

Global Air Traffic Management Operational Concept

Review

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Requirements and Performance Panel

Air Traffic Management

Air traffic management is the dynamic, integrated management of air traffic and airspace — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties.

Global Air Traffic Management Operational Concept

- The ATM operational concept is a vision that describes how an integrated global ATM system should operate.
- The concept provides States and industry with clearer objectives for the design and implementation of ATM and supporting CNS systems.

Vision statement

To achieve an interoperable global air traffic management system for all users during all phases of flight, that

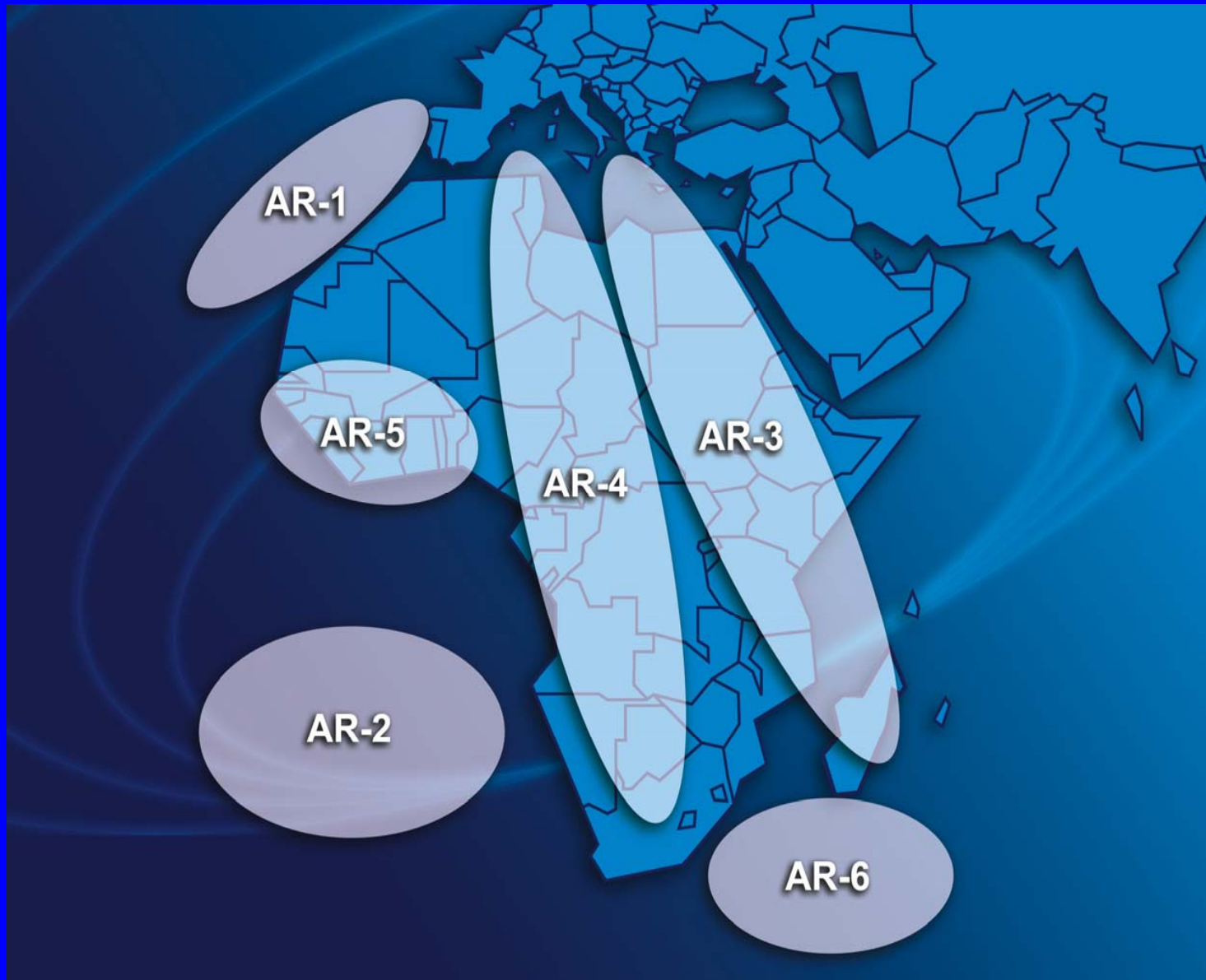
- meets agreed levels of safety
- provides for optimum economic operations
- is environmentally sustainable and
- meets national security requirements

Scope of the ATM concept

The global ATM operational concept addresses what is needed to *increase user flexibility* and *maximize operating efficiencies* in order to:

- increase system capacity and
- improve safety levels in the future air traffic management system





Fundamentals

- ATM Community
- Guiding principles
- Expectations
- Concept components
- Expected benefits

Guiding Principles in six main areas:

- Safety
- Humans
- Technology
- Information
- Collaboration
- Continuity

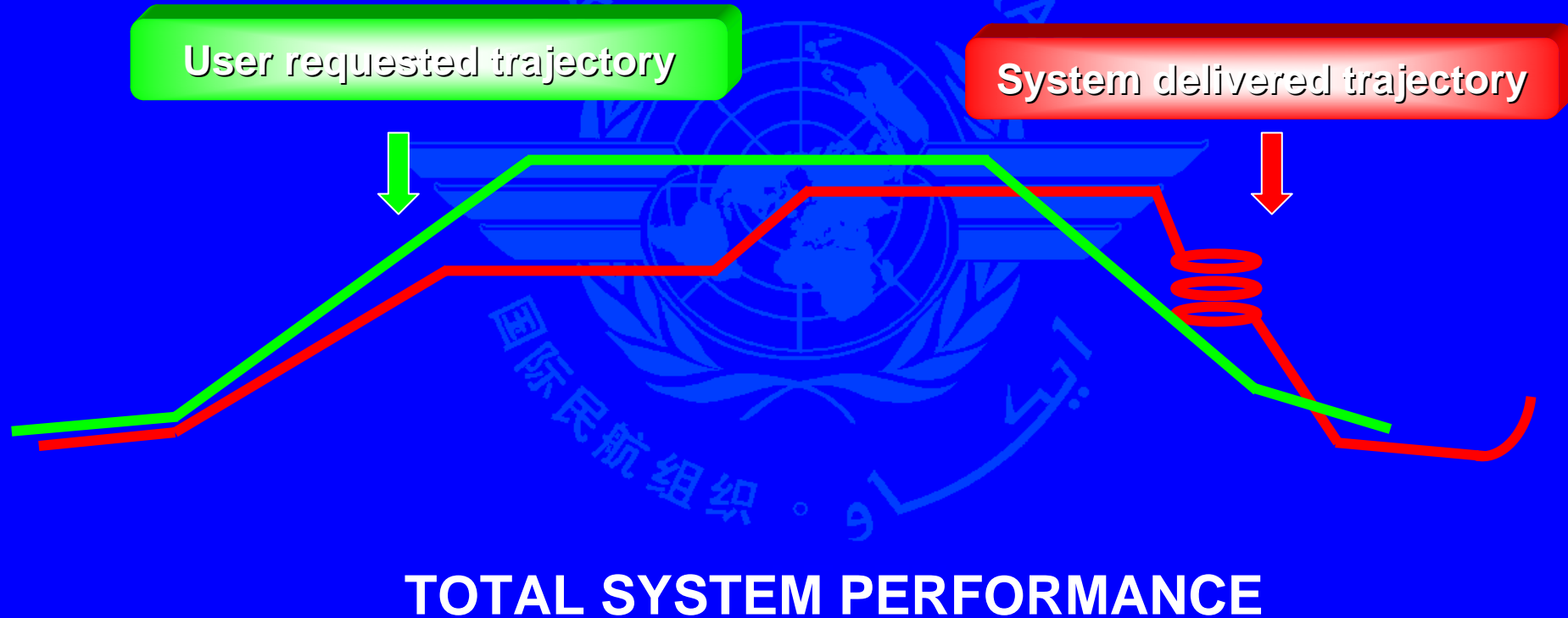
Eleven Expectations

(in alphabetical order)

- Access and Equity
- Capacity
- Cost-effectiveness
- Efficiency
- Environment
- Flexibility
- Global interoperability
- Participation by the ATM community
- Predictability
- Safety
- Security

ATM OPERATIONAL CONCEPT

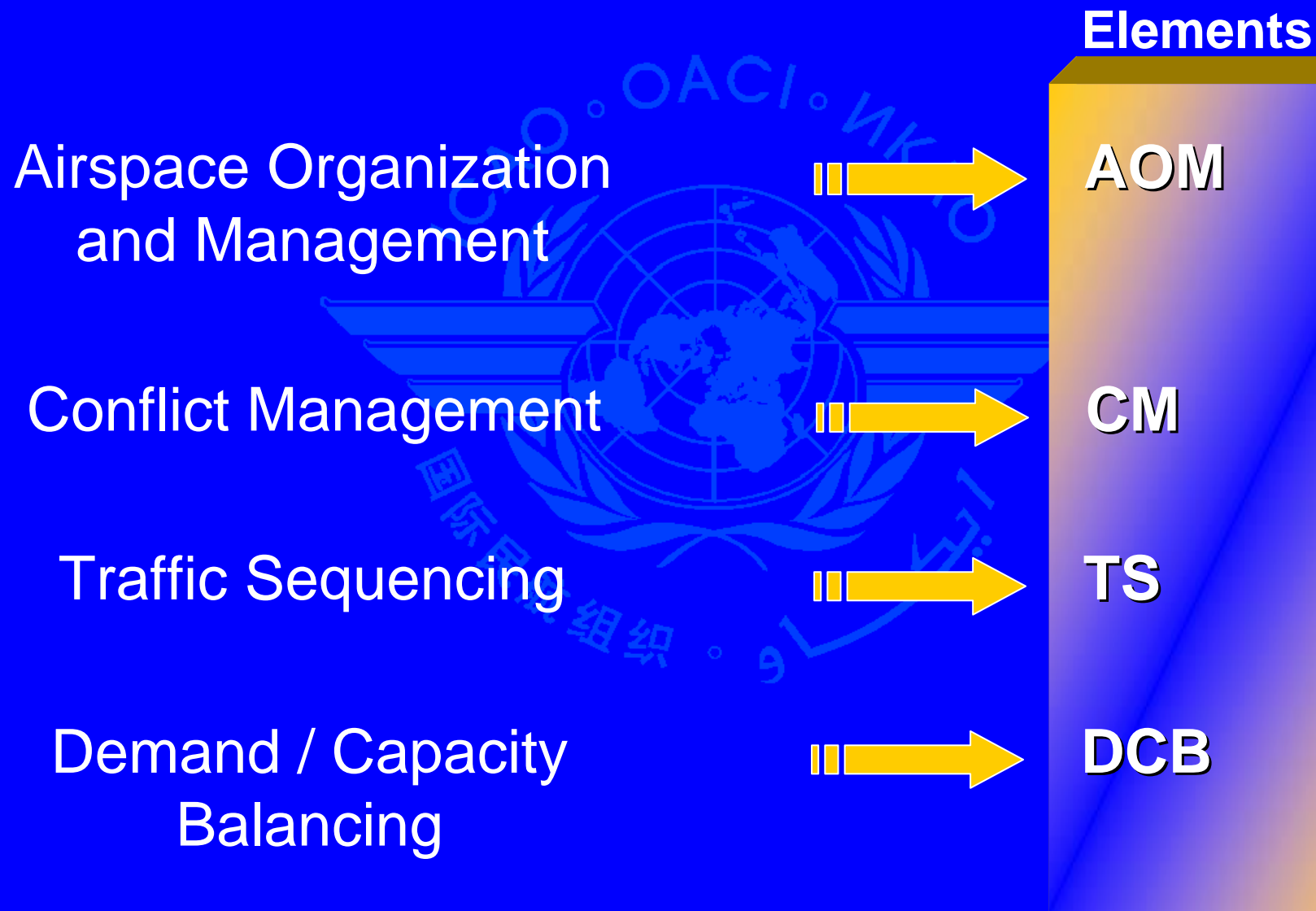
OUTCOMES / USER EXPECTATIONS



Seven Concept Components

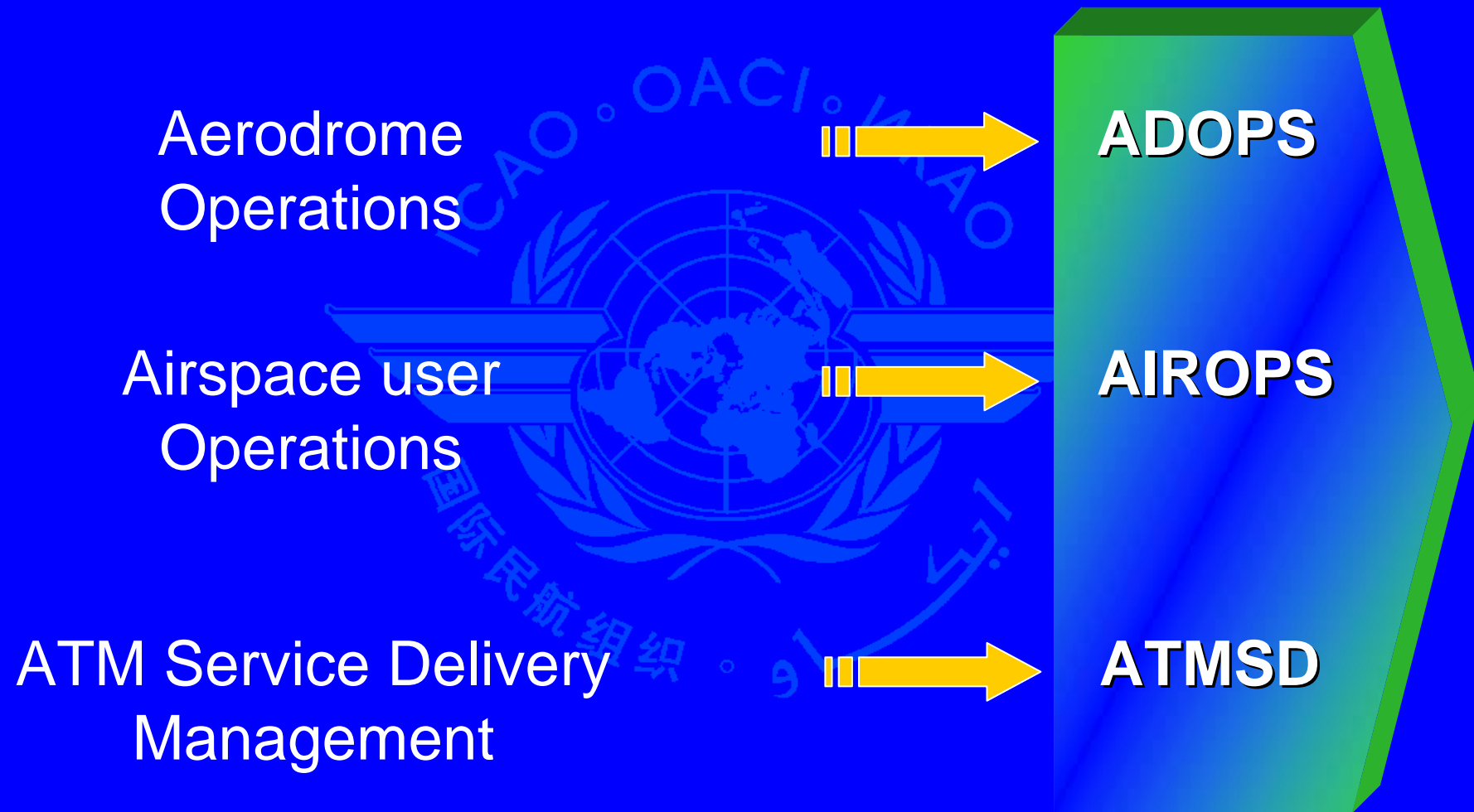
- Airspace organization and management
- Aerodrome operations
- Demand and capacity balancing
- Traffic synchronization
- Airspace user operations
- Conflict management
- ATM service delivery management

ATMOC Components



ATMOC Components

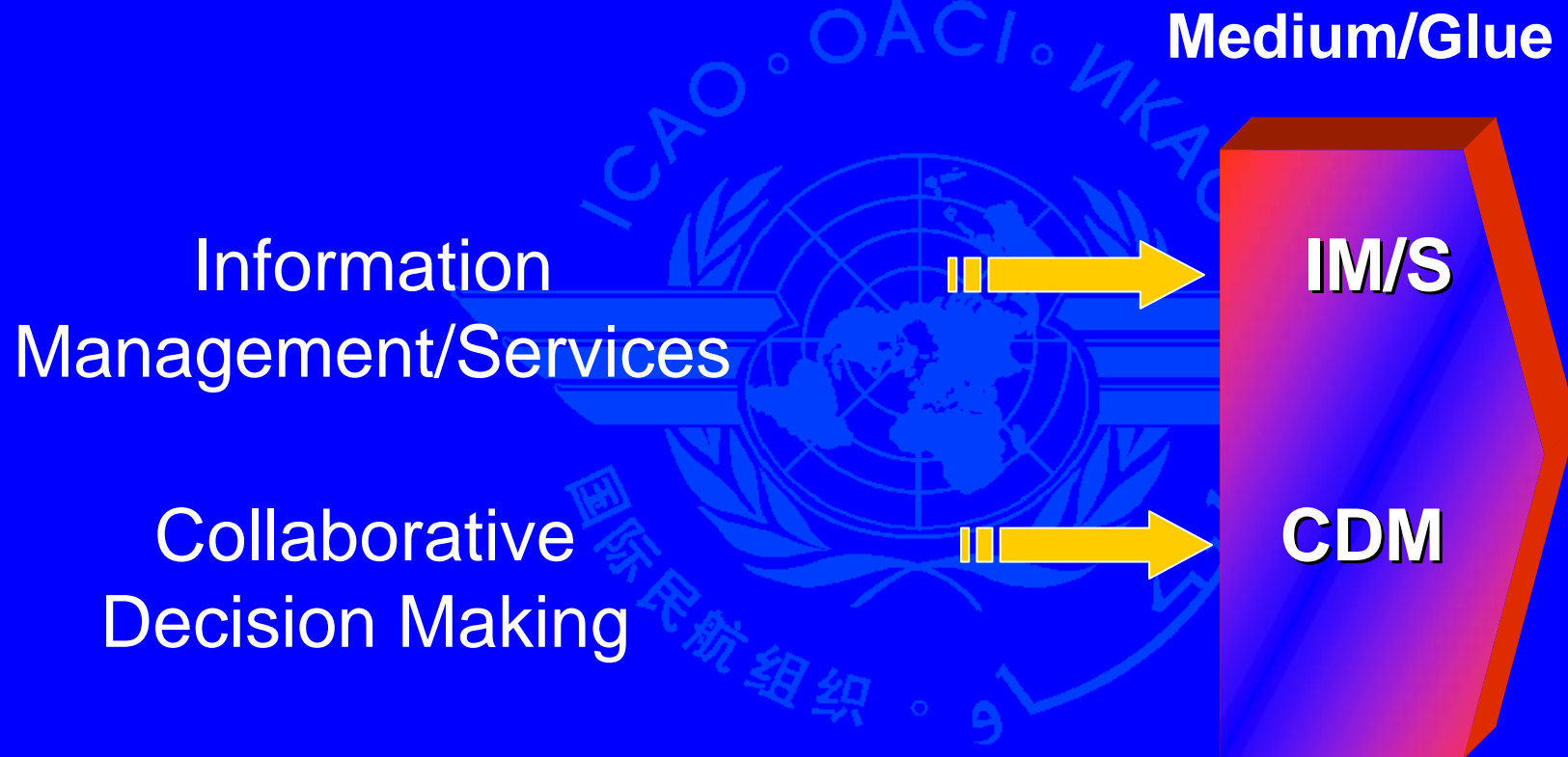
Actors/Activities



Collaborative Decision Making and Information Management

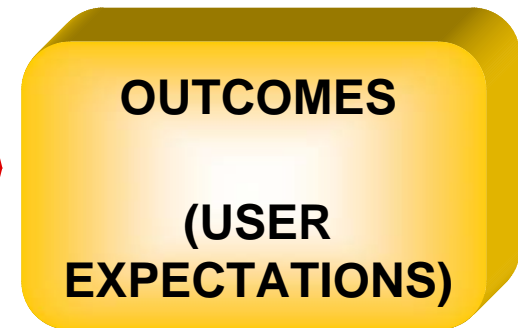
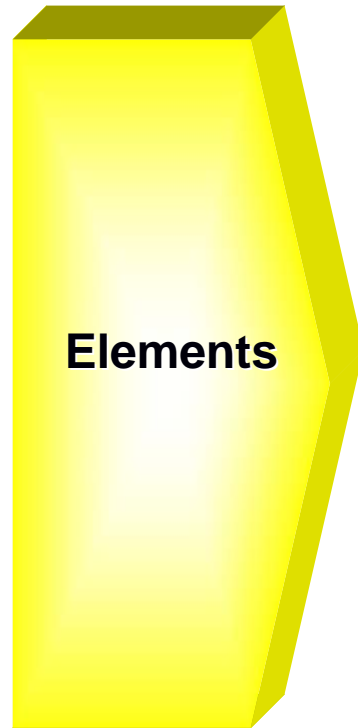
- Means achieving an acceptable solution that takes into account the needs of those involved
- Requires a spirit of cooperation
- Resolves competing demands for an ATM resource and facilitates the safe sharing of that resource among airspace users
- Will ensure the cohesion and linkage between the seven concept components

ATMOC Prerequisites



ATM OPERATIONAL CONCEPT

ATMOC Components



ATMOC = Integrated Services

In Conclusion

1. The meeting is invited to take note of the need to consider the impact of the ICAO ATM Operational Concept, on the region.
2. ATMSD (ANSPs) should take the leadership role in the regionalized, harmonized implementation of the ICAO ATM Operational Concept.
3. ATMSD should identify the areas where immediate collaboration can be implemented and consequently benefits derived.
4. To meet the overall requirements of the ATMOC, ATMSD and States, must create, as a matter of urgency, the facilities to allow cooperation, to achieve global CDM.
5. Regulators and ATMSD executives must develop a common view and supporting process to fulfill their respective roles as members of the ATM Community and must interact in a unified manner with the other members of the ATM Community.
6. Regional ATMSD must consider the value of harmonization via RAN and PIRG participation.



THANK YOU FOR YOUR ATTENTION

