

Supporting
European
Aviation



ICAO SAM A-CDM workshop

Schedule and Slot coordination

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Senior Expert Airports

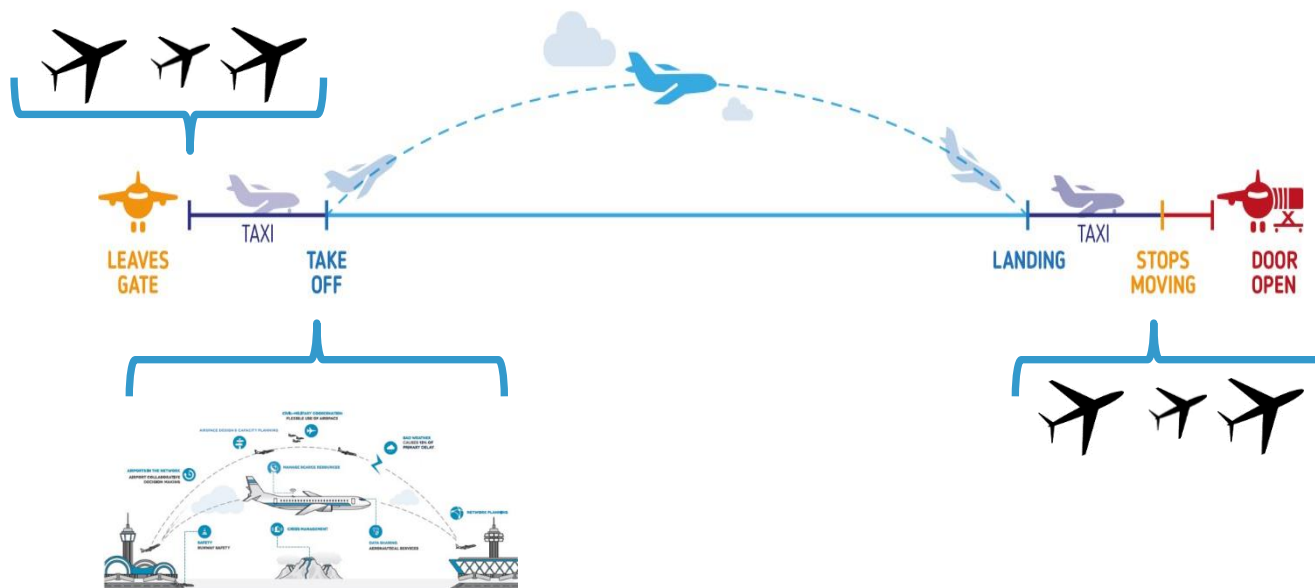
14th November 2019



NETWORK
MANAGER

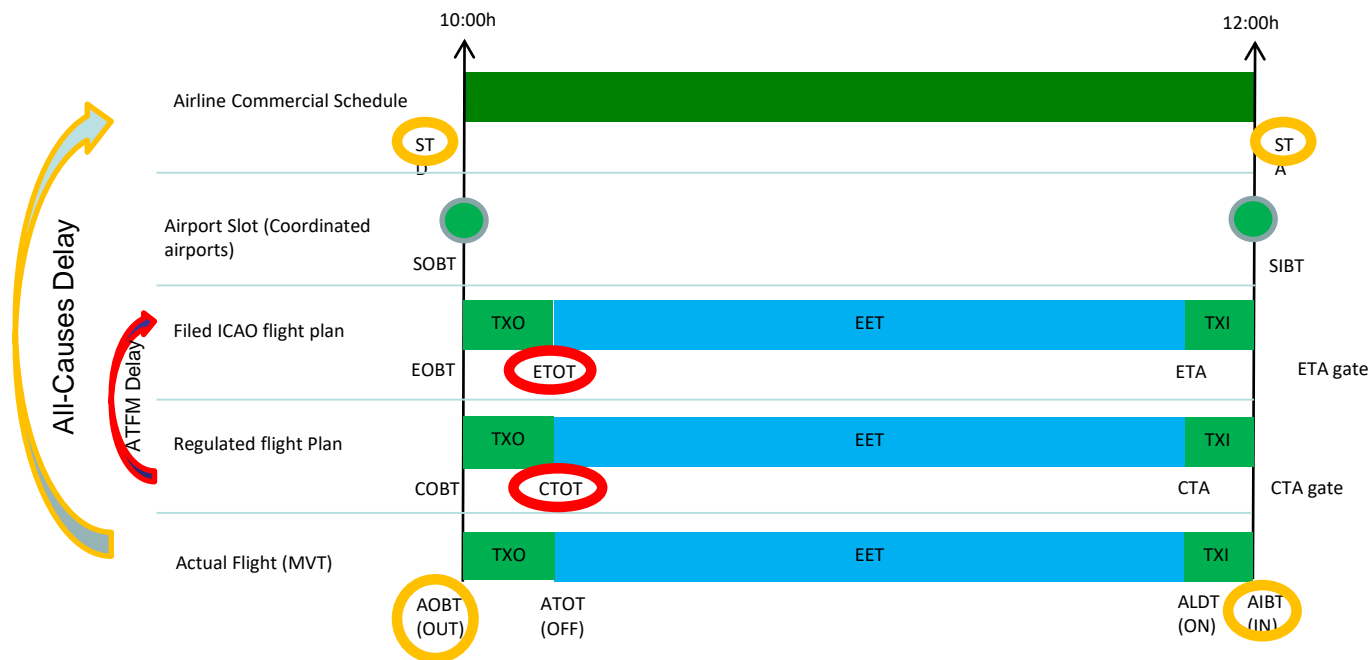


Which delay?



All-Causes vs. ATFM delays

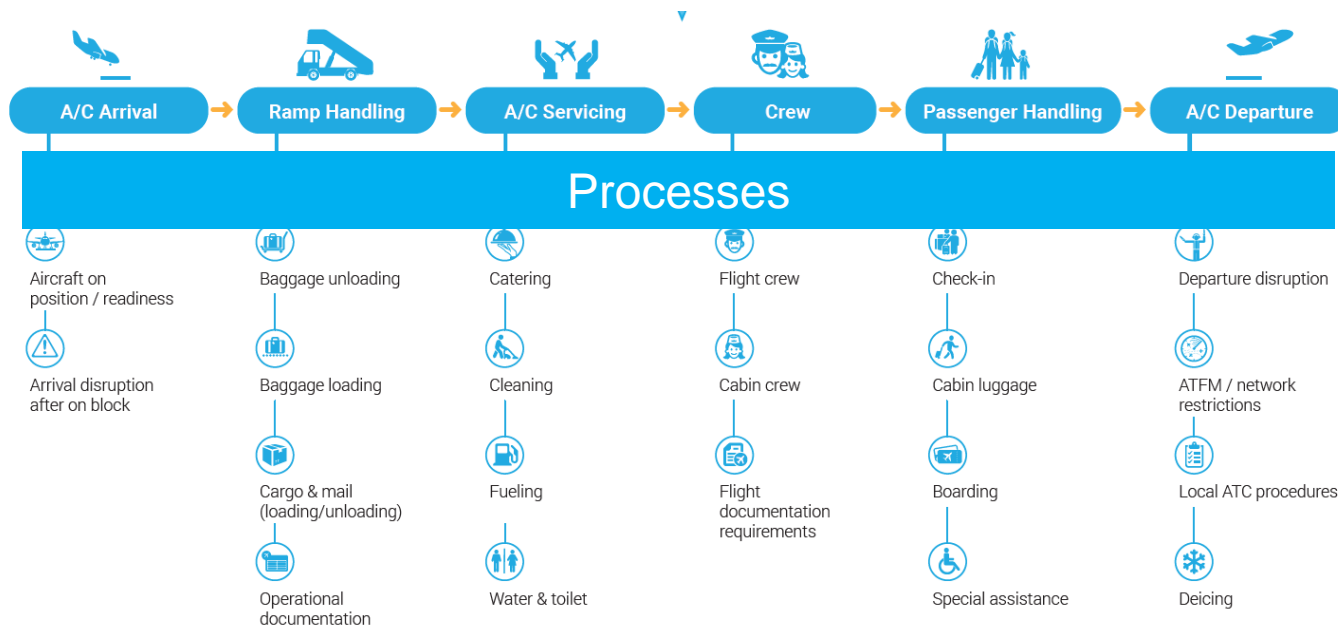
“Dream Case” scenario with NO delay



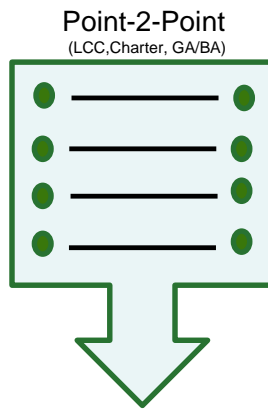
[CODA MIRROR \(real time dashboard\)](#)

Primary delay

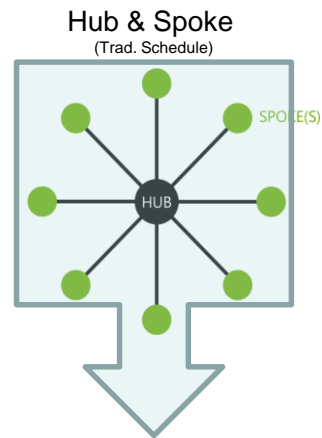
Turnaround processes



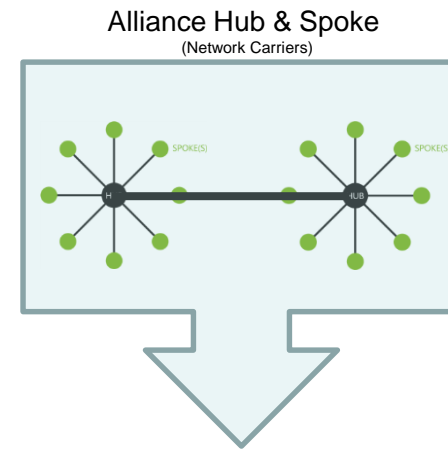
Business models and Market Segments



4 city pairs with given aircraft capacity



28 city pairs with given aircraft capacity

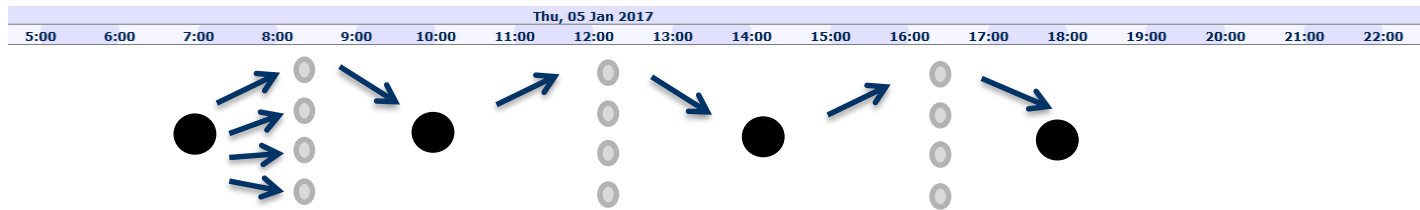


100+ city pairs with given aircraft capacity

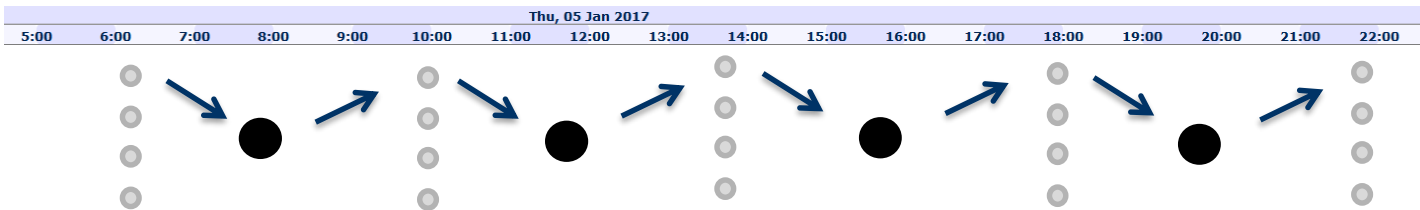
Hub Operations



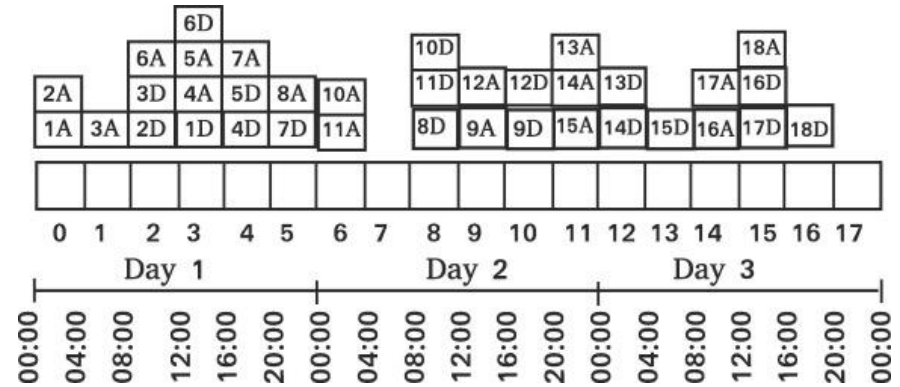
Stabling at the hub



Stabling away from the hub



Schedule Coordination - Airport



An airport slot stands for all the time and infrastructure which one aircraft needs to arrive and depart

Defined as the scheduled time of arrival or departure

Available for allocation or is allocated by a slot coordinator [or committee]



Schedule Coordination - Airport



Allocated to a specific aircraft movement for a particular day and/or time



Known as Airport slot – strategic

Used when the airport is constrained

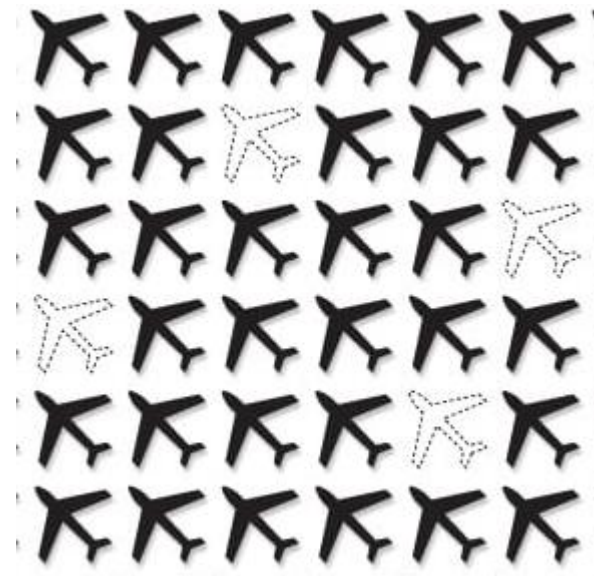


Slot Management - Airports

Strategic;

Airport slot

Based on Arrival and Departure



Slot Management - Airports

Pre-tactical

Provisional slot allocation

Either Departure or Arrival
Restrictions apply



Slot Management - Airports



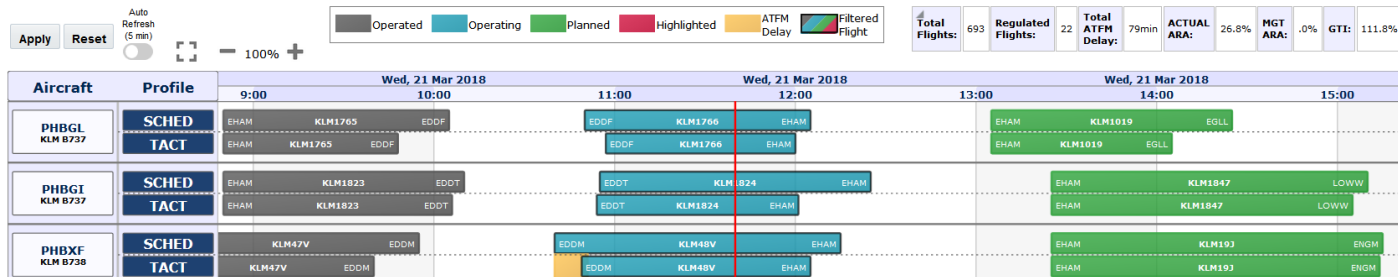
Tactical

Allocation of coordinated /
calculated take-off time

Either Departure or Arrival
Restrictions apply

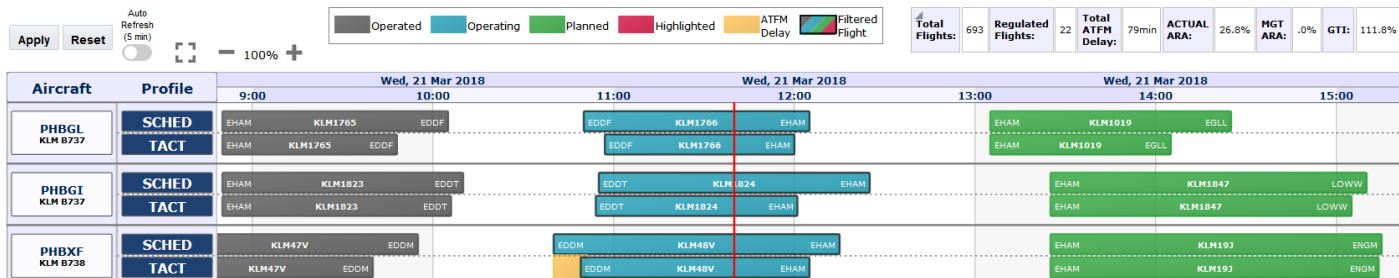


All-causes Delay mitigation techniques



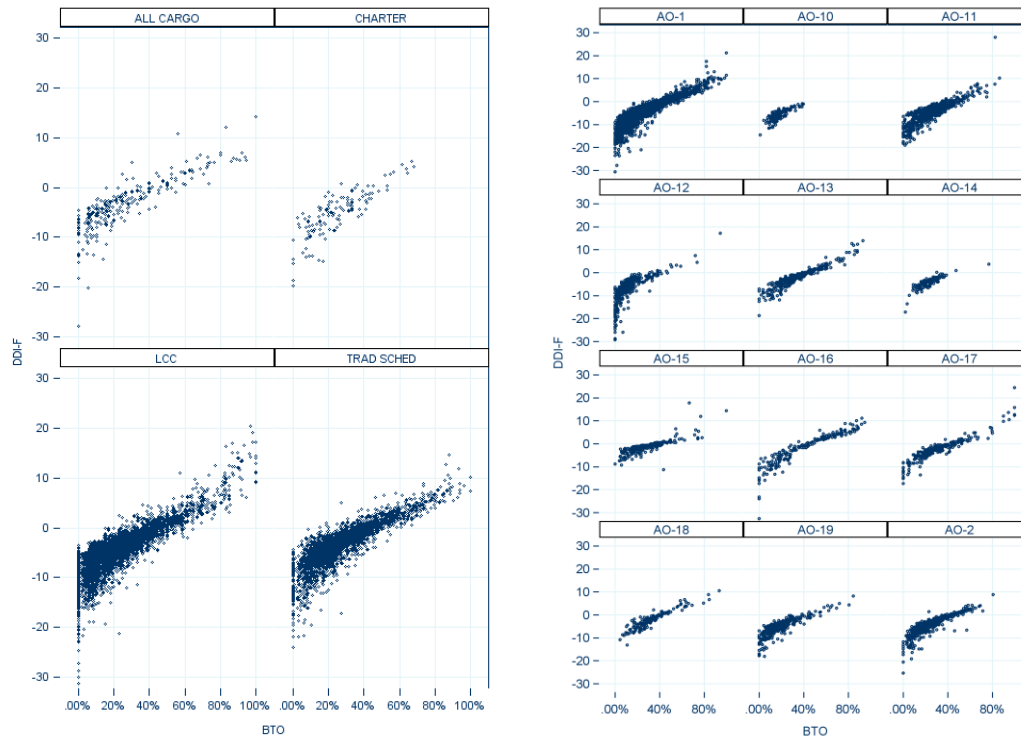
- (pre-) Tactical flight cancellation
- Buffer in scheduled ground-time
- Fire-break during mid-day
- First Rotation hours (staff)
- Reduced ground time
- Spare aircraft & crew

All-causes Delay mitigation techniques (cont'd)



- Buffer in scheduled block-time
- Aircraft swaps
- Dynamic CI
- ATC Slot Swapping

Scheduling Quality Indicators



Block Time Overshoot (BTO): this gives the percentage of actual block times which are longer than the scheduled block time. The BTO of flights operated in Europe is typically between 25% and 35%.

Delay Difference Indicator-Flight (DDI-F): this is the difference between the arrival delay and departure delay expressed in minutes. Flights operated ahead of schedule can therefore have a negative delay figure. The DDI-F of flights operated in Europe, with a tendency to be slightly negative, is typically around -3 minutes.

The vision for Global ATM

A set of interlinked operational ATFM regions fed by ACDM





Thank you

