12th Meeting of the Regional Coordination Mechanisms Task Force

Video Conference
4 September 2023

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

(Presented by the Part II working group)

Executive Summary

The 57th DGCA Conference tasked the Regional Coordination Mechanisms Task Force (RCM TF) to assess the feasibility of establishing 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 focusses on Part II: the challenges and opportunities the region faces, and thus the nature of the problem this study seeks to establish.

The challenges and opportunities the Asia-Pacific region faces largely stem from changes currently occurring in the global civil aviation system, and in the medium-to long-term. Growth in aviation activity, environmental pressures, rapid changes in technology all present challenges and opportunities for aviation.

This report has identified **five options** for the region to address these challenges, each of which responds differently to the challenges and opportunities; and each of which would require different levels of commitment for the States within the Asia-Pacific region.

Action: The RCM TF is invited to:
 a. **Discuss** the contents of this paper

Introduction

1. 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 the 57th DGCA proposing that an APCAC be established. Consensus to support the proposals was not reached.

2. 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.

3. 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.

4. This report:

   a. Identifies the challenges facing the Asia-Pacific (APAC) region.

   b. Discusses the options that could be adopted to address those challenges.

   c. Notes some of the existing coordination mechanisms used by the region.

Note: Part II does not explicitly explore challenges and opportunities relating directly to the possible establishment of an APCAC. Instead, it 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 — the feasibility study — which will examine the feasibility of establishing an APCAC.

Section A: Background

5. At the 54th Asia Pacific Directors-General of Civil Aviation Conference (DGCA/54) in Ulaanbaatar, Mongolia, in August 2017, the APCAC Task Force (APCAC TF) presented a progress report on the feasibility of the potential establishment of a Civil Aviation Commission for the APAC region. This report determined that there was insufficient basis to establish an APCAC.

6. 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 Regional Coordination Mechanisms Task Force (RCM TF) was established to undertake this work.

7. At the DGCA/57 in Incheon, Republic of Korea in July 2022, there were two discussion papers tabled in relation to a renewed proposal for the establishment of an APCAC (DP/11a/4 and DP/11a/3). While acknowledging these discussion papers, the Conference entrusted the RCMTF 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.

8. 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 adopted to address the challenges.

An overview of the ICAO Asia-Pacific region

9. 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 APAC region is significantly different to other ICAO regions, being the most populous and geographically vast region.

10. The diversity of the APAC region is prominent and 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 differences in GDP;

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.

11. 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 amongst States, the aviation industry, and safety and security partners.

12. Despite the diversity across the region, there are also a range of ways that the region is bound together, when dealing with both the aviation sector and in a more general sense. This includes:

a. States face a wide range of challenges that are especially prominent within the geographic APAC region, such as natural phenomena that pose threats to aviation. States are extremely resilient, and many share experiences and lessons learned following events across the region to ensure others are better prepared.

b. States are interconnected with each other by a range of formal and informal relationships and agreements relating to both aviation and more generally. Examples of this include through the Directors General of Civil Aviation conference, which brings together all APAC states on an annual basis, various bilateral and trilateral agreements and technical arrangements, and the APAC ministerial conference. A sample of additional mechanisms is provided in Annex 1. From a more general standpoint, the region remains interconnected by similar mechanisms relating to trade and economic agreements, defence agreements and so forth. In some cases, States may also be connected to States outside of the APAC region, such as through the Five Eyes intelligence alliance (consisting of New Zealand, Australia, the United States, the United Kingdom, and Canada).

c. The region works together on aviation specific issues through various fora to both influence and implement developments to ICAO Standards and Recommended Practices (SARPs). For example, sub-groups of the Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) assess and develop standards at a technical level, and which are then presented as a regional view back to ICAO.

Section B: Challenges facing the APAC region

13. Aviation across the globe is changing in many ways and the challenges resulting from those changes are complex. These challenges range from those related to post-pandemic sector recovery and economic growth, to those associated with the environment, security, and technological advances.

14. The challenges faced specifically by the APAC region can be summarised as follows:

    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 that relate to:**

        i. Enabling the region to move forward as a whole and that less-advanced States are provided adequate assistance to make sure they are not left behind.

        ii. Ensuring there is adequate infrastructure investment in aviation safety, security, air navigation services, environmental protection, facilitation, and human resource development.

        iii. Ensuring that States can attract and retain appropriate technical resource 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[1].

    b. **Emerging technologies in aviation are advancing at a rapid place, and is providing new and unknown challenges, including:**

        i. Ensuring the region can enable a timely 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. **Concerns about the environmental impacts of aviation are growing. As the sector responds, such as by adopting the use of sustainable aviation fuels, new electric propulsion systems, etc., the challenges emerge as:**

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[1] Footnote to be added following release of final results

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

   i. 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 continuing developing regulatory capability to address cyber security concerns – which is a predominant focus of ICAO.

15. These challenges are complicated by the diversity of the region, and the specific interests of individual States. Consequently, an additional challenge is faced:

   e. **Effectively enhancing regional cooperation and collaboration on matters of common interest, and representing these to ICAO, whilst also enabling States to represent their own individual views as may be appropriate.**

16. If these challenges remain prevalent, we may find that the region starts to drift behind the rest of the world in our ability to mitigate safety and security risks. For example, the regional Universal Safety Oversight Audit Program (USOAP) rate is which is below the global average[2]. Additionally, doing nothing will continue to isolate states from the region that are building capacity and capability at a slower pace than others, further fragmenting the cohesiveness of the region.

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[2] The world average for USOAP effective implementation (EI) score is 68.78%. In contrast, the average APAC EI score is 65.87%.

Opportunities

17. By addressing the identified challenges, the APAC region can take advantage of various opportunities that will enhance the aviation system on both a regional and global level. These opportunities will help to further ensure that any regional mechanisms in place are linked to regional priorities and are achieving what they are intended to do.

18. The opportunities can be summarised as follows:

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

    a. Allow the region to work further towards harmonised goals and initiatives, thus improving the cohesiveness across the region.

    b. Allow for more systematic approaches to be adopted in relation to improving safety, security, environmental issues, facilitation, human resource development and air navigation services across the region.

    c. Continue to enhance state-to-state relationships, as well as relationships with ICAO and industry bodies. The region already does this well, as evidenced in paragraph 12 (b). Placing more focus on this will further contribute to a more harmonised regional and global aviation system, regardless of political arrangements and different rates of growth across the region.

    d. Likely assist with the need for increased response and cooperation for the recovery of the aviation sector from COVID-19, response to climate change in the aviation sector, and the continuous improvement of aviation safety and security.

    e. Encourage advocacy and support at a regional level of common positions of APAC Member States at international fora relating to civil aviation.

20. 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 richer thinking, more diverse ideas, and different approaches to aviation issues by recognising differences amongst States.

    b. Encourage creativity and innovative solutions when dealing with new technologies that go against the status quo.

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

21. 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 and ensure that no country is left behind.

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

22. The APAC region already has a wide range of collaboration and coordination mechanisms, as detailed in Annex 1. These mechanisms generally are technical in focus (e.g., are focussed on technical issues for air navigation or certification processes, such as APANPIRG), as opposed to having a strategic focus on the issues and challenges faced by the region.

23. 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 matters of policy that reflect the emergence of complex issues that cannot be addressed through technical mechanisms alone.

24. A clear and simple articulation of the objective or objectives that the region seeks to achieve through better coordination and collaboration is critical to aiding this feasibility study. Another way of expressing the objective or objectives is a problem statement, which in turn enables the benefits of a particular solution (or solutions) to be described and assessed.

25. For the purposes of this Stage 2 work, the following is proposed:

    The APAC region is seeking to increase its ability to see the regions collective aspirations achieved through:
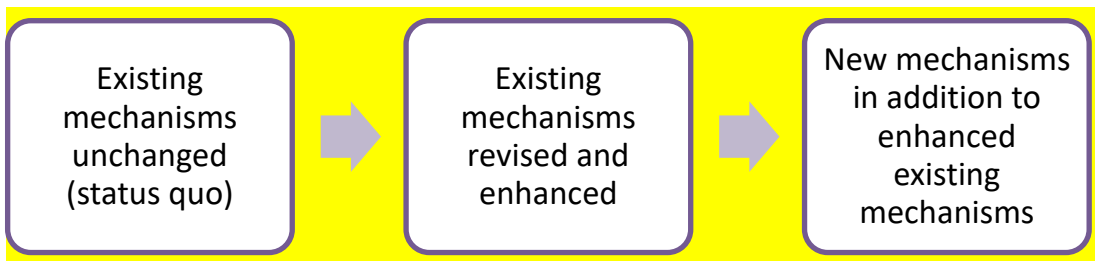
    i. *Influencing the ICAO at all levels.*

    ii. *Using the strengths of the States within the region to enable and enhance the benefits all States derive from civil aviation, such as connection and economic development.*

    iii. *Implementing ICAO strategic intentions and policies as well as technical standards and practices consistently throughout the region.*

    iv. *Whilst maximising the benefits of aviation for all States in the region, ensuring that the differing ambitions of individual States within the region are recognised, respected and valued through the collaboration and coordination mechanisms used to achieve 'i', 'ii" and 'iii'.*

26. To achieve the above, and to address the issues the region will face in the future, requires consideration to be given to effectiveness of the existing mechanisms, how they might 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 also need to be identified and described.

27. Further, the nature of the emerging issues faced by the region will not have an 'even' 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.[3] Thus, the options considered need to be flexible enough to enable some variation within the APAC region without fragmenting the region.

28. A continuum of options for improving collaboration and coordination exist. This continuum ranges from the *status quo* through to new mechanisms. Diagrammatically, the continuum can be shown as below.

Existing mechanisms unchanged (status quo)	→	Existing mechanisms revised and enhanced	→	New mechanisms in addition to enhanced existing mechanisms

29. If the objective of the region is to be more effective in influencing ICAO and to enable all States within the region to maximise the benefits that accrue from aviation, then at the very least, existing mechanisms would need to be revised and enhanced. This means that the range of options includes revising and enhancing existing mechanisms and establishing new mechanisms, or a combination of both.

30. For example, if the DGCA Conference is thought of as a coordination and collaboration mechanism, it could be revised in several different ways to make it more effective.

31. At the other end of the spectrum, a new mechanism could be a CAC similar to those established in other regions (noting some are established by Treaty, and others are established using different mechanisms).
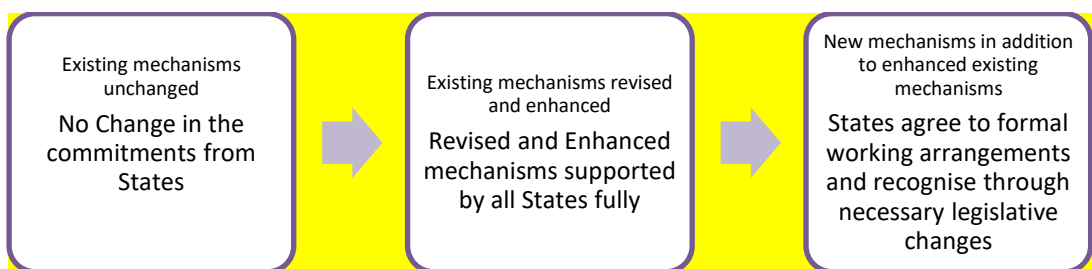
32. The following table summarises how the continuum of options might address the objectives and set out above.

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[3] Footnote to be added following release of final results

Objectives/options	Existing mechanisms unchanged (Status Quo)	Existing Mechanisms Revised and Enhanced	New Mechanisms
Influence ICAO at all levels	Partially effective, maintaining current level of APAC influence	Would enable improved effectiveness	Likely to be most effective
Enhance benefits derived from aviation throughout the region	Partially effective, reflecting benefits States within the region already derive, and future benefits to be derived from existing mechanisms and initiatives	Likely to enable greater benefits, while enabling States to elect the degree to which they wish to benefit, recognising that each may have different priorities and domestic imperatives	Likely to enable greater benefits, Depending on the nature of the new mechanism, States can elect the degree to which they wish to benefit, recognising that each may have different priorities and domestic imperatives
Implement Strategic Policies as well as Technical Standards and Practices consistently throughout the region	Limited effectiveness as existing mechanisms are generally technical in focus	Likely to be more effective dependent on extent of revision and enhancements	Likely to be most effective dependent on nature of new mechanisms
Ensure differences within the region are recognised, respected and valued	Differences are not expressly considered in the overall structure and operation of existing mechanisms	Likely to be more effective in recognising differences such as domestic priorities	Likely to be more effective, although noting that some new mechanisms may present challenges and limitations also

33. Regardless of where on the continuum of options solutions fall, each broad type of option would require pre-conditions to be met in order for the option (or combination of options) to have the best chance of enabling the region to achieve its objectives. As with the options, the preconditions can be considered as a continuum. This is shown below:

Existing mechanisms unchanged	Existing mechanisms revised and enhanced	New mechanisms in addition to enhanced existing mechanisms
No Change in the commitments from States	→ Revised and Enhanced mechanisms supported by all States fully	→ States agree to formal working arrangements and recognise through necessary legislative changes

34. Whatever changes are made to achieve the objectives set out above, the only part of the continuum that will enable improved outcomes ranges from

enhancing existing mechanisms to establishing new ones. It is only by making some change that the region will:

a. Move forward in a consistent and effective way, inclusive of all Member States;

b. Build the capability and capacity required to ensure a safe and secure regional aviation system that brings the within the desired connections and economic benefits; and

c. Embrace diversity and encourage innovation and creative solutions to the technical and strategic issues that are becoming more prevalent across the region.

Annex 1: Examples of existing regional coordination and collaboration mechanisms

36. 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 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[4].
Asia-Pacific Air Navigation Planning and Implementation	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

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[4] Annual Safety Report Asia Pacific Region 2017 (icao.int)

Regional Group (APANPIRG)	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. The first conference was held in Beijing, China in 2018, with the second conference set to be held in New Delhi, India in late 2023.
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.
ASEAN Air Transport Meetings	Made up of South East 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.