ICAO SAM A-CDM workshop
Schedule and Slot coordination

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14th November 2019
Which delay?
All-Causes vs. ATFM delays

“Dream Case” scenario with NO delay

CODA MIRROR (real time dashboard)
Primary delay
Turnaround processes
Airline Schedule Planning

- Fleet availability
- Schedule Design
- Fleet Assignment
- Aircraft Routing
- Crew Scheduling
Business models and Market Segments

**Point-2-Point**
(LCC, Charter, GA/BA)

- 4 city pairs with given aircraft capacity

**Hub & Spoke**
(Trad. Schedule)

- 28 city pairs with given aircraft capacity

**Alliance Hub & Spoke**
(Network Carriers)

- 100+ city pairs with given aircraft capacity
Hub Operations

Stabling at the hub

Stabling away from the hub
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].
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
• 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