International Civil Aviation Organization

SEMINAR/WORKSHOP (SAM ANIP-PB)

Part I

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Performance-Based Implementation Plan for the SAM Region

(Part I –ATM)

Content

- History
- ATM Global operational concept
- SAMIG current and future activities related to ATM

Trajectory towards ATM CONOPS

2006	Global Air Navigation Plan approved
2003	AN 11th approved ATM CONOPS
1998	CNS/ATM Systems approved by Council
1993	Coordinated Global Plan approved
1992	Asembly endorsed CNS/ATM concept
1991	AN 10th approved FANS concept
1988	FANS Concept developed

Evolution of CNS/ATM Systems to Global Concept

- Premise 1: • CNS/ATM Systems are NOT only ATS, they represent the total aeronautical system
- Premise 2: • Technology is NOT an end, a concept based on operational requirements is needed.
- Result: • CONOPS development conceived to guide implementation of CNS/ATM technology.

Air Traffic Management Operational Concept

Operational concept is a vision and describes how to operate a global integrated ATM system – environment 2025

Provides the ATM community with clear objectives to design and implement ATM with the support of CNS systems

Approach Statement

Achieve a global ATM, inter-functional system for all users during all flight phases, covering all safety levels agreed , provide economically optimum operations, be sustainable with regard to the environment and meet national requirements for aviation safety.

Grounds

- ATM Community
- Ruling principles
- Expectations
- Conceptual change

ATM Community

- Aerodrome - air operators/services
- Airspace providers
- Airspace users – UAV/crewed
- ATSP – air traffic controllers, engineers, technicians
- Supporting companies – manufacturers / regulations
- States – regulatory authorities
- ICAO – regulates, coordinates, facilitates

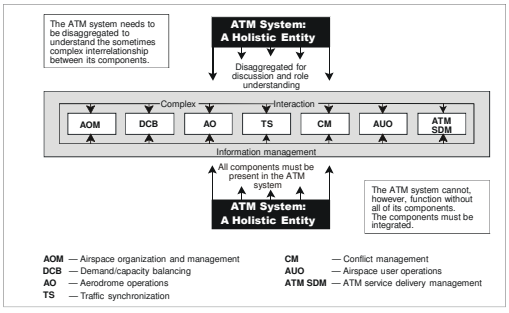
Governing principles

- Safety – maximum priority
- Human factor – essential function
- Technology – vs. ATM requirements
- Information – timely, accurate, QA
- Collaboration – CDM strategic/tactical
- Continuity - contingencies

Expectations

- Safety – Risk management
- Access and equity – equal opportunities
- Capacity – DCB
- Efficiency - economical profitability
- Flexibility – dynamic trajectories
- Predictability - itineraries

Key concept changes



Key concept changes

- Organization and airspace management (AOM)
- Aerodrome operations (AO)
- Balance between Demand and Capacity (DCB)
- Traffic Synchronization (TS)
- Airspace Users Operations (AUO)
- Conflict management (CM)
- ATS provision management (ATM SDM)

Information services

Questions?