IFATCA

Need of ATFCM from ATC perspective

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Introduction

- Increase of air traffic is a now fact and it is the direct result of the industry demand
- Such increase of Air traffic prompt ANSPs Airport operators to come out with procedures to meet this demand
- Air traffic growth has a direct impact on sectors congestions, delays and airport or terminal congestion
- Redesigning airspace, implementing new procedures will help mitigating some of the outcomes of this growth but it sometimes it doesn't solve the issue, eventually for operational Air traffic controllers when a short term increase of traffic may occur such as traffic disruption from neigbouring FIR or organisation of sport or social event.



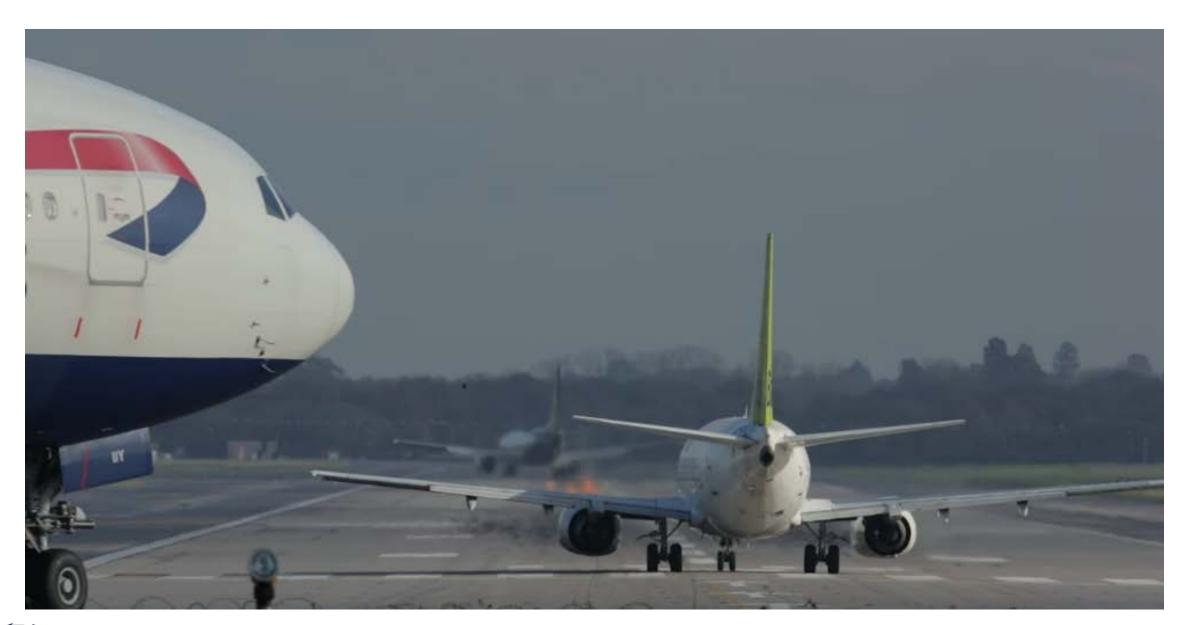
ATC growth from operational side

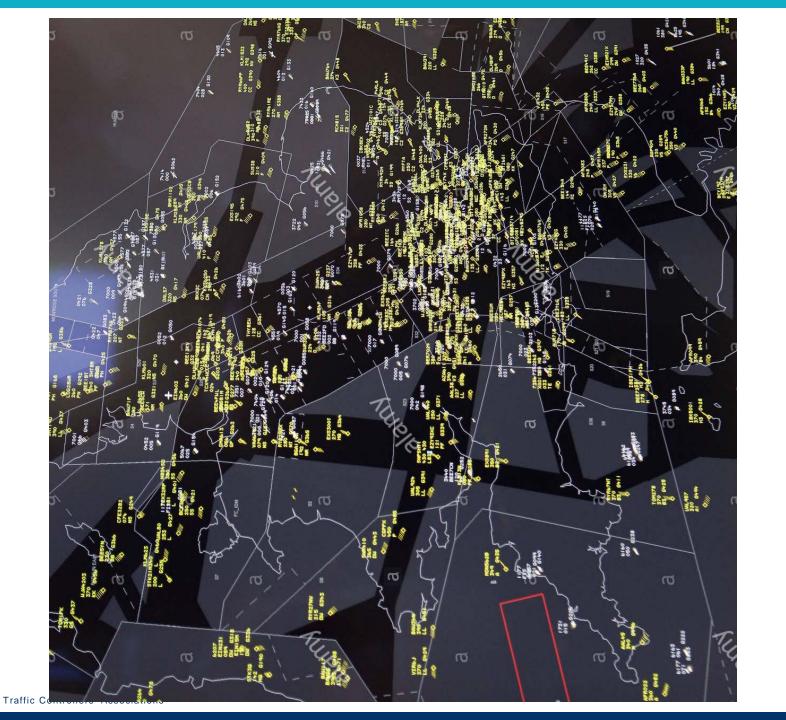
- Accumulation of air traffic during a certain time of the day, the week or the year
- Lack or outdated procedures doesn't meet this growth
- Unbalance between Demand and capacity
- Outdated technology
- Staffing issues & lack of training



Outcomes

- Delays and traffic disruptions
- Workload management
- loss of situational awarness
- Fatigue
- Unsafe situations





How ATFM / CDM support ATCos

The CDM concept was first published in the *Global Air Traffic Management Operational Concept* (Doc 9854), First Edition, 2005.

- CDM is a process applied to support other activities such as demand/capacity balancing. CDM can be applied across the timeline of activities from strategic planning (e.g. infrastructure investments) to real-time operations. [Doc9971 3th 2.1.1]
- Sharing information is the most important enabler for CDM.
- Air traffic flow management (ATFM) is an enabler of air traffic management (ATM) efficiency and effectiveness.
 - CDM process is important for optimum ATFM services, because ATFM implementations implies working together to improve the overall performance of the ATM systems such as aerodromes, ANSPs, airspace users (AUs) and stakeholders.

Source: ICAO Doc9971.Manual on Collaborative Air Traffic Flow Management [ATFM]

ATFM/CDM



IFATCA ATFM Policy

IFATCA encourages the implementation of ATFM processes provided that:

- The process achieves an optimum overall performance.
- Air Traffic Controllers and Flow Management Controllers are involved in the design of their local procedures and the determination of capacity values and / or occupancy values.
- The communication between and the compatibility of regional systems is established.
- The tactical capacity is managed on an operational level.
- The process, including restrictions, is transparent to all users.
- Procedures should be in place to allow controllers to report occasions where they
 felt overloaded or sector capacity values were exceeded. Feedback should be
 given to the reporting controller.



IFATCA ATFM TRNG Policy

ATFM staff not performing clerical or administrative functions, so called ATFM controllers, must be qualified controllers with recent experience on control duties on entry to ATFM services.

The responsibility for aircraft in flight remains solely with ATC and any subsequent ATFM involvement shall be at the request of ATC only.

An ATFM controller must hold an ATFM rating. Such a rating will require the ATFM controller to demonstrate a comprehensive knowledge, skill and experience of all relevant ATC procedures and ATFM duties.

ATFM controllers should be obliged to familiarise themselves with major changes in ATC procedures and maintain their acquaintance with problem areas with relation to ATFM within their region.



Key components of a cross ATFM/CDM Concept

Multi-nodal stakeholders interconnected via virtual communication framework

- Each ANSP has an independent ATFM System.
- Each ANSP independently manages demand/capacity at its own airport(s).
- Common agreement to share essential data for ATFM by all multi-nodal stakeholders.
- Stakeholders/ANSPs communicate via existing Internet/Telecommunications networks.
- Harmonized and integrated data exchange between all stakeholders in the multi-nodal network.
 Specify Capacity and Predict Demand
- Demand Prediction Flight progress is via manual input or automated data feed (e.g., FDP or AFTN).
- Capacity Management Inputs from FMP and FOC are via ATFM web-based interface.
 Evaluate Alternatives, Initiate/Modify ATFM Measures
- Aircraft Operators manage the ATFM Measures, such as delays, assigned to flights.
- Aircraft Operators perform CDM with Airport Operators for ground/surface delay intent.
- Slot assignments can be viewed via software web interface and notifications.



Conclusion

ATFM system has been working and has been improving various aspects. It seems to be the next step that discussing how to work not only within but between States. For enhancing the ATFM/ACDM system, ICAO should support the region better centralizing the ATFM system and information.

Collaborative Decision Making (CDM) is a famous concept, used within several segments of aviation.

Airport CDM (A-CDM) is the operational approach for achieving an optimal turnaround process at airports. The main objective of A-CDM is therefore to generate a common situational awareness that will foster improved decision-making.

Sharing information is the most important enabler for CDM. CDM process is important for optimum ATFM services, because ATFM implementations benefit from parties working together to improve the overall performance of the ATM systems such as aerodromes, ANSPs, airspace users (AUs) and stakeholders.





International Federation of Air Traffic Controllers' Associations

IFATCA is the recognised international organisation representing air traffic controller associations.

The Federation has been representing air traffic controllers for more than 50 years, and has more than 50,000 members in over 125 countries.

One Sky - One Voice



GLOBAL

IFATCA is an international Federation, with Member Associations in more than 130 countries from all corners of the globe.



PROFESSIONAL

IFATCA unites and defends the professional aspects of the air traffic controller profession.



NOT FOR PROFIT

IFATCA is a registered not-for-profit organisation in Montréal, Canada.



NON POLITICAL

IFATCA maintains political independence.

Thank you

