



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

ATFM Overview

Workshop on Air Traffic Flow Management
(ATFM) Implementation for the
CAR and SAM Regions
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What is ATFM?

A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

ATFM Objective:

Balance air traffic demand with system capacity to ensure system efficiency of the National Airspace System





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What is ATM?

The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions



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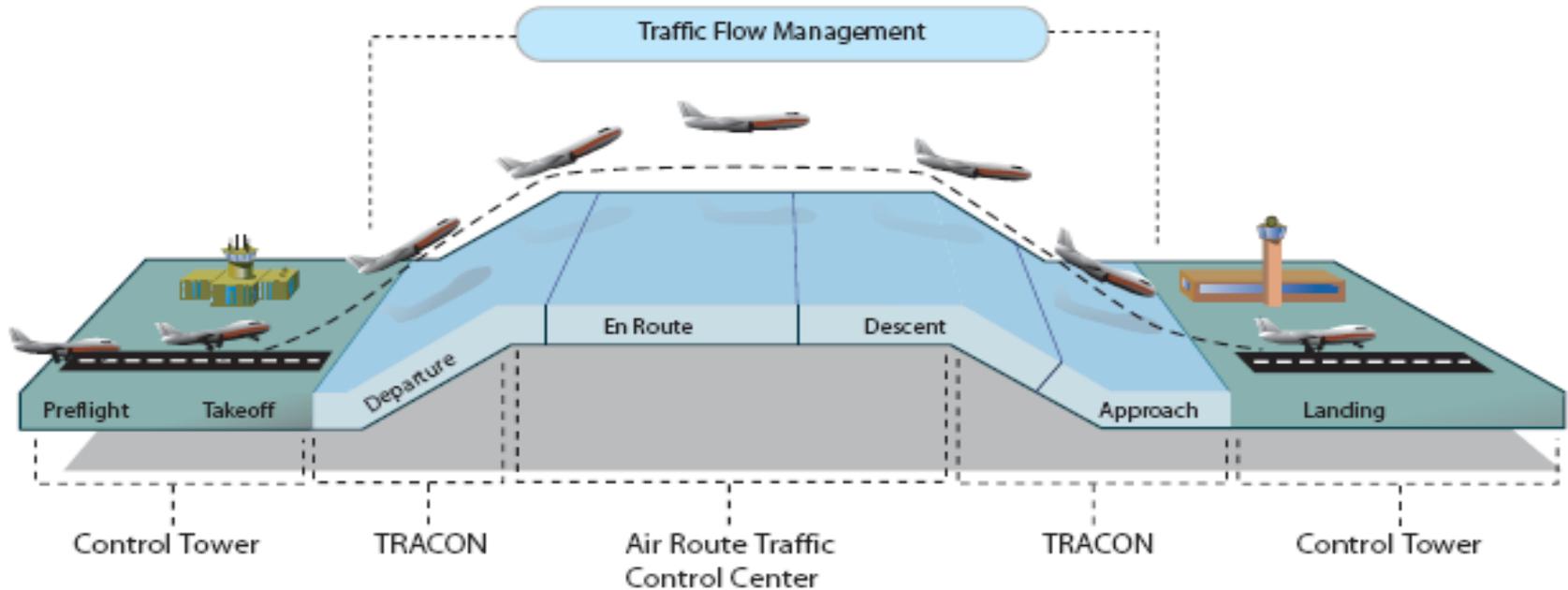
What is Air Traffic Management System?

A system that provides ATM through the collaborative integration of humans, information, technology, facilities and services, supported by air and ground- and/or space-based communications, navigation and surveillance.

Systems Approach

- ✈️ A management approach that considers the impact of individual actions on the whole.
- ✈️ Considers impacts and focus on ensuring equity in service delivery
- ✈️ A system approach – collaborating with stakeholders.
- ✈️ Stakeholders consider costs and benefit to the system

Phases of a Commercial Flight



From the beginning of an IFR flight until the end, Traffic Flow Management has a role to play

Traffic Flow Management Initiatives

Miles-in-trail (MIT)

Ground Delay Program (GDP)

Airspace Flow Program (AFP)

Ground Stop (GS)





Miles-in-Trail (MIT)

- Miles-in-trail describes the number of miles required between aircraft departing an airport, over a fix, at an altitude, thru a sector, or route specific.
- MITs are used to apportion traffic into a manageable flow, as well as provide space for additional traffic to enter the flow.



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Ground Delay Program GDP

- A GDP -- aircraft are delayed at departure point to manage demand at their destination.
- Flights are assigned departure times
- GDP implemented at airports where capacity has been reduced or when demand exceeds capacity for a sustained period.
- The purpose of the program is to limit airborne holding



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Airspace Flow Programs (AFP's)

- AFP's are like GDP's in the Air.
- Provides enhanced en route traffic management during severe weather events.
- An AFP develops a real time list of flights that are filed into a constrained area and distributes controlled departure times to meter the demand through the area.



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Ground Stops (GS)

- Requires aircraft to remain on the ground.
- Occur with little or no warning.
- Used in severely reduced capacity situations (weather) or to preclude sector/center reaching near saturation levels or airport grid lock.
- When routings are unavailable due to severe weather.
- When routings are unavailable due to catastrophic events.



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Thank You

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