



International Civil Aviation Organization

ICAO

The Third Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/3)

Bangkok, Thailand, 16th – 19th April 2024

Agenda Item 3: Review of Current Operations and Problem Areas

PROGRESS UPDATE ON CAPACITY OPTIMISATION OF AIR ROUTES L642 AND M771

(Presented by Hong Kong China)

SUMMARY

This paper presents a progress update on the enhancement of longitudinal spacing on air routes L642 and M771 to follow up one of the action items agreed as Priority Area 2 in the region. Reference SAIOSEACG/2 and SCSTFRG/11 conducted in 2023, all concerned States/Administrations, i.e. China, Singapore and Vietnam expressed full support in implementing enhanced 20NM longitudinal spacing on L642 and M771. A trial operation proposed by Hong Kong China for this project was agreed upon as a result. To expedite the process of discussion, Hong Kong China conducted an online meeting with China, Singapore and Vietnam in February 2024 and it was agreed in the meeting that the trial would commence in early May 2024. All concerned States/Administration agreed to complete signing the necessary Addendum or Memorandum of Understanding (MOU) to the existing Letter of Agreements (LOA) within March 2024.

1. INTRODUCTION

1.1 Hong Kong China has been playing an active role in optimising the capacity of air routes in the APAC region, including major trunk routes (MTR) L642 and M771. The plan to enhance the longitudinal spacing between aircraft operating along L642 and M771 from 50NM to 20NM has received strong support from all stakeholders. Close collaboration among all concerned States/Administrations in the region and IATA is crucial to achieve the goal of this initiative. To this end, a consensus has been reached among all concerned States/Administrations to commence a trial operation of applying 20NM minimum longitudinal spacing on L642 and M771 on 7 May 2024. This trial operation will allow concerned States/Administrations and IATA to collect valuable operational information and experiences, assess the benefits and effectiveness of applying 20NM minimum longitudinal spacing, evaluate effectiveness of mitigating measures from safety assessment conducted earlier, and gather feedback for the preparation of full implementation.

2. DISCUSSION

2.1 Hong Kong China completed a comprehensive evaluation of this initiative in Q2 2022, which concluded that the capacity of L642 and M771 would be doubled without compromising safety after implementation of the enhanced 20NM longitudinal spacing. This enhancement will be beneficial to operators, as it will improve fuel efficiency by accommodating more aircraft to operate at optimum

cruising levels. Operators' economic performance, as well as overall carbon footprint, will be significantly improved. IATA also expressed their full support to this initiative.

2.2 To progress this initiative, Hong Kong China conducted an online meeting with China, Vietnam and Singapore in February 2024. During the meeting, it was agreed that 20NM minimum longitudinal spacing would be applied between traffic pairs during the trial period based on the following conditions:

- a) aircraft are cruising at or above FL290;
- b) aircraft are equipped with serviceable ADS-B; and
- c) the longitudinal spacing between the two aircraft is constant or increasing.

2.3 It was also agreed that aircraft without serviceable ADS-B operating on air routes L642 and M771 shall cruise at FL280 or below as per current practice, unless prior approval has been obtained from the receiving ATCC/ACC concerned. Singapore mentioned during the meeting that they had adopted a similar approach in handling aircraft without serviceable ADS-B.

2.4 During the meeting, Singapore also confirmed that they had already been applying 20NM minimum longitudinal spacing on L642 and M771 with Vietnam, and the relevant procedures were covered in the LOA. Similar to the arrangement between Hong Kong ATCC and Sanya ACC, Singapore and Vietnam are using Mach number technique (MNT) for chasing traffic pairs to determine the required longitudinal spacing.

2.5 Following the fruitful outcome of the meeting, an Addendum to LOA between Hong Kong ATCC and Sanya ACC, detailing the requirements of the trial application of minimum 20NM longitudinal spacing, was signed in early March 2024. Additionally, a MOU between China and Vietnam was planned to be signed in March/April 2024.

2.6 The tentative commencement date of the trial is 7 May 2024 as agreed by all concerned States/Administrations during the online meeting. The trial will run from 0200 to 1200 UTC daily until further notice with regular reviews when needed.

3 ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) share their experience and take similar initiative to optimise the capacity of other major air routes in the APAC region; and
- c) discuss any relevant matters as appropriate.

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