# ICAO MID Region

Global ATM Operational Concept
Training Seminar

Current Global Air Navigation Plan

for CNS/ATM Systems (Doc 9750)

28 November to 1 December 2005

#### **BACKGROUND**

1983: FANS Committee

Study, identify and assess new technologies, including the use of satellites

1989: FANS Phase II

Monitor and coordinate development and transition



#### **BACKGROUND**

# 1991: Tenth Air Navigation Conference

- CNS/ATM Systems
- Role of Regions and States emphasized with regard to planning, implementation and transition
- Important role of Regional Offices in planning and implementation



## **BACKGROUND: Global Planning**

1993: Global Coordinated Plan for Transition to ICAO CNS/ATM Systems

1998: Global Air Navigation Plan for CNS/ATM Systems (Global Plan, Doc 9750)

2002: Update to Global Plan



#### **CNS/ATM Benefits**

- Enhanced safety
- Increased system capacity
- Reduced delays
- Reduced flight operating costs
- Reduced fuel consumption
- More efficient use of airspace
- More dynamic flight planning
  - Reduced controller workload

# **Additional aspects**

- Cost-benefit studies
- Organizational and financial issues
- > Technical Cooperation
- Legal issues



# Regional Planning Process

- Regional Planning is the principal engine of ICAO's planning and implementation work
- Global guidance and regional harmonization measures converge with plans and proposal of States and users
- Important role of forecasting



# **National Planning Process**

- National plans are required to improve overall efficiency and capacity of States' airspace infrastructure and to address requirements arising out of traffic growth
- National plans should be coordinated through regional and subregional planning groups



## **CNS/ATM Partners**

- > ICAO
- States
- Users
- Service Providers
- Industry



# **Global Planning Methodology 1**

#### Homogeneous ATM area

> An airspace with a common air traffic management interest, based on similar characteristics of traffic density, complexity, air navigation system infrastructure requirements or other specified considerations wherein a common detailed plan will foster the implementation of interoperable CNS/ATM systems.

# **Global Planning Methodology 2**

## **Major traffic flow**

A concentration of significant volumes of air traffic on the same or proximate flight trajectories



# Global planning methodology 3

#### Routing area

- An area encompassing one or more major traffic flows, defined for the purpose of developing a detailed plan for the implementation of CNS/ATM systems and procedures.
  - A routing area may cross several homogeneous ATM areas with different characteristics.



# Global planning methodology 4

# Relationship with Global ATM Operational Concept

- Role of ATM system requirements
- Transition strategies
- Performance framework



#### **Elements in Current Global Plan**

- Air Traffic Management
- Communications Systems
- Navigation Systems
- Surveillance Systems
- Meteorology
- Aeronautical Information Service
- Human Resource Development & Training



Legal

## **Current Global Plan, Part II**

- Depicts the facilities and services to be provided to satisfy requirements for implementation of global CNS/ATM systems
- Amended as necessary to reflect changes in facilities and/or services
- Intended to identify the inter-regional CNS/ATM systems infrastructure



# **Current Global Plan**

## **Thank You!**

