



ICAO

*International Civil Aviation Organization*

**Twelve Meeting of the South China Sea Traffic Flow Review Group (SCSTFRG/13)**

Beijing, China, 16 – 18 July 2025

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**Agenda Item 3: Review of the Existing Traffic Flow Route Structures in SCS Airspace and Identifying Priorities**

**Strategic Implementation of Free Route Operation (FRTO) Framework in Kuala Lumpur FIR And Kota Kinabalu FIR**

(Presented by Malaysia)

**SUMMARY**

This paper details the proactive steps taken by Malaysia to outline strategic approach in implementing the Free-Route Operation (FRTO) in Kuala Lumpur FIR and Kota Kinabalu FIR. Ensuring the implementation is in accordance with the standards set forth by the Aviation System Block Upgrades (ASBU), the framework is devised to align with the Asia-Pacific (APAC) Seamless Air Navigation Services (ANS) Plan aimed at enhancing aviation safety and efficiency across the Asia-Pacific region.

**1. INTRODUCTION**

1.1 To effectively address the complex and dynamic demands of the aviation industry, it is imperative that Air Navigation Service Providers (ANSP) continuously adapt to these evolving changes. Understanding the specific needs of this industry is crucial for ensuring the efficacy and safety of navigation services.

1.2 In line with the mission statement of the Civil Aviation Authority of Malaysia (CAAM), which emphasises a commitment to "continuously enhance safety and security for a sustainable aviation industry," Malaysia is focused on sustainable aviation. This dedication is reflected in the optimisation of flight efficiency through the strategic planning for the implementation of FRTO.

**2. DISCUSSION**

Framework

2.1 To ensure a focused and strategic approach to the implementation of the FRTO, Malaysia has undertaken the important step of [publishing a comprehensive strategic framework](#). This framework details the expected timeline and key milestones for successful FRTO implementation.

2.2 By providing this structured plan, Malaysia aims to facilitate a smoother transition, ensuring all stakeholders are aligned and well-prepared for the changes ahead.

Current Progress

2.3 Flexible Use of Airspace (FUA)

2.3.1 FUA has been extensively implemented within Malaysian airspace, with a particular emphasis on accommodating military operations. This approach allows for the dynamic allocation of airspace resources, ensuring that military activities are efficiently integrated with civilian air traffic.

2.3.2 However, the current focus remains predominantly on meeting the needs of military activities, highlighting the ongoing necessity to balance defence requirements with the demands of civilian aviation.

2.3.3 Malaysia plans to introduce Airspace Management Cells (AMC) to cater to military and civil effective use of airspace. This would enable a more streamlined and responsive airspace management system.

2.4 Direct Route Operation (DRO)

2.4.1 In the current dynamic environment of air traffic management, CAAM ATCOs frequently employ direct routing strategies to efficiently resolve traffic and minimise flight paths. This practice, however, lacks formalised pre-tactical and strategic arrangements.

2.4.2 To effectively address this issue and support airlines in improving flight planning, Malaysia will implement DRO within the Kuala Lumpur (KL) Flight Information Region (FIR). The trial phase for KL FIR is set to commence in June 2025 and will extend over a duration of three months.

2.4.3 The implementation of DRO within Kota Kinabalu (KK) FIR will proceed in alignment with the framework strategic approach targeted to be implemented by the end of 2025.

Future Planning (Phased approach)

2.5 User-Preferred Route (UPR)

2.5.1 With the broad implementation of cross-boundary UPR implemented by other APAC states, Malaysia sees the opportunity for a targeted pursuit of UPR implementation within KL FIR and KK FIR. A thorough traffic management review is underway following the national framework set.

2.5.2 Further discussion and knowledge sharing with related ANSPs is necessary to ensure a seamless application and implementation that would benefit airspace users.

2.6 Free Route Airspace (FRA)

2.6.1 Malaysia expresses strong support for the implementation of the FRA within APAC states.

2.6.2 While this initiative represents significant progress toward enhancing aviation safety and efficiency in the region, it is crucial to engage in comprehensive discussions and coordinated efforts among all stakeholders.

- 2.6.3        Such collaboration will ensure that the specific challenges, requirements, and opportunities unique to each APAC state are thoroughly addressed, paving the way for effective and harmonious implementation.

**3.        ACTION BY THE MEETING**

- 3.1        The meeting is invited to:
- a)    note the information contained in this paper;
  - b)    discuss any relevant matters as appropriate.

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