerance window, the Lumpur Ground Controller shall advise the PIC to call at TSAT – 5 minutes earliest.  Example phraseology (current time is 0755): <i>[CALLSIGN] your TSAT is 0805, please call again at 0800.</i>  Alternative: <i>[CALLSIGN] your TSAT is 0805, expect Start Up and Push back Approval at 0800. Hold Position.</i>	Lumpur Ground Controller	VHF Radio
1b	Lumpur Ground shall mark the Start Up Request in FDPS.	Lumpur Ground Controller	FDPS
1c	FDPS will forward the Start Up Request (ASRT) to the ACIP	ATC	FDPS
2	ACIP publish the information ASRT.	MA(S)	ACIP
3	ACIP automatically sets the Start Up Request Milestone	MA(S)	ACIP

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## Start Up Request 2/2

**Start-up requests after the TSAT tolerance window shall also be rejected adding “request your TOBT responsible person to enter a new TOBT”**

**Compliance to the TSAT tolerance window is very important so that the aircrafts can reach the runway at TTOT and not jeopardize the departure sequence when coming ahead or behind TTOT**

No	Step	Responsible	System/ Tool
4	CDM12a – Missed TSAT:  If ASRT is not available within the ACIP at TSAT+ 6 minutes, the ACIP will automatically raise the alert CDM12a and send it to Lumpur Delivery for immediate action.  If ASAT is not set after TSAT + <CDM_AutoLooseSlotASAT> then ACIP automatically delete the TOBT and TSAT and a new TOBT needs to be set by the TOBT responsible person (see step 5b) The TOBT deletion will be sent to the DMAN.	MA(S)	ACIP
5	Lumpur Ground shall decide whether to approve the Start Up (see chapter 3.14) or ask the PIC to update the TOBT.	Lumpur Ground	VHF Radio
5a	In case, the TOBT needs to be updated, the PIC ask the TOBT responsible person to update the TOBT	PIC	VHF Radio Phone/mo bile phone
5b	The TOBT responsible person will update the TOBT	TOBT responsible person	ACIP

*Note: If the TSAT has been deleted and the flight needs to be re-sequenced by the DMAN, it might be necessary that the flight requires a new en-route clearance.*

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## Start Up Given

The start up given process has not been changed.

The only change is on the technical data integration side, that its data is now been shared by CAAM with the ACIP and displayed for the situational awareness of the stakeholders.

### Milestone 14 process steps

No	Step	Responsible	System/ Tool
1	Lumpur Ground approves the Startup up and Push back and the Lumpur Ground Controller manually key in ASAT in FDPS.	Lumpur Ground Controller	FDPS
2	FDPS sends ASAT to ACIP	ATC	FDPS
3	ACIP publishes ASAT	MA(S)	ACIP
4	ACIP automatically sets Start Up Approved milestone	MA(S)	ACIP

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## Push-Back request and approval

The push-back approval process has not been changed.

The only change is on the technical data integration side, that its data is now been shared by CAAM with the ACIP and displayed for the situational awareness of the stakeholders.

### Milestone 15 process steps:

No	Step	Responsible	System/ Tool
1	Pilot-in-Command request Push Back at Lumpur Ground (if not already requested in combination with MS13 Startup Request)	PIC	VHF Radio
2	Lumpur Ground approve the Push back to the PIC as soon as the traffic situation allows it.	Lumpur Ground Controller	FDPS
3	After receiving the Push Back Approval, the PIC instruct the Headset Operator to initiate the Push back in accordance with the published procedure in the AIP, AD 2 WMMKK.	PIC	Voice Comm / Radio
4	The A-SMGCS automatically detects the AOBT and sends it to ACIP via FDPS	ATC	A-SMGCS
5	In case, the A-SMGCS does not detect the AOBT automatically, the Lumpur Ground Controller shall manually key in the AOBT within FDPS	Lumpur Ground Controller	FDPS
5a	FDPS send the AOBT to ACIP	ATC	FDPS
6	In case, the AOBT will be generated by the Visual Docking Guidance System (VDGS) <sup>3</sup> the VDGS send the AOBT to ACIP.	MA(S)	VDGS
7	ACIP automatically sets Off-Block milestone	MA(S)	ACIP

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# Take-Off clearance process

**The take-off clearance process has not been changed.**

**The only change is on the technical data integration side, that its data is now been shared by CAAM with the ACIP and displayed for the situational awareness of the stakeholders.**

## Milestone 16 process steps:

No	Step	Responsible	System/ Tool
1	Lumpur Tower issues a Take-off clearance to the PIC taking the CTOT Window into account (if the flight is regulated and having a CTOT).	Lumpur Tower Controller	FDPS
2	The A-SMGCS automatically detects the ATOT (ATD) and send it to ACIP	ATC	A-SMGCS
2a	In case, the A-SMGCS does not automatically detect the ATOT (ATD), the Lumpur Tower Controller will manually key in the ATOT (ATD) in FDPS	Lumpur Tower Controller	FDPS
2b	FDPS send ATOT to ACIP	ATC	FDPS
3	ACIP automatically sets the Take-Off milestone	MA(S)	ACIP

*Note: In case of a rejected Take-Off or abort Take-Off, the Lumpur Tower Controller decides to put the flight back into the sequence again (flat) after solving the cause of the rejected or aborted take-off. If the cause cannot be resolved, the PIC might request a Return to Stand/Bay procedure (see chapter 3.17.2).*

# AOE Mobile User Training

ACIP Web Application

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- AOE Mobile User Training

# Accessing the System

- How to get started...

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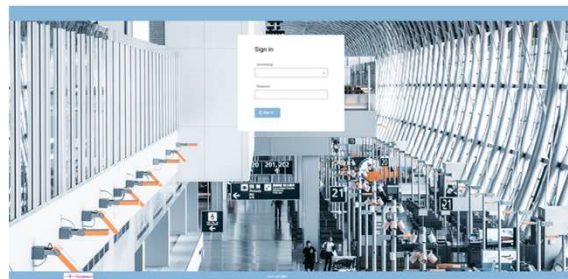
## AOE-Mobile – User Training

### Accessing the System – Login using Desktop Browser

- AOE Mobile: Airport Operational Extranet Mobile Client
- Users can log in with their user account configured in the ACIP.
- Application can be accessed from any modern browser
- directly enter the URL in the browser:

<https://webapplication.kul-acdm.com/webapp-aomobile/>

- Install via browser as a web application; then, you can click via the shortcut on the desktop.





- AOE Mobile User Training  
**Start - Up**

- Starting window...

## AOE Mobile – User Training Start-Up – Welcome Page (1)

- After entering login credentials, user will be able to see the Welcome Page of application
- Assigned grid views can be seen on the welcome page
- The number of grids and the information within the grid can be configured individually per user or per user group
- Can also use “☰” symbol which is available on the left side of the screen to go to desired view/page

**Homepage Menu:**  
A list of all the flight grids that have been assigned to this specific user.

**Notifications:**  
Use to access important notifications. The counter indicates the number of unread messages.

**User Menu:**  
Use to apply specific functions such as logout, password change...

**Status:**  
Displays the current connection Status

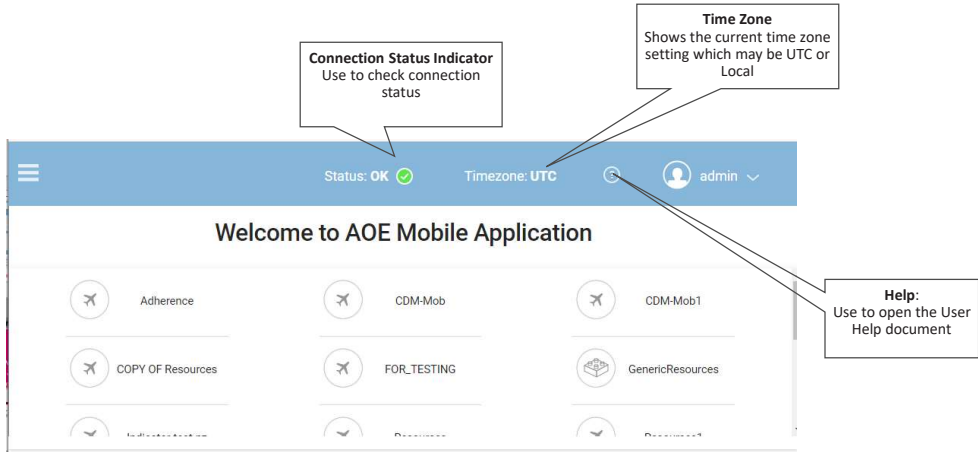
**Grids:**  
All of the grids that have been assigned to the specific user.

The screenshot shows a mobile application interface with a blue header bar containing 'Status: OK', a notification icon, and a user profile icon. Below the header is a 'Welcome to AOE Mobile Application' message. A central menu lists five options: 'ARRIVALS', 'COM Partner(test2)', 'DEPARTURES', 'Full Details', and 'TURNS\_NEW\_TABS'. A red box highlights this menu.



## AOE Mobile – User Training

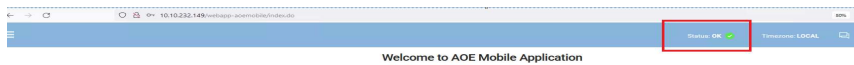
### Start-Up – Welcome Page (2)



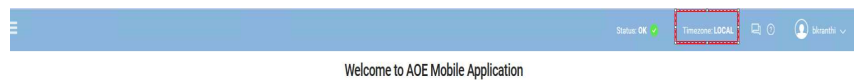
## AOE Mobile – User Training

### Start-Up – Indicators

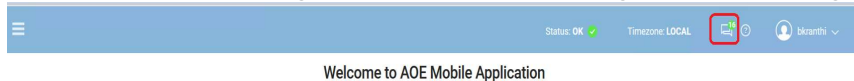
- The highlighted portion in the below screenshot displays the “**connection status**” of AOE mobile client with AOE Mobile server.



- The highlighted portion in the below screenshot displays the **time zone** selected for the session.
- Can switch to UTC/LOCAL as per the user requirement (using Settings menu)

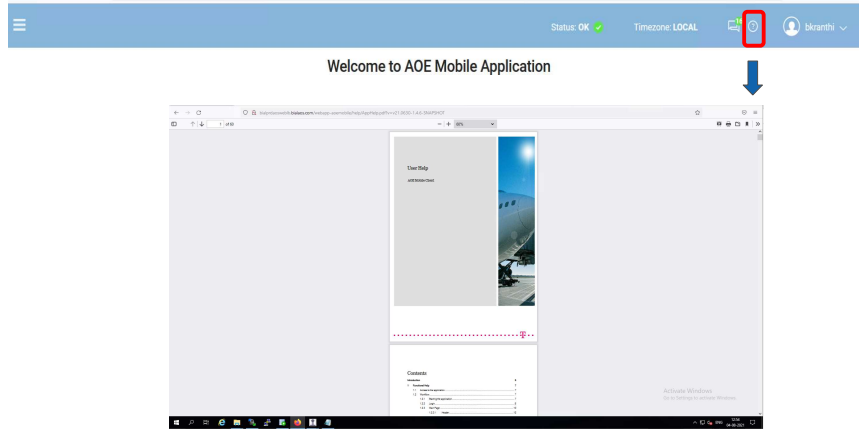


- The highlighted portion in the below screenshot shows the alarms assigned to the user
- The count of unread messages will be shown on the top right corner of message icon



## AOE Mobile – User Training Start-Up – Help

- The highlighted portion in the below screenshot helps the user to open the AOE User manual)



A 3D rendering of an airport terminal building with several airplanes parked at gates. A large, stylized red 'T' logo is superimposed on the scene. A pink gradient overlay covers the bottom portion of the image, containing text and a logo.

- AOE Mobile User Training  
**User Menu**
- Access to setting and other functions...

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# AOE Mobile – User Training

## User Menu – Overview

- Access functions such as changing the password, changing the time zone or changing the theme, etc.

**Settings:**  
Access to the settings menu. This is only visible to users have been granted.

**Theme**  
Use to switch from light to dark theme (night view)

**Logout:**  
Logout of the application.

# AOE Mobile – User Training

## User Menu – Settings

- Access to the settings menu can be given to individual users.
- Changes are stored locally on the device which allows users to customize the application according to their needs.

**Time zone:**  
Lets the user switch between LOCAL and UTC time zones. This adjusts the timestamps visible in the flight grids accordingly.

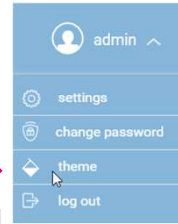
**Notification:**  
The number of notifications stored locally on the device. All alerts received by a user are stored on the device and removed via the FIFO\* principle.

**Period:**  
This is an indicator in minutes which is used to calculate the time range to use when selecting flights for flight grid.  
"Now – Start" TO "Now + End" flights are always selected.

# ACIP – User Training

## User Menu – Theme

Use the Theme menu option to switch to the night view (Dark theme)



Flight No	Flight Status	From	Org	ACT Arr	BBT	AMT	ELDT	Flight Dep	Flight Status Dep	Dest	To	ACT Dep	BBT	ATOT	BBT
92103	S	LVS	LVS	ARR	23:12 <sup>1</sup>			AF2104	S	LVS	LVS	ARR	23:57 <sup>1</sup>		23:57 <sup>1</sup>
92105	S	MUC	MUC	73H	23:23 <sup>1</sup>			FR2106	S	MUC	MUC	73H	23:58 <sup>1</sup>		23:58 <sup>1</sup>
92167	S	FRA	FRA	321	23:35 <sup>1</sup>			LH2108	S	FRA	FRA	321	00:30		00:30
92109	S	DUS	DUS	737	23:49 <sup>1</sup>			AG2110	S	DUS	DUS	737	00:25		00:25
92113	S	LHR	LHR	320	23:54 <sup>1</sup>			LH2112	S	LHR	LHR	320	00:22		00:22
92201	S	TXL	TXL	AT4	00:05			ED2202	S	TXL	TXL	AT4	00:25		00:25
92203	S	LVS	LVS	ARR	00:12			AF2204	S	LVS	LVS	ARR	00:51		00:51
92205	S	MUC	MUC	73H	00:23			FR2206	S	MUC	MUC	73H	00:58		00:58
92207	S	FRA	FRA	321	00:35			LH2208	S	FRA	FRA	321	01:30		01:30
92209	S	DUS	DUS	737	00:42			AG2210	S	DUS	DUS	737	01:25		01:25
92211	S	LHR	LHR	320	00:56			BA2212	S	LHR	LHR	320	01:37		01:37
92201	S	TXL	TXL	AT4	01:05			ED2202	S	TXL	TXL	AT4	01:55		01:55
92203	S	LVS	LVS	ARR	01:12			AF2204	S	LVS	LVS	ARR	01:57		01:57
92205	S	MUC	MUC	73H	01:23			FR2206	S	MUC	MUC	73H	01:58		01:58
92207	S	FRA	FRA	321	01:35			LH2208	S	FRA	FRA	321	02:30		02:30
92209	S	DUS	DUS	737	01:42			AG2210	S	DUS	DUS	737	02:25		02:25
92211	S	LHR	LHR	320	01:56			BA2212	S	LHR	LHR	320	02:27		02:27

- AOE Mobile User Training

## Flight Grids

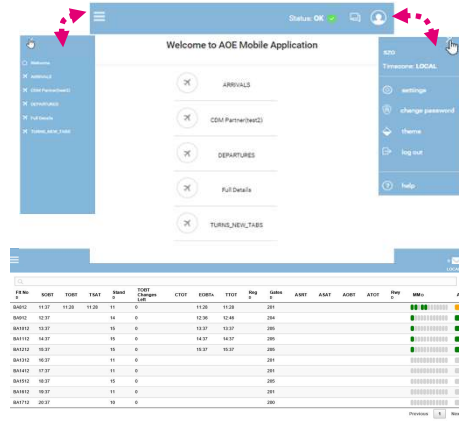
- Access to operational flights...

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# AOE Mobile – User Training

## Flight Grid – Overview

- All Flight Grids and functions assigned to individual user shown in the main menu.
- Number of grids and content within the Grid is configurable per user or user group.
- Flight grids in portrait or landscape mode
- Columns are in-/excluded depending on the size of the screen
- Flight updates are automatically pushed to the client.



# AOE Mobile – User Training

## Flight Grid – Layout

This screenshot provides a detailed view of the flight grid layout with several callouts explaining key UI elements:

- Menu:** Located at the top left, represented by a hamburger icon.
- Filtering:** A search bar above the flight grid.
- Go back to the default order:** A button to reset the sorting of the flight grid.
- Select the column to be displayed:** A 'Columns' button to customize the grid's columns.
- Tab Folder:** A button to manage the detail view's tabs.
- Change position of the detail area:** A button to adjust the detail view's placement.
- Hide Detail:** A button to toggle the detail view on or off.
- List of Flight Records:** Points to the main table of flight data.
- Indicator for next day:** Points to a specific column in the flight grid, likely representing a date indicator.
- Detail Area:** A pop-up view showing detailed flight information for a selected record.
- Go to next page:** A button at the bottom of the grid to navigate to the next page of results.

The flight grid shows columns for Flight No., ORG, DEST, TIME, and STAT. The detail area displays fields for Day Dep, Flight Dep, SOBT, and other flight-related data.

# AOE Mobile – User Training

## Flight Grid – Multiple rows per Flight

Day Dep	Flight Dep	Callsign Dep	Reg Dep	ACT Dep	Flight Status Dep	SOBT	EOBT	AOBT	ATOT	Stand Dep
11:00	GA430	GIA430		738	DEP	11:00	10:55	10:55	11:15	HOLD
11:00	QG964	CTV964		320	DEP	11:00	10:50	11:00	11:17	HOLD
To IATA Destination IATA Service Type Code... NIT Dep Total Pax (D) Code Shares Dep F/C Comments(D) CTOT Ramp Handling Age...										
DJB	DJB	J		0						
11:00	GA600	GIA600		738	DEP	11:00	11:01	11:01	11:16	HOLD
11:00	IU742	SJV742		320	DEP	11:00	11:01	11:01	11:24	HOLD
11:00	AK389	AXM389		320	DEP	11:00	11:01	11:01	11:19	HOLD
11:10	IU842	SJV842		320	DEP	11:10	11:07	11:10	11:23	HOLD
11:10	MH710	MAS710		738	DEP	11:10	11:00	11:10	11:33	HOLD

- the second row will be used in case not all configured columns can be displayed in one row.
- Use the icons / to open / close the second row

Multiple rows belonging to one record

# AOE Mobile – User Training

## Flight Grid – Remove Columns



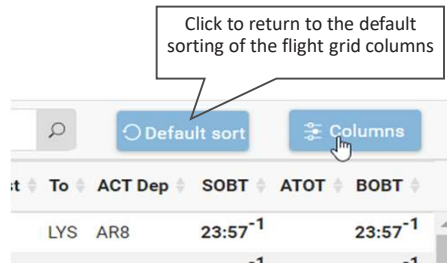
- Click on the "Columns" button to open a list of buttons where each button represents a configured flight grid column.
- By clicking on a button, you can remove (hide) or add columns you clicked on.

Flight Arr	Flight Status Arr	From	Org	ACT Arr	SOBT	AOBT	ELDT	PKG
F2103	S	LYS	LYS	ARR	23:12 <sup>-1</sup>			AFS
R2105	S	MUC	MUC	73H	23:23 <sup>-1</sup>			FFS
H2107	S	FRA	FRA	321	23:35 <sup>-1</sup>			LH
U2109	S	DUS	DUS	737	23:42 <sup>-1</sup>			4U
A2111	S	LHR	LHR	320	23:56 <sup>-1</sup>			BA
0201	S	TXL	TXL	ATA	00:05			02202
F2203	S	LYS	LYS	ARR	00:12			AF2204
R2205	S	MUC	MUC	73H	00:23			FR2206
H2207	S	FRA	FRA	321	00:35			LH2208
U2209	S	DUS	DUS	737	00:42			4U2210

## AOE Mobile – User Training

### Flight Grid – Multiple Sort / Default Sort

- You can sort a column or even multiple columns by double clicking on the column header.
- To return to the Default sort click on the “Default sort” button.



An aerial view of an airport terminal with a large red T logo in the foreground. The background is a light blue sky with several airplanes flying. A red gradient bar is at the bottom of the image.

- AOE Mobile User Training

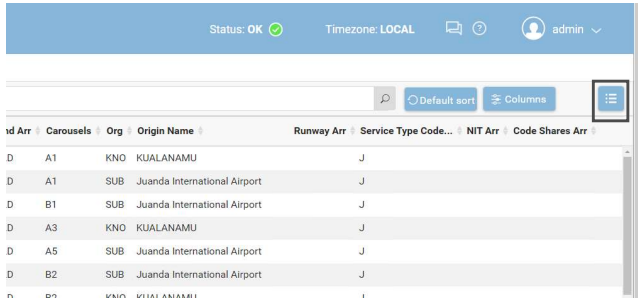
## Flight Grid - Details



- Access to further information related to the flight...

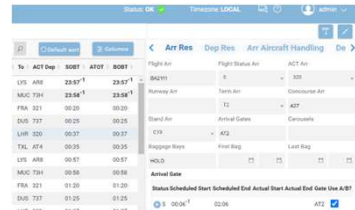
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## Tab Folders – Show / Hide Details

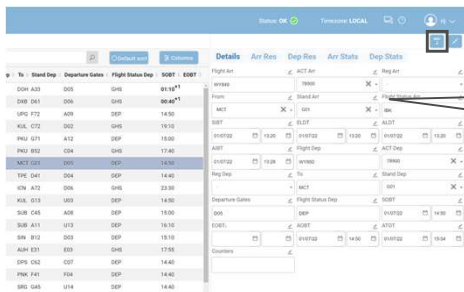



- Switch between flight grid with or without the Detail Panel
- Use  to display the detail tabs
- Use  to hide the detail tabs



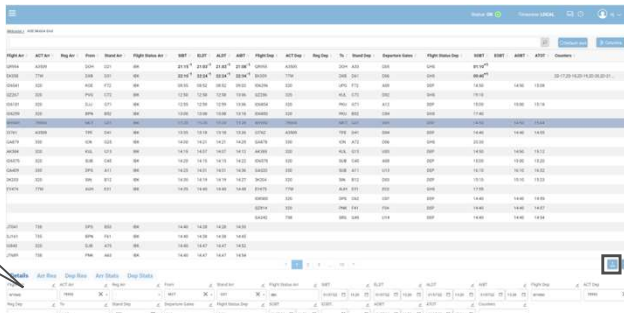
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## Tab Folders – Positioning of the Details



- Use to switch between the position of detail tabs vertically (right-hand side of flight grid) or horizontally (below flightgrid).
- Use  to switch between the two positions.

Details positioned vertically





## AOE Mobile – User Training

### Tab Folders – Arrival & Departure Resources

- View flight resource allocation information.
- Dedicated tab folders available for arrival and departure resources (Arr Res, Dep Res) information.
- Visible information is configurable.

Details	Arr Res	Dep Res	Arr Stats	Dep Stats
Flight Arr	Flight Status Arr	ACT Arr		
WY849	N	78900		
Runway Arr	Term Arr	Details	Arr Res	Dep Res
07R	2	Flight Dep	Flight Status Dep	ACT Dep
Stand Arr	Arrival Gates	WY850	T	78900
G01	D05	Runway Dep	Term Dep	Concourse Dep
Baggage Bays	First Bag	25R	2	2D
HOLD	01:07:22	Stand Dep	Departure Gates	CBP(D)?
Arrival Gate		Second Call	Goto Gate	ASBT
Status	Scheduled Start	Scheduled End	Actual	AEBT
E	13:28	13:38	13:28	01:07:22
Arrival Baggagebelt		Departure Desk		
Status Belt	Scheduled Start	Scheduled End	Actual Start	
E	HOLD 13:38	14:38	13:28	
Status	Desk	Scheduled Start	Scheduled End	Act. Start
E	HOLD 11:20	14:20	11:20	14:20
E	HOLD 11:20	14:20	11:20	14:20
E	HOLD 11:30	14:30	11:30	14:30
Departure Gate				
Status	Gate Sched.	Lounge Start	Scheduled Gate Start	Scheduled Start
E	D05 14:05		14:20	14:05

- These Tabs are examples of a customer configuration and can be administrated using ACIP rich client

## AOE Mobile – User Training

### Tab Folders – Updating Times

- Use Filter e.g. input Flight Number to search for a flight

MM Arr	CdmStatus	Flight Arr	From	SIBT	FIRT	FNLT	TLDT	ELDT	EIBT	AIBT	Flight Dep	To	Reg Dep	ACT Dep	Stand Dep	ALDT	SOBT
	FIR	UK424	HYD	13:40	13:10		13:40	13:30			UK427	LKO	320		HOLD		15:55

- Go to Detail Tab (Example: User for updating FNLT Timestamp)
- Click on FNLT field to update data manually. First select the date using date picker and then set the time from the time picker

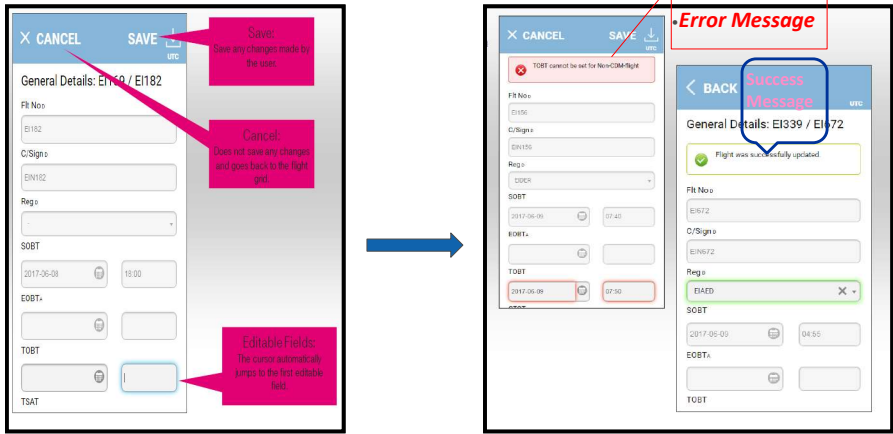
The process involves three steps:

- Date Picker:** Selecting the date 04/08/21.
- Time Picker:** Selecting the time 13:32.
- Update Field:** The FNLT field in the flight details is updated to 04/08/21 13:32.

# AOE Mobile – User Training

## Tab Folders – Save / Cancel Updates

- SAVE/CANCEL button gets enabled after editing the data



• AOE Mobile User Training

## Configuring Users

- How to add new users...

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# AOE Mobile – User Training Configuring Users

In General AOE Mobile users are configured in the same way as normal ACIP users.

- Users are assigned to roles
- Role – contains the defined flights grids as well as functions that they can access in the AOE Mobile application.
- Authorization – controls which flight details a user is able to see and change.

The screenshots illustrate the configuration process for AOE Mobile users. The top window displays a table of flight data with columns for flight number, status, and date. The middle window shows a 'View Condition' dialog box with various options for filtering and displaying data. The bottom window shows a 'View Attribute Write Condition' dialog box for configuring data updates.

• AOE Mobile User Training Exercises

- Hands on

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## AOE Mobile – User Training Exercises

- Open the menu and select a predefined view
- Sort the flight grid as required then go back to the default sorting
- Hide/Select unwanted field
- Look/Edit at the detail tabs
- Switch between UTC & Local time zone

