



International Civil Aviation Organization
The First Meeting of South China Sea Major Traffic Flow Review Group
(SCS-MTFRG/1)
 Kuala Lumpur, Malaysia, 19-20 January 2015

Agenda Item 5: Discuss strategy for development/realignment of routes and optimization of FLAS/FLOS and set implementation targets and timelines.

IMPLEMENTATION OF ROUTE M503 ALONG THE SOUTHEAST COAST OF CHINA

(Presented by CHINA)

SUMMARY

This paper presents an overview of the necessity to implement the route M503 along China Southeast Coast area. The progress so far has been made and the implementation plan in the future has also been introduced in this paper.

1. INTRODUCTION

1.1 With the air traffic continually increasing in the past years along Pearl River Delta (PRD) area and Yangzi River Delta (YRD) area in China, the routes between these two major air traffic flows, are becoming more and more congested, among which A470 is the most congested route, causing massive flight delay and operational risk. For that purpose, an alternative RNAV2 route designated as M503 along the southeast Coast has been planned since 2007 and is to be implemented on March 4th 1600UTC.

1.2 PRD area and YRD area has the most developed economy in China. In PRD area, there are a number of major airports like Hong Kong, Guangzhou, Shenzhen, Macao and Zhuhai. In YRD area, there are a number of major airports like Shanghai Pudong, Shanghai Hongqiao, Hangzhou, Nanjing and Ningbo. A470 has witnessed a fast growing traffic in the past years with a traffic growth rate over 10% and has a daily traffic of about 1200. While the route segments of A470 along the Southeast Coast (RUPOX-IKATA) has a daily traffic of around 840, with some serious bottlenecks affecting the whole route operation.

1.3 The safety assessment on the route M503 planning has been conducted with cooperation by FAA which indicates that it is safe and feasible. In order to maintain a safe and efficient operation after implementation, CAAC has coordinated with parties involved, including Hong Kong FIR, Taiwan FIR, ICAO and IATA in the preparation phase.

1.4 The route is a RNAV2 route with radar control service. At present, the position updating of the aircraft operating is provided by GNSS only.

1.5 At initial stage, with about 30 flights of 16 aircraft operators that used to fly with A470 will be allocated to M503. Operators shall not file flight plans for operations on M503 unless they have obtained the airworthiness and the operational approval of RNAV2 based on GNSS navigation for the aircraft.

1.6 The available flight levels of the route are between 8400m and 12500m. Normally ATC will only approve the usage of flight levels 9200m or above.

1.7 The route is at first stage planned to operate as a unidirectional route for southbound traffic only. Aircraft shall establish a lateral offset at a distance of 4 nautical miles to the west while

operating from PONEN to LELIM.

1.8 Aircraft is prohibited to initiate any deviation without ATC clearance, and is not allowed to deviate eastwards beyond M503. If an eastwards deviation has to be made, an advanced request to ATC concerned should be presented by the pilot at earliest convenience for operational coordination.

2. DISCUSSION

2.1 Due to the situation that potential flight safety along A470 has been affected and potential flight delay will be increasing, an urgent action shall be made and efficient measures have to be taken to solve the problem.

2.2 For the air traffic between PRD area and YRD area are fast-growing in the past years and projected to be more than doubled in the next decade, and IFALPA, IATA CATA(China Air Transport Association)and other parties involved has urged to solve the problem, therefore, to mitigate the worsening operational problem and also to accommodate the traffic flow between Northeast Asia and Southeast Asia in the future, an alternative route of A470 along the coast has to be established and implemented as soon as possible.

2.3 As being the first RNAV2 route over the seas in China, more information and data should be collected for operational analysis and improvement, therefore, a step by step method should be used. Only when a thorough analysis and evaluation of the impact on airspace users has been conducted, should more traffic fly with the route M503.

2.4 The route planning and operation at this time is only in China FIR(Shanghai FIR and Guangzhou FIR control sector), when joining and connecting the regional route network, considering airspace structure and operational changes over the past years, China will do more coordination, according to the ICAO procedures, with affected FIRs, to submit BANP amendment proposal.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the urgency of the implementation of the alternative route of A470.
- b) note the information update about the implementation of route M503.

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