



International Civil Aviation Organization

**The Sixth Meeting of the APANPIRG ATM Sub-Group
(ATM/SG/6)**

Hong Kong, China, 30 July – 03 August 2018

Agenda Item 4: ATM Systems (Modernisation, Seamless ATM, CNS, ATFM)

AMAN IMPLEMENTATION IN CHINA

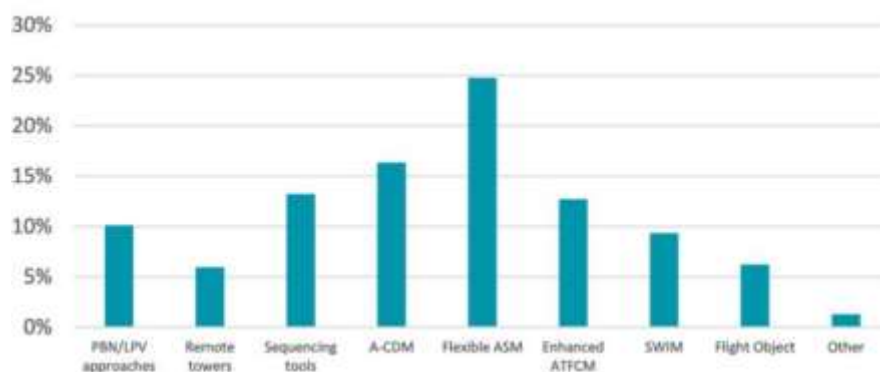
(Presented by China)

SUMMARY

This paper presents information about Arrival Manager (AMAN) implementation in China.

1. INTRODUCTION

1.1 In April 2017, CAAC、ICAO and EASAR jointly held a military and civil aviation cooperation seminar in Beijing. In the meeting, European experts pointed out the most effective innovations in air traffic management according to a global survey by EASAR. The top5 are: Flexible ASM, A-CDM, Sequencing tools, enhanced ATFCM and PBN. AMAN is a very effective sequencing tool with benefits of lower ATC workload, fewer low-altitude holding, silent coordination between ATC units, and airport capacity increase.



1.2 In the beginning of 2018, ATMB published the minimum function specification of AMAN. The specification fully absorbed the successful experience of BARGO and sought the opinions and suggestions of THALES. After the release of the specification, all the ATC units developed their AMAN implementation plan as required by ATMB.

2. DISCUSSION

2.1 Urumqi and Shenyang are equipped with the AMAN system provided by China LES company and the technology is introduced from BARCO. The AMAN system in Urumqi and Shenyang have been used for more than 2 years. Beijing\Shanghai\Guangzhou ATC unit will be equipped with the AMAN system provided by Thales, those system will come into use with the launch of Shanghai/Beijing/Guangzhou new terminal control center.

2.2 The following table shows the schedule of AMAN implementation for the eight ATC facilities in middle south regional ATMB.

Table 1 AMAN implementation schedule of MS Regional ATMB

ATC FACILITY	Estimated time of implementation
Guangzhou ATC Center	Dec-18
Shenzhen ATM Station	Dec-18
Hainan Sub-regional ATMB	Jun-20
Henan Sub-regional ATMB	Jun-19
Hubei Sub-regional ATMB	Jun-19
Hunan Sub-regional ATMB	May-18
Guangxi Sub-regional ATMB	Dec-18
Sanya ATM Station	Dec-19

2.3 Hunan Sub-regional ATMB began using AMAN in March of this year, during discussions with local air traffic controllers, in terms of arriving traffic management, early notification of separation requirements to the airborne side, more predictable for sequencing, reduction of control workload and capacity increase are widely acknowledged by them. They also suggested that benefits of starting arrival management at an early stage of flight need to be better realized, which means an extension of AMAN range and further spreading of AMAN information are advisable.

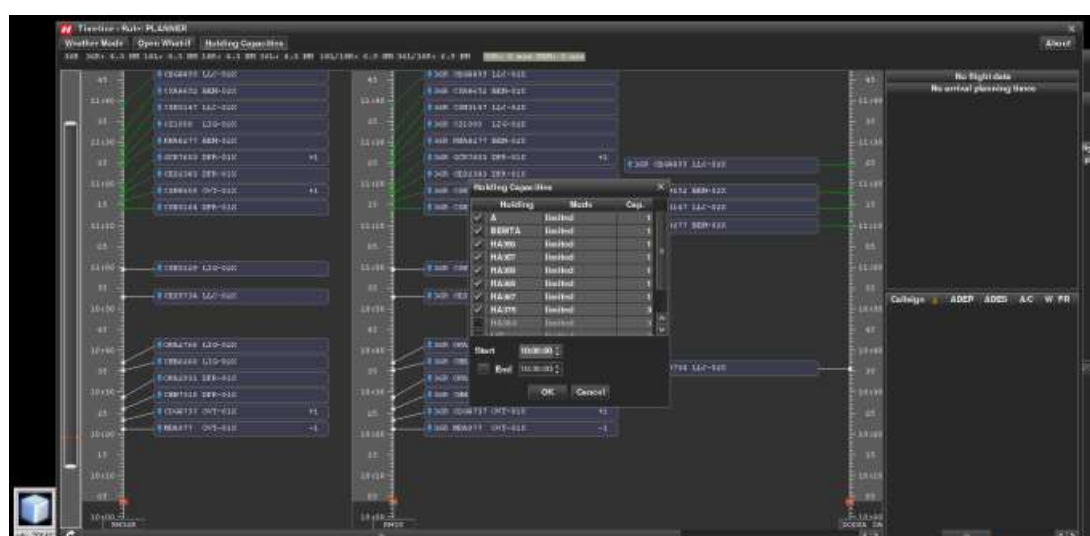


Figure 1 Changsha AMAN interface

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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