



AN- CONF/14

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Update to the Global Air Traffic Management Operational Concept (Doc 9854)

AN-Conf/14 Information Session PPT/007

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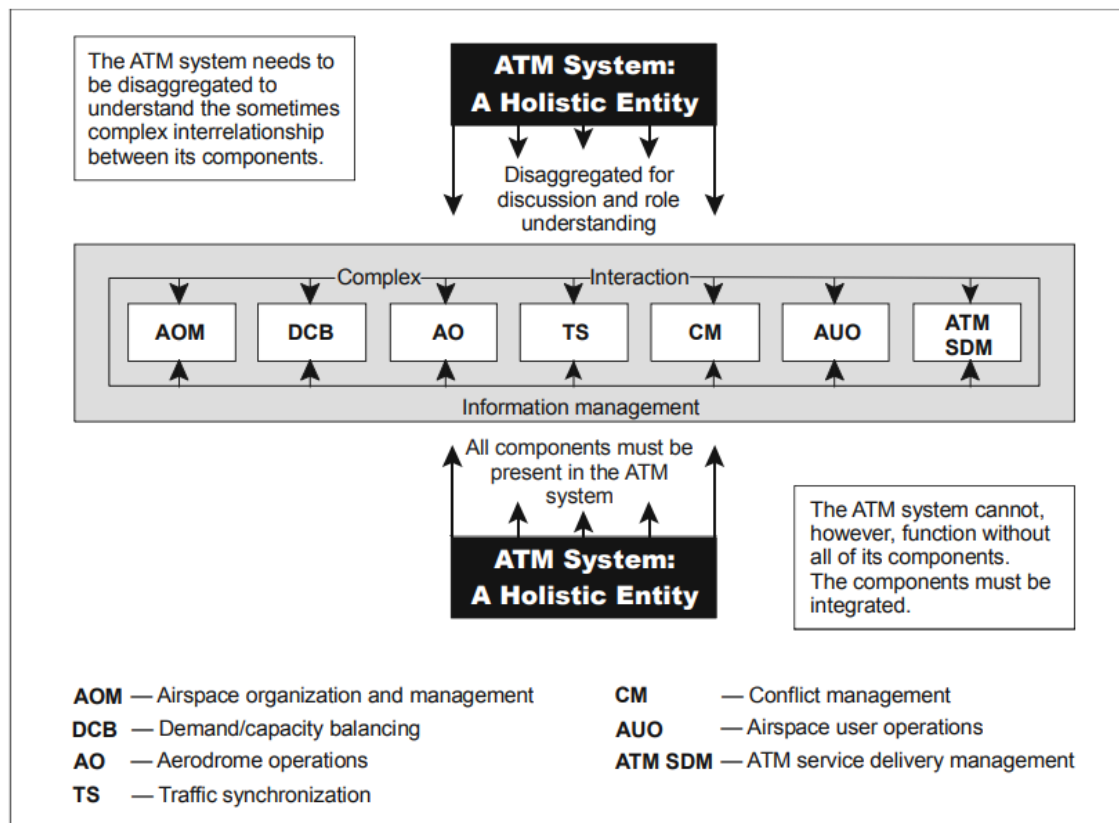
The First Global Reference for ATM Framework

1991 | ICAO CNS/ATM Concept from AN-Conf/10

“Need for a comprehensive concept of
an integrated and global ATM system”

2003 | The global ATM operational concept from AN-Conf/11

1st Edition of the Global ATM Operational Concept



- ✓ The seven ATM operational concept components
- ✓ ATM system performance
- ✓ Eleven Key Performance Areas (KPA's)
- ✓ System safety approach
- ✓ Evolution to the ATM Operational Concept
- ✓ National, regional and global planning

AN-Conf/11 Recommendations on the Concept

Recommendation 1/1 Endorsement of the **Global ATM Operational Concept**

Recommendation 1/2 Coordination with military authorities

Recommendation 1/3 Development of ATM requirements

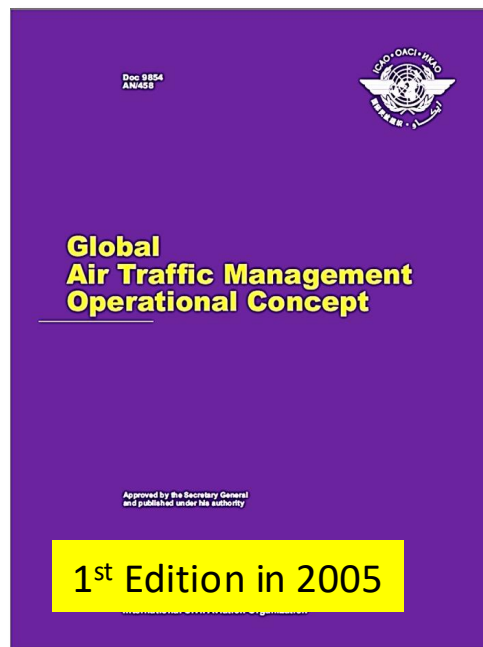
Recommendation 1/4 Development of Standards and Recommended Practices (SARPs) from the Global ATM Operational Concept

Recommendation 1/11 Publication of the Global ATM Operational Concept

Recommendation 1/12 Amendment of Chapter 4 of the Global Air Navigation Plan for CNS/ATM Systems (Doc 9750)

Role of the Concept since 2005

01

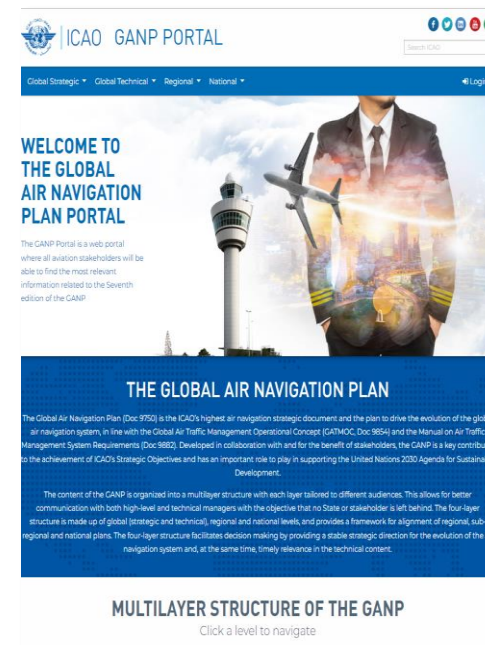


02

Detailed concepts & performance framework

- CDM/ATFM
 - FF-ICE
 - SWIM
 - TBO
 - Connected Aircraft
-
- ATM System Requirements
 - Global Air Navigation System Performance

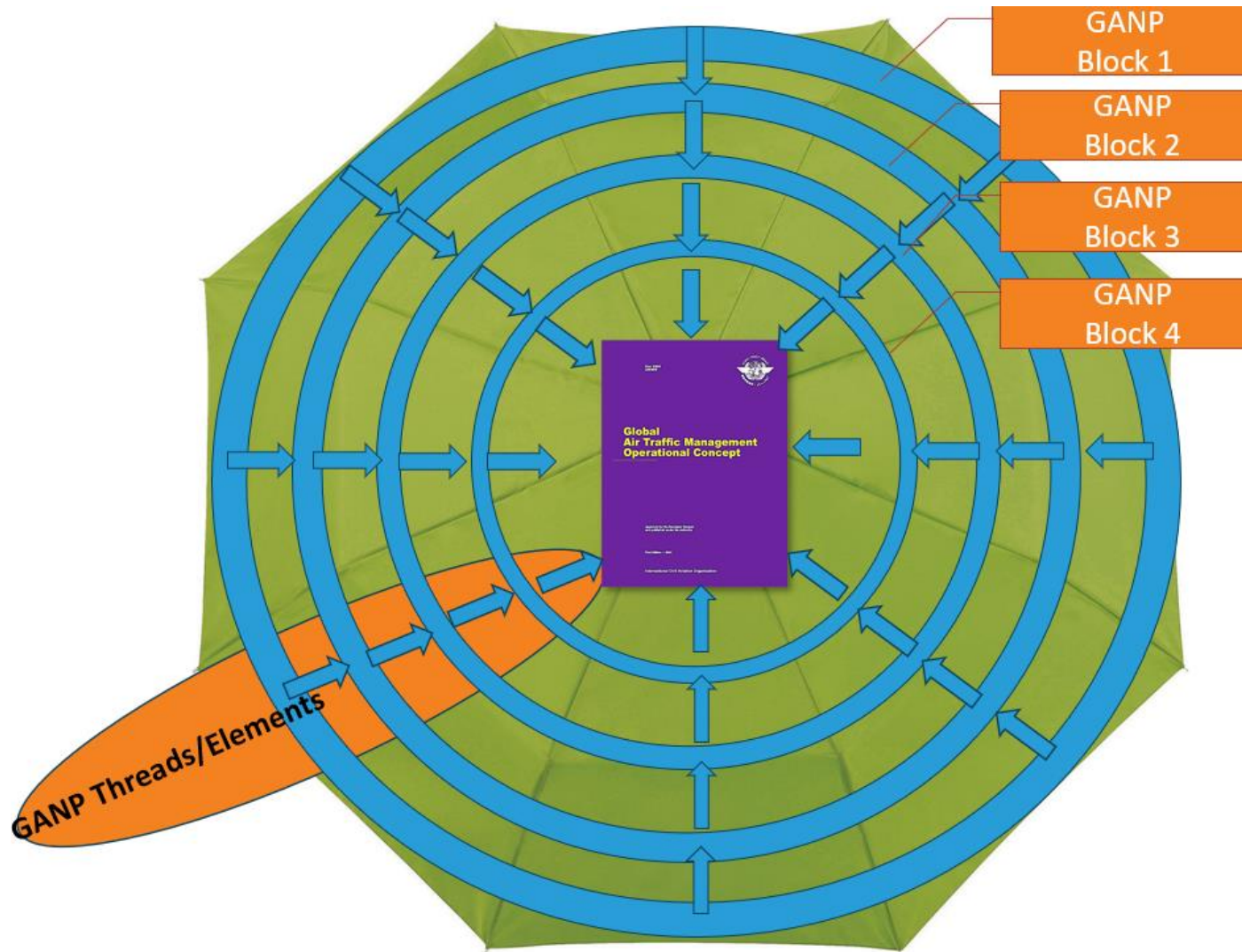
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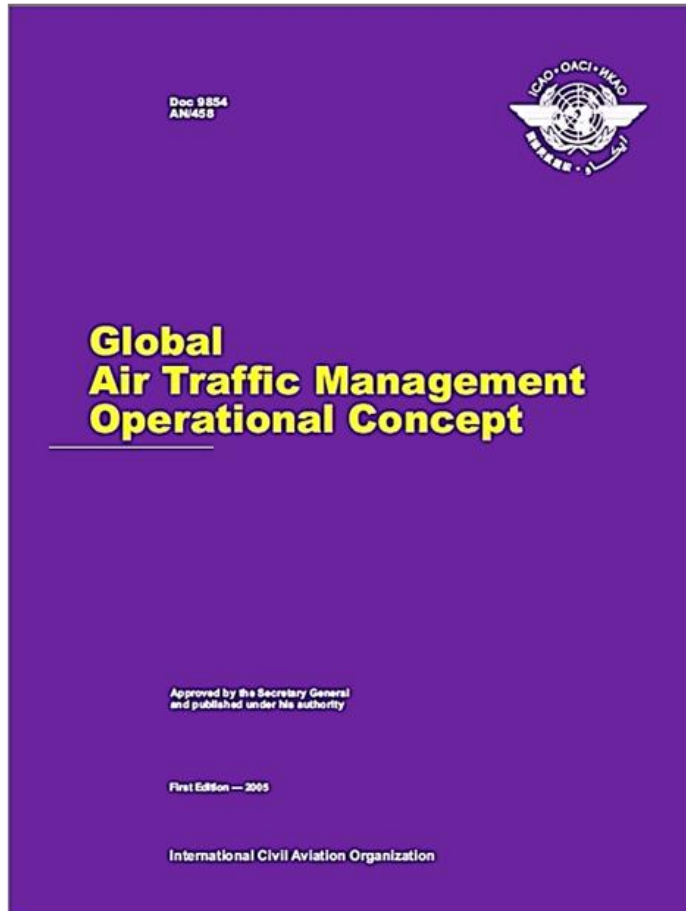
04



Relationship with the Global Air Navigation Plan



Relationship with Other Enabling Concepts (e.g. TBO)



considers the trajectory of a manned or unmanned vehicle during all phases of flight ...

manages the interaction of that trajectory with other trajectories or hazards to achieve the optimum system outcome, with minimal deviation from the user-requested flight trajectory, whenever possible.

individual aircraft performance, flight conditions, and available ATM resources **will allow dynamically optimized 4-D trajectory planning.**

Management by trajectory does not mean that every aspect of a flight, including arrival profile, runway, taxi path and gate needs to be predetermined and captured in detail in the agreement at the time of departure. **The agreement and the management of that agreement will have the details required by the traffic management phases** that the flight is subject to at the time the initial agreements and subsequent updates are made.

And many more...

Relationship with Other Enabling Concepts (e.g. TBO) (Cont'd)

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And many more...

Provides the core principles for the next level of detail on “trajectory” as the basis for ATM

Core Principles

Concept document includes details for SARPs and implementations

Details



Doc 10130

The
Trajectory-based Operations (TBO)
Concept

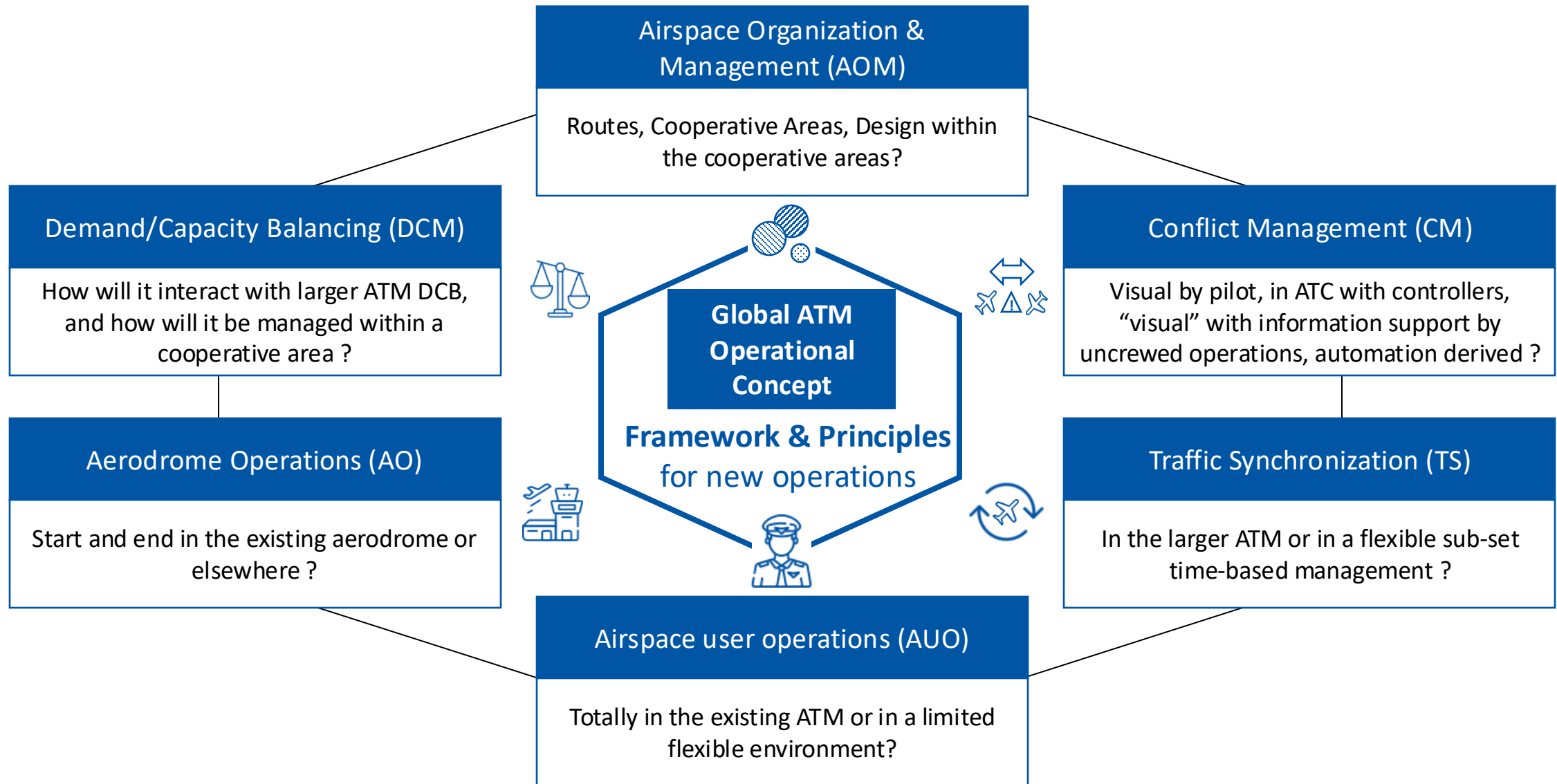
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INTERNATIONAL CIVIL AVIATION ORGANIZATION

Relationship with Concept(s) for New Entrants



Update to the Concept

(ATMRPP Job Card 013.01 refers)

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“WHY”

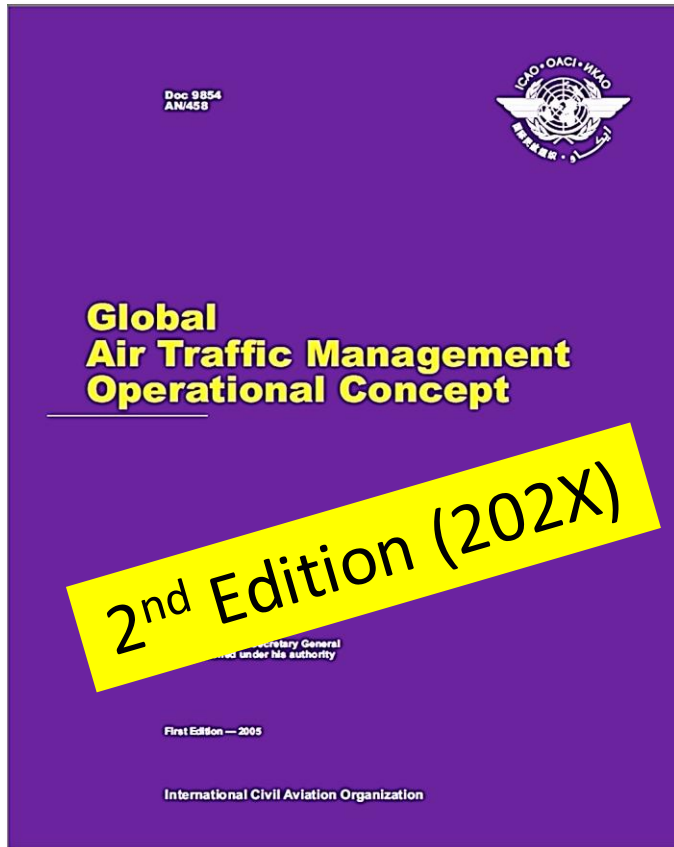
The Global ATM Operational Concept (GATMOC, Doc 9854) risks obsolescence due to a limited time horizon and incomplete scope.

Important to ensure the convergence of disparate concepts developed by different workstreams of the international aviation community.

“WHAT”

Review the core principles of the current GATMOC while adding to the scope and principles reflecting the operational visions of new airspace users.

Provide ICAO vision and future operational concept that drives the evolution of ATM up to and beyond 2050.

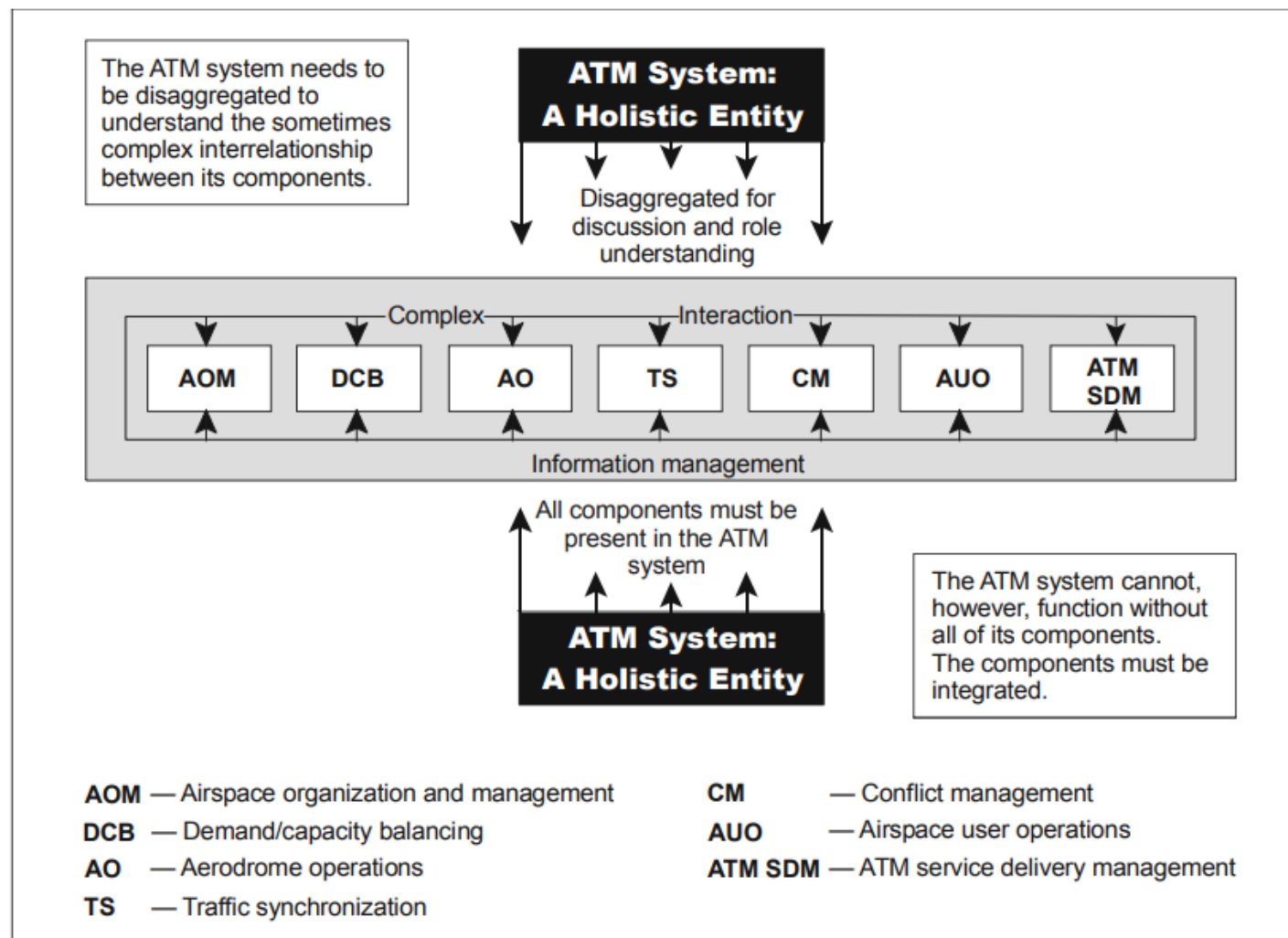


Guiding Principles for the Update

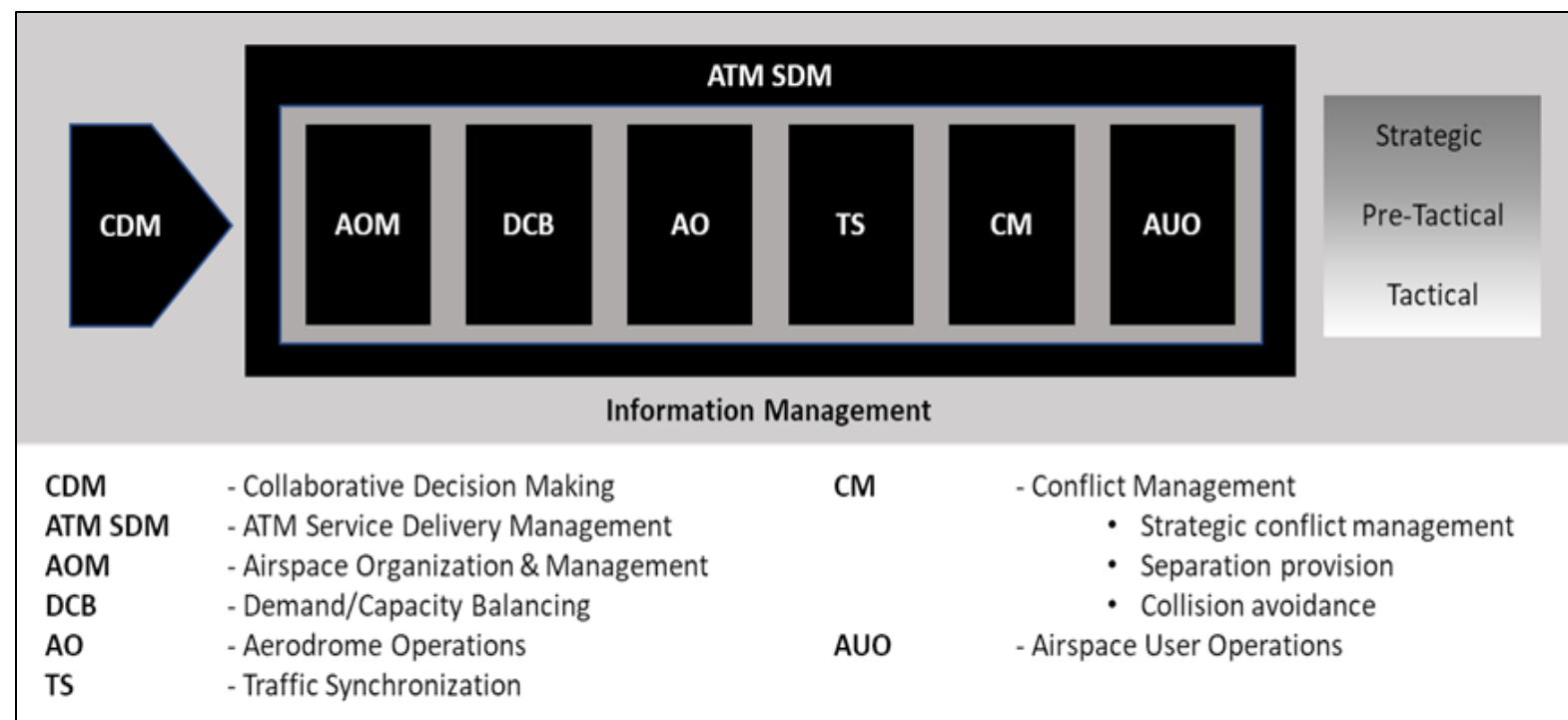
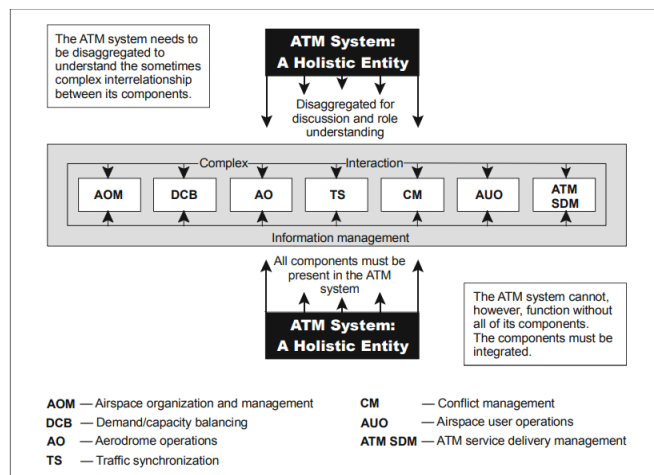
- maintain the high-level nature of the document
- reaffirm core principles and services contained therein
- limit the “downstream” impact to other documents as appropriate.
- ensure alignment and avoid redundancy with other documents
- acknowledge the increased prominence of resilience as a key ATM principle
- include new business operations, where necessary
- resolve potential ambiguities where important to the comprehension of the operational context



Update to the Concept Components



Update to the Concept Components



Still Under Consideration

- Status and visibility of the concept document
- Synchronization with other relevant ICAO activities and alignment with other ICAO documents under development
- Means and mechanism for consultation and endorsement
- Timeline for the next edition (2028 or even later)



Questions?



Thank You

