

ApacFlow XSD Description

Namespace	Description
ApacFlow	FIXM Extension containing data attributes to support Air Traffic Flow Management operations in accordance with Distributed Multi-Nodal Air Traffic Flow Management Network concept and Airport-Collaborative Decision Making operations in Asia/Pacific region.

Class	Definition	Reference/Remark
ApacDepartureType	Class containing ATFM data related to departure aerodrome	This class is to be included in extension field under DepartureType class.
Data Attribute	Definition	Reference/Remark
actualOffBlockTime	A time the aircraft is pushed back / vacates parking position (equivalent to airline/handlers ATD – Actual Time of Departure and ACARS=OUT)	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018
calculatedTakeOffTime	A time calculated and issued by an ATFM unit, as a result of tactical slot allocation, at which a flight is expected to become airborne	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018
targetOffBlockTime	A time that an Aircraft Operator or Ground handler estimates that an aircraft will be ready to startup/be pushed back immediately upon reception of clearance from the control tower	ICAO Asia/Pacific Framework for Collaborative ATFM, Version 3, August 2017
targetStartupApprovalTime	A time provided by ATC taking into account TOBT, CTOT, and/or the traffic situation that an aircraft can expect start up/push back approval	ICAO Asia/Pacific Framework for Collaborative ATFM, Version 3, August 2017
targetedTakeOffTime	A time that an aircraft is targeted to be airborne, taking into account TOBT, TSAT, and other factors such as EXOT, wake turbulence, SID, etc.	<ul style="list-style-type: none"> ● ICAO Asia/Pacific Framework for Collaborative ATFM, Version 3, August 2017 ● EUROCONTROL A-CDM Implementation Manual, Version 5.0, March 2017

Class	Definition	Reference/Remark
ApacArrivalType	Class containing ATFM data related to destination aerodrome	This class is to be included in extension field under ArrivalType class.
Data Attribute	Definition	Reference/Remark
calculatedLandingTime	A landing time calculated and issued by an ATFM unit, as a result of tactical slot allocation, at which a flight is expected to land on a runway	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018
estimatedLandingTime	An estimated time that an aircraft will touch-down on the runway (equivalent to ETA - Estimated Time of Arrival)	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018

Class	Definition	Reference/Remark
ApacAircraftTrackType	Class containing aircraft track data	This class is to be included in extension field under FlightType class.
Data Attribute	Definition	Reference/Remark
actualSpeed	Current aircraft ground speed	
flightLevel	Current flight level	flightLevel can be in the following forms, <ul style="list-style-type: none"> • Flight level; or • Altitude.
heading	Current aircraft heading	
position	Current aircraft position	position can be in the following forms, <ul style="list-style-type: none"> • Designator; • Latitude/Longitude; or • Relative point.
positionTime	Time when all data in this class is reported	

Class	Definition	Reference/Remark
ApacTrajectoryType	Class containing all trajectory elements of a flight	This class is to be included in extension field under FlightType class.
Data Attribute	Definition	Reference/Remark
element	A list of trajectory elements	

Class	Definition	Reference/Remark
ApacTrajectoryElementType	Class containing composition of each trajectory element(s) specified in ApacTrajectoryType	
Data Attribute	Definition	Reference/Remark
level	An estimated flight level of the aircraft at this trajectory element	level can be in the following forms, <ul style="list-style-type: none"> ● Flight level; or ● Altitude.
routePoint	A specified position of this trajectory element	routePoint can be in the following forms, <ul style="list-style-type: none"> ● Designator; ● Latitude/Longitude; or ● Relative point.
actualTimeOver	An actual time of the aircraft over routePoint	
calculatedTimeOver	A time calculated and issued by an ATFM unit, as a result of tactical slot allocation, at which a flight is expected to be over routePoint, i.e. a fix, waypoint, or particular location. The implementation of this constraint may be carried out through tactical ATC intervention, such as speed control or route extension, or by having the aircraft meet the constrained time through the use of its Flight Management System RTA - Required Time of Arrival function	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018
estimatedTimeOver	An estimated time at which the aircraft would be over routePoint, i.e. fix, waypoint, or particular location, typically where air traffic congestion is expected	ICAO Doc 9971 Manual on Collaborative ATFM, 3rd Edition, 2018
seqNum	The sequence number of this trajectory element as specified in FlightRouteTrajectoryType class of FIXM version 4.1 Core	
