SAIOSEACG 4

# Strengthening Cross-FIR Collaboration to Enhance Regional Operational Efficiency

Bangkok, Thailand

Presented by CHINA

2025.03

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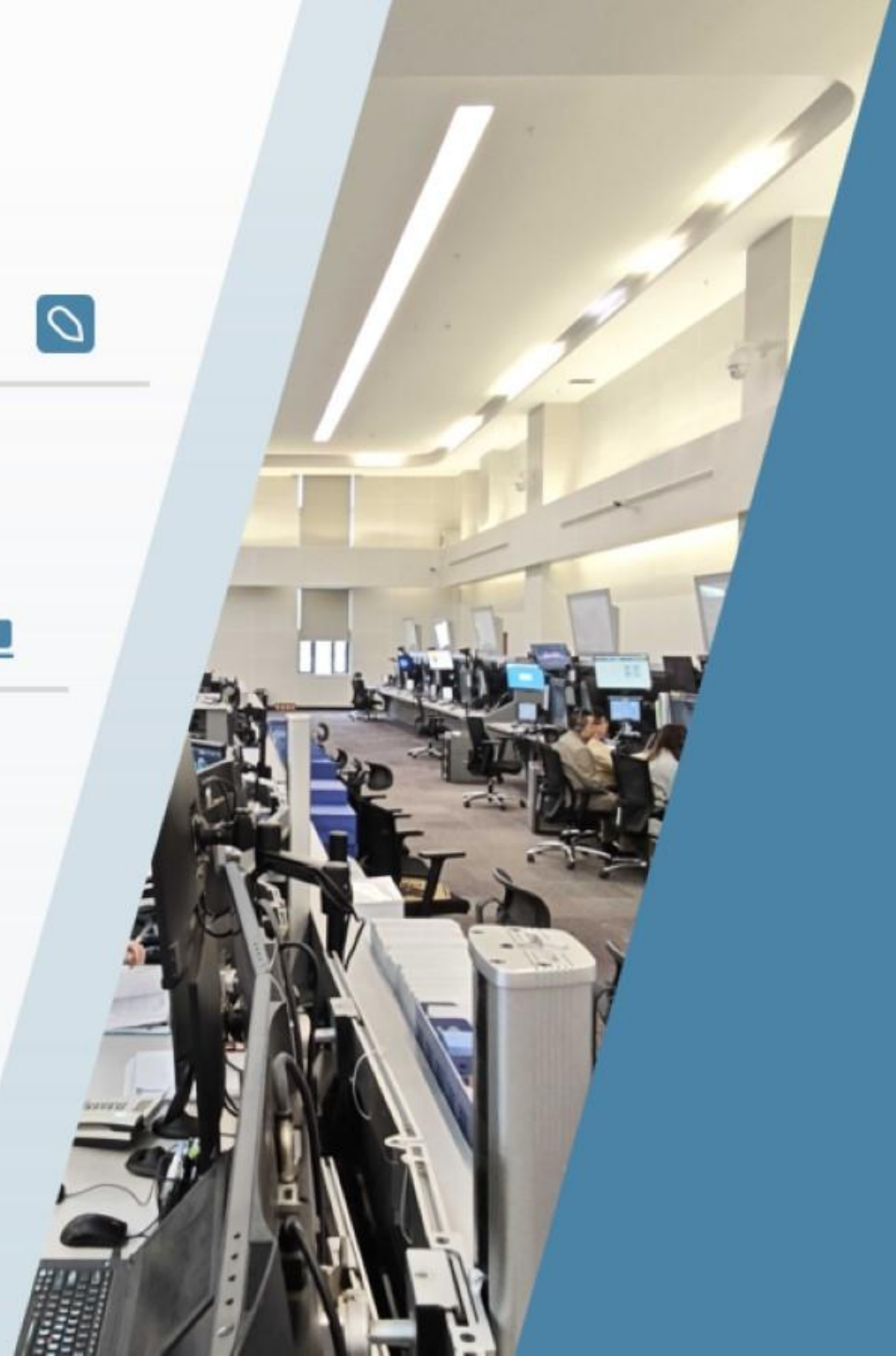
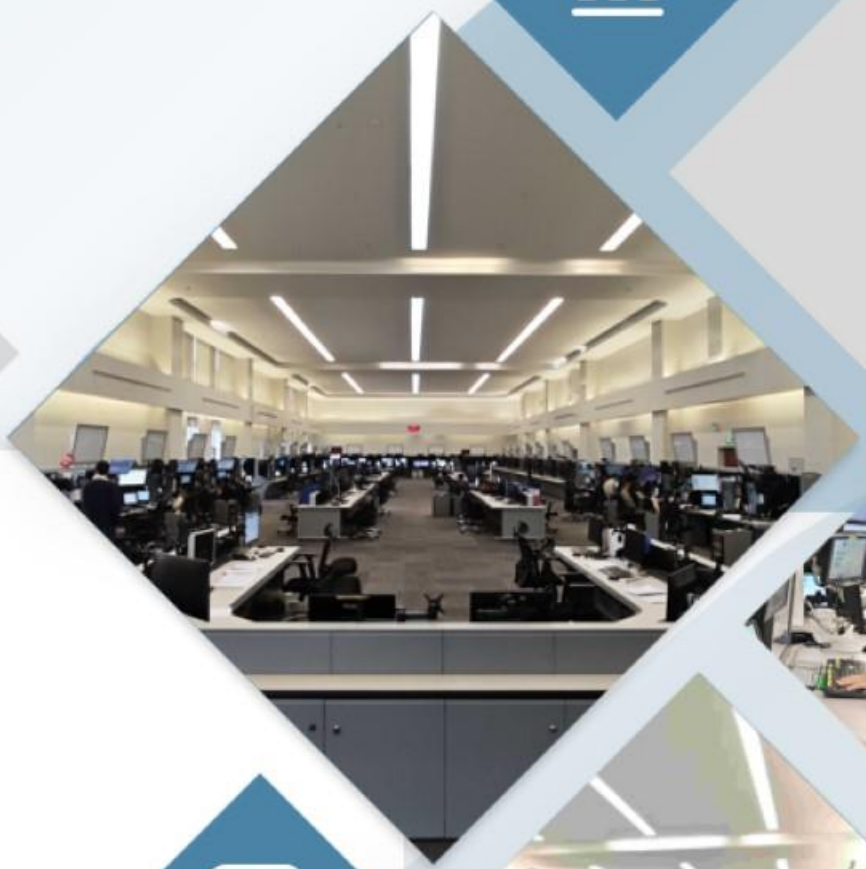


01

# Introduction

Bangkok, Thailand



# Introduction

## Recent Progress

Initiatives by ICAO groups (e.g., SAIOSEACG) have enhanced safety, capacity, and efficiency.

## Cross - FIR Collaboration

- Essential for integrating diverse operational procedures.
- Example: Domestic operations can use 10 NM separation, whereas cross-FIR operations currently use 20 NM.

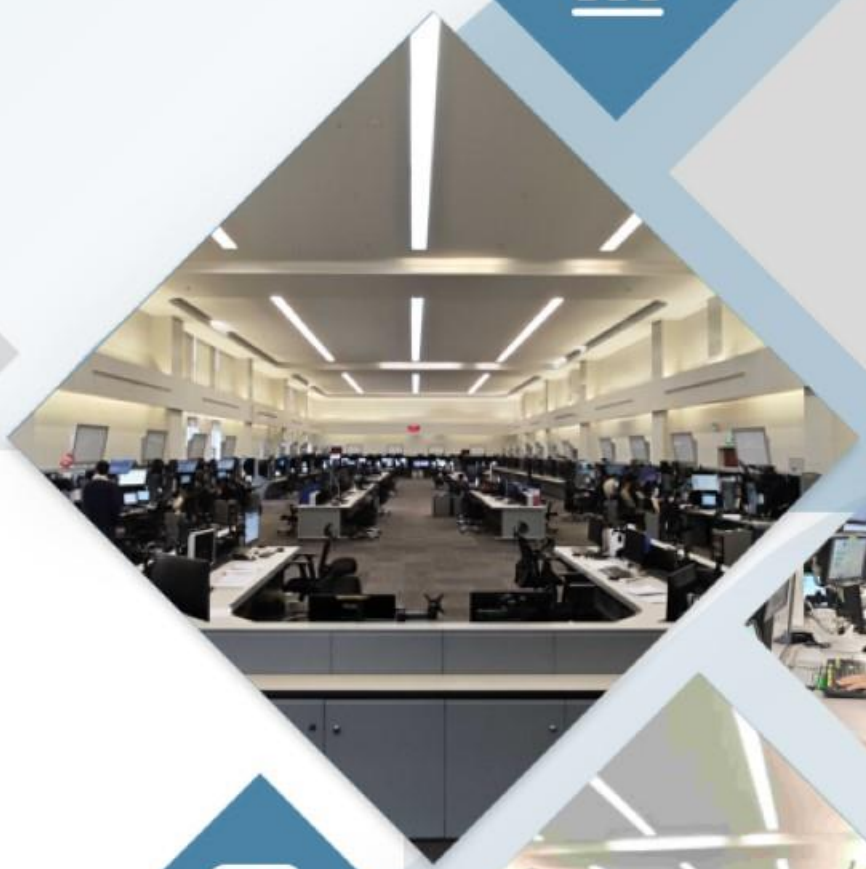
## Emerging Needs

- Approaching rainy season and increasing traffic demand make further collaboration imperative.
- Overcoming differences in safety cultures, training standards, and procedures is key.

02

# Discussion

Bangkok, Thailand



# A1 Parallel Route Planning

## Background

Parallel routes along A1 have been explored over the past decade with five candidate proposals.

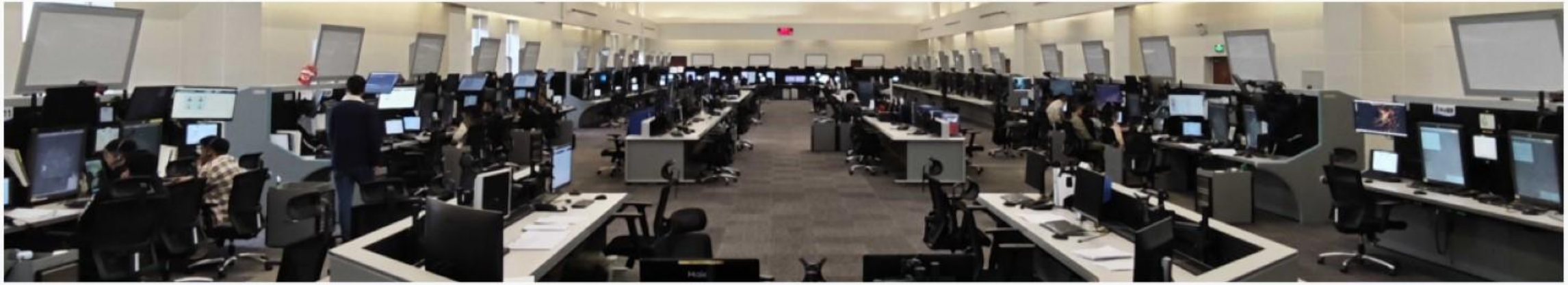
## Current Challenge

Traffic levels since 2025 are approaching or exceeding capacity limits.

## Key Recommendation

Accelerate consensus on a feasible route roadmap to raise airspace capacity and enhance long-term safety.

# Implementation of AIDC



### Case Example

AIDC between Sanya and Hanoi ACC has reduced daily telephone coordination by an average of **4 hours.**

### Benefits

Streamlined communication, increased operational efficiency, and minimized the potential for human error.

### Challenges

Inconsistencies in **TOC** and **AOC** timing due to differing safety cultures.

### Future Direction

Expand AIDC to other regions (e.g., Ho Chi Minh ACC) to further improve cross-FIR integration.

# L642/M771 Reduced Transfer Separation Trials

## Trial Overview

Reduced handover separation from 50 NM to 20 NM on L642 and M771 from **0200 to 1200 UTC**

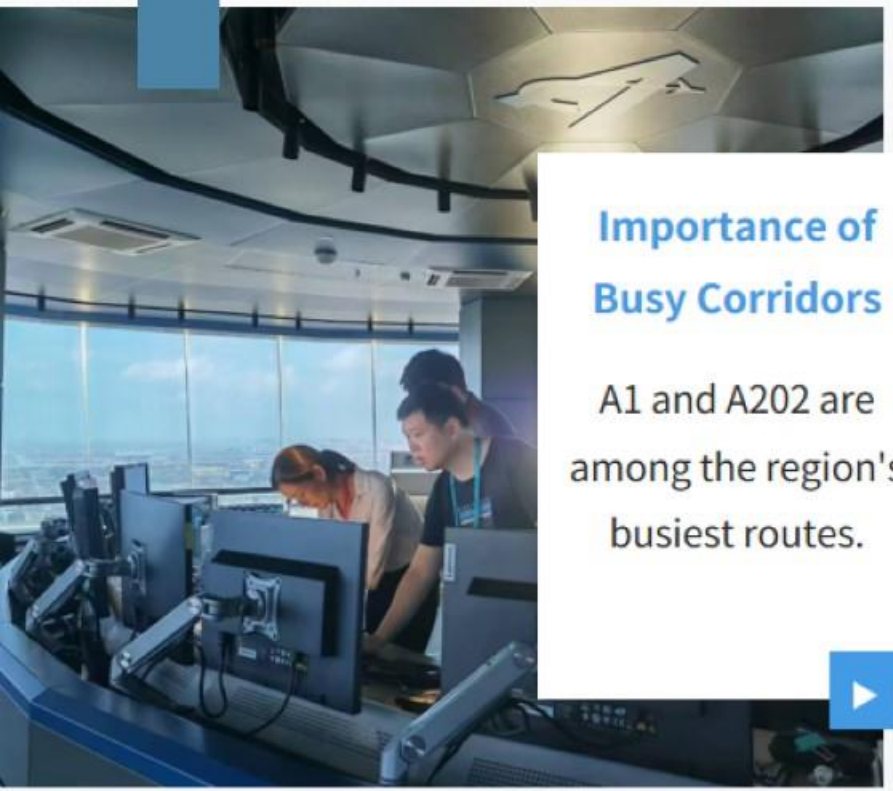
## Operational Impact

Average of **36 flights** per day operated within the 20–50 NM range, enhancing airspace efficiency.

## Next Steps

- Consider extending trials to **24-hour** operation.
- Evaluate transitional separation options (e.g., temporary 30 NM) under specific scenarios like LSWDCP.

# A1/A202 Transfer Separation Reduction Research



## Importance of Busy Corridors

A1 and A202 are among the region's busiest routes.

▸ 01

## Research Focus

Reducing handover separations to 15 NM – potentially even 10 NM.

▸ 02

## Evaluation Components

Safety and capacity assessments, HITL, fast-time simulations, and flight simulator validations.

▸ 03

## Objective

Increase operational capacity while upholding safety standards in alignment with APAC Seamless ANS Plan.

▸ 04

# Enhancing Airborne Rerouting Efficiency

01

### Current Process

Traditional **“approval-first”** rerouting delays operations, especially during peak periods or severe weather.

02

### Proposed Change

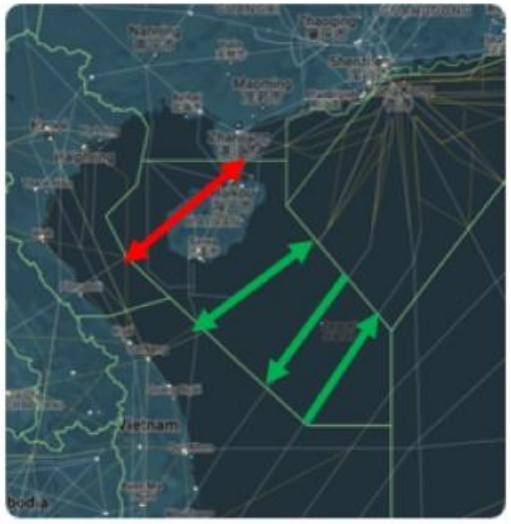
Transition to a **“notification-based”** process with pre-coordinated rerouting paths.

03

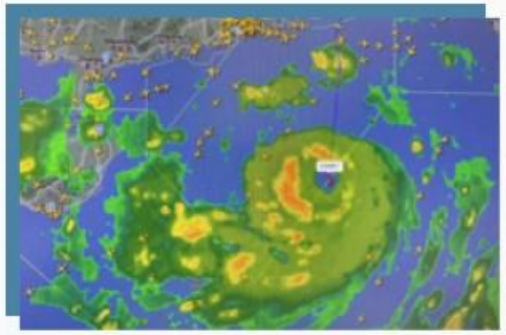
### Benefits

Immediate implementation of rerouting with post-facto notifications improves system responsiveness and flexibility.

# Example - Enhancing Airborne Rerouting Efficiency

| A202 | A1 | L642 | M771 |
| --- | --- | --- | --- |
|  |  |  |  |
| A1/L642/M771 | L642/M771 | A1 | A1 |

# Information Sharing for Diverted Flights



01

**Issue**

Diversions during prolonged rainy seasons lead to flights entering adjacent FIRs unexpectedly.

02

**Challenges**

- Incomplete situational awareness and limited surveillance in receiving FIRs.
- Certain air routes are situated close to FIR boundaries.

03

**Recommendations**

- Establish clear procedures for information sharing.
- Ensure early notifications (preferably 15 minutes in advance) to adjust operations and maintain safety.

# Coordination on Lateral Deviations Near Handover Points

## Operational Practice

- Maintaining appropriate lateral separation between aircraft on bidirectional routes is crucial
- Sanya ACC has implemented lateral offset procedures on A1/A202

## Proposal

- Related States/Administrations are encouraged to adopt similar lateral offset
- Providing a tolerance zone such as allowing lateral deviations within 10 NM of the handover point

## Expected Outcome

Reduced coordination complexity and improved traffic flow consistency.

# Optimization of ATFM Measures

## Existing Challenges

Current ATFM measures (level restrictions, MIT, check-for-startup) impose high workloads on controllers.

## Proposed Shift

Transition towards ATFM solutions based on CTOT or Flow Rate.

## Benefits

Reduced controller workload, improved safety, and enhanced operational efficiency.

## Example

Implement Flow Rate metrics (e.g., 2 aircraft per 15 minutes or 5 per 30 minutes) where CTOT is not available.

03

# Action by the Meeting

Bangkok, Thailand

# Invitation to the Meeting

## 01 Note the Information

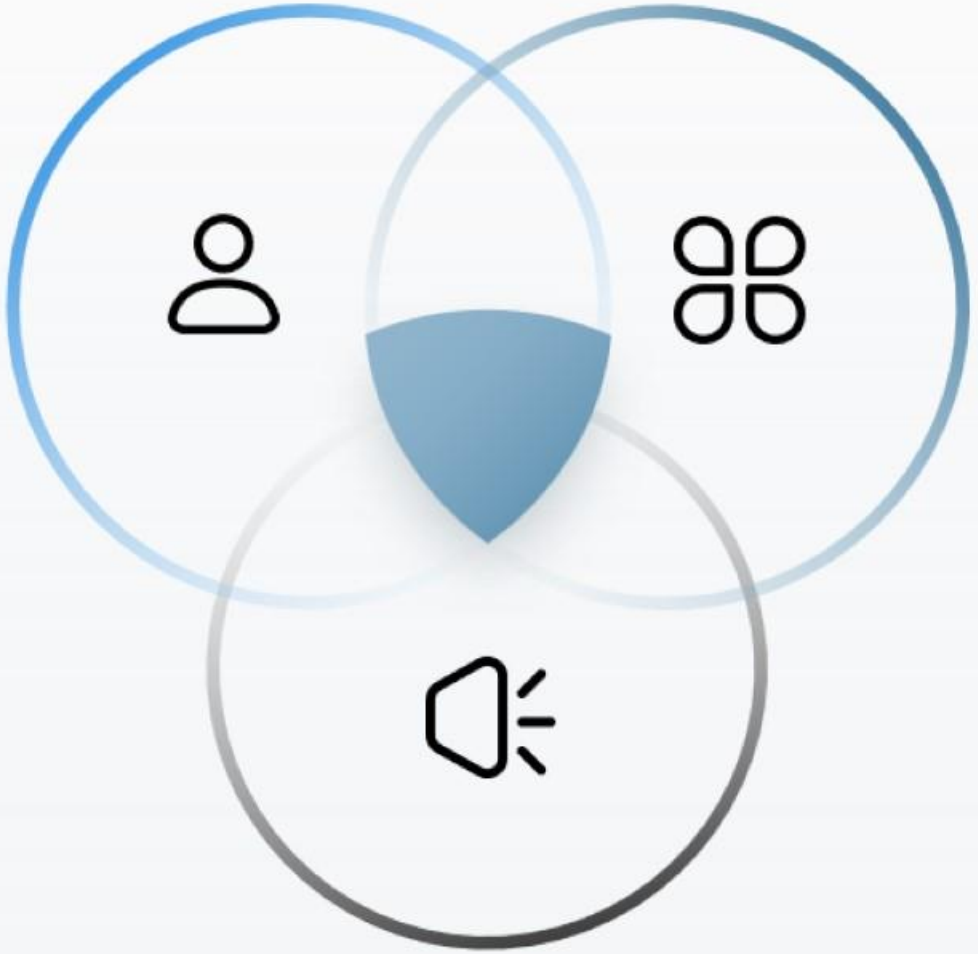
Note the information presented in the paper.

## 02 Encourage Collaboration

Encourage all stakeholders to implement feasible and actionable collaboration measures on the discussed topics.

## 03 Discuss Further Matters

Discuss any further relevant matters as appropriate.



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# THANKS

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