

International Civil Aviation Organization

Twelfth Meeting of the South China Sea Traffic Flow Review Group (SCSTFRG/12)

Bangkok, Thailand, 11 – 12 November 2024

Agenda Item 2: Review of the Current and Planned CNS/ATM Capabilities and Identifying Associated Reduced Horizontal Separation

ENHANCEMENT OF LONGITUDINAL SPACING ON ATS ROUTE P648 TO 50NM

(Presented by Malaysia)

SUMMARY

This paper presents the implementation of reduced horizontal separation for ATS Route P648 from the conventional 10 minutes to 50 NM separation. This paper also presents a proposal for related States/Administration to collaborate and further review and optimize the ATS route network within the South China Sea (SCS).

1. INTRODUCTION

- 1.1 The air traffic growth within the Kota Kinabalu Flight Information Region (KK FIR) has exhibited a consistent upward trend and is anticipated to persist in the future.
- 1.2 Malaysia remains steadfast in its commitment to address the increase in capacity. In line with Action Item 9/3 (c) of the SCSTFRG Task List, which aims to enhance the longitudinal spacing on the ATS route P648 to 50NM, proactive steps have been taken on this matter.

2. DISCUSSION

Reduction of Longitudinal Separation

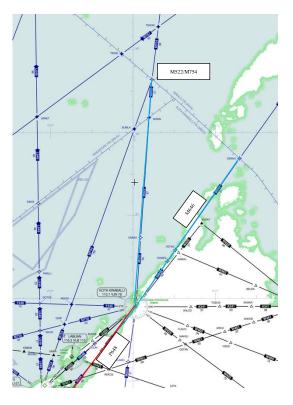
- 2.1 Conventional 10-minute longitudinal separation was previously used for traffic using ATS route P648.
- 2.2 Malaysia, in collaboration with Indonesia, has achieved a significant milestone by successfully implementing the 50 NM longitudinal separation between pairs of applicable aircraft, marking a substantial improvement in airspace management.

Limitation

- 2.3 The application of 50 NM separation on ATS routes P648 is applicable for pairs of RNP10-approved aircraft on the same track with no closing speed. It should be noted that this reduced longitudinal separation is not applicable between a pair of flights travelling beyond Jakarta FIR or Kinabalu FIR.
- 2.4 This limitation arises from the continued use of traditional separations on the connecting routes from P648, thereby impeding the optimisation of this initiative.

11 - 12/11/2024

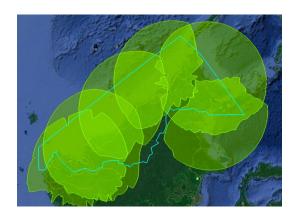
2.5 Picture 2.1 below illustrates the connecting routes from P648 that use conventional 10-minute longitudinal separation. The routes connected to P648 are M646 and M522/M754.



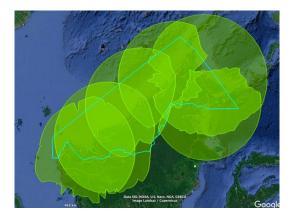
Picture 2.1

Surveillance coverage

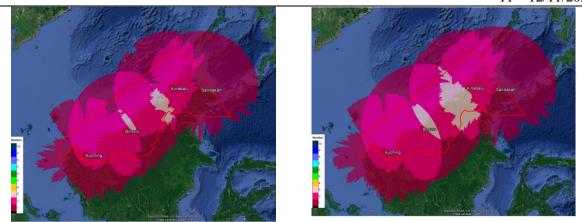
2.6 Picture 2.2 and Picture 2.3 below illustrate the surveillance capability of KK FIR.



Picture 2.2 (a) Combined Radar Coverage at FL300



Picture 2.2 (b) Combined Radar Coverage at FL400



Picture 2.3 (a) Combined ADSB Coverage at FL300

Picture 2.3 (b) Combined ADSB Coverage at FL400

2.7 With the capabilities Malaysia possesses, Malaysia aims to support the region in enhancing longitudinal spacing to optimise flight levels and fuel consumption for the benefit of airspace users.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) invite related states/administration for collaborative improvement of the horizontal separation within the SCS route network; and
 - c) discuss any relevant matters as appropriate.

.....