# ACI

A-CDM Seminar

Bahrain, 11-13 October 2015

The ACI View

# Airport Collaborative Decision Making

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## on behalf of ACI World

# SCOPE OF PRESENTATION

- Need for A-CDM
- What it is – what it is not
- A-CDM - Aims
- A-CDM Partners
- Airport Operators – Strong Involvement
- A-CDM Europe Overview
- Co-operation with ICAO on Industry Guidance Material
- ACI View and Support

# Need for A-CDM

- ACI forecasts that the number of air passengers will double to more than 12 billion (arr and dep) by 2031

- Airports - the nodes of flight networks – may become constraints on the overall ATM system

- As airports become busier:

  - real-time airport operations management gets more difficult

  - potential for disruption to normal operations and impact on passengers increases

- Many airports are facing capacity constraints, and are increasingly challenged by performance issues, thus enhancing the operational efficiency of existing aerodrome and terminal infrastructure is an important objective for airports.

- Airports need to constantly monitor operations and identify and solve problems before they escalate into protracted disruptions and crises.

# What is A-CDM?

- Airport-CDM is about improving operational efficiency of all airport partners at aerodromes by
  - reducing delays
  - streamlining the predictability of events during the progress of a flight
  - optimizing the utilization of resources
  - making the most of existing capacity

    and will

  - have major benefits during Irregular Operations (IROPS) and adverse conditions
  - reduce kerosene consumption and both $CO_2$ and noise emissions

- Partnership between Airport-Operators, Air-Traffic Control, Aircraft-Operators, Ground-Handlers, which
  - use a common platform for sharing flight information, thus creating a common situational awareness
  - agree on and stick to a set of operational rules, procedures and automated process

# What A-CDM is, and what it is not

## A-CDM is about:

- ✓ An important cultural change
- ✓ Bringing benefits to Airlines, Airports, ATM & ATM network
- ✓ Harmonization of non-commercially sensitive data
- ✓ Implementing the foundation steps ("milestones")
- ✓ Free local choice of additional A-CDM steps
- ✓ Rapid benefits and high return on investment
- ✓ Important operational benefits

## A-CDM is not:

- ○ Doing things the old way
- ○ Implementing a new system
- ○ An obligation to share commercially sensitive data
- ○ Only providing financial benefits

# A-CDM Aims

- Collaborative set-up of a pre-departure sequence taking into account aircraft operators preferences and operational constraints

- Achieve a common situational awareness by tracking the progress of a flight from planning to take-off

- Creation of a accurate Target Take Off Time

- Airports send Departure Planning Information messages (DPIs) to ATM network management , and receive flight update messages (FUMs) from network management, thus improving en-route and sector planning as well as airport turn-round planning

- Complements en-route CDM and Air Traffic Flow Management (ATFM) across a country or region.

- Longer-term aim is to extend the reach of A-CDM into landside operations, including ground handling and airport passenger and baggage processes
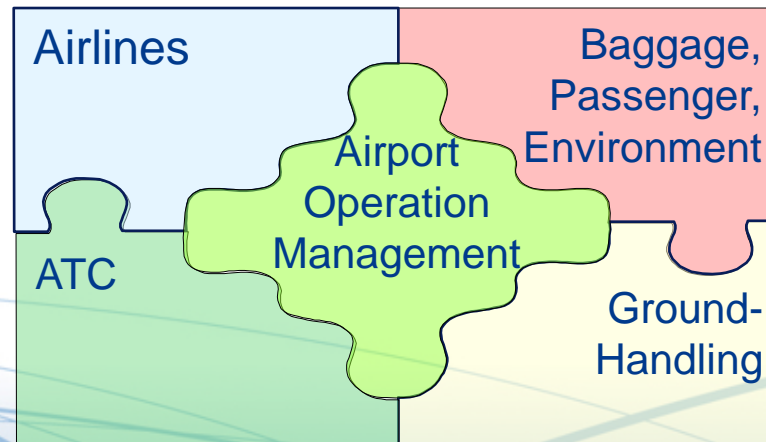
# Airport-CDM Partners

Airport Operator

ATC

ATM Network Management

Airport - CDM Partners

Aircraft Operator

Ground Handler
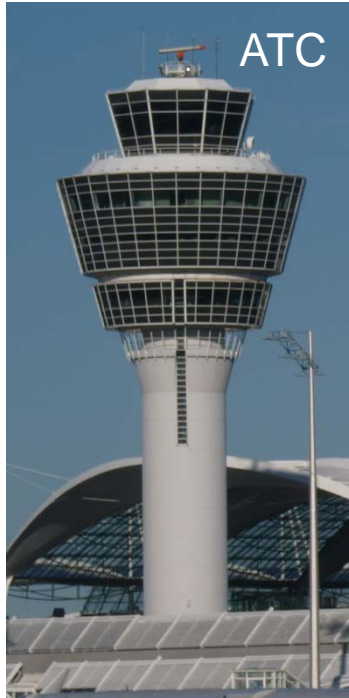
# Airport Operator – Reasons for strong involvement

- The airport operator is the overall owner of, and body responsible for, the performance of the airport

- As "ground coordinator", the airport operator has the most neutral view of all airport stakeholders interests

- The airport operator has the most comprehensive overview of the overall status of operations (stands, gates, baggage, safety, environment, etc.)

- The airport operator is the flight data integrator/provider for the airport

# EU A-CDM History – Status Quo

- 2007 Munich Airport – first Airport with fully established A-CDM
- 2008 ACI-Europe / Eurocontrol A-CDM Action plan
- 2010 CANSO joined the partnership
- 2010 EU-Community Specification (CS) under Single Sky Initiative (SES)

- 2015 Airports in Europe with fully established A-CDM system
- 2015 Airports in Europe – DPI and FUM Implementation status

Berlin Schoenefeld,
Brussels,
Düsseldorf,
Frankfurt,
Helsinki,
London Gatwick,
London Heathrow,
Madrid,
Milan Malpensa
Munich,
Paris CDG,
Oslo,
Rome Fiumicino,
Stuttgart,
Venice,
Zurich.
Eurocontrol, 10/ 2015



DPI and FUM Implementation Status

NMOC/NOS/KOO - COI Date : 05/02/2015
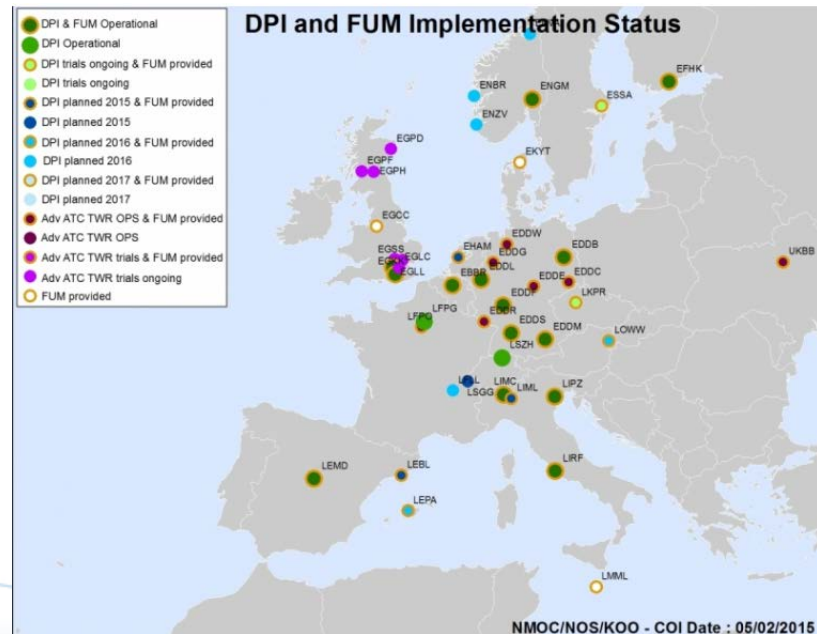
# Co-operation with ICAO

- ICAO has developed Aviation System Block Upgrade modules on A-CDM:  B0 –A-CDM (Surface management) and B1 – A-CDM (Total airport management)

- ICAO (at ACI's suggestion) agreed on the need for global guidance material and technical standards for A-CDM

- ICAO set up a task force on A-CDM and requested the industry organizations to join it to write worldwide guidance material
  - ACI agreed to participate
  - IATA, CANSO, China, Eurocontrol, FAA joined the task force

- Draft manual to be produced by end of 2015

# ACI - View and Support

- Promote A-CDM introduction where appropriate
- Support work on a globally standardized data interchange technical framework between airlines, ANSPs, airport operators and ground handlers
- Develop Airport/ANSP A-CDM implementation best practices and promote global standards relating to A-CDM
- Encourage the creation of A-CDM pilot project teams in the regions
- Support further work with ICAO on the Aviation System Block Upgrade (ASBU) Modules which deal with A-CDM
- Provide regular status updates to stakeholders on A-CDM implementation

Leading, representing and serving the global airport community

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