Examination of the Feasibility of an Asia Pacific Civil Aviation Commission

Regional Coordination Mechanisms Task Force

Asia Pacific Civil Aviation Commission (APCAC) Feasibility Study - Part II

(Presented by the Part II working group)

Executive Summary

The 57th Conference of Directors-General of Civil Aviation, Asia and Pacific Regions (DCGA) tasked the Regional Coordination Mechanisms Task Force (RCM TF) to examine the feasibility of an Asia-Pacific Regional Civil Aviation Commission (APCAC). The RCM TF has approached this task in three parts:

- Part I: Information-gathering about a Civil Aviation Commission (CAC).
- Part II: Identifying the challenges and opportunities.
- Part III: Assessment of the feasibility of an APCAC.

This report focuses on Part II: the challenges and opportunities the region faces, and thus the nature of the problem this study seeks to describe.

Managing passenger and freight growth, the need to reduce aviation's environmental impacts, and improving facilitation using the lessons learned from the impact on aviation of COVID-19 present further challenges and opportunities for aviation in the Asia-Pacific region.

The characteristics of the region bring a unique context. Parts of the region are lagging in the implementation of ICAO's plans and standards. While the challenges and opportunities in the Asia-Pacific region have similarities with global ones, the way these affect the region reflects the specific features of the region.

Improved coordination and cooperation could be one way to allow the region to take advantage of opportunities by developing responses, including implementation support, that address the needs of States in the region and the region as a whole. It would also allow the region to better engage with and influence ICAO's priorities and its provision of support to areas of need within the region.

This report has identified **three broad options** for the region to consider addressing these challenges.

Introduction

The 57th DGCA Conference tasked the RCM TF to examine the feasibility of establishing an Asia-Pacific Civil Aviation Commission (APCAC). Two papers were presented to that conference proposing that an APCAC be established. Consensus to support the proposals was not reached.

The RCM TF determined to undertake its work in three parts:

- Part I: Information-gathering about a Civil Aviation Commission (CAC).
- Part II: Identifying the challenges and opportunities.
- Part III: Assessment of the feasibility of an APCAC.

This report relates to **Part II**: **Identifying the Challenges and Opportunities**. It was prepared by a working group led by New Zealand, with representatives from Fiji, Japan, the Republic of Korea, Singapore and the United States of America. Australia also provided comments on the draft report.

This report:

- a. Identifies the challenges facing the Asia-Pacific (APAC) region.
- b. Discusses the options that could be adopted to address those challenges and take advantage of opportunities.

Note: Part II does not explicitly explore challenges and opportunities relating directly to the possible establishment of an APCAC. Instead, it also looks at the current frameworks to enhance civil aviation collaboration and coordination across the APAC region. Information from Part II will feed into Part III which will examine the feasibility of establishing an APCAC as well as other options.

Section A: Background

At the 54th DGCA Conference in Ulaanbaatar, Mongolia, in August 2017, the APCAC Task Force (APCAC TF) presented a progress report on the feasibility of the potential establishment of an APCAC. This report determined that there was insufficient basis to establish an APCAC.

Accordingly, the Conference agreed to conclude the APCAC feasibility study and establish a new Task Force to focus exclusively on strengthening and evolving existing regional mechanisms for regional cooperation, towards capability- and capacity-building, and technical assistance. The RCM TF was established to undertake this work in 2017.

At the 57th DGCA Conference in Incheon, Republic of Korea in July 2022, there were two discussion papers tabled in relation to a proposal for the establishment of an APCAC (DP/11a/4 and DP/11a/3). While acknowledging these discussion papers, the Conference entrusted the RCM TF to examine the feasibility of an APCAC as part of its work programme and report on progress to the next DGCA Conference, to be held in Dhaka, Bangladesh in October 2023.

This paper comprises three sections:

- Section A: provides background and contextual information including the history of this work and an overview of the APAC region.
- Section B: describes the challenges faced by the region and identifies a range of opportunities that may emerge if the challenges are addressed.
- **Section C:** describes some of the options that could be considered to address the challenges.

An Overview of the ICAO APAC Region

The APAC region consists of 39 ICAO Member States and 13 Territories. It has liaisons with two Special Administrative Regions of China and has 49 Flight Information Regions. The ICAO Regional Office serves as the central body for States/Administrations in the region, overseeing the planning and implementation of ICAO provisions and plans by States/Administrations e.g. International Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS), and Regional Air Navigation Planning) and providing secretariat services for other regional mechanisms (such as DGCA and RCM TF). The APAC Regional Sub Office (RSO) and the Pacific Island States Liaison Officer (PIS LO) also support these activities.

The diversity of the APAC region is reflected in various ways. This includes:

- a. APAC States have different political and judicial systems;
- b. There is significant diversity in economic size and development of States, such as vast differences in GDP and population;
- c. The region is linguistically and culturally diverse;

- d. States are subject to geographical differences some are isolated, whereas others are densely populated. In addition, the region is home to both landlocked and small island developing States; and
- e. There are different levels of size, complexity, and maturity in States' aviation systems.

These differences are both a strength and a weakness. Both ICAO and APAC States have recognised that this diversity can pose challenges. The attainment of a safe, secure, and environmentally sustainable aviation system across the region requires close collaboration and coordination among States, the aviation industry, and other stakeholders.

States in the region have realised some opportunities to improve cooperation and coordination, such as addressing common needs, e.g. securing additional resources from ICAO's Regular Budget for the APAC Regional Office. These opportunities include:

- States share experiences, best practices and lessons learned following major natural events affecting aviation across the region to ensure others are better prepared e.g. pandemics, volcanic ash, cyclones and typhoons.
- b. States are connected with each other by a range of formal and informal relationships and agreements relating to aviation. Examples of this include through the DGCA conference, which brings together all APAC states on an annual basis, various bilateral and trilateral agreements and technical arrangements, and recently established APAC Ministerial Conferences. A sample of additional mechanisms is provided in Annex 1.
- c. The region works together on aviation specific technical issues through various fora to influence and implement developments to ICAO Standards and Recommended Practices (SARPs). For example, the Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) identifies and addresses specific deficiencies through regional procedures in the air navigation field, and which are then presented as a regional view to ICAO.
- d. Regional platforms (e.g. COSCAP) have also been established to address the needs of developing States in particular.

Section B: Challenges facing the APAC region

Global aviation is changing in many ways and the challenges resulting from those changes are complex. Further, the impact of these challenges on the region and its approach to address them may differ from that of other regions. These challenges range from those related to post-pandemic sector recovery and economic growth, to those associated with the environment, security, facilitation and technological advances.

The challenges faced by the APAC region include:

- a. The APAC region is one of the fastest growing aviation economies in the world, although this growth is not even across the region. As the sector grows and changes, that creates challenges relating to:
 - Enabling the region to level up safety and security capabilities and effectively mitigate safety and security risks, as the region's Universal Safety Oversight Audit Programme (USOAP) and the Universal Security Audit Programme (USAP) effective implementation scores are below the global average.
 - ii. Enabling the region to move forward as a whole and ensuring that developing States are provided adequate assistance to make sure they are not left behind.
 - iii. Ensuring there is adequate infrastructure investment in aviation safety, security, air navigation services, environmental protection, facilitation, and human resource development.
 - iv. Ensuring that States can attract and retain appropriate technical resources and expertise to keep up with a rapidly growing sector. The 2023 APAC Needs Survey, conducted by the RCM TF, has highlighted this as a top need across the whole region, especially whilst recovering from COVID-19.
- b. Emerging technologies in aviation are advancing at a rapid pace, and are providing new and unknown challenges, including:
 - Ensuring the region can enable a timely policy and regulatory response to sector demands and advancements in relation to emerging technologies, which are moving much faster than anticipated.
 - ii. Regulating a range of advancements that are largely unknown, in a way that maintains a safe and secure aviation system.
- c. The need for international aviation to reduce its environmental impact. As the sector responds, such as by adopting the use of sustainable aviation fuels, new electric propulsion systems, etc., the challenges emerge as:
 - i. Assisting with State readiness on a case-by-case basis to address ICAO's long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050.
 - ii. Adequately regulating new emission-reducing systems (such as electric propulsion systems) to ensure they meet safety standards.

iii. Increasing the production and availability of sustainable aviation fuels and clean energy across the region.

d. Continuing to build capacity and capability across the region:

- First, in relation to the technical capability and capacity to establish, operate and maintain aviation services as the sector rapidly grows and evolves at different rates and in different ways across the APAC region.
- ii. Second, in relation to having the necessary **regulatory capability** (safety, security, environmental, economic) to oversee the sector and ensure its ongoing safety and secure operation in a harmonised way. For example, the region needs to continue developing regulatory capability to address cyber security concerns which is a focus of ICAO.
- e. Effectively enhancing regional cooperation and collaboration with finite resources and gaining ICAO support for assisting with specific regional priorities

Opportunities

The region will have a better capability and capacity to address these aviation challenges and to take advantage of the opportunities by working together more closely. The opportunities can be summarised as follows:

There is an opportunity for the APAC region to enhance its collaboration and coordination to assist with mitigating challenges. This includes:

- a. Allowing the region to work further towards agreed civil aviation goals and initiatives, thus improving the cohesiveness across the region.
- b. Allowing for more systematic approaches to be adopted in relation to improving civil aviation safety, security, aviation environmental protection, facilitation, human resource development and air navigation services across the region.
- c. Continuing to enhance state-to-state relationships, as well as relationships with ICAO and industry bodies.
- d. Increasing response and cooperation in the recovery of the aviation sector from the COVID-19 pandemic, action on climate change in the aviation sector, and the continuous improvement of aviation safety, security, and facilitation.
- e. Encouraging advocacy and support at a regional level of common needs of APAC Member States at international fora relating to civil aviation.

There is an opportunity for the region to embrace the diversity of States and draw on differences as a strength, not a weakness, to further enhance collaboration, coordination, and innovation. This will:

- a. Encourage diverse thinking and innovative approaches to aviation issues by leveraging differences amongst States.
- b. Encourage creativity and innovative solutions when dealing with new technologies that go against the status quo.

c. Result in more comprehensive decision-making that can likely accommodate for the different rates of growth and development across States.

There is an opportunity to make sure there are effective assistance and capacity-building mechanisms in place to improve aviation safety and security across the region.

Section C: Options to address the challenges and leverage the opportunities.

The APAC region already has a range of collaboration and coordination mechanisms, as detailed in Annex 1. These mechanisms may be technical (e.g. RASG-APAC), or strategic (e.g. DGCA and Ministerial Conferences) in focus. While the DGCA Conference is starting to engage more meaningfully with all of ICAO's strategic objectives, it is a single annual event and needs to be able to ensure delegations are capable of handling multiple ICAO strategic objectives and build agreed common regional positions and put these forward globally, such as at the ICAO Assembly.

The challenges summarised in Section B demonstrate that the issues confronting aviation in the region are changing and evolving. In some cases, these can be (or are already being) addressed through the traditional collaboration and coordination mechanisms that the region has in place. Increasingly, there are complex issues that cannot be addressed through technical mechanisms alone. These include issues that affect all or many States in the region including matters around implementation and support.

For the purposes of this Part II work, the following objective is proposed:

The APAC region is seeking to increase its ability to address challenges and prioritise actions in the region through:

- i. Promoting the implementation of ICAO strategic objectives, including standards and recommended practices (SARPs) consistently throughout the region.
- ii. Using the strengths of the States within the region to enable and enhance the benefits all States derive from civil aviation.
- iii. While maximising the benefits of aviation for all States in the region, ensuring that the differing needs of individual States within the region are addressed through the collaboration and coordination mechanisms used to achieve 'i' and 'ii".
- iv. Influencing ICAO to address the needs and priorities of the region and shaping the development of global civil aviation matters consistent with the region's agreed interests.

To achieve the above requires consideration to be given to effectiveness of existing regional mechanisms, how they should be enhanced, as well as new mechanisms and what they could achieve.

In considering the options available, the pre-conditions that would need to be in place to enable the options to achieve the outcomes should be identified and described.

Further, the nature of the emerging issues faced by the region will not have a consistent impact across the region. Some matters will likely be more important to some States or groupings of States at sub-regional level than at a whole-of-region level. The 2023 APAC Needs Study highlights the diversity of priorities across different States and sub-regions.

Thus, the options need to be flexible enough to consider for variation within the APAC region without fragmenting the region.

Three broad options for improving collaboration and coordination exist:

Option 1

 Existing mechanisms unchanged (status quo)

Option 2

 Existing mechanisms revised and enhanced

Option 3

New mechanisms

Regardless of which option (or combination of options) is pursued, each requires preconditions to be met in order to have the best chance of enabling the region to achieve its objectives. As with the options, there are three broad sets of preconditions. This is elaborated below:

Option 1

 This region will continue to operate as it currently does and would not make any changes to the existing framework

Option 2

 All States would be required to commit to these enhancements through active and regular participation and commitment of resources

Option 3

• The region must agree to the establishment of these new mechanisms including commitments on States to fully participate, resource, and formalise such mechanisms as necessary.

Option 1 – existing mechanisms unchanged – will see the region continue to operate as it currently does and would not make any changes to the existing framework. This option is clearly not tenable given the challenges faced by the region. As a result, the working group recommends that this option is disregarded.

The options that will enable improved outcomes are enhancing existing mechanisms or establishing new mechanisms (options 2 and 3) ¹. These appear to present the most opportunities to address the challenges that have been identified. As a result, the working group suggests that these options are considered in Part III of the feasibility study.

Part II: Identifying the Challenges and Opportunities – Final Report

¹ These options were presented to the DGCA in October 2023. The DGCA agreed to discard option 1 and continue to progress Part III of the feasibility study using options 2 and 3.

Annex 1: Examples of existing regional coordination and collaboration mechanisms

To help achieve regional priorities and enhance collaboration and coordination, the region has a large range of existing mechanisms in place to assist.

Note: The table below is not intended to be exhaustive, but rather captures key bodies that are used for regional collaboration and coordination purposes.

Mechanism	Objective
Directors General of Civil Aviation (DGCA) Conference	The Conference of Directors General of Civil Aviation Asia and Pacific Regions (more commonly known as the DGCA Conference) is an annual meeting with rotational hosting responsibilities. The aim of the conference is to supplement ICAO processes by bringing APAC Directors General together on an annual basis to discuss strategic and policy matters affecting aviation safety and security across the region. The DGCA Conference gives the opportunity for all member States to be represented.
Regional Coordination Mechanisms Task Force (RCM TF)	Following the conclusion of the first APCAC feasibility study that was prepared in 2016-2017, the 54th DGCA Conference (Ulaanbaatar, Mongolia, 2017) agreed to establish a new Taskforce to focus exclusively on strengthening and evolving existing regional mechanisms for regional cooperation, towards capability and capacity building and technical assistance. The TF was reconvened in the second half of 2022 to resume its work after a pause due to the pandemic.
Regional Aviation Safety Group – Asia Pacific (RASG-APAC)	RASG-APAC was endorsed at the 47th DGCA Conference (Macao, China, 2010) as a focal point to ensure harmonisation and coordination of efforts aimed at reducing aviation safety risks for the APAC region ² .

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² Annual Safety Report Asia Pacific Region 2017 (icao.int)

Mechanism	Objective
Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG)	 APANPIRG was established in 1991 by the ICAO Council, and seeks to: ensure continuous and coherent development of the Asia/Pacific Regional Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and Global Air Navigation Plan (Doc 9750) and reflecting global requirements. facilitate the implementation of air navigation systems and services as identified in the Asia/Pacific Regional Air Navigation Plan with due observance to the primacy of air safety, regularity, and efficiency; and identify and address specific deficiencies in the air navigation field.
ICAO APAC Regional Office	The primary role of the ICAO APAC Regional Office is to foster the planning and implementation by States of the following ICAO provisions: International Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS), and Regional Air Navigation Planning, for the safety, security, and efficiency of air transport. The Regional Office also provides many secretariat services for other mechanisms (such as DGCA and RCM TF).
Existing State-to-State multilateral relationships and bilateral mechanisms	Established by States on a case-by-case basis.
State-to-ICAO relationships	Established between States and ICAO on a case-by-case basis.
APAC Ministerial Conference	Established to provide a forum for Ministers and their representatives to discuss and decide strategies for managing future safety and air navigation enhancements within the region.
TRAINAIR Plus Programme	Aims to assist with achieving the ICAO goal of improving the safety and efficiency of air transport through the establishment, maintenance and monitoring of high standards of training and competency of aviation personnel on a world-wide basis and in a cost-effective manner.

Mechanism	Objective
ASEAN Air Transport Meetings	Made up of Southeast Asian States, and comprises of various sub-working groups under the wider ASEAN Air Transport Working Group. These sub-groups include:
	ASEAN Air Transport Economic Cooperation Sub-Working Group
	ASEAN Air Transport Technical Cooperation Sub-Working Group
	ASEAN Air Transport Sectoral Negotiations
	ASEAN Transport Search and Rescue Forum
COSCAPS	The Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) are designed to enhance the safety and efficiency of air transport through the establishment of a self-sustaining sub-regional cooperative entity providing technical services in safety oversight to Member States. COSCAPs are implemented by ICAO and comprise DGCAs of participating States, ICAO representatives, and other organisations.
Appointment of an ICAO Pacific Liaison Officer	A Pacific Liaison Officer was appointed in late 2023 in recognition of the distinct sustainable development and ICAO compliance challenges which many States in this region presently face. This post will serve as the key coordination point on civil aviation development matters among the PSIDS themselves, ICAO's APAC Regional Office and Capacity Development and Implementation bureau, and applicable regional and international organizations, including Pacific Aviation Safety Office (PASO).