

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 1: Introduction and assessment of a global air traffic management (ATM) operational concept

1.1 The global ATM operational concept

:

1.3 The need for a global air navigation plan

:

JAPAN'S VIEW ON THE GLOBAL AIR TRAFFIC MANAGEMENT OPERATIONAL CONCEPT

(Presented by Japan)

SUMMARY

Japan has been implementing the MTSAT and ATM center projects according to the FANS (new CNS/ATM) concept endorsed by the Tenth Air Navigation Conference. The MTSAT and ATM center would be a fundamental and essential function for future global ATM system in Japan as described in the global ATM operational concept.

This paper presents Japan's view on the global ATM operational concept and evolution to the global ATM operational concept, and shows relative activities in Japan for the new ATM system.

Proposed action by the conference is in paragraph 6.

1. INTRODUCTION

1.1 In order to improve air safety facing increasing air traffic and delays, Japan implemented the air traffic flow management center in 1994. In Japan, the air traffic flow management center has worked well in avoiding the saturation of air traffic in sectors in the air traffic control centers and terminal approach areas while also minimizing comprehensive delays of departure aircraft.

1.2 Facing continuously increasing air traffic volume, accommodating various user needs for more efficient aircraft operation, Japan has been working on implementing an air traffic management center which would serve integrated services of air traffic service, air traffic flow management service and airspace management service.

1.3 Air transport has grown rapidly and continuously in the last few decades, and is forecasted to continue its steady growth. Japan recognized necessity of future ATM vision as well as the new technologies for communications, navigation, and surveillance (CNS). Japan has been participating in all related ICAO activities, i.e. Air Traffic Management Operational Concept Panel (ATMCP).

2. THE GLOBAL ATM OPERATIONAL CONCEPT

2.1 In the Asia/Pacific Region, there are still many differences in the communications, navigation and surveillance environments. The seamless ATM service as described in the global ATM operational concept, developed by ATMCP, is necessary to accommodate future increasing air traffic in the Asia/Pacific Region safely and efficiently.

2.2 Japan started the multifunctional transport satellite (MTSAT) and ATM center projects according to the future air navigation systems (FANS) (new CNS/ATM) concept endorsed by the Tenth Air Navigation Conference. The global ATM operational concept was developed based on the FANS concept. The global ATM operational concept shows a clear vision for an integrated, harmonized and globally interoperable, future ATM system. The MTSAT and ATM center would be a fundamental and essential function for future global ATM system in Japan.

2.3 Japan shares the same visions as described in the global ATM operational concept.

3. EVOLUTION TO THE GLOBAL ATM OPERATIONAL CONCEPT

3.1 In order to progress toward implementation of a global ATM system as described in the global ATM operational concept, ICAO must complete the development of operational requirements and development of Standards and Recommended Practices (SARPs). Japan will continue to participate and cooperate with any follow-up work that is deemed necessary.

3.2 There are new innovations contained in the global ATM operational concept document, i.e. a delegation of separation responsibility and flexible management of airspace boundary. ICAO should discuss this matter with all parties concerned because of the complex nature of this issue such as operational procedures and legalities.

3.3 Continuous efforts and agreements in regions are extremely important in implementing this seamless global ATM system. Every region should make a regional ATM implementation plan with a target date up to and beyond 2025 as described in the global ATM operational concept.

**4. GLOBAL STANDARDS FOR INTERNATIONAL
AIR TRAFFIC FLOW MANAGEMENT**

4.1 An air traffic flow management for flights between States and regions should be based on techniques which are agreed to, by relating States and regions. This technique should also be harmonized with other regions.

4.2 Although some facilities have already established international air traffic flow management service, ICAO should develop guidance material and/or SARPS for States and regions that plan to implement an international air traffic flow management system in the future.

**5. RELATING ACTIVITIES TO THE CONCEPT IN
JAPAN**

5.1 Japan started implementing an integrated function of the air traffic service, air traffic flow management and airspace management, named the Air Traffic Management Center. This center is scheduled to be operational in 2005. The ATM center is expected to provide a major increase in air safety, efficiency and air capacity, while also improving the economical operation of aircraft. For more detail, refer to the IP/43 “The establishment of air Traffic Management Center in Japan”.

5.2 Japan has been supporting the States in the Asia/Pacific Region for the implementation of new ATM systems through various channels or framework. Japan will continue to support the States for implementation of a new CNS/ATM infrastructure with MTSAT that is scheduled for launch in 2004. For example, Japan is assisting the Philippine’s new ATM center implementation including satellite-based augmentation system (SBAS) and data link system.

6. ACTION BY THE CONFERENCE

6.1 The conference is invited to:

- a) note Japan’s view on the global ATM operational concept and relating activities; and
- b) recommend that ICAO develop guidance material and/or SARPs for international air traffic flow management.

— END —