

INTERNATIONAL CIVIL AVIATION ORGANIZATION



REPORT OF THE FIFTH MEETING OF THE SOUTH ASIA, INDIAN OCEAN AND SOUTHEAST ASIA ATM COORDINATION GROUP (SAIOSEACG/5)

BANGKOK, THAILAND, 13 – 16 JANUARY 2026

The views expressed in this Report should be taken as those of the
Meeting and not the Organization

Approved by the Meeting
and published by the ICAO Asia and Pacific Office, Bangkok

SAIOSEACG/5
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INTRODUCTION

Meeting

1.1 The Fifth Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/5) was held in Bangkok, Thailand, from 13 to 16 January 2026.

Attendance

2.1 The Meeting was attended by 72 participants from Bangladesh, Bhutan, China, Hong Kong China, India, Indonesia, Lao PDR, Malaysia, Maldives, Pakistan, Philippines, Singapore, Thailand, United States, Viet Nam, IATA and ICAO.

2.2 A list of participants is appended in **Appendix A to the report**.

Officer and Secretariat

3.1 Mr. Gabriel Cheng, Chief of Procedures and Evaluation, Air Traffic Management Division, Civil Aviation Department of Hong Kong China, and Mr. Naresh Kumar Chaudhary, General Manager (Air Traffic Management), Directorate of Air Space Management, Airports Authority of India presided over the meeting throughout its duration as Co-Chairs of SAIOSEACG.

3.2 Mr. Hyuk Jin Kwon, Regional Officer Air Traffic Management (ATM), ICAO Asia and Pacific (APAC) Regional Sub-Office (RSO), was the Secretary for the Meeting. He was assisted by Ms. Zhang Ying, Deputy Chief of RSO and Ms. Yanru Chen, Programme Assistant, of the ICAO APAC RSO. The Meeting was also supported by Mr. Mior Adli Bin Mior Sallehuddin, Regional Officer ATM, and Mr. Tak Chuen Chui, AIM/ATM Officer.

Opening of the Meeting

4.1 Mr. Gabriel Cheng and Mr. Naresh Kumar Chaudhary welcomed participants to the Meeting.

4.2 On behalf of Mr. Tao Ma, Regional Director of ICAO APAC Office, Mr. Hyuk Jin Kwon welcomed participants to the Meeting.

4.3 **DISCLAIMER:** The presentation of material in this report does not imply the expression of any opinion whatsoever on the part of ICAO, APANPIRG, the ATM Sub-Group of APANPIRG or SAIOSEACG concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Language and Documentation

5.1 The working language of the meeting and all documentation was English. 20 Working Papers (WP), five Information Papers (IP), nine flimsies and two presentations, were considered by the Meeting.

5.2 The list of Working and Information Papers is appended at **Appendix B to the Report** (IP01).

Draft Conclusions, Draft Decisions and Decisions of SAIOSEACG – Definition

6.1 SAIOSEACG recorded their actions in the form of Draft Conclusions, Draft Decisions and Decisions within the following definitions:

- a) **Draft Conclusions** deal with matters that, according to APANPIRG terms of reference, require the attention of States, or action by the ICAO in accordance with established procedures;
- b) **Draft Decisions** deal with the matters of concern only to APANPIRG and its contributory bodies; and
- c) **Decisions** of SAIOSEACG that relate solely to matters dealing with the internal working arrangements.

List of Decisions and Draft Conclusions/Decisions

7.1 List of Draft Conclusions/Draft Decisions/Decisions

Nil.

REPORT ON AGENDA ITEMS

Agenda Item 1: Adoption of Agenda

Adoption of Agenda (WP01)

- 1.1 The provisional agenda (WP01) was adopted by the Meeting.
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Agenda Item 2: Review of Outcomes of Related Meetings

Review of Relevant Meeting Outcomes (WP02)

2.1 ICAO reviewed the summaries of several regional meetings in 2025, related to the progress on ATM, airspace modernization, and regional cooperation. These included the ATFM/SG/15, CNS SG/29, ATM/SG/13, and AAC/5 meetings. Together, they focused on improving airspace efficiency, safety, and coordination across the APAC Region.

2.2 Overall, the meetings in 2025 reinforced the need for closer cooperation, consistent implementation of agreed procedures, and continued monitoring to support safe, efficient, and harmonized air navigation across the APAC Region.

2.3 Key discussions at ATFM/SG/15 focused on improving air traffic flow through better coordination, use of performance-based separation, and stronger data exchange. States/Administrations discussed reducing congestion through measures such as revised routing, reduced separation minima, and improved use of surveillance and data link technologies. Challenges such as missing departure message and inconsistent implementation of procedures were also highlighted.

2.4 CNS SG/29 reviewed progress on modernizing communication, navigation, and surveillance systems. The meeting supported wider use of system-wide information management (SWIM), improved data sharing, and better monitoring of system performance. Updates were also shared on managing airspace safety risks, including large height deviations and GNSS interference.

2.5 ATM/SG/13 advanced several strategic initiatives, including Project 30/10 to reduce separation minima, the introduction of trajectory-based operations (TBO), and improved contingency planning for congested airspace. The meeting also emphasized stronger coordination among States/Administrations and the need for reliable data to support regional traffic flow management.

2.6 The AAC/5 highlighted ongoing modernization efforts by air navigation service providers, including new technologies, cross-border coordination, and operational trials such as free route operations. It also reviewed progress on capacity-building initiatives and future work programs to support safer and more efficient regional airspace management.

2.7 India informed the Meeting that 20 NM longitudinal separation using space-based Automatic Dependent Surveillance – Broadcast (SB ADS-B) had been permanently implemented on ATS routes L301/L639 in Mumbai Flight Information Region (FIR). Additionally, a trial implementation was currently ongoing on ATS route N571 since 20 August 2025 for limited hours. 24-hour trial had commenced from 1 January 2026.

South China Sea Traffic Flow Review Group Outcomes (WP03)

2.8 The Secretariat presented the key outcomes of the Thirteenth Meeting of the South China Sea Traffic Flow Review Group (SCSTFRG/13, Beijing, China, 16 – 18 July 2025), focusing on the progress of improving airspace efficiency, safety, and coordination in the South China Sea region. The meeting confirmed that States/Administration were moving toward more efficient separation minimums, better use of modern surveillance, and more flexible airspace management to handle growing traffic demand.

2.9 Reducing separation on major air traffic service (ATS) routes, particularly on ATS routes L642 and M771, where 20 NM spacing had shown positive results with no safety findings, was highlighted during the meeting. Participants also supported further use of 30 NM separation during weather-related disruptions and agreed to continue improving route structures, including implementing new and more efficient ATS routes.

2.10 The meeting also highlighted the need to modernize older concepts such as flight level allocation and weather deviation procedures, which no longer match current traffic volumes. ICAO presented a phased roadmap toward more dynamic and performance-based airspace use, including future application of Free Route Airspace (FRA) and advanced traffic management tools.

2.11 In addition, several States reported progress in improving CNS capabilities, including wider use of ADS-B to enhance surveillance coverage, and better coordination through data sharing. The importance of regional cooperation, information exchange, and alignment of procedures was strongly emphasized.

Bay of Bengal Traffic Flow Review Group Outcomes (WP04)

2.12 The Secretariat presented the key outcomes of the Seventh Meeting of the Bay of Bengal Traffic Flow Review Group meeting (BOBTFRG/7, video teleconference, 9 – 11 December 2025). This region continues to make steady progress in modernizing ATM through reduced separation minima, upgraded CNS infrastructure, and closer regional coordination. While differences in system readiness and aircraft equipment remained, States were progressing toward performance-based and harmonized operations, improving capacity, efficiency, and environmental performance.

2.13 Significant advances were reported in the implementation of more efficient separation minimums, in line with the Project 30/10 expectations. States were gradually shifting from 50 NM longitudinal separation to 30 NM and, where conditions permit, 20 NM. Malaysia began a one-year trial on the implementation of 30 NM performance-based separation on ATS route N571, while India applied 20 NM separation using SB ADS-B, and Sri Lanka was preparing for RNP 4 operations.

2.14 Other States also shared improvements in ATM systems and operational concepts, including Air Traffic Flow Management (ATFM) integration, FRA initiatives, and TBO enablers.

2.15 CNS modernization continued across the region, with expanded use of Automatic Dependent Surveillance – Contract (ADS-C), Controller Pilot Data Link Communication (CPDLC), SB ADS-B, ATS Message Handling System (AMHS), and ATS Inter-Facility Data Communication (AIDC). Most FIRs meet minimum data link performance requirements, with further actions underway to reach higher targets. Clear implementation milestones were agreed, with States adopting a flexible, capability-based approach to timelines to reflect varying levels of readiness across the region.

2.16 The Meeting was also provided with information about the reactivation of BOBCAT ATFM procedures, which had effectively balanced the traffic demand with limited airspace capacity during the peak nighttime period in the Kabul FIR.

2.17 India suggested that ICAO invite Myanmar to participate in the BOBTFRG, noting Myanmar's relevance to meeting discussion.

2.18 In response, the Secretariat clarified that Myanmar's participation as a State under ICAO was not recognized due to the prevailing situation. In this regard, concerned States/Administrations were recommended to engage in bilateral operational discussions with Myanmar.

RASMAG Outcomes (WP05)

2.19 The Fifteenth Meeting of the FANS Interoperability Team-Asia (FIT-Asia/15) and the Thirtieth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/30) were held in Bangkok, Thailand, from 24 to 27 June 2025 and 14 to 17 July 2025 respectively.

2.20 The FIT-Asia/15 was provided with updated information of data link performance reports by various States and was reminded that the revised colour key code for "yellow – acceptable performance" had been discussed at FIT-Asia/14, and that RASMAG/29, **Conclusion RASMAG/29-1: Revised colour key codes for Asia/Pacific PBCS reporting templates** referred. States were urged to use the latest template to ensure accurate data collection and analysis; therefore, all future submissions should align with the updated format.

Asia/Pacific Region Combined PBCS Monitoring Report

2.21 Indonesia and Malaysia presented the aggregated data link performance monitoring report for the APAC region, prepared with support from Japan. For the combined data for Required Surveillance Performance (RSP) across all media types in 2024, the 95% criteria were achieved in all Flight Information Regions (FIRs). None of the FIRs met the 99.9% criteria, but all FIRs except Chennai and Kolkata achieved a clearance rate of 99.0%.

2.22 The Required Communication Performance (RCP) 240 performance in the APAC region was generally robust in 2024, with most FIRs meeting or exceeding the 95% criteria for Actual Communication Performance (ACP) and Actual Communication Technical Performance (ACTP). However, performance against the 99.9% criteria showed greater variability, with several FIRs, including Kolkata, Kuala Lumpur and Manila, underperforming in at least one half of the year.

APAC Consolidated Safety Report

2.23 The Monitoring Agency for the Asian Region (MAAR) presented a combined summary of the safety analysis results for the APAC Region, on behalf of the APAC regional monitoring agencies (RMAs) and enroute monitoring agencies (EMAs). The full *APAC Consolidated Safety Report* could be found in **SAIOSEACG/5 WP/05 Appendix A**.

2.24 The estimated vertical collision risk for 2024 for the Asia area met target level of safety, both in vertical and horizontal collision risks.

Hot Spots for RASMAG

2.25 RASMAG/30 agreed to classify three hotspots D1 (Fukuoka/Manila), D8 (Manila/Ujung Pandang) and J (Jakarta/Kota Kinabalu/Singapore) as potential non-hotspots due to decreasing risk and mitigation implemented. No new hotspots were proposed.

Classification and Reporting for Non-RVSM Approved Aircraft Operating in RVSM Airspace and Occurrences Caused by GNSS Radio Frequency Interference

2.26 MAAR provided some guidance to clarify the classification and reporting for both non-RVSM approved aircraft operating in Reduced Vertical Separation Minimum (RVSM) airspace and occurrences caused by Global Navigation Satellite System (GNSS) Radio Frequency Interference (RFI).

2.27 Large Height Deviation (LHD) Category L scenarios involved situations where an aircraft was provided with RVSM separation despite not being RVSM approved. The possible scenarios that should be reported as LHD Category L were provided and a mapping to the current LHD/Large Longitudinal Error (LLE)/Large Lateral Deviation (LLD) category was proposed.

2.28 However, after discussion, RASMAG/30 agreed to the formation of a new LHD/LLE/LLD category for the classification of GNSS RFI occurrences leading to LHD/LLE/LLD. RASMAG/30 agreed to ***Conclusion RASMAG/30-1: New LHD/LLE/LLD Category 'R' for GNSS RFI occurrences in Asia and Pacific Region.***

Large Lateral Deviation Reporting Criteria in Asia and Pacific Region

2.29 RASMAG discussed the proposed revision of LLD reporting criteria in the Asia and Pacific Region, specifically considering the reduction of the current 10 NM threshold. Two previously proposed approaches: a 5 NM reporting threshold presented by Japan Airspace Safety Monitoring Agency (JASMA) and the comprehensive deviation reporting (all lateral deviations regardless of deviation magnitude) suggested by Pacific Approvals Registry and Monitoring Organization (PARMO).

2.30 Both methodologies presented valuable perspectives for consideration. In conclusion, the adoption of a 5 NM threshold for LLD reporting would align with existing ICAO standards while maintaining operational efficiency. As a result of discussions, RASMAG agreed that the criteria could be flexible, and agreed to ***Conclusion RASMAG/30-2: Large Lateral Deviation Reporting Criteria in Asia and Pacific Region.***

Agenda Item 3: Review of Current Operations and Problem Areas

APANPIRG ATM and Airspace Safety Deficiencies List (WP06)

3.1 The Secretariat presented a list of Air Navigation Deficiencies noted by the Thirty-Sixth Meeting of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/36) in the ATM and Airspace Safety fields. The list was based on the uniform methodology for the identification, assessment and reporting of such deficiencies as described in Part V of the APANPIRG Procedural Handbook. APANPIRG Deficiencies were issued in the following areas:

- a) Aeronautical Information Management (AIM);
- b) Aeronautical Data Area of Responsibility;
- c) Designation of Restricted Areas Deficiencies;
- d) Airspace Classification;
- e) Air Traffic Services (ATS) Messages and Flight Planning;
- f) Search and Rescue (SAR);
- g) ATS Datalink; and
- h) Airspace Safety Reporting.

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Report on Agenda Items

3.2 As approved by APANPIRG/36, four deficiencies in the following fields were removed:

- a) Designation of Restricted Areas Deficiencies – Australia;
- b) Search and Rescue (SAR) – Thailand;
- c) Airspace Safety Reporting – Philippines; and
- d) ATS Datalink – India.

3.3 Details of the ATM and Airspace Safety Deficiencies agreed by APANPIRG/36 were provided in **SAIOSEACG/5 WP06 Attachment A**.

3.4 India acknowledged the efforts undertaken by Australia and indicated that it would draw upon Australia’s work as a reference in coordinating with ICAO to address the identified deficiency concerning non-compliance with ICAO Annex 2 requirements for the designation of Restricted Areas within the Mumbai FIR.

3.5 Regarding ATS Messages and Flight Planning, Thailand reported that, based on the collected data in 2025, the proportion of missing departure messages from Maldives had consistently remained below the established threshold (less than 5 percent). The official dataset would be submitted in due course as supporting evidence for the removal of Maldives’ deficiency related to non-compliance with ATS message addressing procedures as specified in *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM, ICAO Doc 4444) Section 11.4.

3.6 Bangladesh informed the Meeting that an AIS Quality Management System had been developed in accordance with ICAO Annex 15 Chapter 3. Furthermore, service level agreements had been established to enhance the efficacy of its data quality management efforts. Bangladesh further assured that close coordination would be maintained with ICAO to resolve the identified deficiency in a timely manner.

Air Navigation Services USOAP Update (WP07)

3.7 The Secretariat provided information on the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA). The paper provided update of the 2024 edition of the USOAP CMA Protocol Questions (PQs), and annual update of the regional USOAP Air Navigation Services (ANS) implementation status.

3.8 A comparison of the PQs in the 2020 and 2024 editions and number of changes for the ANS audit area were shown in **Table 1**.

Table 1: Comparison of the PQs in the 2020 and 2024 Editions and Changes in ANS Audit Area

Area	Number of 2020 PQs	Number of 2024 PQs	
ANS	122	New	11
		Deleted	5
		Revised	108
		Merged	0
		No Change	9

3.9 **Figure 1** provide an average level of Effective Implementation (EI) scores for the 37 States in the APAC Region that had been audited or received USOAP activities. As of 19 December 2025, the average ANS-related EI of APAC Region was 68.32 percent, with 22 States achieving an ANS EI equal to or above the regional average.

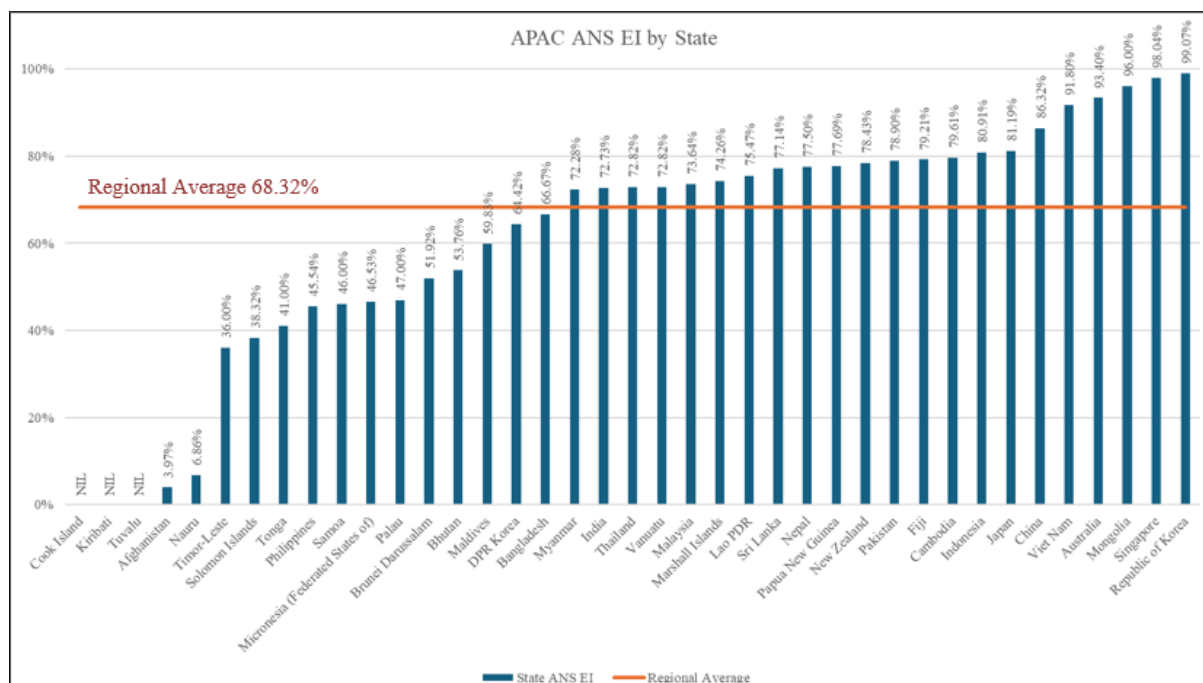


Figure 1: USOAP ANS EI Comparisons by State (19 December 2025)

Application of ATC Separation Minimums (WP08)

3.10 The Meeting was updated on the APAC Region’s implementation of air traffic control (ATC) separation minimums as per the *Asia/Pacific Seamless ANS Plan*. The Secretariat highlighted the annual survey initiated by the ICAO APAC Office since 2017, which would assess ATC horizontal separation standards and Flight Level Allocation Schemes (FLAS) to enhance operational efficiency and align with ICAO’s global standards.

3.11 The Meeting was reminded of the **Recommendation 3.1/1 – Project 30/10 – Optimized implementation of longitudinal separation minima** from the Fourteenth Air Navigation Conference (AN-Conf/14) to implement longitudinal separations of 55.5 km (30 NM) or less in oceanic and remote airspace, and 19 km (10 NM) or less elsewhere.

3.12 The Meeting was informed that only 10 APAC Administrations (23 percent) utilized 30 NM or less horizontal separation in the “Category R within State/Administration’s FIR” and only four Administrations utilized 30 NM or less in the “Category R/S → R TOC ATC Horizontal Spacing at Inbound FIR TOC Points”.

3.13 The Meeting was informed of the **Decision APANPIRG/36/7: Establishment of APAC Project 30/10 Task Force**, which aimed to provide the regional roadmap for the implementation of more efficient separation minimum in the APAC Region, in accordance with AN-Conf/14 Recommendation 3.1/1.

3.14 Hong Kong China highlighted a potential discrepancy between the graphical categorization and the accompanying data, specifically regarding the illustration representing Category S → S TOC ATC Horizontal Spacing at Inbound FIR TOC Points (SAIOSEACG/5 WP08 Figure 6). The Secretariat agreed to review the dataset and incorporate necessary revisions in future updates.

3.15 Viet Nam provided an update to **SAIOSEACG/5 WP08 paragraph 2.6**, advising that 5 NM separation was applied in the Ha Noi and Ho Chi Minh FIRs, while 10 NM was applied in Ho Chi Minh FIR oceanic airspace. The Secretariat welcomed this update and encouraged Viet Nam to include the information in its upcoming survey response.

3.16 Thailand suggested that, when preparing the graphical representation of the survey results, the inclusion of the most recent response year would improve clarity and facilitate easier interpretation.

3.17 The Chair inquired about the number of inbound TOC points evaluated in **SAIOSEACG/5 WP08 Figure 7 and Table 2**. The Secretariat explained that, due to converging routes and asymmetric bi-directional operations at various TOC points, the evaluation was conducted based on individual routing separation spacing, which accounts for the significant number of TOC points reflected in the analysis.

Enhancing Capacity on ATS Routes during Large-Scale Weather Deviation (LSWD) Procedures (WP10)

3.18 Singapore presented the application of Large-Scale Weather Deviation (LSWD) procedures on the six parallel ATS routes over South China Sea, noting that the LSWD procedures had been introduced to maintain safety during adverse weather by reducing usable flight levels to ensure vertical separation. This paper highlighted that these procedures were developed in a largely procedural environment based on RNP 10 standards and had not been reviewed since, despite significant advancements in CNS, ATFM, and meteorological capabilities. Frequent LSWD activations observed in November 2025 indicated a continued impact on airspace capacity.

3.19 Singapore identified opportunities to optimize capacity during large scale weather events without compromising safety and invited States/Administrations to share their LSWD activation criteria and coordination practices. It was suggested that improvements could include revising separation and deviation parameters using enhanced CNS capabilities, considering ATFM measures as alternatives to level restrictions, and exploring a transition from the current Flight Level Allocation Scheme (FLAS) to the ICAO standard Flight Level Orientation Scheme (FLOS) to address capacity constraints brought about by the LSWD procedures.

3.20 The Meeting had considered establishing a small working group under the ambit of SCSTFRG to study the feasibility of reviewing FLAS/FLOS operations on the six parallel ATS routes over the South China Sea and to develop an implementation plan for the FLAS/FLOS transition. After much deliberation, it was agreed that the matter was part of the SCSTFRG Priority Area 4 and would be more appropriately discussed at future SCSTFRG meetings. Progress updates on this matter would be reported to SAIOSEACG.

3.21 In relation to the activation of the LSWD, the existing criteria specified that if five or more aircraft were expected to deviate more than 10 NM within 30 minutes, and where those deviations cannot be completed within one FIR, LSWD procedures could be applied. A NOTAM would be published to notify airspace users of the LSWD conditions.

3.22 In response to a query, the Secretariat clarified that the six parallel ATS routes over the South China Sea (i.e. L642, M771, N892, L625, N884 and M767) were unidirectional, with FL310, FL320, FL350, FL360, FL390 and FL400 allocated to each ATS routes, irrespective of flight direction.

Update on Large-Scale Weather Deviation (LSWD) Statistics on ATS Routes L642 and M771 (IP04)

3.23 Singapore provided an update on the frequency of LSWD activations on ATS routes L642 and M771, from June to November 2025, including the longitudinal spacing applied, in response to Action Item 4/2 of the SAIOSEACG task list. The update followed earlier discussions at SAIOSEACG/4 and SCSTFRG/13 on reducing additional buffers for longitudinal spacing as far as practicable.

3.24 The data indicated that the majority of LSWD activations (79 percent) continued to apply 50 NM longitudinal spacing, often in conjunction with flow control measures. This paper highlighted the potential to optimize capacity during LSWD activations through more frequent and consistent application of reduced longitudinal spacings of 30NM or less and continued coordination among concerned States/Administrations.

3.25 The concerned States/Administration discussed the feasibility of implementing a default longitudinal spacing of 20 NM for traffic operating on ATS routes L642 and M771, and the application 30 NM spacing in the event of LSWD. Acknowledging that this matter would require further deliberation, as suggested by the Chair, the concerned States/Administration agreed to provide updates at the next SCSTFRG meeting.

3.26 Singapore encouraged concerned States/Administration to share data related to LSWD operations.

Joint Initiative on the Enhancement of Longitudinal Separation on ATS Routes between Manila and Ujung Pandang FIR (WP11)

3.27 At SCSTFRG/13, Indonesia proposed working with the Philippines to reduce longitudinal separation to 30 NM on ATS routes between the Ujung Pandang and Manila FIRs. Philippines agreed, and both States confirmed their commitment to restart bilateral coordination to improve airspace capacity and efficiency.

3.28 Both States had agreed on a phased approach, with Phase 1 (trial implementation of 30 NM longitudinal spacing on ATS routes A461, B472, and G578 supported by surveillance and direct VHF communications) would commence on 1 April 2026. Phase 2 (trial implementation of 50 NM longitudinal spacing on ATS routes A339, B462 and B473) was planned for late 2026. This phase would require aircraft to be equipped with RNAV 10 (RNP 10), ADS-C, CPDLC, and compliance with RCP 240 and RSP 180 specifications.

3.29 The Chair commended Indonesia and the Philippines for their efforts in reducing longitudinal separation on the respective ATS routes, which would enhance enroute capacity and improved traffic flow. Indonesia and the Philippines were requested to provide a progress update at the next SCSTFRG meeting.

Progress on the Trial Implementation of Reduced Longitudinal Separation on Routes L642 and M771 (WP12)

3.30 China presented progress on the trial implementation of reduced longitudinal spacing on ATS routes L642 and M771, from 50 NM to 20 NM, which was launched in May 2024.

3.31 Acknowledging that ATS routes L642 and M771 were the main routes linking major cities in East and Southeast Asia, and to improve capacity and efficiency, Sanya FIR and neighboring FIRs (Hong Kong, Ho Chi Minh and Singapore) started a trial implementation of 20 NM longitudinal separation in May 2024.

3.32 By October 2025, the trial recorded nearly 3,000 operating hours and directly benefited over 4,100 flights. Results showed clear improvements in airspace capacity, flight flexibility, fuel efficiency, and coordination between FIRs. The trial expanded steadily, with daily operating hours and benefiting flights increasing significantly.

3.33 The trial also highlighted some issues, including inconsistent use of reduced separation, conservative spacing in catching-up situations, and the need for better coordination during weather or traffic disruptions.

3.34 States/Administration were encouraged to adopt 20 NM separation as the common standard on these ATS routes, supported by clear procedures, improved coordination, and continued CNS/ATM enhancements to ensure safe and efficient operations.

3.35 The Chair commended States/Administrations for their progress in implementing 20 NM longitudinal separation on ATS routes L642 and M771. The concerned States/Administration were requested to expedite the updating and signing of the Letter of Agreement (LOA) and to provide updates on their progress at the next SCSTFRG meeting.

Progress Update on the Implementation of 20 NM Longitudinal Spacing on Air Routes L642 and M771 (WP13)

3.36 Hong Kong China continued to advance efforts to optimize capacity on ATS routes L642 and M771. Following the successful implementation of 20 NM longitudinal separation endorsed by **Decision SCSTFRG/13-1**, the new LOA between Sanya ACC and Hong Kong ATCC had been prepared and it was currently under review by the authority and planned to be signed in 2026.

3.37 Despite full implementation, the application of 20 NM longitudinal spacing was frequently suspended in 2025 during the activation of the Large-Scale Weather Deviation Coordination Procedure (LSWDCP). During these periods, spacing often reverted to 50 NM or 10 minutes using the Mach Number Technique, which significantly degraded the effectiveness of this initiative. At SAIOSEACG/4, Singapore proposed applying 30 NM spacing on ATS routes L642 and M771 during LSWDCP whenever operationally feasible, which was supported by China, Hong Kong China, Indonesia, and IATA. Results presented at SCSTFRG/13 demonstrated that 30 NM separation delivered notable reductions in delays when compared with 50 NM separation.

3.38 With the increasing frequency of LSWDCP activations observed in 2025 and growing traffic demand on ATS routes L642 and M771, there was an urgent need to consistently apply 30 NM spacing during LSWD to sustain ATM efficiency. In line with South China Sea Large Scale Weather Deviation Procedures discussed at SAIOSEACG/4 on the continued application of surveillance separation and minimizing additional buffers for longitudinal spacing during LSWDCP, Hong Kong China would continue with close collaboration among ANSPs to mitigate delays arising from LSWD whenever operationally feasible.

Sideline Discussion on Large-Scale Weather Deviation (LSWD for ATS Routes L642 and M771 (Flimsy 09)

3.39 The Meeting was informed of the details of the sideline discussion on LSWD for ATS routes L642 and M771 between China, Hong Kong China, Singapore, Viet Nam and IATA on 14 January 2026.

3.40 The participating States/Administration reached consensus on the proposals to enhance the LSWD procedures to align with the significant improvements in CNS capabilities and the relevant coordination arrangements to optimize capacity and reduce delays during LSWD events.

3.41 In addition, participating States/Administration agreed to conduct a feasibility assessment on reviewing the current FLAS and FLOS for segments of the South China Sea parallel routes in the respective FIRs as progress of SCSTFRG Priority Area 4, and present the findings at SCSTFRG/14.

3.42 The Chair queried about the timeline for implementing the agreed arrangement. Singapore indicated readiness to implement, while China, Hong Kong China, and Viet Nam highlighted that internal coordination was still required. The Chair emphasized that operational benefits could be realized if implementation occurs during the 2026 weather season and requested concerned States/Administration to provide updates at SCSTFRG/14.

Implementation of PBCS Based 30 NM Separation on ATS Route N571 in Bay of Bengal Area (Flimsy 01)

3.43 India provided information on the successful implementation of performance-based longitudinal separation on ATS route N571, between AGELA and IGOGU, and further cross border operational trial with Malaysia. India also provided an insight into the challenges encountered in application of such performance-based longitudinal separation, particularly the lack of fleet capability and the Global Navigation Satellite System (GNSS) Radio Frequency Interference (RFI).

3.44 The lack of fleet equipage for PBCS resulted in the revision of the initial plan from exclusive PBCS airspace (FL360 – FL410) to non-exclusive PBCS airspace, considering that at least 45% of the fleet was non PBCS capable.

3.45 The Meeting noted the encouraging results of the trial and proposed to extend the trial to other ATS routes in the Bay of Bengal region (i.e. L510, N563 and P574). India expressed its commitment to formalize the application of separation based on PBCS to facilitate the airline community in better flight profiles and contribute to the reduction in carbon emission in this area of the Bay of Bengal.

3.46 The Meeting congratulated India on its initiatives to enhance airspace capacity and efficiency, and expressed anticipation for the successful implementation of reduced longitudinal separation on ATS routes L510, N563 and P574.

3.47 Malaysia informed the Meeting that, subject to the positive outcome of the operational trial on ATS route N571, reduction of longitudinal separation operational trial would be extended to other ATS routes.

BOBCAT ATFM Operational Updates (IP02)

3.48 Thailand presented Post-Ops Analysis following the reactivation of the BOBCAT ATFM procedure for westbound nighttime traffic through Afghanistan airspace using the BOBCAT on 4 September 2025. The BOBCAT ATFM procedure was successfully utilized to balance westbound traffic demand with available capacity. During the 108-day analysis period between 4 September 2025 and 21 December 2025, more than 4,000 flights were managed.

3.49 Flight operational efficiency was enhanced with an average assigned ATFM delay of 2.2 minutes/flight resulting in a reduction of approximately 3,350 tons of CO₂ emissions. The effectiveness of the system was further evidenced by flight level compliance, as 93 percent of flights were observed to enter the Kabul FIR at the same or higher flight levels when compared to slot allocation, optimizing fuel consumption. Monthly performance was reported to remain consistently strong, ranging from 91 to 94 percent.

3.50 In response to comments related to aerodrome ground infrastructure limitations impacting Calculated Take Off Time (CTOT) compliance performance at certain airports, Thailand suggested that ATS units could adjust taxi-out time to take into account the ground infrastructure limitations. This could help maintain CTOT compliance.

3.51 The Meeting thanked Thailand and States involved in reactivation of the ATFM procedure. In addition, the Meeting appreciated Thailand for the thorough analysis and requested Thailand to present to relevant forum. In parallel, relevant States were requested to continue providing Traffic Sample Data (TSD).

3.52 India expressed the non-adherence of the prescribed BOBCAT slot submission window resulting in issuance of slots even after 1630UTC, non-compliance of CTOT at some occasions and the situation in which aircraft were unable to climb to their assigned flight levels as per the BOBCAT allocation in the Delhi FIR. It was noted that tactical coordination with the Lahore FIR was necessary, accompanied by assurances from aircraft that they would reach their assigned levels prior to entering the Kabul FIR.

3.53 IATA provided positive feedback, noting that no systemic issues were reported and that the ATFM procedure was well-received among the airlines.

Agenda Item 4: Implementation of CNS-ATM Systems

Regional Air Navigation Plan Update (WP09)

4.1 The Secretariat presented an update on the progress of incorporating coordinate data for APAC FIRs and Search and Rescue Regions (SRRs) in the Regional Air Navigation Plan (ANP) Volume I. States should note that Doc 9673 did not provide a legal description of the FIRs in the first place, therefore, it was very important for States to understand that this process of checking, alignment and validation was crucial if they would like a formal basis for their FIRs.

4.2 The exercise to review the FIR and SSR coordinates in the ANP should be based on ICAO historical records and not new proposals for changes. The Proposal for Amendments (PfA) process for FIRs and SRRs followed the approval procedures stipulated in ANP Volume I (approval of the Council). Some States had submitted major amendments to their FIRs during the review process. These would only be considered if it was change that only affected the national airspace and not the neighbouring airspace or if all parties agreed with the change proposal before submission to ICAO.

4.3 The Meeting noted that 30 FIRs and 15 SRRs PfAs were approved by the President of the Council and incorporated in the ATM Table I-1 of the ANP Volume I, and that there were issues in some areas affecting the resolution of FIRs/SRRs affecting progress and urged States/Administrations to provide updates of any bilateral/trilateral discussion of unresolved FIR boundaries.

4.4 On the matter of realignment of Lahore and Karachi FIRs in Pakistan, the Secretariat stressed the need for consensus from the affected adjacent States.

GNSS Radio Frequency Interference (RFI) (Flimsy 02)

4.5 IATA highlighted the increasing risk of GNSS RFI and its impact on aviation safety and efficiency. Modern aircraft and ATM systems relied heavily on GNSS for navigation, surveillance, and precision approaches. As interference events became more frequent and widespread, they posed a serious and ongoing operational risk rather than isolated incidents.

4.6 GNSS RFI could reduce position accuracy, disrupt approaches, increase pilot and controller workload, and cause delays, rerouting, or loss of airspace access. These effects were particularly critical in busy or complex airspace and during normal daily operations.

4.7 IATA emphasized the need for a coordinated international response involving ICAO, States, industry, and manufacturers. Key actions would include better monitoring and reporting of interference events, stronger cooperation to identify and reduce interference sources, stricter control of illegal jamming devices, improved aircraft and avionics resilience, updated standards and training, and development of clear contingency procedures. The Meeting agreed to the proposed multi-faceted approach in the paper to strengthen operational resilience against GNSS RFI.

4.8 With respect to military RFI and non-military RFI, Thailand highlighted that following AN-Conf/14, ICAO ATM Operations Panel was tasked to develop guidance on civil-military coordination for the scenarios where:

- a) the military originates GNSS RFI; and
- b) the military detects GNSS RFI.

4.9 The Secretariat updated the Meeting on the progress of work undertaken by the Procedures for GNSS and Data Link Disruption Ad Hoc Group, highlighting its strong focus on operational aspects. The Ad Hoc Group had been developing the *APAC Regional Guidance Material for GNSS RFI and Data Link Disruption Coordination and Reporting Framework*, which was expected to be presented for endorsement at ATM/SG/14 later this year.

4.10 The Secretariat encouraged interested States/Administrations, which were not yet a member, to participate in the Ad Hoc Group, to contribute to and benefit from its ongoing initiatives.

India's Preparedness for Mitigation of GNSS RFI (Flimsy 03)

4.11 India presented its effort in mitigating GNSS RFI threats and data of GNSS RFI events in India and in the Bay of Bengal – Arabian Sea regions.

4.12 The DGCA India published an Advisory Circular that provided comprehensive guidelines for airlines operators, pilots, air traffic controllers and Air Navigation Service Providers (ANSPs) for dealing with the threats in effective and coordinated manner.

4.13 Airports Authority of India developed contingency procedures for air traffic controllers in July 2025 to help them deal with GNSS RFI events. A comprehensive safety risk assessment had been conducted to assess the risks and possible mitigation strategies.

4.14 Pakistan shared its experience regarding GNSS RFI occurrences within Lahore FIR, where a certain type of aircraft reported "TCAS Unable due GNSS RFI". IATA expressed that this might be related to the performance characteristics of certain airframe manufacturers.

Spectrum Resilience - Balancing Spectrum Efficiency with Aviation Safety (Flimsy 04)

4.15 IATA emphasized the importance of protected radio frequencies to safely operate communication, navigation, and surveillance systems. Interference to these frequencies could directly affect flight safety and efficiency.

4.16 The rapid expansion of 5G networks, especially near aviation radio altimeter bands, had increased the risk of RFI. Existing mitigation measures were temporary, and new altimeter standards would not be widely available for several years.

4.17 IATA called for strong cooperation between aviation and telecommunication authorities, a precautionary approach to spectrum decisions, and continued protection of aviation frequencies to ensure safe and efficient air navigation.

4.18 The Secretariat highlighted that similar paper was also presented at ATM/SG/13. As the issue was not exclusive to aviation industry, the Secretariat encouraged States/Administrations to participate in international fora organized by different international organizations. States/Administrations were also encouraged to participate in the Tenth Meeting of the Spectrum Review Working Group to be held in Bangkok, Thailand, in February 2026.

4.19 India queried on the content of paragraph 2.8 in the paper that aviation was still operating older technology as primary voice communications. IATA explained that VHF communications was used as an example of long term use of a technology in comparison to the rapid rate of change of technology in other domains.

Agenda Item 5: ATS Route Developments

Asia/Pacific Region ATS Route Catalogue (WP14)

5.1 The Secretariat presented draft Version 25.2 of the *Asia/Pacific Region ATS Route Catalogue*, which incorporated progress updates on relevant route proposals that had been received from the designated Points of Contact (POC) via email exchanges prior to the Meeting.

5.2 The updated Version 25.2, as reviewed by the Meeting, was included in **Appendix C to the Report**.

5.3 Indonesia continued its close coordination with Malaysia on the proposed amendments to routes SCS20 to SCS23. Indonesia indicated provisional agreement with SCS22 and SCS23, while noting that further technical discussions were required for SCS20 and SCS21. Reaffirming its commitment to this collaborative process, Indonesia informed the Meeting that a bilateral technical meeting with Malaysia had be planned for Q1 2026 to advance progress on these proposals.

Progress Update on the Establishment of A1 Parallel Routes (WP15)

5.4 China and Hong Kong China informed that ATS route A1 was facing unprecedented challenges in terms of capacity, operational complexity and safety margins. Consensus was reached on the configuration and orientation of A1 parallel route.

5.5 The parallel routes connecting ATS route A1 within Hong Kong FIR had been established since June 2020. The proposed arrangement within the Sanya FIR was as follows:

- a) Southern route: A newly established route between New Waypoint 1 (N16°39'54"E109°35'58", near ITBAM) and IKELA, accommodating west-to-east traffic.
- b) Northern route: A newly established route between BUNTA and New Waypoint 2 (N18°51'31"E112°04'33"), generally parallel to the southern route, accommodating east-to-west traffic.

The above coordinates were preliminary and subjected to change.

5.6 The lateral spacing between the two parallel routes within Sanya FIR would be approximately 15 NM. China proposed that the A1 parallel route adopt the RNAV 2 navigation specification.

5.7 Viet Nam noted the latest proposal by China that a new waypoint was to be established instead of ITBAM, which was proposed by China in previous three SCSTFRG meetings and SAIOSEACG/4. Viet Nam expressed its objection to the use of new waypoint due to completion of their internal approval process.

5.8 China clarified that the reference to ITBAM had been a technical proposal rather than a finalized decision, and explained that recent recalculations using updated internal software resulted in revised coordinates for the western waypoint. China advised that ITBAM exceeded the prescribed tolerance according to *World Geodetic System – 1984 (WGS-84) Manual* (ICAO Doc 9674), hence a new waypoint was proposed. China emphasized that discussions with Viet Nam would continue.

5.9 The Chair recommended a side meeting between China and Viet Nam to discuss this matter and report the progress to future SAIOSEACG and relevant meetings.

Naming of Parallel ATS Route A1 and ATS Route ROT–VPH (Flimsy 06)

5.10 Viet Nam provided updates regarding the planned implementation of A1 parallel route and new ATS route between ROT and VPH. To reduce congestion and improve airspace capacity, concerned States agreed to establish a parallel ATS route to ATS route A1 and a new ATS route between ROT and VPH.

5.11 Viet Nam had completed the RNAV 2 route design and flight procedure amendments for both routes, which had been approved by the relevant military and airspace authorities. The parallel A1 route would run from waypoint IGETI at the Ho Chi Minh and Vientiane FIR boundary to ITBAM at the Ho Chi Minh and Sanya FIR boundary. Additionally, the Meeting was informed that the segment of the new bi-directional RNAV 2 route (connecting ROT and VPH) had also been established within Ha Noi FIR.

5.12 Viet Nam requested ICAO and concerned States to assign route designators promptly so that implementation could proceed.

5.13 China expressed that according to ICAO Annex 11, the same basic designator shall be assigned to a main trunk route throughout its entire length. China commented that consensus had not been reached regarding the TOC point for A1 parallel route between Sanya and Ho Chi Minh FIRs. China emphasized the importance of reaching multilateral agreement among all concerned States/Administration before applying for the ATS route designator.

5.14 India enquired on the authority to assign the ATS route designator. The Secretariat referred to **SAIOSEACG/5 Flimsy 08** for the steps and guidance to agree upon the assignment of ATS route designator.

Coordination for ATS Route Implementation (Flimsy 08)

5.15 ICAO Secretariat presented the guidance for submission of Proposal for Amendment (PFA) to APAC Air Navigation Plan (ANP) Volume II for ATS route implementation and/or amendment. States should use the ATS Route Amendment Template in the APAC ANP when submitting ATS route changes. The proposing State was responsible for ensuring that each proposal was clear, accurate, complete, and supported by operational justification, including correct coordinates and any required charts.

5.16 Each proposal must state the reason for change, the intended implementation date, affected States, and any supporting Secretariat comments. Proposals should also reflect any related changes across the ANP.

5.17 The amendment process requires States to obtain route designators and waypoint codes, coordinate with affected States, and submit the PfA to the ICAO APAC Office. After regional agreement, States must publish the change through an AIRAC AIP amendment in line with Annex 15 requirements.

5.18 India enquired if PfA be required when the navigation specification of a specific route was to be changed. The Secretariat clarified that navigation specification was not required in the PfA, instead such information was to be included in the relevant State AIP section(s).

5.19 The Chair commented on the steps to be taken to submit a PfA and highlighted that during the multilateral coordination stage, stakeholders shall also agree upon one designated States/Administrations responsible to coordinate the assignment of ATS route designator and the subsequent submission of corresponding PfA.

Updates on the Implementation Plan for Reduced Longitudinal Spacing on Routes N892 and L625 (WP16)

5.20 The Philippines shared its plan to implement reduced longitudinal spacing on ATS routes N892 and L625, but these routes present a distinct set of challenges, as substantial segments of these routes within the Manila FIR traverse Category R airspace, requiring new operational procedures, trainings for rated ATCs and the establishment of an additional air traffic control sector.

5.21 Following the successful operationalization of the new sector (Manila ACC West Sector), coordination with Taipei and Ho Chi Minh ACCs had recommenced. The trial implementation of reduced longitudinal separation was tentatively planned for Q2 2026, starting with 50 NM separation. Subject to positive results, Manila ACC might proceed with the adoption of 30 NM as the minimum longitudinal spacing during the full implementation phase.

5.22 The trial would apply to suitably equipped aircraft at or above FL290, using a “Best Equipped, Best Served” approach. Reduced longitudinal spacing would be suspended during LSWD or other operational constraints.

5.23 Singapore congratulated Philippines on the establishment of new sector in the Manila ACC, and expressed its readiness to continue the discussion with Philippines and Viet Nam for the reduction of longitudinal separation on ATS routes L625.

5.24 Viet Nam expressed support on the application of 50 NM longitudinal separation and would be ready to implement upon the signing of LOAs with affected States.

5.25 India enquired on the necessity for ADS-C and CPDLC with the emphasis of J5, J6 or J7 as depicted in the **SAIOSEACG/5 WP16 paragraph 2.3 d)**. Philippines advised that as the area was in category R (Remote) airspace, ADS-C and CPDLC would be required to facilitate the implementation of performance-based separation over that airspace.

5.26 The Chair commended the good work from the Philippines in enhancing the capacity and efficiency and requested the Philippines to report progress of trial in the next SCSTFRG meeting.

Update on South-East Asia-Oceanic Implementation of Free Route Operations (SEA-O FRTO) Trial (Flimsy 05)

5.27 IATA presented the outcomes of the South-East Asia–Oceanic Free Route Operations (SEA-O FRTO) trial, conducted under APAC ANSP Committee (AAC) Workstream 4 to improve cross-border coordination and flight efficiency. Launched in August 2024, the trial involved four ANSPs, i.e. Australia, Indonesia, New Zealand and Singapore, in cooperation with IATA and participating airlines. By connecting multiple FIRs and reducing boundary constraints, airlines were able to flight plan User Preferred Routes (UPR) across 37 agreed city-pairs.

5.28 The trial confirmed clear benefits, including more efficient routing, fuel and CO₂ savings, improved weather and volcanic avoidance, and smoother coordination between FIRs. While some airlines initially faced system setup and workload challenges, usage became more consistent over time. Based on the positive results, the trial was extended and expanded to include additional ANSPs and airlines, before concluding in October 2025 as planned. IATA also shared that lessons learned and operational data from the trial are now being used to develop regional guidance material to support wider FRTO implementation, with endorsement by the AAC targeted for 2026.

5.29 India sought clarification on whether the increased planner workload associated with implementing FRTO would be from the perspective of the ANSP or the airspace users. In response, IATA noted that in order to identify fuel savings under UPR, airline flight planners were required to take an additional step of comparing a fixed route flight plan with the UPR model before determining the most optimal trajectory during the flight planning phase.

5.30 Indonesia expressed its appreciation to IATA and Singapore for cooperating with Indonesia to conduct the FRTO trial and looked forward to future collaboration with different stakeholders.

Updates on Data-Driven Airspace Efficiency Study on New ATS Route Proposals at Europe-Asia Interface (Flimsy 07)

5.31 As a follow-up of SAIOSEACG/4 WP15, IATA briefed that a special project was launched in 2025 for the case study on the new ATS route proposal at Europe-Asia interface. In the meantime, a modeling to support the assessment of airspace optimization initiatives was developed.

5.32 The updates of the project "Data-driven Airspace Efficiency Study" were provided by IATA, including key methodologies, data processing, developed prototype, KPIs and draft conclusions, as well as the industry workshop and technical visits organized by the project team. It was also updated that a white paper was under development by IATA to provide the comprehensive outcome of the study, and more information will be shared with the industry at future meetings.

5.33 IATA confirmed that the prototype of the modeling would be improved based on industry comments and calls for further assessment and cross-border coordination by the States/ANSPs concerned for the ATS route proposals.

Agenda Item 6: ATM Contingency Plans and Search and Rescue

Air Traffic Management (ATM) Contingency Plan of the Philippines (IP03)

6.1 Philippines shared their ATM contingency plan, highlighting the importance of continued regional cooperation to maintain safety and operational resilience. In line with ICAO Annex 11 requirements and lessons learned from the January 2023 power failure, the Philippines strengthened its ATM contingency arrangements to ensure safe and continued operations in the Manila FIR during major service disruptions.

6.2 A Level 2 ATM Contingency Plan was developed through close coordination with neighboring ACCs. As a result, the Philippines successfully concluded and formalized contingency agreements with Singapore, Ho Chi Minh, Hong Kong, Taipei, Fukuoka, and Ujung Pandang ACCs between 2019 and 2025. These agreements establish clear coordination procedures and mutual support arrangements during contingency situations.

6.3 The finalized contingency provisions would be published in the Philippine AIP by Q1 2026. The Philippines expressed appreciation to all neighboring ANSPs for their cooperation.

6.4 Philippines further shared the contingency routes that had been coordinated with the neighboring ACC.

6.5 The Secretariat concurred with Malaysia's and United States' comment on the necessity for them to be included in the respective contingency plan coordination and relevant agreements despite no contingency routes entering or originating from both States.

6.6 The Chair enquired for the schedule for the APAC Region ATM Contingency Framework (RACF) Workshop. The Secretariat informed the Meeting that the workshop was planned for in July 2026. United States supplemented that the workshop would be tentatively conducted in two parts focusing on ATM contingency framework and space object launch and re-entry coordination. States/Administrations were encouraged to take part in the workshop.

Agenda Item 7: ANSP Coordination and Civil/Military Cooperation

Enhancing Civil Military Cooperation in ATM for the Safe and Optimal Use of Airspace (WP17)

7.1 ICAO presented the working paper on "Enhancing Civil-Military Cooperation in ATM for the Safe and Optimal Use of Airspace". Civil-military cooperation in ATM (CMAC), particularly the Flexible Use of Airspace (FUA) was one of the key elements of GANP for the enhancement of airspace capacity, operational efficiency and environmental sustainability. Given that the APAC Region was expecting rapid growth in the coming years, while at the same time the Region had not achieved a mature level of CMAC, the subject remains one of the highest priorities in the *Asia/Pacific Seamless ANS Plan* and one of the high priority objectives in the Delhi Declaration. Continuous efforts devoted by both the States and ICAO to this area were considered essential.

7.2 Despite the major challenges confronted, accumulated experiences and progress had been achieved by the States/Administrations in the Region. ICAO provided implementation support through Regional Workshops/Seminars on CMAC/FUA and would continue the efforts for further enhancement.

7.3 A survey on CMAC/FUA implementation had been circulated via a State Letter in September 2025. States/Administrations were encouraged to complete the Survey before end of March 2026 if not yet done so. The outcomes of the Survey would help ICAO to better understand the needs of the Region and provide effective support to strengthen the implementation.

7.4 Given the crucial role of CMAC and FUA, an inter-regional workshop on enhanced CMAC and FUA implementation would be co-hosted by ICAO APAC RSO and EUR/NAT Office from 19 to 23 January 2026 in Bangkok, Thailand. This interactive event was planned to provide the States/Administrations with practical guidance through tabletop exercises and case studies.

7.5 IATA appreciated ICAO for the long term effort in organizing the CMAC workshop and confirmed IATA would participate in the workshop. IATA noted comments in the paper that stated flexible use of air space and civil military cooperation have been emphasized as key measures to ensure the resilience of the air navigation system.

7.6 The Chair encouraged interested parties to participate in the workshop. The Secretariat clarified that registration remained open until 16 January 2026 at the request of State/Administration and the workshop would be conducted in hybrid mode for the first two days. Please contact ICAO APAC RSO at apac-rso@icao.int, for more information.

Agenda Item 8: Review of SAIOSEACG Task List

Review of SAIOSEACG Task List (WP18)

8.1 The SAIOSEACG Task List as reviewed by the meeting is provided in **Appendix D to the Report**.

Agenda Item 9: Any Other Business

ATM Points of Contact (WP19)

9.1 The Secretariat requested States/Administrations to provide update on *ATM Points of Contact List* as necessary.

9.2 The Secretariat clarified that States/Administrations should provide updates to the consolidated *ATM Points of Contact List* whenever revisions occur. In response to a query from India, it was noted that States/Administrations might determine as appropriate whether to include alternative contact methods in addition to the official email address and telephone number.

Upgrading Air Navigation Systems to Enable Future ATM Operations in Indonesia (WP20)

9.3 Indonesia updated the Meeting on their ANS modernization, aligned with SAIOSEACG objectives and the ICAO Global Air Navigation Plan (GANP). The upgrades respond to continued traffic growth and aim to improve safety, capacity, and efficiency. Key projects included a new ATM automation system at Jakarta, supporting ADS-C, CPDLC, and automated coordination between ATS units. Indonesia would also implement a centralized ATFM system to better manage traffic demand at major airports.

9.4 In addition, Indonesia was upgrading its AMHS and transitioning from AIS to AIM, enabling reliable digital aeronautical data exchange and preparing for future SWIM services. All systems were currently under installation, with phased implementation starting in 2026 and full deployment targeted by the end of 2026.

9.5 India inquired whether any data-sharing mechanism exists between Malaysia and Indonesia, particularly for surveillance data, to support the reduction of longitudinal separation. Malaysia clarified that, at present, no such mechanism were in place.

9.6 The Meeting congratulated Indonesia on the achievement in upgarding the ATM automation systems. China, India, Malaysia, Singapore and Thailand expressed their intention for continuous collaborations in the area of AIDC, cross-border ATFM and other related enahncements.

Indonesia's National Air Navigation Plan (NANP) – Alignment with the Regional Air Navigation Plan (RANP) and PBN Implementation (IP05)

9.7 Indonesia shared how they align their National Air Navigation Plan (NANP) with the ICAO Regional Air Navigation Plan (RANP) to support harmonized air navigation development in the region. The purpose was to raise awareness, not to seek approval.

9.8 Alignment between the NANP and RANP ensured smooth operations across FIR boundaries, improved safety, and supported regional initiatives such as Performance-based Navigation (PBN). Indonesia reflected regional priorities in its national plan while keeping flexibility for national needs, using phased and capability-based implementation linked to regional performance targets.

9.9 Indonesia expressed that PBN, being a key part of its NANP, supported better airspace capacity, more predictable flights, and improved access to airports, especially in challenging environments. Priority actions including RNAV routes, RNAV SID/STARs, and selective use of RNP were in place. Such approach would improve coordination with neighboring FIRs and would support safe, efficient, and seamless regional operations.

9.10 India enquired the timeline for future implementation of PBN routes. Indonesia commented that, since 2020 more than 50 major airports in Indonesia utilized various PBN procedures to enhance the capacity with current PBN projects planned until 2030 and the next phase of PBN airspace implementation expected to begin from 2026.

Closing and the Next Meeting

10.1 The Co-chairs thanked the meeting participants for their significant contribution and the progress made during the meeting.

LIST OF PARTICIPANTS

	STATE/NAME		TITLE/ORGANIZATION
1.	BANGLADESH (3)		
	1.	Mr. Md. Shamsuddoha	Deputy Director (SMS) Civil Aviation Authority of Bangladesh <u>BANGLADESH</u>
	2.	Mr. Md. Shakhaoat Hossain	Assistant Director (ASD) Civil Aviation Authority of Bangladesh <u>BANGLADESH</u>
	3.	Mr. Md. Abdur Rahim Talukdar	Assistant Director (ASD) Civil Aviation Authority of Bangladesh <u>BANGLADESH</u>
2.	BHUTAN (1)		
	4.	Mr. Karma Gayley	CNS Officer Bhutan Civil Aviation Authority Paro International Airport <u>BHUTAN</u>
3.	CHINA (5)		
	5.	Ms. WANG Mingxin	Senior Engineer, ASMC Air Traffic Management Bureau Civil Aviation Administration of China <u>CHINA</u>

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	STATE/NAME		TITLE/ORGANIZATION
	6.	Mr. LU Yan	Assistant, ATM Division Air Traffic Management Bureau Civil Aviation Administration of China <u>CHINA</u>
	7.	Mr. CAI Zefeng	Assistant, Airspace Management Center, Air Traffic Management Bureau Civil Aviation Administration of China <u>CHINA</u>
	8.	Mr. LIANG Qizhao	Assistant, Airspace Management Office of Middle South Regional Air Traffic Management Bureau Civil Aviation Administration of China <u>CHINA</u>
	9.	Mr. FU Yongqiang	Director of Sanya ACC, Hainan ATM Sub-Bureau, Middle South Regional Air Traffic Management Bureau Civil Aviation Administration of China <u>CHINA</u>
4.	HONG KONG, CHINA (2)		
	10.	Mr. Cheng Po Keung, Gabriel	Chief Air Traffic Control Officer, Hong Kong Civil Aviation Department <u>HONG KONG, CHINA</u>

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	STATE/NAME		TITLE/ORGANIZATION
	11.	Ms. Jenny LEE	Senior Operations Officer Hong Kong Civil Aviation Department <u>HONG KONG, CHINA</u>
5.	INDIA (8)		
	12.	Mr. Naresh Kumar Chaudhary	General Manager (ATM-ASM) Airports Authority of India (AAI) <u>INDIA</u>
	13.	Mr. Asit Kumar Sinha	Joint General Manager (ATM-ASM) Airports Authority of India (AAI) <u>INDIA</u>
	14.	Mr. Manoj Kumar Sinha	Joint General Manager (ATM) Airports Authority of India (AAI) <u>INDIA</u>
	15.	Mr. P Gowri Shankar	Joint General Manager (ATM) Airports Authority of India (AAI) <u>INDIA</u>
	16.	Mr. Divendrappa Shetter	DGM (ATM) Airports Authority of India (AAI) <u>INDIA</u>
	17.	Mr. Jay Prakash Kushwaha	DGM (ATM) Airports Authority of India (AAI) <u>INDIA</u>

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	STATE/NAME		TITLE/ORGANIZATION
	18.	Mr. Vinod Kumar Purvia	DGM (ATM) Airports Authority of India (AAI) <u>INDIA</u>
	19.	Mr. Abhradeep Das	AGM (ATM) Airports Authority of India (AAI) <u>INDIA</u>
6.	INDONESIA (6)		
	20.	Ms. Nurdini Rospitha Tambunan	Chief of Airspace & Aeronautical Information Management Director General of Civil Aviation <u>INDONESIA</u>
	21.	Ms. Dewi Rosaria	Air Navigation Inspector Director General of Civil Aviation <u>INDONESIA</u>
	22.	Ms. Aura Ristawidya	Aviation Evaluator Director General of Civil Aviation <u>INDONESIA</u>
	23.	Mr. R. Triaswanto	VP of Air Navigation Control Services ACC-TMA AirNav HQ, <u>INDONESIA</u>
	24.	Mr. Rino Laharto	VP of Airspace Design AirNav HQ, <u>INDONESIA</u>

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	STATE/NAME		TITLE/ORGANIZATION
	25.	Mr. Darwin Sitohang	ATCO, AirNav Branch MATSC AirNav <u>Indonesia</u>
7.	LAO PDR (1)		
	26.	Mr. Vixay Vorlachit	Officer, Air Navigation Standards Division Department of Civil Aviation of Lao People's Democratic Republic <u>LAO PDR</u>
8.	MALAYSIA (2)		
	27.	Mr. Ahmad Shukri Bin Shamsudin	Manager, Air Navigation Services Technical Division Civil Aviation Authority Malaysia <u>MALAYSIA</u>
	28.	Ms. Nur A`fifah Binti Mansor	Manager, Air Navigation Services Technical Division Civil Aviation Authority Malaysia <u>MALAYSIA</u>
9.	MALDIVES (1)		
	29.	Mr. Ismail Rameez	Manager at Maldives Air Traffic Control Center Maldives National Air Traffic Services <u>MALDIVES</u>

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	STATE/NAME		TITLE/ORGANIZATION
10.	PAKISTAN (3)		
	30.	Mr. Saad Ahmed Malik	Deputy Director [ATM] Airspace & Air Navigation Standards PAKISTAN Civil Aviation Authority <u>PAKISTAN</u>
	31.	Mr. Rashid Mahmood	Senior Joint Director ATC Pakistan Airports Authority <u>PAKISTAN</u>
	32.	Mr. Sohail Babar Warraich	Deputy Secretary (CAA), Ministry of Defense Pakistan Airports Authority <u>PAKISTAN</u>
11.	PHILIPPINES (3)		
	33.	Ms. Anna Joy C. Papag	Division Chief, Enroute Control Division Civil Aviation Authority of the Philippines <u>PHILIPPINES</u>
	34.	Ms. Almira O. Butial	Assistant Chief, Manila Area Control Center Civil Aviation Authority of the Philippines <u>PHILIPPINES</u>

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	STATE/NAME		TITLE/ORGANIZATION
	35.	Mr. Henson A. Sorreda	Assistant Chief, Manila Area Control Center Civil Aviation Authority of the Philippines <u>PHILIPPINES</u>
12.	SINGAPORE (6)		
	36.	Ms. Amelia Yeo	Air Traffic Management - Asia Pacific Civil Aviation Authority of Singapore (CAAS) <u>SINGAPORE</u>
	37.	Mr. Chee Han Tan	Head (ATM-SEA2) Civil Aviation Authority of Singapore (CAAS) <u>SINGAPORE</u>
	38.	Mr. Clinton Soon	Air Traffic Controller Civil Aviation Authority of Singapore <u>SINGAPORE</u>
	39.	Mr. Roger Lau	Senior Chief (ATM) Civil Aviation Authority of Singapore <u>SINGAPORE</u>
	40.	Mr. Khung Hui Yeo	Senior Chief (SATCC) Civil Aviation Authority of Singapore <u>SINGAPORE</u>

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	STATE/NAME		TITLE/ORGANIZATION
	41.	Ms. Eliza Ng Sue Ying	Air Traffic Control Manager (ATM – Ops Partnership) Civil Aviation Authority of Singapore <u>SINGAPORE</u>
13.	THAILAND (16)		
	42.	Mr. Buntoeng Megchai	Air Navigation Operations Management Department Manager 12 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>
	43.	Mrs. Supattra Tassarø	Senior Air Navigation Operations Officer 7 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>
	44.	Mrs. Chalinthra Thanakankorn	Head of Aeronautical Search and Rescue Standards Division 10 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>
	45.	Mr. Chavalit Ithiapa	Senior Air Navigation Services Standards Officer 8 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>
	46.	Mr. Natpakhan Moontongchun	Air Navigation Services Standards Officer 5 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>
	47.	Miss Supaporn Thongmaunglaung	Air Navigation Services Standards Officer 5 Civil Aviation Authority of Thailand (CAAT) <u>THAILAND</u>

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	STATE/NAME		TITLE/ORGANIZATION
	48.	Ms. Sunisa Raddussadee	Senior Director, Air Traffic Management Network Bureau AEROTHAI <u>THAILAND</u>
	49.	Mr. Bancha Kingbualuang	Director, Network Operations Air Traffic Management Center AEROTHAI <u>THAILAND</u>
	50.	Ms. Napaporn Chotechuang	Chief of Operational Administration, Bangkok Aera Control Center AEROTHAI <u>THAILAND</u>
	51.	Mr. Piyawut Tantimekabut	ATM Expert, Director Level AEROTHAI <u>THAILAND</u>
	52.	Ms. Pantip Changpradit	Acting expert director AEROTHAI <u>THAILAND</u>
	53.	Ms. Chayanan Sanorjit	Air Traffic Control Manager, Bangkok Aera Control Center AEROTHAI <u>THAILAND</u>
	54.	Mrs. Jiranapa Jiemjitpolchai	Air Traffic Control Network Manager AEROTHAI <u>THAILAND</u>

SAIOSEACG/5
Appendix A to the Report

	STATE/NAME		TITLE/ORGANIZATION
	55.	Ms. Wararat Longchit	ATRO2, Bangkok Aera Control Center AEROTHAI <u>THAILAND</u>
	56.	Mr. Atthawit Wichiponlayut	Executive Strategic Planning Officer AEROTHAI <u>THAILAND</u>
	57.	Ms. Nussara Tienklin	Senior ATM Data Officer AEROTHAI <u>THAILAND</u>
14.	UNITED STATES (1)		
	58.	Mr. Shayne Campbell	Senior International Air Traffic Representative Asia Pacific Federal Aviation Administration <u>UNITED STATES</u>
15.	VIET NAM (5)		
	59.	Mr. Nguyen Tien Giang	Deputy Director Air Traffic Service Department Vietnam Air Traffic Management Corporation (VATM) <u>VIET NAM</u>
	60.	Mr. Nguyen Viet Phuong	Head of Hanoi Air Traffic Control Center Northern Region Air Traffic Services Company Vietnam Air Traffic Management Corporation (VATM) <u>VIET NAM</u>

SAIOSEACG/5
Appendix A to the Report

	STATE/NAME		TITLE/ORGANIZATION
	61.	Mr. Nguyen Tuan Anh	Head of Ho Chi Minh Air Traffic Control Center Southern Region Air Traffic Services Company Vietnam Air Traffic Management Corporation (VATM) <u>VIET NAM</u>
	62.	Ms. Bui Hanh Hoa	Official Air Traffic Service Department Vietnam Air Traffic Management Corporation (VATM) <u>VIET NAM</u>
	63.	Ms. Nguyen Thi Phuong Thuy	Official Safety and Quality Department Vietnam Air Traffic Management Corporation (VATM) <u>VIET NAM</u>
16.	IATA (4)		
	64.	Mr. John Moore	Assistant Director Operations, Safety & Security (OSS) International Air Transport Association (IATA) <u>SINGAPORE</u>
	65.	Capt. James Toye	Head of Line Operations Cathay Pacific Airways <u>HONG KONG CHINA</u>
	66.	Captain Seow Chee Seng	VP Technical & Flight Services Singapore Airlines <u>SINGAPORE</u>

SAIOSEACG/5
Appendix A to the Report

	STATE/NAME		TITLE/ORGANIZATION
	67.	Mr. HU Bin <i>Online</i>	Manager Safety ATFM Liaison & Flight Operations DDG-NASIA-Regional Operations, Safety and Security <u>CHINA</u>
17.	ICAO (5)		
	68.	Mr. Hyuk Jin Kwon	Regional Officer ATM/AOM ICAO Asia and Pacific Regional Sub-Office <u>CHINA</u>
	69.	Ms. ZHANG Ying	Deputy Chief ICAO Asia and Pacific Regional Sub-Office <u>CHINA</u>
	70.	Mr. Tak Chuen Chui	Regional Officer ATM ICAO Asia and Pacific Regional Office <u>THAILAND</u>
	71.	Mr. Mior Sallehuddin, Mior Adli Bin	Regional Officer ATM ICAO Asia and Pacific Regional Office <u>THAILAND</u>
	72.	Ms. CHEN Yanru	Programme Assistant ICAO Asia and Pacific Regional Sub-Office <u>CHINA</u>

LIST OF WORKING AND INFORMATION PAPERS

WORKING PAPERS

Number	Agenda	WORKING PAPERS	Presented By
WP01	1	Provisional Agenda	Secretariat
WP02	2	Review of Relevant Meeting Outcomes	Secretariat
WP03	2	South China Sea Traffic Flow Review Group Outcomes	Secretariat
WP04	2	Bay of Bengal Traffic Flow Review Group Outcomes	Secretariat
WP05	2	RASMAG Outcomes	Secretariat
WP06	3	APANPIRG ATM and Airspace Safety Deficiencies List	Secretariat
WP07	3	Air Navigation Services USOAP Update	Secretariat
WP08	3	Application of ATC Separation Minimums	Secretariat
WP09	4	Regional Air Navigation Plan Update	Secretariat
WP10	3	Enhancing Capacity on ATS Routes during Large-Scale Weather Deviation (LSWD) Procedures	Singapore
WP11	3	Joint Initiative on the Enhancement of Longitudinal Separation on ATS Routes between Manila and Ujung Pandang FIR	Philippines and Indonesia
WP12	3	Progress on the Trial Implementation of Reduced Longitudinal Separation on Routes L642 and M771	China
WP13	3	Progress Update on the Implementation of 20 NM Longitudinal Spacing on Air Routes L642 and M771	Hong Kong China
WP14	5	Asia/Pacific Region ATS Route Catalogue	Secretariat
WP15	5	Progress Update on the Establishment of A1 Parallel Routes	China and Hong Kong China
WP16	5	Updates on the Implementation Plan for Reduced Longitudinal Spacing on Routes N892 and L625	Philippines
WP17	7	Enhancing Civil Military Cooperation in ATM for the Safe and Optimal Use of Airspace	Secretariat
WP18	8	Review of SAIOSEACG Task List	Secretariat
WP19	9	ATM Points of Contact	Secretariat
WP20	9	Upgrading Air Navigation Systems to Enable Future ATM Operations in Indonesia	Indonesia

INFORMATION PAPERS

Number	Agenda	INFORMATION PAPERS	Presented By
IP01	1	Provisional List of Working and Information Papers	Secretariat
IP02	3	BOBCAT ATFM Operational Updates	Thailand

Number	Agenda	INFORMATION PAPERS	Presented By
IP03	6	Air Traffic Management (ATM) Contingency Plan of the Philippines	Philippines
IP04	3	Update on Large-Scale Weather Deviation (LSWD) Statistics on ATS Routes L642 and M771	Singapore
IP05	9	Indonesia's National Air Navigation Plan (NANP) - Alignment with the Regional Air Navigation Plan (RANP) and PBN Implementation	Indonesia

FLIMSIES

Number	Agenda	FLIMSIES	Presented By
Flimsy 01	3	Implementation of PBCS Based 30 NM Separation on ATS Route N571 in Bay of Bengal Area	India
Flimsy 02	4	GNSS Radio Frequency Interference (RFI)	IATA
Flimsy 03	4	India's Preparedness for Mitigation of GNSS RFI	AAI (India)
Flimsy 04	4	Spectrum Resilience - Balancing Spectrum Efficiency with Aviation Safety	IATA
Flimsy 05	5	Update on South-East Asia-Oceanic Implementation of Free Route Operations (SEA-O FRTO) Trial	IATA
Flimsy 06	5	Naming of Parallel ATS Route A1 and ATS Route ROT-VPH	Viet Nam
Flimsy 07	5	Updates on Data-Driven Airspace Efficiency Study on New ATS Route Proposals at Europe-Asia Interface	IATA
Flimsy 08	5	Coordination for ATS Route Implementation	Secretariat
Flimsy 09	3	Sideline Discussion on Large-Scale Weather Deviation (LSWD) for ATS Routes L642 and M771	Secretariat

PRESENTATIONS

Number	Agenda	PRESENTATIONS	Presented By
01	3	BOBCAT ATFM Operational Updates (IP02)	Thailand
02	3	Progress on the Trial Implementation of Reduced Longitudinal Separation on Routes L642 and M771 (WP12)	China

INTERNATIONAL CIVIL AVIATION ORGANIZATION



ASIA/PACIFIC REGION ATS ROUTE CATALOGUE

Version 25.2

January 2026

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Foreword

1.1 The *Air Navigation Plan – Asia and Pacific Regions* (Doc 9673) has been superseded, in electronic form by the electronic Air Navigation Plan (eANP), which contains a table of regional ATS routes in Volume II (*Table ATM II- APAC- I – Asia and Pacific Regions ATS Routes*).

1.2 A Contracting State or qualifying International Organization identifying a need for a new route requirement to be included in the eANP or to change an existing route contained in the eANP, may submit an amendment proposal to the ICAO Asia and Pacific (APAC) Office in accordance with established procedures summarized below and the template provided on the ICAO APAC Office website.

1.3 Appropriately presented and documented proposals to amend the eANP are submitted to the ICAO Secretary General through the Regional Office and circulated to States and International Organizations for comment. If, in reply to the ICAO Regional Office's inquiry, no objection is raised to the proposal by a specified date, it will be deemed that a regional agreement (involving the relevant PIRG) on the subject has been reached. The Regional Office will inform States and International Organizations concerned of the approval and the eANP will be amended accordingly.

1.4 If, in reply to the ICAO Regional Office's inquiry, any objection is raised, and if objection remains after further consultation, the matter will be documented for discussion by APANPIRG and, ultimately for formal consideration by the Air Navigation Commission, if it remains unresolved. If the Commission concludes that the amendment is acceptable in its original or other form, it will present appropriate recommendations to the Council.

1.5 The Fourteenth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/14, August 2004) under *Conclusion 14/5* established the ATS Route Network Review Task Force (ARNR/TF) to review the Asia and Pacific ATS route network to determine present and future route requirements. To facilitate the amendment process and keep track of route implementation and future requirements, and with the objective of providing more up to date information on ATS route developments, ARNR/TF prepared the draft *Asia/Pacific Region ATS Route Catalogue*.

1.6 APANPIRG/16 (August 2005, Bangkok, Thailand), recognizing the value of a consolidated reference document for the regional ATS routes and future route requirements of States and airspace users, accepted the *Asia/Pacific Region ATS Route Catalogue* under *Decision 16/9*. The *Asia/Pacific Region ATS Route Catalogue* is intended to be a living document, supplementing the eANP and maintained by the ICAO APAC Regional Sub-Office on behalf of the ICAO APAC Office. Communication related to the *Asia/Pacific Region ATS Route Catalogue* should be made via email to apac-rso@icao.int.

1.7 The APAC Regional Sub-Office, which is responsible for maintaining the *Asia/Pacific Region ATS Route Catalogue*, will update from time to time as amendment proposals are presented, progressed and agreed or not agreed. The revision number and date shown on the cover page of the *Asia/Pacific Region ATS Route Catalogue*. The *Asia/Pacific Region ATS Route Catalogue* is posted on the ICAO APAC Office website at <https://www.icao.int/APAC/apac-electronic-documents>.

1.8 *The Asia/Pacific Region ATS Route Catalogue* is now as follows: Chapter 1: South Asia; Chapter 2: Southeast Asia; Chapter 3: East Asia; Chapter 4: Trans-Regional (South Asia); Chapter 5: Trans-Regional (East Asia); Chapter 6: Trans-Regional (Mid Asia); and Chapter 7: Pacific.

1.9 Regional ATS route proposals affecting Asia/Pacific airspace should be presented as part of a paper to ATM coordination groups or other suitable bodies, and then may be entered into the *Asia/Pacific Region ATS Route Catalogue* by the ICAO APAC Office. The APAC Regional Office or Regional Sub-Office will periodically present to appropriate ATM coordination groups or other suitable bodies the proposals within their geographical area of interest for review.

1.10 The *Asia/Pacific Region ATS Route Catalogue* contained proposals for route changes that had not yet been agreed and implemented.

1.11 States in APAC were required to reclassify the routes as:

- **Priority A** – Short Term (i.e. it could be implemented within 12 months);
- **Priority B** – Medium Term (i.e. it could be implemented within 13 to 36 months);
- **Priority C** – Long term (i.e. more than 36 months); and
- **Priority D** – Cannot be implemented (reasons to be provided).

Note: as some States were not represented, these ATS route proposal were classified as Priority C and will be updated when more information becomes available.

1.12 IATA has also prioritised the routes in terms of efficiency and environmental benefits as:

- **HIGH** – one of top priorities for airlines; or
- **MEDIUM** – has significant benefits but can wait until high priority proposals are implemented; or
- **LOW** – the route proposal may be deleted if the State cannot implement within 36 months.

1.13 After review, the *Asia/Pacific Region ATS Route Catalogue* may be updated by:

- deletion of the proposal when the proposal has been agreed and entered into the eANP; or
- deletion of the proposal when it has been decided that there is no possibility of implementation in the foreseeable future [i.e. the proposal has had no progress in the past five years, or it is a Priority C or D (more than 36 months) by States and is assigned a LOW priority by IATA]; or
- amendment with the addition of supplementary information; or
- addition of a new ATS route proposal.

Amendment Record

Version	Date	Amended by	Comments
0.1	14 February 2005	-	ARNR/TF/2 developed draft version.
0.2	5 May 2005	ARNR/TF/3	Finalized format following contribution from members.
0.3	29 July 2005	ATM/AIS/SAR/SG/15	Sub-Group concluded the Catalogue be adopted (Draft Conclusion 15/3).
1	26 August 2005	APANPIRG/16	APANPIRG/16 decided that the Catalogue be accepted (Decision 16/9).
2	24 January 2006	BBACG/17	Reviewed and updated the Catalogue.
3	19 May 2006	SEACG/13	Reviewed and updated the Catalogue.
4	26 January 2007	BBACG/18	Reviewed and updated the Catalogue.
5	23 May 2008	SEACG/15	Reviewed and updated the Catalogue.
6	15 May 2009	SEACG/16	Reviewed and updated the Catalogue.
7	27 May 2010	SEACG/17	Reviewed and updated the Catalogue.
8	10 March 2011	BBACG/21	Reviewed and updated the Catalogue.
9	6 May 2011	SEACG/18	Reviewed and updated the Catalogue.
10	22 September 2011	SAIOACG/1	Reviewed and updated the Catalogue.
11	22 June 2012	ATM/AIS/SAR/SG/22 APANPIRG/23	Reviewed, reformatted, and updated the Catalogue, approved by APANPIRG/23.
12	26 June 2013	SAIOACG/SEACG, ATM/SG	Reviewed, reformatted, and updated the Catalogue, approved by APANPIRG/24.
13	11 September 2014	SAIOACG/SEACG, ATM/SG APANPIRG/25	Reviewed subsequent to Easter Island being transferred out of the Region; added trans-regional proposals.
14	September 2015	SAIOACG/SEACG, ATM/SG APANPIRG/26	Removal of Chapter A (BANP routes).
15	September 2016	SAIOACG/SEACG, ATM/SG APANPIRG/27	Reviewed and updated the Catalogue.
16	August 2017	SAIOACG/SEACG, ATM/SG	Reviewed and updated the Catalogue.
17	September 2018	SAIOACG/SEACG, ATM/SG	Reviewed and updated the Catalogue, incorporated IATA inputs, added State and IATA priority label.
18	April 2019	SAIOACG/9, SEACG/26	Reviewed and updated the Catalogue.
19	September 2019	ATMSG/7, AIRARD TF/4	Reviewed and updated the Catalogue.
20	December 2020	ATMSG/8	Reviewed and updated the Catalogue.

21	November 2021 March 2022, October 2022 December	SAIOACG/10, SEACG/27, ATM/SG/9, SAIOSEACG/1, ATM/SG/10 BOBTFRG/4	Reviewed and updated the Catalogue.
22	March 2023 July 2023	SAIOSEACG/2 SCSTFRG/11	Reviewed and updated the Catalogue.
23	October 2023 December 2023 April 2024	ATMSG/11 BOBTFRG/5 SAIOSEACG/3	Reviewed and updated the Catalogue.
24	September 2024 November 2024 November 2024	ATMSG/12 SCSTFRG/12 BOBTFRG/6	Reviewed and updated the Catalogue.
25	March 2025 July 2025	SAIOSEACG/4 SCSTFRG/13 ATM/SG/13	Reviewed and updated the Catalogue, including new Chapter 6 on Trans-Regional (Mid Asia), new ATS route proposals (MEKONG 02, MEKONG 03 and BOB 03), and added States and IATA proposals and feedback.
25.1 25.2	December 2025 January 2026	BOBTFRG/7 SAIOSEACG/5	Reviewed and updated the Catalogue.

Chapter 1: South Asia

(referred to States, SAIOSEACG and BOBTFRG for review)

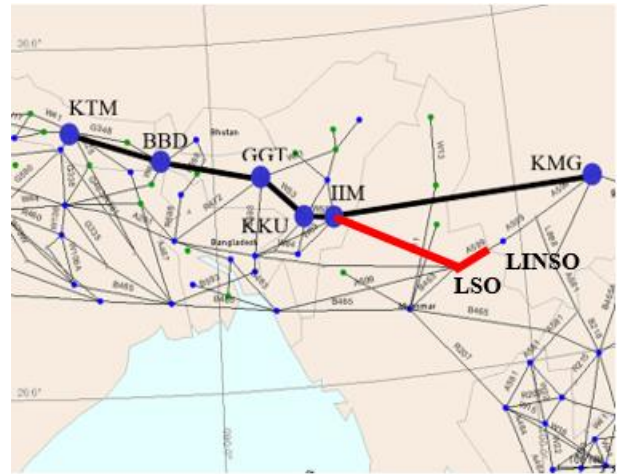
ATS Route Name	HIMALAYA 02
State Priority	D
IATA Priority	HIGH
Requested by (when)	Nepal (01/09/2018)
States/Administrations Involved	Nepal, India, Myanmar, China (Kathmandu, Kolkata, Yangon, Kunming FIRs)
Route Description	<p>Kathmandu (KTM) 2740.5N 08521.0E – Bagdogra (BGD) 264118N 0881934E – Guwahati (GGT) 2606.1N 09135.3E – Silchar (KKU) 2454.8N 09258.9E – Imphal (IIM) 2446.0N 09354.5E – Kunming (KMG) 2501N 10244E</p> <p>Alternate proposal by IATA: Kathmandu (KTM) 2740.5N 08521.0E – Bagdogra (BGD) 264118N 0881934E – Guwahati (GGT) 2606.1N 09135.3E – Dimapur (DMR) 255251.30N 0934655.29E – Kunming (KMG) 2501N 10244E</p>
Flight Level Band	
Benefit (fuel, environmental)	<p>110 NM / 15 minutes, 520 kg fuel, 1640 kg CO₂ per flight</p> <p>Potential to save 19 to 25 minutes per flight and assist in decongesting A599/Lashio.</p>
Operational Information (potential airlines, flight frequency, potential city pairs)	
<p>Remarks: IATA North Asia Office approached China who have indicated this route will be considered as part of the overall China route review – no timeline was given. China advised that they would seriously look at the proposal and would coordinate with Nepal (ref. para 8.4 of the SEA-RR/TF/4 report).</p> <p>At SAIOACG/9: with the improvement of surveillance capability, Myanmar would review this proposal.</p> <p>At ATMSG/7: Under consideration by China; and Myanmar commented this route proposal would be dependent on the enhancement of surveillance and communication coverage in the area.</p> <p>26/09/2020: Nepal updated this route proposal was under discussion with Myanmar, and they were optimistic that communication and surveillance capabilities would be available in Yangon FIR in the near future to support the implementation of this route. 20/11/2020: China commented that it was not possible to establish a new entry/exit point, and counter-proposed to re-align IIM – LSO –</p>	<p>The map displays the proposed flight route (Himalaya 02) connecting Kathmandu (KTM) to Kunming (KMG) via Bagdogra (BGD), Guwahati (GGT), Silchar (KKU), and Imphal (IIM). The route is shown as a thick black line connecting these cities. The map also shows other regional routes and airports, including BBD, GGT, IIM, and KMG. Geographical features like the Bay of Bengal and surrounding countries (Nepal, India, Myanmar, China, Bhutan, Bangladesh) are visible. The map includes latitude and longitude coordinates (30.0°N, 20.0°N, 100°E, 105°E).</p>

LINSO (existing entry/exit point between Yangon and Kunming FIRs). At

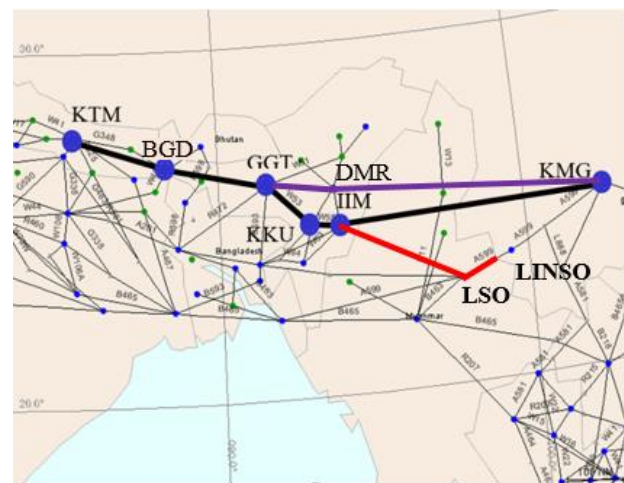
ATM/SG/8: In response to China’s counter-proposal, Myanmar provided their disagreement; and India commented the existing established routes in Kolkata FIR (i.e. W137, W53 and W55) was for domestic operations only, and India would need to review the possibility of opening these routes for international operations. India also suggested that in light of this, and the delay of more than nine years and the positions of Myanmar and China, Nepal may wish to consider a new proposal.

At ATM/SG/9: IATA commented that based on detailed re-assessment conducted by airlines, it confirmed a ‘HIGH’ priority to HIMALAYA 02. In addition, IATA suggested an alternate proposal which had potential to save up to 19 to 25 minutes, and would also help to decongest ATS route A599/Lashio (LSO) and save additional 88 NM compared with IIM – LSO – LINSO route. IATA also requested India to consider keeping ATS route J7 (CDR2/3 route between GGT – DMR) available based on traffic demand timings. Nepal supported the alternate proposal as suggested by IATA, and would coordinate and hold a consultation meeting with the various stakeholders. China commented that it was not possible to establish a new entry/exit point.

At BOBTFRG/3: Myanmar supported the proposal by IATA; India expressed its concern in getting a favourable response from its military authorities for the route between Guwahati (GGT) – Dimapur (DMR) – Kunming (KMG). According to India, implementing the route from Imphal (IIM) to Kunming (KMG) was more feasible. Given the fact that China had revised the priority as “D”, IATA was requested to consider the position of China before pursuing the proposal; and Bangladesh suggested IATA to consider: Kathmandu (KTM) – Saidpur (SDP) – Silchar (KKU) – Imphal (IIM) – Kunming (KMG).



Counter-proposal by China



Counter-proposal by China
Suggested by IATA



[Map provided by ICAO]

27/1/2022: Nepal is having in-house discussion and consultation with different stakeholders and planning to coordinate with the affected States soon.

1/3/2022: IATA may request that China explores possibility in near future of opening up additional entry/exit as this has direct savings to flights from Nepal and China.

3/3/2022: China commented there is no status update.

In August 2022, China commented that there was no plan to establish a new entry/exit point and suggested considering the route proposal based on the current existing entry/exit point LINSO.

At BOBTFRG/4: Noting that with the upgradation of Bangladesh's CNS/ATM system, full coverage of communication in Dhaka FIR would be available shortly, so taking consideration of China's counter-proposal, Bangladesh proposed two route options as: Kathmandu (KTM)-Saidpur (SDP)-SYT-LSO or, Kathmandu (KTM)- Saidpur (SDP)-SYT- Imphal (IIM)-LSO. India commented that further meaningful discussion of this proposal should be based on the basic agreement between China and Myanmar.

Before SAIOSEACG/2: Nepal implied that they would like to insist on their initial proposal if IATA's proposal is not acceptable and pointed out that Nepal would put further efforts to discuss with the Chinese Authority to see the further possibilities without deviating much from the initial proposal.

At SAIOSEACG/2:

a) Nepal reiterated that they would like to retain their initial proposal if IATA's proposal is not acceptable and pointed out that Nepal would put further efforts into discussing with the relevant States to see the further possibilities without deviating much from the initial proposal. IATA supported.

b) Considering the divergence on the segment, in terms of FMS load for track change from KTM to KMG, Bangladesh



HIMALAYA 02 as New Proposal by Nepal

requested IATA to reconsider their proposal for the segment from: Kathmandu (KTM)- Saidpur (SDP)- SYT- Imphal (IIM).

c) Myanmar stated they did not agree with the road segment from IIM – LSO – LINSO.

d) China commented that there was no plan to establish a new entry/exit point so far.

e) Given that the situation had not changed for more than 15 years, India suggested Nepal re-evaluate this proposal. In response, Nepal stated that they would re-evaluate the proposal, and if there would be a possibility for modification, they would present a working paper accordingly in the next appropriate ICAO forum.

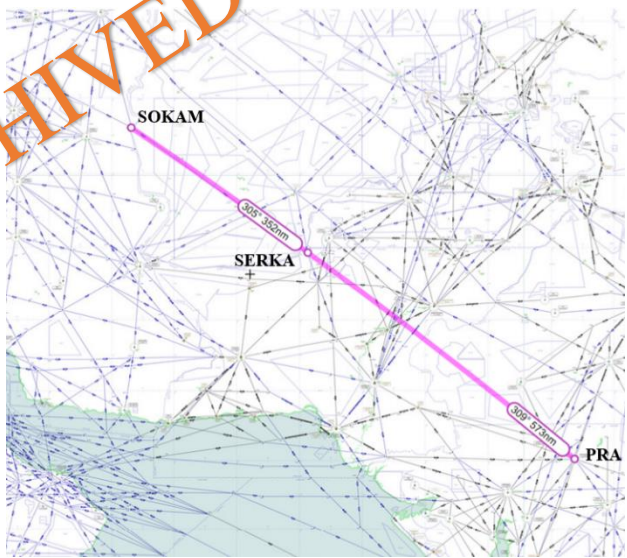
At ATMSG/11: Nepal suggested that the Hymalaya 02 route should remain in this catalogue. In response, the ICAO APAC RSO will continuously discuss it within the ATS route catalogue.

At SAIOSEACG/3: Nepal emphasised that the HIMALAYA 02 route potential to enhance economic viability and environmental sustainability for air travel. India stated that since domestic routes are involved, it has to review international operations on these routes. It also stated that this route passes through military areas, for which discussion with military authority is required. India also suggested that Nepal's route may be finalised and discussed with Myanmar (an important stakeholder) first before consideration by other concerned states. Bangladesh suggested Nepal to consider their proposal for the segment from Kathmandu (KTM) - Saidpur (SDP) - SYT - Imphal (IIM). The meeting recognised that further meaningful discussion of this proposal should be based on the basics of Myanmar's presence. In this connection, Nepal agreed to refine the route proposal taking into consideration of comments from Bangladesh and China and requested ICAO to set up a coordination meeting that involved all stakeholders, including Myanmar, for necessary discussion on the matter. At the side meeting, China and Nepal reviewed all four proposed schemes

for this route proposal and particularly discussed the fourth scheme (i.e. IIM-LINSO) in depth. China acknowledged about using the existing entry/exit FIR boundary point, etc. Nepal agreed to consider these technical concerns further. Both China and Nepal agreed that they would continue to maintain close contact on this proposal via ICAO APAC RSO.

Before the SAIOSEACG/4: Nepal updated through email that they wish to keep it in this ATS route catalogue with high priority. Nepal said that this route will be crucial to achieve the strategic objectives of ICAO. IATA also has given this route high priority.

At BOBTFRG/7: IATA expressed its support of the HIMALAYA 02 proposal and expects clear operational benefits for flights operating from Nepal to more distant FIRs.

ATS Route Name	IND 07 (N877 Extension)
State Priority	D
IATA Priority	MEDIUM
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	India, Pakistan, Afghanistan (Mumbai, Delhi, Karachi, Kabul FIRs)
Route Description	Pratarah (PRA) 2401.8N 07445.0E – SERKA 2951.0N 06615.0E – SOKAM 3313.3N 06037.9E
Flight Level Band	28,000 - 46,000 ft
Benefit (fuel, environmental)	51 NM / 7 minutes, 835 kg fuel, 2,630 kg CO ₂ per flight, 3,387 tonnes fuel, 10,668 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	LH, KL KUL/SIN – Middle East – East/Europe
<p>Remarks: This proposal predates the extension of UL333 through Kabul FIR and has been under consideration for a number of years. The extension of UL333 is under utilised against other Kabul routes largely due the 45 NM ‘penalty’ in track mileage the current route structure requires. The route’s primary benefit at this stage will be westbound and during BOBCAT traffic flow. Extension completed SERKA to SOKAM. Update 08/02/13: PRA – SERKA has been approved by India after lengthy consultation with the military, complementary action from Pakistan awaited.</p> <p>At SAIOACG/9: Pakistan commented this route proposal was very unlikely to be implemented. Future of this route would be decided at SAIOACG/10 in 2020. Update from India on 02/08/2019: Since the proposal is pending concurrence of Pakistan for a long time, India need to renegotiate the proposal with military after comments from Pakistan.</p> <p>17/08/2020: The designated established military areas in Karachi FIR and route structure (crosser routes near the boundary with Delhi and Kabul FIRs) does not allow the establishment of this route. Pakistan proposed for deletion.</p> <p>At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue.</p> <p>At BOBTFRG/3: Pakistan re-affirmed that the designated established military areas in Karachi FIR and route structure</p>	

(crossing routes near the boundary with Delhi and Kabul FIRs) would not permit the establishment of this route.

1/3/2022: IATA wants this proposal to be archived and reintroduced if/when future possibilities permit its success.

At BOBTFRG/4: Pakistan reaffirmed that the proposed route was not feasible and supported archiving this proposal for future possibility, and IATA had no objection.

ARCHIVED

ATS Route Name	BOB 01
State Priority	
IATA Priority	HIGH
Requested by (when)	IATA (05/11/2021: ATM/SG/9)
States/Administrations Involved	India, Bangladesh, Myanmar (Chennai, Kolkata, Dhaka, Yangon FIRs)
Route Description	<p>Option 1: SUGAN 152500N 0825045E – New Waypoint 192600N 0920000E (FIR BDRY between Kolkata and Yangon) – Sittwe (STW) – Mandalay (MDY)</p> <p>Option 2: Vishakhapatnam (VVZ) 174003.90N 0831510.00E – RUMUN 185805N 0891420E – New Waypoint 192600N 0920000E (FIR BDRY between Kolkata and Yangon) – Sittwe (STW) – Mandalay (MDY)</p> <p>Counter proposal by India: Eastbound: Q10 - TATUX - DOPID - MDY. Westbound: MDY - DOPID - KAGUL - Q11.</p> <p>Counter proposal by Bangladesh: TATUX-DOPID-Cox's Bazar -CHILA-A599- LSO-LINSO</p>
Flight Level Band	All suitable bi-directional flight levels. Else, at least suitable eastbound flight levels. (airline operators preferred flight level would be FL330 as primary and FL310 as secondary)
Benefit (fuel, environmental)	<p>Option 1: Narrow body fleet: 94 NM / 12 minutes, 456 kg fuel, 1.5 tonnes CO₂ per flight, 166 tonnes fuel, 548 tonnes CO₂ annually Wide body fleet: 94 NM / 12 minutes, 900 kg fuel, 3.0 tonnes CO₂ per flight, 329 tonnes fuel, 1095 tonnes CO₂ annually</p> <p>Option 2: Narrow body fleet: 71 NM / 9 minutes, 344 kg fuel, 1.1 tonnes CO₂ per flight, 126 tonnes fuel, 402 tonnes CO₂ annually Wide body fleet: 71 NM / 9 minutes, 679 kg fuel, 2.2 tonnes CO₂ per flight, 248 tonnes fuel, 803 tonnes CO₂ annually</p>
Operational Information (potential airlines, flight frequency, potential city pairs)	About 110 flights per week Africa/South Asia – Far East, Southern India – East Coast of the United States

Remarks: The proposed routes would efficiently connect South West Bay of Bengal traffic and Far East. At BOBTFRG/3: In order to conduct better assessment, India requested IATA to provide the analysis of the fleet equipage in ADS-C/CPDLC and PBCS. IATA provided its analysis result on fleet readiness of its members in the SAIOSEACG/1 meeting (Mar. 2022).

On 8/8/2022: India in its assessment on BOB01 & BOB02 commented the proposed routes are outside the SUR and VHF coverage imposing unnecessary restrictions for all other cross-cutting routes. Therefore proposed alternatives as below:

Eastbound aircraft via Q10: TATUX – DOPID – MDY.

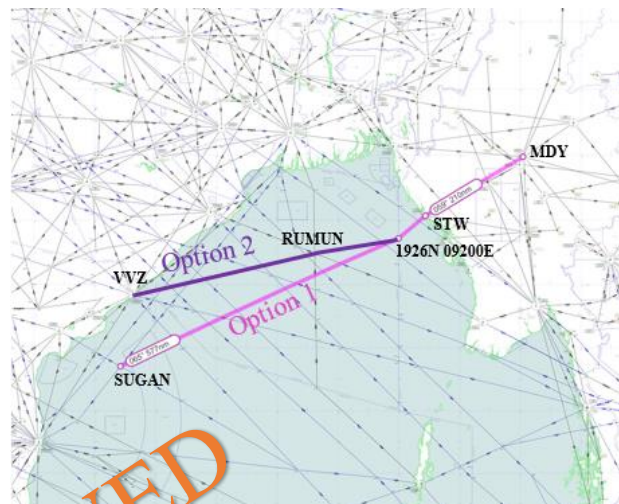
Westbound aircraft: MDY – DOPID – KAGUL – Q11.

India stated this would improve the availability of getting optimum flight levels (well covered by SUR and VHF in Kolkata FIR) and require the approval of Bangladesh and Myanmar.

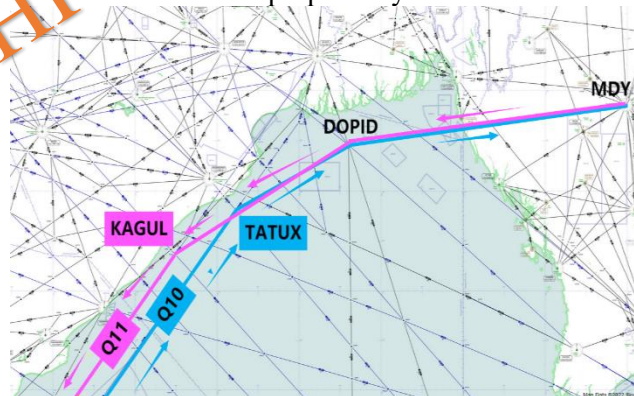
ATMSG/10: Bangladesh commented that India's counter-proposal overflies the designated established military areas, so Bangladesh needs to consult with the military authorities.

BOBTFRG/4: Bangladesh noted that the consultation with the military authority was still under process. To avoid the Danger area, two more alternative options are proposed with a connection to the new DVOR (Cox's Bazar, CXB), which is under construction and would be available in three months, detailed as follow:
 DOPID – Cox's Bazar (CXB DVOR) – MDY or,
 TATUX – Cox's Bazar (CXB DVOR) – MDY.

In response to Bangladesh's counterproposal, IATA suggested specifying a new waypoint at the position of Cox's Bazar instead of waiting for the availability of the new DVOR and proposed the following route connecting Cox Bazar-APAGO-CHILA and onwards joining ATS Route A599:

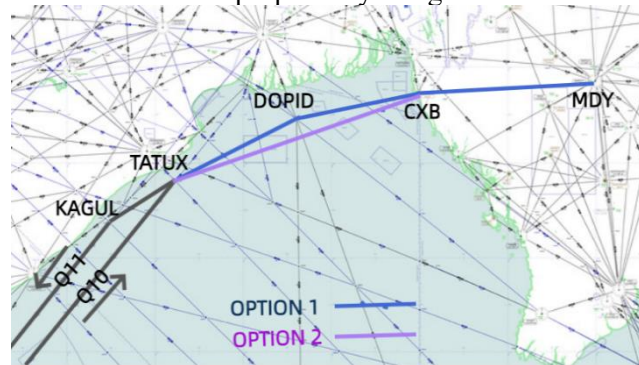


Counter-proposal by India:



[Map provided by ICAO]

Counter-proposal by Bangladesh:



[Map provided by ICAO]

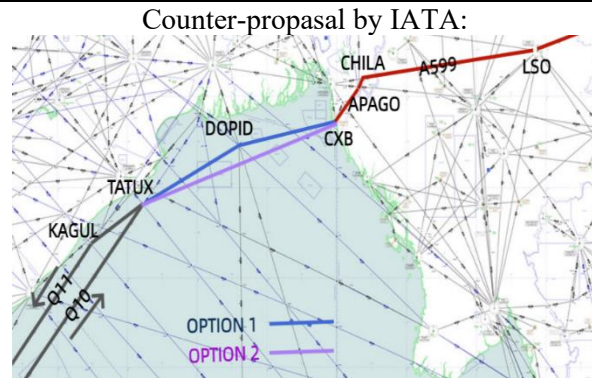
TATUX-DOPID-Cox's Bazar -APAGO-CHILA-A599- LSO-LINSO

Before SAIOSEACG/2, all stakeholders had extensive discussion on the BOB01. IATA affirmed its proposal: A599 – CHILA - APAGO – CB (Coxs Bazar) – DOPID – TATUX - KAGUL Q11. Bangladesh suggested to skip the waypoint “APAGO”.

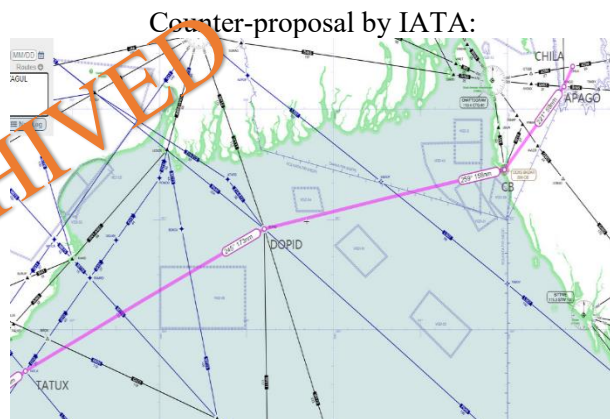
At SAIOSEACG/2:

- a) India and IATA had no objection to Bangladesh’s counter-proposal in principle.
- b) In response to India’s concern about the handover separation, Bangladesh confirmed that they could accept the transfer separation from Yangon FIR.
- c) Myanmar suggested to consider Bangladesh’s counter proposal: A599 – CHILA– CB (Coxs Bazar) – DOPID – TATUX - KAGUL Q11, and pointed out that the optimization of the FLAS operation was the major issue which needed to be addressed before the establishment of the new route.
- d) Bangladesh suggested the resolution on the new route would be finalized considering the revision of LOA between Bangladesh-India and Bangladesh-Myanmar.
- e) IATA suggested Bangladesh and India to consider an interim solution – making BOB 01 an Eastbound airway, establishing eastbound air traffic on present A599 and B465 airways before entering into Yangon FIR; till the time Myanmar raised FLAS issues are sorted out, then enabling BOB01 for Westbound flights.

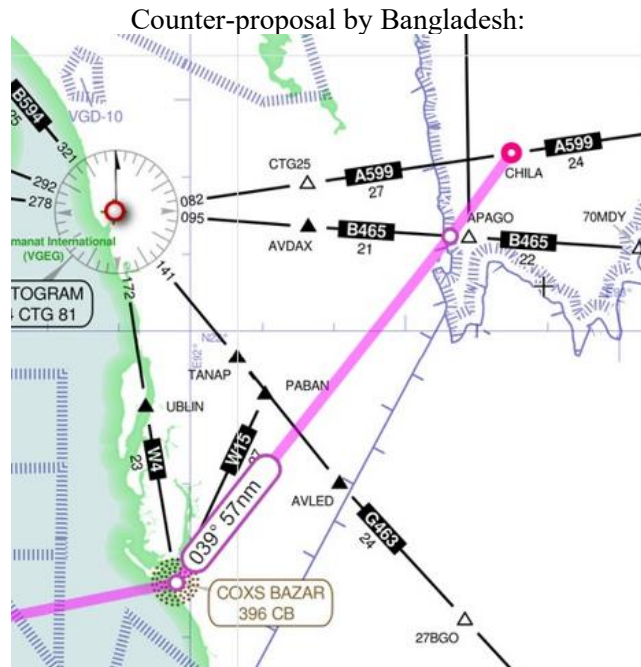
After SAIOSEACG/2: ICAO RSO hosted a special coordination meeting (Video Teleconference, 11 May 2023), involving Bangladesh, India and IATA. The Special coordination meeting formally agreed to establish the BOB01 Route proposal connecting SURUP - KAKID – GOLAN - (WPT1) - (WPT 2) - Chattogram (CTG). This bi-directional route option saves about 55NM, expected to benefit about 110 weekly flights.



[Map provided by ICAO]



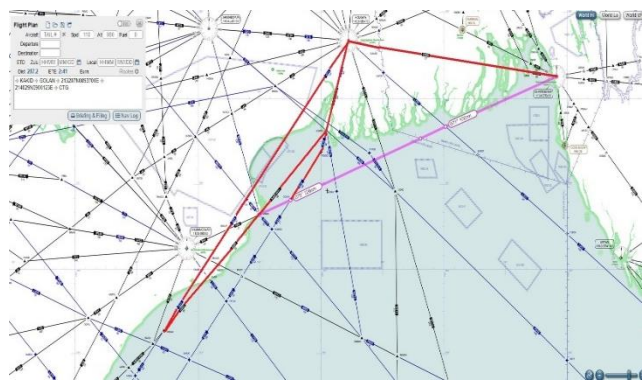
[Map provided by ICAO]



[Map provided by IATA]

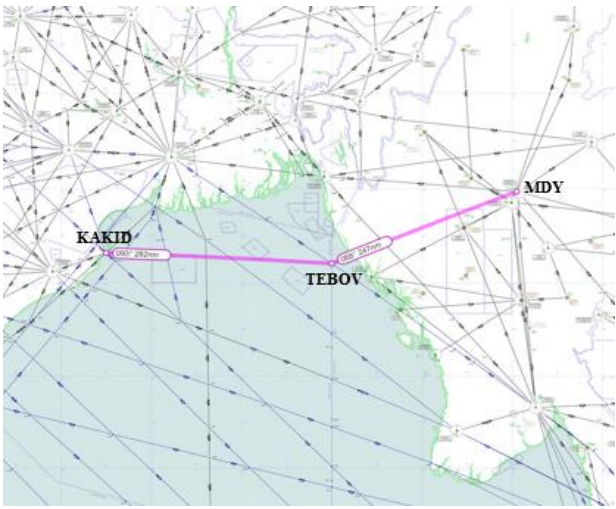
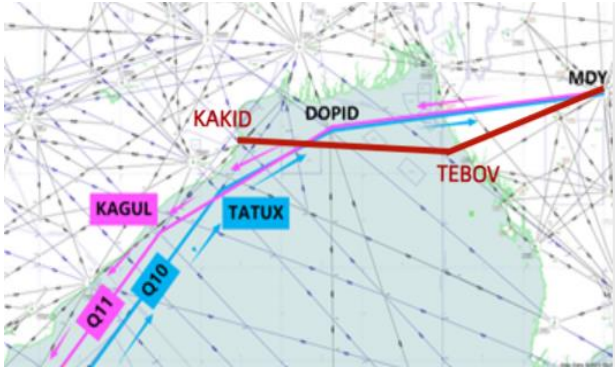
At BOBTFGR/5: discussion highlighted the near-finalization of new route proposals involving Bangladesh and India. The meeting was informed that the Route designator has been approved as P632. The need for a formal safety assessment process for the proposed routes was emphasized. Bangladesh and India indicated their commitment to finalizing the necessary safety assessments, including participation from ICAO for supervisory guidance. Participants expressed hope that the proposed amendments to the routes would be promulgated in the first quarter of 2024, subject to the completion of safety assessments.

At SAIOSEACG/3: Bangladesh and India presented the update of establishing BOB 01 route. It was intimated that Bangladesh and India have already conducted a safety assessment in the second week of April. The PfA had already been submitted to the ICAO APAC office. Following the approval of PfA by the ICAO Office and the signing of the LoA by both states, the ATS route shall be promulgated by both countries, which will be a part of a regional network of ATS Routes.



Formally agreed BOB01 Route Proposal (Pink line – Agreed Direct Route, Red lines – Present routes.

ARCHIVED

ATS Route Name	BOB 02
State Priority	
IATA Priority	HIGH
Requested by (when)	IATA (05/11/2021: ATM/SG/9)
States/Administrations Involved	India, Bangladesh, Myanmar (Kolkata, Yangon FIRs)
Route Description	KAKID 203833N 0865951E – TEBOV 202504N 0915949E – Mandalay (MDY) Counter proposal by India: Eastbound: Q10 - TATUX - DOPID - MDY. Westbound: MDY - DOPID - KAGUL - Q11.
Flight Level Band	All suitable flight levels
Benefit (fuel, environmental)	Narrow body fleet: 50 NM / 6 minutes, 228 kg fuel, 750 kg CO ₂ per flight, 83 tonnes fuel, 274 tonnes CO ₂ annually Wide body fleet: 50 NM / 6 minutes, 450 kg fuel, 1.5 tonnes CO ₂ per flight, 164 tonnes fuel, 548 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	About 110 flights per week Africa/South Asia – Far East, Southern India – East Coast of the United States
Remarks: The proposed route would not only provide efficient connection over Bay of Bengal, but it would also help in de-congesting ATS routes A791, B465, Q19 and Q20. At BOBTFRG/3: In order to conduct better assessment, India requested IATA to provide the analysis of the fleet equipage in ADS-C/CPDLC and PBCS. 08/08/2022: India in its assessment on BOB01 & BOB02 commented the proposed routes are outside the SUR and VHF coverage imposing unnecessary restrictions for all other cross-cutting routes. Therefore proposed alternatives as below: Eastbound aircraft via Q10: TATUX - DOPID - MDY. Westbound aircraft: MDY - DOPID - KAGUL - Q11. India stated this would improve the availability of getting optimum flight levels (well covered by SUR and VHF in Kolkata FIR) and require the approval of Bangladesh and Myanmar. ATMSG/10: Bangladesh commented that India's counter-proposal overflies the designated established military areas, so Bangladesh needs to consult with the military authorities. 16/11/2022: In response to India's concerns about SUR and VHF coverage,	 <p>Counter-proposal by India vs original proposal by IATA:</p>  <p>[Map provided by ICAO]</p>

IATA suggested that with the issuing of the ADS/C & CPDLC mandate, PBCS-equipped aircraft could operate on this proposed route. Regarding the military area, IATA pointed out that the danger area VGD-31 was permanently removed; thus, the possible route connecting DOPID (India proposed waypoint)-TEBOV is not affected by the consequent restrictions (see the Map provided by IATA). Considering the complexity of this airspace, IATA preferred this route to be retained separately and discussed in tandem with BOB01.

At BOBTFRG/4: Considering the complexity and constraints in the area, Bangladesh and India wanted to focus on Bangladesh's counter-proposes for BOB 01 in the first place. Since the SWG has prioritised the BOB01 as the primary task, it was proposed by IATA that BOB 02 to be archived for future possibility.

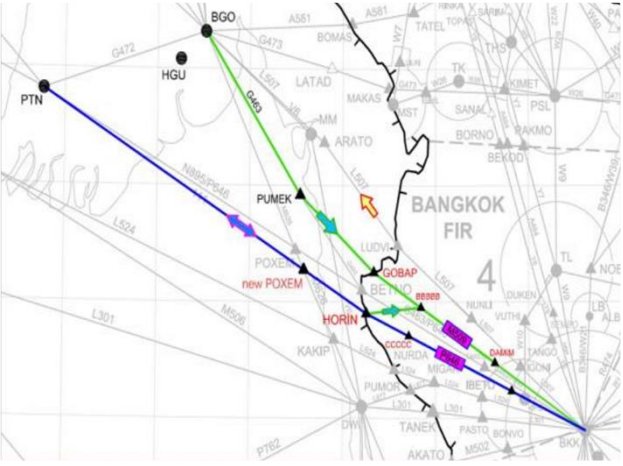
At SAIOSEACG/2: agreed that BOB02 be retained in the route catalogue.

At BOBTFRG/5: there was a consensus to move the BOB 02 route proposal into archives since the BOB 01 route has reached its final stages of implementation. IATA, Bangladesh, and India agreed with this decision.

Possible route overflies VGD-31 (permanently removed):



[Map provided by IATA]

ATS Route Name	BOB 03
State Priority	B
IATA Priority	HIGH/MEDIUM/LOW (<i>Need IATA assessment</i>)
Requested by (when)	Myanmar and Thailand (November 2024)
States/Administrations Involved	Myanmar and Thailand (Yangon and Bangkok FIRs)
Route Description	Route 1: BKK (1353.61N 10035.78E) – HORIN – New POXEM – PTN (1648.78N 9446.78E) Route 2: BKK (1353.61N 10035.78E) – GOBAP – DAMIM – PUMEK (1528.64N 9748.61E) – BGO (1719.11N 9631.20E)
Flight Level Band	
Benefit (fuel, environmental)	Further optimize air traffic flows from Europe, South Asia and Middle East to continental Southeast Asia operating through Myanmar and Thailand airspace
Operational Information (potential airlines, flight frequency, potential city pairs)	<i>(Need information from IATA)</i>
Remarks: At SIOSEACG/4: this proposal is newly incorporated. Concerned States are realigning of N895/P646 between PTN – BKK and designating as bi-directional route for overflight traffic and G463 between BGO-BKK, and designating it a uni-directional RNAV2/RNAV10 route serving eastbound PBN-capable traffic. BIMT Phase 2b (Myanmar – Thailand Route Development) aims to further optimize air traffic flows between Myanmar and Thailand. The route will be Performance-Based Navigation (PBN) (RNAV2 or RNAV10). Myanmar and Thailand agreed to continue implementation efforts during BIMT/8 (November 2024). At BOBTFRG/7: Thailand informed that a bilateral meeting between Thailand and Myanmar was planned for the following week. The outcomes of the discussion would be reported at future regional meeting, such as SAIOSEACG/5.	

Chapter 2: Southeast Asia

(referred to States, SAIOSEACG and SCSTFRG for review)

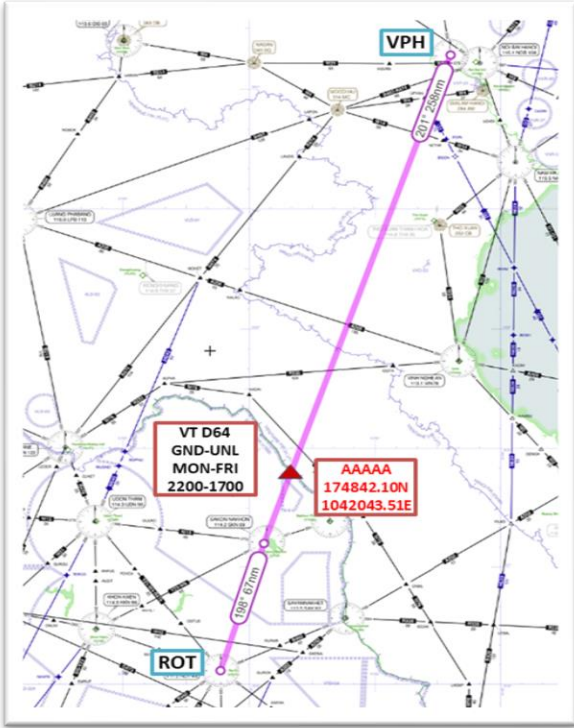
ATS Route Name	MEKONG 01
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Thailand, Vietnam (21/03/2023)
States/Administrations Involved	Thailand, Lao PDR, Vietnam (Bangkok, Vientiane, Hanoi) Cambodia, Thailand, Lao PDR, Viet Nam (Phnom Penh FIR, Bangkok FIR, Vientiane FIR, Hanoi FIR)
Route Description	VINH PHUC (VPH) (211634N 1053604E) – BISON (2026.20N 10538.01E) – CB (1952.58N 10530.98E) – IDOTA (Ha Noi/Vientiane FIR Boundary) (1841.23N 1058.35E) – New Bangkok/Vientiane FIR Boundary (174842.10N 1042043.51E) – ROI-ET (ROT) (160700.59N 1034619.45E) – BIDEM (Bangkok/Phnom Penh FIR Boundary) (1423.06N 10347.27E) – REP (1321.62N 10413.42E) – PNH (1135.69N 10445.85E)
Flight Level Band	
Benefit (fuel, environmental)	Potential to save 12 minutes and 750 kilograms of fuel per flight (VVNB – VDSR)
Operational Information (potential airlines, flight frequency)	Allow flights from Guangzhou FIR and beyond on the ATS route R474 to fly shorter distance into Bangkok FIR (VTBS) and further South into Phnom Penh FIR (VDSA & VDPP)
<p>Remarks: This route was proposed as Conditional Route (CDR) to promote international CDR arrangement among the Mekong states. The route availability will be subject to civil-military coordination in pre-tactical and tactical level.</p> <p>At SAIOSEACG/2: Viet Nam supported the initiative by Thailand, and added that the new route would be further realigned with the existing primary routes within Hanoi FIR. For the update, the approval procedure of the route proposal by its higher authority is in progress, and which expected to be completed soon. It is suggested that Thailand organize a tripartite meeting involving all States concerned to further discuss the detail.</p> <p>At SCSTFRG/12: Further information will be provided after Mekong-ATMCG meeting (27-28 November 2024).</p> <p>At SAIOSEACG/4: the relevant States agreed to the design principle of the ATS route to be implemented as an RNAV2 CDR with the MFA of FL270 and would continue with implementation planning in due course. Viet Nam and Thailand informed the meeting</p>	

Figure 1: VPH – ROT Route

of the following points through WP17 derived from MK-ATM/CG/10 meeting. Hanoi FIR, Viet Nam and Bangkok FIR, Thailand agreed to the design principle of ATS route serving traffic as Fig-2 between VPH – ROT – PNH to be implemented as an RNAV2 CDR with the MFA of FL270 and would continue with implementation planning in due course. Hanoi FIR (Viet Nam) and Bangkok FIR (Thailand) agreed to the design principle of ATS route serving traffic between VPH – ROT – PNH to be implemented as an RNAV 2 CDR with the MFA of FL270 as depicted Fig-3 and would continue with implementation planning in due course.

Thailand added remarks regarding the Fig-3 as follow: relevant States discussed the design of the route which had been altered to align with requirements within Hanoi FIR, Vientiane FIR, and Bangkok FIR as well as the route specification and Minimum Flight Altitude (MFA) for the route, at the MK-ATM/CG/10 (Nov 2024). It was agreed that the route would be designated an RNAV2 Conditional Route (CDR) with the minimum flight altitude of FL270. Moreover, the route was further extended into Phnom Penh FIR, connecting to Phnom Penh (VDPP) and Siem Reap (VDSA) by overlaying existing conventional route R345 (ROT – BIDEEM – REP) and VD W1/Y13 (REP – PNH).

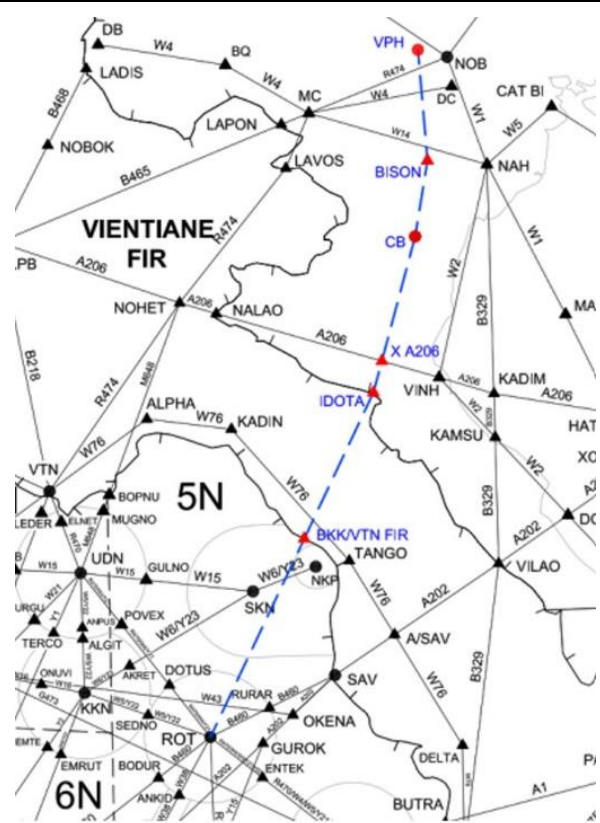


Figure 2: Proposed VPH - ROT Route

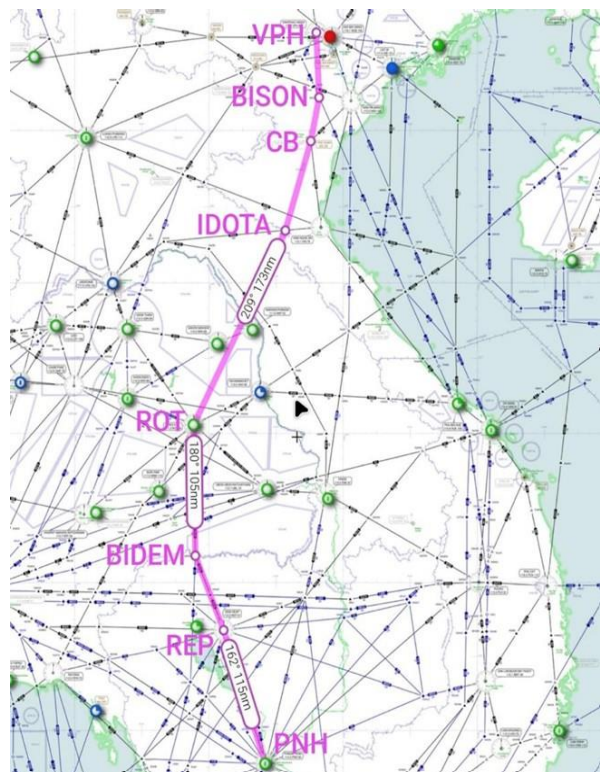

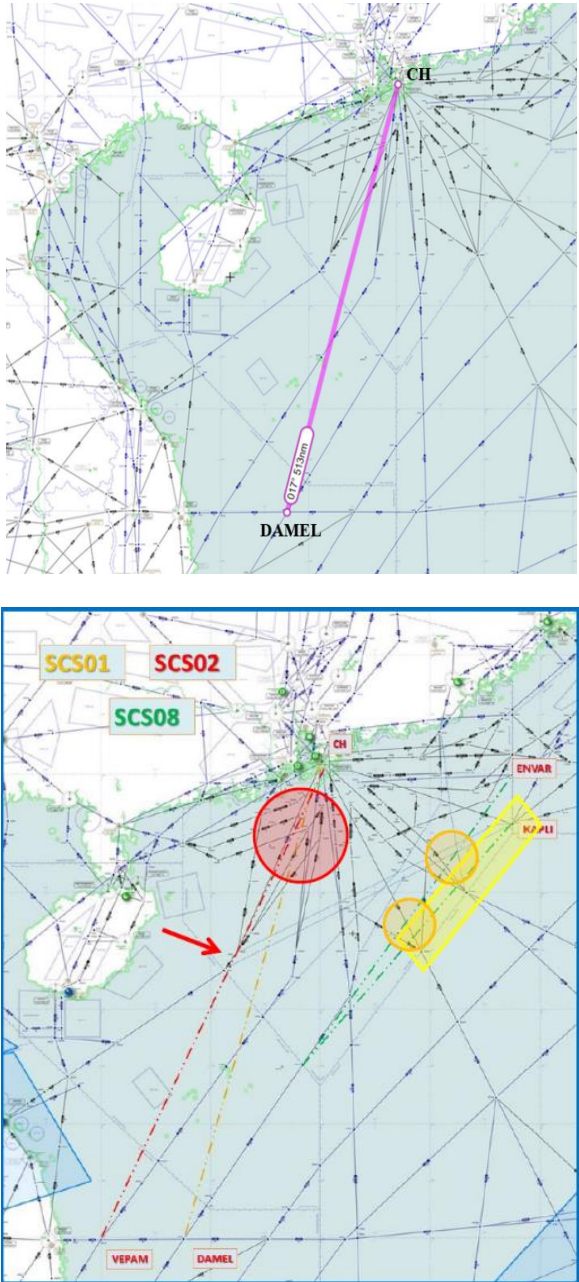


Figure 3: Proposed VPH - ROT - PNH Route

ATS Route Name	MEKONG 02 (NAN – SAGAG)
State Priority	B
IATA Priority	HIGH/MEDIUM/LOW (<i>Need IATA assessment</i>)
Requested by (when)	Lao PDR and Thailand (June 2024)
States/Administrations Involved	China, Lao PDR, Thailand (Kunming, Vientiane, Bangkok FIRs)
Route Description	NAN (1848.61N 10047.28E) – New Bangkok/Vientiane FIR Boundary (coordinate TBC) – SAGAG (2112.91N 10137.05E)
Flight Level Band	FL270 – FL460
Benefit (fuel, environmental)	Reduce NAN – SAGAG flight distance by 35 NM
Operational Information (potential airlines, flight frequency)	FD, TG, MF, MU (<i>Need further traffic count from IATA</i>)
<p>Remarks: At SAIOSEACG/4: this proposal was newly incorporated. The proposed route were designed to enhance airspace capacity between NAN (Bangkok FIR) – SAGAG (Vientiane FIR) into Kunming FIR in southwestern China which the route design principle has been agreed through the tri-lateral discussion between China, Lao PDR and Thailand on 24 – 25 June 2024.</p> <p>At SCSTFRG/14: China commented to ensure seamless coordination and timely implementation for ATS routes from LPB to ELASU, a technical coordination meeting will be convened between China, Lao PDR, Thailand to finalize operational arrangements, validate route design, and confirm implementation timelines on Q4 2026.</p>	

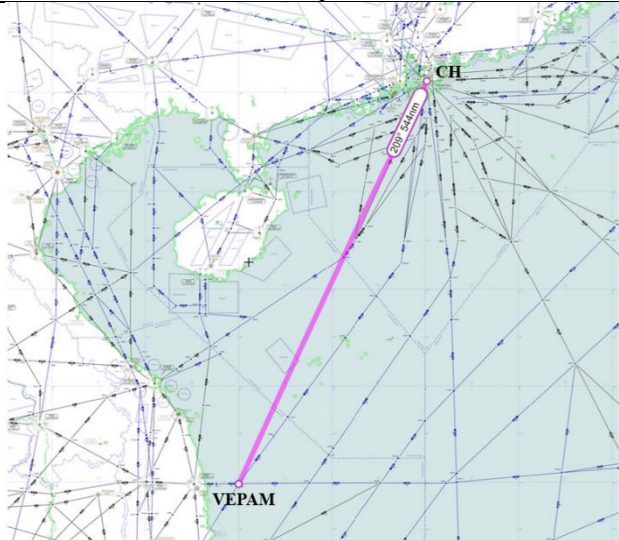
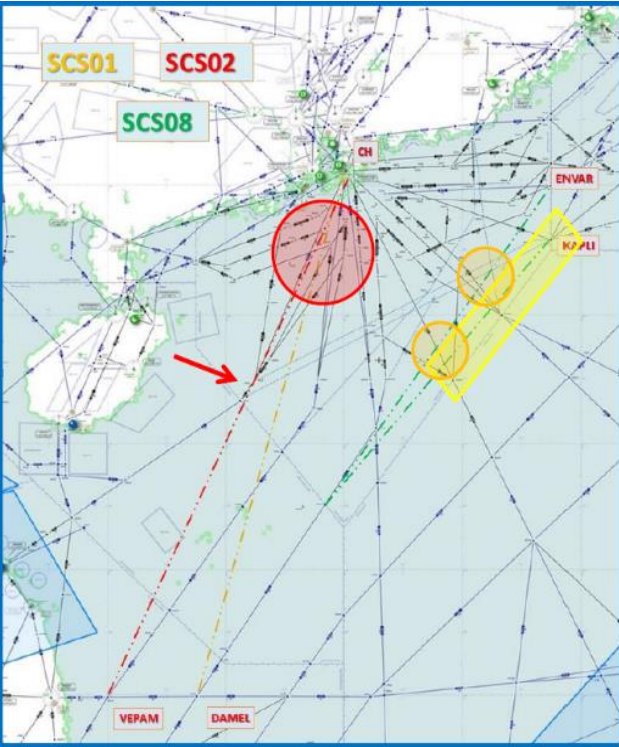
ATS Route Name	MEKONG 03 (BASIT-UPNEP)
State Priority	B
IATA Priority	HIGH/MEDIUM/LOW (Need IATA assessment)
Requested by (when)	Cambodia and Thailand (2015)
States/Administrations Involved	Cambodia, Thailand (Phnom Penh and Bangkok FIRs)
Route Description	UPNEP (942.26N 10029.60E) – BASIT (Bangkok/Phnom Penh FIR Boundary) (934.95N 10221.12E)
Flight Level Band	
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency)	VN
<p>Remarks: At SAIOSEACG/4: this proposal is newly incorporated. The development of a direct ATS route serving traffic between VVTS (Viet Nam), VDSV (Cambodia) and VTSM/VTSP (Thailand) was discussed during the MK-ATM/CG/10 (Nov 2024), the design principle of the route was agreed among relevant States. With a 2-phase implementation plan, this agreement was captured as Conclusion MK-ATM/CG/10-3 from the meeting:</p> <p>a) Phase 1: implementation of BASIT – UPNEP, which were agreed upon by Cambodia and Thailand. Both States were ready to begin the implementation.</p> <p>b) Phase 2: implementation of TUNPO – BASIT by Cambodia and Viet Nam.</p> <p>This route segment would be added into ATS Route Catalogue later as Viet Nam need to conduct internal assessment before developing an implementation plan.</p> <p>At SCSTFRG/13: Cambodia reported ongoing cooperation with Thailand under Phase 1, and stated that this topic would be further addressed at the upcoming Mekong ATM Meeting later this year.</p>	

ATS Route Name	SCS 01
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	Viet Nam, China, Hong Kong China (Ho Chi Minh, Sanya, Hong Kong FIRs)
Route Description	DAMEL 1358.7N 11130.6E – Cheung Chau (CH) 2213.2N 11401.8E
Flight Level Band	28,000 – 46,000 ft
Benefit (Environmental)	23 NM / 4 minutes, 300 kg fuel per flight, 1,560 tonnes fuel, 4,914 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	CX, KA, MH, SQ More than 100 flights per week SIN – Pearl River Delta airports
<p>Remarks: Proposed route shortening for M771 into the Pearl River Delta area.</p> <p>At SEACG/19: WP09 Hong Kong China advised they had studied the proposal for track shortening and advised the proposed change would reduce capacity of A1/P901. It would also require an extensive change in the flight route system and ATC sectors in Hong Kong FIR. However, Hong Kong China would continue to study this proposal for the implementation of RNP4/2.</p> <p>At SEACG/26: Hong Kong China commented they would need to review the integration of this route proposal with its planned airspace enhancement projects.</p> <p>22/07/2019: Viet Nam has no objection, subject to agreement from China and Hong Kong China.</p> <p>23/10/2020: China commented the proposal was under consideration.</p> <p>30/10/2020: Hong Kong China commented SCS 01 and SCS 02 were conflicting with each other (see the red circle in the figure below). The two routes would create additional confliction points in the most congested ATC sector and ATS route segment in the Hong Kong FIR (see the red circle and arrow in the figure below). Therefore, these two routes were not recommended.</p> <p>At ATM/SG/8: IATA provided updates on IATA priority; implementation benefits; and operational information.</p>	 <p>The top map displays a flight route from DAMEL (1358.7N 11130.6E) to Cheung Chau (CH) (2213.2N 11401.8E) highlighted in pink. The bottom map shows a complex network of flight routes in the Hong Kong FIR, with SCS01, SCS02, and SCS08 highlighted. A red circle and arrow indicate a conflict point between SCS01 and SCS02 near the CH airport.</p>

29/09/2021: China commented SCS 01 would create conflict with existing ATS routes A1, L642 and M771, and therefore not recommended for implementation.

At ATM/SG/9: IATA provided update on the route operational information.


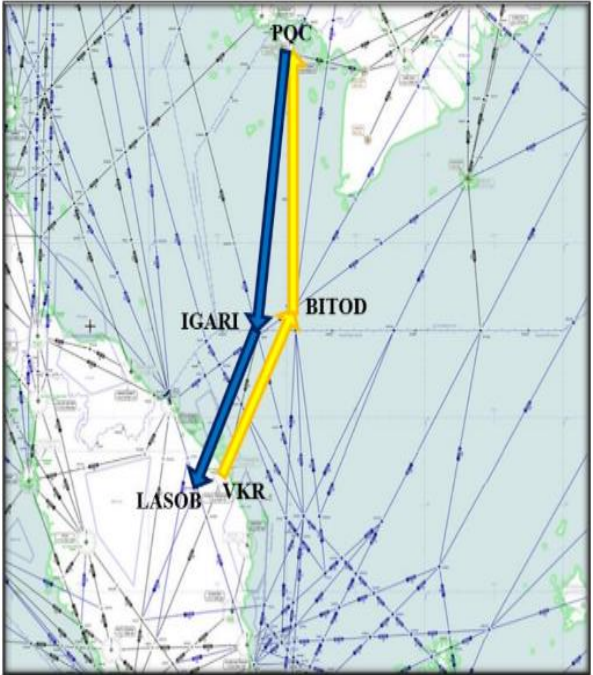
At SCSTFRG/13: Hong Kong China suggested to archive SCS 01 to focus on the discussion to other feasible routes. IATA advised that they will reassess the feasibility of the proposal and retain it in the ATS Route Catalogue list pending further review.

ATS Route Name	SCS 02
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	Viet Nam, China, Hong Kong China (Ho Chi Minh, Sanya, Hong Kong FIRs)
Route Description	VEPAM 1358.0N 11000.0E – Cheung Chau (CH) 2213.2N 11401.8E
Flight Level Band	28,000 – 46,000 ft
Benefit (Environmental)	12 NM / 1 minutes, 200 kg fuel per flight, 2,080 tonnes fuel, 8,580 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	CX, KA, MH, SQ More than 200 flights per week SIN – Pearl River Delta airports
<p>Remarks: Proposed route shortening for L642 out of the Pearl River Delta area.</p> <p>At SEACG/19: WP09 Hong Kong China advised they had studied the proposal for track shortening and advised the proposed change would reduce capacity of A1/P901. It would also require an extensive change in the flight route system and ATC sectors in Hong Kong FIR. However Hong Kong, China would continue to study this proposal for the implementation of RNP4/2.</p> <p>At SEACG/26: Hong Kong China commented they would need to review the integration of this route proposal with its planned airspace enhancement projects.</p> <p>22/07/2019: Viet Nam has no objection, subject to agreement from China and Hong Kong China.</p> <p>23/10/2020: China commented the proposal was under consideration.</p> <p>30/10/2020: Hong Kong China commented SCS 01 and SCS 02 were conflicting with each other (see the red circle in the figure below). The two routes would create additional conflict points in the most congested ATC sector and ATS route segment in the Hong Kong FIR (see the red circle and arrow in the figure below). Therefore, these two routes were not recommended.</p> <p>At ATM/SG/8: IATA provided updates on implementation benefits; and operational information. 29/09/2021: China commented SCS 02 would create conflict with existing</p>	 

ATS routes A1, L642 and M771, and therefore not recommended for implementation.

At ATM/SG/9: IATA provided update on the route operational information.

At SCSTFRG/13: Hong Kong China suggested to archive SCS 02 to focus on the discussion to other feasible routes. IATA advised that they will reassess the feasibility of the proposal and retain it in the ATS Route Catalogue list pending further review.

ATS Route Name	SCS 11
State Priority	B
IATA Priority	LOW
Requested by (when)	IATA (10/03/2015: SEACG/22)
States/Administrations Involved	Viet Nam, Singapore, Malaysia (Ho Chi Minh, Singapore, Kuala Lumpur FIRs)
Route Description	Kuala Terengganu (VKR) 0521.6N 10304.9E – BITOD 0715.4N 10407.1E
Flight Level Band	
Benefit (fuel, environmental)	6 NM / 0 minutes, 23 kg fuel per flight, 167 tonnes fuel, 527 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	MH, VN At least 20 flights per week KUL – HAN/PNH/SGN
<p>Remarks: At SEACG/26: Malaysia, Singapore and Viet Nam had agreed in principle the feasibility of the route proposal. The States concerned would meet to further discuss the proposal in due time, and Malaysia agreed to become the lead coordinator.</p> <p>22/07/2019: Viet Nam proposed the following route proposals for consideration by Malaysia and Singapore: Uni-directional eastbound route VKR – BITOD – PQC; and uni-directional westbound route PQC – IGARI – LASOB.</p> <p>At ATMSG/7: Malaysia would lead the tripartite meeting, expected during the SCSTFRG/8 in September 2019. At ATMSG/8: This route proposal was under consideration by Viet Nam; and IATA provided updates on IATA priority, implementation benefits and operational information.</p> <p>08/10/2021: Malaysia commented they would host the meeting between Malaysia, Singapore and Viet Nam in Q4 2021 or Q1 2022.</p> <p>22/2/2022: the tripartite meeting between Malaysia, Singapore and Viet Nam was canceled and will be rescheduled to report the discussion outcome to SCSTFRG/10 meeting (scheduled 31/5 – 1/6 2022) In the tripartite meeting in September 2022, Viet Nam proposed the following route proposals: unidirectional Eastbound: VKR-IPRIX-BITOD-PQU; and unidirectional Westbound: PQU-IGARI-LASOB.</p>	 

Upon agreement by States concerned (Malaysia and Viet Nam), IATA proposed an extension from IPRIX to VIGEN to this proposal for smooth joining to M765 saving 5 - 6 NM for eastbound flights.

Before SAIOSEACG/2: Malaysia indicated that Malaysia, Singapore and Vietnam have broadly agreed to the proposal. Malaysia's proposal for the Coordination Procedure has been agreed by Singapore pending Viet Nam acknowledgement.

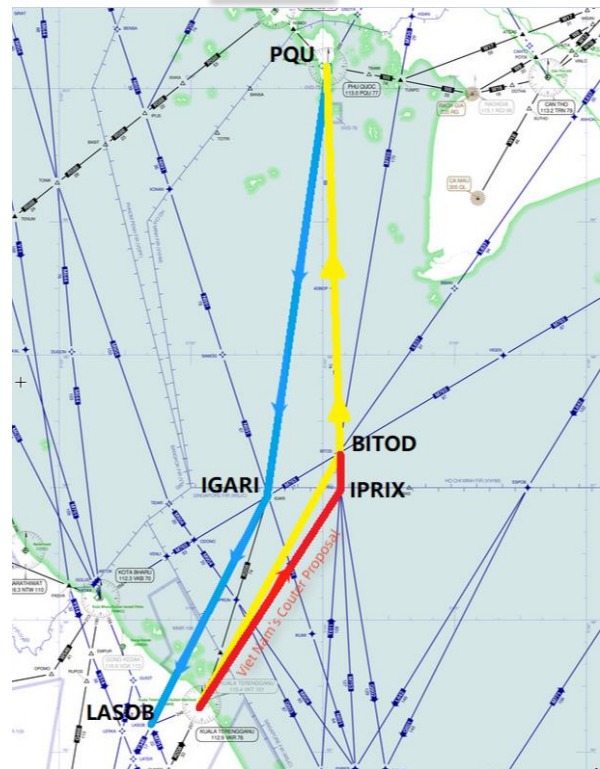
At SAIOSEACG/2: regarding the additional proposal by IATA to further line up the IPRIX to VIGEN, Viet Nam declined based on their safety and efficiency evaluation.

At SCSTFRG/11: Viet Nam submitted IP05 that commented at the Tripartite Meeting (through a video teleconference) between Malaysia, Viet Nam, and Singapore on the ATS route, and other relevant issues on 28 July 2022. Viet Nam principally agreed to the proposal for the establishment of a new ATS route as requested by IATA. Viet Nam suggested a minor adjustment to the proposal, stating that VKR-IPRIX should be used instead of VKR-BITOD to minimize the number of transfer points at IPRIX and reduce the workload of ATC. Viet Nam also suggested RNAV 2/RNP 2 for both routes. The timeline depends on the Malaysia and Singapore sides.

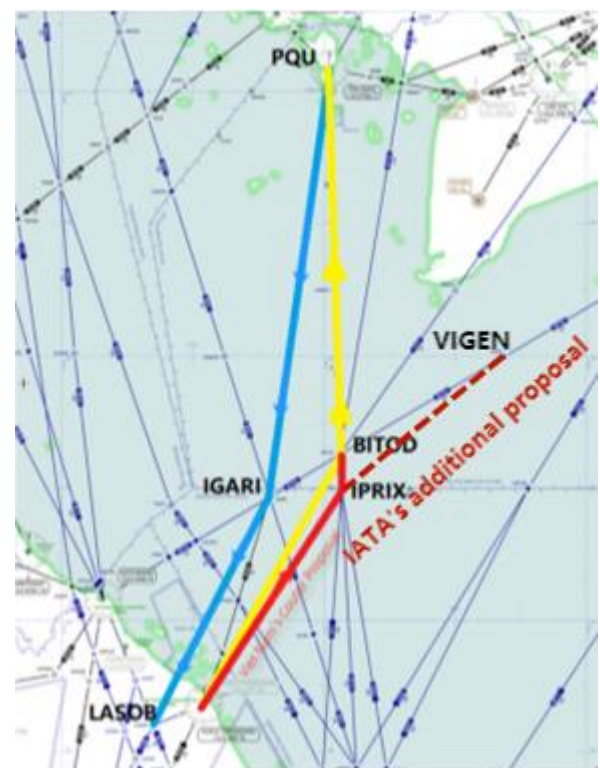
At SAIOSEACG/3: Malaysia suggested to apply RNP10 route specification on the proposed routes. Singapore had no objections to either RNP 2 or RNP 10 navigation specifications for the proposed routes but highlighted that there are some operational details that need to be further discussed between the three States involved. In line with the APAC Seamless ANS Plan, ICAO recommended RNAV 2 and RNP 4 as preferable options for future air navigation, and the suggestion was echoed by Viet Nam. As requested by Malaysia, IATA agreed to investigate the fleet equipage operating in the area.

At SCSTFRG/12: Malaysia has engaged with local airlines operating in the area and confirmed that they are ready for RNAV

Counter-proposal by Viet Nam:



Suggested by IATA:




2/RNP 4. Further discussions with the relevant states are scheduled to take place in Q1 2025.

Before SAIOSEACG/4: Malaysia updated through email that technical discussion between CAAM and CAAS was conducted on 18/2/25. Tripartite discussion is proposed in Q2/3 subject to states availability.

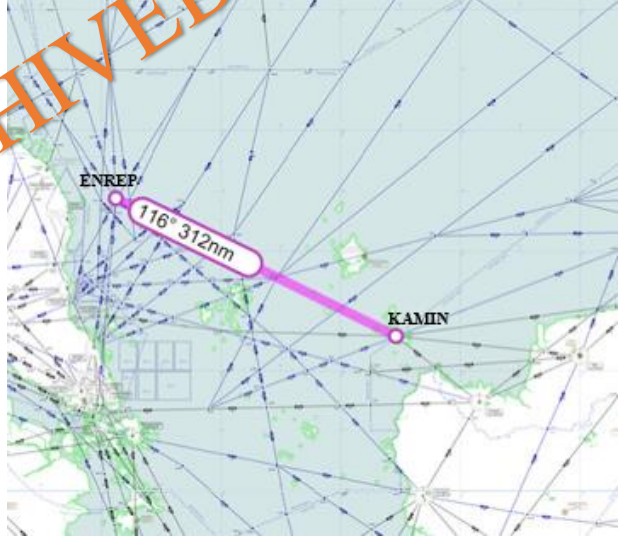
At SAIOSEACG/4: IATA proposed deleting the additional proposal to further connect the IPRIX and VIGEN in order for the counter-proposal from Viet Nam to be progressed without further delay.

12/12/2025: Malaysia informed that further discussion on the route proposal would be arranged with Singapore and Viet Nam in the near future.

ATS Route Name	SCS 14
State Priority	B
IATA Priority	LOW
Requested by (when)	Malaysia (26/03/2018: SAIOACG/8 & SEACG/25)
States/Administrations Involved	Malaysia, Singapore (Kota Kinabalu, Singapore FIRs), Indonesia
Route Description	ENREP 045223.88N 1041442.00E – OLKIT 045012.12N 1115118.00E or ENREP 045223.88N 1041442.00E – TERIX 041520.88N 1093455.92E
Flight Level Band	At or below 29,000 ft
Benefit (fuel, environmental)	107 NM / 12 minutes, 365 kg fuel, 1,153 kg CO ₂ per flight, 266,450 kg fuel, 841,982 kg CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	BKI – KBR
<p>Remarks: Purpose is to circumnavigate major confluence of air traffic at VPK thus providing better efficiency for flight operating from/to KBR. Operation at 29,000 ft and below to avoid crossing traffic within the South China Sea airspace.</p> <p>At SEACG/26: Singapore commented implementation of this route would be possible with the implementation of space-based ADS-B in Singapore FIR, planned by end of 2019; and IATA would assign its priority after a comprehensive review of the Catalogue by its focus group.</p> <p>15/05/2020: discussion on this route proposal would be conducted when the COVID-19 situation improved, and a face-to-face meeting could be conducted between Malaysia and Singapore.</p> <p>At ATMSG/8: Indonesia commented future discussion on this route proposal would require their involvements; and IATA assigned “LOW” priority and recommended for deletion.</p> <p>16/09/2021: Singapore commented that, as the COVID-19 situation had not improved, the face-to-face meeting between the States involved had yet to materialise.</p> <p>At SAIOSEACG/3: Malaysia proposed withdrawing the route proposal. Singapore informed that they have no objections to the withdrawal of SCS 14. IATA suggested that the two route proposals be archived for future</p>	

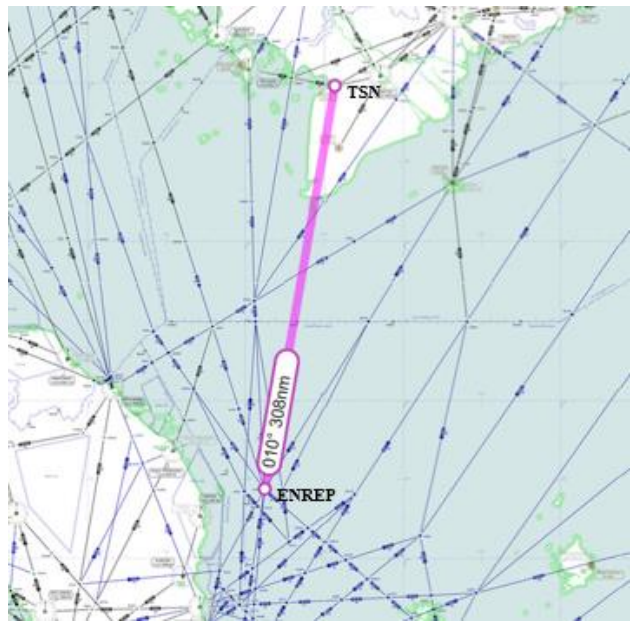
use instead of withdrawn. The meeting agreed to archive the two route proposals from the ATS Route Catalogue.	
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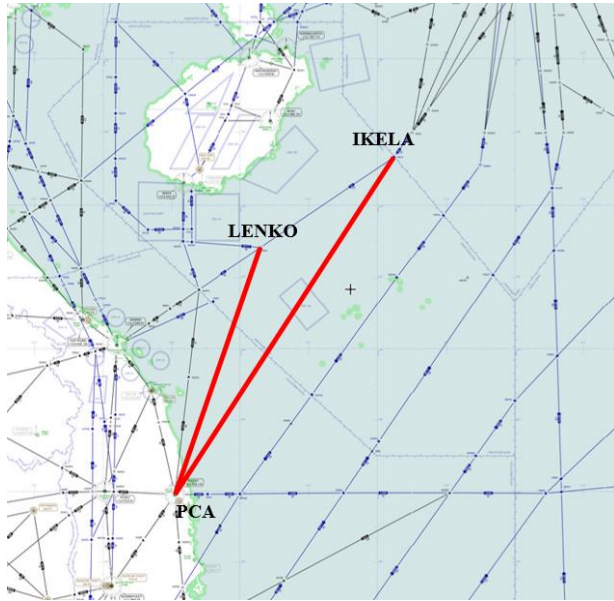
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ATS Route Name	SCS 15
State Priority	B
IATA Priority	LOW
Requested by (when)	Malaysia (26/03/2018: SAIOACG/8 & SEACG/25)
States/Administrations Involved	Malaysia, Singapore (Kota Kinabalu, Singapore FIRs)
Route Description	ENREP 045223.88N 1041442.00E – KAMIN 023441.88N 1085536.12E
Flight Level Band	At or below 29,000 ft
Benefit (fuel, environmental)	107 NM / 12 minutes, 365 kg fuel, 1,153 kg CO ₂ per flight, 266,450 kg fuel, 841,982 kg CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	KCH – KBR
<p>Remarks: Purpose is to circumnavigate major confluence of air traffic at VPK thus providing better efficiency for flight operating from/to KBR. Operation at 29,000 ft and below to avoid crossing traffic within the South China Sea airspace.</p> <p>At SEACG/26: Singapore commented implementation of this route would be possible with the implementation of space-based ADS-B in Singapore FIR, planned by end of 2019; and IATA would assign its priority after a comprehensive review of the Catalogue by its focus group.</p> <p>15/05/2020: discussion on this route proposal would be conducted when the COVID-19 situation improved, and a face-to-face meeting could be conducted between Malaysia and Singapore.</p> <p>At ATM/SG/8: Indonesia commented future discussion on this route proposal would require their involvements; and IATA assigned “LOW” priority and recommended for deletion.</p> <p>16/09/2021: Singapore commented that, as the COVID-19 situation had not improved, the face-to-face meeting between the States involved had yet to materialise.</p> <p>At SAIOSEACG/3: Malaysia proposed withdrawing the route proposal. Singapore informed that they have no objections to the withdrawal of SCS15. IATA suggested that the two route proposals be archived for future use instead of withdrawn. The meeting</p>	

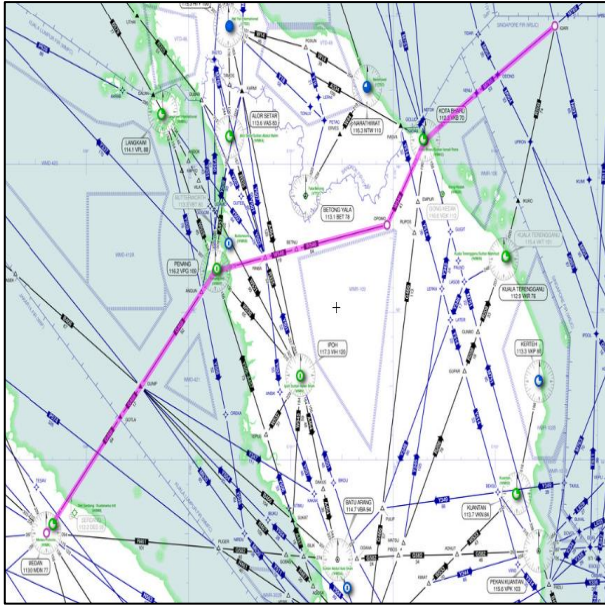
agreed to archive the two route proposals from the ATS Route Catalogue.	
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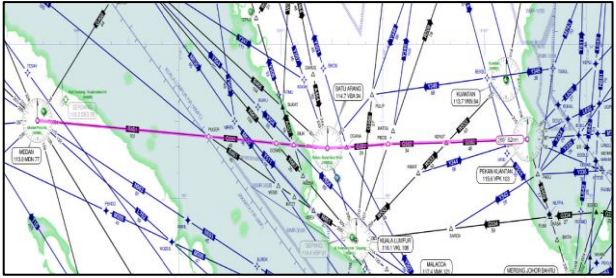
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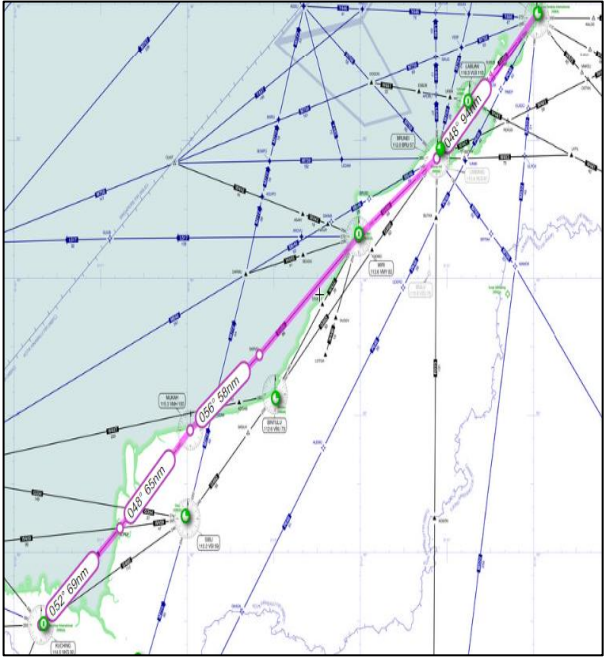
ATS Route Name	SCS 16
State Priority	C
IATA Priority	MEDIUM
Requested by (when)	Viet Nam (01/04/2019: SEACG/26)
States/Administrations Involved	Singapore, Viet Nam (Singapore, Ho Chi Minh FIRs)
Route Description	Implementation of new uni-directional northbound ATS route: ENREP 045223.88N 1041442.00E – New Waypoint (FIR BDRY between Singapore and Ho Chi Minh) – Tan Son Nhat (TSN) 104859.20N 1063844.10E
Flight Level Band	
Benefit (fuel, environmental)	48 NM / 6 minutes, 252 kg fuel, 794 kg CO ₂ per flight, 576,576 kg fuel, 1,816 tonnes CO ₂ annually Reduction in Distance/Time/Fuel/CO ₂ by 19NM/2MIN/600LBS/860KGS per flight with B744ERF for SIN/SGN portion on the basis of annual average wind conditions.
Operational Information (potential airlines, flight frequency, potential city pairs)	SIN – SGN
<p>Remarks: 22/07/2019: Viet Nam update that due to crossing routes, this route proposal would be possible subject to the enhancement of surveillance and ATFM capabilities in the concerned area.</p> <p>At ATM/SG/8: Viet Nam commented this route proposal was under consideration; and IATA assigned “MEDIUM” priority.</p> <p>11/2/2022: Singapore commented the concerned area is fully covered by ADS-B to support the proposal and ready to discuss on the implementation.</p> <p>11/02/2022: Viet Nam commented they would continue to assess a necessity of this ATS/PBN route requirement adding ATS surveillance (SSR and ADS-B) capability has been enhanced by cooperation between Viet Nam and Singapore, and new ATM automation/AFTM capability will be enhanced with a long-term plan.</p>	

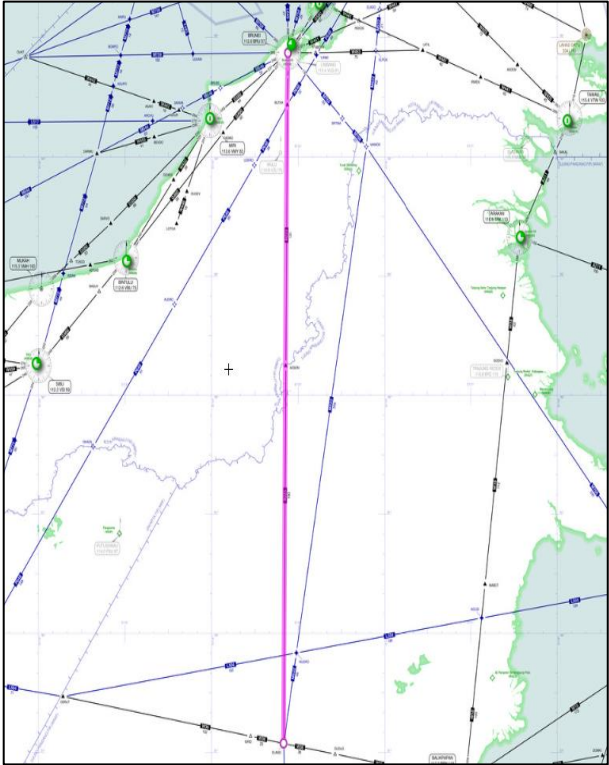
ATS Route Name	SCS 18
State Priority	C
IATA Priority	LOW
Requested by (when)	Viet Nam (01/04/2019: SEACG/26)
States/Administrations Involved	Viet Nam, China, Hong Kong China (Ho Chi Minh, Sanya, Hong Kong FIRs)
Route Description	Phu Cat (PCA) 135726.00N 1090233.60E – IKELA 183942.00N 1121442.00E or Phu Cat (PCA) 135726.00N 1090233.60E – LENKO 172456.88N 1101800.00E
Flight Level Band	
Benefit (fuel, environmental)	52 NM / 5 minutes, 220 kg fuel per flight, 435 tonnes fuel, 1,370 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	KA, MH At least 30 flights per week KUL – SGN – East Asia
<p>Remarks: At ATMSG/7: China proposed to concentrate on the implementation of parallel route to A1 (SCSTFRG Priority Area 1). This route proposal may not be needed, if the parallel route to A1 is implemented.</p> <p>23/10/2020: No update (SCSTFRG/9 postponed to 2021).</p> <p>At ATMSG/8: IATA provided updates on IATA priority; implementation benefits; and operational information. At ATM/SG/9: No update (discussion on planned implementation of parallel route to A1 was still ongoing at the SCSTFRG meeting).</p> <p>At SCSTFRG/13: Hong Kong China agrees with the remark made by China to focus on the implementation of parallel routes on A1. It is suggested to archived SCS 08 to focus on the discussion to other feasible routes.</p>	

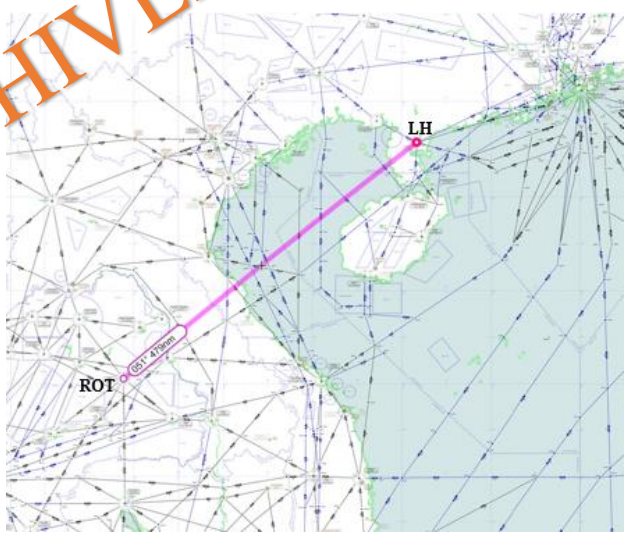
ATS Route Name	SCS 19
State Priority	A
IATA Priority	MEDIUM
Requested by (when)	Malaysia (20/03/2023)
States/Administrations Involved	Malaysia, Thailand
Route Description	This proposal essentially focuses on extending M757 to replace the conventional route Y508
Flight Level Band	
Benefit (fuel, environmental)	The implementation of PBN Airspace and to simplify FPL in Kuala Lumpur FIR.
Operational Information (potential airlines, flight frequency)	
Remarks: At SAIOSEACG/2: Thailand indicated its full support for the extension of M757. At SCSTFRG/12: Thailand said that they already submitted PFA to ICAO. 3/12/2025: PFA had been circulated.	

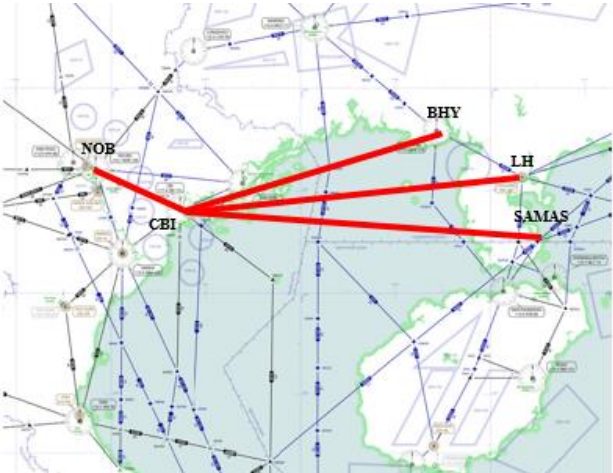
ATS Route Name	SCS 20
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Malaysia (20/03/2023)
States/Administrations Involved	Malaysia, Singapore, Indonesia, Viet Nam
Route Description	This proposal essentially focuses on extending M765 to replace the conventional routes W546 and G468.
Flight Level Band	
Benefit (fuel, environmental)	The implementation of PBN Airspace and to simplify FPL in Kuala Lumpur FIR.
Operational Information (potential airlines, flight frequency)	
<p>Remarks: At SAIOSEACG/2: Indonesia expressed its favourable consideration on this proposal, further assessment was needed.</p> <p>At SCSTFRG/12: Malaysia has informed that the proposals are currently under review by Indonesia. Malaysia has proposed bilateral discussions on these proposals, and the outcomes of these discussions will be communicated to ICAO.</p> <p>Before SAIOSEACG/4: Malaysia updated through email that a draft PfA for the proposal has been circulated to states involved for their review and consideration.</p> <p>At SCSTFRG/13: Indonesia noted that further coordination with Malaysia would be conducted.</p> <p>13/12/2025: Malaysia informed that further dialogue would be held to determine the direction of the proposals. A technical meeting between Indonesia and Malaysia was planned for Q1 2026 to jointly review the proposals.</p>	

ATS Route Name	SCS 21
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Malaysia (20/03/2023)
States/Administrations Involved	Malaysia, Singapore, Indonesia
Route Description	This proposal essentially focuses on extending M758 to replace the conventional routes G582 and R461 (PUGER to MDN).
Flight Level Band	
Benefit (fuel, environmental)	The implementation of PBN Airspace and to simplify FPL in Kuala Lumpur FIR.
Operational Information (potential airlines, flight frequency)	
<p>Remarks: At SAIOSEACG/2: Indonesia expressed its favourable consideration on this proposal, further assessment was needed.</p> <p>At SCSTFRG/12: Malaysia has informed that the proposals are currently under review by Indonesia. Malaysia has proposed bilateral discussions on these proposals, and the outcomes of these discussions will be communicated to ICAO.</p> <p>At SCSTFRG/13: Indonesia noted that further coordination with Malaysia would be conducted.</p> <p>13/12/2025: Malaysia informed that further dialogue would be held to determine the direction of the proposals. A technical meeting between Indonesia and Malaysia was planned for Q1 2026 to jointly review the proposals.</p>	

ATS Route Name	SCS 22
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Malaysia (20/03/2023)
States/Administrations Involved	Malaysia, Singapore, Indonesia
Route Description	Upgrade a portion of conventional ATS routes G580 (VKG to VJN) to PBN Route
Flight Level Band	
Benefit (fuel, environmental)	The implementation of PBN Airspace.
Operational Information (potential airlines, flight frequency)	
<p>Remarks: At SAIOSEACG/2: Indonesia expressed its favourable consideration on this proposal, further assessment was needed.</p> <p>At SCSTFRG/12: Malaysia has informed that the proposals are currently under review by Indonesia. Malaysia has proposed bilateral discussions on these proposals, and the outcomes of these discussions will be communicated to ICAO.</p> <p>13/12/2025: It was noted that Indonesia had provisionally agreed to the proposal. A technical meeting between Indonesia and Malaysia was planned for Q1 2026 to jointly review the details of the proposal.</p>	

ATS Route Name	SCS 23
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Malaysia (20/03/2023)
States/Administrations Involved	Malaysia, Singapore , Indonesia
Route Description	Upgrade from conventional ATS routes R223 to PBN Route
Flight Level Band	
Benefit (fuel, environmental)	The implementation of PBN Airspace.
Operational Information (potential airlines, flight frequency)	
<p>Remarks: At SCSTFRG/12 meeting, Malaysia has informed that the proposals are currently under review by Indonesia. Malaysia has proposed bilateral discussions on these proposals, and the outcomes of these discussions will be communicated to ICAO.</p> <p>13/12/2025: It was noted that Indonesia had provisionally agreed to the proposal. A technical meeting between Indonesia and Malaysia was planned for Q1 2026 to jointly review the details of the proposal.</p> <p>SAIOSEACG/5: The list of States/Administrations Involved was updated.</p>	

ATS Route Name	SEA 12
State Priority	C
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	Thailand, Lao PDR, Viet Nam, China (Bangkok, Vientiane, Hanoi, Sanya, Guangzhou FIRs)
Route Description	Roiet (ROT) 1607.0N 10346.7E – Huguang (LH) 2107.9N 11020.2E
Flight Level Band	29,000 – 46,000 ft
Benefit (fuel, environmental)	14 NM / 2 minutes, 208 kg fuel, 655 kg CO ₂ per flight, 1,731 tonnes fuel, 5,451 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	CX 160 flights per week JKT/KUL/PNH/SIN – HKG/SYX
<p>Remarks: Provide parallel to the A202 route.</p> <p>At SEACG/26: Viet Nam proposed to concentrate on SCSTFRG Priority Area 1: parallel route to A1 proposal. This route proposal to be reviewed at a later stage.</p> <p>23/10/2020: No update (SCSTFRG/9 postponed to 2021).</p> <p>At ATM/SG/9: No update (discussion on planned implementation of parallel route to A1 was still ongoing at the SCSTFRG meeting).</p> <p>At SAIOSEACG/4: IATA agreed to archive the proposal requested by ICAO, as the main focus is on the parallel routes to A1. IATA noted that in the absence of an A1 parallel route progressing, this proposal will be reactivated.</p>	

ATS Route Name	VIET NAM 02
State Priority	D
IATA Priority	HIGH
Requested by (when)	Viet Nam (01/09/2018)
States/Administrations Involved	Viet Nam, China (Hanoi, Sanya, Guangzhou FIRs)
Route Description	Noi Bai (NOB) 2112.8N 10550.1E – Cat Bi (CBI) 2049.1N 10642.5E – SAMAS 2030.3N 11029.7E or Noi Bai (NOB) 2112.8N 10550.1E – Cat Bi (CBI) 2049.1N 10642.5E – Huguang (LH) 2107.9N 11020.2E or Noi Bai (NOB) 2112.8N 10550.1E – Cat Bi (CBI) 2049.1N 10642.5E – Nankang (BHY) 2135.2N 10925.9E
Flight Level Band	28,000 – 46,000 ft
Benefit (fuel, environmental)	48 NM / 6 minutes, 252 kg fuel, 794 kg CO ₂ per flight, 576,576 kg fuel, 1,816 tonnes CO ₂ annually For ZGGG-VVNB with B789, Viet Nam02 can reduce the flight distance by 73NM, reduce the flight time by 9 minutes, and save 700Kg of fuel.
Operational Information (potential airlines, flight frequency, potential city pairs)	CX 44 flights per week
Remarks: Because of small traffic demand and cost/benefit considerations, this route is impossible and cannot be implemented at present. Retain proposal for long-term planing (Viet Nam). Retention discussed at SEACG/22. At SEACG/26: China commented that this route proposal was very unlikely to be implemented, and recommended for this route proposal to be deleted from the Catalogue; and Viet Nam proposed alternate option: Noi Bai (NOB) 2112.8N 10550.1E – Cat Bi (CBI) 2049.1N 10642.5E – Nankang (BHY) 2135.2N 10925.9E to serve traffic between Ha Noi/Cat Bi/Van Don (new international airport in Viet Nam) and destinations in China and beyond. 23/10/2020: China commented the proposal was under consideration. At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue. 29/09/2021: China commented the proposal was still under consideration. 1/3/2022: IATA preferred this route proposal to be retained in the Catalogue. Despite currently low traffic due to the epidemic, as traffic returns this proposed route can give	

airlines more flight route options between China and Vietnam and beyond.

3/3/2022: China proposed for deletion due to inconsistency with overall flight flow.

At SCSTFRG/11: Viet Nam suggested this route proposal be retained in the APAC Route Catalogue and wished that China would reconsider the feasibility of this new route. It was also supported by IATA. In response, China confirmed that they would further assess this route proposal internally and discuss it with Viet Nam during their upcoming bilateral meeting.

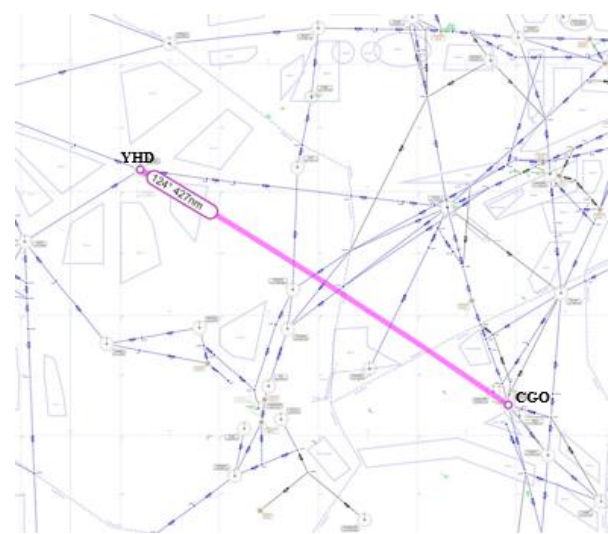

At SCSTFRG/12: Viet Nam said that they have been continuously discussing the implementation of this route with China.

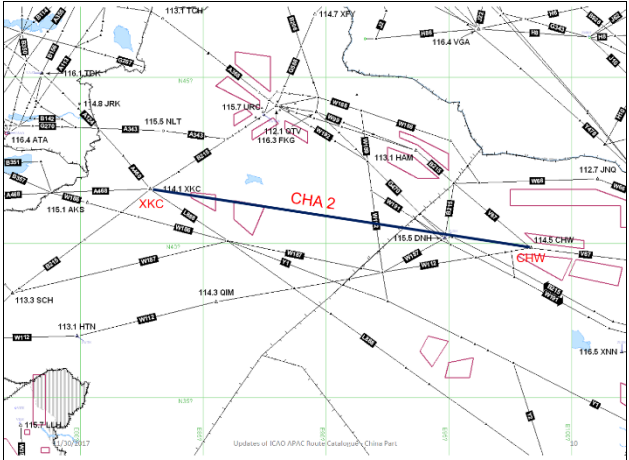
At SCSTFRG/13: China stated that the parallel route to A1 remains the top priority. Viet Nam does support this priority.

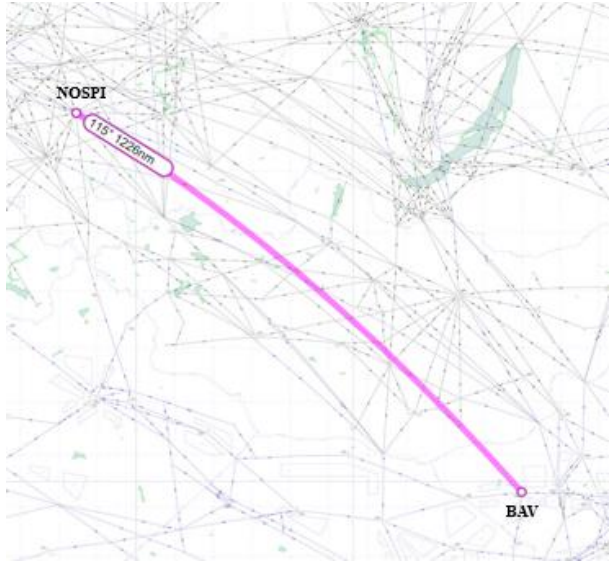
8/12/2025: China informed no progress update.

Chapter 3: East Asia

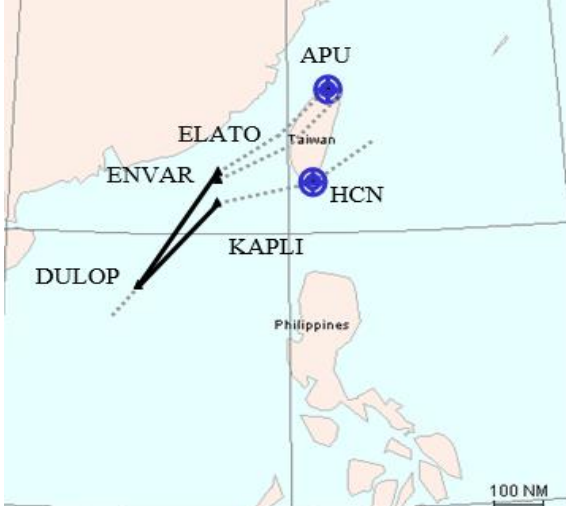
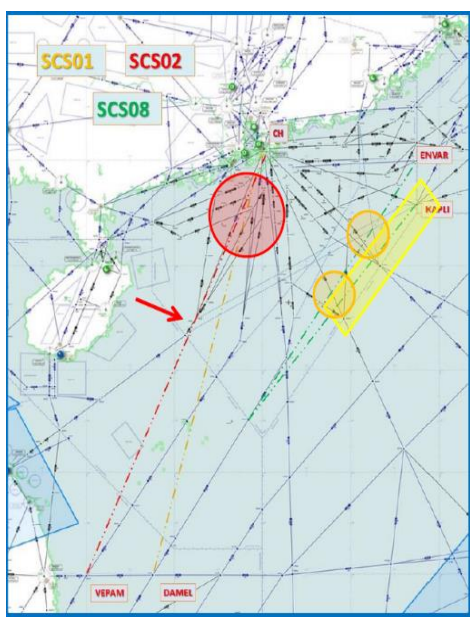
(referred to States, SAIOSEACG and SCSTFRG for review)

ATS Route Name	CHA 01
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	China (Lanzhou, Beijing, Wuhan FIRs)
Route Description	Yinchuan (YHD) 3820.8N 10624.6E – Zhengzhou (CGO) N3431.1 E11350.6
Flight Level Band	8,400 – 15,000 meters
Benefit (fuel, environmental)	73 NM / 9 minutes, 26,645 kg fuel, 825,995 kg CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	Europe – Shanghai
Remarks: Original proposal: YHD – YAV – CGO – ZHO – SB/HFE. The route segment between CGO – ZHO – HFE has been implemented as part of ATS route B208 since 2008. Therefore, the route description was amended as YHD – CGO accordingly. At ATMSG/7: China commented the proposed route would create numerous conflicts, and was not consistent with its planned route network. 23/10/2020: China commented there was no progress on this proposal. At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue, and proposed the route segment between CGO – ZHO – HFE to be made available for eastbound too. In response to IATA’s proposal, China commented the following uni-directional routing systems had been implemented for flight planning: (a) eastbound: HFE – FYG – ZHO – CGO. (b) westbound: CGO – W129/KAMDA – W128/FYG. At SAIOACG/10 and SEACG/27: China proposed for deletion. 3/3/2022: China commented how the current uni-directional routing system works in actual operation (see the Map provided by China) adding that it could reduce heavy traffic and conflict over ZHO. 8/12/2025: China commented that this route proposal would cross multiple main routes, which could cause many conflicts, making it unfeasible. China recommended for deletion.	  <p>[Map provided by China]</p>

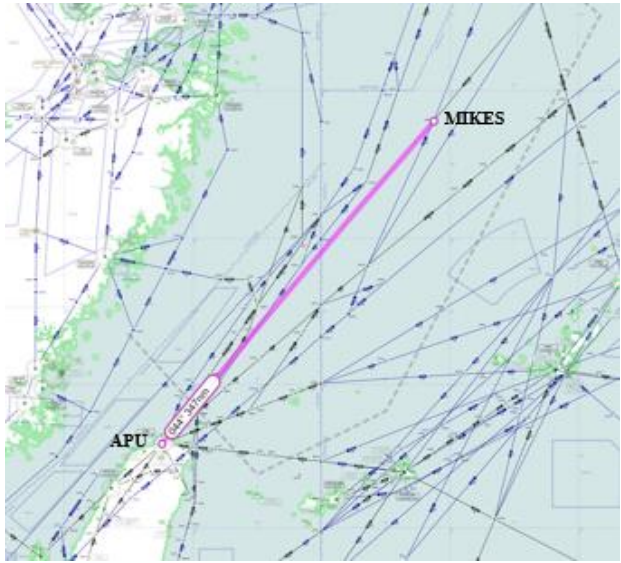
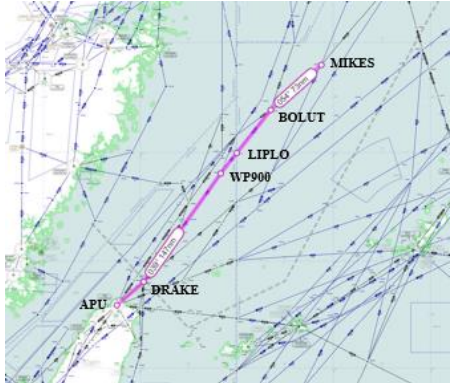
ATS Route Name	CHA 02
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	China (Urumqi, Lanzhou FIRs)
Route Description	Qiuci (XKC) 4140.6N 08250.6E – Jiayuguan (CHW) 3951.3N 09821.0E
Flight Level Band	8,400 – 15,000 meters
Benefit (fuel, environmental)	93 NM / 12 minutes, 4,426 tonnes fuel, 1,372,202 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	63 flights per week Middle East/Pakistan – China/Japan/Korea
Remarks: China comment: there are existing routes between XKC and CHW. At ATMSG/7: China commented the proposed route was not possible for implementation, and proposed for deletion; and IATA would provide feedback after a comprehensive review of the Catalogue by its focus group, expected in March 2020. 23/10/2020: China proposed for deletion. At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue. 8/12/2025: China informed no progress update.	

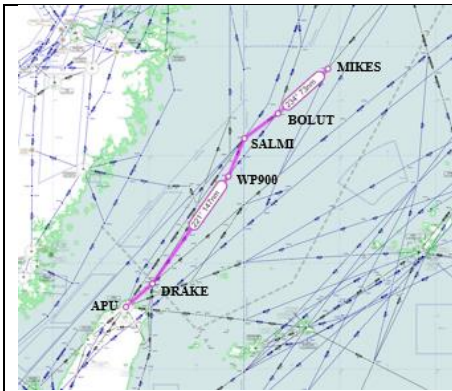
ATS Route Name	CHA 12
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (29/08/2018)
States/Administrations Involved	Russia, Mongolia, China (Novosibirsk, Krasnoyarsk, Ulaanbatar, Beijing FIRs)
Route Description	NOSPI 534912.00N 0865248.00E – New Waypoint (FIR BDRY between Novosibirsk and Krasnoyarsk) – New Waypoint (FIR BDRY between Krasnoyarsk and Ulaanbatar) – New Waypoint (Entry/Exit Point: FIR BDRY between Ulaanbatar and Beijing) – Baotou (BAV)
Flight Level Band	28,000 – 46,000 ft
Benefit (fuel, environmental)	5 minutes, 6,090 tonnes fuel, 19,185 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	85 flights per week
<p>Remarks: New route proposal replacing the previous from Weixian to Novokuznetsk.</p> <p>At ATMSG/7: China and Mongolia commented the proposed route was not possible for implementation; and IATA would provide feedback after a comprehensive review of the Catalogue by its focus group, expected in March 2020.</p> <p>23/10/2020: China proposed for deletion.</p> <p>At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue.</p>	

ATS Route Name	IATA 02
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	China (Kunming, Guangzhou FIRs)
Route Description	OMBON 3321.4N 10416.3E – Sanjiang (SJG) 2546.6N 10936.6E
Flight Level Band	8,400 – 15,000 meters
Benefit (fuel, environmental)	14 minutes, 6,657 tones fuel, 20,636 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	56 flights per week Europe – Pearl River Delta airports
<p>Remarks: China comments: There are existing routes between OMBON and RO. Direct route is impossible at present.</p> <p>23/10/2020: China proposed for deletion.</p> <p>At ATM/SG/8: IATA preferred this route proposal to be retained in the Catalogue.</p> <p>At the SCSTFRG/13: IATA and China agreed to archive the proposal and consider the potential of Conditional Route (CDR) when appropriate. IATA shared that discussions had taken place in a side meeting with China. As the route proposal aims to connect Europe with Southern China, due to safety concerns related to traffic conflicts, IATA proposed to support and facilitate the flight operations via Y1 and L888 as an alternate.</p>	

ATS Route Name	SCS 08
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	Hong Kong China, Taipei ACC (Hong Kong, Taipei FIRs)
Route Description	DULOP 1814.2N 11432.6E – ELATO 2220.0N 11730.0E – A1 or DULOP 1814.2N 11432.6E – ENVAR 2159.5N 11730.0E – M750 or DULOP 1814.2N 11432.6E – KAPLI 2110.0N 11730.0E – G86
Flight Level Band	28,000 – 46,000 ft
Benefit (fuel, environmental)	6 minutes, 850 kg fuel, 2,687 kg CO ₂ per flight, 1,863 tonnes fuel, 5,868 tonnes CO ₂ annually Note: Savings based on DULOP – ENVAR.
Operational Information (potential airlines, flight frequency, potential city pairs)	BR, CI At least 42 flights per week Southeast Asia – North Asia airports
<p>Remarks: Supports traffic Northeast Asia – Southeast Asia. Potentially problematic as will impact South China Sea’s traffic arrangements (IATA to review).</p> <p>At SEACG/19: in WP09, Hong Kong China advised they had studied the proposal for track shortening and advised that allowing flights to proceed from M771 DUMOL to ELATO/ENVAR/KAPLI will likely create a bottle neck at these points and result in flights not getting optimum levels or increase ground delay to departures from Hong Kong and Macao to East Asia. However, Hong Kong China would continue to study this proposal. Most preferred: DULOP – ENVAR.</p> <p>30/10/2020: Hong Kong China commented these two routes are too close to the Hong Kong and Manila FIR boundary (see the yellow shaded areas in the figure below). New confliction points would be created and the distance/time available for traffic resolution is not sufficient. There are safety concerns and these proposed routes were not recommended. Therefore, the two routes are not recommended.</p> <p>At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue.</p> <p>At SCSTFRG/13: Hong Kong China suggested to archive SCS08 to focus on the discussion to other feasible routes. IATA</p>	 

<p>explained that the proposal originated from member airlines wishing to connect Hong Kong China with north and southeast Asia. Prior to COVID-19, 42 flights per week were operated. IATA proposed extending the use of M771 to connect to KAPLI and ENVAR, noting that M771 is located very close to the FIR boundary, which raises safety concerns. IATA will continue to refine the proposal and provide updates in future meetings.</p>	
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ATS Route Name	TPE 01
State Priority	C
IATA Priority	HIGH
Requested by (when)	IATA (01/09/2018)
States/Administrations Involved	Taipei ACC, Japan (Taipei, Fukuoka FIRs)
Route Description	Anbu (APU) 2510.6N 12131.3E – New Waypoint (FIR BDRY between Taipei and Fukuoka) – MIKES 2935.2N 12544.9E
Flight Level Band	28,000 – 46,000 ft
Benefit (fuel, environmental)	16 NM / 2 minutes, 107 kg fuel, 337 kg CO ₂ per flight, 1,168 tonnes fuel, 3,680 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	BR, CI 210 flights per week Southeast Asia/HKG/TPE – Fukuoka
<p>Remarks: Supports traffic between APU and Japan.</p> <p>29/06/2019: update from Japan, this route was under consideration.</p> <p>23/10/2020: Japan commented this proposal was under consideration. At ATMSG/8: IATA preferred this route proposal to be retained in the Catalogue.</p> <p>16/09/2021: Based on information provided by the IFATCA, the proposed route TPE 01 partially overlaps ATS route Q11 and several other ATS routes that already existed in the area, and therefore it was not possible to implement a new route in Taipei FIR.</p> <p>Counter-proposal: Northbound traffic: APU – A1 – DRAKE – Q11 – WP900 – L4 – LIPLO – Y741 – BOLUT – MIKES.</p>   <p>Southbound traffic: MIKES – BOLUT – B576 – SALMI – Q11 – DRAKE – APU.</p>	




15/10/2021: Japan commented this proposal was still under consideration.

25/2/2022: Japan commented no progress at this stage, although this proposal is recognized as one of the business coordination projects by both Taipei and Fukuoka ACCs.

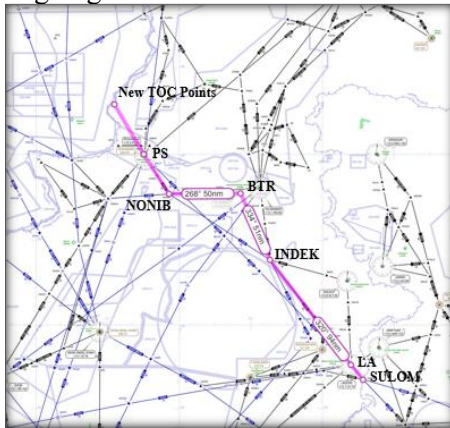
23/9/2022: IFATCA, the segment in the counter-proposal for both north and south already existing, the segment btw BOLUT and MIKES is subject to the Fukuoka FIR.

Chapter 4: Trans-Regional (South Asia)

(referred to States, SAIOSEACG and BOBTFRG for review)

ATS Route Name	AFG 01
State Priority	B
IATA Priority	MEDIUM
Requested by (when)	Afghanistan (03/08/2019: AIRARD TF/4)
States/Administrations Involved	Pakistan, Afghanistan (Lahore, Kabul FIRs)
Route Description	Peshawar (PS) 335841.50N 0713100.90E – SURVI 350606.12N 0702512E
Flight Level Band	
Benefit (fuel, environmental)	32 NM / 4 minutes, 400 kg fuel per flight, 957 tonnes fuel, 3,014 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	AI, AY, TG About 46 flights per week (some operating during winter season only) HEL – BKK/SN
<p>Remarks: This is an alternative proposal to INDEK-BABEV-SURVI, which will shorten the flight distance. Original proposal: IMTIL – SURVI.</p> <p>At ATMSG/7: Pakistan counter-proposed for this route via SURVI – Peshawar (PS). Pakistan informed the meeting the proposed route between SURVI and PS had been submitted to the relevant authorities of Pakistan for approval.</p> <p>17/08/2020: Pakistan informed this route proposal was still under consideration by the relevant authorities. At ATMSG/8: IATA assigned “MEDIUM” priority; implementation benefits; and operational information. IATA also proposed to review the time restrictions LAJAK-SULOM (1500-2359Z) to make proposal beneficial to more traffic.</p> <p>At SAIOACG/10 and SEACG/27: Pakistan informed this route proposal was still under consideration by the military authority.</p> <p>15/09/2021: Pakistan informed that the military authorities of Pakistan had approved the following ATS route proposal (bi-directional), on the request of Tajikistan and Uzbekistan: SULOM – Lahore (LA) – INDEK – Islamabad (BTR) – NONIB – Peshawar (PS) – 343433N 0710533E (new TOC points between Afghanistan and Pakistan). The above route proposal was under approval process of Pakistan Federal Government and coordination process with Afghanistan and Tajikistan regarding further route connectivity in Afghanistan airspace and</p>	

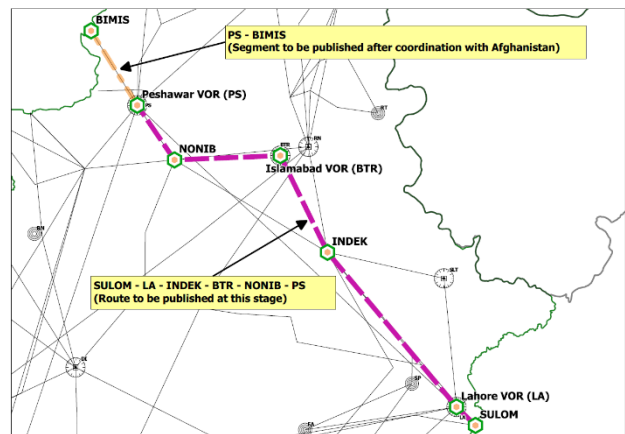
beyond from the new TOC points was ongoing.



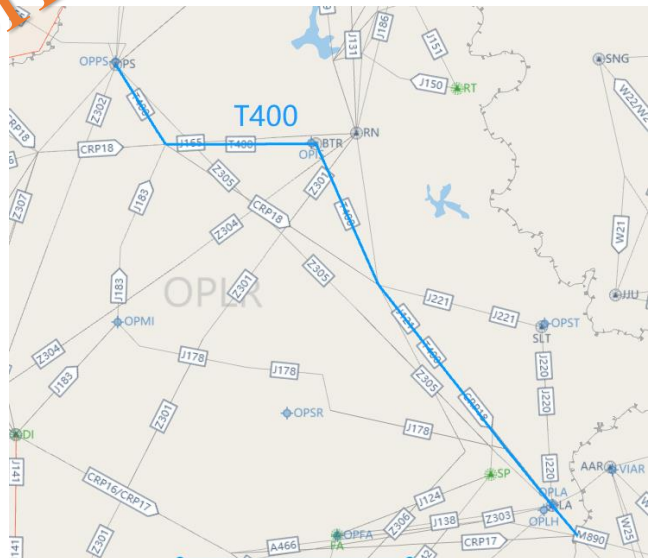
18/02/2022: Upon approval on a new RNAV bi-directional int. ATS route in Lahore FIR by the Federal Government of Pakistan, Pakistan requested a new RNAV Route designator to APAC RO awaiting the response from Afghanistan for further connectivity in Kabul FIR (the last segment from Peshawar VOR to PAK/AFGHAN new TCP BIMIS (Lahore FIR)), and saying a joint PfA will be processed. In April 2022, the segment in Lahore FIR, Pakistan was established: SULOM – Lahore VOR – INDEK – Islamabad VOR (BTR) – NONIB – Peshawar VOR as the domestic route T400. Further route connectivity in Afghanistan airspace and beyond the new TOC points will be further discussed according to the situation in Afghanistan.

At BOBTFRG/4: Pakistan affirmed that airway T400 starting from point SULOM (TOC with India) - INDEK – NONIB – PS - BIMIS was already operational and available for flights at this stage after being approved by the relevant government authorities. Further connectivity to BIMIS (TOC with Afghanistan) was subject to the response from Afghanistan.

At SAIOSEACG/2: Pakistan preferred that this route proposal should be retained in the catalogue and be re-activated according to the situation in Afghanistan. Pakistan also affirmed that airway T400 starting from point SULOM (TOC with India) - INDEK – NONIB – PS providing connectivity with P500 (MOTMO-FIRUZ) was already operational and available for



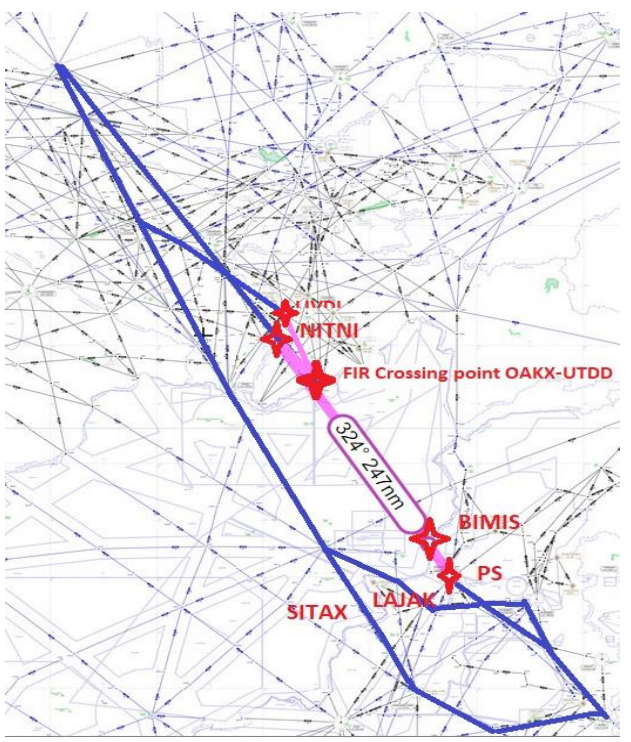
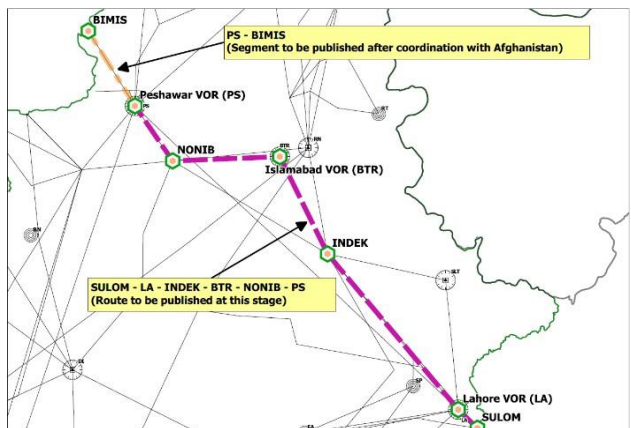
SULOM – Lahore VOR – INDEK – Islamabad VOR (BTR) – NONIB – Peshawar VOR (PS) – BIMIS 342433N, 0710533E (Pak/Afghan new proposed TCP boundary waypoint), Vertical Limit FL360 – FL410



flights. The portion between PS-BIMIS is approved but further connectivity to/from PS-BIMIS (TOC with Afghanistan) is subject to the response from Afghanistan.

At BOBTFRG/5: discussions about route proposals involving Afghanistan were influenced by the current situation in the States. Given the sanctions and focus on restoring air traffic services in Afghanistan, it was suggested that these route proposals be held in abeyance or archived until further notice.

ATS Route Name	AFG 02
State Priority	C
IATA Priority	LOW
Requested by (when)	Tajikistan (03/08/2019: AIRARD TF/4)
States/Administrations Involved	Afghanistan, Tajikistan (Kabul, Dushanbe FIRs)
Route Description	TAPIS 343100.12N 0690900E – PINAX 371500N 0690600E
Flight Level Band	
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
<p>Remarks: Afghanistan commented that waypoint TAPIS is a converging point for two congested routes, and would review this proposal.</p> <p>At ATM/SG/8: IATA assigned “LOW” priority and recommended for deletion.</p> <p><i>Note: continuation of this proposal is 29.007 “TAPIS-PINAX-SORAM-TENRO” in RDGE Middle Asia ATS Route Catalogue.</i></p>	

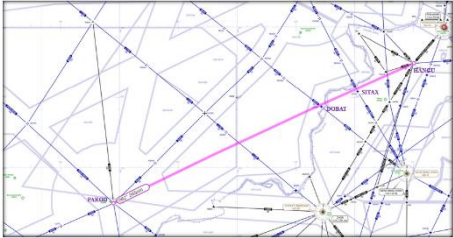
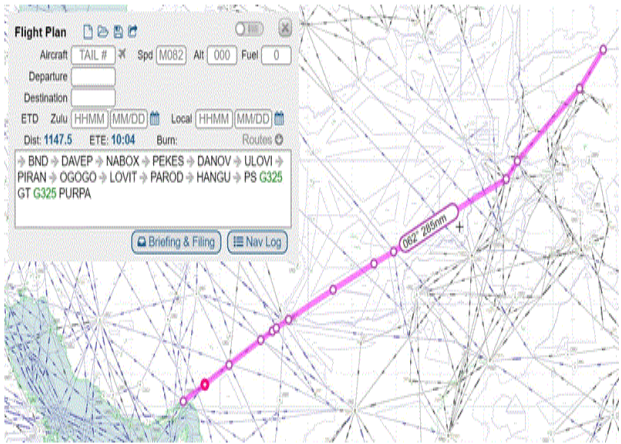
ATS Route Name	AFG 03
State Priority	
IATA Priority	HIGH
Requested by (when)	IATA (Either as the Afghanistan Contingency route plan /or as the airspace reopens for flight operations)
States/Administrations Involved	Pakistan, Afghanistan, Tajikistan (Lahore, Kabul, Dushanbe FIRs)
Route Description	Peshawar (PS) - BIMIS – DCT –370841N 0692043E (new FIR crossing point between OAKX and UTDD) – DCT LIVDI and DCT NITNI
Flight Level Band	As suitable
Benefit (fuel, environmental)	Estimated Potential Savings Per Flight: Compared to SITAX: 71 NM equivalent to 700Kg fuel, 2.2Ton CO2 Compared to LAJAK: 41 NM equivalent to 400Kg fuel, 1.3Ton Co2
Operational Information (potential airlines, flight frequency, potential city pairs)	South Asia – Europe Traffic flow (bi-directional)
<p>Remarks: Primarily intended for long-haul wide-body ULR (Ultra Long-Range) flights between South Asia.</p> <p>Tactical ATFM efforts. By offering an additional FIR crossing between Pakistan and Afghanistan, upon the reopening of Afghanistan's airspace, it could mitigate congestion at (OPLA-OAKX) FIR crossing points SITAX and LAJAK. Pakistan agreed to publish PS – BIMIS after coordination with Afghanistan (... ref AFG 01 proposal in the Route catalogue)</p> <p>At SAIOSEACG/3: IATA has suggested new air routes AFG 03, aiming to open a new route through Kabul's airspace, linking Peshawar with waypoints in Dushanbe, which could save up to 71 NM. This route would help reopen Afghanistan's airspace, reduce environmental impact, and ease congestion at critical crossing points. Targeted primarily at long-haul, wide-body flights, these proposals are part of broader efforts to enhance air traffic management for improved efficiency and safety. Pakistan affirmed its readiness to enhance airspace efficiency and mentioned the approval of the AFG 01 route from Peshawar to BIMIS. However, due to the contingency situation in Afghanistan's airspace, further exploration of this route awaits Afghanistan's readiness. IATA urged ICAO to consider updating this route as a contingency option or at a suitable time when Afghanistan's airspace stabilizes.</p>	 

ICAO RSO agreed to seek assistance from the ICAO APAC office to explore the feasibility of the project.

At ATM/SG/12: Pakistan updated AFG-03 through email. They said that AFG-03, it is apprised that said proposal is similar to previous APAC Region ATS Route proposal AFG-01 in Pakistan airspace, the approvals of which are already taken. Pakistan is ready to establish this route from PS till BIMIS (transfer of control point between Pakistan and Afghanistan International Border), further connectivity from BIMIS onwards (as mentioned in AFG-03, APAC Region ATS route catalogue) is the sole responsibility of Afghanistan. Subject to availability of ATS infrastructure in Afghanistan and stabilization of Afghanistan airspace, the connectivity from PS till BIMIS will be established. IATA updated AFG 03 through email: The Afghanistan CAA has indicated a positive stance towards this route proposal; however, implementation will be considered only after the resumption of regular ATM services. The Pakistan and Tajikistan CAAs are affirmative for the necessary re-alignment of the airway.

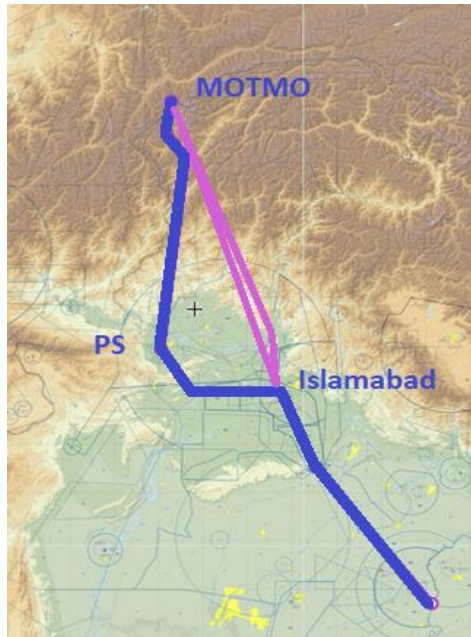
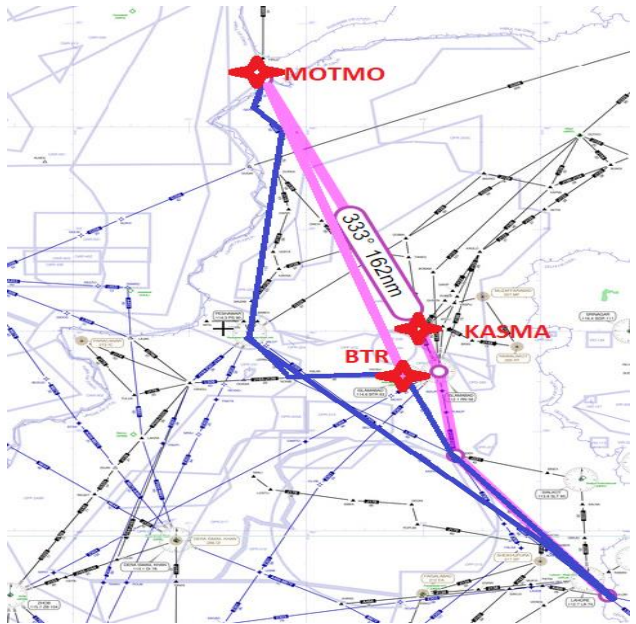
At BOBTFRG/6: Given the current situation in Afghanistan, IATA and Pakistan agreed that they would discuss it further at the planned CCT meeting to explore the feasibility of the proposal.

At BOBTFRG/7: The meeting agreed for this route proposal to be further discussed when ATS in Kabul FIR was fully restored.

ATS Route Name	MID 02(a)
State Priority	D
IATA Priority	HIGH
Requested by (when)	AIRARD TF/2 (04/05/2018)
States/Administrations Involved	Iran, Pakistan, Afghanistan (Tehran, Karachi, Kabul, Lahore FIRs)
Route Description	Bandar Abbas (BND) 2711.8N 05622.0E – DAVEP 2742.4N 05720.1E – NABOX 2816.5N 05826.0E – PEKES 2859.5N 05952.3E – DANOV 2914.7N 06023.9E – ULOVI 2919.8N 06034.5E – PIRAN 2934.1N 06108.1E – OGOGO 3024.9N 06309.1E – LOVIT 3109.1N 06500.4E – PAROD 3129.0N 06554.0E – A453 – HANGU 3329.1N 07100.3E – Peshawar (PS) 3358.7N 07131.0E – G325 – Gilgit (GT) 3555.2N 07420.1E – G325 – PURPA 3656.5N 07524.4E
Flight Level Band	
Benefit (fuel, environmental)	40 Nm / 3 minutes, 600 kg fuel per flight, 1,342 tonnes fuel, 4,262 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	EK, EY, QR About 43 flights per week
<p>Remarks: High Priority MID 02 (a) preferred over MID 02 (b) if only one route is chosen.</p> <p>17/08/2020: The proposed entry into Pakistan airspace allows very minimal response time (less than two minutes) for traffic de-confliction at DOBAT and SITAX and other crosser routes.</p>  <p>Pakistan proposed for deletion.</p> <p>At ATMSG/8: IATA assigned “HIGH” priority; implementation benefits; and operational information. IATA preferred this route to be retained in the Catalogue and commented this route could be used for contingency and for aircraft with limited oxygen requirements.</p> <p>At BOBTFRG/3: Pakistan re-affirmed that the proposed route was not feasible.</p> <p>BOBTFRG/4: Pakistan reaffirmed that the proposed route was not feasible and</p>	

supported archiving this proposal for future possibility and IATA had no objection.	
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ARCHIVED

ATS Route Name	PAK 01
State Priority	
IATA Priority	HIGH
Requested by (when)	IATA (either by ATM/SG/12 or earlier)
States/Administrations Involved	Pakistan (Kabul FIR)
Route Description	Option 1: INDEK J121 RN J130 KASMA DCT MOTMO Option 2: INDEK T400 BTR (Islamabad) DCT MOTMO
Flight Level Band	As suitable
Benefit (fuel, environmental)	Estimated Potential Savings Per Flight: 50 NM, Equivalent to 500Kg Fuel, 1.6 Ton CO2
Operational Information (potential airlines, flight frequency, potential city pairs)	South Asia – Europe Traffic flow (bi-directional)
<p>Remarks: This proposed air route will primarily cater to long-haul wide-body flights between South Asia and Europe. It will not only promise reductions in CO2 emissions but also enhance safety. By optimizing emergency diversion routes, especially over the Hindukush high terrain, it helps minimise critical passenger oxygen requirements in the event of rapid depressurization.</p> <p>At SAIOSEACG/3: IATA suggested new air routes to improve flight efficiency between South Asia and Europe. PAK 01, includes two options that shorten the current Lahore FIR route by about 48 - 49 NM by using direct paths to MOTMO. These routes are expected to reduce CO2 emissions and increase safety by providing better options for emergency diversions over difficult terrain. Pakistan mentioned restructuring of ATS Route T400 (route connectivity with P500) back in 2022 to facilitate traffic avoiding Kabul FIR and, in this regard, referred to its A41-WP/68. Pakistan reiterated its commitment to safety and flight efficiency while acknowledging airspace constraints due to restricted and prohibited areas near the proposed route. Pakistan emphasised the need for a detailed assessment of the proposal. IATA expressed openness to suitable alterations and encouraged the exploration of opportunities.</p> <p>At ATM/SG/12: Pakistan updated PAK-01 (Option-2) and (Option-1) through email. They said that PAK-01 (Option-2) the proposed ATS route passes through prohibited area OP/P226 and thus cannot be materialized. And PAK-01 (Option-1), the</p>	 

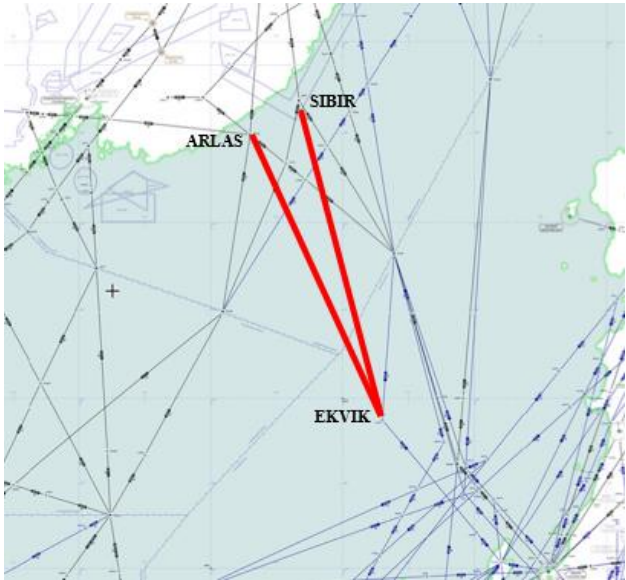
proposed ATS route passes in close proximity to danger and prohibited areas, it is estimated that in case of inclement weather conditions, any diversions would cause violation of danger / prohibited areas and thus not a viable option either, keeping in view flight safety. Nevertheless, deliberation with stakeholders are underway for a workaround to make this proposed option safer for flight operations but it seems to be difficult for establishment of subject route. IATA also updated PAK 01 through email: Given that Afghanistan's airspace is likely to remain in contingency mode for some more time, IATA strongly urges the Pakistan CAA to consider authorizing PAK01 as an interim measure. It is requested that if required the route may be modified to account for the requirements of reserved/special use airspace, as well as to utilize the existing 'J' routes, which are already established for domestic operations.


At BOBTFRG/6: given the current situation in Afghanistan, IATA and Pakistan agreed that they would discuss it further to move forward.

At BOBTFRG/7: IATA requested Pakistan consider establishing the route at least on a contingency or opportunity basis, for example when there is no military activity, under Flexible Use of Airspace concepts. IATA also commented that this proposed route would improve options for weather avoidance and better use of jet streams, especially during periods of strong winds.

Chapter 5: Trans-Regional (East Asia)

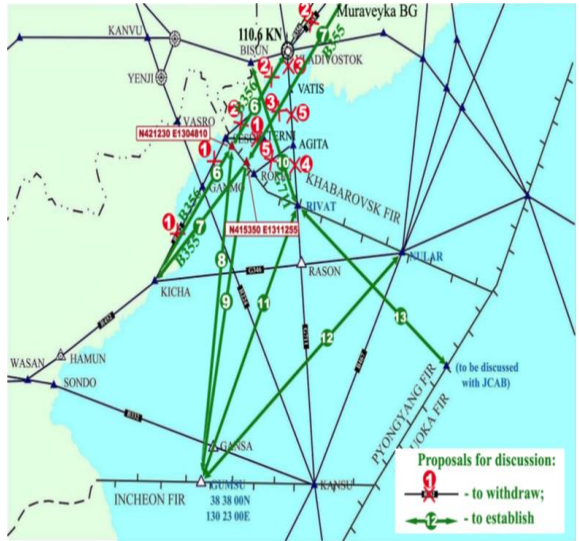
(referred to States and ATM/SG for review)

ATS Route Name	FE0008 / RDGE 15.003 / APAC RUS 5
State Priority	C
IATA Priority	MEDIUM
Requested by (when)	Russia, IATA (01/09/2018)
States/Administrations Involved	Russia, Japan (Khabarovsk, Fukuoka FIRs)
Route Description	Implementation of two new bi-directional ATS routes: a. SIBIR 432154.00N 1352024.00E – New Waypoint (FIR BDRY between Khabarovsk and Fukuoka) – New EKVIK Waypoint b. ARLAS 425906.00N 1343553.88E– New Waypoint (FIR BDRY between Khabarovsk and Fukuoka) – New EKVIK Waypoint
Flight Level Band	
Benefit (fuel, environmental)	No fuel gain but could help to reduce ground delays for HND/KIXNRT operations to Europe.
Operational Information (potential airlines, flight frequency, potential city pairs)	AF, BA, KL, LH
Remarks: To improve north-south traffic flows between Khabarovsk FIR and Fukuoka FIR, Original SIBIR – LURED – EKVIK proposal will be changed due to new position of EKVIK further east as a result of the planned airspace structure change in Japan, when both new ATS routes will be implemented, the existing B451 ARLAS – LAKTA – LURED – IGROD will be withdrawn. Based on the results from the coordination meeting between the Russian Federation and Japan in February 2017, the implementation could not be progressed as Japan indicated that no further airspace changes for the Fukuoka FIR are acceptable before the 2020 timeframe (RDGE/27). Russian Federation: New waypoint needed 404751N 1361021E (FIR Boundary), coordination with Japan (Fukuoka FIR) required. Alternative bi-directional route to EN15. 23/10/2020: Japan commented no update. At ATMSG/8: IATA assigned “ MEDIUM ” priority and recommended for this route to be retained in the Catalogue. 15/10/2021: Japan commented no update.	

ATS Route Name	FE0021 / RDGE 13.028 / APAC RUS 4
State Priority	C
IATA Priority	HIGH
Requested by (when)	Russia, IATA (01/09/2018)
States/Administrations Involved	Russia, Japan (Khabarovsk, Fukuoka FIRs)
Route Description	Implementation of new bi-directional ATS route: AVGOK – Niigata (GTC) 375729.90N 1390653.60E
Flight Level Band	
Benefit (fuel, environmental)	20 NM / 4 minutes, 440 kg fuel per flight, 2,400 tonnes fuel, 7,550 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pair)	AF, AY, JL, KL, NH About 105 flights per week HND/NRT to Europe
Remarks: During a bilateral meeting between the State ATM Corporation and the JCAB Japan (in Tokyo, November 2012), a difference in coordinates of the AVGOK waypoint was identified in the aeronautical information publications of Russia and Japan. The incorrect coordinates were confirmed by Japan and a decision was made to report this issue to the appropriate Regional ICAO Offices. The Russian Federation proposes the following coordinates (4336N and 13815E) for the AVGOK waypoint. Based on the results from the coordination meeting between the Russian Federation and Japan in February 2017, the implementation of the bi-directional ATS Route AVGOK – GTC requires further studies due to the involved military area. RDGE/27 meeting in 2017: could become a conditional route. Further discussion with Japan is required through the ICAO APAC Office. To reduce route distance of 13NM as compared to current routing AVGOK – KADBO – GTC. 23/10/2020: Japan commented no update. At ATMSG/8: IATA assigned “ HIGH ” priority and recommended for this route to be retained in the Catalogue. 15/10/2021: Japan commented no update.	

ATS Route Name	FE0050 / RDGE 20.011
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	Implementation of new uni-directional westbound ATS route for B355: Muraveyka (BG) 435303N 1331511E – VATIS 425143N 1320851E – TERNI 422213N 1314003E – BUMEP 415350N 1311255E – KICHA 404106N 1291140E
Flight Level Band	18,000 – 51,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Planned implementation date as part of project in 2015. Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 7).	<p>Proposals for discussion: - to withdraw; - to establish</p>

ATS Route Name	FE0051 / RDGE 20.012
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	Implementation of new uni-directional eastbound ATS route segment: MESOV 383800N 1302300E – ADNUR 421230N 1304810E
Flight Level Band	29,000 – 53,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Planned implementation date as part of project in 2015. Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 8). Implementation has not progressed as the connection/ continuation of this ATS route (implemented ATS routes end at FIR border over High Seas) into Incheon FIR still missing. No information was received from DPRK and South Korea (ROK) via the ICAO APAC Office. Implementation could not be progressed as no information from DPRK at RDGE/28.	

ATS Route Name	FE0052 / RDGE 20.013
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	BUMEP 415350N 1311255E – MESOV 383800N 1302300E
Flight Level Band	28,000 – 51,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 9). Implementation has not progressed as the connection/ continuation of this ATS route (implemented ATS routes end at FIR border over High Seas) into Incheon FIR still missing. No information was received from South Korea (ROK) via the ICAO APAC Office. Implementation could not be progressed as no information from DPRK at RDGE/28.	 <p>The map displays the Khabarovsk and Vladivostok FIRs, along with neighboring FIRs: Khabarovsk FIR, Vladivostok FIR, Incheon FIR, and Pyongyang FIR. It shows various airports such as Muraveyka BG, Khabarovsk, Vladivostok, Khabarovsk, and Vladivostok. Proposed routes are marked with numbers 1 through 12. A legend indicates that red numbers (1-10) represent routes to be withdrawn, and green numbers (11-12) represent routes to be established. A note mentions that the route to the east is to be discussed with JCAB.</p>

ATS Route Name	FE0053 / RDGE 20.014
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	New G711 BISUN 431400N 1311148E – TERNI 422213N 1314003E – RIVAT 412900N 1321600E
Flight Level Band	21,000 – 53,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 10). <i>Note: to verify has this route been implemented as G705?</i>	

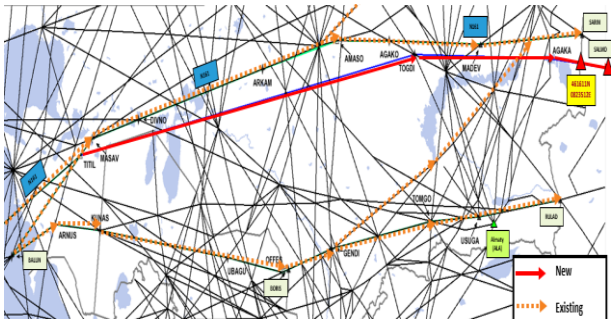
ATS Route Name	FE0054 / RDGE 20.015
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	Implementation of new bi-directional ATS route: RIVAT 412900N 1321600E – MESOV 383800N 1302300E
Flight Level Band	21,000 – 53,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 11). Planned implementation date 11 December 2014. <i>Note: to verify has this route been implemented as N513?</i>	

ATS Route Name	FE0055 / RDGE 20.016
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK (Khabarovsk, Pyongyang FIRs)
Route Description	Implementation of new bi-directional ATS route: NULAR 405912N 1341100E – MESOV 383800N 1302300 ^E
Flight Level Band	28,000 – 53,000 ft
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 12). Planned implementation date 11 December 2014. <i>Note: to verify has this route been implemented as L771?</i>	

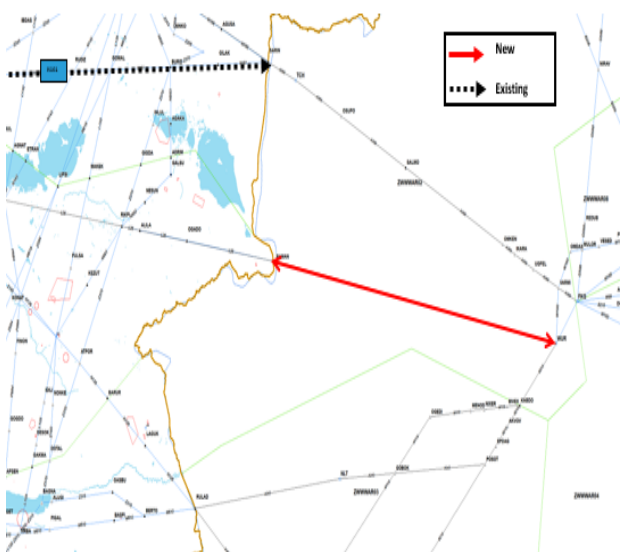
ATS Route Name	FE0056 / RDGE 20.017
State Priority	C
IATA Priority	
Requested by (when)	DPRK, Russia (01/09/2018)
States/Administrations Involved	Russia, DPRK, Japan (Khabarovsk, Pyongyang, Fukuoka FIRs)
Route Description	Implementation of new bi-directional ATS route segment: RIVAT 412900N 1321600E – New Waypoint (FIR BDRY between Pyongyang and Fukuoka)
Flight Level Band	
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency, potential city pairs)	
Remarks: Khabarovsk/Vladivostok airspace re-organisation project, (in map No. 13), for further discussion with JCAB, Japan. Planned implementation date as part of project in 2015. Implementation could not be progressed as no information from China at RDGE/28.	

Chapter 6: Trans-Regional (Mid Asia)

(referred to States, RDGE, SAIOSEACG and SCSTFRG for review)

ATS Route Name	RDGE-TRANS-REGIONAL MID-ASIA 01
State Priority	A
IATA Priority	HIGH
Requested by (when)	Kazakhstan (RDGE-SCM/2024)
States/Administrations Involved	Kazakhstan & China (Almaty & Urumqi FIRs)
Route Description	Unidirectional Eastbound: TITIL - XXXXX – TOGDI - 470156N 0771253E – AGAKA - 461611N 0823512E (new FIR boundary waypoint) – SALMO.
Flight Level Band	With Minimum Obstacle Clearance of 2000 ft, segment from AGAKA at coordinates 461611N 0823512E is set at 8800 ft.
Benefit (fuel, environmental)	Fuel savings: 25 194 l, CO2 reduction: 63 993 kg Objectives: 1. Ease congestion in Astana FIR Sector A1C, Shymkent FIR Sector A1I (heavily loaded) & Almaty FIR Sector A3A; 2. Provide an alternative route utilizing different FIR boundary crossing points and sector intersections; 3. Significantly distance transit flow from busy airports such as Almaty and Astana, which, in turn, will reduce controller workload, enhance flight safety, and improve overall air traffic management efficiency; and 4. Allow air traffic controllers to use altitude change procedures more flexibly, simplifying management across different ATS route segments.
Operational Information (potential airlines, flight frequency)	Supported by major airlines such as All Nippon Airways (ANA), KLM, EgyptAir, and Finnair. Anticipated traffic shifts (approximately 1307 flights per month): 1. 40% from N161 and BORIS – RULAD; and 2. 80% from BORIS – SARIN and BALUN – SARIN.
Remarks: 8/12/2025: China commented that the existing entry and exit points (SARIN and RULAD), which connect China and Kazakhstan, experience moderate daily traffic, and their operational capacity was not yet at full saturation. It was concluded that the existing airspace structure was sufficient to meet operational demands. The proposal within China is not feasible. It was therefore recommended to fully utilize the existing air route resources.	


ATS Route Name	RDGE-TRANS-REGIONAL MID-ASIA 02
State Priority	A
IATA Priority	HIGH
Requested by (when)	Kazakhstan (RDGE-SCM/2024)
States/Administrations Involved	Kazakhstan & China (Almaty & Urumqi FIRs)
Route Description	Unidirectional Eastbound GENGA - 462546N 0782244E – AGAKA - 461611N 0823512E (new FIR boundary waypoint) – SALMO.
Flight Level Band	With a Minimum Obstacle Clearance of 2000 ft, the segment from AGAKA at coordinates 461611N 0823512E is set at 8800 ft.
Benefit (fuel, environmental)	Distance: 325.7 NM, savings: 14.7 NM, fuel savings: 187 l, CO2 reduction: 474 kg Objectives: 1. Ease controller workload in Almaty FIR Sector A4A; 2. Creates options for two corridors, BALUN and BORIS; 3. Reduces load on the TOMGO waypoint, Shymkent FIR, Sector A1I, and Almaty FIR Sector A3A; and 4. Creates options compared to the existing ATS routes, i.e. BORIS – SARIN and BALUN – SARIN.
Operational Information (potential airlines, flight frequency)	Anticipated traffic shifts: 1. 80% from BORIS-SARIN – approx. 417 flts/mth; and 2. 40% from BALUN-SARIN – approx. 230 flts/mth.
Remarks: 8/12/2025: China commented that the existing entry and exit points (SARIN and RULAD), which connect China and Kazakhstan, experience moderate daily traffic, and their operational capacity was not yet at full saturation. It was concluded that the existing airspace structure was sufficient to meet operational demands. The proposal within China is not feasible. It was therefore recommended to fully utilize the existing air route resources.	

ATS Route Name	RDGE-TRANS-REGIONAL MID-ASIA 05
State Priority	B/C
IATA Priority	HIGH/MEDIUM/LOW
Requested by (when)	Kazakhstan (RDGE-SCM/2024)
States/Administrations Involved	Kazakhstan & China (Almaty & Urumqi FIRs)
Route Description	Bidirectional BAMAN-WUR
Flight Level Band	
Benefit (fuel, environmental)	<p>The total length of 2281.5 NM (4225 km), serves as an alternative to several existing routes, such as N161 with a distance of 2282.4 NM (4227 km), BORIS – SARIN with a distance of 2335.4 NM (4325 km), and BALUN – SARIN with a distance of 2307.4 NM (4273 km).</p> <p>The new ATS route is 0.9 NM (2 km) shorter than N161, 53.9 NM (100 km) shorter than BORIS – SARIN, and 25.9 NM (48 km) shorter than BALUN – SARIN.</p> <p>Objectives:</p> <ol style="list-style-type: none"> 1. total flight distance from SUBUT to GOVSA is reduced by 1 NM; 2. reduce the load on the SARIN waypoint, Almaty FIR Sector A4A, and the RULAD waypoint in Sector A3A; and 3. will attract air traffic from the BORIS – SARIN corridor, which in turn will ease the workload in the Shymkent FIR, Sector A11.
Operational Information (potential airlines, flight frequency)	<p>Anticipated traffic shifts (approximately 542 flights per month):</p> <ol style="list-style-type: none"> 1. 10% from N161; 2. 60% from BALUN-SARIN; and 3. 80% from BORIS-SARIN.
Remarks: 8/12/2025: China commented that the existing entry and exit points (SARIN and RULAD), which connect China and Kazakhstan, experience moderate daily traffic, and their operational capacity was not yet at full saturation. It was concluded that the existing airspace structure was sufficient to meet operational demands. The proposal within China is not feasible. It was therefore recommended to fully utilize the existing air route resources.	

ATS Route Name	RDGE-TRANS-REGIONAL MID-ASIA 08
State Priority	A/B
IATA Priority	HIGH/MEDIUM/LOW
Requested by (when)	Kyrgyzstan (RDGE-SCM/2024)
States/Administrations Involved	Kyrgyzstan & China (Bishkek & Urumqi FIRs)
Route Description	Bidirectional Osh [OSH] – Kashi [KHG]
Flight Level Band	
Benefit (fuel, environmental)	
Operational Information (potential airlines, flight frequency)	
Remarks: 8/12/2025: China informed that ATS route L43 had been established on 30/10/2025. Recommended for deletion.	

Chapter 7: Pacific

(referred to States and ATM/SG for review)

ATS Route Name	WPC 01
State Priority	D
IATA Priority	HIGH
Requested by (when)	IATA (30/07/2018)
States/Administrations Involved	Papua New Guinea, Indonesia, USA, Philippines, Japan, Taibei ACC (Port Moresby, Ujung Pandang, Oakland Oceanic, Manila, Fukuoka, Taibei FIR)
Route Description	Port Moresby (PY) 0927.2S 14712.9E – Vanimo (VNO) 0240.7S 14118.2E – Koror (ROR) 0722.1N 13433.0E – ENDAX 1415.0N 13000.0E – BISIG 2027.0N 12500.0E – TINHO 2421.2N 12201.7E
Flight Level Band	FL250 – FL430
Benefit (fuel, environmental)	163 NM / 15 minutes, 1,604 kg fuel, 5,053 kg CO ₂ , 5,000 tonnes fuel, 15,700 tonnes CO ₂ annually
Operational Information (potential airlines, flight frequency, potential city pairs)	60 flights per week Taibei and beyond – Australia, New Zealand, and Papua New Guinea
<p>Remarks: BISIG replaces the waypoint that was published in the ICAO route catalogue as that waypoint no longer exists. May also be useable as an offload route for flights between Manila and Australasia.</p> <p>At ATM/SG/6: PNG positive, Indonesia positive, Japan was reviewing, Philippines and Taibei yet to be discussed. At</p> <p>ATMSG/7: Under consideration by Philippines.</p> <p>17/01/2020: Philippines supported the implementation of this route.</p> <p>23/10/2020: Japan commented this route proposal was under consideration.</p> <p>16/09/2021: Based on information provided by the IFATCA, implementation of this proposed route in Taibei FIR was not possible because it would cross ATS routes G581 and Q13, and traverse restricted area RCR 17. Proposed for deletion.</p> <p>15/10/2021: Japan commented this route proposal was still under consideration.</p> <p>25/2/2022: Japan commented no discussion, but if necessary it would be put on the agenda at future meeting.</p> <p>23/9/2022: IFATCA, this proposal requires further coordination with the military.</p>	

<p>At ATM/SG/12: IATA updated WPC 01 through email: WPC 01 retain pending outcome of consideration access to military airspace.</p>	
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SAIOSEACG Task List

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
3 (SEACG)	<p>Radar data sharing ADS-B data sharing</p>	<p>SAIOSEACG/2 SAIOSEACG/4 SAIOSEACG/6</p>	Lao PDR, Thailand	Open	<p>Raised at SEACG/16. Lao PDR and Thailand agreed to share the radar data. Lao PDR and Thailand will further coordinate. To discuss at the Mekong meeting, and report to SEACG24. Task updated at SEACG/26. No report received. MEKONG to discuss and report to SEACG/27. Task updated at SAIOACG/10 and SEACG/27. No report received. Updated at SAIOSEACG/1: Thailand may need to reconsider cost and benefit of the project before going to the next step due to COVID-19 impacts. Report to SAIOSEACG/2 Thailand has planned to implement ground-based ADS-B for ATS in 2024 and ADS-B data sharing/exchanging will be focused on instead of Radar. Lao PDR is considering its policy for this activity. Updated SAIOSEACG/4: Still under study. Updated SAIOSEACG/5: no update</p>

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
2/10 (SAIOACG)	BOB States to present the analysis outcomes of local fleet equipage and the expected PBCS implementation date for RNP4 with 30NM longitudinal and 23NM lateral performance-based separation minima. IATA to survey member airlines on their RNP and PBCS readiness for possible non-exclusive mandate of January 2024.	BOBTFRG/4 BOBTFRG/6 BOBTFRG/8	BOB States, IATA	Open	India has implemented 30/30NM on four ATS routes in the near term. Adjacent States should consider a coordinated implementation of similar performance-based separations, taking into account PBCS requirements. This task is also part of the BOBTFRG. <u>BOBTFRG/2 developed and agreed the implementation timeline for 30NM longitudinal spacing over BOB airspace, expected by 2024, which also require the mandating of ADS-C/CPDLC by 1 January 2023.</u> Due to the COVID-19 impact on airline operators, IATA requested for the discussion on the mandate proposal to be deferred until Q2-Q4 2021. Discussed at BOBTFRG/3 on a non-exclusive mandate of implementation timelines for the BOBTFRG Priority Areas. (Refer to Appendix E to the Report of BOBTFRG/3) Updated on 17 Mar 2022 by IATA – survey for analysis is on-going, showing majority of its member airlines are mostly PBCS capable and approved. Updated at SAIOSEACG/1 WP04 Updated at BOBTFRG/4 Updated at SAIOSEACG/4 by India.
8/1 (SAIOACG) 27/1 (SEACG)	Resolve FIR and SRR boundary data. Report status to Regional Office	October 2022 SAIOSEACG/3 SAIOSEACG/4 Long Term	Bangladesh, Cambodia, China, Hong Kong China, India, Japan, Myanmar, Pakistan, Thailand, Viet Nam	Open	SAIOACG/8 and SEACG/25 Report re: WP07. Regional Office to Report to ATM/SG/6. SAIOACG/10 and SEACG/27 Report re: WP12. SAIOSEACG/1 Report re: WP11 SAIOSEACG/2 Report re: WP14 SAIOSEACG/3 Report re: WP13

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
8/8 (SAIOACG)	Present final planning assurances (bypass plans) and update Contingency Coordination Team information for Afghanistan Contingency Plan	SAIOSEACG/2 SAIOSEACG/3 ATM/SG/13	ICAO, India, Pakistan	Open Closed	<p>SAIOACG/8 and SEACG/25 Report re: WP19.</p> <p>SAIOSEACG/2: Pakistan would request to close the action item, keeping in view the ongoing scenario in Afghanistan and action (s) taken by neighboring states and regional office;</p> <ul style="list-style-type: none"> a) The flights can bypass Kabul FIR from North by utilizing ATS Route T400-P500 (SULOM-PS-MOTMO) to/from Delhi-Lahore-Dushanbe FIRs b) The flights can bypass Kabul FIR from South passing through central region of Pakistan by utilizing ATS Route G452 (MERUN/VIKIT-RK-G452) to/from Delhi- Karachi-Tehran FIRs c) The flights can bypass Kabul FIR from South passing through southern region of Pakistan utilizing ATS Route B210-P757-L124 (TASOP/RAMSA-KE-NH-PG-KEBUD) To/from Delhi/Mumbai- Karachi-Tehran FIRs d) In addition, one contingency route {RAMSA/TASOP-KE-NH-IDEBA- LAKAT-AKRIL/L506} is approved and can be made available subject to prior coordination. e) KABUL FIR Contingency Coordination Team (CCT) with participation from relevant stakeholders <p>Updated by ATM SG/13-WP/33: Regional ATM contingency planning and contingency operations update</p>
8/9 (SAIOACG)	Bay of Bengal Danger Areas – tactical coordination, reduced vertical limits, correction of AIP and NOTAM promulgation to align with Annex 15	ATM/SG/10 ATM/SG/11 ATM/SG/12 ATM/SG/13 ATM/SG/14	Bangladesh, India, ICAO	Open	SAIOACG/8 and SEACG/25 Report re: WP28. SAIOACG/10 and SEACG/27 Report re: WP23.

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
26/8 (SEACG)	Coordinate implementation plan RNP2 /RNAV 2 nav spec on ATS routes L642, M771, N892	SCSTFRG/10 SAIOSEACG/3 SAIOSEACG/4 SAIOSEACG/5 SAIOSEACG/6	China, Hong Kong, China, Philippines, Singapore, Viet Nam, IATA	Open	SEACG/26 Report WP27. SAIOACG/10 and SEACG/27 Report re: WP16 No update at SCSTFRG/9 Update by Singapore (14 Feb 2022) – ready to implement Update by Viet Nam (16 Feb 2022) – fully support, or alternatively RNP4 if not air operators equipage issue Updated at SAIOSEACG/1 - HK China wishes to go for RNP 2 after 20NM longitudinal separation Refer to SCSTFRG/13 WP04: Updated by Hong Kong China on the progress of the operational trial of 20NM longitudinal spacing on ATS routes L642 and M771 SCSTFRG/13 meeting adopted Decision SCSTFRG/13-1 endorsing full implementation of 20NM longitudinal spacing on L642 and M771
10/2 (SAIOACG)	Conduct a review of Myanmar Level 2 Contingency Plan, which include an additional contingency ATS route and flight levels.	BOBTFRG/4 SAIOSEACG/3 On going	Bangladesh, China India, Lao PDR, Myanmar, IATA	Open	SAIOACG/10 and SEACG/27 Report re: WP18. Updated at SAIOSEACG/1 - India's discussion with Myanmar is on going
2/2 (SAIOSEACG)	IATA to provide fleet equipage survey update to the meeting.	SAIOSEACG/3 SAIOSEACG/4 SAIOSEACG/5 SAIOSEACG/6	IATA	Open	Proposed by India, Malaysia, and Hong Kong China.
2/3 (SAIOSEACG)	ICAO to address the issue of the contingency route designator in the updated version of the Regional ATM Contingency Plan.	ATM/SG/11 ATM/SG/12 ATM/SG/13 ATM/SG/14	ICAO	Open	SAIOSEACG/2 Report re: WP21
2/4 (SAIOSEACG)	SCSTFRG States to review the existing Flight Level Allocation Scheme (FLAS) and Flight Level Orientation Scheme (FLOS). And provide relevant data to ICAO regional Sub-office.	SCSTFRG/11 SCSTFRG/12	SCSTFRG States	Open Completed	SCSTFRG/10 Report re: SCSTFRG Decision10/1 Review of the existing South China Sea Flight Level Allocation Scheme (FLAS) and Flight Level Orientation Scheme (FLOS). SAIOSEACG/2 Report re: WP10. SAIOSEACG/3 Report re: WP03.

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
3/1 (SAIOSEACG)	Hong Kong China, China, Viet Nam and Singapore to report the outcomes on the trial implementation of 20 NM separation on L642/M771	SCSTFRG/12 SCSTFRG/13	Hong Kong China, China, Viet Nam and Singapore	Open Completed	<p>Refers to Progress Update on Capacity Optimisation of Air Routes L642 And M771 (WP09), a trial operation proposed by Hong Kong China for this project was agreed upon as a result.</p> <p>Updated at the SAIOSEACG/3 meeting by the WP09 submitted by Hong Kong China. The Trial operation will start on 7th May 2024.</p> <p>Subject to the coordination between HK n SY ACC and the approval fm other concerned states, The trial time period has been gradually extended form 10hour 0200-1200UTC to 16 hours daily fm 0000-1600 in the beginning of 2025 and further extended to 20hour 0000-2000UTC in certain occasions. HK China will continue the trial and fully support the proposal fm China to pursue for 24H operation asap. China to report on the 24 hours Trial.</p> <p>Refer to SCSTFRG/13 WP04: Updated by Hong Kong China on the progress of the operational trial of 20NM longitudinal spacing on ATS routes L642 and M771 SCSTFRG/13 meeting adopted Decision SCSTFRG/13-1 endorsing full implementation of 20NM longitudinal spacing on L642 and M771.</p>
3/4 (SAIOSEACG)	ICAO to coordinate with Japan to share its experience in establishing the Centre Report Agency (CRA).	Fit-Asia/14	ICAO	Open Closed	<p>Questions were raised in the workshop on the PBN implementation in en-route environments.</p> <p>Refer to FIT-Asia/15 SP03.</p>

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
3/5 (SAIOSEACG)	India and Malaysia to share the outcomes of the trial operation on N571 for 30NM Longitudinal separation minima trials for ADS-C/CPDLC/RNP4/2, RCP 240 equipped fleet.	SAIOSEACG/4 BOBTFRG/7 BOBTFRG/8	India and Malaysia	Open	<p>Refers to the SAIOSEACG/3 Final Report 5.23: side meeting discussions between India, Malaysia and IATA.</p> <p>Malaysia will report on the trial in close coordination with India and support from IATA and ICAO.</p> <p>Refer to BOBTFRG/7-WP03: Malaysia and India have been conducting a one-year trial of Performance-Based Communication and Surveillance (PBCS) 30 NM longitudinal separation on ATS route N571 until August 2026.</p>
3/6 (SAIOSEACG)	ICAO to organize a coordination meeting that involves all stakeholders, including Myanmar, to discuss the HIMALAYA02 Route.	ATM/SG/12 ATM/SG/13 On going	ICAO RSO, Nepal	Open	Refers to the SAIOSEACG/3 WP18 Implementation of Himalaya 02.
4/1 (SAIOSEACG)	Coordination of ATS Route Proposals from the RDGE-SCM/2024 between the ICAO EUR and APAC Regions	Long Term	ICAO APAC, ICAO EU-NAT	Open Completed	<p>Refers to Decision SAIOSEACG4-2: Coordination and Discussion of possible steps in order to progress the implementation of the presented ATS Route proposals with the States in the APAC Region</p> <p>Refer to SAIOSEACG/5 WP 14.</p>
4/2 (SAIOSEACG)	South China Sea large-scale weather deviation procedures	SCSTFRG/13 SAIOSEACG/5 SCSTFRG/14	Singapore, China, Hong Kong China, Viet Nam, ICAO.	Open	<p>Refers to Decision SAIOSEACG/4-1 – SOUTH CHINA SEA LARGE SCALE WEATHER DEVIATION PROCEDURES: Concerned States/Administrations should continue to apply surveillance separation, during Large-Scale Weather Deviation (LSWD) and minimise additional buffers for longitudinal spacing as far as practicable, through safety assessment process, on ATS routes L642 and M771.</p> <p>Refer to SAIOSEACG/5- WP10, IP04, Flimsy 09: an update on the LSWD activations on ATS routes L642 and M771.</p>

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
4/3 (SAIOSEACG)	Establishment of the Parallel Route to A1.	SCSTFRG/13 SCSTFRG/14	Viet Nam, Lao PDR, China, Hong Kong China, Thailand, ICAO	Open	Refers to WP18, an update from Viet Nam. Refer to the Final Report of SCSTFRG/13 para 4.21 (Side meeting results): All relevant stakeholders reviewed current A1 ATS route structure and parallel route proposal.
4/4 (SAIOSEACG)	Report on the Proposed ATS Routes development.	SAIOSEACG/5 SAIOSEACG/6	BIMT & Mekong Coordination Group	Open	Refers to the New proposals included in the APAC ATS Route Catalogue. Refer to BOBTFRG/7 Final Report para 4.5: Regarding BOB 03, Thailand informed the meeting that a bilateral meeting between Thailand and Myanmar is planned. Thailand stated that, if Myanmar clarifies its position on the proposal, the two States will prepare an implementation timeline and report the outcome to an upcoming regional meeting.
4/5 (SAIOSEACG)	BOBCAT Re-activation	ATFM/SG/15	All BOB States, IATA, ICAO	Open Closed	WPs will be presented by IATA on this matter to ATFM/SG/15. Refer to IP02 of SAIOSEACG/5: Updated by Thailand
5/1	Study the feasibility of reviewing FLAS/FLOS operations on the six parallel ATS routes over the SCS and to develop an implementation plan for the FLAS/FLOS transition, considering that this matter was part of the SCSTFRG Priority Area 4.	SAIOSEACG/6	All SCS States, IATA, ICAO	Open	Refer to the Final Report of SAIOSEACG/5 para 3.20.
5/2	Concerned States/Administration to provide update on the operating of default spacing of 20 NM on ATS route L642, M771, and 30 NM spacing would be applied in the event of LSWD including the signing of relevant LOAs.	SAIOSEACG/6	China, Hong Kong China, Singapore, Viet Nam	Open	Refer to the Final Report of SAIOSEACG/5 para 3.25, 3.35.

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ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
5/3	Update the related LSWD activation arrangement for L642 and M771.	SCSTFRG/14	China, Hong Kong China, Viet Nam, Singapore	Open	Refer to the Final Report of SAIOSEACG/5 para 3.42.
5/4	Report on the progress of Phase 1 and phase 2 implementation of reduced longitudinal separation between Ujung Pandang and Manila FIRs	SCSTFRG/14	Indonesia and Philippines	Open	Refer to the Final Report of SAIOSEACG/5 para 3.29.
5/5	Present BOBCAT Post-Ops Analysis (POA)	ATFM & A- CDM/SG/16	Thailand	Open	Refer to the Final Report of SAIOSEACG/5 para 3.51.
5/6	Update on A1 parallel route TOC point coordination between Sanya and Ho Chi Minh FIRs	SCSTFRG/14	China, Viet Nam	Open	Refer to the Final Report of SAIOSEACG/5 para 5.9.
5/7	Update on the trial result of implementation plan for reducing longitudinal spacing on ATS route N892 and L625	SCSTFRG/14	Philippines	Open	Refer to the Final Report of SAIOSEACG/5 para 5.26.
