



INTERNATIONAL CIVIL AVIATION ORGANIZATION

ASIA/PACIFIC OFFICE

ICAO SPECIAL IMPLEMENTATION PROJECT (SIP)

WORKSHOP ON THE DEVELOPMENT OF BUSINESS CASE FOR THE IMPLEMENTATION OF CNS/ATM SYSTEMS

(BANGKOK, 23 – 27 JULY 2007)

SUMMARY OF DISCUSSIONS

1. INTRODUCTION

1.1 The workshop was conducted within the framework of Special Implementation Projects (SIPs) for the year 2007. The objective was to provide States in the Asia/Pacific Region, with a better understanding of developing business case for the implementation of CNS/ATM systems, using a progressive, cooperative, cost-effective approach leading to a seamless Global ATM system.

1.2 The workshop was attended by a total of 33 participants from 10 States and IATA. The list of participants and speakers is available in the Attachment 1 to this Summary Report. Mr. Lalit Shah, ICAO Regional Director, Asia and Pacific Region, opened the Workshop. Mr. Li Peng, Regional Officer for Communications, Navigation, and Surveillance (CNS), ICAO Asia and Pacific Office, acted as Secretary for the workshop assisted by Mr. S.K. Saraswathi, Regional officer, CNS.

1.3 Mr. C. Mustapha, Economist in the Air Transport Bureau, ICAO Headquarters in Montreal and Mr. Hindupur Sudarshan, Technical Officer, Planning and Global Coordination Office, ICAO Headquarters in Montreal were the facilitators of the workshop.

2. DISCUSSIONS

2.1 On the first day of the workshop, participants were provided with basic presentations, which covered technology and operational aspects of Global ATM systems, implementation considerations, and harmonization issues. The workshop noted that significant progress was being made to implement CNS/ATM systems worldwide including in the Asia/Pacific Region. The workshop recognized the importance of ongoing interregional coordination for ensuring the harmonized implementation of CNS/ATM systems so as to achieve a seamless and integrated Global ATM system.

2.2 On the second day, the workshop discussed the core subjects of business case development such as traffic forecasts, economic assessment, cost/benefit methodology, financial analysis and risk management.

2.3 On the third and fourth days, the workshop attendees participated in the exercise for the development of business case for the implementation of CNS/ATM systems on the basis of guidance material developed by the ICAO Secretariat. Through the use of workstations and the business case software, which were provided to each State during the workshop, the participants acquired a hands-on experience in the development of business case for the implementation of CNS/ATM systems.

2.4 On the fifth and last day, all the groups who carried out the exercise presented their outcome to the workshop in the standard format as provided in the Attachment 2 to this Summary. Subsequently, the workshop was provided with an overview of future developments, the work programme of the Air Navigation Commission (ANC) panels, environmental benefits of CNS/ATM systems and the follow-up action required by States in achieving a Global ATM system.

2.5 In the concluding session, participants expressed their appreciation for the format and content of the workshop, which demonstrated the importance of the development of business case for the implementation of CNS/ATM systems and for the conduct of the hands-on exercise using individual workstations. The workshop called upon ICAO to further improve the business case software so as to respond to user needs. Mr. Lalit Shah, the Regional Director, thanked the attendees for their interest in the development of Business cases and closed the workshop.

3. RECOMMENDATIONS

As a result of discussions, the workshop developed the following recommendations, which are to be addressed by ICAO and States, as appropriate:

- 1) **States**, when implementing CNS/ATM systems leading to a Global ATM system, ensure that the facilities and services necessary to implement these systems are in accordance with the Asia and Pacific Air Navigation Plan and ICAO Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS);
- 2) **States and International organizations** follow a common approach by utilizing the guidance provided in the Global Air Navigation Plan, toward developing and implementing a performance-based Global ATM system;
- 3) **ICAO** continues enhancing the ongoing intra and interregional coordination for planning, implementation and harmonization of a Global ATM system; and
- 4) **ICAO** assists States in the development of business case for the implementation of CNS/ATM systems.



**ICAO Special Implementation Project (SIP)
Workshop on the Development of Business Case for
the Implementation of CNS/ATM Systems
Bangkok, Thailand, 23-27 July 2007**

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**BUSINESS CASE WORKSHOP EXERCISE OUTCOME
— PRESENTATION FORMAT**

1. Characteristics of the industry

Enumerate the current and projected growth of Air Traffic in your state and also identify, if any, the safety and security risks in your State.

2. The air navigation service provider

Describe the organization providing the air navigation services in your State including its institutional format, its capital structure, its principal shareholders and its management.

3. Identification of major stakeholders/partners

Identify the major stakeholders/partners that includes in addition to the air navigation service providers, the airspace users (the commercial airlines using the airspace, business aviation, general aviation, military, etc.) and the potential funding sources.

4. Problem definition

The current conventional air navigation systems might have several limitations, which would depend on the State or the region concerned. List such limitations in your State.

5. Scope of the Project

Define the geographical scope of the project in your State and determine the major traffic flows.

Attachment 2

6. Implementation of Global ATM System

Explain the vision of your State in terms of plans for transition to Global ATM system. In other words, which are the ATM improvements and supporting CNS elements have been chosen for your National Plan.

7. Financial analysis

As a result of the financial analysis carried out, what are the outcomes in terms of **net present value** and the **benefit to cost ratio** for your CNS/ATM project and determine the payback period for the air navigation services provider(s).

8. Financing requirements

Consequent to the financial analysis as above, establish the financing requirements and their timing.

9. Risk Management

What are the risks identified for this project and if any, briefly describe the risk mitigation plans.

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