



# ICAO current work on A-CDM

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### **Contents**

- ACDM in ICAO provisions
- Fundamentals of ACDM
- Objectives
- Actors and Stakeholders







# **ICAO** provisions





### ICAO CAPACITY & EFFICIENCY

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### B0-ACDM

#### Improved airport operations through Airport-CDM

To implement collaborative applications that will allow the sharing of surface operations data among the different stakeholders on the airport. This will improve surface traffic management reducing delays on movement and manoeuvring areas and enhance safety, efficiency and situational awareness.

#### **Applicability**

Local for already established airport surface infrastructure.

#### Benefits

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Enhanced use of existing infrastructure of gate and stands (unlock latent capacity). Reduced workload, better organization of the activities to manage flights.

Efficiency

Increased efficiency of the ATM system for all stakeholders. In particular for aircraft operators: improved situational awareness (aircraft status both home and away); enhanced fleet predictability and punctuality; improved operational efficiency (fleet management); reduced delay.

**Environment** 

Reduced taxi time; reduced fuel and carbon emission; and lower aircraft engine run time.

#### Cost

The business case has proven to be positive due to the benefits that flights and the other airport operational stakeholders can obtain. However, this may be influenced depending upon the individual situation (environment, traffic levels investment cost, etc.).

A detailed business case has been produced in support of the EU regulation which was solidly positive.

B1-ACDM	Optimized airport	operations through A-CDM total airport management		
	To enhance the planning and management of airport operations and allows their full integration in air traffic management using performance targets compliant with those of the surrounding airspace. This entails implement			
	Applicability			
	AOP: for use at all the ai network).	OP. for use at all the airports (sophistication will depend on the complexity of the operations and their impact on the etwork).		
	APOC: will be implemented at major/complex airports (sophistication will depend on the complexity of the operations and their impact on the network).  Not applicable to aircraft.			
	Benefits			
	Efficiency	Through collaborative procedures, comprehensive planning and proactive action to foreseeable problems a major reduction in on-ground and in-air holding is expected thereby reducing fuel consumption. The planning and proactive actions will also support efficient us of resources; however, some minor increase in resources may be expected to support the solution(s).		
		Through collaborative procedures, comprehensive planning and proactive action to foreseeable problems a major reduction in on-ground and in-air holding is expected thereby reducing noise and air pollution in the vicinity of the airport.		
	Predictability	Through the operational management of performance, reliability and accuracy of the schedule and demand forecast will increase (in association with initiatives being developed in other modules).		
	Cost  Through collaborative procedures, comprehensive planning and proactive action to foreseeable problems, a ma reduction in on-ground and in-air holding is expected thereby reducing fuel consumption. The planning and pro			

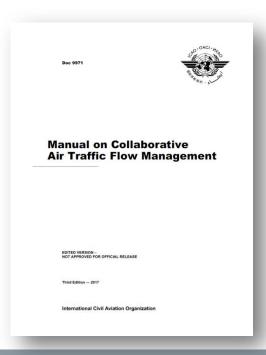
actions will also support efficient use of resources; however, some minor increase in resources may be expected to

support the solution(s).





### Doc 9971 – 3rd edition





- Part 1 CDM
- Part 2 ATFM
- Part 3 ACDM





# **Draft Content (under review)**

- Chapter 1: What is ACDM?
- Chapter 2: Airport CDM Partners and

**Stakeholders** 

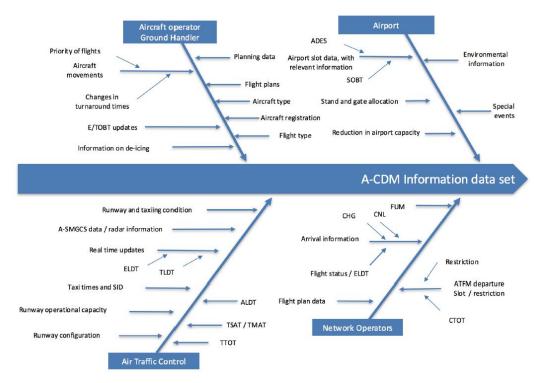
- Chapter 3: A-CDM Methods and Tools
- Chapter 4: A-CDM Implementation





## Fundamentals of ACDM: ACIS









Collaborative decision-making (CDM) is defined as a process focused on how to decide on a course of action articulated between two or more community members. Through this process, ATM community members share information related to that decision and agree on and apply the decision-making approach and principles.

La toma de decisiones en colaboración (CDM) se define como un proceso centrado en la forma de decidir un curso de acción articulado entre dos o más miembros de la comunidad. A lo largo de este proceso, los miembros de la comunidad ATM comparten información relacionada con esa decisión y aprueban y aplican el enfoque y los principios de la toma de decisiones.

Preámbulo ICAO DOC 9971, Manual de gestión colaborativa de la afluencia del tránsito aéreo







# **Objectives**

- Predictability
- On time performance

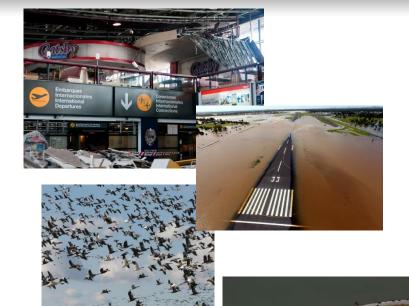




- Gate / Stand usage
- Taxiway-Apron congestion







Irregular Operations

# Uses







# Partners (actors)

- ANSP
  - Tower
  - APP
  - ATFM
- Aircraft operators
- Aerodrome operators







### Stakeholders

- Other aircraft operators
  - Airlines
  - Charter companies
  - General Aviation
- ATS (MET, AIS, etc.)
- Ground handlers, Fuel, catering
- Airport maintenance/Projects



And...

- Local authorities
- Military
- Security
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### CAPACITY & EFFICIENCY

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