



International Civil Aviation Organization

**The Twenty-first Meeting of the Bay of Bengal ATS Coordination Group
(BBACG/21)**

Bangkok, Thailand, 07 – 10 March 2011

Agenda Item 10: Any Other Business

SEAMLESS ATM IMPLICATIONS FOR BBACG

(Presented by the Secretariat)

SUMMARY

There has been unprecedented interest in the future air traffic systems being developed to enable ‘Seamless ATM’ which was agreed at the 46th Conference of Directors General of Civil Aviation (DGCA/46, October 2009, Osaka), and how these may affect the Asia and Pacific (APAC) Regions. Seamless ATM systems and procedures must be facilitated by effective ATM coordination, so these changes will inevitably be of great interest to ATM Coordination Groups such as BBACG.

1. INTRODUCTION

1.1 As a first step toward the ‘Seamless Sky’ agreed at the DGCA Conference, ATM/AIS/SAR/SG/20 considered it important to extend knowledge about the ICAO Global ATM Operational Concept and the future ATM visions such as NextGen (United States), SESAR (Europe) and CARATS (Japan). To achieve this objective, the Federal Aviation Administration (FAA) and Japan Civil Aviation Bureau (JCAB) proposed a forum on future air traffic systems in collaboration with ICAO Asia and Pacific Office. Since then, a number of related activities have been initiated that are relevant to the BBACG.

2. DISCUSSION

2.1 The CANSO (Civil Air Navigation Services Organisation) Seamless Airspace Workgroup proposed the following definition of ‘seamless airspace’:

Contiguous airspace that is technically and procedurally interoperable, universally safe, and in which all categories of airspace users transition between FIR, or other vertical or horizontal boundaries, without requiring a considered action to facilitate that transition and without any noticeable change in:

- *Type or quality of service received*
- *Air navigation and communications performance standards*
- *Standard practices to be followed.*

2.2 The CANSO Seamless Airspace Workgroup considered the following terms as key to describe the general concept of Seamless ATM: standardised, harmonised, and interoperable. Thus a vision of a future Seamless ATM environment is conceptualised as having:

- consistent and harmonised standards and operating practices; and
- using interoperable ATM and supporting systems.

2.3 The following Conclusions were adopted by the 21st Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/21, September 2010) regarding the development of seamless ATM initiatives:

Conclusion 21/8 – ICAO Asia/Pacific Seamless ATM Workshop

That, ICAO be invited to organize the Asia and Pacific Seamless ATM Workshop to be held in early 2011 inviting the APANPIRG member States and other parties of interest in order to foster discussion and action for the Asia and Pacific States in the planning of the future air traffic management system, considering the overall vision for the region for seamless ATM.

Conclusion 21/12 – Convening of the Seamless- ATM Ad Hoc meeting

That, while recognizing the seamless ATM needs to be addressed in a holistic manner, ICAO Regional Office be invited to organize a seamless ATM Ad Hoc working group meeting as soon as possible.

2.4 As a result of these Conclusions, the Seamless ATM Symposium has been organised in Tokyo, Japan from 12 until 14 April 2011. The regional Seamless ATM Ad-hoc Meeting will be held on 15 April 2011. APANPIRG/21 had a discussion on how best APANPIRG and its contributory bodies could pursue Seamless ATM. However, there had been a discussion in parallel to reorganize the APANPIRG contributory bodies to match, for example MET and AIS, and APANPIRG/21 could not assign the task to a specific Sub-group. Consequently, in the meantime, APANPIRG21 concluded that an Ad-hoc meeting could be established to consider how Seamless ATM could proceed in the APAC Regions.

2.5 In regard to the reorganization of APANPIRG contributory bodies, APANPIRG agreed to establish the APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF) and adopted the following Decision:

Decision 21/57 - APANPIRG Contributory Bodies Structure Review Task Force

That,

- a) APANPIRG Contributory Bodies Structure Review Task Force with members consisting of Sub-group chairpersons, vice-chairpersons and voluntary members nominated by States be established; and
- b) In coordination with ICAO Regional Office, the Task Force undertakes a review of the Terms of Reference and activities of the APANPIRG contributory bodies and proposes rationalization of their structures to APANPIRG/22 to meet the changing environment.

2.6 In this connection, the review of the bodies that contribute to APANPIRG must support the on-going development of Seamless ATM. Thus the very basis of bodies like BBACG must be considered and the terms of reference amended as necessary to ensure an alignment of goals with Seamless objectives.

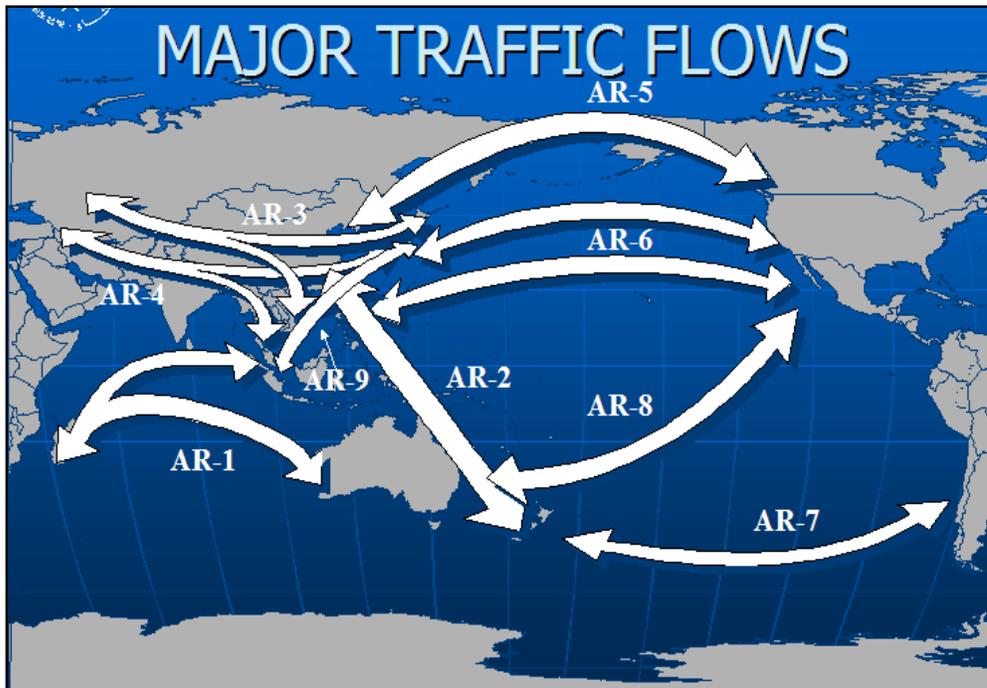
2.7 ICAO's role is to facilitate the effectiveness of ATM coordination, provide advice and information on the Standards and Recommended Practices (SARPs), and ultimately to develop new SARPs that support this changing environment. In providing support to Seamless ATM coordination efforts, the limited resources of the ICAO Regional Office should be considered, as is the need for States to take prime responsibility for bilateral and multilateral ATM coordination themselves wherever possible in terms of providing administration support for coordination meetings.

2.8 In the context of Seamless ATM, it is clear that optimal, harmonised systems and procedures cannot be achieved without appropriate coordination between:

- State ATS Authorities;
- Air Navigation Service Providers (ANSP);
- Communication Service Providers (CSP);
- Military authorities; and
- airspace users such as the International Air Transport Association (IATA).

2.9 The Major Traffic Flows of relevance to the Bay of Bengal/South Asia areas are illustrated in Figure 1 (AR-1 Africa-SE Asia/Australia and AR-4 Europe-SE Asia/East Asia). It is important that Seamless ATM principles are applied to these Major Traffic Flows. Therefore, it is necessary to consider the need for an integrated, ATM Coordination Group bringing the expertise of the agencies noted in paragraph 2.8 and covering the geographical region generally described as South Asia and the Indian Ocean, as far east as SE Asia and Australia.

Figure 1: Major Traffic Flows



2.10 It is important for Seamless ATM to recognise that the Major Traffic Flows are not constrained by ICAO Regions and in the future, the need to work across trans-regional boundaries will be increasingly required. Such is already the case for the IPACG (Informal Pacific ATC Coordinating Group) and ISPACG (Informal South Pacific ATS Coordination Group), which coordinate with North American and South American Regions respectively.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) discuss the content of this paper; and
- b) note the forthcoming Seamless ATM Symposium and ABSRTF.

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