International Civil Aviation Organization

The Fourth Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/4)

Bangkok, Thailand, 18 – 21 March 2025

Agenda Item 5: ATS Route Development

PROGRESS OF THE MEKONG ATM COORDINATION GROUP (MK-ATM/CG)

(Presented by Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam)

SUMMARY

This paper presents outcomes of the 10th Mekong ATM Coordination Group Meeting (MK-ATM/CG/10) held on 27 – 28 November 2024 in Bangkok, with particular focus on outcomes related to ATS route development.

1. INTRODUCTION

1.1 The Mekong ATM Coordination Group (MK-ATM/CG) had been established for States in the area surrounding the Mekong River to discuss and collaborate on matters related to ATM coordination, including airspace management, ATS route development, air traffic flow management, and communication/navigation/surveillance (CNS) infrastructure implementation. The MK-ATM/CG had been meeting regularly up until the COVID-19 pandemic and was only able to re-convene virtually during its 9th meeting in September 2022. After a brief hiatus, the MK-ATM/CG gathered in person once again for its 10th meeting (MK-ATM/CG/10) on 27 – 28 November 2024 in Bangkok, Thailand. The MK-ATM/CG/10 meeting was participated by delegates from Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam with ICAO Asia/Pacific Regional Office's officer as an invited guest.

1.2 This Working Paper provides a report on the key outcomes related to ATS route development from MK-ATM/CG/10 meeting. For a more complete detail, the MK-ATM/CG/10 meeting report is provided as **Attachment A** to this Working Paper.

2. DISCUSSION

LPB – ELASU (Lao PDR – China) and NAN – SAGAG (Lao PDR – Thailand) Route Development

2.1 Under Agenda Item 4.1.1 of the MK-ATM/CG/10 meeting, the development of ATS routes serving traffic between NAN (Bangkok FIR) – SAGAG (Vientiane FIR) and LPB (Vientiane FIR) – ELASU (Kunming FIR) were discussed. The proposed routes were design to enhance airspace capacity for traffic from Bangkok and Vientiane FIRs into Kunming FIR in Southwestern China. Through the tri-lateral discussion between China, Lao PDR, and Thailand held on 24 – 25 June 2024, the route design principle, as shown in **Figure 1**, had been agreed.

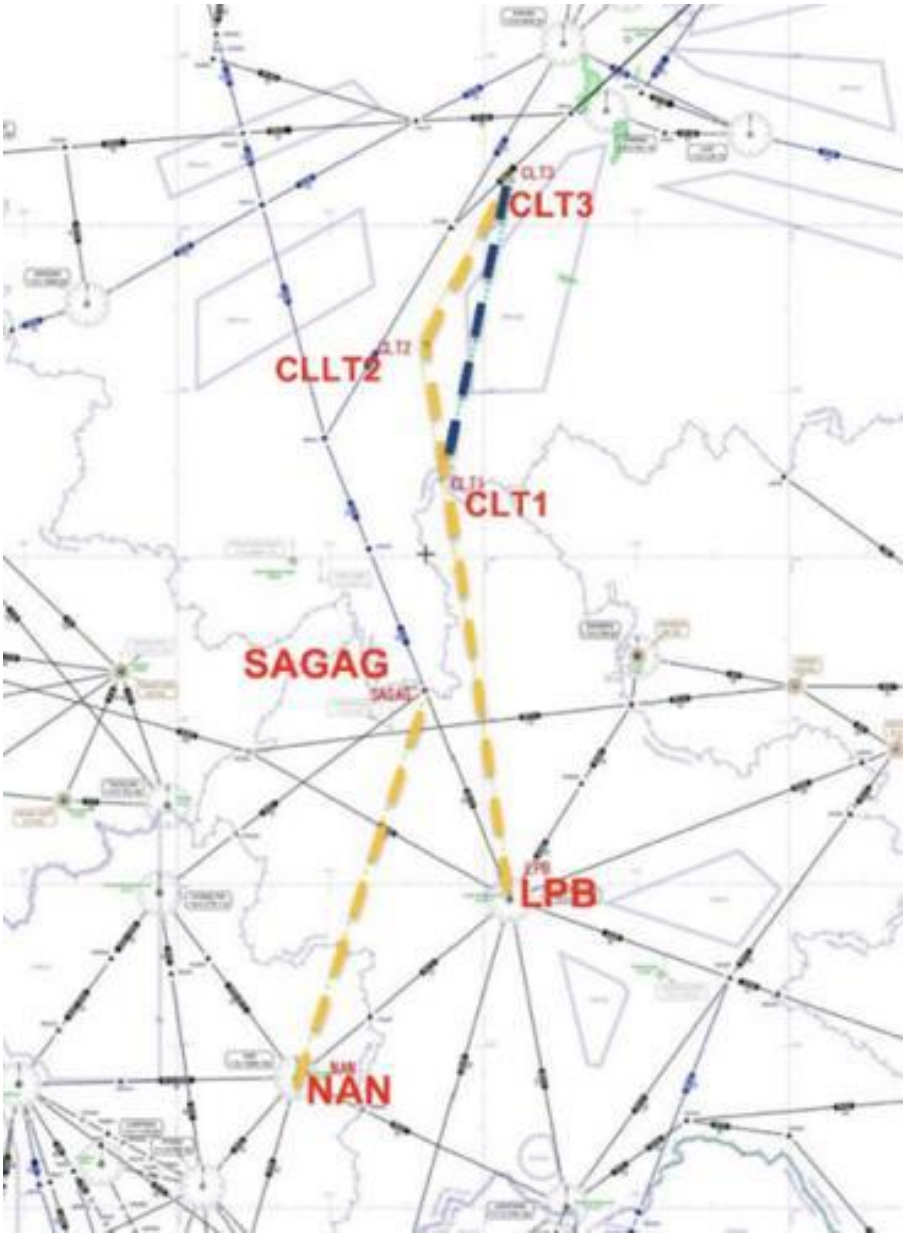

Figure 1 – Proposed NAN-SAGAG and LPB-ELASU Routes

2.2 During the discussion at MK-ATM/CG/10, slight realignment of the NAN – SAGAG route was discussed to minimize the number of crossing points within the Vientiane FIR. It was agreed that Lao PDR would assess the realigned proposal and further coordinate with Thailand for implementation accordingly.

2.3 **The proposed NAN – SAGAG ATS route has not been included in the Asia/Pacific Region ATS Route Catalogue (v24.2, November 2024). To keep track of the implementation progress of this route, it is proposed that this be added to the Catalogue.**

2.4 As for LPB – ELASU, China had informed Lao PDR and Thailand that the route design was being evaluated before further discussion during a tri-lateral meeting in the first half of 2025.

VPH – ROT – PNH Route Development (Cambodia – Thailand – Viet Nam)

2.5 Under Agenda Item 4.1.2 of the MK-ATM/CG/10 meeting, the development of an ATS route serving traffic between VPH/NOB (Hanoi FIR, Viet Nam) and ROT (Bangkok FIR, Thailand) was discussed. This ATS route had been proposed during the 6th meeting of the MK-ATM/CG to serve overflight traffic from Hanoi FIR, Guangzhou FIR and beyond into Bangkok FIR, allowing the traffic to connect with B460 or R345 – Y13 to VTBD/VTBS or with R345 into Phnom Penh FIR. **This proposed route had also been included in the Asia/Pacific Region ATS Route Catalogue (v24.2, November 2024), under the route name MEKONG01**.

2.6 At the MK-ATM/CG/10, the 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 shown in **Figure 2**, as well as the route specification and Minimum Flight Altitude (MFA) for the route. It was agreed that the route would be designated an RNAV2 Conditional Route (CDR) with the MFA of FL270.

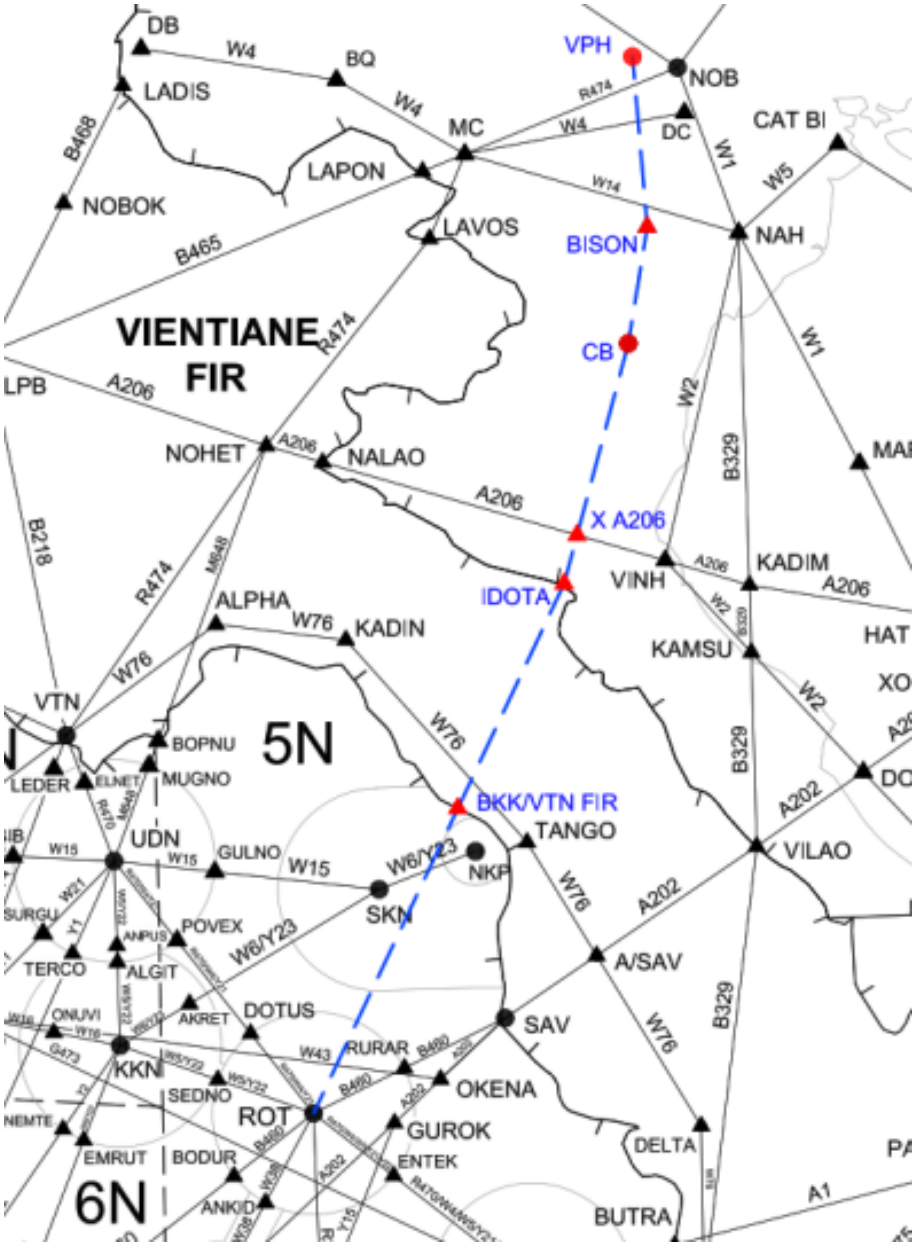

Figure 2 - Proposed VPH - ROT Route

2.7 During the discussion, Cambodia also proposed that the route should be extended into Phnom Penh FIR, overlaying the existing R345 (ROT – REP) and W1 (REP – PNH) to better serve traffic into Cambodia as well. This proposed extension, as shown in **Figure 3,** was agreed to by Lao PDR, Thailand, and Viet Nam.

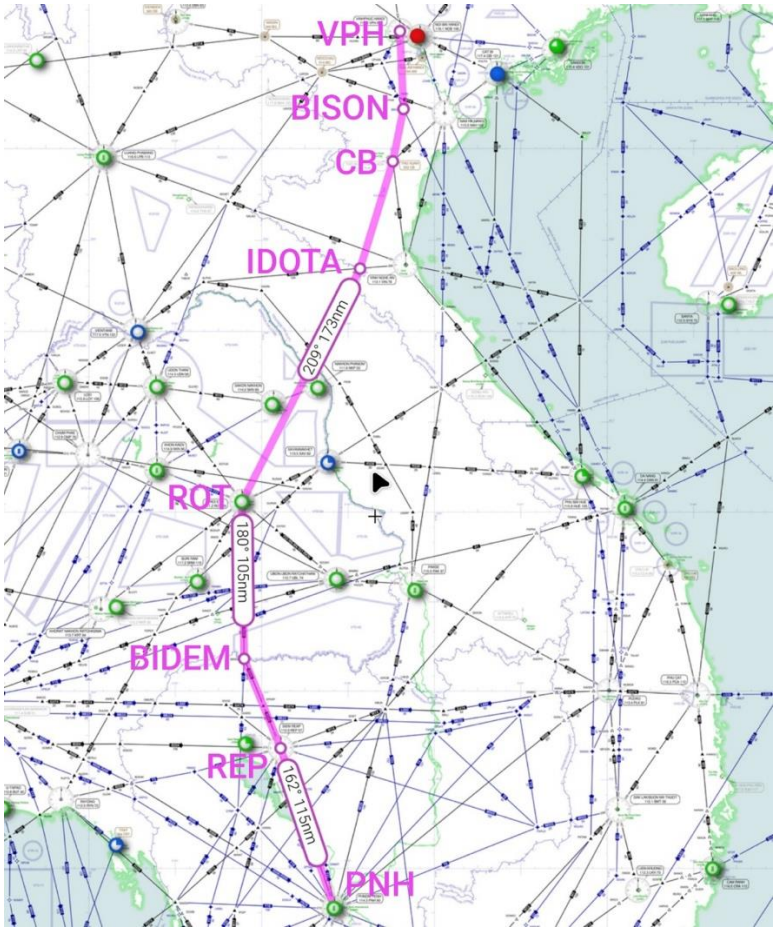

Figure 3 - Proposed VPH - ROT - PNH Route

2.8 In summary, the relevant States agreed to the design principle of ATS route serving traffic 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. This agreement was captured as Conclusion MK-ATM/CG/10-1 and Conclusion MK-ATM/CG/10-2 from the meeting. **To continue keeping track of the implementation, it is proposed that MEKONG01 route in the Asia/Pacific Region ATS Route Catalogue be updated to reflect this latest progress.**

A1 Parallel Route

2.9 Under Agenda Item 4.1.3 of the MK-ATM/CG/10 meeting, the establishment of a parallel route to A1 – as shown in **Figure 4** – was discussed. This route proposal has been in the *Priority Area 1* of the South China Sea Traffic Flow Review Group (SCSTFRG) for several years.

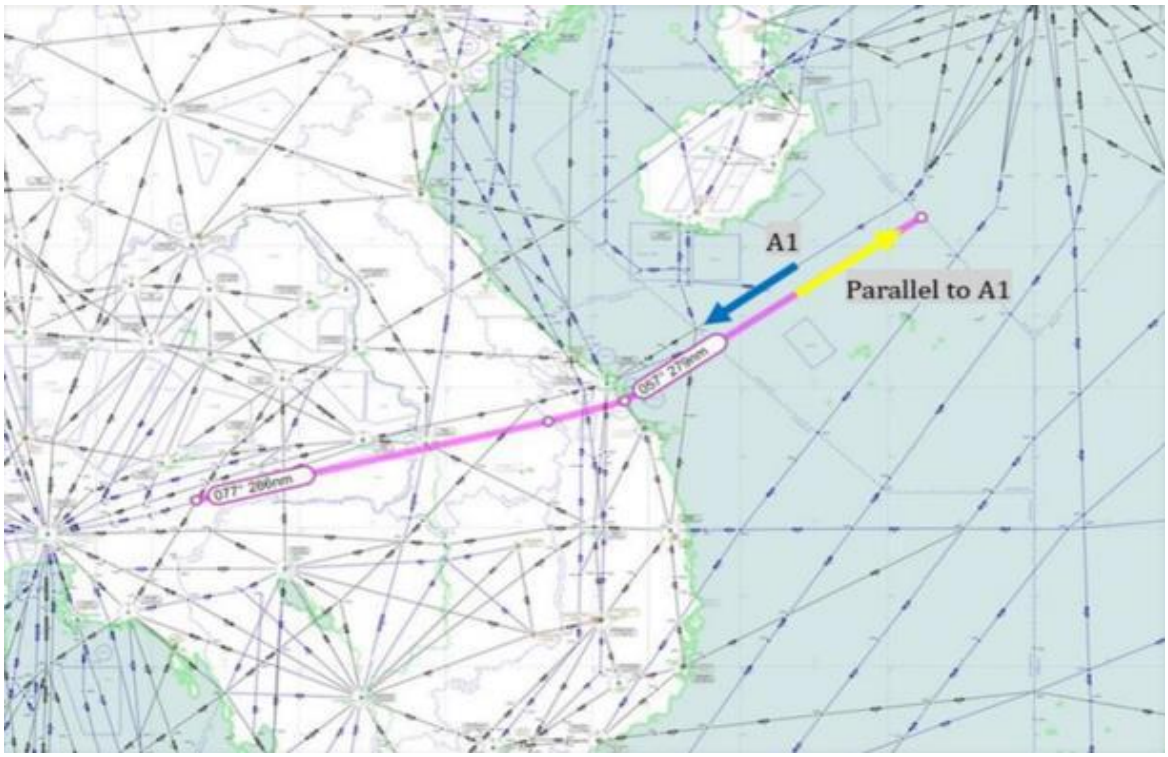

Figure 4 - Proposed A1 Parallel Route

2.10 At the MK-ATM/CG/10 discussion, the meeting was reminded of the grave importance of this parallel route, which was expected address the airspace capacity shortfalls in the area. The capacity shortfalls, based on Thailand's analysis for the period between March 2023 and May 2024, had resulted in a total of over 260,000 minutes of ATFM delays for flights departing from Thailand into the South China Sea airspace. However, no conclusion was achieved at the meeting and the proposed route remained on the table for further discussion.

TUNPO – BASIT – UPNEP Route Development (Cambodia – Thailand – Viet Nam)

2.11 Under Agenda Item 4.1.3 of the MK-ATM/CG/10 meeting, the development of ATS route serving traffic between VVTS (Viet Nam), VDSV (Cambodia), and VTSM/VTSP (Thailand) was discussed. During discussions leading up to and during the MK-ATM/CG/10, the design principle of the route was agreed among relevant States as shown in **Figure 5** with a 2-phase implementation plan. This agreement was captured as Conclusion MK-ATM/CG/10-3 from the meeting.

Figure 5 - Proposed TUNPO - BASIT - UPNEP Route

2.12 Phase 1 of the initiative would be the implementation of BASIT – UPNEP, which were agreed upon by Cambodia and Thailand. Both States were ready to begin the implementation.

2.13 **This proposed portion of the route between BASIT – UPNEP has not been included in the Asia/Pacific Region ATS Route Catalogue (v24.2, November 2024). To keep track of the implementation progress of this route, it is proposed that this portion of the proposed route be added to the Catalogue.**

2.14 Phase 2 of the initiative would be the implementation of TUNPO – BASIT by Cambodia and Viet Nam. This implementation would come later as Viet Nam would need to conduct internal assessment before developing the implementation plan.

VILAO – SEKON – TSH (Cambodia and Viet Nam)

2.15 Under Agenda Item 4.1.5 of the MK-ATM/CG/10 meeting, the development of ATS route serving traffic between VVNB – VVTS transiting over Phnom Penh and Vientiane FIRs was discussed. The proposal had initially been introduced in 2014 but had yet to be implemented. During the discussion, a new proposal was put forward by Cambodia to establish VILAO – SEKON – TSH route (**Figure 6**) for Lao PDR and Viet Nam to consider. It was noted that this proposed route would create crossing points with the existing A1 and A202 as well as the parallels to them should they be implemented, and that careful consideration and traffic analysis would be required.

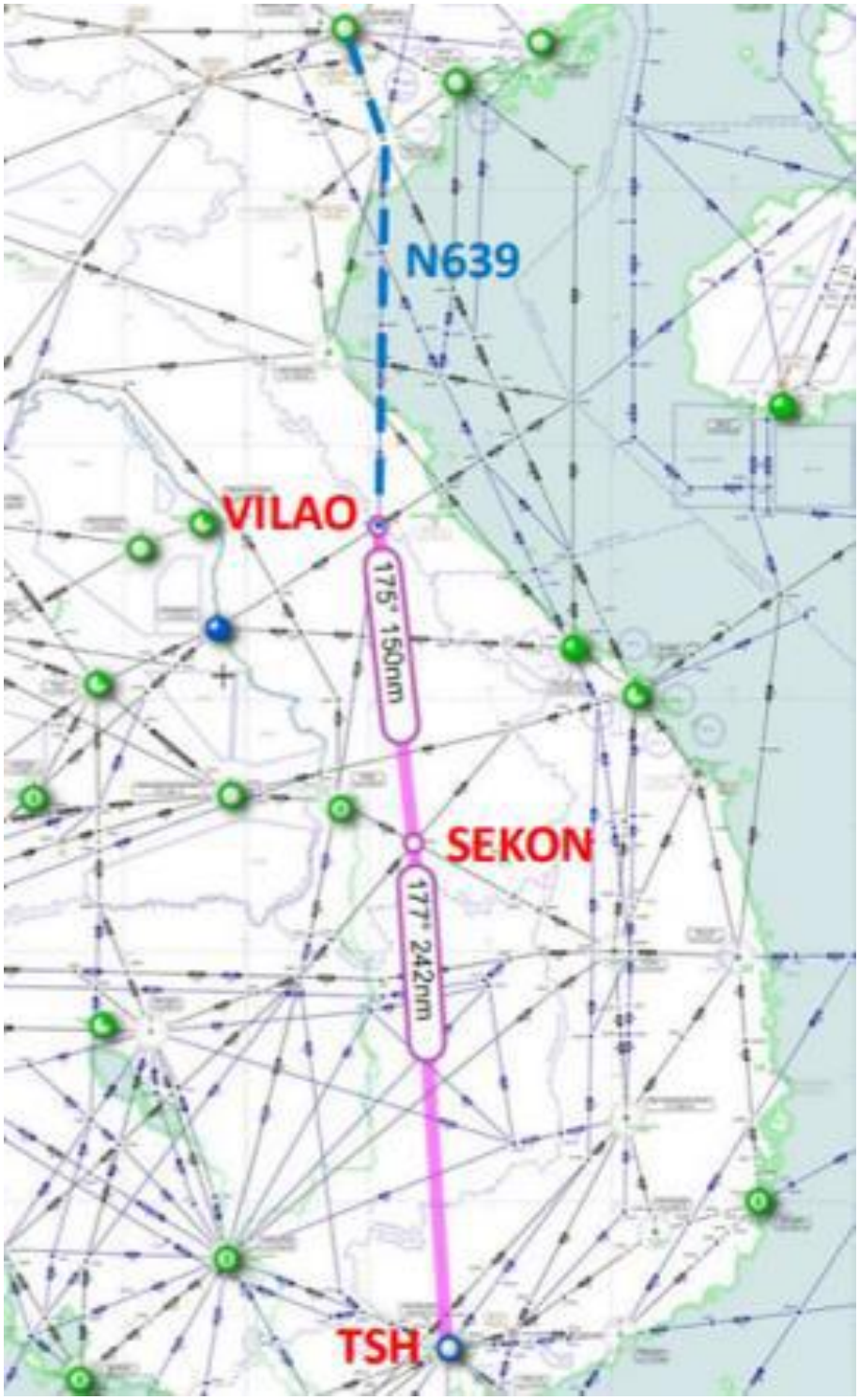

Figure 6 - Proposed VILAO - SEKON - TSH Route

Other Matters Discussed during MK-ATM/CG/10

2.16 The MK-ATM/CG/10 meeting also discussed other matters apart from ATS route development. These included:

- Air Traffic Flow Management (ATFM) implementation and operations updates,
- ATS coordination issues including extended longitudinal spacing requirements on A1 and A202 and the considerations on the use of Strategic Lateral Offset Procedure (SLOP),
- AIDC implementation updates,
- Review of ATS Operational Contingency Plan in various FIRs, and
- The resumption of annual meeting of the MK-ATM/CG.

2.17 Outcomes from these topics of discussion were included in the MK-ATM/CG/10 meeting report, provided as **Attachment A** to this Working Paper.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper,

b) consider adding the proposed NAN – SAGAG route serving traffic between Lao PDR and Thailand, as well as serving traffic into China, to the Asia/Pacific ATS Route Catalogue to keep track of the implementation progress,

c) update the progress of MEKONG01 route in the Asia/Pacific ATS Route Catalogue, noting the agreement on the route design concept and the extension of the route into Phnom Penh FIR,

d) consider adding the proposed BASIT – UPNEP route serving traffic between Cambodia and Thailand to the Asia/Pacific ATS Route Catalogue to keep track of the implementation progress, and

e) discuss any relevant matters as appropriate.

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Meeting Report

The 10th Mekong ATM Coordination Group Meeting (MK-ATM/CG/10)

27 – 28 November 2024, Bangkok, Thailand

Introduction

The ***10th Mekong ATM Coordination Group Meeting (MK-ATM/CG/10)*** was held between 27 – 28 November 2024 at the Marriott Bangkok Hotel Surawongse, Bangkok, Thailand and was hosted by AEROTHAI. This was a continuation of the regular meeting among the States concerned in the Mekong region to discuss matters related to air traffic management (ATM) operations – including airspace management, ATS route development, and air traffic flow management – as well as updates on CNS infrastructure implementation. This was the first MK-ATM/CG meeting held after a brief hiatus since 2022 and represented the restarting of the regular annual meeting of the group.

The meeting was attended by 69 representatives from air navigation service providers (ANSPs) and aviation regulatory authorities of the concerned States. The list of participants is distributed along with this report.

This meeting report captures key discussion points and outcomes from the meeting and is distributed to all participants.

Presentations and papers used during the meeting are stored in a shared folder administered by AEROTHAI, accessible via: https://tinyurl.com/MKATMCG10document.

Table of Contents

Administrative Matters

Opening Remarks

Mr. Sunun Nimfuk, Executive Vice President of AEROTHAI, welcomed the participants to the meeting and remarked on importance of continued collaboration to improve airspace safety, efficiency, and sustainability across Mekong region, highlighting the commitment to stronger airspace connectivity among the participating nations. The Vice President expressed confidence that the shared commitment among Thailand, Vietnam, Cambodia, Lao PDR, and Myanmar would enhance airspace safety, efficiency, and sustainability, leading to stronger regional cooperation and smoother skies.

Meeting Facilitation

Mr. Sunun Nimfuk presided over the meeting, supported by *Ms. Chananya Pinkaewprasert*, Director of Network Operations ATM Center, AEROTHAI. *Mr. Sugoon Fucharoen*, ATM Network Assistant Manager, moderated the discussion and led the secretariat team from the Network Operations ATM Center, AEROTHAI.

Summary of Conclusions

Conclusion MK-ATM/CG/10-1 – Agreement on VPH – ROT Concept
Lao PDR, Thailand, and Viet Nam agreed to the design principle of VPH - ROT route, to be implemented as an RNAV2 Conditional Route with the minimum flight altitude of FL270. Concerned States would work internally to obtain required approvals to begin the implementation.

Conclusion MK-ATM/CG/10-2 – Agreement on Extension of VPH – ROT into Phnom Penh FIR
Lao PDR, Thailand, Viet Nam, and Cambodia agreed to the concept of extending VPH – ROT route into Phnom Penh FIR by adding a PBN overlay on the existing R345 between ROT – REP and W1 between REP – PNH, effectively making the new route connecting VPH – ROT – PNH.

Conclusion MK-ATM/CG/10-3 – Agreement to TUNPO – BASIT – UPNEP Concept
Cambodia, Thailand, and Viet Nam agreed to the design principle of TUNPO – BASIT – UPNEP route, to be implemented to serve traffic between VDPP, VDSV, VVTS and VTSM, VTSP. The implementation would be divided into 2 phases: (1) BASIT – UPNEP and (2) TUNPO – BASIT. Phase 1 (BASIT – UPNEP) can be implemented between Cambodia and Thailand. Phase 2 (TUNPO – BASIT) will be taken into further consideration by Viet Nam.

Conclusion MK-ATM/CG/10-4 – Joint WPs/IPs to SAIOSEACG/4
The Meeting agreed to submit joint Working/Information Papers (WPs/IPs) to the next South Asia, Indian Ocean and Southeast Asia ATM Coordination Group meeting (SAIOSEACG/4) in 2025, detailing the progress of various route structures enhancement initiatives as agreed at this meeting. These WPs may also include progress between this meeting and SAIOSEACG/4 as well.

Summary of Action Items

Action Item MK-ATM/CG/10-1 – Assessment of NAN-SAGAG Proposal
Lao PDR to assess the new proposal from Thailand on the realigned NAN – SAGAG route, considering the traffic analysis information provided by Thailand, and coordinate with Thailand on the implementation plan.

Action Item MK-ATM/CG/10-2 – Viet Nam Approval for VPH – ROT – PNH
Viet Nam to coordinate internally to obtain required approval from State authorities and inform Lao PDR and Thailand when ready to begin implementation planning.

Action Item MK-ATM/CG/10-3 – Preparation of VPH – ROT – PNH Documentation
Thailand to prepare relevant documentation for the request of route designator from ICAO and for the submission of the proposal for amendment (PfA) to the APAC BANP.

Action Item MK-ATM/CG/10-4 – BASIT – UPNEP Implementation
Cambodia and Thailand to coordinate further on the implementation plan of BASIT – UPNEP route.

Action Item MK-ATM/CG/10-5 – Viet Nam Consideration for TUNPO – BASIT
Viet Nam to coordinate internally and inform concerned States on the implementation of TUNPO – BASIT.

Action Item MK-ATM/CG/10-6 – Traffic Information for VILAO – SEKON – TSH
Cambodia to provide more information – including traffic analysis – to Lao PDR on the proposal to establish VILAO – SEKON – TSH route, in support of the safety assessment process required.

Action Item MK-ATM/CG/10-7 – Viet Nam Consideration for VILAO – SEKON – TSH
Viet Nam to consider the proposal to establish VILAO – SEKON – TSH route, and inform concerned States accordingly.

Agenda Item 1 – Adoption of Agenda

1.1 The meeting reviewed and adopted the provisional agenda prepared by AEROTHAI as the agenda for the meeting. Agenda items covered are listed in **Table 1**.

Table 1 - Meeting Agenda

Agenda Item	Topic
Agenda Item 1 ***Adoption of Agenda***	Adoption of Agenda
Agenda Item 2 ***Review of Related Meetings***	Review of Related Meetings
Agenda Item 3 ***Information Sharing***	Information Sharing by Participating States
Agenda Item 4 ***ATM Operations***	4.1 Airspace Management (ASM) 4.2 Air Traffic Flow Management (ATFM) 4.3 Air Traffic Service (ATS) Coordination
Agenda Item 5 ***CNS Infrastructure***	5.1 Surveillance System Development 5.2 AIDC Implementation
Agenda Item 6 ***ATS Operational Contingency Plan***	Review of ATS Operational Contingency Plans for Participating States
Agenda Item 7 ***Any Other Business***	Any Other Business & Review of Conclusions/Action Items
Agenda Item 8 ***Dates and Venues for Next Meetings***	Review of the Plans for Next Meetings

Agenda Item 2 – Review of Related Meetings

2.1 The meeting reviewed key conclusions from related ICAO meetings. **Table 2** summarizes key conclusions from the 34th Meeting of the ICAO Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/34) and its contributory bodies including the Air Traffic Management Sub-Group (ATM/SG) and the Communications, Navigation, Surveillance Sub-Group (CNS/SG). **Table 3** summarizes key Recommendations from the 14th ICAO Air Navigation Conference (AN-Conf/14). Other conclusions and recommendations not covered in these two tables are included in the main meeting presentation and their details can be found on reports from the associated ICAO meetings.

Table 2 – APNPIRG/34 Conclusions

Meetings	Conclusion Numbers	Conclusions
APANPIRG/34	Conclusion APANPIRG/34/1	APAC Regional Seamless ANS Reporting Form 3.0 and Cloud-based Seamless ANS Implementation Progress Reporting.
ATM/SG/12	Draft Conclusion ATM/SG/12-1	Asia/Pacific Seamless ANS Plan
ATM/SG/12	Decision ATM/SG/12-8:	Establish Procedures for GNSS and Data Link Disruption Ad Hoc Group

Table 3 – AN-Conf/14 Recommendations

	Conclusions
Recommendation 3.1/1	Project 30/10 – Optimized implementation of longitudinal separation minima
Recommendation 3.2/2	Transition to FF-ICE services and cessation of FPL2012 by 2034

Agenda Item 3 – Information Sharing

Agenda Item 3.1 – Cambodia Traffic Information Sharing

3.1 Cambodia shared information on the overall traffic information from 2019 to 2024. In 2022, Cambodia's air traffic movement began to significantly recover from the impacts of the COVID-19 pandemic, with continued recovery through 2023, followed by a slight decline in 2024. The busiest airport in the country was Phnom Penh International Airport (VDPP), which managed between 103 and 129 flights daily as of October 2024. VDPP experienced a drastic decline during the pandemic but began recovering in 2022, a trend also seen at Siem Reap–Angkor International Airport (VDSA), which managed 32 to 45 flights daily. Meanwhile, Sihanouk International Airport (VDSV) was recovering more slowly, with approximately 6 daily movements.

Agenda Item 3.2 – Lao PDR Traffic Information Sharing

3.2 Lao PDR shared information on the overall traffic levels within the Vientiane FIR over the past few years. In 2019, prior to the COVID-19 pandemic, annual traffic demand exceeded 350,000 flight movements; however, there was a drastic decline of 80 to 90 percent during the pandemic. Lao PDR was now gradually recovering, with over 1,000 traffic movements per day being recorded. Vientiane International Airport (VLVT) remained the busiest in the country, with international flights being fewer than domestic flights. In terms of the airspace, Sector "S" experienced higher traffic volumes, and a significant portion of the flights were overflights originating from China.

Agenda Item 3.3 – Myanmar Traffic Information Sharing

3.3 Myanmar shared information about the level of traffic demand within the Yangon FIR from 2020 to October 2024. Following the COVID-19 pandemic, overall traffic in the Yangon FIR has shown significant improvement since 2022. In 2023, Myanmar recorded over 9,000 international flight movements, and an average of 700 overflights daily in 2024. Domestic flights, however, have been in decline. A significant portion of the overflights consisted of overnight flights from Europe.

Agenda Item 3.4 – Thailand Traffic Information Sharing

3.4 Thailand shared information about the level of traffic demand within the Bangkok FIR for the past few years. Traffic within the Bangkok FIR has shown significant improvement following the impacts of the COVID-19 pandemic. The current daily flight demand was approximately 2,500 flights, which represented 85% of the traffic compared to 2019 levels. Overflights accounted for approximately 10-15% of the total traffic, while most of the flights were arrivals and departures.

3.5 In terms of inbound traffic from "Mekong" States, inbound traffic from Vietnam were the highest, with approximately 1,000 flights per month representing 82% of the 2019 levels.

In contrast, inbound traffic from Lao PDR was the lowest, with 280 flights per month, or 65% of the 2019 levels.

Agenda Item 4 – ATM Operations

Agenda Item 4.1 – Airspace Management (ASM)

Agenda Item 4.1.1 – Thailand – Lao PDR – China Route Development

4.1 During this agenda item, the meeting discussed the update of the development of ATS routes between NAN-SAGAG and LPB-ELASU, designed to enhance air traffic flow from the Bangkok and Vientiane FIRs into the Kunming FIR in Southwestern China as shown in **Figure 1**. China, Lao PDR, and Thailand had reached an agreement on the route structure design concept during the 1st Airspace Management Coordination Meeting among the 3 States held on 24-25 June 2024.

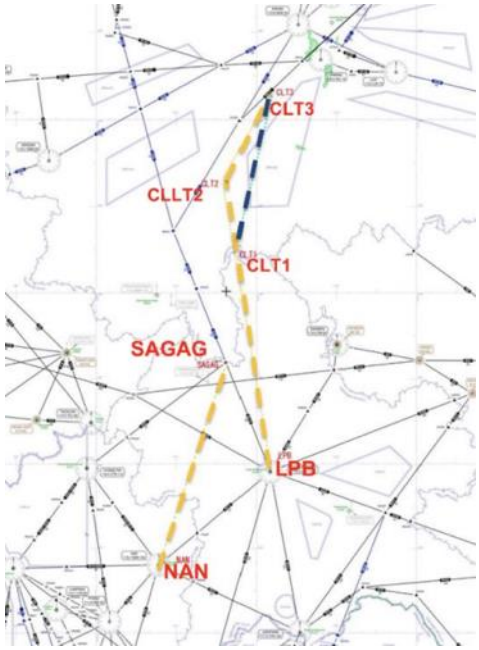


Figure 1 - NAN-SAGAG and LPB-ELASU Proposed Routes

LPB – ELASU Route Development

4.2 Lao PDR provided an update on the LPB-ELASU route, noting that the design of the route had already been approved by their State authorities. However, the route design was still being internally reviewed and processed for approval by China, and that the next Airspace Management Coordination meeting among the 3 States was expected to be held in February 2025, during which time further discussion on the implementation of this route would be facilitated.

NAN – SAGAG Route Development

4.3 Thailand shared that traffic demand analysis on B214, B465, B218 and A581 between August to September 2024 had been conducted based on data submitted by Lao PDR to support Lao PDR's review of the NAN – SAGAG route design concept, the result of which were shared with the meeting.

4.4 Lao PDR raised concerns that the proposed route would intersect two other ATS routes, creating additional crossing points in an area that already had two crossing points. To address this concern, Thailand suggested that the route's endpoint be shifted slightly to the east to where B218 intersects B214, thus limiting the creation of new crossing points. Lao PDR was requested to review this new design and coordinate with Thailand on the implementation plan.

> ***Action Item MK-ATM/CG/10-1 – Assessment of NAN-SAGAG Proposal***
> *Lao PDR to assess the new proposal from Thailand on the realigned NAN – SAGAG route, considering the traffic analysis information provided by Thailand, and coordinate with Thailand on the implementation plan.*

Agenda Item 4.1.2 – Thailand – Lao PDR – Viet Nam Route Development

4.5 The meeting discussed about the VPH/NOB – ROT route proposed by Thailand during the 6th Mekong ATM Coordination Group Meeting (MK-ATM/CG/6). The route was designed the serve overflight traffic from Hanoi FIR, Guangzhou FIR and beyond on the ATS route R747 into Bangkok FIR, allowing the flight to connect with B460 or R345 – Y13 to VTBD and VTBS and R345 to Phnom Penh FIR (VDSA, VDPP) with shorter distance as shown in **Figure 2**.

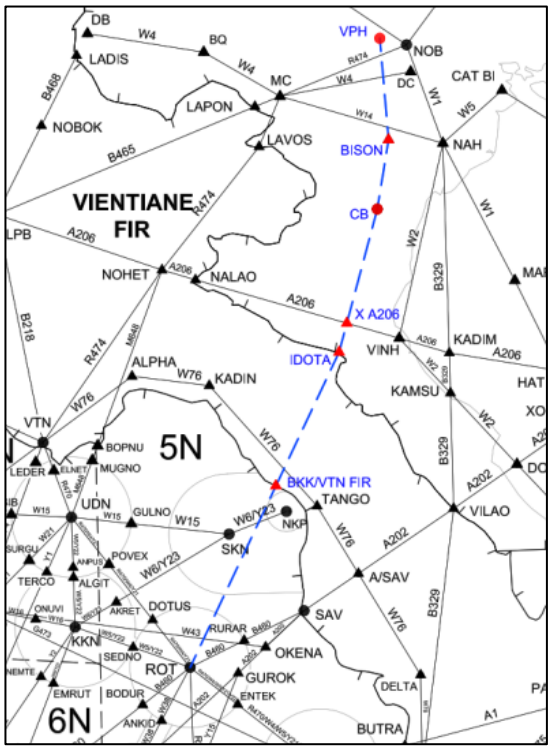


Figure 2 - Proposed ROT - VPH/NOB Route

4.6 The meeting discussed the Minimum Flight Altitude (MFA) for the flight which originally had been proposed to be FL260 by Thailand. Viet Nam counter-proposed the MFA of FL270 due to military training area in the Hanoi FIR, which Thailand agreed to. The meeting also discussed and agreed to the route specification of RNAV2.

4.7 On the implementation, Lao PDR, Thailand, and Viet Nam agreed on the design principle for the route. Viet Nam would coordinate internally further to obtain required approval from state authorities.

Conclusion MK-ATM/CG/10-1 – Agreement on VPH – ROT Concept
Lao PDR, Thailand, and Viet Nam agreed to the design principle of VPH – ROT route, to be implemented as an RNAV2 Conditional Route with the minimum flight altitude of FL270. Concerned, States would work internally to obtain required approvals to begin the implementation.

Action Item MK-ATM/CG/10-2 – Viet Nam Approval for VPH – ROT – PNH
Viet Nam to coordinate internally to obtain required approval from State authorities and inform Lao PDR and Thailand when ready to begin implementation planning.

4.8 During the discussion, Cambodia also proposed extending the VPH – ROT route to PNH, overlaying the existing R345 and W1 in the Phnom Penh FIR. Lao PDR, Thailand, and Viet Nam agreed to the proposal by Cambodia.

Conclusion MK-ATM/CG/10-2 – Agreement on Extension of VPH – ROT into Phnom Penh FIR
Lao PDR, Thailand, Viet Nam, and Cambodia agreed to the concept of extending VPH – ROT route into Phnom Penh FIR by adding a PBN overlay on the existing R345 between ROT – REP and W1 between REP – PNH, effectively making the new route connecting VPH – ROT – PNH.

4.9 Thailand, Vietnam, and Lao PDR agreed to request waypoint names for the route within their respective FIRs, with Thailand taking responsibility for preparing the relevant documents for the request of ICAO route designator and submission of the amendment to the APAC BANP.

Action Item MK-ATM/CG/10-3 – Preparation of VPH – ROT – PNH Documentation
Thailand to prepare relevant documentation for the request of route designator from ICAO and for the submission of the proposal for amendment (PfA) to the APAC BANP.

Agenda Item 4.1.3 – A1/A202 Parallel Route Development

4.10 Thailand shared the history of a route parallel to A1, shown in **Figure 3**, which had initially been proposed in 2009 at the ICAO Southeast Asia Route Review Task Force (SEA-RR/TF/1) and subsequently discussed through the ICAO South China Sea Traffic Flow Review Group (SCSTFRG) meetings over the years. The proposed route structure parallel to A1 was designed to address airspace capacity issue, which – based on Thailand's analysis for the period between March 2023 and May 2024, a total of over 260,000 minutes of Air Traffic Flow Management (ATFM) delays were recorded for flights departing from Thailand into the South China Sea airspace, highlighting considerable inefficiencies.

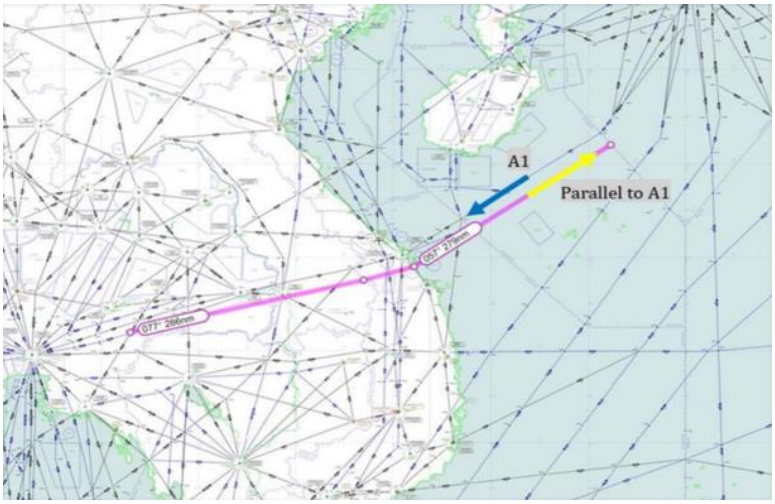


Figure 3 - A1 Parallel Route

4.11 Lao PDR supported Thailand's discussion by highlighting the inefficiencies in that airspace, noting that the longitudinal spacing parameter of 20NM at the transfer of control between Bangkok – Vientiane and Vientiane – Hanoi / Ho Chi Minh FIRs was not able to be applied due to extended spacing restrictions being put on flights along A1.

4.12 Viet Nam shared that the importance of establishing this A1 parallel route was well recognized, although implications on traffic into and out of Da Nang International Airport (VVDN) would have to be reviewed. Viet Nam would therefore take the information provided by Thailand for further consideration. The meeting also noted that China would need to be part of the discussion as well as the route would pass through the Sanya FIR.

4.13 In addition to A1 parallel, Thailand also reminded the meeting of the proposal to establish another parallel route to A202, which had initially been proposed in 2018 and had been postponed. Thailand remarked that they were ready to resume the discussion on this initiative.

Agenda Item 4.1.4 – Cambodia – Thailand Route Development

4.14 The meeting discussed a new ATS route development involving Cambodia, Thailand, and Viet Nam. In 2015, Cambodia had proposed a direct ATS route connecting Sihanouk (VDSV) and Samui (VTSM). Subsequently in 2019, Vietnam Airlines put forward a proposal for a direct ATS route between TUNPO and BASIT to facilitate traffic between Ho Chi Minh City (VVTS) and Phuket (VTSP) as shown in **Figure 4**.

Figure 4 - Initial Direct ATS Route Proposals for Viet Nam - Thailand Traffic Flows

4.15 During the Bi-Lateral ATM Coordination Meeting (Cambodia-Thailand) on 8 February 2024 in Bangkok, Thailand and Cambodia agreed in principle to the combination of the aforementioned proposals, creating a single route proposal between TUNPO – BASIT – UPNEP as shown in **Figure 5**, recognizing the potential benefits to airspace users. The implementation was proposed to be split into 2 phases. Phase 1 would involve the implementation of BASIT – UPNEP within the Bangkok FIR, while Phase 2 would focus on the implementation of TUNPO – BASIT within the Phnom Penh and Ho Chi Minh FIRs.

Figure 5 - TUNPO - BASIT - UPNEP Route Proposal

4.16 The meeting reached an agreement on the design principle for the route as proposed. Cambodia and Thailand would continue coordinating on the implementation plan for the BASIT-UPNEP route, while Vietnam, having raised no objections to the concept would coordinate internally and inform the concerned States regarding the implementation of the TUNPO-BASIT route.

> ***Conclusion MK-ATM/CG/10-3 – Agreement to TUNPO – BASIT – UPNEP Concept***
> *Cambodia, Thailand, and Viet Nam agreed to the design principle of TUNPO – BASIT – UPNEP route, to be implemented to serve traffic between VDPP, VDSV, VVTS and VTSM, VTSP. The implementation would be divided into 2 phases: (1) BASIT – UPNEP and (2) TUNPO – BASIT. Phase 1 (BASIT – UPNEP) can be implemented between Cambodia and Thailand. Phase 2 (TUNPO – BASIT) will be taken into further consideration by Viet Nam.*

Action Item MK-ATM/CG/10-4 – BASIT – UPNEP Implementation
Cambodia and Thailand to coordinate further on the implementation plan of BASIT – UPNEP route.

Action Item MK-ATM/CG/10-5 – Viet Nam Consideration for TUNPO – BASIT
Viet Nam to coordinate internally and inform concerned States on the implementation of TUNPO – BASIT

Agenda Item 4.1.5 – Cambodia – Lao PDR – Viet Nam Route Development

4.17 Cambodia presented a proposal to the meeting for an ATS route between VVNB and VVTS, traversing the Vientiane FIR and Phnom Penh FIR as shown in **Figure 6**.

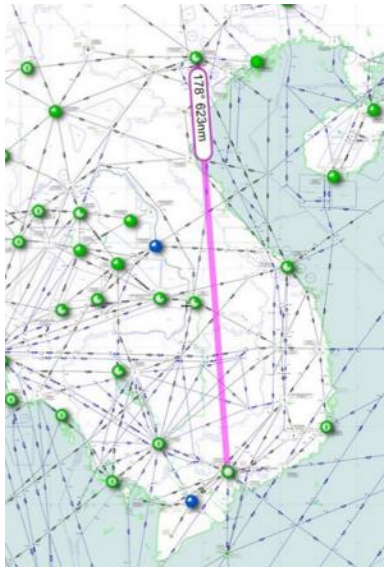


Figure 6 - Proposed Direct Route for VVNB - VVTS Traffic Flow

4.18 Cambodia provided background on the proposed route, explaining that it was initially presented by Viet Nam, with support from Lao PDR and Cambodia, during the ATM Coordination Meeting between Cambodia, Lao PDR, and Viet Nam on 12 October 2014. The VVNB – VVTS route structure was subsequently reintroduced at MK-ATMCG/3 in October 2014 through a joint information paper submitted by Vietnam, Lao PDR, and Cambodia. However, the implementation of the route remained pending due to certain constraints among the 3 States.

4.19 Cambodia expressed concern about the current situation, noting that each year during the monsoon season, a significant number of flights would deviate from the Ho Chi Minh FIR into the Phnom Penh FIR due to adverse weather conditions. Cambodia further highlighted that the frequency and scale of these deviations have increased over time. Cambodia presented a study on flight deviations from Ho Chi Minh FIR between 19 July and 7 August 2024, during which 299 flights deviated into the Phnom Penh FIR, as shown in **Figure 7**, with an average deviation duration of 12 minutes. Based on these findings, Cambodia concluded that an established direct route from VVNB to VVTS could serve as an alternative to the current route during adverse weather conditions.

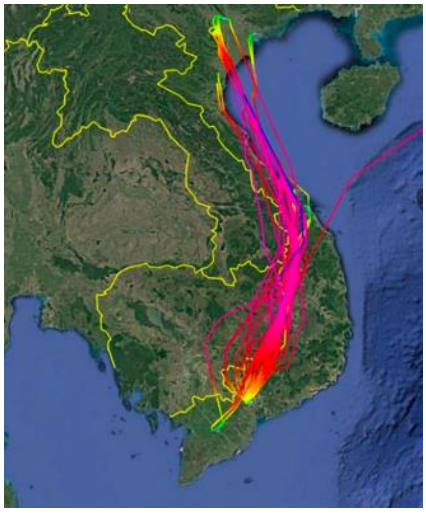


Figure 7 - Deviating Traffic into Phnom Penh FIR

4.20 Cambodia proposed a simplified route structure between VVNB and VVTS, specifically VILAO – SEKON – TSH, in order to streamline the route development process and minimize the impact on the current airspace of the concerned FIRs. For the segment between NOB and VILAO, the existing route N639 would be utilized as shown in **Figure 8**. This new proposal was expected to save approximately 70NM, 9 minutes of flight time, 400 kg of fuel, and 1,276 kg of CO2 emissions per flight. In terms of operational and safety aspects, this route would offer a more optimized alternative to the current route, particularly during adverse weather conditions in the monsoon season. Additionally, it would enhance the predictability of flight paths, reduce occurrences of aircraft deviating from ATS routes, and alleviate the workload on both flight crews and ATC due to fewer deviation situations.

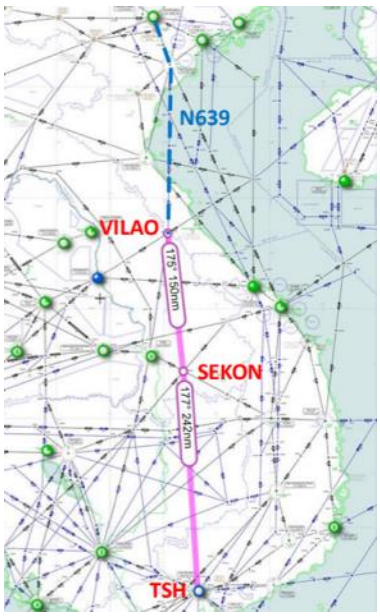


Figure 8 - Simplified Proposal: VILAO - SEKON - TSH

4.21 Accordingly, Cambodia proposed to Lao PDR and Viet Nam to resume discussions on the implementation of the direct route VVNB – VVTS by considering the new proposed route structure of VILAO – SEKON – TSH.

4.22 Lao PDR stated that the establishment of this route would have to be considered against the existing A1 and A202 as well as the parallels to them should they be implemented, as the new direct routing would create more crossing points to be managed within the Vientiane FIR. Lao PDR therefore requested that Cambodia provide more information including traffic demand analysis to support the safety assessment process for the implementation of the proposal. Cambodia agreed to provide additional information, including a traffic analysis, to Lao PDR as requested.

> ***Action Item MK-ATM/CG/10-6 – Traffic Information for VILAO – SEKON – TSH***
> *Cambodia to provide more information – including traffic analysis – to Lao PDR on the proposal to establish VILAO – SEKON – TSH route, in support of the safety assessment process required.*

4.23 Similarly, Viet Nam also stated that analysis and assessment were required for the areas this route would traverse, especially considering military airspace to the north of VVTS and a new aerodrome being planned to the west of VVTS. Viet Nam requested that they be given the opportunity to consider the proposal and inform concerned Cambodia accordingly.

> ***Action Item MK-ATM/CG/10-7 – Viet Nam Consideration for VILAO – SEKON – TSH***
> *Viet Nam to consider the proposal to establish VILAO – SEKON – TSH route, and inform concerned States accordingly.*

Agenda Item 4.1.6 – Cambodia – Viet Nam Route Development

4.24 Cambodia provided an update to the meeting on the implementation of VLPS – VVTS direct route structure via Y24 in the Phnom Penh FIR. Cambodia explained that the study of this route had first been proposed during the 9th Mekong ATM Coordination Group Meeting (MK-ATM/CG/9). The study indicated that a flight from VLPS to VVTS would normally cover a distance of 336.8 NM, and would have to through the PNH waypoint, located in a highly congested area within Cambodia ACC Sector 2. Consequently, Cambodia had proposed the development of a new ATS route, Y24, which would reduce the flight distance for Lao Airlines and other carriers, as well as alleviating the workload for air traffic controllers.

4.25 Cambodia shared to the meeting that, initially, Cambodia and Lao PDR coordinated to establish the Y24 connecting ESLIM to NILIS and then PAKSE; however, Lao PDR informed Cambodia that more time was needed to coordinate with is military. Following which, the route structure was shifted to ESLIM – VIBUN – LEKOB, connecting to PAKSE along the magenta line as shown in **Figure 9**.

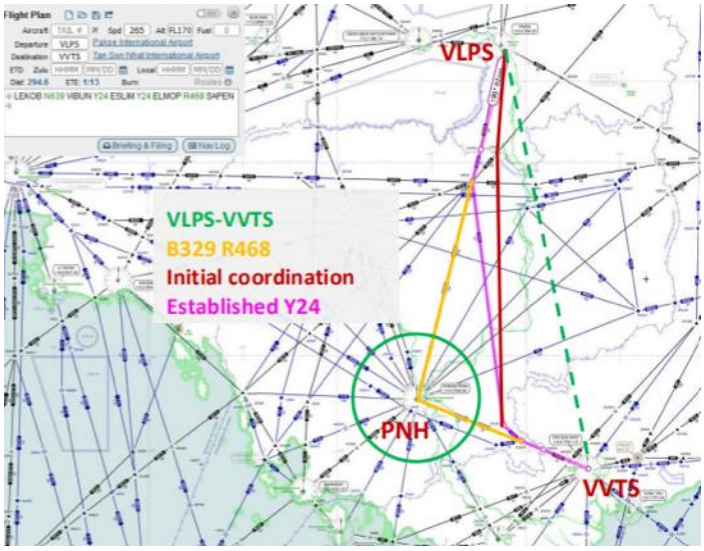


Figure 9 - Development of Y24 between VVTS - VLPS

4.26 Cambodia informed the meeting that Y24 was implemented on 11 July 2024. The result ofY24 implementation showed that Lao Airlines and other carriers were able to reduce their flight distance by 42.2 NM per sector. ACC controllers reported no issues with Flight Level Orientation Scheme (FLOS) and Flight Level Allocation Scheme (FLAS), while APP controllers observed a reduction in conflicting traffic originating from Y24.

Agenda Item 4.1.7 – Instrument Approach at Bokeo International Airport

4.27 Lao PDR presented information about the establishment of Bokeo International Airport and the associated Instrument Approach Procedure in Vientiane FIR. The airport would be located very close to the FIR boundary with the Bangkok FIR. Lao PDR raised a concern that the Missed Approach Turning Procedure would require the aircraft to enter into the Bangkok FIR as shown in **Figure 10.**

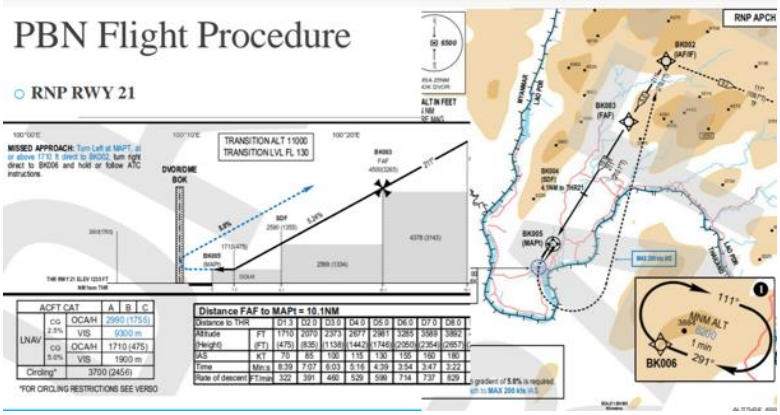


Figure 10 - RNP Approach RWY21 for Bokeo Int'l Airport

4.28 Therefore, Lao PDR invited the meeting to note the information and consider supporting Lao PDR in establishing the Instrument Flight Procedure for Bokeo International Airport, including the development of bilateral agreements for cross-border flight procedures between the airports of Thailand and Lao PDR. This agenda was further discussed during the side meeting between Thailand and Lao PDR.

Addendum: Report on Route Development Progress to SAIOSEACG

4.29 Based on the discussion under Agenda Item 4.1 as recorded in this document, the meeting discussed and agreed that progress update of the various route development initiatives from the MK-ATM/CG be reported to the upcoming South Asia, Indian Ocean, and Southeast Asia ATM Coordination Group (SAIOSEACG) meeting.

> ***Conclusion MK-ATM/CG/10-4 – Joint WPs/IPs to SAIOSEACG/4***
> *The Meeting agreed to submit joint Working/Information Papers (WPs/IPs) to the next South Asia, Indian Ocean and Southeast Asia ATM Coordination Group meeting (SAIOSEACG/4) in 2025, detailing the progress of various route structures enhancement initiatives as agreed at this meeting. These WPs may also include progress between this meeting and SAIOSEACG/4 as well.*

Agenda Item 4.2 – Air Traffic Flow Management (ATFM)

Agenda Item 4.2.1 – ICAO Asia/Pacific Regional ATFM Implementation Status

4.30 Thailand shared information on the status of ICAO Aisa/Pacific Regional ATFM implementation, as had been reported through the ICAO Asia/Pacific Regional ATFM Implementation Status reporting mechanism. The status was based on the report against the performance objectives of the Regional Framework for Collaborative ATFM submitted by Asia/Pacific States and Administrations as of February 2024[1]. Based on the reports, Mekong States' ATFM implementation status was as follows:

- Cambodia: Marginal (89 in 2024)
- Lao PDR: Not yet report
- Myanmar: Incomplete (30 in 2024)
- Thailand: Robust (91 in 2024)
- Vietnam: Marginal (71 in 2024)

4.31 Thailand shared that the Regional Framework for Collaborative ATFM had an expectation that all States should be at least at the "Level 2" in the region's Distributed Multi-Nodal ATFM Network concept, i.e. being able to facilitate departing flights' compliance to ATFM measures issued by other States. When needs arise, States could then consider implementing "Level 3" capabilities of issuing ATFM measures to balance demand and capacity withing their areas of responsibility. Regional ATFM Monitoring and Reporting Form reflected the delineation between Level 2 and Level 3 capabilities, allowing States/Administrations to report their implementation at the appropriate levels[2].

4.32 Thailand also reminded the meeting that ongoing participation of Mekong States in the Asia-Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC) was important to the

[1] Detailed information can be found from the report of the 14th APAC ATFM Steering Group Meeting (ATFM/SG/14) held in April 2024, accessible via this webpage.
[2] Information on the Asia/Pacific Regional Framework on Collaborative ATFM and Regional ATFM Monitoring and Reporting Form can be accessed via the ICAO APAC e-Document (ATM) webpage via this link.

effective implementation of cross-border ATFM in the Asia-Pacific region, and that the next AMNAC meeting (AMNAC/23) was planned for March 2025 in Hong Kong China.

Agenda Item 4.2.2 – Cambodia ATFM Updates

4.33 Cambodia presented an update of their ATFM support system, which would now include the feature to communicate CTOT information to flights from aerodromes in Cambodia with assigned CTOTs issued by other ATFM units in the region. By adding extensive information and giving improved usability to the system, Cambodia would be able to improve their facilitation of CTOT compliance for departing traffic.

4.34 Cambodia shared that the CATS ATFM Web Portal had been accessible since 2 November 2024 via https://www.cats.com.kh/atfm/atfm_operation_portal. Cambodia also planned to upload relevant ADPs on this website. Additionally, users can access supplementary information such as real-time airspace and airport capacity, as well as post-operation analysis, among other resources.

4.35 Cambodia also shared that Phnom Penh ATFMU was expected to establish a Memorandum of Understanding (MOU) or bilateral agreement with Sanya ATFMU (China) to support the continuous collaboration of CTOT facilitation to airlines transiting through the Sanya FIR.

Agenda Item 4.2.3 – Thailand ATFM Updates

4.36 Thailand provided updates on ATFM services conducted by the Bangkok ATFM Unit (Bangkok ATFMU) with topics comprising overview of AEROTHAI ATFM services, post operations analysis, planned ATFM activities in 2025, operational observations, and non-receipt of DEP messages. Details of these topics were provided as part of the presentation by Thailand. Important information included:

- AEROTHAI ATFM services comprised both BOBCAT ATFM Service for Kabul FIR and General ATFM Service for demand-capacity balancing within the Bangkok FIR.

- ATFM post-operations analysis could be accessed via dashboards at https://bit.ly/thailand-gdp-analysis and https://bit.ly/ctot-fwd-review.

- Upcoming activities in 2025 that could require ATFM measures included traffic congestion, inclement weather, and military air exercises. These activities would be announced via appropriate channels including AIP Supplement, NOTAMs, and ATFM Daily Plans (ADP).

- Issues with non-receipt of DEP messages, tracked as part of a monitoring of States liable to receiving APANPIRG deficiencies, showed some issues with departures from Lao PDR and Myanmar especially during September – October 2024.

4.37 In response to the information on non-receipt of DEP messages, Cambodia and Viet Nam requested detailed data from Thailand for further investigation.

4.38 Thailand also shared that Bangkok ATFMU has been facilitating compliance to ATFM measures – specifically CTOTs – issued by other ATFM units, including CTOTs assigned due to traffic congestion on A1 and A202 and special events such as the Singapore Airshow, the National Day Parade, and weather conditions in Singapore.

4.39 Thailand also shared several observations from operations with the meeting. The first issue pertained to flow restrictions in the South China Sea airspace, where flights departing from Thailand within the CTOT windows were frequently instructed to hold en-route before entering Vientiane FIR due to additional spacing restrictions. The second issue involved traffic congestion in the BACC sector 4N during the early morning hours, leading to large-scale en-route holding and vectoring, which also impacted safety. These issues would be discussed during 3rd Lancang-Mekong River ATFM Working Group meeting (LMR-ATFM/WG/3) scheduled immediately following this MK-ATM/CG/10 meeting.

Agenda Item 4.2.4 – Viet Nam ATFM Updates

4.40 Viet Nam shared an update on ATFM to the meeting, informing the meeting that they had officially implemented AMNAC Level 3 capabilities at 3 international airports: VVNB, VVDN, and VVTS. The implementation has helped Viet Nam manage traffic into those 3 airports more effectively.

4.41 Viet Nam thanked Thailand for their support on this capability upgrade, and registered their interest in ATFM support tools that would help with demand-capacity balancing for the airspace, which was planned as the next step in Viet Nam's ATFM implementation.

Agenda Item 4.3 – ATS Coordination

4.42 Thailand raised two concerns regarding Air Traffic Service (ATS) coordination with the meeting, comprising (1) assigned flight levels and longitudinal spacing for the transfer of aircraft between Bangkok ACC and Vientiane ACC and (2) consequences of westbound aircraft flying on a lateral offset without a specified limit.

Longitudinal Spacing Issues on A1 and A202

4.43 Thailand shared the issue relating to longitudinal spacing for the transfer of aircraft between Bangkok ACC and Vientiane ACC on ATS routes A1 and A202. Thailand noted that there were limited flight levels available for eastbound aircraft. According to the ATS coordination Letter of Agreement (LOA) between Bangkok and Vientiane ACCs, a 20 NM spacing for aircraft at the same altitude was to be applied. However, frequent extended spacing requirements from China (Sanya FIR) meant the application of 20NM spacing was often not possible, resulting in confusions, traffic management complications, and airborne holding.

4.44 Lao PDR shared with the meeting that, although the LOA specified 20NM spacing between Bangkok and Vientiane ACCs, the application was frequently not possible due to spacing requirements published by China (Sanya ACC). Viet Nam echoed that they too faced

the same issues. The meeting agreed that this topic would need to be discussed with China as well, and would therefore be discussed at the LMR-ATFM/WG/3.

4.45 ICAO also remarked that the practice of using Flight Level Allocation Scheme (FLAS) should be reconsidered, given that the airspace in discussion should already be covered with ATS surveillance. The removal of FLAS would help improve the capacity and efficiency in the airspace.

4.46 This topic was further discussed during the 3rd Lancang - Mekong River ATFM Working Group Meeting on 29 November 2024 (LMR-ATFM/WG/3).

Application of Strategic Lateral Offset Procedure (SLOP) without a Specified Limit

4.47 Thailand shared the issue regarding to the consequences of westbound aircraft flying on a Strategic Lateral Offset Procedure (SLOP) without a specified limit. This could cause issues within the Bangkok FIR due to the danger areas close to the FIR boundary as shown in **Figure 11.**

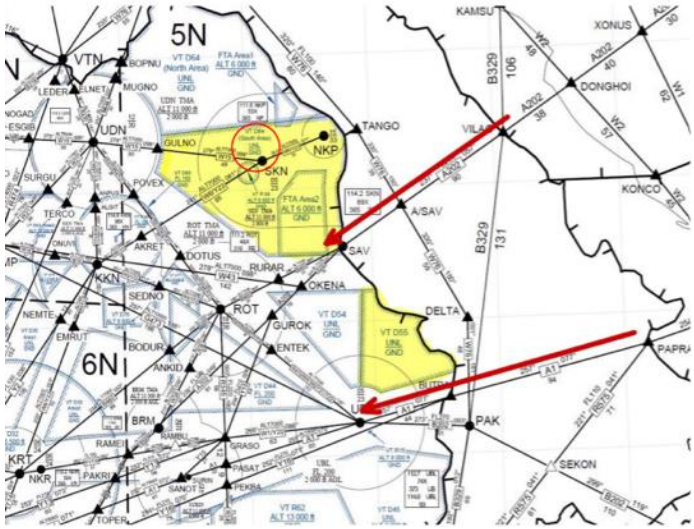


Figure 11 - Issues with SLOP on A1 and A202

4.48 This procedure has resulted in aircraft approaching danger areas within the Bangkok FIR and potentially leading to unnecessary coordination workload between Bangkok ACC and the military units to verify the aircraft's intention.

4.49 Viet Nam shared that the lateral offset procedure had been included in the ATS LOA with Sanya ACC (China) to manage the amount of traffic on A1 and A202, allowing a reduction in workload for the ATCOs.

4.50 However, ICAO representative stated that lateral offset procedures had been primarily designed for remote procedural airspace rather than for daily operations in a surveillance airspace, and should not be used to as a demand/capacity balancing tool.

4.51 Thailand proposed that Viet Nam coordinate with China for further discussions on this topic, encouraging that the procedure be discontinued or ensure the aircraft would be put back on the ATS route prior to entering the Bangkok FIR.

Agenda Item 5 – CNS Infrastructure

Agenda Item 5.1 – Surveillance System Development

5.1 Thailand shared information about the ADS-B implementation plan, which is aimed at enhancing surveillance coverage in the Bangkok FIR. Six (6) ADS-B ground stations have been installed in Thailand as shown in **Figure 12** which, when combined with the existing SSR stations, provide surveillance coverage for most of the Bangkok FIR with minimal gaps in the lower altitudes. The ADS-B implementation project started in March 2022 and was operationalized in September 2024, with surveillance tracks from ADS-B showing 95% consistency with those based on SSR stations.

Figure 12 - ADS-B Ground Stations in Thailand

5.2 Thailand also shared that they were in the process of preparing for ADS-B surveillance data exchange with neighboring States including Myanmar, Cambodia, and Malaysia. Specifically, test data were being assessed for integration into the ATM system in used in Thailand. The arrangements for ADS-B surveillance data sharing were coordinated between Thailand and their neighbors at associated bi-lateral CNS/ATM coordination forums, with engineering points of contact (POCs) having been established.

5.3 Myanmar informed the meeting that, during the last Bangladesh – India – Myanmar – Thailand ATM Coordination Meeting (BIMT/8), Myanmar and Thailand had also agreed to expand the scope of ADS-B data exchange to also include the exchange between Phuket – CoCo Island and Doi Inthanon – Yangon stations as well.

Agenda Item 5.2 – ATS Inter-Facility Data Communication (AIDC) Implementation

Agenda Item 5.2.1 – Cambodia AIDC Implementation Updates

5.4 Cambodia provided an update on the AIDC implementation between Phnom Penh ACC (PACC) and neighboring ACCs, which included:

- PACC and VACC: COP NILIS and LEKOB (ABI, EST, ACP, AOC, TOC). Complete technical trial on CDN, REJ, and MAC. Next step is to plan for operational trial.

- PACC and BACC: COP VAPVU, BOKAK. PACC and BACC has Reached an agreement to enhance the AIDC trial for all COPs except BIDEM.
- PACC and HACC: Completed AIDC technical trial in October 2021, waiting for operational trial with HACC. Cambodia also shared that the intention is to do operational trial on R468 and G474.

Agenda Item 5.2.2 – Lao PDR AIDC Implementation Updates

5.5 Lao PDR shared that Vientiane ACC has been conducting AIDC testing with adjacent ACCs since 2014, initially with Phnom Penh ACC, followed by Bangkok ACC, Kunming ACC, Hanoi ACC, and Ho Chi Minh ACC, though not yet officially with Yangon ACC. Lao PDR was currently using Thales TopSky for their ATM system, and was basing their AIDC infrastructure on the APAC AIDC ICD version 2 with information exchange occurring via the AFTN/AMHS network. Lao PDR also noted that a Safety Management System (SMS) will be developed during the implementation phases and subsequent stages of AIDC and ATC operations.

5.6 Lao PDR also shared that the AIDC operation between Vientiane and Phnom Penh ACCs is already put into operation and implemented since 2 January 2020.

Agenda Item 5.2.3 – Thailand AIDC Implementation Updates

5.7 Thailand shared 2 main progresses of ATS Inter-Facility Data Communication (AIDC) between Bangkok FIR and adjacent FIRs, including Yangon FIR AIDC implementation update.

5.8 Bangkok and adjacent FIRs

- Vientiane FIR: Completed
- Kuala Lumpur FIR: Completed
- Phnom Penh FIR: Completed
- Yangon FIR: Not used

5.9 Yangon FIR AIDC implementation update

- The first trial use was during August 2019 but canceled due to safety concerns regarding Thailand's TMCS system.
- Second trial use was during February 2020 but cancelled due to technical issue from Myanmar.
- Third trial use was during June 2024 but cancelled due to technical issues related to the creation of a large number of ABI messages for flight plan.

Agenda Item 5.2.4 – Viet Nam AIDC Implementation Update

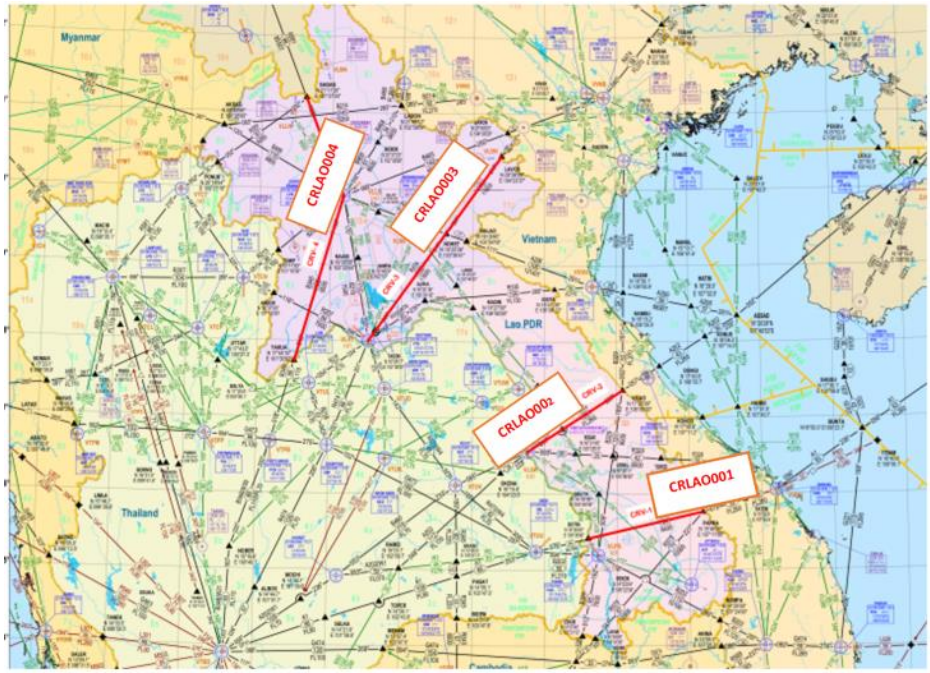
5.10 Vietnam shared that Ho Chi Minh ACC was still in the process of upgrading the ATM system which was expected to be ready for AIDC trials around the beginning of 2026.

5.11 It was also shared that the AIDC trial with Myanmar was cancelled multiple times due to system issues and was now scheduled to resume in February or March of 2025.

Agenda Item 6 – ATS Operational Contingency Plan

Agenda Item 6.1 – Vientiane FIR Contingency Plan

6.1 Lao PDR presented information on their ATS Operational Contingency Plan to the meeting, with the contingency routes and flight level allocation established as shown in **Figure 13**. This contingency route arrangement had already been included in the ATS LOAs with Bangkok ACC and Ha Noi ACC.



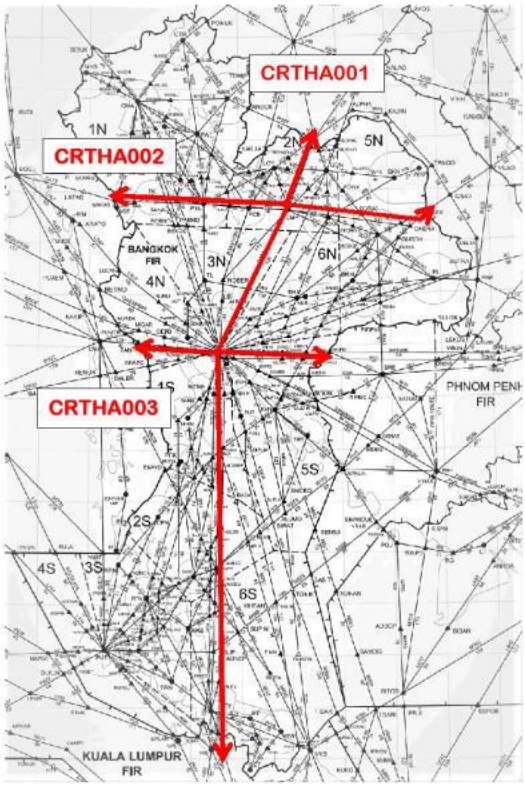
Contingency Routes Definition	ATS routes	Direction	FL Assignment	ACCs	Frequency (MHz)
CRLAO001	A1 BKK-BUTRA-PAPRA-DAN	Westbound	300, 340 and 360	Bangkok ACC	132.1MHz
		Eastbound	290 and 330	Ha Noi ACC	123.3MHz
CRLAO002	A202 BKK-SAV-VILAO-ASSAD	Westbound	300, 360 and 400	Bangkok ACC	132.1MHz
		Eastbound	290 and 330	Ha Noi ACC	125.9MHz
CRLAO003	R474 BKK-VTN-LAVOS-HAN	Westbound	260, 300, 340 and 380	Bangkok ACC	126.5MHz
		Eastbound	270, 290, 330 and 370	Ha Noi ACC	132.3MHz
CRLAO004	B218/B346	Westbound	280 and 360	Bangkok ACC	126.5MHz

Figure 13 - Vientiane FIR Contingency ATS Routes & FLAS

Agenda Item 6.2 – Bangkok FIR Contingency Plan

6.2 Thailand shared information on the contingency route structure for flights transiting the Bangkok FIR during periods of limited or no air traffic services. The route structure comprises 3 contingency routes – CRTHA001, CRTHA002, CRTHA003 – designed to support

flights transiting both east-west and north-south, utilizing existing ATS route structure and flight level allocation. Details of the route structure is shown in **Figure 14.**



Contingency Routes Definition	ATS Route	Direction	FL Assignment	ACCs	Frequency (MHz)
CRTHA001	VTN R474 BKK A464 KARMI	Northbound	310	Vientiane ACC	124.1
		Southbound	390	Kuala Lumpur ACC	133.7
CRTHA002	MAKAS G473 CMP W43 OKENA A202 SAV	Eastbound	370 410	Vientiane ACC	128.3
		Westbound	340	Yangon ACC	128.75
CRTHA003	TANEK L301 BKK G474 OMURO	Eastbound	330 410	Phnom Penh ACC	127.5
		Westbound	360	Yangon ACC	124.75

Figure 14 - Bangkok FIR Contingency ATS Routes & FLAS

6.3 During the contingency period, Traffic Information Broadcast by Aircraft (TIBA) procedure was to be in effect, using the TIBA frequency of 128.95 MHz in line with the regional and global practice. Information concerning the ATS contingency route structure in the Bangkok FIR can be found in the AIP Thailand, section ENR 3.5. Additionally, the full national contingency arrangement can also be accessed from the Civil Aviation Authority of Thailand (CAAT)'s website via this link. An extract of the contingency arrangement relating to air traffic management has also been included in the ATS Operational Letters of Agreement (LOAs) signed between Thailand (AEROTHAI) and neighboring States' ANSPs.

6.4 Thailand also shared about an ongoing effort to develop an Asia/Pacific Regional Contingency Framework by the Asia/Pacific ANSP Committee (AAC) in collaboration with the ICAO Air Navigation Bureau[3], which should have more updates in 2025.

[3] Information on this Regional Contingency Framework development can be found in the WP/19 of the 12th Meeting of the ATM Sub-Group of APANPIRG, accessible via this link.

Agenda Item 7 – Any Other Business

7.1 The meeting reviewed and agreed on the conclusions and action items from the discussion. The conclusions and action items have been included in the reporting of the associated agenda items as well as summarized in the beginning of this meeting report.

Agenda Item 8 – Dates and Venues of Next Meetings

8.1 The meeting discussed the plan for the MK-ATM/CG Meeting in the upcoming years, noting the intention to resume regular face-to-face meetings among member States on an annual basis. The tentative plan for the next 2 Mekong ATM Coordination Group Meeting meetings is as follows:

Meeting	Timeframe	Location
MK-ATMCG/9	Sep 2022	Online
MK-ATMCG/10	Nov 2024	Bangkok, Thailand
MK-ATMCG/11	2025	Cambodia
MK-ATMCG/12	2026	Lao PDR

Closing of the Meeting

Mr. Sunun Nimfuk, Executive Vice President of AEROTHAI, thanked all participants for their active participation throughout the meeting. He expressed his deep appreciation for the constructive discussions and collaboration that have been demonstrated by all the members. He noted the values of the outcomes discussed over the 2-day event and shared his confidence that the outcomes – and the relationship fostered among the Mekong States – will pave the way for improved air traffic management in the Mekong region. He also expressed his anticipation for continued cooperation and the 11th Mekong ATM Coordination Group Meeting in Cambodia. Finally, Mr. Sunun wished all participants safe travels and declared the meeting closed

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