

# AOS new Features

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# Arrival Planning Information (API)/iAOP

## Benefits

- The overall objective of the API Service is to improve coordination between stakeholders and to improve Network, Airport and TMA operations

## AOS Extension

- New Detail Tabfolder „API“
- Contains a table of all API messages generated
- Arrival CDM Alarms for additional awareness
- Implemented according to latest Eurocontrol API Implementation Guide (G-APIs)

The screenshot displays the API/iAOP interface with several key components:

- Flight Data Table:** A table at the top showing flight details such as flight number (e.g., 1012, 1028, 1033), origin/destination, arrival/departure times, and status.
- Message Log:** A central table listing generated API messages with columns for Status, Created, BIBT, Rule, Description, and Send?.
- XML View:** A detailed view of an XML message, showing fields like <endUserId>, <sendTime>, <aircraftId>, <aerodromeOfDeparture>, <aerodromeOfDestination>, <estimatedOffBlockTime>, <flightStatusInbound>, <aircraftATAId>, <aircraftTypeATA>, <airportSlotArrival>, <arrivalApronStand>, <arrivalRunway>, <taxiTime>, <arrivalTerminal>, <inBlockTime>, <landingTime>, <minimumTurnaroundTime>, and <scheduledInBlockTime>.
- Alarm Panels:** Two panels at the bottom showing active and inactive alarms. The 'Arrival' panel shows alarm CDM21, and the 'Departure' panel shows alarm CDM02.

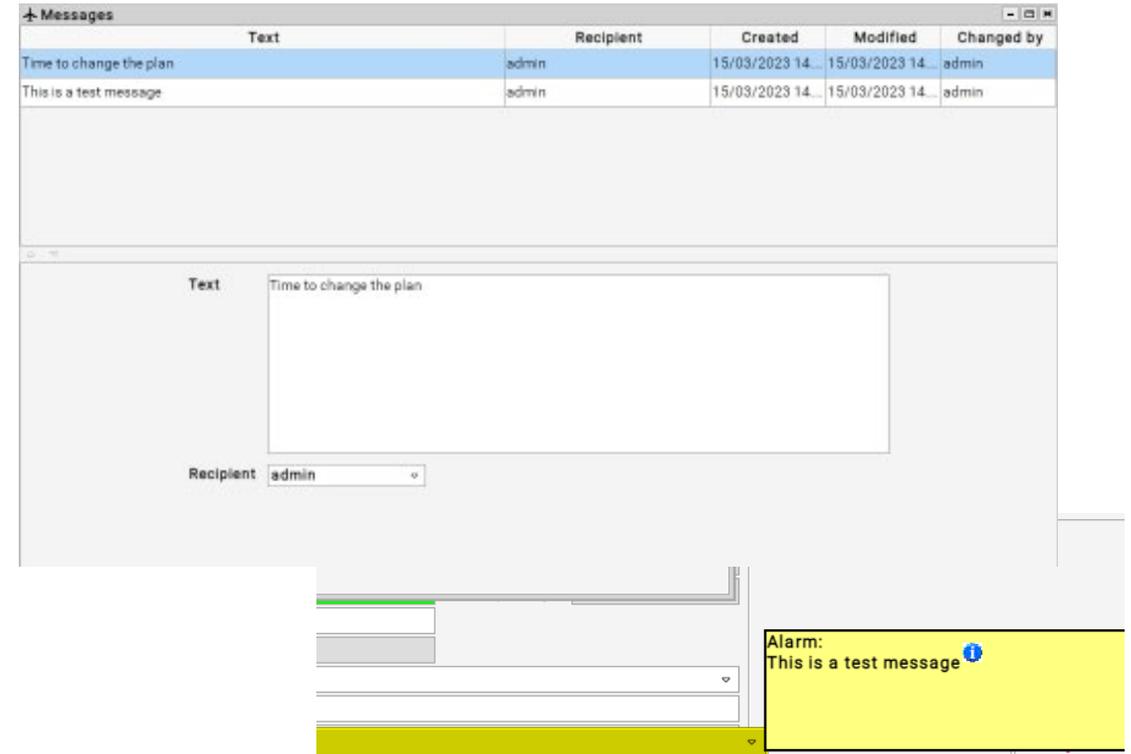
# Messaging

## Benefits

- *Alerting or informing dedicated logged in AOS users*

## AOS Extension

- User interface to enter the messages to send
- Recipients receive an info at the bottom right of the main AOS panel
- Send to individual users or a group of users (based on roles)



# Rule-Based Special Services

## Benefits

- Efficient rule-based assignment of pre-defined services to a flight. Can then be used for tracking and invoicing these additional services.

## AOS Extensions

- New “Special Service Rules” screen for defining the condition for assigning the specific services
- Services are generated upon rolling out the operational days
- Are also created whenever a new flight is entered into the system
- The generated services can be updated in the “Special Service” tab folder

The screenshot shows the 'Special Service Rules' application window. At the top, there is a table listing rules:

Name	Short Description	Long Description	Active?	Start	End	Pref.	Last Change	Changed By
Services for LH			<input checked="" type="checkbox"/>			50	21/05/21 1546	admin
Services for EY			<input checked="" type="checkbox"/>			50	21/05/21 1547	admin

Below the table, there is a 'Detail' tab selected. The detail view shows a rule for 'Airline (A) = LH'. The rule is defined by the condition 'Airline (A) = LH'. The rule is active and has a preference of 50. The rule is assigned to a flight if 'at least one' of the following conditions apply:

Description	Resource...	Resource T...	Amo...	Unit	Type	\$?	Comment
Wheelchair Service	WHEELCH...	WCH	10.00		F	<input checked="" type="checkbox"/>	
Catering	CATERING	CATERING		PIECES	F	<input checked="" type="checkbox"/>	
Ground Power Unit	GPU	GPU			F	<input checked="" type="checkbox"/>	

At the bottom of the detail view, there is a table showing the attribute name, logical operator, and value:

Attribute Na...	Logical ...	Value
Airline (A)	=	LH

# Conflict Management

## Benefits

- Better visibility and tracking of confirmed conflicts

## AOS Extension

- Persistent acknowledge / unknowledge of conflicts including timestamps (visible for all users)
- Approved conflicts are approved for all RMS users.
- Enter additional reasons for traceability and clarification.
- Tracking in Audit trail
- Changed Bar layout for more visibility

The screenshot displays a conflict management interface. At the top, a Gantt chart shows a timeline from 09/22 to 12/22 with various colored bars representing events. Below the Gantt chart, a table lists resources with columns for Res., Description, and Type. An 'Event conflict list' dialog box is open, showing a table with columns for Event, Confli..., Reason, Confirmed by, and Confirmed ... The dialog contains one entry: ACT: 8789 not allowed on 504, with a checked 'Confli...' box and a reason of 'exception'. Below the dialog, a Gantt bar is highlighted with a blue border, showing a conflict between two events: one from 2:16 to 2:17 and another from 2:17 to 2:18, with a reason of 'EY B 789'.

Res.	Description	Type
64	RON/TON	
504	EY216/EY217	
43	EE095/EE095	
43	EE5036/EE5021	

Event	Confli...	Reason	Confirmed by	Confirmed ...
ACT: 8789 not allowed on 504	<input checked="" type="checkbox"/>	exception		

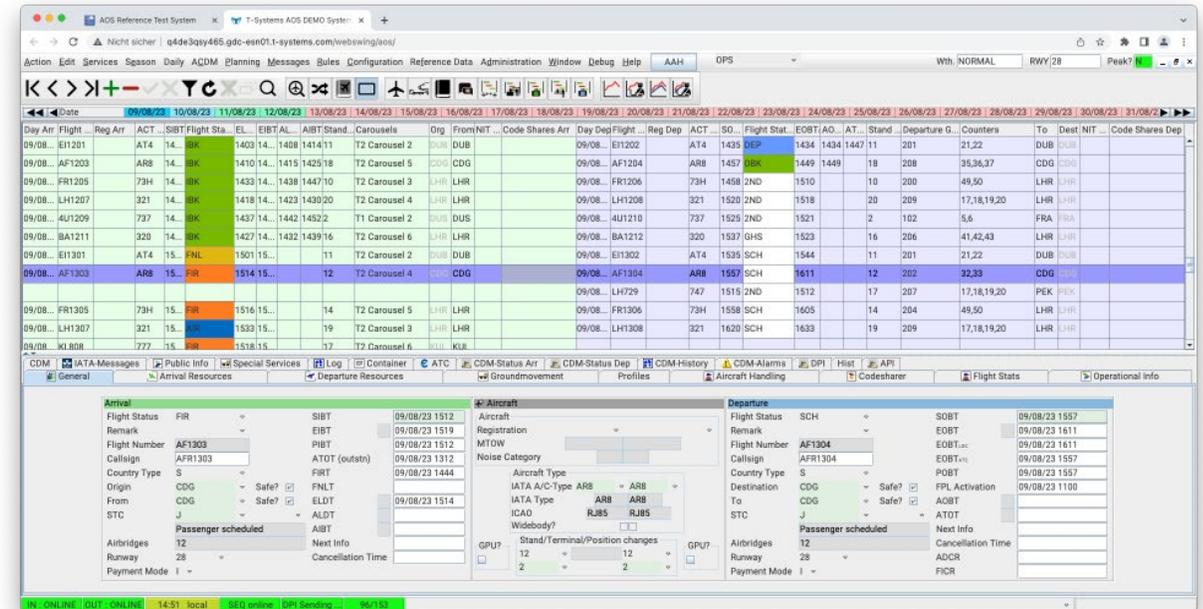
# AOS as Webapplication

## Benefits

- No need to run anything on desktop
- “Cost savings” compared to actual Java licensing
- Improvement of Security
- Move into the Cloud

## AOS Extension

- AOS is running in the Browser
- No more local installations required and no additional software
- Full AOS functionality as local running AOS



# Perspectives

## Benefits

- For an easy way to save/open the way user has arranged the Windows

## AOS Extension

- Positions and configuration (view) of each window can be saved
- Public Perspective & Private Perspectives can be created using the provided functions
- Saved perspectives are stored under the Window menu and can be retrieved at any time
- One selection dialog applicable for all windows requiring a selection input

TA	From	Reg Arr	Service Type	ACT Arr	A/L Arr	Stand Arr	Arrival Gates	Baggage Bays	SIBT
DEL		J							
KUL		P							
BOM		J							
DEL		J							
GOI		J							
DEL		J							

Use to open desired perspective

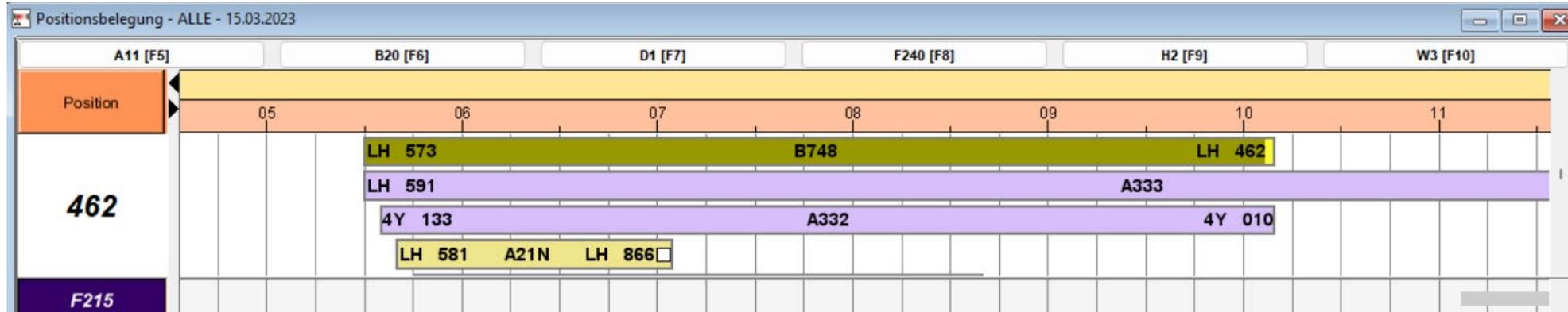
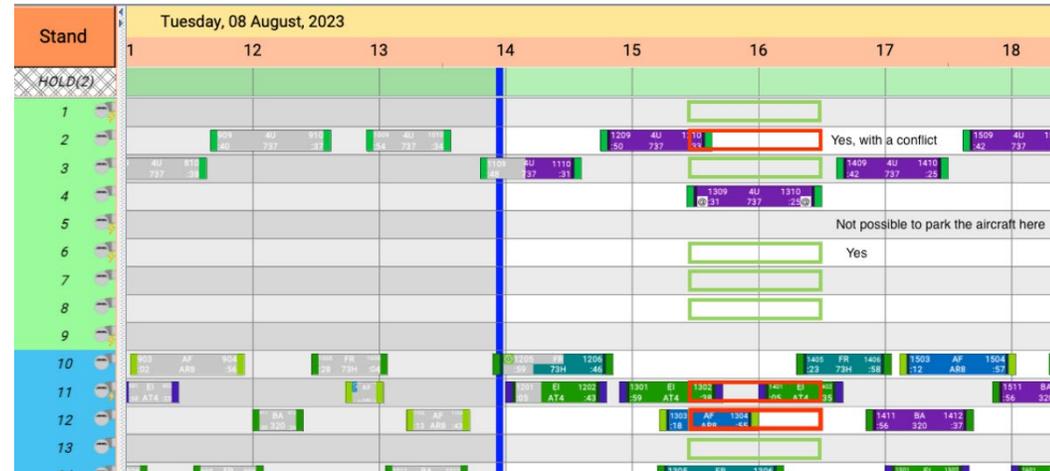
# And some more...

- Export/Import of Rules
- Weather Information
- Notice to Airman Message (NOTAM)
- Alarm Based Check List
- Fixed Timeline in Gantt Chart
- Highlight mandatory fields
- Display Multiple Runways
- Special Service Request Code (SSR)
- Baggage Halls
- Nature Code
- Book Load
- Identifying Peak Days
- Identifying VIP and Priority Flights
- Total Numbers of Bags
- Expected PAX Numbers
- Best Known PAX & Bag Numbers
- Closing Types
- Create Multiple Copies in one Go
- Visualize Background Solver Time Window
- Chart Snapshot
- Template Look-up Table also for Planning

# Work in progress

- KPI based planning
  1. Maximize PAX on contact stands
  2. Maximize contact rate
  3. Minimize Groundmovements
  4. Minimize Transfer Times
  
- Jump to Areas

- Moved Mode



# Thank you!

Jürgen Hanke

[Juergen.hanke@t-systems.com](mailto:Juergen.hanke@t-systems.com)

+49 151 14258057

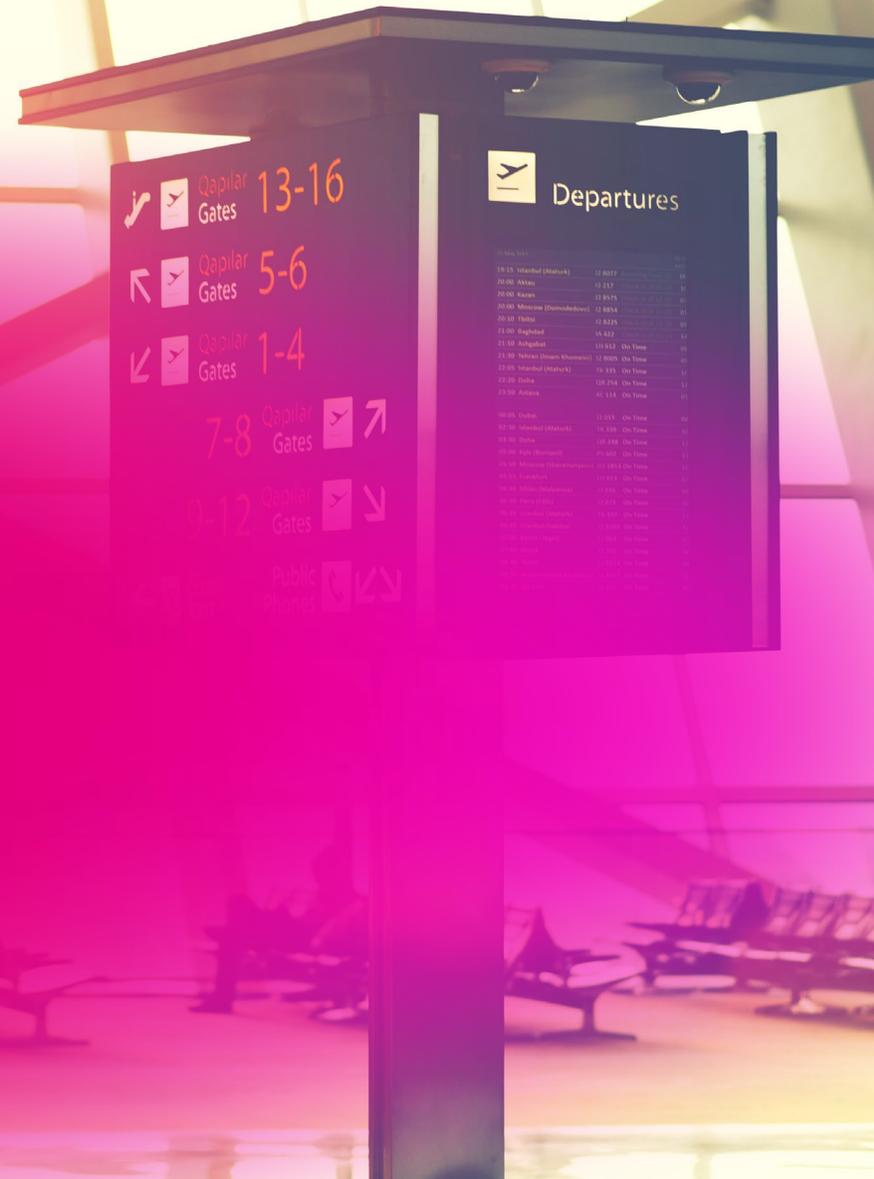
Carolin Braun

[carolin.braun@t-systems.com](mailto:carolin.braun@t-systems.com)

+49 175 6071406

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# Alarm Based Check-List

## Benefits

- supports defining and triggering alarm and creating check lists including alerting

## AOS Extension

- In the Alert Configuration screen new alarm types
  - Alarm Type – MANUAL & TASK
  - Tab Folder: Task Assignment
- Flight Grid Services
  - Create Arrival Alarm
  - Create Departure Alarm
- Result for Acknowledgement in Daily->Alarms

The screenshot displays the 'Alert Configuration' interface. At the top, a table lists various alarm configurations:

Alarm Type	Category	Severity	Description	Area	Query	Active?	Schedule
REF01	FIXED	3	Create new Stand	REF		<input checked="" type="checkbox"/>	
SEASON_IMPORT_FAILED	FIXED	1	Errors detected while importing a new seasonal flight schedule	ACL		<input checked="" type="checkbox"/>	
SEASON_SRV_IMPORT_FAILED	QUERY	3	Alarm is generated if no season schedule, imported by the ACL ser...	ACL	SELECT TRUNC(SYSDATE-1),...	<input checked="" type="checkbox"/>	0 5 ***
SITA_OFFLINE	QUERY	3	No SITA Messages received within the last X (OP_MasSITInactiveTi...	OPS	SELECT SITAOFF[TO_CHAR...	<input type="checkbox"/>	0 30 *****
Sick Person on Board	MANUAL	3		AOCC		<input checked="" type="checkbox"/>	
Unprocessed FUM	CHECK	1	Raises an alarm if a FUM message could not be assigned to a flight.	CDM	SELECT PAA_IDSEQ, PAA_A...	<input checked="" type="checkbox"/>	*2 *****

Below the table, the 'Task Assignment' section is visible, showing a 'Task Content Template' with the text 'Sick person in Board flight [0]'. The 'Assigned Tasks' section lists:

Alarm Type	Severity	Group
Call Emergency Doctor	1	
Call Rescue Team	1	

The 'Allowed Placeholder' section on the right lists various placeholders and their displayed values:

Placeholder	Displayed Value
(0)	Flight Number
(1)	SIBT/SOBT
(2)	Registration
(3)	Origin/Destination
(4)	Previous/Next
(5)	Stand Arrival/Departure
(6)	Current Stand
(7)	Gate list
(8)	Counter list (Dep only)
(9)	Passenger number
(10)	Number of PRM

The bottom part of the screenshot shows a flight grid with columns for Stand, Flight, and other details. A 'Create Arrival Alarm' option is highlighted in the grid. An 'Info' dialog box is open, displaying the message: 'Fire alarm in aircraft UK411/---/0, positioned at stand 33'. Below the grid, a table shows a list of observed alarms:

Observed	Type	Content	Acknowledged	Resolved
06/07/21 17:50	FBI Alarm Alarm	Fire detected on aircraft...	06/07/21 18:11	06/07/21 18:11
06/07/21 17:50	FBI Alarm	Fire alarm in aircraft UK411/---/0, positioned at stand 33	06/07/21 18:11	06/07/21 18:11
06/07/21 17:50	FBI Call the Ops		06/07/21 18:12	
06/07/21 17:50	FBI Evacuate		06/07/21 18:12	
06/07/21 17:50	FBI Investigation		06/07/21 18:12	

At the bottom, a form for 'Acknowledge' is visible, with fields for 'Type', 'Address', 'Date', 'Source', 'Acknowledged', 'Resolved', 'Date', 'Time', and 'Comments'. The 'Content' field contains the text: 'Fire alarm in aircraft UK411/---/0, positioned at stand 33'.

# Fixed Timeline in Gantt Chart

## Benefits

- *keep relevant Gantt chart area always in focus*

## AOS Extension

- Use to enable or disable fixing the current timeline within the Gantt chart
- Number of minutes before & after timeline are configurable

The image shows a 'Baggage Bay Selection' dialog box overlaid on a Gantt chart interface. The dialog box has the following fields:

- From:** 22/09/22 0000
- To:** 22/09/22 2359
- Timeline:** A checkbox labeled 'Fixed' is checked, with input fields for '-60' and '300'.
- Selection Name:** (empty)
- View:** (empty)
- Resources:** 2,4,6,7,8,9,10,11,12,13,15A,15B,16A,16B,17A,17B,18A,18B,19A,19B,20A,20B,22A,22B,2

Buttons for 'Ok' and 'Cancel' are at the bottom of the dialog. Below the dialog, a Gantt chart is visible with a context menu open over a task bar. The menu items are:

- Find Flight... (Strg-F)
- Fix Timeline (Strg+Umschalt-F)
- Auto Solve... (Fix timeline)
- Show Bar Links
- Show All Bar Links