



ICAO

International Civil Aviation Organization

The Eleventh Meeting of the South China Sea Traffic Flow Review Group (SCSTFRG/11)

Bangkok, Thailand, 4 – 6 July 2023

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

SAIOSEACG MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents outcomes from the Second Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/2) for the review and action by SCSTFRG.

1. INTRODUCTION

1.1 The SAIOSEACG was established in accordance with Decision APANPIRG/32/5 to create the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG). This group was formed by merging the SAIOACG and SEACG meetings to improve the efficiency of States and ICAO. Its purpose is to identify, plan and implement Air Traffic Management improvements within the airspace that serves the South Asian, Indian Ocean and Southeast Asian regions.

1.2 The SAIOSEACG/2 meeting was held in Bangkok, Thailand from 20 – 24 March 2023. The meeting was attended by 65 participants from Australia, Bangladesh, Cambodia, China, Hong Kong, India, Indonesia, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Philippines, Singapore, Thailand, United States of America, Viet Nam, IATA, IFATCA and ICAO. The relevant presentations and papers are available at <https://www.icao.int/APAC/Meetings/Pages/2023-SAIOSEACG-2.aspx>

2. DISCUSSION

State of Aviation Post-COVID-19

2.1 The meeting reviewed IATA's presentation of economic and traffic data that showed the impact of COVID-19 on the airline industry and the progress of recovery since international borders began to reopen. The meeting noted that all markets were beginning to show strong recovery, and air traffic globally is expected to be fully recovered by 2025, with Asia Pacific being in the later stage of recovery.

Relevant Meeting Outcomes

2.2 The SAIOSEACG/2 meeting discussed the outcomes of the Tenth Meeting of the South China Sea Traffic Flow Review Group (SCSTFRG/10). It took note of updated information regarding

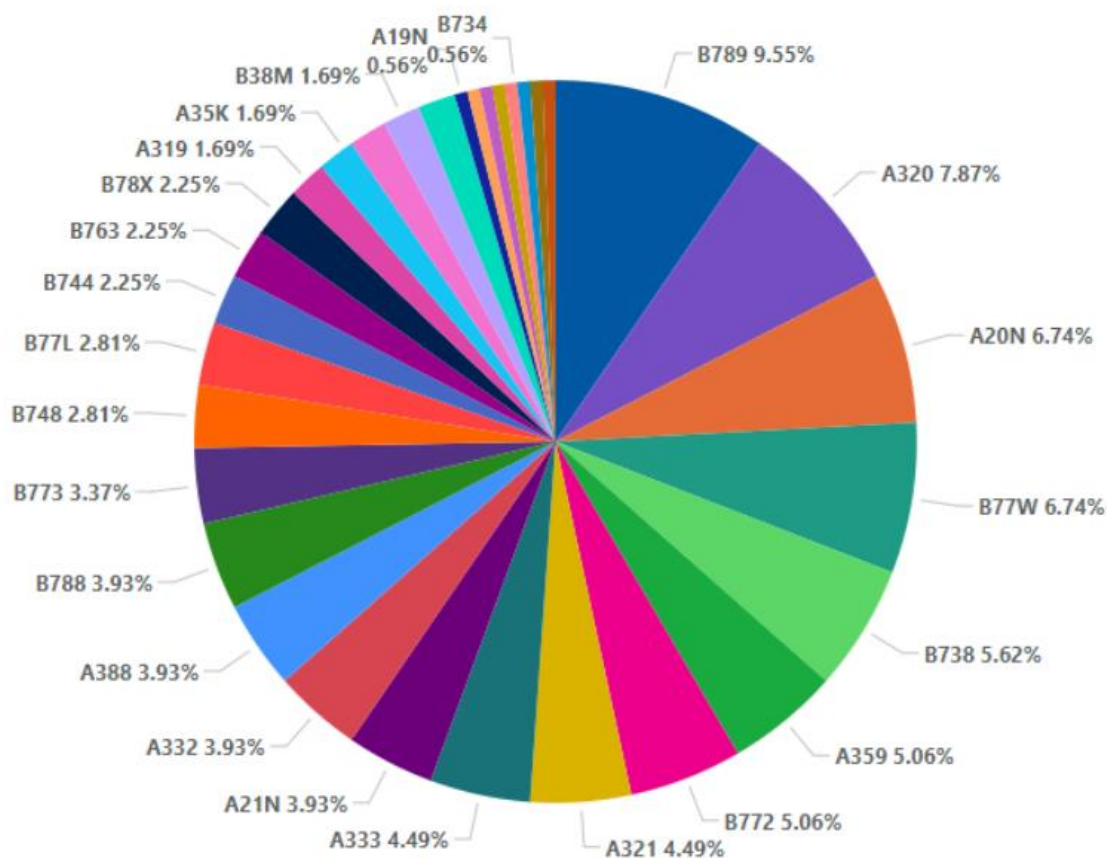
the SCSTFRG Priority Areas. This included the implementation of a 20 NM longitudinal spacing on ATS routes A1 and A202, and a 50 NM longitudinal spacing on routes A461 and A583.

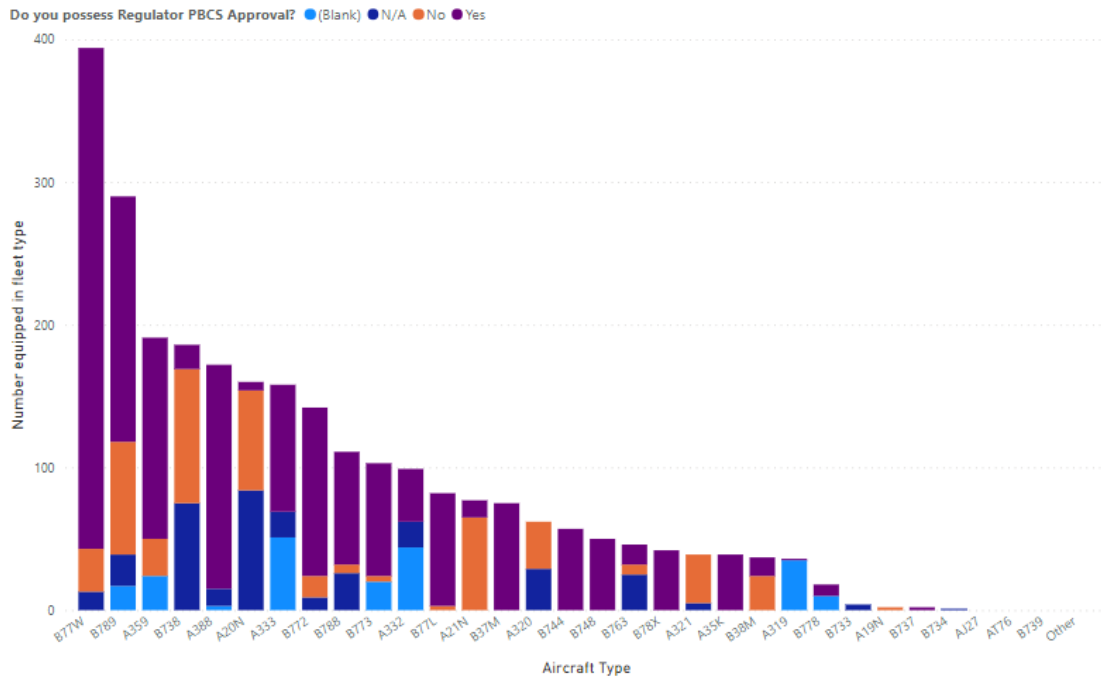
2.3 SCSTFRG/10 also discussed the need to review the existing South China Sea Flight Level Allocation Scheme (FLAS) and Flight Level Orientation Scheme (FLOS). It was decided that current FLAS/FLOS data should be provided to the ICAO APAC Regional Sub-office. Furthermore, the meeting heard updates on the planned CNS/ATM capabilities and initiatives from Indonesia, the Philippines, and Malaysia.

2.4 During the meeting, The Philippines reminded the members about the ATS surveillance and VHF radio coverage of the South China Sea (SCS) area, which was presented in figure 3 and 4 of WP02. This information represents the collective capability of member states in the area and not necessarily the capability of a state in its Flight Information Region (FIR).

Update on IATA Equipage Survey

2.5 IATA presented an update on its Aircraft Equipage and Capacity Survey conducted in 2022 for Asia-Pacific and North Asia, with an increase in the percentage of entire fleets reported as CPDLC and ADS-C equipped. The survey also showed an increase in RNP2 capability for en-route, and IATA emphasized the need to analyze the data closely to derive desired equipage assessment. Hong Kong China and India requested more detailed illustrations of the type of PBN in the form of Bar Chart, which IATA agreed to consider for future data analysis.





Having both PBCS capability and regulatory approval

Concept Review of South China Sea Airspace Structure

2.1 The International Federation of Air Traffic Controllers' Associations (IFATCA) presented a phased upgrade concept to the South China Sea airspace, involving the implementation of ICAO Standards and Recommended Practices (SARPs) and procedures. The approach includes reviews of Flight Level Orientation Scheme (FLOS), South China Sea route structure, and Flight Level Allocation Scheme (FLAS) for parallel routes. The proposal received a positive response from both the International Air Transport Association (IATA) and ICAO. The meeting recognized that any change to the FLAS/FLOS procedures could ripple throughout the whole South China Sea area and require extensive coordination. This topic will be further discussed within the WP/11 presented by IFATCA.

Progress Update on Capacity Optimization of Air Routes L642 and M771

2.2 Hong Kong China presented their plan to double the airspace capacity of major trunk routes L642 and M771 by reducing the minimum aircraft separation from 50 NM to 20 NM. This is expected to provide environmental and economic benefits. The implementation of 20 NM longitudinal spacing was identified as a Priority 2 issue by SCSTFRG. To ensure safe and orderly air traffic flow, it was suggested that all concerned States/Administrations participate and contribute actively. A side meeting was proposed to further discuss the issue, with China, Singapore, and Vietnam agreeing to participate.

2.3 The side meeting between China, Hong Kong China, Singapore and Vietnam was held where Hong Kong China's proposal to implement 20 NM longitudinal spacing on ATS Routes L642 and M771 was discussed. All parties expressed support for the proposal. However, China voiced some concerns about the details, such as the use of FL390 and the simultaneous signing of all Letter of Agreements (LOAs). They suggested updating the point of contact for all participants to increase coordination effectiveness. The aim was to finalize the details for the trial implementation of 20 NM longitudinal spacing before the SCSTFRG/11 meeting. This topic will be further discussed within the WP/04 presented by Hong Kong China.

Optimization of Air Routes A461, M501 and A583

2.4 The meeting was updated on the successful enhancement of the 30 NM longitudinal spacing utilization on air routes A461 and M501 within the Manila FIR and Hong Kong FIR. The Philippines and Hong Kong China are planning to reduce the spacing on ATS route A583 to 30 NM by Q4 2023 in preparation for the anticipated return of pre-COVID-19 traffic levels in 2024. Indonesia expressed readiness to cooperate with the Philippines on the optimization of ATS route A461.

Proposal Implementation of 30 NM or Closer Spacing

2.5 Indonesia is ready to apply 30 NM separation based on positive results from an IATA survey on fleet equipage and improved surveillance coverage in Ujung Pandang FIR. ICAO thanked Indonesia for the initiative and invited them to present a WP on this topic at the upcoming SCSTFRG/11 for further discussion. This topic will be further discussed within the WP/05 presented by Indonesia.

Indonesia's Corrective Action to Manage Missing Departure Messages

2.6 Indonesia presented their solutions for managing missing departure messages, a problem they diagnosed in the first half of 2021. Two main causes were identified: improperly handled departure messages by the system and unpaired radar and Flight Plan (FPL) data. Indonesia has improved their system to minimize missing departure messages through automatic message-sending and alerting of failed departure messaging. ICAO thanked Indonesia for their corrective action.

Asia/Pacific Region ATS Route Catalogue

2.7 The meeting discussed the review process by the ICAO APAC Regional Sub-Office for the Asia/Pacific Region ATS Route Catalogue. The meeting considered new ATS route proposals submitted by Malaysia and Thailand for incorporation into the Route Catalogue. There were divergences and concerns expressed by different States and administrations, and some proposals were retained while others were subject to further evaluation or modification. This topic will be further discussed within the WP/08.

Development of VPH-ROT Route

2.8 Thailand introduced a process to establish direct routes connecting Hanoi, Bangkok, and Phnom Penh, offering benefits like reduced flight time and fuel savings. Vietnam proposed further alignment of the new route with existing primary routes within Hanoi FIR. It suggested a tripartite meeting involving all States concerned to discuss the details. The new route proposal was subsequently incorporated into the Asia/Pacific Region ATS Route Catalogue as Mekong 01.

Civil/Military Cooperation in The ATM Contingency Operation

2.9 Indonesia presented lessons learned from major ATM contingency events in the last three years, including the need for close cooperation and collaboration with military authorities and civil aviation authorities responsible for adjacent FIRs in a harmonized manner. Singapore emphasized the importance of implementing new capabilities such as Flight and Flow Information for a Collaborative Environment (FF-ICE) and System Wide Information Management (SWIM) to improve the resilience of the ATM system during contingency scenarios. ICAO stressed the importance of having an appropriate contingency management body in place and conducting contingency exercises.

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.