



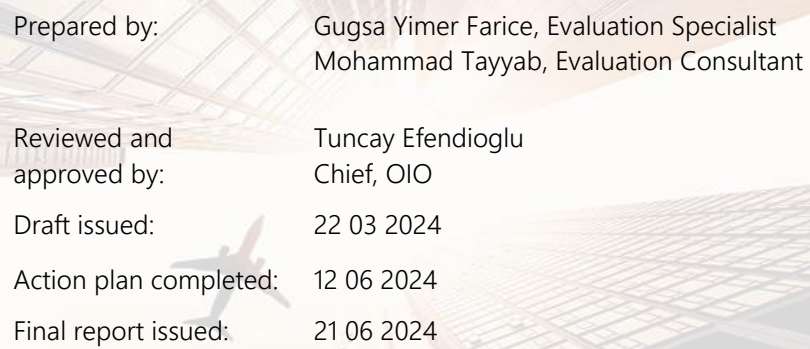
ORGANISATION DE L'AVIATION  
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INTERNATIONAL CIVIL  
AVIATION ORGANIZATION

# Evaluation of the Country Portfolio of Thailand

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Office of Internal Oversight



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## ACRONYMS

ACT-SAF	Assistance, Capacity-building and Training for Sustainable Aviation Fuels
ADB	Bureau of Administration and Services
AGA	Aerodrome and Ground Aids
AloSP	Acceptable Level of Safety Performance
ANB	Air Navigation Bureau
ANP	Air Navigation Plan
ANS	Air Navigation Services
AOT	Airports of Thailand
APAC	Asia Pacific (Region)
ASEAN	Association of Southeast
ATS	Air Traffic Services Unit
AVSEC/FAL	Aviation Security / Facilitation Programmes
CAAT	Civil Aviation Authority of Thailand
CAD	Canadian Dollars
CASP AP	Cooperative Aviation Security Asia Pacific
CAPSCA	Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation
CDI	Capacity Development and Implementation Bureau
CE	Critical Elements
CNS	Communications, Navigation and Surveillance
CO <sub>2</sub>	Carbon Dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
COSCAP	Cooperative Development of Operational Safety and Continuing Air Worthiness
COVID-19	Coronavirus Disease 2019
CRRIC	COVID-19 Response and Recovery Implementation Centre
CATC	Civil Aviation Training Center – Thailand
C-WP	Council Working Paper
DAC	Development Assistance Committee
DCA	Department of Civil Aviation
DOA	Department of Airports
DRD	Deputy Regional Director
EASA	European Union Aviation Safety Agency
EI	Effective Implementation
FAA	Federal Aviation Administration
FIR	Flight Information Region
GANP	Global Air Navigation Plan
GASeP	Global Aviation Security Plan
GASOS	Global Aviation Safety Oversight System
GASP	Global Aviation Safety Plan
GDP	Gross Domestic Product
HR	Human Resources

IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICVM	ICAO Coordinated Validation Mission
iPACK	Implementations Package
LTAG	Long-Term global Aspirational Goal
M&E	Monitoring & Evaluation
MET	Meteorology
MRV	Monitor, Report and Verify
NANP	National Air Navigation Plan
NASP	National Aviation Safety Plan
NCLB	No Country Left Behind
OECD-DAC	Organization for Economic Co-operation and Development – Development Assistance Committee
OIO	Office of Internal Oversight
OSG	Office of the Secretary General
PHC	Public Health Corridor
PIRG	Planning and Implementation Regional Group
PQ	Protocol Questions
RASCF	Regional Aviation Security Coordination Forum
RASG	Regional Aviation Safety Groups
RCM	Regional Cooperation Mechanism
RGs	Regional Groups
RO	Regional Office
ROP	Regional Operating Plans
RSOO	Regional Safety Oversight Organization
SAP	State Action Plan
SARPs	Standards and Recommended Practices
SDGs	Sustainable Development Goals
SMS	Safety Management System
SSC	Significant Safety Concern
SSeC	Significant Security Concern
SWIM	System Wide Information Management
TA	Technical Assistance
TASAP	Thailand Aviation Safety Action Plan
TBO	Trajectory Based Operations
ToR	Terms of Reference
UKCAAi	United Kingdom-Civil Aviation Authority International
UN	United Nations
UNEG	United Nations Evaluation Group
USAP-CMA	Universal Security Audit Programme Continuous Monitoring Approach
USOAP	Universal Safety Oversight Audit Programme
WG	Working Group
WHO	World Health Organization

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## EXECUTIVE SUMMARY

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1. The 2023 OIO Work Programme included an evaluation of the Country Portfolio of Thailand. The purpose of the evaluation is to enhance accountability, organizational learning, and decision-making by providing evidence, lessons learned, and recommendations for improvement. The evaluation assessed ICAO's support in enhancing civil aviation in Thailand, focusing on the evaluation criteria of relevance, coherence, effectiveness, efficiency, and sustainability.
2. The evaluation covers ICAO projects and other activities in Thailand since 2016, examining management and partnership mechanisms. Primary stakeholders of the evaluation include the APAC Regional Office, CAAT, ICAO Bureaus, and OSG, with potential relevance for RASGs, AVSEC/FAL/RGs, PIRGs, and the ICAO Council.

### Main Findings and Conclusions

3. Overall, ICAO has tailored its support to address specific challenges of Thailand's aviation sector, focusing on safety, security, air navigation, and environmental protection. ICAO's support was in line with aviation plans and needs and expectations of Thailand.
4. On the other hand, the Regional Office doesn't systematically compile State level information to get the full picture of the aviation sector in the country affecting the relevance of Regional Operating Plans. The absence of country-specific targets also hampers the utility of Regional Operating Plans for monitoring and reporting, affecting a comprehensive assessment of ICAO's contribution to Member States.
5. Amid the challenges of the COVID-19 pandemic, ICAO's rapid and customized response supported Thailand's aviation sector. The prompt engagement, including timely information sharing, and addressing funding gaps for Implementations Package (iPACKs), highlighted ICAO's agility in meeting Thailand's specific needs during this challenging period.
6. ICAO RO's effective support to Thailand's aviation sector is evident in addressing dynamic challenges, notably resolving Significant Safety Concerns and improving the Effective Implementation (EI) Rate. The Regional Office has played a crucial role in guiding and supporting CAAT and other stakeholders during challenging times in the Thai civil aviation sector.
7. Thailand's achievement in increasing the USOAP EI Rate to 61.73% is noteworthy and reflects effectiveness of addressing key gaps highlighted by Universal Safety Oversight Audit Programme (USOAP) audit. However, Thailand's USOAP EI rate is still below the regional (66.35%) and global averages (69.32%).
8. The effectiveness of the USOAP-CMA in identifying safety issues in Thailand is evident, however less frequent audits and absence of alternative continuous monitoring mechanisms pose challenges for timely detection and resolution of issues and proper planning.
9. Tailored technical assistance and guidance from ICAO APAC RO, alongside active participation in CASP-AP, played a pivotal role in Thailand's surpassing of GAsEP targets and strengthening collaboration. This dual approach facilitated ICAO's effectiveness in advancing Thailand's aviation security and facilitation objectives.

10. Thailand has made notable progress in implementing Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and developing a State Action Plan for carbon emission reduction, establishing a Monitoring, Reporting and Verifying (MRV) system, and actively engaging with ICAO and partners. Challenges remain in implementation and monitoring due to technical constraints, but collaboration with ICAO and partners, alongside investments in sustainable aviation, are pivotal for long-term sustainability.
11. ICAO's support to Thailand in Economic development of air Transport is limited to disseminating information, training events for participants from Thailand aviation sector, organizing Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) meeting in Thailand and organizing air transport events. The RO has put the Strategic Objective as an agenda, where Economic Development of Air Transport was discussed during the annual Regional DGCA Conference.
12. The APAC Regional Office efficiently supports Thailand's aviation needs, responding promptly to safety concerns and training requirements. Stakeholders in Thailand advocated for increased physical engagement, coordination and collaboration, and mission frequency. Challenges such as limited staffing, delayed hiring, and financial constraints hinder effectiveness. Improved HR processes and strategic resource allocation are crucial for enhancement performance and meeting the expectations of the Member States.
13. Though there is no direct support by the Regional Office, the Civil Aviation Authority of Thailand (CAAT) demonstrates good practice in gender equality, and there are no major human rights issues reported, reflecting Thailand's positive human rights climate in the aviation industry.

## Recommendations

Based on the findings and conclusions, the evaluation forwarded five recommendations including:

- Ensuring that Regional Operating Plans contain sufficient information including target Member States that will benefit from each activity and establishing a system (folder) to compile country-specific information for better understanding of State's aviation sector;
- Assigning State focal persons to follow up the overall aviation sector of individual Member State and to coordinate planning and support to the State;
- Providing targeted support in aviation safety to Thailand to improve USOAP EI in general and Critical Element -6 (Certification and Approval Obligations), Critical Element 7 (CE 7 - Surveillance Obligations) and Critical Element -8 (CE 8 - Resolution of Safety Issues) in particular;
- In collaboration with the CAAT, establishing a coordination arrangement to bring together all partners supporting Thailand to avoid duplication and maximize effectiveness and efficiency; and
- Revising the Host Country Agreement with Thailand with emphasis on clauses related to repair and maintenance of the building.

## INTRODUCTION AND CONTEXT

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### Introduction

14. The 2023 Work Programme of the Office of Internal Oversight (OIO) included an evaluation of the country portfolio of Thailand. The evaluation is undertaken in accordance with the OIO Charter (C-WP/15115) and the ICAO Evaluation Policy (C-WP 15269). According to the Evaluation Policy, the evaluation aims to enhance accountability by providing evidence of institutional performance and contribute to organizational learning and decision-making by providing lessons learned and recommendations for improvement.
15. The overall objective of the evaluation is to assess the relevance, coherence, effectiveness, efficiency, and sustainability of ICAO's support in enhancing civil aviation in Thailand. The evaluation was intended to be forward-looking and provided findings and lessons for improved decision-making for projects/plans in Thailand and other countries in the Region. The evaluation is conducted in adherence to the Norms and Standards for Evaluation in the United Nations System approved by the United Nations Evaluation Group (UNEG)<sup>1</sup>.
16. The scope of the evaluation covers broadly between 2015 (the year SSC was raised) and 2023 to understand the progress made since 2015 and identify major contributions made by ICAO HQ and ICAO APAC RO towards supporting Thailand as a member (and host) state.
17. Under the direction of the Chief, OIO, the evaluation was conducted by the OIO Evaluation Specialist, with the support of an external Evaluation Consultant.

### Context

18. With a legacy dating back to 1911, Thailand has emerged as a major player in the Asia Pacific aviation landscape since the 1950s. The nation has been home to the ICAO's Asia Pacific Office since 1955. The aviation sector holds significant importance in Thailand's economic and social progress, substantially contributing to its Gross Domestic Product (GDP), i.e. 15.5%. In 2019, the combined impact of the air transport industry and spending by international tourists arriving by air accounted for approximately 15.5% of Thailand's GDP, amounting to a staggering \$63.7 billion and supporting over 4.3 million jobs.<sup>2</sup>
19. Oversight of aviation policy decisions in Thailand rests with the Ministry of Transport. At the same time, the CAAT assumes the pivotal role of the regulatory authority for civil aviation. The stewardship of major international airports is entrusted to the Airports of Thailand Public Company Limited (AOT), while the Department of Airports (DOA) predominantly oversees domestic airports. Aeronautical Radio of Thailand Limited (AEROTHAI) is the cornerstone for providing Air Navigation Services.
20. Thailand has grappled with the challenges of aviation safety oversight. In 2015, the Etrate for safety plummeted from 80% in 2005 to 34.28%<sup>3</sup>, culminating in the issuance of a Significant Safety Concern (SSC) by ICAO. This concern was chiefly associated with Aircraft Operations and the

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<sup>1</sup> Norms and Standards of Evaluation (2016), United Nations Evaluation Group (<https://www.unevaluation.org/document/detail/1914>)

<sup>2</sup> Thailand Development Research Institute, Vol. 35, No. 3. September 2020, Impact of the COVID19 on the Air Transport Industry, with Particular Focus on Thailand

<sup>3</sup> Final Report of The USOAP CMA Audit of The Civil Aviation System of The Kingdom of Thailand, 2015

imperative need for refined Air Operator Certificate (AOC) certification procedures, leading to Thailand's demotion by the US FAA from a 'Category 1' to 'Category 2' rating.

21. Responding to the SSC, Thailand embarked on a comprehensive reform, bifurcating the erstwhile Department of Civil Aviation (DCA) into two distinct entities: the newly established CAAT and the Department of Airports. Under the aegis of ICAO and collaborative partnerships, CAAT orchestrated a series of strategic measures to redress the SSC. This included the formulation of regulations for AOC recertification, the stipulation of protocols for the transportation of hazardous materials, the provision of training initiatives, and the meticulous assessment and issuance of AOCs in tandem with international experts and inspectors, apart from other similar measures.
22. In September 2017, ICAO conducted an Integrated Coordinated Validation Mission (ICVM)<sup>4</sup> and concluded that Thailand had made commendable strides in mitigating the Significant Safety Concern. The EI rate witnessed an upswing, registering at 41.18% in 2017. Nevertheless, it still trailed regional and global benchmarks. Thailand is yet to attain the target of 75% EI set by the Global Aviation Safety Plan (GASP)<sup>5</sup> within the stipulated timeframe 2024. The latest data indicate that Thailand's EI rate stands at 62%.
23. Beyond aviation safety, ICAO remains unwavering in its commitment to bolstering Thailand's air navigation capacity, improving security and facilitation protocols, nurturing air transport development, and enhancing environmental protection efforts. This collaborative endeavour is designed to ensure the consistent implementation of ICAO Standards and Recommended Practices (SARPs) and policies, including the pertinent resolutions endorsed by the ICAO Assembly, within Thailand's dynamic aviation landscape.

RO Areas of General Responsibility:

- Air navigation
- Air transport
- Aviation security
- Legal matters
- Regional bodies
- Technical cooperation
- General functions

Source: [www.icao.int](http://www.icao.int)

<sup>4</sup> Final Report of the ICAO Coordinated Validation Mission in The Kingdom Of Thailand, 2017

<sup>5</sup> Global Aviation Safety Plan (GASP), Goals and Targets, (<https://www.icao.int/safety/GASP/Pages/Goals-and-Targets.aspx>)

## EVALUATION PURPOSE, OBJECTIVES, SCOPE, AND STAKEHOLDERS

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### Purpose

24. The evaluation has had two purposes: accountability and learning:

- **Accountability:** The evaluation aims to independently assess the effectiveness and efficiency of the support provided by ICAO in improving the implementation of ICAO Standards and Recommended Practices (SARPs), policies, and targets in Thailand. This aspect focuses on holding the organization accountable for its actions and outcomes.
- **Learning:** The evaluation also seeks to identify good practices and lessons learned from ICAO's activities in Thailand. It intends to provide recommendations for improving performance and delivering better results. This aspect emphasizes learning from past experiences and continuously enhancing ICAO's operations.

### Objectives

25. The main objectives of the evaluation were to<sup>6</sup>:

- i. Assess the relevance, coherence, effectiveness, efficiency, and sustainability of the country portfolio of Thailand and associated projects and activities in enhancing civil aviation in the region and
- ii. Provide findings and lessons for improved decision-making for projects/ plans at the regional and global levels.

### Scope

26. The evaluation encompasses all activities and outputs delivered by ICAO in Thailand, specifically focusing on key results achieved since 2016. It will also examine the management and partnership mechanisms used in the region, providing a comprehensive assessment of ICAO's engagement in Thailand.

### Stakeholders

27. The primary clients of this evaluation include the APAC Regional Office, Thailand's Civil Aviation Authority (CAAT), various ICAO Bureaus, and the Office of the Secretary-General (OSG). Additionally, Regional Aviation Safety Groups (RASGs), Aviation Security and Facilitation Regional Groups (AVSEC/FAL/RGs), and Policy and Implementation Regional Groups (PIRGs), as well as the ICAO Council, may utilize the evaluation findings and lessons learned as deemed appropriate.

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<sup>6</sup> Terms of Reference of the Evaluation of Country Portfolio of Thailand, 2023

## EVALUATION METHODOLOGY

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### Technical Approach, Methods, Ethics and Limitations<sup>7</sup>

28. The evaluation was designed using participatory and inclusive approach, engaging all relevant stakeholders at HQ, Regional Office, and at State level. The evaluation developed an evaluation matrix using a formative approach focused on learning. The evaluation was conducted in three phases: i) inception, ii) data collection and analysis, and iii) report writing.
29. This approach engaged all categories of stakeholders affiliated with Thailand's aviation sector and had in-depth knowledge of the implementation, management and coordination of ICAO SARPs, policies, and targets. Purposive sampling method was used to identify and engage relevant stakeholders. Key informant interviews and group discussion techniques were used to generate data accurately.
30. At the end of phase 1, an inception report was prepared, which included the technical approach and methods, evaluation framework, and data collection tools. In phase 2, an in-depth desk review of relevant documents was conducted, followed by a field visit, which was undertaken to meet and collect data from relevant stakeholders.
31. Data analysis was undertaken using qualitative method i.e., a descriptive and content analysis providing validation of the findings for the evaluation. In addition, quantitative analysis was conducted, using secondary data collected from various sources (iSTAR, USOAP, etc.) Triangulation of data was made to check the quality of collected data. Consent was acquired for all interviews and group discussions to ensure willingness and voluntary participation in this exercise. Respondents were assured of confidentiality before interviews.

### Limitation of the Evaluation

32. The Operating Plan of the Regional Office often lacks clear specification of the states where activities will be carried out, and the reports also fail to clearly highlight where achievements occurred. Consequently, there is a general lack of state-level output data, which has impacted the current evaluation. To address this, the evaluation team had to ask regional officers to identify activities implemented in Thailand based on the Operating Plan. They then attempted to identify both planned and achieved outputs, supported by cross-referencing existing documents.
33. The other challenge was lack of monitoring data about the support provided by the RO to Member States, which affected the evaluation. Unless operating plans do not specify State that will benefit from ICAO support and outputs achieved, it is difficult to assess ICAO's contribution to individual Member States. ICAO will also not be able to do similar Member States level evaluations in the future. The RO hasn't developed any system to monitor country level progress except those that track out level results through USOAP CMA/ USAP or iSTAR.
34. The Evaluation team faced challenges, which included the busy schedules of some respondents or their non-availability at the Country, RO, and HQ levels. In such a scenario, consultations and in-depth interviews with the available respondents were made to ensure optimal advantage of available resources. In addition, some respondents were interviewed remotely, later, where possible.

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<sup>7</sup> See Annex 2 for the complete evaluation methodology.

## FINDINGS

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35. The section on Findings provides insights related to the evaluation of the country portfolio of Thailand, with a focus on Development Assistance Committee (DAC) Criteria of evaluation, i.e. relevance, coherence, effectiveness, efficiency; sustainability and performance of cross-cutting themes (gender and human rights), as defined by OECD-DAC and UNEG as well as the evaluation data.<sup>8</sup>

### Relevance

**Finding 1:** ICAO's interventions and operating plans have effectively addressed critical challenges within Thailand's aviation sector, particularly concerning Significant Safety Concerns (SSC) and gaps identified during audits since 2016. This underscores the relevance of ICAO's initiatives in the context of Thailand's specific aviation needs.

36. ICAO RO APAC is responsible for planning and managing interventions according to the need of APAC Member States in aviation sector. This requires engagement at individual country level as well as collaborating and coordinating at regional level, with all the Member States, including Thailand.
37. Thailand faced a significant fall in EI rate in 2015 (34%) compared to 2005 (80%)<sup>9</sup>. The emergent SSC in 2015 led the Government of Thailand to take significant steps, including restructuring the Department of Civil Aviation (DCA). As a result, the CAAT and DOA were established in October 2016. The emergent CAAT faced multiple challenges in establishing and managing Thailand's aviation sector and, more importantly, the removal of SSC as soon as possible, which was crucial for Thailand's tourism industry, which relies highly on the aviation sector and generates around 15% of GDP.
38. ICAO worked closely with the then-government<sup>10</sup> officials in Thailand to persuade them to empower civilian experts within the aviation sector and to ensure that the country could comply with the internationally accepted standards and systems through the relevant civilian experts, to address key challenges faced by Thailand. ICAO APAC RO extended its support to the Ministry of Transport and erstwhile DCA officials in strengthening CAAT through human resource development and technical assistance provided under its Regional Operating Plans, focusing on addressing the SSC raised in 2015.<sup>11</sup>
39. The regional operating plans are prepared using templates provided by ICAO HQ, and serve as a framework outlining key activities, deliverables, targets, and actuals. These plans have effectively assisted RO APAC in tackling significant challenges encountered by Thailand, including removal of SSC, improved EI rate and other improvements in Thailand aviation. They, however, lack details regarding individual countries and their specific challenges that require attention. The absence of country-level details in these plans undermine the evaluability of ICAO's support at country level.

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<sup>8</sup> Definitions for the gender and human rights criteria were taken from UNEG, 2014. Integrating Human Rights and Gender Equality in Evaluation: Towards UNEG Guidance. New York: UNEG.

<sup>9</sup> Final Report of The USOAP CMA Audit of The Civil Aviation System of The Kingdom Of Thailand, 2015

<sup>10</sup> Military Government in Thailand 2014-2019

<sup>11</sup> List of Projects provided as Annex-5

40. The regional operating plans have been harmonized with the overarching strategic goals outlined in the ICAO Business Plans for both 2017-2019 and 2020-2022 and are developed considering the needs of region and Member States including Thailand.
41. The activities mentioned in the Regional Operating Plans and undertaken by ICAO in Thailand are relevant to address various issues highlighted by aviation plans of Thailand including National Airspace and Air Navigation Master Plan (2020)<sup>12</sup>, Thailand Aviation Safety Action Plan (2021-23)<sup>13</sup> and Thailand Action Plan to Reduce Aviation Emissions (2018)<sup>14</sup> etc. However, the activities implemented in Thailand (or any other Member State) are not specified in the APAC RO operating plan. This necessitates to have a country specific file /folder with all information related to the (country) plans and the country related record.
42. No country-wide needs assessment or country profiling of Thailand related to the aviation sector exists at ICAO to substantiate the planning process (i.e., country-specific or regional-level plans). The current plans take inspiration from needs identified during audit processes and CAT missions, etc., that help identify gaps related to international standards or the requests made directly by the Member State based on their own felt needs. This lacks the systematic process of taking stock of the country's inspiration for the future from strategy and policy documents.

**Finding 2:** In the face of the unprecedented global challenge posed by the COVID-19 pandemic, ICAO's RO APAC demonstrated agility and relevance in supporting Thailand's aviation sector. Recognizing the severe impact of the pandemic on global air transport and, particularly, Thailand's aviation-dependent tourism industry, ICAO's response was both prompt and tailored to the specific challenges faced.

43. In the earlier part of 2020, the world grappled with the COVID-19, where the global transportation system, including aviation, nearly halted, reducing travel only to essential services, e.g. transport of food and medicine etc. This also impacted the aviation industry of Thailand, which constitutes 15.5% of the country's GDP, where Thailand saw a drop of around 53% in flights and 68% in passengers in 2020, compared to the previous year<sup>15</sup>. This led to a 6.5% reduction in Thailand's economic growth rates in 2020, exceeding the global average reduction of 4.5%.<sup>16</sup>

Table 1: Statistics of Thailand's Air Transport, 2020

Air Transport	Passenger		Flight		Freight	
	Million People	%	Number	%	Ton	%
<b>Total</b>	58.25	-64.7%	500,435	-53.1%	954,377	-36.0%
<b>International</b>	16.25	-81.7%	133,940	-73.9%	922,163	-34.7%
<b>Domestic</b>	81.70	-44.9%	366,495	-33.8%	32,214	-58.6%

<sup>12</sup> <https://www.caat.or.th/wp-content/uploads/2020/09/แผนแม่บททางอากาศและการเดินอากาศแห่งชาติ.pdf>

<sup>13</sup> <https://www.caat.or.th/wp-content/uploads/2019/06/แผนปฏิบัติการด้านความปลอดภัยในการบินพลเรือนแห่งชาติ-Thailand-Aviation-Safety-Action-Plan-พ.ศ.-2564-2566.pdf>

<sup>14</sup> <https://www.caat.or.th/wp-content/uploads/2018/01/Thailand-Action-Plan-2018.pdf>

<sup>15</sup> State of Thai Aviation Industry, 2020, Aviation Economics Division, Civil Aviation Authority of Thailand, pp. 4.

<sup>16</sup> State of Thai Aviation Industry, 2020, Aviation Economics Division, Civil Aviation Authority of Thailand, pp. 47

44. In response to this situation, ICAO actively engaged with the CAAT to address the specific challenges faced by Thailand's aviation industry during different phases of the pandemic. The assistance provided by ICAO was tailored to the evolving needs of the sector and focused on providing timely advice, information dissemination, and addressing funding challenges. These interventions played a crucial role in ensuring the functionality of Thailand's aviation sector during this challenging period.
45. Communication channels between ICAO Headquarters (HQ), Regional Office for RO APAC, and Thai aviation stakeholders were predominantly facilitated through online portals and electronic media. This approach ensured continuous and effective collaboration, enabling the timely dissemination of vital information to tackle emerging challenges during the pandemic.
46. Thailand also utilized ICAO's iPack-Public Health Corridor (PHC) to assess the implementation of COVID-19 public health measures, conducted gap analyses against relevant ICAO SARPs, and developed a comprehensive Aviation Risk Assessment Framework. This package helped Thailand improve its management of COVID-19 and other potential future health-related risks.
47. With the goal of reviving tourism as the pandemic recedes, Thailand is determined to restore air traffic to pre-COVID levels. However, the increased pressure on CAAT personnel and processes has led to challenges such as prolonged clearance processes for passengers contributing to delays, particularly during times of restrictions, which necessitates further assistance in the coming days and any future similar pandemic.
48. According to the international guidelines and its overall strategy, ICAO played a crucial role in shaping Thailand's approach to COVID-19 protocols, where decisions were part of global discussions involving various organizations, including the World Health Organization (WHO). In addition, Thailand actively participated in the Asia Pacific COVID-19 Contingency and Recovery Planning Group (ACCPRG), an Information Sharing platform, particularly the Public Health (PH) Subgroup, to exchange best practices and coordinate responses throughout the pandemic. Additionally, Thailand benefitted from the three online CAPSCA-AP Meetings held in 2020 and 2021, as well as the in-person CAPSCA Meetings in 2022 and 2023. This along with iPack-Public Health Corridor (PHC) helped enable Thailand<sup>17</sup> and its related institutions to manage the major challenge of COVID19.

## Coherence

**Finding 3:** ICAO's support in Thailand demonstrates alignment with global aviation plans. The supports were well-matched with Thailand's National Action Plans and directly contribute to the sector's advancement.

49. ICAO has been actively supporting Thailand's aviation sector under its all-strategic objectives. Apart from external alignment with ICAO's strategic objectives, the RO's support is aligned internally with Thailand's plans and its priorities as reflected in various policies and plans.
50. ICAO's support is aligned with Thai national aviation plans (e.g. Thailand's National Air Space and Air Navigation Master Plan<sup>18</sup>, Aviation Safety Action Plan (2021-23) and Thailand Action Plan to Reduce Aviation Emissions (2018)<sup>19</sup> etc., where both ICAO and Thailand's' plans provide similar directions including improved safety oversight, improved navigation capabilities and efficiency,

<sup>17</sup> Thailand's response to the Pandemic and Lessons Learned, CAAT

<sup>18</sup> <https://portal.caat.or.th/nanp/masterplan.php>

<sup>19</sup> <https://www.caat.or.th/wp-content/uploads/2018/01/Thailand-Action-Plan-2018.pdf>

improved compliance with international environmental standards etc. This is ensured by planning interventions, based on the findings of audits and other assessments/report (ICVM, missions etc) where needs and gaps are identified by ICAO team.

51. Externally, ICAO's interventions in Thailand align with the priorities identified under its Strategic Objectives and Business Plans. These are broadly aligned with activities identified through audits, CAT missions, ICVMs and other similar processes, ensuring its assistance remains aligned with broader strategic objectives.
52. Thailand has developed its aviation related plans, revising various policy instruments since 2015. These include the National Airspace and Air Navigation Master Plan (2020), Thailand Aviation Safety Action Plan (2021-23), Thailand Action Plan to Reduce Aviation Emissions (2018), and other aviation sector policies and regulations. The aviation plans and procedures are aligned with the broader international standards (SARPs) and ICAO business plan objectives. CAAT and other stakeholders have received advice and guidance from ICAO during missions and through informal channels for issues related to the development of these policies and plans.
53. Thailand's active participation in Regional Planning and Implementation Groups (PIRGs) and collaboration with Regional Aviation Safety Groups (RASG) and the Regional Aviation Security Group (RAVSeC) has significantly contributed to enhancing its safety and security performance. The comparison tables (planned vs achievements) provided by RO APAC, have highlighted commendable progress in key areas like Communications, Navigation, and Surveillance (CNS). However, progress documented between 2017-19 and 2020-2022 in other crucial domains such as information management, meteorology, and optimizing airspace and aerodrome usage within these tables is not fully reflected. Yet, insights and input gathered from the APAC regional team, responsible for working on these areas, indicate a significant progress achievement on these aforementioned milestones, especially information management.
54. Despite having sub-regional programmes and regional coordination forums such as COSCAP, CASP-AP, RASG, and others, there remains a challenge of duplication of efforts and limited coherence among interventions by various regional partners. Enhancing coordination mechanisms is crucial to streamline actions and promote a more harmonized approach, ensuring that diverse stakeholders contribute synergistically to advancing aviation objectives in Thailand.
55. This alignment has facilitated a seamless integration of ICAO's initiatives with Thailand's overarching aviation goals. By closely coordinating with the country's plans, ICAO has targeted key areas of improvement, ultimately enhancing the safety, efficiency, and sustainability of Thailand's civil aviation operations. This strategic coherence between ICAO's interventions and Thailand's aviation frameworks has led to a meaningful collaboration.

**Finding 4:** The Regional Office has facilitated regional integration through its specific programmes, e.g. COSCAP and CASP-AP where Thailand has received assistance in coordination and capacity building.

56. Asia Pacific, particularly Southeast Asia, underwent a significant transformation over the last few decades. These include rapid economic growth and emerging conflicts that have impacted the aviation sector. Within such a diverse spectrum of nations, the Thai aviation sector needed dynamism and agility in plans, actions, and personnel to remain coherent within such a context.
57. Some countries in the region have well-established aviation industries with advanced infrastructure, modern airports, and robust regulatory frameworks (e.g. Singapore, Hong Kong China, etc). On the other hand, some countries in the region have weak aviation systems and infrastructure (e.g.

Afghanistan and Pacific region nations). Thailand often faces challenges in integrating its aviation systems with such nations.

58. ICAO has extended guidance and assistance to Thailand during missions and other formal and informal meetings to ensure a coherent aviation sector of Thailand within its context. Importantly, ICAO also facilitated regional integration through its specific programmes, e.g. COSCAP (providing regional integration on safety) and CASP-AP (focusing integration for security), where Thailand has received assistance in coordination, capacity building and lesson learning.
59. Given this diversity, creating interventions for ICAO that effectively address the specific needs of each country is a formidable task. It required a nuanced understanding of each nation's unique challenges and opportunities within its aviation sector. For example, an intervention suitable for a highly developed aviation sector may not directly apply to a country still in the early stages of aviation development. Within this, ICAO has been able to customize its initiatives to fairly align with the distinct circumstances and requirements of each country in the region, including Thailand.
60. This complexity necessitates a tailored and flexible approach from ICAO for planning and implementation. It also underscores the importance of conducting thorough needs assessments and consultations with local stakeholders to ensure that interventions by ICAO are appropriately aligned with the specific context of each country. This cannot be determined by audits, which are standardized tools to assess critical elements and are uniformly applied to the aviation sector of each country.

**Finding 5:** In addition to ICAO, Thailand is partnering with EASA, Singapore, Australia, Hong Kong, Malaysia, UK-CAAI, FAA, TSA and IATA to implement SARPs and other ICAO requirements. However, there is no clear collaborating mechanism among stakeholders to facilitate complementarity of support from different partners and avoid duplication. ICAO and CAAT could bring all partners to work together in supporting Thailand's aviation sector.

61. Member States with well-developed aviation sectors assist other regional and global partners in aviation. These players include FAA, TSA, UK-CAAI, Singapore, Australia, Hong Kong China, Malaysia, Japan etc. Their assistance is extended to various States in the region, including assistance to Thailand on multiple fronts.
62. The collaborations by Thailand with these regional partners include formal relationships through active engagement (e.g. EASA, FAA, TSA and Singapore) or informal coordination for various aviation sector issues or gaps faced by CAAT. These partnerships have allowed Thailand to learn from and improve on multiple aspects of its aviation sector after 2015.
63. UK-CAAI, which provided its services to CAAT after SSC was enacted in 2015, is of particular importance. CAAT selected the UK CAA's technical cooperation arm, CAA International (CAAI), to review, draft and implement new ICAO-compliant aviation regulations and procedures. Under this, CAAI assessed the Thai Civil Aviation Board Regulations (CABRs) against the ICAO Annexes, Standards and Recommended Practices (SARPs) and EASA standards and supported CAAT in redrafting the Thai regulations to align with the requirements of Thailand's aviation industry. CAAI will also assist CAAT with developing procedures, manuals, forms and checklists to support the practical implementation of the new regulations.
64. CAAI has been working with CAAT since 2016 to help create a sustainable aviation regulator for Thailand. In addition, CAAI helped CAAT recertify its Thai-registered international airlines to ICAO standards, which led to the removal of a SSC raised by ICAO in 2015.

65. Thailand has been part of various EASA projects<sup>20</sup>, including AATIP (ASEAN Air Transport Integration Project), CAAT – EASA Aviation Oversight Support Project, EU-South East Asia APP (Aviation Partnership Project), ARISE Plus Civil Aviation Project and EU-SOUTH EAST ASIA CCCA CORSIA PROJECT. In addition, Thailand is also a member of the Southeast Asia Regional Initiative Forum (SEARIF), aiming to harmonize safety regulations and working procedures among the countries in the region.
66. CAAT received the FAA's International Aviation Safety Assessment (IASA) Technical Review Team in 2019. The FAA set 26 items in Thailand that need to be addressed. FAA has signed an agreement in aviation with the Thai government, but such agreements are not shared with ICAO or other stakeholders as such agreements are bi-lateral. FAA is supporting Thailand in various areas to meet ICAO standards in particular to improve safety oversight. In some of the areas, FAA is collaborating with ICAO in supporting Thailand (e.g. inspectors' training). However, there is a need for creating a collaboration mechanism to avoid duplication of efforts and to implement complementary activities. The US TSA has also worked extensively with Thailand in capacity building in the area of aviation security.
67. CAAT and AeroThai identified that the aviation sector is subject to frequently evolving international regulations and standards by various regional and global organizations. Ensuring that the aviation sector in Thailand remains current and aligned with these changing standards can be a complex task and a significant opportunity for RO APAC in its future planning processes and capacity-building initiatives for Thailand.

## Effectiveness

**Finding 6:** ICAO RO supported Thailand's aviation sector, addressing dynamic challenges, and positively contributing to resolving Significant Safety Concerns (SSC) and other similar challenges. Strengthening the plans with more country-specific information is expected to further enhance operational effectiveness and precision in tracking and evaluating outcomes at the national level.

68. The APAC RO Regional Operating Plans are in the form of a performance planning and monitoring framework that is updated annually and is used to track and report on the progress of the RO in achieving its expected results. The interventions indicated in the Regional Operating Plans and their impact on the Thailand aviation sector (SSC removed EI Rate improved, etc.) indicate that despite some gaps in planning, APAC RO has effectively extended support and guidance under these plans to the CAAT and other stakeholders in areas that were needed in a time when Thai air industry was facing major challenges.
69. However, the operating plans do not identify the target countries of the activities. Similarly, the plans do not reflect on what should be done, where it will be done and also cost of the activities/outputs. For example, the Regional Operating Plan 2022, identifies assisting states to resolve SSC (5.5.6). However, the countries with SSCs that will be supported are not mentioned in the plan. Similarly, 5.14.1 notes assistance to states through workshops and seminars on aerodromes in the plan and achieved. However, it does not reflect the location or country of the intervention, necessitating further research before understanding the details of each activity. This creates a challenging scenario for monitoring and evaluation purposes, reducing the evaluation team's ability to assess effectiveness of the plans. While regional plans provide substantial evidence of the

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<sup>20</sup> <https://www.easa.europa.eu/en/domains/international-cooperation/easa-by-country/countries/thailand>

activities, targets and progress updates, they fall short when tracking activities and progress on the country level.

## REGIONAL OPERATING PLAN 2020 - APAC

1 - Safety					
APAC - Asia and Pacific					
#	Project / Key Activity	#	Deliverable	Target(s)	Actual(s)
5.6	Assist States in the implementation of policies and provisions to address critical safety issues concerning Safety Management , Search and Rescue, and other areas	5.6.1	Conduct of meetings, seminars and provision of guidance to facilitate the implementation of the Asia/Pacific SAR Plan	60 % of States with at least 90% compliance with the 41 elements of the SAR Plan	24 % of States with at least 90% compliance with the 41 elements of the SAR Plan
		5.6.2	Development of regional guidance materials/circulars on safety-related subjects	Number of materials/circulars developed	-- Number of materials/circulars developed
		5.6.3	Assist States to resolve the SSC	Number of State where SSC is resolved	-- Number of State where SSC is resolved
		5.6.4	Coordinate training in the field of Aircraft Accident and Incident Investigation	Number of regional AIG workshop successfully conducted	-- Number of regional AIG workshop successfully conducted
		5.6.5	Coordinate training in the field of SSP and SMS	Number of Workshop/Training session conducted	-- Number of Workshop/Training session conducted

Figure 1: Snapshot from the Regional Operating Plan

70. Discussions with the ICAO regional officers indicated a lack of involvement of the ICAO regional team in the preparation of the design of operating plan template, which is done at the headquarters and are in the form of dropdown menus in an online planning platform. This leads to gaps in the plans' alignment with the APAC regional goals, needs and priorities<sup>21</sup>.
71. Currently, the RO is not sharing the regional operating plans with the Member States to get their feedback and input to align activities with their specific contextual needs of Member States. While some need assessments have been carried out in few areas (e.g. Aerodrome Assistance and WHM Need/Capacity Survey, A-CDM implementation survey) to assess Thailand's contextual needs, a country level comprehensive need assessment is needed that can broadly guide the broader and long-term planning process, in line with the aspiration of the country aviation sector.<sup>22</sup> Sharing Regional Operating Plans with Member States would all substantially improve the clarity and effectiveness of these plans. This collaborative process will significantly enhance the ownership of Member States, eventually fostering the more effective implementation of plans.
72. Similarly, CAAT and AeroThai identified that the aviation sector is subject to frequently evolving international SARPs. This puts CAAT and other stakeholders in a challenging position, where new standards arrive before implementing previous additions/editions. Ensuring that the aviation sector in Thailand remains current and aligned with these changing norms can be a complex task and a significant opportunity for RO APAC in its future planning processes and capacity-building initiatives.
73. The SARPs and PQs are standardised, and information that is needed under each PQ is strongly objective that enhances the capability of Member States under each of the key areas of SARPs. However, as the Regional Officers and CAAT identified<sup>23</sup>, the guidance on cultural sensitivity,

<sup>21</sup> Interviews with stakeholders, including ICAO regional office staff

<sup>22</sup> Interviews with stakeholders, including ICAO regional office staff

<sup>23</sup> Interviews with CAAT and Regional Officers (RO APAC)

communication, and delivery methods (based on lessons from Thailand) reflects a need for improvement.<sup>24</sup>

### Strategic Objective 1: Safety

**Finding 7:** ICAO's safety initiatives in Thailand, as outlined in the operating plan for the period 2017-2022, demonstrated significant achievements in key areas. The country successfully met targets to remove Significant Safety Concern (SSC) and improve EI Rate. The positive safety index, though not meeting the specific target, indicates notable progress in enhancing various safety aspects and advancing aviation safety in Thailand.

74. The activities planned in Aviation Safety in Thailand included CAT Missions in 2016 and 2018, AIG workshops, trainings in the field of Aircraft Accidents and Incident Investigation, trainings in the field of SSP and SMS, ICVM missions and audits, development of guidance material on safety, trainings on SSP and SMS, assessment of Corrective Action Plans with ANB/ MO etc.<sup>25</sup>
75. While the activities actually undertaken, as mentioned in the Progress and activity table (2017-22), for Strategic Objective 1-Safety for Thailand included:
- Implementation of policies and provisions to address critical safety issues concerning Safety Management, Search and Rescue, and other areas;
  - Implementation of policies and provisions to improve flight safety performance (ANIWP: ROI-10) and Improve safety performance at and in the vicinity of aerodromes (ANIWP: ROI-04);
  - Monitored Member State (Thailand) through the USOAP Continuous Monitoring Approach (CMA) and assisted in developing tailored plans of action to address risks;
  - Supported the rapid and coordinated response to crises, contingencies and other situations requiring urgent assistance to Thailand (and other states) and supported the effort to achieve the NCLB goals within the Safety objective;
  - Supporting ICAO initiatives to facilitate States in managing challenges faced due to the COVID-19 pandemic<sup>26</sup>;
  - CAT Missions were undertaken in 2016 and 2019. In addition, ICAO facilitated SEI implementation and assisted in promulgation of NASP in Thailand; and
  - Furthermore, CAAT, Airports of Thailand (AoT), and AeroThai received comprehensive trainings on Aerodrome Certification and Aerodrome Safety Management.
76. Technical assistance on USOAP-CMA in the Aerodrome and Ground Aids (AGA) area was provided through the APAC CAT Mission in 2018. During this mission, CAAT Aerodrome Inspectors received detailed explanations regarding unsatisfactory PQs (Protocol Questions) and were guided on necessary improvements for the State's Corrective Action Plan and evidence required for future audits or ICVMs. This contributed to improvements in terms of aerodrome certification. However, of the total 39 aerodromes, only 9 aerodromes were certified between 2015 and 2023.

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<sup>24</sup> Consultations with CAAT staff

<sup>25</sup> APAC RO Regional Operating Plans 2019-2022

<sup>26</sup> APAC RO Regional Operating Plans 2019-2022

Year	Number of Aerodromes	Number of Certified Aerodromes
2015	38	2
2016	38	0
2017	38	0
2018	38	0
2019	38	0
2020	38	0
2021	39	0
2022	39	5
2023	39	2
Total Certified (2015-23) <sup>27</sup>		9

77. The different trainings organised by ICAO were attended by officials from CAAT, DOA, AOT, Bangkok Airways and AEROTHAI and other stakeholders on various safety related topics mentioned above and contributed towards effectiveness of the services offered by these aviation stakeholders in Thailand. Table 3<sup>28</sup> taken from iSTAR 4.0, highlights achievements in enhancing aviation safety in Thailand. The USOAP EI stands at 61.73%, which is an improvement compared to 2015, although, it is still below the GASP target of 75% (Global Average: 69.32% and Regional Average 66.35%<sup>29</sup>). A similar positive trend is evident in attaining SSP, where Thailand attained level 3. The target for 100% performance-based navigation is met successfully. In addition, a specific target was set for global training activities involving Trainer Plus courses, developing, and delivering 29 courses showcases a proactive engagement in training activities. However, there are some areas that needs improvements e.g. Aerodrome Certification. Similarly, the FAA assessment for Thailand indicates, it falls short and is categorised as Category 2 instead of the desired Category 1.

Indicator	Target	Value	Achieved
USOAP EI <i>USOAP EI%</i>	75%	61.73%	No
Significant Security Concern (SSC) <i>Number of SSCs</i>	0	0	Yes
Aerodrome Certification <i>Validation status of USOAP Questions (PQs)</i>	Satisfactory	Unsatisfactory	No
State Safety Program (SSP) <i>Level of SSP</i>	Level 2	Level 3	Yes

<sup>27</sup> List of Aerodromes certified attached as Annex-9

<sup>28</sup> ICAO iSTAR 4.0 State Safety Briefing – Thailand in APAC -2023

<sup>29</sup>

Indicator	Target	Value	Achieved
FAA IASA <i>IASA Categorisation</i>	Cat 1	Cat 2	No
PBN <i>Percentage of international instrument runways with PBN approaches</i>	100%	100%	Yes
Global Aviation Training Activities <i>Number of training courses developed or developed by Train Plus Members during the last 12 months</i>	0	29	Yes
High Safety Index <i>Number of areas (operation, air navigation, support) with high safety index over 1</i>	3/3	1	No <sup>30</sup>

**Finding 8:** Between 2017 and 2023, ICAO has effectively collaborated with Thailand's aviation sector stakeholders, identifying, and addressing training and capacity-building needs. The approach's effectiveness is evident in the design and execution of multiple courses that all aimed at enhancing and sustaining Thailand's aviation sector.

78. The data from Global Aviation Training (GAT) suggests that 70 ICAO-recognized courses have been delivered with 998 participants. Figure 2 details the number of courses and participants in training programs. ICAO and its partners have effectively incorporated many essential course areas, such as training competency, flight safety, aerodromes, air navigation services, aviation law, aviation management, and environmental considerations. The inclusion of these essential areas reflects the approach to improving staff capacities within Thailand's aviation industry, emphasising a commitment to safety, regulatory compliance, and sustainability. Figure 3 reflects the course covered by areas.<sup>31</sup>

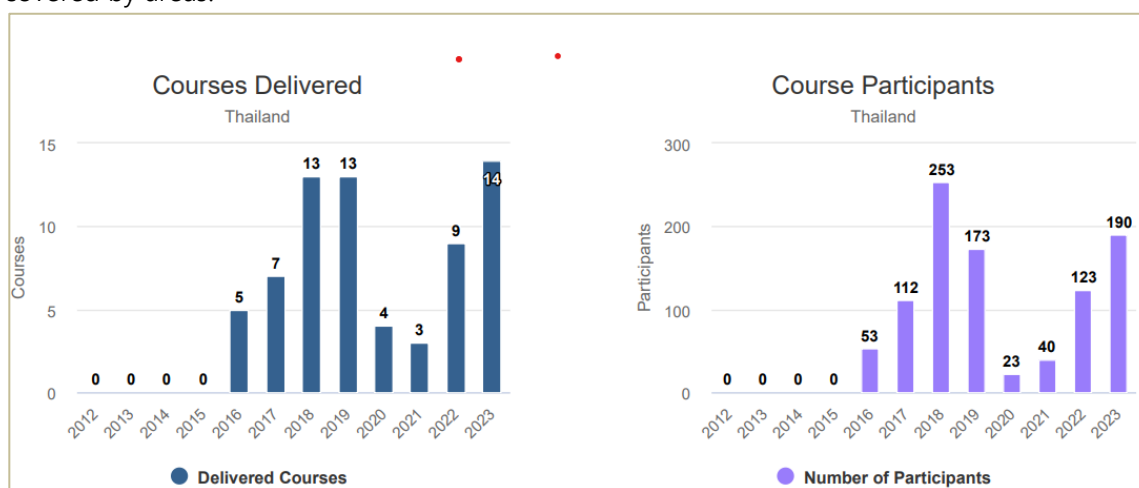


Figure 2: Number of courses and participants in training programs

<sup>30</sup> ICAO iSTAR 4.0 State Safety Briefing –Thailand in APAC, 2023

<sup>31</sup> ICAO iSTAR 4.0 State Safety Briefing – Thailand in APAC -2023

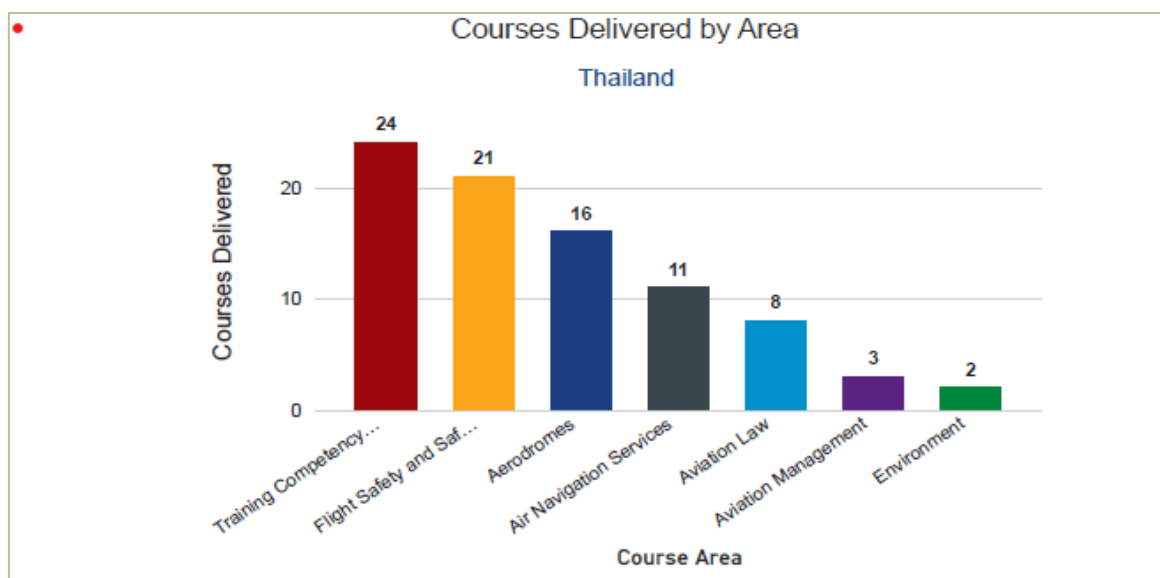


Figure 3: Courses covered by area

79. Currently, there are no ongoing national projects of Capacity Development and Implementation Bureau (CDI) of ICAO in Thailand. However, there are 2 projects completed (financially closed) and 4 unsigned proposals (pipeline-cancelled). Thailand is part of 4 ongoing regional projects managed by APAC RO (Annex-11).
80. CAAT has developed a detailed mechanism for the capacity building of all staff, where regular assessment is undertaken to develop annual capacity building plan. This was possible due to the technical guidance of ICAO on staff capacity building within the technical domains. CATC has also successfully designed and delivered a series of courses for a diverse range of participants, including personnel from the Thai aviation sector and various international counterparts during 2018-2022. The courses covered a broad spectrum of subjects, including English and ground-based aviation modules, specialised courses for Operational Group, Aviation Management Groups, Aircraft Maintenance Group and Electronic Systems Group. Other courses included Flying training, a Master of Management program in aviation and various short ICAO courses. During this period, many participants actively engaged in these training sessions. A total of 8259 Thai nationals and 443 foreign aviation professionals attended these training courses (for details annex 8).
81. Though CATC has been effective in training of aviation professionals, both Thai national and its foreign counterparts, it currently lacks capability in offering certified training courses in aviation safety<sup>32</sup>. The consulted CAAT staff also highlighted the need for training and technical support in these areas.
82. In addition, ICAO has engaged 2 CAAT staff as secondees, which contributed towards the capacity building efforts of CAAT and in short term, to address ICAO's staffing needs<sup>33</sup>.

<sup>32</sup> Interviews with Staff

<sup>33</sup> HR Data from ICAO RO APAC

**Finding 9:** The technical assistance provided by ICAO RO in addressing Significant Safety Concern (SSC) in Thailand has contributed effectively to improvements in EI rates; However, the EI rate still falls below the global and regional standards and significant challenges are observed in particularly in CE 6, CE-7 and CE-8.

83. The most significant indicator of the effectiveness of the interventions under Strategic Objective 1-safety is the removal of SSC due to improvement in the EI rate, particularly since 2018, which indicates collective efforts of stakeholders and technical support from ICAO duly acknowledged by country stakeholders. While Thailand improved its EI rate, it is below the regional and global standards.<sup>34</sup>
84. While there is overall improvement in most aspects of USOAP-CMA, critical elements, particularly CE 6, CE-7 and CE-8, present significant challenges<sup>35</sup>. This concern is validated by secondary data, with CE-6 56.1, CE-7 at 48.4 and CE-8 at 22.2 –notably lower than other critical elements

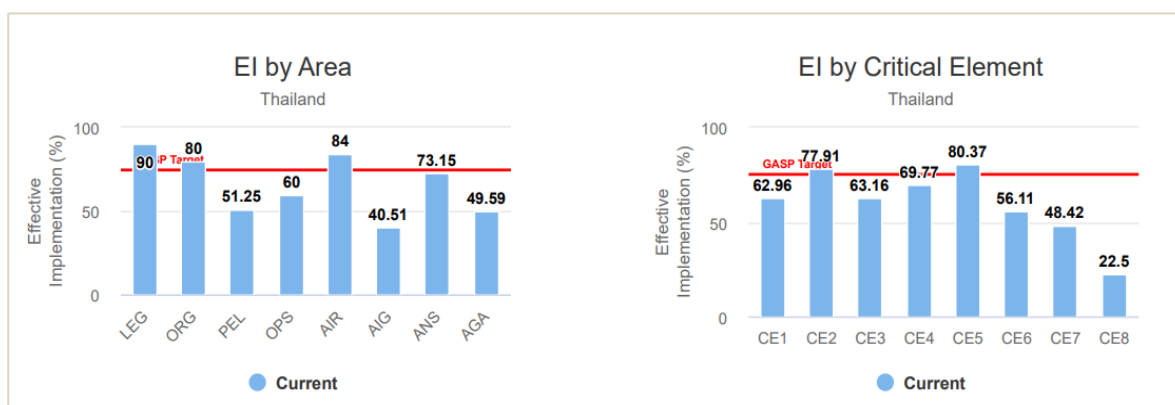


Figure 4: Thailand' EI by Area and by Critical Elements

(Figure 4<sup>36</sup>). Furthermore, except for CE-2 and CE-5, all other elements fall below the GASP targets. This was also validated by respondents in CAAT who indicated further support to improve under CE-7 and CE-8. Thailand also has low score under CE-6 and need the required support in the area. Similarly, when examining the EI by area, it is evident that apart from the Legal (LEG), Organisation (ORG) and AIR sectors, scores in other critical areas lag behind the GASP targets, as illustrated in Figure 4. CAAT respondents indicated facing challenges in AI and AGA areas, which validate the finding.

85. The secondary data indicates that in 2019<sup>37</sup>, Thailand had 466 USOAP protocol findings. The most significant number of these findings (55) related to licensing, certification, authorisation, and approval obligations (CE-6) in the OPS audit area, with AGA ranking second in the same critical element. In 2023<sup>38</sup>, a positive trend was observed, with a reduction to 243 open USOAP protocols findings compared to the figures 2019. Notably, there has been a substantial decrease in USOAP protocol findings related to CE-6, specifically in OPS and AGA areas, signalling an improvement in licensing, certification, authorisation, and approval obligations. In CE-7, a slight increase is noticed in the AGA area in contrast to the overall reduction trend in all areas and elements (Annex-9).

<sup>34</sup> Source: Report on CAT Mission to Thailand – 11 to 14 December 2018

<sup>35</sup> Interviews with CAAT staff

<sup>36</sup> Source: ICAO iSTAR 4.0 State Safety Briefing – Thailand in APAC -2023

<sup>37</sup> Source: Report on CAT Mission to Thailand – 11 to 14 December 2018 - ICAO Asia/Pacific Regional Office

<sup>38</sup> Source: ICAO iSTAR 4.0 State Safety Briefing – Thailand in APAC -2023

**Finding 10:** Building on the evidenced effectiveness of the USOAP-CMA in identifying key safety issues in Thailand (2015), the less frequent occurrence of these audits poses a potential challenge for timely detection and resolution of safety-related issues.

86. APAC RO has initiated several interventions for effective aviation safety management by States, including Thailand, each, aligned with the ICAO strategic objectives through the RASP as well its Business Plans. Within this, the USOAP-CMA has been used to measure the extent to which Thailand has met the targets for aviation safety compliance.
87. USOAP-CMAs are less frequent in Thailand, and the activity was undertaken in 2005 and 2015, leaving gaps of around 10 years. The less frequent audits often lead situation where issues and changes in the country are camouflaged.
88. It was noted that the CAAT and other stakeholders in Thailand appreciated the importance of USOAP CMA and ICVMs in identifying key challenges that led to the improvement of CAAT and overall Thailand safety standards. They also, however requested for more frequent audits and CAT missions.

**Finding 11:** COSCAP-SEA stands out as a robust regional forum, fostering effective safety collaboration among South East Asian states, including Thailand, in partnership with international aviation agencies. COSCAP significantly contributes to aviation safety and capacity development in Thailand and other Member States, aligning with Thailand's commitment to enhanced air transport safety.

89. Established in 2001, COSCAP-SEA operates as an ICAO Regional Technical Program focused on aviation safety and capacity development. Governed by the strategic priorities, the program is currently in phase V (July 2021 to June 2026) and covers diverse safety areas, including safety oversight, accident investigation, and safety management. COSCAP – SEA goals include enhancing air transport safety, applying harmonised regulations, and contributing to social and economic development. Thailand holds membership in the network along with other SEA states. The program collaborates with states and organisations such as Australia, The United Kingdom, the United States, AAPA, ACI, ASEAN, CANSO, IATA, IFALPA, and IFATCA<sup>39</sup>.
90. COSCAP – SEA Steering Committee Meetings (SCMs) are regularly conducted, with participation from Thailand. The meetings focus on planning and executing training courses and technical subjects related to safety for the Member States. These meetings begin with reviewing the previous session's action plans and progress then formulating a detailed work plan for the upcoming year.
91. Member States, including Thailand, benefit significantly as COSCAP-SEA collaborates with international entities. Collaboration with the EU led to the organisation of training courses on airworthiness and safety regulation. A flight operation inspectors' course in Bangkok, Thailand, was co-organised with EASA to address Member States' needs aligning with APAC Beijing Ministerial Declaration safety commitment. Additionally, a SSP Implementation Course co-organised with

<sup>39</sup> <https://www.icao.int/coscap/Pages/Home.aspx>

EASA aimed to support the EI of the APAC region, where Thailand also received support towards improving its EI rate<sup>40</sup>.

## Strategic Objective 2: Air Navigation Capacity and Efficiency

**Finding 12:** The APAC RO has supported Thailand to enhance air traffic management and safety in different areas. Notable progress observed in guidance and monitoring of Performance-Based Navigation (PBN) implementation, regional positions on radio communication conferences, coordination of frequency planning, contracts for aeronautical virtual private network services, and guidance for Common Route Virtualization (CRV) implementation.

92. APAC RO established the following areas/categories of planned activities under Strategic Objective 2: Air Navigation Capacity and Efficiency<sup>41</sup> of the Regional Operating Plan, including interventions for Thailand. The results areas for these activities involved:<sup>42</sup>

- Validate the technical feasibility and expected performance of CRV solution and to contract CRV before 2022;
- Assistance to States to implement policies and provisions on communications, navigation and surveillance (CNS);
- Assistance to States to implement policies and provisions on information management (ANIWP: ENB-IM);
- Assistance to States to implement policies and provisions on meteorology;
- Develop and measure progress against regional AN priorities through Regional Air Navigation Plans and Regional Planning and Implementation Groups (PIRGs);
- Assist States in the implementation of policies and provisions to optimize airspace and airport usage (ANIWP: ROI-01);
- Develop and measure progress against regional AN priorities through Regional Air navigation plans and Regional Planning and Implementation Groups (PIRGs);
- Assist states in the implementation of policies and provisions to optimize air space and airport usage (ANIWP: ROI-01).

93. The available information mentioned in ICAO planned vs achieved tables (Annex 5) related to Thailand showed notable progress on the planned activities. For instance, achievements are evident in areas including guidance and monitoring of Performance-Based Navigation (PBN) implementation, regional positions on radio communication conferences, coordination of frequency planning, contracts for aeronautical virtual private network services, and guidance for Common Route Virtualization (CRV) implementation. Additional meetings and coordination were conducted to facilitate the implementation of critical technologies such as Air Traffic Services Inter-facility Data Communication (AIDC), Automatic Dependent Surveillance-Broadcast (ADS-B) services, and en-route datalink systems like Automatic Dependent Surveillance-Contract (ADS-C)

<sup>40</sup> <https://www.eu-sea-app.org/2019-activities-coorganised-with-coscap>

<sup>41</sup> Operating Plan Tables for Thailand, and interviews with stakeholders

<sup>42</sup> Operating Plans Table for Thailand

and Controller Pilot Datalink Communications (CPDLC). These efforts collectively enhance air traffic management and safety in the region.<sup>43</sup>

94. APAC ANSP Committee meetings are held regularly with Thailand and other Member States, providing an opportunity to share progress reports based on the actions agreed upon in the preceding year's committee meetings. These spotlight four identified priorities, each with a dedicated workstream: (1) stepping up investments in ANS capacity and capabilities led by Thailand and China, (2) accelerating the implementation of seamless ANS and enhancing ANS sustainability; (3) collaborating on business continuity and contingency planning; and (4) supporting the operations of oceanic ANSPs. The 57<sup>th</sup> and 58<sup>th</sup> committee meeting indicate role of Thailand and China in ANS capability and capabilities under the first priority, while the second priority, focusing on seamless implementation, is led by Hong Kong, Singapore, China and Thailand<sup>44</sup>. This indicates Thailand is effectively participating in regional initiatives focusing enhanced ANS capabilities.
95. Interviews with CAAT staff reveal that ICAO provided expert advice and support to Thailand on the Flight Information System (FIR) and Search and Rescue Region (SRR). Similarly, ICAO's expert guidance and support have led to improvements in AEROTHAI's practices concerning the handling and distributing flight plans and air traffic messages.<sup>45</sup> This, however, is not reflected in the operating plans and the Planned vs Achieved table (Annex 9),
96. The Asia Pacific Flight Procedure Program (FPP) Steering Committee Meetings (SCMs) are regularly held each year to formulate a work plan and budget for the upcoming year, preceded by a review of the previous year's work plan. As a member, Thailand regularly attends these meetings with other Member States. The agenda of these meetings primarily focuses on training flight procedure-related training courses and technical support to states' in-flight procedures. Annually, the forum facilitates training programs. For instance, in 2023, the Asia Pacific Flight Procedure Program (FPP) conducted a Flight Procedure Design Online Course. A total of 71 participants from 18 APAC states/administrations, including Thailand and five states from Europe and Mid East, attended this training course<sup>46</sup>.

### Strategic Objective 3: Security and Facilitation

**Finding 13:** The effective provision of tailored technical assistance and guidance by ICAO APAC RO has played a pivotal role in Thailand's accomplishment of specified milestones for security and facilitation within the ICAO framework for the periods 2017-19 and 2020-22. This tailored support has not only enabled Thailand to meet GAsEP targets for aviation security but also to outperform regional and global averages, underscoring the effectiveness of ICAO's assistance and Thailand's effort in advancing aviation security and facilitation objectives.

97. Strategic Objective 3: Security and Facilitation had the following planned activities in four results areas:
  - Support to States to implement SARPs Annex 17 and Annex 9;
  - Support for the effective implementation of the USAP-CMA Programme;

<sup>43</sup> ICAO Operating plan tables in Thailand

<sup>44</sup> Asia and Pacific Air Navigation Services Provider Committees (APAC ANSP Committee) Progress report – 58th Conference of DG CA of APAC Region. ([https://www.icao.int/APAC/Meetings/2023%20DGCA%2058/58-DP-09b-06\\_APAC-ANSP-COMMITTEE\\_231011\\_ASIA%20AND%20PACIFIC%20AIR%20NAVIGATION%20SERVICES.pdf](https://www.icao.int/APAC/Meetings/2023%20DGCA%2058/58-DP-09b-06_APAC-ANSP-COMMITTEE_231011_ASIA%20AND%20PACIFIC%20AIR%20NAVIGATION%20SERVICES.pdf))

<sup>45</sup> Interviews with CAAT staff

<sup>46</sup> <https://www.icao.int/APAC/APAC-FPP/Pages/News.aspx>

- Coordination and support for the ICAO Aviation Security Training Centres (ASTCs);
  - Assistance to States to develop aviation security and facilitation (including TRIP/MRTD) assistance projects<sup>47</sup>.
98. Planned activities under AVSECFAL have been largely implemented by project-based plan (Aviation Security Improvement Plan), initiated by Regional Office, and supported with resources provided by HQ. These projects are coordinated between HQ & Regional Officers. The Regional Office indicated that it does not have the necessary resources to effectively monitor and manage such assistance efforts until the objectives are met.
99. Under the 2017-19 and 2020-22 operating plan, the RO has accomplished various activities and Thailand has recorded positive achievements under the AVSECFAL strategic objective. The RASCF/9 in 2019 was hosted by Thailand and conducted successfully. As a participant, Thailand has attended all RASCFs and other regional meetings as appropriate. Implementation of scheduled assistance and capacity-building activities, including ASIPs achieved as per deliverable for 2017-22.
100. USAP-CMA audits were undertaken in Thailand, and the results formed the basis for “measuring” the effectiveness of RO AVSEC and FAL support for Thailand. Thailand’s EI rate increased in 2020 by around 10%, which exceeded the GAsEP aspirational target for that period and was above APAC and global averages. The ROs AVSEC/ FAL team extended pre-audit liaison; participated in audit processes and post-audit follow-up actions to ensure compliance. This support was important to address gaps identified during the audit and ensure continuous improvement. ROs AVSEC/FAL has also provided extensive guidance and assistance relating to the development of the CAAT Quality Control and Oversight system, including acting as a facilitator and guide on a CAAT audit of Phuket International Airport in 2018 and providing tailored training either directly or in association with CASP-AP and partners/donors.
101. ICAO RO APAC also provided tailored assistance through a complimentary ICAO iPack relating to establishing the Public Health Corridor, which was accepted by Thailand and delivered in 2022.
102. CAAT participated in training events at ASTCs in APAC. ROs AVSEC/FAL and RD are extending technical support to Thailand’s Passport Division, Department of Consular Affairs and Ministry of Foreign Affairs regarding developing the next generation of Thailand’s E-passports. The RO facilitated engagement between the Thai Delegation and ICAO HQs FAL Section and CDI regarding the same issue during the Eighteenth Symposium on the ICAO Traveller Identification Programme and Joint International Criminal Police Organization Biometrics Forum in Montreal.
103. Discussions with Regional office team members indicate that activities for the Strategic Objective of Security and Facilitation in Thailand have been accomplished, reflecting a better working relationship between ICAO and Thailand. The achievement is a significant milestone in the country’s commitment to enhancing aviation security and facilitation. Consultation with CAAT about future capacity needs indicates that CAAT cannot offer relevant ICAO security training courses to all its inspectors due to capacity issues. CAAT staff are looking forward to ICAO to provide opportunities for further security training, including cyber security, to its inspectors either directly between the RO and CAAT or via the ICAO ASTC network.

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<sup>47</sup> ICAO operating plans table on Thailand

**Finding 14:** CASP-AP has been instrumental in significantly enhancing Thailand's aviation security capabilities and fostering regional collaboration among its Member States to further the agenda of regional aviation security. The program has played a pivotal role in achieving compliance with international conventions, ICAO SARPs, and guidance material related to aviation security for its Member States including Thailand.

104. CASP-AP serves as a regional platform where members and representatives from the aviation sector meet within Steering Committee Meetings (SCMs), held annually. The meetings facilitate Member States in aviation security issues and engage with international partners to review progress on the annual work plan agreed upon in the previous SCM and propose measures to alleviate any backlog. Thailand joined CASP-AP as an observer in 2015-16 and transitioned to membership in 2017. In the SCMs, Thailand has actively contributed through insights on regional and national aviation security issues, sharing challenges faced within its aviation sector and seeking support through CASP-AP.
105. The CASP-AP has been instrumental for Thailand, providing a platform to seek advice on best practices and approaches in handling aviation security matters, drawing from the experiences of partners and stakeholders. The 16th SCM was hosted by Thailand in 2019 and was attended by 59 participants, of whom 46 represented 18 CASP-AP Member States and Administrations. In this SCM, it was emphasised that all CASP-AP members must endeavour to implement the ICAO Global Aviation Security Plan (GASeP) and raise the effectiveness of implementation.
106. The 16th CASP-AP SCM witnessed strong support for Thailand's proposal on the ASEAN joint assessment for aviation security, presented as a research paper. Members, including Vietnam, Bangladesh, Singapore, Indonesia, and others, expressed appreciation and endorsement for the initiative. While recognizing the merit of the proposal, considerations such as political, intelligence sharing, and agreements between states for confidentiality and budget were emphasized. Based on this, the SCM highlighted the importance of developing a regional risk context statement. At the 18<sup>th</sup> SCM, the meeting agreed that CASP-AP should prioritize assisting States/Administrations to conduct State specific Risk Context Statements (RCSs) and then concentrate on a regional RCS and, where possible, incorporate the work that ASEAN is already doing in this space.
107. The achievements under CASP-AP highlight its significant role in strengthening aviation security capabilities in the Asia-Pacific region, with Thailand actively contributing to and benefiting from this collaborative platform. This is a testament to CASP-AP's effectiveness in enhancing Thailand's aviation security landscape and fostering regional cooperation.

#### Strategic Objective 4: Economic Development of Air Transport

**Finding 15:** Though, the Regional Office has no staff dedicated for this strategic objective, the RO has tried to assist Thailand and other Member States by disseminating information and organizing air transport events. However, the support provided under this strategic objective is limited.

108. Strategic Objective 4: Economic Development of Air Transport was established to facilitate activities under two results areas:
- Assistance to States to follow ICAO's policies, guidance and Regional Action Plans, and monitor and report significant developments on air transport;

- Assist ICAO HQ, as applicable, in the conduct of air transport events in the APAC Region through coordination and administrative arrangements.
109. Under this plan, the RO has disseminated State letters and offered assistance activities through ongoing interactions with states, including Thailand. Moreover, ICAO has delivered information on air transport economics and regulation to Thailand and other Member States. The RO has put the Strategic Objective as an agenda, where Economic Development of Air Transport was discussed during every annual Regional DGCA Conferences from 2015 to 2023.
  110. ICAO undertook an Aviation Data and Analysis Seminar (10-13 December 2019, at APAC RO, Bangkok, Thailand), which aimed to bring together all stakeholders (Regulators, Air Navigation Service Providers (ANSPs), Aerodrome Operators, Aircraft Operators, International Organizations, and Industry) to review the current situation and trends of aviation, data analytics and economy of aviation in the APAC Region. It also focused on the synergies between aviation, tourism, and trade to provide an understanding of the challenges and needs of the different stakeholders, considering cost-effectiveness. This helped Thailand (and other Member States) use civil aviation data analysis for planning and decision-making in ICAO, national administrations, airlines, airports and ANSPs. The APAC Regional Office (RO) further bolstered Thailand's air transport capabilities by hosting an Aviation Data and Analysis Seminar within the country. This event brought together 46 Thai participants and equipped them with skills to analyze aviation data. To ensure continued access to this valuable information, Thailand appointed a focal point after the seminar. This allows them to leverage ICAO's Data Dashboards, integrating data-driven insights into their air transport development strategies.
  111. In addition, Thailand was provided with PHC i-Pack in 2022 to assist in restarting air travel in the COVID-19 period, which helped it contribute to its tourism industry, which depends highly on the Aviation sector's performance. Apart from this, Thailand has received assistance from RO on various aspects to better manage health events including the CAPSCA annual Regional Meetings e.g. in 2023, the CAPSCA Meeting held in Thailand to support public health events preparedness planning (attended by 57 participants from Thailand) including CAA, Airlines, Airport authorities etc.
  112. **CAAT indicated that they need innovative initiatives, including capacity building of their staff in planning, marketing, and implementing economic activities as related to air transport. Moreover, CAAT indicated increased support, particularly for an improved understanding of the economic development strategic objective.** Thailand have started to benefit from the use of ICAO Aviation Data Analytics Dashboards for air transport planning after receiving access to the Dashboards in December 2023 which is an outcome of their participation in the 2023 Data and Analysis Seminar.
  113. In 2022, the APAC RO took a significant step to strengthen its capacity for supporting member states in achieving the Economic Development of Air Transport Strategic Objective. They advertised a new Air Transport Officer (P3) position for secondment, encouraging countries with qualified personnel to participate. This initiative proved successful, with Indonesia's Directorate General of Civil Aviation nominating a candidate in the fourth quarter of 2023. Following a successful selection process, this nominee will now fill the newly created position within the APAC RO. This strategic addition will allow the RO to offer enhanced support to member states, including Thailand, in furthering their air transport development goals.
  114. Focusing on economic development activities within Thailand's aviation sector would have a significant impact, given the pivotal role that Thailand's aviation industry plays in contributing to the country's GDP. For instance, Thailand's aviation sector, involving airlines, airport operators, on-site enterprises, aircraft manufacturers, and air navigation service providers, employs 172,000 people. Local supply chain interactions support an additional 435,000 jobs. Additionally, an

estimated 99,000 jobs are further influenced by employee wages spent on consumer goods and services. Similarly, foreign tourists arriving by air contribute to supporting 3.6 million people. Within this, the air transport industry, coupled with spending by air-travelling tourists, is estimated to contribute US\$63.7 billion to Thailand's GDP, constituting 15.5 per cent of the country's total GDP<sup>48</sup>.

#### Strategic Objective 5: Environmental Protection

**Finding 16:** The RO, in collaboration with ICAO HQ, has provided substantial support to Thailand in implementing CORSIA. Thailand has successfully developed the State Action Plan (SAP) to reduce carbon emissions. ICAO's engagement with Thailand in initiatives like CORSIA, APWGM-WG and broader support to SAF demonstrates a commitment to fostering sustainable aviation practices.

115. Specific activities related to environmental protection implemented by the Regional Office include knowledge and information sharing with CAAT on CORSIA requirements, which led to notification from Thailand to participate in CORSIA voluntarily. Detailed list of activities implemented by ICAO HQ and the RO include:

- Regional Seminar on States' Action Plan and CORSIA, in Jakarta, Indonesia (2017). Which helped Thailand successfully update and submit the 2<sup>nd</sup> SAP to ICAO in 2018;
- ICAO CORSIA Regional Seminar in Brisbane, Australia (2018), which helped Thailand gain knowledge and information on CORSIA requirements;
- ICAO CORSIA Regional Workshop, in Seoul, South Korea (2019), which helped Thailand in notifying ICAO of its voluntary participation in CORSIA from its pilot phase;
- ICAO State Action Plan Regional Seminar (online), 5-6 Aug 2020, which led to Thailand successfully submitting its CO<sub>2</sub> emissions data for 2019, 2020, and 2021 to ICAO (via CCR) timely;
- ICAO Global Aviation Dialogues on the feasibility of a long-term global aspirational goal for international aviation CO<sub>2</sub> emissions reductions (LTAG-GLADs) (virtual event, 2021). Thai stakeholders gained knowledge and information on the ICAO's work on the feasibility of a long-term global aspirational goals for international aviation CO<sub>2</sub> emissions reductions (LTAG);
- APAC Webinar on SAP Initiative on CO<sub>2</sub> Emissions Reduction in APAC Region and Implementation of CORSIA, 19 Aug 2021;
- APAC Webinar for the 10th Anniversary of the ICAO State Action Plan (SAP) Initiative on CO<sub>2</sub> Emissions Reduction (2021), which helped Thailand to successfully update and submit 3<sup>rd</sup> SAP to ICAO in November 2021;
- ICAO Global Aviation Dialogues on the feasibility of a long-term global aspirational goal for international aviation CO<sub>2</sub> emissions reductions (LTAG-GLADs) – APAC Region, virtual event (2022), which led to Thailand joining the ICAO Assistance, Capacity Building, and Training on Sustainable Aviation Fuels (ACT-SAF) from 2022;
- APAC Webinar on Implementation of CORSIA, 30 Jun 2022-Thai stakeholders obtained information on the progress of CORSIA implementation and updated information from the 41st Session of the ICAO Assembly;
- ASEAN Workshop on CORSIA conducted by CAA Thailand and DGCA Indonesia in Bali (2022).

<sup>48</sup> <https://www.iata.org/en/iata-repository/publications/economic-reports/thailand--value-of-aviation/>

116. ICAO and Thailand organized the ICAO Environmental Regional Seminar - APAC, in Bangkok in 2023. Thai stakeholders (government and industry) gained knowledge and experience on SAF development.
117. Under the ACT-CORSIA Buddy Partnership framework, a spreadsheet has been developed by the RO to facilitate states, including Thailand, in compiling CO<sub>2</sub> emission data. The tool is designed to aid CORSIA Focal Points of ICAO Member States lacking alternative means of aggregating CO<sub>2</sub> emission data received from assigned aeroplane operators. Its primary purpose is to streamline the preparation and uploading of this information onto the CORSIA Central registry<sup>49</sup>.
118. CORSIA, a global initiative, is expected to significantly mitigate CO<sub>2</sub> emissions in aviation, surpassing the impact of domestic policies. Since voluntarily joining CORSIA in 2018, Thailand has actively participated, expressing commitment to reduce carbon emissions in alignment with ICAO's global climate objectives. ICAO's assistance, particularly through the State Action Plan initiative, has equipped Thailand with the necessary tools and capacity, resulting in the development and submission of the "Thailand Action Plan to Reduce Aviation Emissions" in 2018.<sup>50</sup>
119. Establishing an MRV system for monitoring, reporting, and verifying carbon emissions at the national level has been instrumental in Carbon reporting. This system allows CAAT to track and report emissions transparently, aligning with international standards and commitments. Through the MRV system, CAAT contributes to the broader global effort to monitor and reduce carbon emissions in the aviation sector. The risk in this technically complex system is losing the trained human resource to a high-paying industry, which may undermine the long-term sustainability of such achievements in carbon reporting.
120. The collaboration of Thai stakeholders with experts from ICAO and EASA in establishing the MRV system demonstrates the importance of regional cooperation. Environmental challenges, especially those related to aviation, require collaborative efforts in such cross-border challenges, where Thailand alone may not have been able to address such an issue. The engagement with regional and international aviation bodies ensured the adoption of best practices in MRV and fostered knowledge exchange and expertise sharing.
121. Despite the commendable efforts, CAAT has faced challenges in effectively implementing CORSIA and the MRV system due to inadequate technical expertise and resources. CAAT is also facing the challenge of acquiring and maintaining the necessary technical infrastructure and capabilities to effectively track the carbon emissions and the mitigation part, where Thailand and its aviation sector are still struggling to engage technology to mitigate the emissions on sustainable basis.
122. CAAT identified that implementing sustainable and environment friendly practices in the aviation sector in Thailand requires financial resources and securing funding for innovative initiatives and new projects aligned with CORSIA and SDG-13 is a challenge.
123. ICAO has actively supported Thailand in fostering collaborations with international agencies, including the FAA, to develop sustainable aviation fuels (SAF)<sup>51</sup>. The FAA partners with esteemed institutions such as Washington State University, MIT, and the University of Hawaii to establish the ASCENT<sup>52</sup> Project. This initiative is dedicated to cultivating sustainable fuel supply chains, focusing specifically on Southeast Asia, including Thailand. The project's objective includes identifying its

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<sup>49</sup> <https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Buddy-Partnerships.aspx>

<sup>50</sup> [https://www.icao.int/environmental-protection/pages/climatechange\\_actionplan.aspx](https://www.icao.int/environmental-protection/pages/climatechange_actionplan.aspx)

<sup>51</sup> <https://www.icao.int/Meetings/CAAF3/Documents/CAAF.3.IP.010.2.3.4.en.pdf>

<sup>52</sup> ASCENT – the Aviation Sustainability Center – is a cooperative aviation research organization co-led by Washington State University and the Massachusetts Institute of Technology.

availability, optimising production pathways, assessing infrastructure needs, addressing barriers and propelling the global advancement of SAF supply chains. Leveraging alliances with entities like The World Bank, this initiative focuses on student training, involving a network of PhD students in workshops and internships. The project ensures a comprehensive approach to sustainable aviation in Thailand and beyond by extending ASCENT COE tools and techniques to various regions.

124. CAAT's focus on Sustainable Aviation Fuel (SAF) reflects a proactive stance in addressing the environmental impact of aviation. SAF is considered a key element in reducing greenhouse gas emissions from the aviation sector. By prioritizing SAF, CAAT is committed to exploring and adopting eco-friendly solutions. CAAT has undertaken a preliminary study on SAF, indicating that CAAT is actively engaged in research and development activities. While SAF is still early, CAAT's initiative to conduct a study suggests a forward-looking approach.
125. Based on CAAT and ICAO's support to encourage the use of SAF in the Thai aviation industry, Thai Airways, in partnership with PTT Oil and Retail Business Public Company (OR), collaborated for the implementation of SAF on the Phuket-Bangkok route<sup>53</sup>, marking a significant milestone towards environmental sustainability efforts in Thailand. It reduced CO<sub>2</sub> emissions by 80% compared to regular aviation fuel without requiring engine conversion. This SAF initiative demonstrates Government and private sector commitment and effectiveness of ICAO's support to achieving net zero emissions by 2050. However, this also indicates a long journey towards integrating sustainability and environmental considerations in the aviation sector.
126. While CAAT's focus on SAF is commendable, there are challenges associated with adopting and implementing sustainable aviation fuels, including the production and adoption of SAF, which is a cost-intensive initiative. Similarly, investing in the necessary infrastructure and overcoming the potential cost disparities between traditional aviation fuels and sustainable alternatives are important challenges. Ensuring a sustainable supply chain for SAF can be challenging. ICAO may need to work with CAAT and industry stakeholders to enhance the availability of sustainable fuels, considering factors such as production capacity, distribution networks, global demand and cost considerations.
127. To reduce aviation emissions, Thailand has implemented various measures<sup>54</sup>. Thailand introduced a plan to improve aircraft technology by expanding the aircraft fleet with new aircrafts. The measure helped to minimise specific fuel consumption. The action is ongoing and is expected to be completed by 2025. The second measure is related to replacing old aircraft with new aircrafts to reduce fuel consumption, thus contributing to reducing carbon emissions. Under this measure, Thai Airways purchased 12 new Airbus 350 fleets, replacing the old aircraft in 2018. Similarly, in 2021, AirAsia replaced the old A320 aircraft with more recent versions, which are fuel efficient and reduced carbon emissions.
128. Thailand has also implemented activities to improve runways and taxiways infrastructure, leading to efficient taxi routes, reduced taxi times, and decreased fuel consumption. In 2018, the Department of Airports constructed a new runway. This was expedited in 2021, where the Airports of Thailand Public Co., UAPO Airport Authority, and the Department of Airports completed new runways, taxiways, and expressways at various airports, to reduce fuel consumption on these taxi ways.
129. The fourth measure by Thailand focused on operational improvements to reduce the jet fuel consumption of each aircraft. Actions taken include minimizing weight, engine wash, pack-off –

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<sup>53</sup> [https://www.thaiairways.com/sites/en\\_TH/news/news\\_announcement/news\\_detail/SAF-flight.page](https://www.thaiairways.com/sites/en_TH/news/news_announcement/news_detail/SAF-flight.page)

<sup>54</sup> Thailand's Action Plan to Reduce Aviation Emissions – Version 2021

take-off phase, single-engine taxiing, optimising flap setting, and reducing thrust. The data shows that Thailand's aviation and airlines have taken several actions to achieve results under these measures, contributing towards reduction in emission of CO<sub>2</sub>.

130. The aviation industry, impacted by the challenges of COVID-19, witnessed increased wildlife activities near aerodromes due to reduced air traffic. ICAO's global strategy addresses this by raising awareness about wildlife strike threats, reinforcing the implementation of SARPs on wildlife control, exchanging best practices, exploring new technologies to mitigate wildlife strikes, and enhancing wildlife striking reports. To implement these strategies, ICAO, in collaboration with Member States, formed a working group 'The Asia Pacific Wildlife Hazards Management Working Group (APWGM-WG)', which is represented by Thailand along with other Member States. The inaugural meetings of the groups (APWGM-WG/1) were conducted at the ICAO APAC Office in Thailand, where the TOR for the group was developed. Subsequent meetings have been held regularly, with the 5th meeting in 2023. The meetings review progress on action points from the previous session and develop action planning for the upcoming year<sup>55</sup>.

## Efficiency

### Human Resources

**Finding 17:** The APAC RO has consistently offered timely and tailored support to Thailand, showcasing commendable responsiveness. Stakeholders acknowledge positive responses to challenges. However, efficiency challenges arise from budget and human resource limitations, impacting the regularity of missions and support in some areas.

131. APAC RO is staffed by a team of around 30 competent and experienced officials who have provided technical and administrative assistance to Member States, including Thailand, to create an impact on ICAO's strategic objectives. Support to Member States, including Thailand, is provided in each strategic area. It involves site visits through country missions, virtual consultations and collaborations, informational resources, and access to opportunities for training, capacity building, networking, etc.
132. Stakeholder consultations (ICAO HQ, APAC RO, CAAT, Aero Thai etc.) have shown that APAC RO has generally provided timely responses to CAAT and other stakeholders' questions and enquiries, despite the level of workload of RO APAC team, felt and acknowledge by Thailand aviation sector stakeholders.
133. Significant examples of support to Thailand aviation include timely facilitation of action plans to remove SSCs, mitigating aviation security related challenges highlighted during the respective audits, and help access needed training opportunities. This signifies an efficient response within a timely manner to address challenges faced by Member States.
134. While there has been positive feedback from most stakeholders on the nature of support provided by the RO, they indicated that the reliance on virtual (emails) and informal channels, due to the limited number of staff members, may be transformed into more physical engagement for improved learning and institutional development processes. They also indicated that the frequency of support missions (CAT missions, ICVMs USOAP/ USAP audits, etc.) need to be increased, the utility and critical nature of which has been endorsed by CAAT and other stakeholders in Thailand.

<sup>55</sup> <https://www.icao.int/APAC/Meetings/Pages/2023-AP-WHM-WG5.aspx>

135. Within this context, the RO has faced the challenge of insufficient personnel. The APAC portfolio covers 39 countries and is one of the biggest regional offices. Due to its vast portfolio and comparatively limited staff, it may be unable to carry out regular and frequent missions, as highlighted by CAAT and RO APAC staff. There is a need to add additional resources, secondees and / or HR as well as, improve work efficiency by allocating country portfolio to specific ROs, which will streamline the workload and provide room for improved services to Member States.
136. The organizational structure of the RO APAC designates staff functions based on their expertise. However, consultations with various stakeholders indicated inadequate (number) staffing in each functional area. This limits the capability of structure in each specialised area reducing the chances of Thailand (and other states) receiving frequent technical support from ICAO. This can be addressed by allocating a number of Member States to various regional officers to act as focal persons, enhancing the efficiency of the planning, execution and coordination.
137. Regarding the HR issues at country level, the loss of HR keeps CAAT thirsty for qualified, competent, and trained HR at each level and in nearly all functions. This also keeps CAAT from training staff, and as soon as staff is trained, the market engulfs such talented staff members, leaving CAAT yearning for qualified people. There is a need to encourage CAAT to ensure that pay packages are levelled with the market to reduce such HR flux.

#### Financial Resources

**Finding 18:** The Regional Officers of RO APAC cited funds as a limitation; while it was noted that apart from the low availability of funds, it was also the low knowledge related to the method of accessing funds that proved to be a limitation for planning and executing activities.

138. The discussion with the team members of RO APAC indicated that they faced constraints regarding availability of funds for various initiatives. Due to this, the regional officers are left with little space for innovation and ability to provide instantaneous support to Member States, that may necessitate funds.
139. Nearly all Regional officers<sup>56</sup> indicated that funds for travel and other similar funds for logistics and operations are limited and not easily accessible. It was also noted that accessing SAF funds has major bureaucratic and procedural issues limiting the capability of the RO Team to access funds for their routine or needed activities like travels required for operations.
140. In some cases, it was noted that the staff's knowledge was limited on available financial resources, and the processes needed to access them, which hampered their ability to access such resources. An orientation on basic financial management will facilitate easy access to such available resources. The RO indicated that the usual practise experienced for mobilization of funds for technical assistance missions is based on annual allocations based on donor's contributions for that year. As a result, funds made available for a year has limitation of time for expending the funds within the same year after the receipt of the allocation announcement.
141. Nevertheless, it is clear that ICAO faces resource constraints, making it challenging to fund some of the crucial requirements of the Regional Office (RO) and the broader region. This underscores the need to intensify efforts in generating funds to support vital aviation-related initiatives in countries like Thailand.

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<sup>56</sup> Interviews with Regional Officers, RO APAC

## Sustainability

**Finding 19:** Thailand's aviation sector has demonstrated a commendable commitment to sustainability, particularly in pillars such as safety, security, and navigation. The proactive investment in human capital through training programs and collaborations with ICAO and regional partners signifies a long-term dedication to maintaining high standards within the industry. The RO, however, need revise the host country agreement to reduce the frequent small- to medium-scale repair costs of the office.

142. The sustainability considerations within the Thai aviation sector have been primarily centred around pillars such as safety, security, and navigation. These efforts are channelled through institutional instruments and human resource development initiatives. The commitment to enhancing the knowledge and skills of staff within key aviation institutions in Thailand, including CAAT, AeroThai, CATC, and others, reflects a holistic approach to ensuring the sustainability of aviation standards and the overall quality of the services within the sector.
143. In Thailand's aviation sector, the USOAP audit conducted in 2015 led to raising an SSC, serving as a critical indicator of potential safety issues. After this audit, guided by recommendations of ICAO to the CAAT, the country embarked on a trajectory of sustained improvements and transformative measures in its aviation sector. This process not only addressed safety-related concerns but also enhanced the overall capacity of CAAT with support from ICAO, ensuring aviation safety on a sustained basis.
144. As the SSC was raised in 2015, ICAO provided extensive guidance and technical support to Thailand for restructuring DCA and also to the newly emerging CAAT and AOT. Within this, ICAO particularly provided advisory on the role distribution and future institutional architecture of each institution established. This helped Thailand clarify institutional roles and understand the future direction for their sustained growth.
145. For investment in its human capital through training programs and initiatives, CAAT is collaborating with ICAO RO APAC and with EASA, UK-CAAi, Singapore, Australia and other regional partners. The focus on capacity building signifies a long-term commitment to sustaining high standards within the industry. As the staff members are equipped with updated knowledge and skills, CAAT has continually been able to refine its systems, with the support of ICAO in various aspects. This contributes to the overall resilience and sustainability of the aviation sector in Thailand, which is also reflected in the sustained improvement in the EI Rate.
146. However, a major challenge (as indicated in Efficiency section as well) is the staff turnover rate due to the disparity between pay packages in CAAT and industry, which also undermines sustainability of initiatives. The staff turnover not only undermines the current function but also reduces the efficacy of the benefits accrued from the training programs. This may undermine the sustainability of functions and future initiatives within the country as capable staff depart the institutions.
147. There is an expressed need for expert assistance in business support, financial management, marketing skills and legal aspects /contracting to ensure the sustainability of its programs, particularly in Economic Development. This points to a broader need for capacity building in areas beyond traditional safety and security, improving the performance in economic and environmental protection and to sustain it.
148. CATC raises concerns about a decreasing number of trainees and the need to enhance awareness among youth to join the aviation industry. Sustainable practices in aviation, especially environmental considerations, require a fresh influx of talent that necessitates that aviation in Thailand becomes attractive for young, talented minds. ICAO and Thailand may see possibility of

collaboration for awareness campaigns, educational initiatives, and incentives to attract younger generation to pursue careers in aviation, fostering a sustainable supply of workforce for future needs.

149. In assessing the sustainability of ICAO support in Thailand, a critical aspect considered was the continuity of the Host Country Agreement, a comprehensive pact signed in 1965. The ICAO RO APAC team underscores the necessity to renew this agreement. Challenges arise in sourcing competent human resources for frequent small- to medium-scale repairs as the infrastructure ages. Language barriers further complicate communication related to procurement documentation, impeding the purchase request process. While repair costs for such issues strain the budget, the RO APAC proposes that the Government of Thailand takes charge, leveraging an established contract with a reputable services/repair company. The effectiveness of this approach was evident in the successful repair works of 2020, where communication with the vendor and documentation processing became more streamlined under the involvement of the Thailand Government representative.

## Cross-cutting theme: Gender and Human Rights

150. Gender and Human Rights were assessed as the extent to which there has been evidence of incorporating gender equality and Human Rights considerations into RO APC support to Thailand.

**Finding 20:** CAAT, along with other institutional partners such as CATC and AeroThai, upholds a commendable human rights record in the aviation industry in Thailand. Notably, there are no discernible challenges or discrimination issues, with CAAT leading in fostering inclusivity and promoting human rights principles. Women represent over 50% of the staff, and CAAT ensures non-discriminatory protection for all staff and passengers. Within this, ICAO plays a supportive role in advancing these inclusive practices within the aviation sector.

151. There is a general favourable human rights landscape within CAAT, its policy ecosystem and culture, and its associated facilities in Thailand's aviation industry. ICAO has broadly assisted CAAT. It indicates a commitment to upholding human rights principles and fostering an inclusive and equitable environment within the aviation sector in Thailand. Examples of human rights considerations in aviation include non-discriminatory practices in hiring, training, and service provision where various religious, gender and ethnic groups are represented in CAAT. Ensuring that passengers and staff are treated with dignity and respect, regardless of their background, is central to the vision and strategy of CAAT. Additionally, the absence of social restrictions implies that individuals from various demographics can participate and contribute to the aviation sector without facing undue limitations.
152. The APAC RO is working to address gender equality concerns in aviation in the region. The 58<sup>th</sup> DGCA Conference, themed "Promoting ICAO Gender Equality with NGAP," tackled the issue regionally, acknowledging the cultural complexities within member states. A dedicated High Level Panel Discussion and focused Agenda Item with discussion papers, including an ICAO contribution, culminated in an Action Item: a regional plan for both gender equality and NGAP objectives. This shift from state-specific support to a broader regional approach reflects the APAC RO's commitment to a more impactful strategy.

153. Culture in Thailand is generally neutral to gender-related issues, and there is a general respect for all people, regardless of their gender, age, race, or ethnicity. The same is generally reflected in the structure, culture, and aspirations of CAAT and other institutions.
154. CAAT serves all staff and passengers with the same lens to ensure a secure passage to users/passengers. There has been an expressed effort to make instruments and policies gender-sensitive, e.g. the security manuals are gender-sensitive, where protocols for women and men are identified separately.
155. While Thailand exhibits gender-neutral practices in aviation, the country faces challenges in becoming fully disability-friendly, particularly within its airports and its infrastructure.<sup>57</sup> The absence of social restrictions and a commitment to gender equality are notable, but the inadequate disability-friendly infrastructure poses a significant challenge. This finding underlines the need for Thailand, especially its airports, to enhance accessibility and inclusivity for persons with disabilities. The aviation sector is vital in ensuring seamless travel experiences for all passengers, including those with disabilities.
156. The primary challenge lies in ensuring that existing infrastructure meets disability related standards. This requires substantial investments and structural modifications. Additionally, raising awareness among aviation stakeholders about the importance of disability inclusivity is crucial. Collaboration with relevant authorities and organizations focused on disability rights can aid in developing and implementing comprehensive plans to address these challenges.

Main Objectives of the ICAO Gender Equality Programme:

- Build capacity and enhance awareness for gender equality
- Enhance gender representation
- Increase accountability
- Further engagement with external partners

Source: [www.icao.int](http://www.icao.int)

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<sup>57</sup> Interview of Regional Officer -ICAO APAC

## CONCLUSIONS AND LESSONS LEARNED

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### Conclusions

157. The evaluation findings are derived from the primary assessments based on key evaluation criteria. A significant obstacle in this evaluation process has been the absence of definitive evidence regarding the attainment of real outcomes for comparison with planned targets at State level. This challenge arises from the design and insufficient utilization of the Operating Plan and inconsistencies in results monitoring and reporting.
158. Conclusion 1: ICAO's support to Thailand have been linked to the needs and critical challenges of the aviation sector of Thailand, emphasizing the relevance of its initiatives to the country's specific needs. The Regional Operating Plans have broadly addressed critical challenges by addressing Significant Safety Concerns (SSC) and strengthening the capacity of the Civil Aviation Authority of Thailand (CAAT). The absence of Member State -level information in these plans, in particular when they target one or small number of Member States, however, limits the evaluability of contribution of ICAO's support to individual Member States. (linked to Finding 1).
159. Conclusion 2: The absence of a systematic country-level needs assessment for the planning process, coupled with the limited consultation during the development of regional operating plans, has an impact on the relevance of ICAO's support to Thailand's aviation sector. Without comprehensive country-specific information and a dedicated Member State focal person (to understand how the Member States is progressing), understanding gaps and support needs remains challenging. Addressing these gaps is imperative to enhance the strategic impact and effectiveness of ICAO's assistance in advancing Thailand's aviation industry. (Linked to finding 1, 6 and 7)
160. Conclusion 3: As for effectiveness, removal of SSC and considerable increase in EI rate stand out as important achievements, reflecting the collective efforts and support from ICAO and other partners. The USOAP EI rate, however, still falls below global and regional standards. The slow yet continuous improvement in Thailand's EI rate, supported by audit reports and stakeholders, affirms the positive impact of ICAO RO's support in enhancing aviation safety in the country. Concerted efforts are still needed to take this beyond regional and global average particularly in areas of CE-7<sup>58</sup> and CE-8<sup>59</sup>, through regular and frequent support and follow up missions. (Linked to Finding 8 and 10)
161. Conclusion 4: Thailand has successfully met milestones set for security and facilitation between 2017-19 and 2020-22, demonstrating a commendable commitment to implementing ICAO's Strategic Objective 3. Tailored technical assistance from APAC RO has significantly contributed to Thailand exceeding the GASep aspirational target in 2020, showcasing a robust partnership and achievement in aviation security and facilitation. (Linked to Finding 14)
162. Conclusion 5: ICAO RO APAC's support to economic development component remained less vibrant, leading to minimal progress on this in Thailand. Comprehensive gap assessment and training programs to develop CAAT's capacities in planning and implementing this strategic objective are needed to improve aviation's contribution to Thailand's economic development. (Linked to Finding 16)
163. Conclusion 6: Thailand, with support from ICAO, has demonstrated significant strides in environmental protection, particularly within CORSIA, APWMG, and SAF. Thailand's engagement in collaborative projects, like the ASCENT Project, underscores its dedication to cultivating sustainable

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<sup>58</sup> Surveillance Obligations

<sup>59</sup> Resolution of Safety Issues

aviation fuels and enhancing environmental practices in the aviation sector. The multifaceted approach, encompassing wildlife hazard management and strategic measures recommended by ICAO, positions Thailand on a trajectory toward a greener and environmentally conscious aviation industry. (Linked to finding 16)

164. Conclusion 7: The APAC Regional Office has efficiently supported Thailand's aviation needs, including prompt response to SSC, potential SSeCs, and training requirements. However, stakeholders emphasized the need for more physical engagement, collaboration, and coordination with other partners to avoid duplication and increased mission frequency for enhanced pace of improvement in aviation sector. This is impeded by challenges like limited number of staff compared to size of region, delayed staff hiring and financial constraints. Improved HR processes, strategic resource mobilization and allocation are crucial for overcoming these challenges and enhancing the APAC RO's effectiveness. (Linked to finding 5, 17 and 18)
165. Conclusion 8: Sustainability efforts in Thailand's aviation sector focus on safety, security air navigation and environment. While significant progress has been made in the sector, turnover of technical staff could challenge the aviation sector in sustaining achievements. Competitive salaries at CAAT can mitigate turnover of staff and awareness raising campaigns can attract the younger generation to aviation (Linked to Finding 19)
166. Conclusion 9: Overall, CAAT and other aviation institutions in Thailand are gender-sensitive and report no discrimination against staff or passengers based on gender, race, or any other factor. However, challenges persist in becoming disability-friendly, emphasizing the need for infrastructure enhancements and awareness campaigns. Regarding human rights, CAAT demonstrates commendable achievements, ensuring dignity and respect for staff and passengers from diverse backgrounds. (Linked to finding 20)

### Lessons learned

- Adequate staffing is essential for effective support, especially in critical roles like the CTA of COSCAP. Delays in hiring can hinder initiatives, emphasizing the need for strategic staffing planning.
- Conducting comprehensive country-level needs assessments is crucial for enhancing ICAO's support's relevance and strategic impact. Depending solely on audits and Member State requests without a clear framework may impede the ability to address gaps effectively and advance the aviation sector strategically.
- Leveraging informal communication methods, such as emails and calls, despite their ad hoc nature, are effective tools to support Member States, particularly in emergent situations like COVID-19. It has also led to cost reduction, while specifically addressing Thailand's aviation needs.
- Regular and frequent audit activities, such as USOAP-CMA, are critical for tracking change and encouraging continuous improvement. They provide valuable insights, contributing to sustained progress in areas like EI rates that can significantly influence a country's contribution to its economic development, as happened in Thailand.
- Regional platforms are an effective tool of institutional learning in aviation. This is evidenced by Thailand's active participation and learning in regional forums, including CORSIA, CASP-AP, and COSCAP, which proved beneficial avenue for networking, lesson learning, and experience sharing. Through engagement in steering committee meetings, Thailand not only presented its country-specific issues related to environment, safety, and security but also gained valuable insights and learned from the experiences of other countries.

## RECOMMENDATIONS

167. In light of the evaluation findings, the following recommendations are made to improve the performance of the RO APAC for improved aviation ecosystem in Thailand:

1. The Regional Office should include sufficient information including target Member States that will benefit from each activity in the Operating Plan to effectively monitor and assess progress and establish a system (folder) to compile country-specific information for better understanding of each State's aviation sector. **(Linked to Conclusion 1 and Finding 1, and 6)**

Priority	Time implication	Resource implication
High	June 2025	Low
Closing criteria: <ul style="list-style-type: none"> <li>• Regional Operating Plans to include the names of Member States where the activities are planned to be implemented and other important information relevant information for monitoring when ever possible.</li> <li>• Member State folder system established by the RO, to include all information in one place.</li> </ul>		

2. The Regional Office should assign State focal persons to follow up the overall aviation sector of individual Member State and to coordinate planning and support to the State. **(Linked to Conclusion 2 and Finding 1, 6 and 7)**

Priority	Time implication	Resource implication
Medium	December 2024	Low
Closing criteria: <ul style="list-style-type: none"> <li>• Focal person for each Member State assigned, to coordinate and look after all aspects of aviation</li> </ul>		

3. In collaboration with CAAT, the Regional Office should establish a coordination arrangement to bring together all partners supporting Thailand to avoid duplication and maximize effectiveness and efficiency. **(Linked to Conclusion 8 and Finding 5)**

Priority	Time implication	Resource implication
Medium	December 2025	Low
Closing criteria: <ul style="list-style-type: none"> <li>• Coordinating mechanism between stakeholders agreed.</li> </ul>		

4. The Regional Office should provide targeted support to Thailand to improve USOAP EI in general and CE -6, CE-7 and CE-8 in particular. **Linked to Conclusion 3 and Finding 9)**

Priority	Time implication	Resource implication
High	December 2025	Medium
Closing criteria: <ul style="list-style-type: none"> <li>An action plan prepared to improve EI target in consultation with CAAT</li> </ul>		

5. The Regional Office in collaboration with the host government should revise the Host Country Agreement to address challenges related to repair and maintenance of the building. **Linked to Finding 19)**

Priority	Time implication	Resource implication
Medium	December 2027	Low
Closing criteria: <ul style="list-style-type: none"> <li>Host Country Agreement revised</li> </ul>		

## ANNEX 1. DETAILED EVALUATION METHODOLOGY

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### Evaluation Purpose<sup>60</sup>

The evaluation has a dual purpose: accountability and learning for the International Civil Aviation Organization (ICAO) in Thailand.

**Accountability:** The evaluation aims to independently assess the effectiveness and efficiency of the support provided by ICAO in improving the implementation of ICAO Standards and Recommended Practices (SARPs), policies, and targets in Thailand. This aspect focuses on holding the organization accountable for its actions and outcomes.

**Learning:** The evaluation also seeks to identify good practices and lessons learned from ICAO's activities in Thailand. It intends to provide recommendations for improving performance and delivering better results, as appropriate. This aspect emphasizes learning from past experiences and continuously enhancing ICAO's operations.

### Scope and Client

The evaluation will encompass all activities and outputs delivered by ICAO in Thailand, specifically focusing on key results achieved since 2016. It will also examine the management and partnership mechanisms used in the region, providing a comprehensive assessment of ICAO's engagement in Thailand.

The primary clients of this evaluation include the APAC Regional Office, Thailand's Civil Aviation Authority (CAAT), various ICAO Bureaus, and the Office of the Secretary-General (OSG). Additionally, Regional Aviation Safety Groups (RASGs), Aviation Security and Facilitation Regional Groups (AVSEC/FAL/RGs), and Policy and Implementation Regional Groups (PIRGs), as well as the ICAO Council, may utilize the evaluation findings and lessons learned as deemed appropriate.

### Evaluation Criteria and Key Questions

Criteria	Key Questions
Relevance	<ul style="list-style-type: none"> <li>To what extent has the Regional Office plans (activities and projects) been relevant to the needs of Thailand under all the 5 strategic objectives of ICAO?</li> <li>To what extent has Regional Office plans and projects adapted and responded to the needs of Thailand during the COVID -19 pandemic?</li> </ul>
Coherence	<ul style="list-style-type: none"> <li>Are/Were the outputs and activities of the operating plan of the regional office aligned with Thailand's Civil Aviation Master Plans/ State Safety Plans/Air Navigation Plan and priorities?</li> <li>How well did/do the outputs / projects complement and fit with other ongoing ICAO programmes and projects (e.g., Regional, COSCAP, CASP-AP, TCB projects) in the region?</li> <li>How well did/do the outputs / projects of partners (ICAO, EASA, Japan, Singapore, UK, etc.) complement and fit with Thailand's plan to address deficiencies and address aviation priorities/needs?</li> </ul>

<sup>60</sup> From Terms of Reference of the Evaluation of Country Portfolio of Thailand

Effectiveness	<ul style="list-style-type: none"> <li>• What were the major activities planned and implemented by ICAO to support Thailand to address its SSC and improve its EI? What other activities/outputs were planned by the Region to address the needs of Thailand?</li> <li>• To what extent have the expected outputs and outcomes been achieved or are likely to be achieved? Were outputs produced and delivered so far in accordance with the plans? Has the quantity and quality of these outputs been satisfactory?</li> <li>• Has the Regional Office carried out a proper consultation and involvement of CAAT and other relevant actors during planning, implementation and monitoring?</li> <li>• How effective is the monitoring mechanisms of the Regional Office?</li> </ul>
Efficiency	<ul style="list-style-type: none"> <li>• Are resources (human resources, time, expertise, funds etc.) allocated and used strategically to provide the necessary support and to achieve the objectives of the Plans?</li> <li>• Are/were the activities/operations in line with the schedule of activities as defined in the operating plan?</li> <li>• How efficient was the Regional Office in utilizing allocated resources to deliver the planned results?</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>• Has the Regional Office and Thailand CAAT integrated an appropriate strategy for sustainability? How effective is it?</li> </ul>
Cross-cutting theme: Gender and Human Rights	<ul style="list-style-type: none"> <li>• Has the Regional Office integrated gender and human right issues (such as disability) in the projects/activities designed to support Thailand?</li> </ul>

## 2. Evaluation Approach and Methodology

### Approach

The evaluation team will employ an approach rooted in the evaluation criteria established by the Organisation for Economic Co-operation and Development (OECD) - Development Assistance Committee (DAC). These criteria encompass relevance, coherence, effectiveness, efficiency, and sustainability. While formulating the final evaluation questions, the evaluation team will carefully assess the accessibility and reliability of data and the ease of data collection to ensure a more credible and robust response to the evaluation inquiries. Additionally, the evaluation team will propose and refine further evaluation questions as part of the inception phase of the evaluation process.

The Evaluation Team, based on the literature review, understands that country level plans are not specifically designed that leaves the evaluators to use ICAO Business Plan, ICAO Budget (which includes strategic framework, programme narratives, and Regional Operating Plans as modus operandi for the evaluation, where Operational plans have a weak country level emphasis. This weakens the modus operandi at design documents for evaluation of country Programme. With this context, the approach is underpinned in the Theory Based Approach, where attention will be paid to theories and concepts propagated by regional team, team at the headquarters and other stakeholders, e.g., CAAT, DCA etc. for collections of assumptions - that are logically linked together towards the country portfolio and broadly towards betterment of aviation in Thailand.

## Methodology

The evaluation process will make use of qualitative methods. However, the quantitative information from the desk review will be analysed to substantiate information from qualitative means. The evaluation methods for data collection include desk review, Focus Group Discussions (FGDs) and Key Information Interviews.

The below descriptions present more details on data collection approaches and methods.

Desk Review: The initial steps involved a thorough review of existing documents, reports, and the relevant literature related to the aviation sector, including business plans and country-specific Aviation Plans. The consultant reviewed the following documents and will continue to explore further;

### ICAO Global Documents

- ICAO Strategic Framework
- ICAO Business Plan
- ICAO Budget (For 2020, 2021 AND 2022)
- ICAO Transformational Framework
- ICAO Evaluation Policy

### Regional Documents

- Regional Aviation Safety Group (RASG)/PIRG minutes,
- Global Aviation Safety Plan (GASP).
- Global Air Navigation Plan (GANP).
- Global Aviation Security Plan (GASeP)
- Reports related to Significant Safety Concern (SSP)

### Thailand Specific documents

- Thailand's Civil Aviation Master Plan,
- Thailand's State Safety Plans and Air Navigation Plans
- Thailand Mission Report
- Thailand Action Plan to Reduce Air Emissions
- Thailand's Civil Aviation Plans,

The desk review provided an understanding of the context and helped identify key areas of interest. However, it is noteworthy that the ICAO's documents related to Thailand provide a rather limited insight in to country plans, interventions and reporting.

## Interviews

- Face-to-face meetings with stakeholders Interviews will be held with the ICAO regional director/deputy regional director. In addition, the consulting team will also conduct interviews/face-to-face meetings with officials of CAAT and aviation experts. These meetings will facilitate in-depth discussions, allowing the consultant to document insights, perspectives and first-hand information.
- Virtual Interviews will be conducted with stakeholders who may not be accessible for face-to-face interviews due to geographical constraints and conflicts in schedules. Among others, the evaluator

will interview the ICAO head office and staff of bureaus using Zoom or Teams, ensuring efficient and secure communication.

Broadly these two categories of interview will focus engaging with the following key internal and external stakeholders.

Primary data collection Respondents approach	
Face-to-face KIIs	ICAO Regional Staff <ul style="list-style-type: none"> <li>- ICAO Regional Director</li> <li>- ICAO Deputy Director</li> <li>- ICAO Evaluation Focal Person</li> <li>- ICAO Regional Officers (Safety, Security and Facilitation, Air navigation, Environment and air transport, technical assistance)</li> </ul>
	CAAT/Ministry of Transport (We'll select the respondents based on suggestions from the ICAO Evaluation Focal Person, maybe from the below list) <ul style="list-style-type: none"> <li>- DG CAAT</li> <li>- Director of Safety</li> <li>- Director of Security,</li> <li>- Director of Air Navigation,</li> <li>- Director of Environment</li> <li>- Director Economic Development</li> <li>- Head, Air Navigation Service Provider</li> <li>- Head, Training Departments</li> </ul>
Virtual KIIs	ICAO Head Quarter staff <ul style="list-style-type: none"> <li>- Director, ANB</li> <li>- Director, ATB</li> <li>- Director, CDI</li> <li>- Deputy Director, ANB</li> <li>- Deputy Director, Monitoring and Oversight</li> <li>- Deputy Director of Aviation Security and Facilitation</li> <li>- Deputy Director of Environment</li> <li>- Chief, Implementation Support, AVSEC</li> <li>- Chief, Implementation Support, ANB</li> </ul>

Focus Group Discussions (FGDs): FGDs will be organised with aviation professionals and safety inspectors (CAAT/ RO will suggest names).

### Secondary Data Collection (SDC)

Secondary Data Collection (SDC) is a crucial tool employed by ICAO to gather information and insights from existing sources within the organization. This approach focuses on identifying, accessing, and utilizing relevant data and documents that have previously been compiled for various purposes. SDC will allow for a comprehensive understanding of the Thailand country portfolio without duplicating efforts or expending additional resources. The USOAP, CMA, and Regional office database is a central repository containing assessments, audit results, and regulatory information related to Member States' civil aviation authorities and interventions. The ICAO Intranet hosts a wealth of organizational resources, documents, and reports that will provide access to a wide range of information related to ICAO's strategic objectives, programme strategies, and initiatives within region and particularly in Thailand.

The combination of these data collection methods will provide a holistic view of the aviation sector in Thailand, its safety oversight and the progress made in response to the Significant Safety Concern (SSC). The face-to-face interviews/consultations will foster open communication with stakeholders. In contrast, virtual interview methods will allow the evaluator to engage a wide range of evaluation participants using a cost-effective online approach.

### Data Analysis

Qualitative and quantitative techniques will be employed to analyse and validate the data. The triangulation will be made through interviews, such as documenting opinions/views on the same themes from multiple interviews. In addition, the data will also be triangulated and validated using data from the desk review.

**ANNEX 2. LIST OF STAKEHOLDERS CONSULTED**

	NAME	DESIGNATION	METHOD OF CONSULTATION
RO APAC			
1.	Mr. Tao Ma,	Regional Director, RO APAC, ICAO	Individual interview
2.	All staff, RO APAC	Meeting with the RD, DRD, and all staff Briefing on Regional Office activities	Small-group interview
3.	Mr. S M Nazmul Anam	Regional Officer, Flight Safety (FS), RO APAC	Individual interview
4.	Ms. Matima Ariyachaipanich,	Flight Safety Officer, Flight Safety (FS), RO APAC	Individual interview
5.	Mr. Ross Lockie,	Regional Officer, Aviation Security and Facilitation (AVSEC FAL) , RO APAC	Small-group interview
6.	Mr. Reminton Low	Regional Officer, Aviation Security and Facilitation (AVSEC FAL) , RO APAC	Individual interview
7.	Dr. Punya Shakya	Regional Officer, Aerodrome and Ground Aids (AGA), RO APAC	Small-group interview
8.	Mr. Witsarut Chinwipat	Regional Officer, Aerodrome and Ground Aids (AGA), RO APAC	Individual interview
9.	Mr. Parakrama Dissanayake	Regional Officer, Technical Assistance (TA)	Small-group interview
10.	Mr. Luo Yi	Regional Officer, Communications, Navigation and Surveillance (CNS)	Small-group interview
11.	Ms. Soniya Nibhani	Regional Officer, ANS Implementation,	Small-group interview
12.	Mr. Peter Dunda	Regional officer, Meteorology and Environment	
13.	Mr. Sayuta Senobua	Regional officer, Environment and Climate Change	
14.	Ms. Lita Lee	Training and Capacity Building Officer, CASP-AP	
15.	Mr. Sudhir Singh	Chief Technical Advisor, COSCAP-SEA	Individual interview
CAAT			
16.	Mr. Suttipong Kongpool	Director General, CAAT	FGD
17.	Mr. Kajonpat Maklin,	Deputy Director General and Manager of Aviation Safety Management and Standards Assurance Office (SMO)	Focus group discussion

	NAME	DESIGNATION	METHOD OF CONSULTATION
18.	Mrs. Tawika Huayhongthong	Manager of Air Navigation Services Standards Dept. (ANS)	
19.	Ms. Haruethai Pattanapisudtichai,	ANS	
20.	Mr. Sarawoot Rungruengwajjake,	ANS	
21.	Mr. Anant Kanaviwatchai,	Manager of Economic Regulation Dept. (ERD)	
22.	Mrs. Rusnee Mustapa,	Manager of Aviation Security and Facilitation Standards Dept. (SFD)	
23.	Ms. Thanwathida Thongchim,	SFD	
24.	Mrs. Watcharapan Phusuntorn,	SFD	
25.	Mrs. Phatcharin Indamusika,	SFD	
26.	Ms. Sunicha Susiri,	SFD	
27.	Mr. Buntoeng Megchai	Manager of Air Navigation Operations Management Dept. (AND)	
28.	Mr. Phichpawis Plengsiriwat,	AND	
29.	Mr. Chaiwat Saekhew,	AND	
30.	Ms. Paramita Uthasin,	Acting Manager of Aviation Industry Development and Promotion Dept. (APD)	
31.	Ms. Phichitra Chayopatham, APD	APD	
32.	Ms. Jarupha Fueangsanga,	ERD	
33.	Ms. Budsarakham Promchai	SMO	
34.	Ms. Lucksanawadee Talanon	SMO	
35.	Ms. Chittinand Sukhakij,	SMO	
36.	Ms. Navara Prapaisilp,	SMO	
37.	Ms. Natta Nuya,	SMO	
38.	Mr. Chawit Punyamongkol	SMO	
39.	Ms. Nitcha Kannalak	SMO	Small-group interview
ICAO Headquarters (Bureaux/ OSG)			
40. .	CREAMER, Stephen	Director – Air Navigation Bureau, ICAO	Individual interview
41. .	GUINDON, Denis	Deputy Director, Monitoring and Oversight – Air Navigation Bureau, ICAO	Individual interview
42. .	LOPEZ GONZALEZ, Javier	Chief, Field Operations Section – Technical Cooperation Bureau, ICAO	Small-group interview
43. .	MERENS, Marco	Chief, Integrated Aviation Analysis Section (now Implementation Support, Planning and Coordination) – Air Navigation Bureau, ICAO	Individual interview

	NAME	DESIGNATION	METHOD OF CONSULTATION
44. .	RAHMA, Mohamed	Director – Air Transport Bureau, ICAO	Individual interview
45. .	VARGAS ARAYA, Jorge	Director, Technical Cooperation Bureau – ICAO	Small-group interview
CATC			
46. 62.	Dr. Pansak Nernsai and around 15 more participants from CATC	Director of Air Traffic Services, Acting Vice President of Academic Affairs) And 15 more faculty members from CATC	Focus Group Discussion
AeroThai			
47.	Mr. Paisan Praneetpongtrang	Executive Vice President (Head of Delegate)	
48.	Mr. Thaleingsak Phathong	Vice President (Air Traffic Management)	
49.	Mr. Visut Dechpokket	Vice President (Standards and Safety)	
50.	Mr. Wittaya Chunvattananon	Vice President (Air Traffic Services Engineering)	
51.	Mr. Debdhanit Yupho	Senior Director, Corporate Communication, Relations And Image Management Bureau	
52.	Mr. Chanyut Phrukkumwong	Director, Air Traffic Services Engineering Research And Development Department	
53.	Ms. Saifon Obromsook	Director, Safety Management Department	
54.	Mr. Thirapat Buakhao	Director, Services Standards Department	
55.	Ms. Supree Dharmasaroja	Director, Corporate Relations Department	
56.	Ms. Kunthinee Karunratanakul	Strategic Planning Assistant Manager	
57.	Mr. Sagoon Fucharoen	Executive Air Traffic Management Network Officer	
58.	Ms. Prapasara Kongsawat	Corporate Relations Manager	
ICAO HQ Bureaus			
59.	Arrojandro Lisboa De Andrea	Chief Business Support Section,	
60.	Lopez Gonzales Javier	Chief, Field Operations Section	
61.	Marin, Miguel	Deputy Director-Capacity Development	

## ANNEX 3. LIST OF DOCUMENTS REVIEWED

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1. RO APAC (2018). Regional Operating Plan 2018.
2. RO APAC (2019). Regional Operating Plan 2019.
3. RO APAC (2020). Regional Operating Plan 2020.
4. RO APAC (2021). Regional Operating Plan 2021
5. RO APAC (2022). Regional Operating Plan 2022.
6. Global Aviation Security Plan, APAC Region, 2017
7. ASIA AND PACIFIC AVIATION SECURITY ROADMAP, 217
8. COOPERATIVE AVIATION SECURITY PROGRAMME ASIA PACIFIC, 2018
9. Universal Security Audit Programme Continuous Monitoring Approach -Analysis of Audit Results 2022
10. ICAO Business Plan 2018-2020
11. ICAO Business Plan 2020-2022
12. ICAO Business Plan 2023-25
13. ICAO Budget 2020-2022
14. ASIA-PACIFIC REGIONAL AVIATION SAFETY PLAN 2020-2022
15. Thailand Air Transport Board (ATB) Brief Air Transport Indicators, 2019
16. Thailand, Economic and Air Transport Indicators 2023
17. THAILAND's Action Plan to Reduce Aviation Emissions version 2021
18. CAT Mission to Thailand, Report, 2019
19. AIR TRAFFIC SERVICES GUIDANCE MATERIAL FOR OPERATION IN A COVID-19 CONTEXT, 2021
20. Thailand, National Strategy, 2020-2037
21. The Study on Transport and Traffic Development Master Plan Executive Summary Report, 2011
22. APAC, Intensifying Asia-Pacific Collaboration to Address Efficiency and Safety, Regional Report,
23. APAC Regional Annual Safety Report, 2016,
24. APAC Regional Annual Safety Report, 2017,
25. APAC Regional Annual Safety Report, 2018,
26. APAC Regional Annual Safety Report, 2021,
27. Universal Safety Oversight Audit Programme Continuous Monitoring Approach Results, 2013-2015
28. Universal Safety Oversight Audit Programme Continuous Monitoring Approach Results, 2015-2018
29. Universal Safety Oversight Audit Programme Continuous Monitoring Approach Results, 2019-2021
30. FINAL REPORT OF THE ICAO COORDINATED VALIDATION MISSION IN THE KINGDOM OF THAILAND, 2019
31. REPORT OF THE EIGHTH MEETING OF THE REGIONAL AVIATION SAFETY GROUP ASIA AND PACIFIC REGIONS (RASG-APAC/8) Bangkok, Thailand, 2018

32. FINAL REPORT OF THE USOAP CMA AUDIT OF THE CIVIL AVIATION SYSTEM OF THE KINGDOM OF THAILAND (2015)
33. FINAL REPORT OF THE ICAO COORDINATED VALIDATION MISSION IN THE KINGDOM OF THAILAND, 2017
34. ICAO iSTAR 4.0 State Safety Briefing, Thailand (25/9/2023)
35. ICAO RO APAC Monthly Updates (January-November, 2023, 11 updates)
36. Summary Record of Steering Committee Meetings, CASP-AP, 2016-23
37. CATC Training Programme Catalogue, 2022
38. 58<sup>th</sup> Conference of DGCA APAC, ANSP Committee, Progress Report, 2023
39. Global Aviation Training Briefing, Thailand 2022
40. State of Thai Aviation Industry, CAAT, 2020
41. USOAP State Profile, Thailand, 2023
42. DP03-FPP Activities and Work Report, 2023

## ANNEX 4: LIST OF ICAO SPONSORED PROJECTS IN THAILAND

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- RAS97903: Cooperative Development of Operational Safety and Continuing Airworthiness Programme - South-East Asia (COSCAP-SEA)
- RAS04901: Cooperative Aviation Security Programme - Asia and Pacific Region (CASP-AP)
- RAS09801: Asia-Pacific Flight Procedure Programme (FPP)
- RAS14801: Assistance for the procurement of Asia/Pacific Common Regional Virtual Private Network (CRV) Services

## ANNEX 5: PLANNED VS ACHIEVED FOR 2016-2023 (THAILAND)

TABLE A2 – APAC  
2017 -19 OPERATING PLAN  
SAFETY

<p>Expected Result 1: Improved Aviation Safety: Enhanced capabilities of States to manage risks, associated with aviation activities to an acceptable level of safety performance</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 1</u>: Implementation of State Safety Programmes among Member States (An-19 provisions) is increased</li> <li>• <u>Key Performance Indicator</u>: # of States having implemented Safety Management provisions (via USOAP results, PQs, SAAQs, CC, EFOD)</li> </ul>
<p>Expected Result 2: Strengthened regulatory capacity: Enhanced capabilities of States, in particular those with low levels of effective implementation of global standards, to fulfil their mandates</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 2</u>: Implementation of effective safety oversight systems among Member States is increased</li> <li>• <u>Key Performance Indicator</u>: # of States having a score of above 60 per cent effective implementation (EI) of the critical elements (CEs) of a State safety oversight system (via USOAP results, PQs, SAAQs, CC, EFOD)</li> </ul>
<p>Expected Result 12: Strengthened Capacity Development: Enhanced capabilities of States in particular developing and least developed countries to implement global standards and policies and improve air connectivity.</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 12</u>: ICAO's No Country Left Behind initiatives are implemented.</li> <li>• <u>Key Performance Indicator</u>: Effective implementation rates of safety and security oversight systems; # of outstanding SSCs and/or SSeCs</li> </ul>

Business Plan Period 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist States in the implementation of policies and provisions to address critical safety	Assist States to resolve the SSC	- CAT Missions 2016 - CAT Mission 2018	Conducted	Nil	

Business Plan Period 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
issues concerning Safety Management, Search and Rescue, and other areas	Coordinate training in the field of Aircraft Accident and Incident Investigation	AIG Workshops are conducted in different subjects each year for APAC where Thailand participates actively.  Number of participants to attend the APAC-AIG Workshop: 2017 – 4, 2018 – 7 and 2019 – 4	2015 AIG EI was 41.67%  Current EI on AIG is 40.51%  Workshops conducted	Nil	
	Coordinate training in the field of SSP and SMS	SSP/SMS Workshops are conducted each year for APAC where Thailand participates actively.  Number of participants to attended the SMS and SSP 2018 – 4	Conducted	Nil	
Monitor Member States through USOAP Continuous Monitoring Approach (CMA) and assist States in developing tailored plans of action to address risk	Assessment of Corrective Action Plans in coordination with ANB/MO when prerequisites are met (more than 75% progress);  Participation in ICVM missions and audits	- CAT Missions 2016  - CAT Mission 2018	2016 the EI was below 32.13%  2023 the EI augmented to 61.73%.  Lowest EI is on CE 7 (48.42) and 8 (22.50).	Need to retain the qualified human resources consistently and train them	

Business Plan Period 2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist States in the implementation of policies and provisions to address critical safety issues concerning Safety Management, Search and Rescue, and other areas	Development of regional guidance materials/circulars on safety-related subjects	Thailand is a part of the AP-RASP implementation programme where NASP is published in line with ICAO GASP and AP-RASP.	SEI implementation and promulgation of NASP		
	Assist States to resolve the SSC	Bhutan has progressed one step forward for resolving the SSC in ANS.	To be updated by Takata/RO ATM	Nil	
	Coordinate training in the field of Aircraft Accident and Incident Investigation	AIG Workshops are conducted in different subjects each year for APAC where Thailand participates actively.  Number of participants to attended the AIG Workshop: 2020 – 5, 2021 – 5 & 2022 – 10	2015 AIG EI was 41.67%  Current EI on AIG is 40.51%  conducted	Nil	
	Coordinate training in the field of SSP and SMS	SSP/SMS Workshops are conducted each year for APAC where Thailand participates actively.	Thailand involved	Nil	
Monitor Member States though USOAP Continuous Monitoring Approach (CMA) and assist States in developing tailored plans of action to address risk	Assessment of Corrective Action Plans in coordination with ANB/MO when prerequisites are met (more than 75% progress);  Participation in ICVM missions and audits	2016 the EI was below 32.13%  2023 the EI augmented to 61.73%.	Done		

## AIR NAVIGATION CAPACITY &amp; EFFICIENCY

<p>Expected Result 4: Optimized the performance of the Global Aviation System: Enhanced the capabilities of States to maximize the benefits of the use of existing technical capabilities and technologies, and increase the return on investment of new ones</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 4</u>: Use of business cases and coordination at local and regional level is improved</li> <li>• <u>Key Performance Indicator</u>: # of reported deployment plans</li> </ul>
<p>Expected Result 11: Improved Data, Analysis and Forecasting: Enhanced capabilities of States to use, analysis and exchange aviation data for decision-making and operational improvement and to measure and, to the extent possible, predict the various aspects of civil aviation development</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 11</u>: Quality, quantity and analysis of aviation data, including forecasts and tools shared with States, are improved</li> <li>• <u>Key Performance Indicator</u>: # of analysis using ICAO data, analysis and forecasts</li> </ul>
<p>Expected Result 12: Strengthened Capacity Development: Enhanced capabilities of States in particular developing and least developed countries to implement global standards and policies and improve air connectivity</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 12</u>: ICAO's No Country Left Behind initiatives are implemented.</li> <li>• <u>Key Performance Indicator</u>: Effective implementation rates of safety and security oversight systems; # of outstanding SSCs and/or SSeCs</li> </ul>

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
(CNS) Assist States in the implementation of policies and provisions	Guidance for and monitoring of PBN implementation (B0-APTA) through PBNICG and PBN go teams plan		PBN implementation met the requirements set by A37-11.		

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
on Communication, Navigation and Surveillance (CNS) (ANIWP : ENB-CNS)	Regional APT position for World Radio communication Conferences (WRC) 2019 developed by APT in line with ICAO position		Thailand's position to APT was in line with ICAO position.		
	Efficient planning and coordination of frequencies between States and the Regional Office through SRWG guidance. This enables to push back the transition to 8.33KHz spacing scheme.		All frequency coordination have been processed in time.		
	State individual contracts for Common aeronautical Virtual Private Network (CRV) services Implementation plan and guidance for CRV	Validate the technical feasibility and expected performance of CRV solution.	Hong Kong and Bangkok took lead in Asia Pacific region in completing assessment on  Common Regional Virtual Private Network, the live demonstration was successfully performed in the end of 2017.		
	Meetings, coordination and intervention as required to facilitate implementation of AIDC (Air traffic services Inter-facility Data Communication) connections as specified by the Asia/Pacific Seamless ATM Plan		Incorporated AIDC functionality into the Thailand Modernization CNS/ATM System (TMCS) project.		
	Meetings, coordination and intervention as required to facilitate implementation of airspace within which		Five ADS-B ground stations have been		

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
	Automatic Dependent Surveillance-Broadcast (ADS-B) services are provided		installed for research and development purpose.		
	Guidance for and monitoring of ATS surveillance implementation (through ADS-B or MLAT or radar surveillance systems), correctly integrated into the ATC system situation display		Incorporated ADS-B and MLAT functionality into the Thailand Modernization CNS/ATM System (TMCS) project.		
	Meetings, coordination and intervention as required to facilitate implementation of en-route data-link: Automatic Dependent Surveillance-Contract (ADS-C) and Controller Pilot Data-Link Communications (CPDLC)		AEROTHAI jointly acted as datalink service provider in ASEAN.		

Business Plan 2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
(CNS) Assist States in the implementation of	Guidance for and monitoring of PBN implementation (B0-APTA) through PBNICG and PBN go teams plan		PBN implementation met the requirements set by A37-11.		

Business Plan 2020-22					
Project/ Key Activity(From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
policies and provisions on Communication, Navigation and Surveillance (CNS) (ANIWP : ENB-CNS)	Regional APT position for World Radio communication Conferences (WRC) 2019 developed by APT in line with ICAO position		Thailand's position to APT was in line with ICAO position		
	Efficient planning and coordination of frequencies between States and the Regional Office through SRWG guidance. This enables to push back the transition to 8.33KHz spacing scheme.		Mr. Chainan Chaisompong, Air Traffic Engineering Manager from AEROTHAI was elected as the new Chair of the SRWG in 2020.		
	State individual contracts for Common aeronautical Virtual Private Network (CRV) services Implementation plan and guidance for CRV	Contract CRV before the end of 2022	1. Contract in 3Q2021 2. Service readiness in 2Q2022		
	Meetings, coordination and intervention as required to facilitate implementation of AIDC (Air traffic services Inter-facility Data Communication) connections as specified by the Asia/Pacific Seamless ATM Plan		In 2020, Thailand has successfully implemented AIDC communications with three adjacent ATSUs (Kuala Lumpur ACC, Vientiane ACC, Phnom Penh ACC). Yangon ACC was the last adjacent ATSU to be implemented.		
	Meetings, coordination and intervention as required to facilitate implementation of airspace within which Automatic Dependent Surveillance-Broadcast (ADS-B) services are provided		4 ADS-B systems installed at Doi Inthanon (Chaingmai), Hatyai Airport (VTSS), Samui Airport (VTSM) and Ubon Ratchathani Airport (VTUU) have been applied for use with air traffic services. 3 SSRs installed at Surat Thani Airport (VTSB), Ubon Ratchathani Airport (VTUU), Phuket Airport (VTSP), has been upgraded with ADS-B capability.		

Business Plan 2020-22					
Project/ Key Activity(From the Operating Plan of APAC Region)	Deliverables (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/ challenges, if any	Remarks
	Guidance for and monitoring of ATS surveillance implementation (through ADS-B or MLAT or radar surveillance systems), correctly integrated into the ATC system situation display		MLAT has been in operation at Suvarnabhumi Airport (VTBS) since 2006 with plans to procure an updated MLAT system to replace the existing one in 2024. At Don Mueang Airport (VTBD), MLAT has been in operation since 2019, implemented simultaneously with the new ATM automation system.		
	Meetings, coordination and intervention as required to facilitate implementation of en-route data-link: Automatic Dependent Surveillance-Contract (ADS-C) and Controller Pilot Data-Link Communications (CPDLC)		AEROTHAI cooperated with ICAO APAC office to resume the datalink service in Myanmar after the termination of service by SITA in 2022.		

## SECURITY &amp; FACILITATION (AVSEC and FAL.)

<p>Expected Result 5: Reduced Aviation Security Risk: Enhanced capabilities of States to reduce the level of risk posed by existing, new and emerging threats to civil aviation and boarder integrity by effective regulatory oversight frameworks and implementation of countermeasures and responses commensurate with the level of threat, as well as the harmonized global aviation security policy framework</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 5</u>: Uniform and consistent countermeasures and responses are implemented</li> <li>• <u>Key Performance Indicator</u>: Level of effective implementation (as observed by USAP-CMA)</li> </ul>
<p>Expected Result 6: Improved Efficiency in Border Clearance Operations: Enhanced capabilities of States to facilitate movement of people and goods by air with minimum operational delays, and high-quality security and law enforcement</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 6</u>: The border crossing procedures and the mechanisms to establish and confirm the identity of travellers are enhanced</li> <li>• <u>Key Performance Indicator</u>: Level of Annex 9 implementation (from Compliance Checklists completed by States)</li> </ul>
<p>Expected Result 12: Strengthened Capacity Development: Enhanced capabilities of States in particular developing and least developed countries to implement global standards and policies and improve air connectivity</p> <ul style="list-style-type: none"> <li>• <u>Key Outcome 12</u>: ICAO's No Country Left Behind initiatives are implemented.</li> <li>• <u>Key Performance Indicator</u>: Effective implementation rates of safety and security oversight systems; # of outstanding SSCs and/or SSeCs</li> </ul>

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Supports States in the Region in their endeavours to implement Annex 17 and Annex 9 SARPs	Ensure successful conduct of the RASCF and other regional meetings as appropriate. Implementation of scheduled assistance and capacity	The RASCF/7 in 2019 was hosted by Thailand and conducted successfully. Thailand has attended all RASCF's conducted.	RASCF/9 2019 hosted successfully by Thailand	Following RASCF/9 there was a hiatus for physical meetings of the RASCF and RASCF 8, 9 and 10 from 2020 to 2022 were conducted virtually until RASCF/11 was conducted as a	

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
	building activities including ASIPs.			physical meeting in Thailand at the Regional Office.	
Supports the effective implementation of the USAP-CMA Programme	Pre-audit and liaison; Audit participation; Post-audit follow-up actions	<p>USAP-CMA audit results have formed the basis of "measuring" the effectiveness of RO AVSEC and FAL support for Thailand and which has seen Thailand's EI rise from 55.5% following a USAP-CMA audit in 2017 to 67.1% following the 2020 USAP-CMA audit (which exceeded the GAsEP aspirational target for that time period and was above APAC and global averages).</p> <p>In addition, the ROs AVSEC/FAL receive regular feedback from the CAAT and partners/donors that they are highly appreciative of the assistance and guidance offered and level of accessibility to the ROs.</p>	As per the planned deliverable.	N/A	
Coordinates and supports the ICAO ASTCs	Establishment of APAC ASTC annual schedule and monitoring of successful conduct of ICAO sponsored training activities	N/A for Thailand as Thailand does not host an ICAO ASTC. However, CAAT regularly has participants attend training at ASTCs in APAC.	As per planned deliverable	N/A	
Assists in developing aviation security and facilitation (including TRIP/MRTD)	Tailored assistance missions to States (in accordance with ICAO priorities and resources)	Most recently ROs AVSEC/FAL and RD providing an information briefing and meeting with Thailand's Passport Division, Department of Consular Affairs, Ministry of Foreign Affairs regarding the development of the next generation of Thailand's epassports. The RO also facilitated	As per planned deliverable	N/A	

Business Plan 2017-19					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
assistance projects in States in the Region		<p>further meeting between the Thai Delegation and ICAO HQs FAL Section technical officers and CDI regarding the same issue during the Eighteenth Symposium on the ICAO Traveller Identification Programme and Joint International Criminal Police Organization Biometrics Forum from 12 - 14 September in Montreal.</p> <p>ROs AVSEC\FAL has also worked with the Thai CAA AVSEC regarding immediate actions to be undertaken to resolve a potential SSeC following the USAP audit in 2020. Appropriate actions were taken and the issue was resolved prior to an SSeC being issued.</p> <p>ROs AVSEC/FAL has provided extensive guidance and assistance relating to the development of the CAAT Quality Control and Oversight system including acting as a facilitator and guide on a CAA audit of Phuket International Airport in 2018 and providing tailored training either directly or in association with CASP-AP and partners/donors as well as answering emails, telephone calls and meeting etc on a regular routine basis.</p>			

Business Plan 2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Supports States in the Region in their endeavours to implement Annex 17 and Annex 9 SARPs	Ensure successful conduct of the RASCF and other regional meetings as appropriate. Implementation of scheduled assistance and capacity building activities including ASIPs.	As per deliverable for 2017 to 2019 and 2019 to 2022	As per planned deliverable	N/A	
Supports the effective implementation of the USAP-CMA Programme	Pre-audit and liaison; Audit participation; Post-audit follow-up actions	Audit in 2020 successfully conducted.	As per planned deliverable.	N/A	
Coordinates and supports the ICAO ASTCs	Establishment of APAC ASTC annual schedule and monitoring of successful conduct of ICAO sponsored training activities	As per deliverable for 2017 to 2019	As per planned deliverable	N/A	
Assists in developing aviation security and facilitation (including TRIP/MRTD) assistance projects in States in the Region	Tailored assistance missions to States (in accordance with ICAO priorities and resources)	As per deliverable for 2017 to 2019. In addition, a complimentary ICAO iPack relating to establishment of Public Health Corridors was accepted by Thailand and delivered in 2022. The RO also participates in CAAT office off site events, providing presentations and guidance.	As per planned deliverable	N/A	

## ENVIRONMENTAL PROTECTION

Expected Result 10: Reduced Environmental Impact on Global Climate: Enhanced capabilities of States to voluntarily prepare and implement appropriate measures to reduce their CO2 emissions from international aviation within the harmonized global regulatory framework in consistent with the UN system environmental protection policies and practices

- Key Outcome 10: Voluntary preparation and implementation by States of appropriate measures is enhanced
- Key Performance Indicator: # of States' action plans on CO2 emissions reduction activities submitted to ICAO, # of national focal points trained, # of States that receive assistance for preparation and implementation of action plans

Expected Result 12: Strengthened Capacity Development: Enhanced capabilities of States in particular developing and least developed countries to implement global standards and policies and improve air connectivity

- Key Outcome 12: ICAO's No Country Left Behind initiatives are implemented.
- Key Performance Indicator: Effective implementation rates of safety and security oversight systems; # of outstanding SSCs and/or SSeCs

2017-19					
Project/ Key Activity(From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand (Regional)	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist development and implementation of States' action plans on CO2 emissions reduction activities in the region	Regional training/seminars on action plan development and measurement of implementation etc.	Regional Seminar on States' Action Plan and CORSIA, in Jakarta, Indonesia (10-13 Apr 2017) ICAO CORSIA Regional Seminar, in Brisbane, Australia (16-18 Apr 2018) ICAO CORSIA Regional Workshop, in Seoul, South Korea (1-2 Apr 2019)	<ul style="list-style-type: none"> <li>• Thailand successfully updated and submitted to ICAO the 2nd SAP in 2018</li> <li>• Thailand gained knowledge and information on CORSIA requirements</li> <li>• Thailand notified ICAO to voluntarily participate in CORSIA from its pilot phase</li> </ul>	NA	

2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand (Regional)	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist development and implementation of States' action plans on CO2 emissions reduction activities in the region	Regional training/seminars on action plan and development and measurement of implementation etc.	ICAO State Action Plan Regional Seminar (online), 5-6 Aug 2020  APAC Webinar for the 10th Anniversary of the ICAO State Action Plan (SAP) Initiative on CO2 Emissions Reduction, 22 Apr 2021  ICAO Global Aviation Dialogues on the feasibility of a long-term global aspirational goal for international aviation CO2 emissions reductions (LTAG-GLADs) – APAC Region, virtual event, 9-10 May 2021  APAC Webinar on SAP Initiative on CO2 Emissions Reduction in APAC Region and Implementation of CORSIA, 19 Aug 2021  ICAO Global Aviation Dialogues on the feasibility of a long-term global aspirational goal for international aviation CO2 emissions reductions (LTAG-GLADs) – APAC Region, virtual event, 28 Mar and 8 Apr 2022  APAC Webinar on Implementation of CORSIA, 30 Jun 2022  APAC Webinar on SAP Initiative on CO2 Emissions Reduction, 18 Aug 2022	<ul style="list-style-type: none"> <li>Thailand successfully submitted its CO2 emissions data for 2019, 2020, and 2021 to ICAO (via CCR) timely</li> <li>Thailand successfully updated and submitted to ICAO the 3rd SAP in November 2021</li> <li>Thai stakeholders gained knowledge and information on the ICAO work on the feasibility of a long-term global aspirational goal for international aviation CO2 emissions reductions (LTAG)</li> <li>Thailand joined the ICAO Assistance, Capacity Building, and Training on Sustainable Aviation Fuels (ACT-SAF) from 2022</li> <li>Thai stakeholders obtained information on the progress of CORSIA implementation and</li> </ul>	NA	

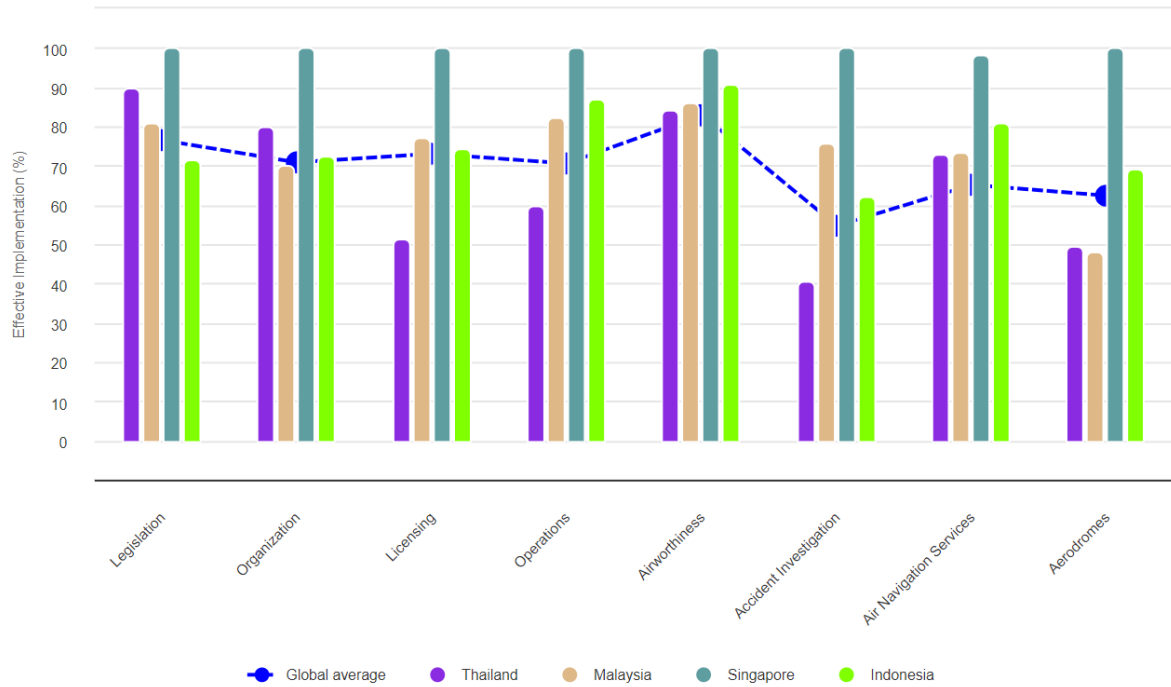
2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand (Regional)	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
		. Participated in ASEAN Workshop on CORSIA conducted by CAA Thailand and DGCA Indonesia, in Bali, 29-30 Nov 2022  . Supported Thailand in hosting the ICAO Environmental Regional Seminar - APAC, Bangkok, 3-4 May 2023	updated information from the 41 <sup>st</sup> Session of the ICAO Assembly  • Thai stakeholders (government and industry) gained knowledge and experience on SAF development		

## ECONOMIC DEVELOPMENT

2017-19					
Project/ Key Activity ((This is the 2020-22) nothing indicated in 2017-19))	Deliverable (This is the 2020-22) nothing indicated in 2017-19))	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist States in the Region to follow ICAO's policies and guidance, as well as Regional Action Plans	Dissemination and promotion of policies and guidance, as well as assistance activities through interaction with States.	<ul style="list-style-type: none"> <li>- Dissemination of ICAO State Letters in the region including Thailand.</li> <li>- Economic Development of Air Transport as an Agenda Item in the annual Regional DGCA Conf.</li> </ul>	<ul style="list-style-type: none"> <li>- Thailand was a recipient of ICAO documents.</li> <li>- Thailand participated in all three Conferences</li> </ul>		
Assist ICAO HQ as applicable, in the conduct of air transport events in APAC Region through coordination and administrative arrangements	Delivery of current and updated information on air transport economics and regulation	ICAO Aviation Data and Analysis Seminar 10-13 December 2019, at APAC RO, Bangkok, Thailand	Sixteen participants from Thailand from the regulator, airports and airlines benefitted		

2020-22					
Project/ Key Activity (From the Operating Plan of APAC Region)	Deliverable (From the Operating Plan of APAC Region)	Planned Deliverable in Thailand	Achievements/ status in Thailand	Gaps/challenges, if any	Remarks
Assist States in the Region to follow ICAO's policies and guidance, as well as Regional Action Plans	Dissemination and promotion of policies and guidance, as well as assistance activities through interaction with States.	<ul style="list-style-type: none"> <li>- Dissemination of ICAO State Letters in the region including Thailand.</li> <li>- Economic Development of Air Transport as an Agenda Item in the annual Regional DGCA Conf.</li> </ul>	<ul style="list-style-type: none"> <li>- Thailand was a recipient of ICAO documents</li> <li>- Thailand participated in the 2022 DGCA Conference</li> </ul>		During the three years period under review, APAC activities were limited due to travel restrictions.
Assist ICAO HQ as applicable, in the conduct of air transport events in APAC Region through coordination and administrative arrangements	Delivery of current and updated information on air transport economics and regulation	<ul style="list-style-type: none"> <li>- Thailand was provided with PHC i-Pack in 2022 to assist restart of air travel in the COVID-19 period.</li> </ul>	<ul style="list-style-type: none"> <li>- Thailand presented their lessons learnt at the Annual CAPSCA –APAC Meeting in 2022</li> </ul>		For 3 years, APAC activities were limited due to travel restrictions.
		<ul style="list-style-type: none"> <li>- Support provided for collection of air transport statistics from the APAC States/Administrations</li> </ul>			

## ANNEX 6: COMPARISON OF EI RATE-GLOBAL VS THAILAND



**ANNEX 7: CATC TRAINING STATISTIC 2018-22**

No	Training Activities	2018			2019			2020			2021			2022		
		Thai	Foreign	Total	Thai	Foreign	Total	Thai	Foreign	Total	Thai	Foreign	Total	Thai	Foreign	Total
1	English and Ground - Based Aviation Course	270		270	256		256	467		467	580		580	135		135
2	Operation Groups	189	137	326	91	150	241	65	52	117	40		40	459	67	526
3	Aviation Management Group	339		339	313		313	281	1	282	293		293	270		270
4	Aircraft Maintenance Group	599		599	371		371	447		447	115		115	338	1	339
5	Electronic Group	139		139	99	2	101	152		152	127		127	41		41
6	Flying Training	158	1	159	105		105	56		56	18		18	138	1	139
7	Master of Management Program in Aviation	18		18	14		14	33		33	26		26	14		14
8	Other short courses and ICAO courses	212		212	196	14	210	94	6	100	114	4	118	187	7	194
	<b>Total</b>	<b>1924</b>	<b>138</b>	<b>2062</b>	<b>1445</b>	<b>166</b>	<b>1611</b>	<b>1595</b>	<b>59</b>	<b>1654</b>	<b>1313</b>	<b>4</b>	<b>1317</b>	<b>1582</b>	<b>76</b>	<b>1658</b>

## ANNEX 8: COMPARISON OF PROTOCOL FINDINGS BY AREA AND CRITICAL FINDING MATRIX 2019 AND 2023

Comparison of protocol findings by Area and Critical Finding Matrix 2019 and 2023																
	LEG		ORG		PEL		OPS		AIR		AIG		ANS		AGA	
	2019	2023	2019	2023	2019	2023	2019	2023	2019	2023	2019	2023	2019	2023	2019	2023
CE-1	7	1	1				1	1			9	7	2	1	2	
CE-2	6				7	2	3	3	6	4	6	6	6	1	6	2
CE-3			7	2	5	5	2	2	1	1	7	6	19	4	4	1
CE-4			2		8	5	1	1	2		4	3	29	1	6	3
CE-5	2		1		5	1	6	2	2		20	16	6	1	5	1
CE-6					17	13	55	24	11	6			30	4	41	32
CE-7					8	7	11	8	4	3			20	13	17	18
CE-8					8	6	5	3	3	2	11	9	7	4	9	5

## ANNEX 9: LIST OF AERODROMES CERTIFIED BETWEEN 2015-23

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Name of Aerodrome <sup>61</sup>	Date of Certification	Certified by
Phuket International Airport	13 Jan 2015	Certified by DCA
Hat Yai International Airport	13 Jan 2015	Certified by DCA
Betong Airport (Domestic Airport)	28 Jan 2022	Certified by CAAT
U-Tapao Rayong Pattaya International Airport	02 Mar 2022	Certified by CAAT
Samui Airport	20 Aug 2022	Certified by CAAT
Suvarnabhumi International Airport	09 Nov 2022	Certified by CAAT
Chiang Mai International Airport	09 Nov 2022	Certified by CAAT
Don Mueang International Airport	17 Jul 2023	Certified by CAAT
Mae Fah Luang-Chiang Rai International Airport	30 Nov 2023	Certified by CAAT

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<sup>61</sup> Provided by Regional Officer-ICAO

## ANNEX 10: CDI PROJECTS IN THAILAND

Project Code	Status	Documentation (in folder 1.CDI Projects)	Note
THA16601	Financially Closed	PRODOC (signed) End course report	
THA18801	Financially Closed	PRODOC (signed) Acceptance of the deployment of the experts	Note 1
THA16801	Pipeline-Cancelled	Draft PRODOC Assistance request by CAAT on 1 <sup>st</sup> Feb 2016 for provision of OPAS experts (PEL, OPS and AIR)	Note 2
THA16802	Pipeline-Cancelled	Draft PRODOC Assistance request by CAAT on 2 <sup>nd</sup> Mar 2016 for training courses for ANS personnel	Note 2
THA19801	Pipeline-Cancelled	Draft PRODOC Assistance request by CAAT on 17 Apr 2019 for provision of OPAS expert (AGA)	Note 2
THA21801	Pipeline-Cancelled	Draft PRODOC Assistance request by AOT on 1 Feb 2021 to review an airport capacity study of Suvarnabhumi Airport	Note 2
RAS04901 (Phase IV)	Implementation	PRODOC (signed) Signature Page for Thailand	Note 3
RAS09801 (Phase IV)	Implementation	PRODOC (signed) Signature Page for Thailand End of Assignment Report (Phase III)	Note 3
RAS14801	Implementation	PRODOC (signed) Signature Page for Thailand	Note 3
RAS97903 (Phase V)	Implementation	PRODOC (signed) Signature Page for Thailand	Note 3

- *Note 1: Additional information regarding implementation has been lost during the Outlook migration from premises to cloud solution.*
- *Note 2: Pipeline projects have been considered lost after no further reply or confirmation from the customer, following the submission of the draft PRODOC.*
- *Note 3: Projects are ongoing and managed by the Regional Office.*

## ANNEX 11: MANAGEMENT ACTION PLAN

Ref	Recommendation	Priority Rating	Accepted (Y/N)	Management Comments	Agreed Actions	Office/Section Responsible	Target Date
1	The Regional Office should include sufficient information including target Member States that will benefit from each activity in the Operating Plan to effectively monitor and assess progress and establish a system (folder) to compile country-specific information for better understanding of each State's aviation sector.	High	Y	<p>Mission reports for each mission undertaken by the RD and staff members are developed and includes follow up actions to be taken.</p> <p>The system for shared folder (cloud) is already in place whereby all APAC Regional Officers/Programme Associate/Assistant updates their activities/information in their folder. Information, unless confidential, is accessible by all staff members.</p> <p>iStars dashboard on secure portal provides State Safety Briefing including EI scores for each APAC State.</p>	<p>The Regional Office will establish and maintain a systematic Intelligence Database folder for APAC States outlining country specific information i.e. aviation sector information on national laws, rules and regulations, accidents and incidents data, technical and operational activities, governance structures, management, and personnel etc. This database will provide better understanding of each State's Aviation Sector</p> <p>Sufficient information including target Member States will be identified in the Operating Plan that would benefit from each activity.</p>	APAC	June 2025
2	The Regional Office should assign State focal persons to follow up the overall aviation sector of individual Member State and to coordinate planning and support to the State.	Medium	Y	<p>State focal persons are listed in APAC RO ROSI for ICAO communications.</p> <p>At the technical level, Regional Officers of each technical discipline maintain an updated list of individual Member State's focal point in their specialised areas of responsibilities. For instance, RO/ATM has the go-to ATM focal points for all APAC States. Similarly, the AVSEC FAL have their updated point of contact for each APAC Member State to coordinate planning and support to individual Member States</p>	<p>The Regional Office will assign State focal persons from the different technical sections to follow up with each individual Member State and to coordinate planning and support to the State in their technical areas.</p>	APAC	Dec 2024

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3	In collaboration with CAAT, the Regional Office should establish a coordination arrangement to bring together all partners supporting Thailand to avoid duplication and maximize effectiveness and efficiency.	Medium	Y	This is currently being practiced within APAC. APAC Management including Regional Officers regularly coordinate with the US FAA, EASA, UK CAAi and other aviation bodies to collaborate the capacity building activities provided to Thailand and other APAC Member States. The same is done for Security and Facilitation whereby coordination with the US TSA, Australia Department of Infrastructure, Transport, Regional Development, Communications and the Arts and similar bodies of the UK amongst others, are being carried out by the APAC Management and RO AVSEC FAL team.	The Regional Office will organise an annual APAC Implementation Support Dialogue Forum at the beginning of each year bringing together States and Development Partners to discuss and exchange views on capacity building activities in the APAC region including Thailand. The Forum will enable the States/Partners to present their short and mid-term work programmes and projects in the APAC Region, engage in discussions and coordinate plans to build capacity and capability and assist the APAC States/Administrations including Thailand to achieve the regional and global safety targets and enhance safety oversight capabilities. This way duplication is avoided, and efficiency is ensured.	APAC	Dec 2025
4	The Regional Office should provide targeted support to Thailand to improve USOAP EI in general and CE -6, CE-7 and CE-8 in particular.	High	Y	Because of easy accessibility, Thailand has received regular technical assistance and guidance from the APAC Regional Office, some of which are as exemplified below. <ul style="list-style-type: none"> <li>• CAT missions 2016 and 2018.</li> <li>• Preparation for audits and corrective action plan such as USOAP ICVM 2019.</li> <li>• Provide OJT to and conduct assessment on a prospective aerodrome inspector of CAAT during the initial certification audit of Krabi Airport (VTSG), Krabi, Thailand, 2020.</li> <li>• Provide expert advice to CAAT during the initial certification audit of U-Tapao Rayong-Pattaya Int'l Airport (VTBU), Rayong, Thailand, 2020.</li> <li>• Implemented A-CDM at Suvarnabhumi and Don Mueang International Airports in 2020</li> <li>• Preparation for USAP and CAP 2020-2021.</li> </ul>	The Regional Office will work closely with the CAAT to ensure necessary targeted assistance is provided to Thailand in preparing for USOAP CMA activity and to improve its overall EI levels. Specific to CE -6, CE-7 and CE-8, the RO will deploy an ICAO APAC CAT technical assistance mission team to CAA Thailand in early 2025 to prepare Thailand for its 2025 USOAP CMA Audit.	APAC	Dec 2025

<b>Ref</b>	<b>Recommendation</b>	<b>Priority Rating</b>	<b>Accepted (Y/N)</b>	<b>Management Comments</b>	<b>Agreed Actions</b>	<b>Office/Section Responsible</b>	<b>Target Date</b>
5	The Regional Office in collaboration with the host government should revise the Host Country Agreement to address challenges related to repair and maintenance of the building.	Medium	Y	The priority is to implement APAC RO premises' repair and refreshment project for which the discussion is ongoing with the MOT.	The Regional Office will coordinate with the respective Ministries on this matter, including involvement of several Ministries such as Foreign Affairs, Transport, Finance etc. and the processes also requires Thailand Government Cabinet's approval. This will be an extensive processes and back-stopping support from ICAO LEB will be essential.	APAC	Dec. 2027

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