



International Civil Aviation Organization

**The Twentieth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/20)**

Singapore, 05 – 09 July 2010

Agenda Item 5: Consider problems and make specific recommendations concerning the provision of ATM/AIS/SAR in the Asia/Pacific Region

ICAO Asia and Pacific Seamless ATM Workshop

(Presented by Japan and the United States)

SUMMARY

As agreed in Kansai Statement of the 46th DGCA Conference, it is the time to move forward toward the Seamless Sky of the Asia and Pacific Regions. JCAB just drew up Japanese future ATM vision namely CARATS, also some other states like China or Korea are now planning to establish their own future visions. It is critically important to make each States' visions of future air traffic systems harmonized. Therefore, with regard to follow-up action to the 46th DGCA Conference, JCAB and the FAA propose to hold an ICAO sponsored Seamless ATM Workshop in order to foster discussion and action for Asia Pacific States/Regions in the planning of the future Air Traffic System in early 2011.

1. INTRODUCTION/BACKGROUND

1.1 From the perspective of seamless ATM, ICAO has been leading the development of the Global Air Traffic Management operational system with the implementation target of 2025. The Global Air Traffic Management System will be based on the components described in the Global ATM Operational Concept. The United States and the Europe have been developing their future air traffic modernization programmes based on the ICAO ATM Operational Concept, namely the Next Generation Air Transportation System (NextGen) and the Single European Sky ATM Research (SESAR) respectively and promoting the seamless ATM operation.

1.2 Taking such global trend into consideration, the 46th Conference of Directors General of Civil Aviation, Asia and Pacific Regions in Kansai, October 2009 adopted the Kansai Statement, in which member states agreed that APANPIRG be the starting platform of the discussion about Future ATM for Asia Pacific regions in order to realize the Seamless Sky.

2. DISCUSSION

2.1 For the purpose of dealing with the expected rapid growth of air traffic as well as the diversified needs for air transport, Japan has been discussing the long-term vision for the Air Traffic Systems in Japan through the year, and finally compiled them as the Collaborative Actions for Renovation of Air Traffic Systems (CARATS). Specific measures for short-, mid- and long-term schedule have been developed. In this future vision, Japan has clarified how the future ATM system should be and try to realize the seamless ATM operation based on the cooperation with neighbouring countries.

2.2 Japan has carried out the discussion as follows, in the process of drawing up CARATS. The way to carry out the discussion of CARATS will become an example for discussion about future ATM in Asia and Pacific Regions.

- a) Set implementation target of 2025 (including numerical targets)
- b) Review of constraint in the current Air Traffic Systems
- c) Direction of renovation of the Air Traffic Systems (Setting eight direction pillars centering on Trajectory Based Operation (TBO))
- d) Detailed road map to achieve renovation

2.3 In order to move forward toward seamless sky, APANPIRG should start the discussion and set the implementation target and direction of renovation at regional levels to establish the seamless future ATM in Asia Pacific regions. Each State should consider the detailed road map based on them. In this case, it is important to harmonize each state's roadmap.

2.4 For the first step toward seamless sky, it is important to extend knowledge about ICAO Global ATM Operational Concept and the Future ATM visions such as NextGen, SESAR and CARATS. For this purpose, FAA and JCAB propose to hold the workshop concerning future air traffic systems in collaboration with ICAO Asia and Pacific Office in early 2011.

3. RECOMMENDATION

3.1 Taking into consideration the above discussion, the following proposed draft conclusion has been formulated:

Draft Conclusion 20/XX – ICAO Asia and Pacific Seamless ATM Workshop

That ICAO be invited to organize the Asia and Pacific Seamless ATM Workshop inviting the APANPIRG member States and other parties of interest in order to foster discussion and action for Asia and Pacific States in the planning of the future air traffic system, considering the overall vision for the region for seamless ATM.

4. ACTION BY THE MEETING

4.1 The meeting is invited to note the information in this paper and make recommendations on the Draft Conclusion for consideration by APANPIRG/21.

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ATTACHMENT**Proposal Worksheet**

- Title:** ICAO Asia and Pacific Seamless ATM Workshop
- Date:** Early 2011 (Preferably February 2011)
- Sponsor:** ICAO
- Support:** FAA, JCAB (confirmed), Aerothai or other local ANSP based on venue (*proposed*)
- Venue:** ICAO Asia/Pacific Regional Office (Bangkok), or alternate venue proposed by ICAO
- Participants:** APANPIRG Member States, Other parties of interest (e.g. IATA, SJU, CANSO)
- Purpose:** To foster discussion and action for Asia-Pac states in the planning of the future air traffic system, considering the overall vision for the region for seamless ATM.

Background: Seamless ATM in the Asia-Pacific region remains a significant challenge, and has been identified for action in major forums such as the 46th DGCA Conference in Osaka, Japan (October 2009). In 2008, ICAO sponsored an event to discuss the integration of NextGen and SESAR into the global ATM framework. That event fostered numerous side discussions among Asia/Pac providers on the global trend in ATM. This interest presents an opportunity for a regional event that focuses on the specific needs of the Asia/Pac region, and provides a similar venue for regional providers to discuss future plans and learn about developing procedures and technologies. ICAO stewardship will be a key to the successful planning, participation and outcome of an Asia/Pac Seamless ATM forum.

Resources: FAA and JCAB can provide planning, organizing and materials resources to support ICAO in the development and execution of the workshop. Ideally a third local ANSP supporter would be added based on the workshop location.

Structure: The event would be a two-day workshop for technical and procedural ATM professionals to share plans and information. The workshop could be structured as follows.

- Day One* - Plenary sessions on topics of global interest, via a series of presenters, followed by a period for Q/A and discussion.
- Day Two (Session 1)* - Technical Breakout sessions on specific emerging technologies, procedures and practices via presentations with Q/A and discussion.
- Day Two (Session 2)* - Final plenary session with a VIP guest speaker followed by a summary and close-out for the workshop.

Workshop Topics/Sessions:**Day One Plenary**

- (1) ICAO Global ATM Concept – *An overview of the ICAO Global Air Navigation Plan and the ICAO approach to future systems development planning in the Asia Pacific Region.*
Presenter: ICAO
- (2) Future ATS Initiatives (NextGen, SESAR, CARATS, CNATS, others) – *Service providers are invited to present overview and status information regarding major initiatives for future ANS systems.*
Format: Panel style with Q&A
Presenters: FAA, JCAB (confirmed), SJU, ATMB-China, Other-TBD (*unconfirmed*)
- (3) How to step into Seamless Sky in the Region – *An informal discussion on principles of Seamless Skies for the Asia-Pacific region with a focus on identifying future ATS priorities and next steps for the region.*
Format: Brief presentations followed by an informal round-table discussion
Presenters: (TBD - ICAO, Airservices Australia, CAAS, Other ANSPs, IATA, CANSO)

Day Two (Session 1 Breakouts)

- (4) Suggested Technical Sessions - *Technical subject matter experts share information and plans on a variety of Future ATS topics to promote knowledge sharing.*
Format: Breakout sessions with Q&A
 - Data Communications
 - ADS-B
 - Information Management/SWIM
 - Performance Based Navigation
 - Airspace Management
 - Environmental Initiatives
 - Oceanic/Non Radar Procedural EnhancementsPresenters: TBD

Key Speakers and Contributors:

Confirmed: ICAO, FAA, JCAB

Highly Desirable: Aerothai, Airservices Australia, Airways New Zealand, CAAS, CANSO, IATA, SESAR, Others TBD

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