



*International Civil Aviation Organization*

ICAO

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

Bangkok, Thailand, 18 – 21 March 2025

## **Agenda Item 7: ANSP Coordination and Civil/Military Cooperation**

### **UPDATE ON CIVIL-MILITARY COOPERATION IN ATM**

(Presented by the Secretariat)

#### **SUMMARY**

This paper presents information on the issues and initiatives of Civil-Military Cooperation in ATM in the Asia and Pacific Region.

## **1. INTRODUCTION**

1.1 Effective civil-military cooperation in air traffic management (ATM) will allow civil aviation to flourish and military aviation to perform their required missions. Pursuant to Article 3 d) of the Chicago Convention, ICAO urges States to consider the safety of navigation of civil aircraft when issuing regulations for their state aircraft. In 2021, ICAO published the Manual on Civil and Military Cooperation in ATM (Doc 10088) to replace Circular 330 as a follow-up of Appendix I of Resolution A40-4. It provides comprehensive guidance to States wishing to implement or improve civil-military cooperation for ATM, for the safe and optimal use of the airspace by both parties.

1.2 Given that the Asia/Pacific region is expecting rapid growth in the coming years, civil-military cooperation in ATM (CMAC) remains one of the highest priority items in the Asia/Pacific region, as evidenced in the APAC Seamless ANS Plan. One of the key enablers for improvement of ATM efficiencies supported by Global ATM Operational Concept (ICAO Doc 9854) is the use of FUA, which is also one of the key elements in Global Air Navigation Plan (ICAO Doc 9750).

1.3 The APAC Seamless ANS Plan Version 4.0 (approved by ANPANPIRG/35, 2024) has identified the following key operational elements related to CMAC for the Region:

<b>Functional Category</b>	<b>Element</b>	<b>Description</b>	<b>Priority</b>
Operational	ASBU - FRT0 B0/1 to B0/4	Direct routing, airspace planning and FUA, flexible routings, and basic conflict detection and conformance monitoring (PASL 7.32, 7.34, 7.39)	1
	ASBU - FRT0 B1/1 to B1/7	Free Route Airspace, RNP routes, Advanced FUA and Airspace Management (ASM), Dynamic Sectorisation, Enhanced Conflict Detection Tools and Conformance Monitoring, and MultiSector Planner Function (PASL 7.32, 7.54)	2

	Regional	Civil-Military Special Use Airspace (SUA) management (PARS 7.16)	1
	Regional	Civil-Military strategic and tactical coordination (PASL 7.47)	1
	Regional	Civil-Military common procedures and training (PASL 7.47)	2
	Regional	Civil-Military integrated systems and facilities (PASL 7.47)	2

1.4 The performance improvement plan of the APAC Seamless ANS Plan concerning CMAC is as follows:

***Phase II (expected implementation by 07 November 2019)***

- 7.16 *Civil-Military Airspace expectations are as follows:*
- a) *SUA should only be established after due consideration of its effect on civil air traffic by the appropriate Airspace Authority to ensure it will be:*
    - *used for the purpose that it is established;*
    - *used regularly*
    - *as small as possible, including any internal buffers, required to contain the activity therein;*
    - *if applicable, operated in accordance with FUA principles; and*
    - *activated only when it is being utilised; and*
  - b) *SUA should be regularly reviewed to ensure the activities that affect the airspace, and size and timing of such activity are accurately reflected by the SUA type, dimensions, activation notice and duration of activation.*
- 7.39 *ATC units should conduct Airspace Planning and enable systems that manage direct and flexible routings where practicable, and the optimal operation of FUA consistent with FRT0-B0/1 to B0/4 (Priority 1).*
- 7.47 *Civil-Military ATM expectations are as follows:*
- a) *a national Civil-Military body should be formed to coordinate strategic civil-military activities (military training should be conducted in locations and/or at times that do not adversely affect civilian operations, particularly those associated with major aerodromes);*
  - b) *formal civil-military liaison should take place for tactical responses by encouraging military participation at civil ATM meetings and within ATC centres;*
  - c) *integration of civil and military ATM systems using joint procurement, and sharing of ATS surveillance data (especially from ADS-B systems) should be provided as far as practicable;*
  - d) *joint provision of Civil-Military navigation aids and aerodromes;*
  - e) *common training should be conducted between civil and military ATM units in areas of common interest; and*
  - f) *civil and military ATM units should utilize common procedures as far as practicable.*

*Note: the term 'military' in this context may include other State functions such as customs, police, and paramilitary activities*

***Phase III (expected implementation by 03 November 2022)***

- 7.54 *ACCs should enable, where practicable, Free Route Airspace, RNP routes, Advanced FUA and Airspace Management (ASM), Dynamic Sectorisation,*

*Enhanced Conflict Detection Tools and Conformance Monitoring and Multi-Sector Planner Function consistent with FRT0-B1/1 to B1/7.*

*Note: CPAR is a key enabler for 'free route airspace' and enroute UPR and DARP operations.*

1.5 At the First ICAO APAC Ministerial Conference on Civil Aviation, held in Beijing, China in January 2018, the Ministers in charge of civil aviation representing 36 Asia/Pacific governments endorsed the Beijing Declaration, formalizing their shared commitments to high-priority aviation safety and efficiency objectives, including “an enhanced level of civil/military cooperation”. In September 2024 at the Second ICAO APAC Ministerial Conference on Civil Aviation held in New Delhi, India, Beijing Declaration commitments to ANS implementation have been updated by the Delhi Declaration with “enhanced civil/military cooperation” remained as one of the high priority objectives.

## 2. DISCUSSION

### Regional Civil-Military Key Elements Implementation Status Reporting

2.1 The APANPIRG/34 Meeting adopted the Conclusion APANPIRG/34/1 - APAC Regional Seamless ANS Reporting Form 3.0 and Cloud-based Seamless ANS Implementation Progress Reporting. The new Seamless ANS Reporting Portal has been launched in 2024, and States are required to report Seamless ANS implementation progress through the Reporting Portal by not later than 30th June 2024, and then at least once a year by not later than 28th February each year.

2.2 The new Seamless ANS Reporting Portal contains the corresponding 6 items listed in APAC Seamless ANS Plan related to CMAC. Until March 1<sup>st</sup> 2025, updated reports of implementation progress have been received from the following 17 States/Administrations through the new Reporting Portal:

Australia, Brunei Darussalam, China, Hong Kong China, Macau China, India, Indonesia, Japan, Lao People's Democratic Republic, Mongolia, New Zealand, Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste, Vietnam

2.3 Records of CMAC implementation progress before 2023 could be found on previous reporting platform from the following 14 States/Administrations:

Bangladesh, Bhutan, Cambodia, Democratic People's Republic of Korea, Fiji, French Polynesia France, Malaysia, Maldives, Nepal, New Caledonia France, Pakistan, Papua New Guinea, Republic of Korea, United States

2.4 States that haven't yet provided the updated status reports on CMAC through the new Reporting Portal are reminded to do so. Any status updates received during the SAIOSEACG/4 meeting will be reflected in the meeting report.

2.5 Based on the implementation progress reported by the States/Administrations as described in 2.2 and 2.3, the overall implementation status of the Region on the 6 CMAC elements in the APAC Seamless ANS Plan are as follows:

Reporting Item	Fully Implemented	In Progress
ASBU - FRT0 B0/1 to B0/4 (Priority 1)	10	4
ASBU - FRT0 B1/1 to B1/7 (Priority 2)	0	5
Regional – C/M SUA management (Priority 1)	15	3
Regional – C/M strategic and tactical coordination (Priority 1) *	15 / 17	2

Regional – C/M common procedures and training (Priority 2)	11	3
Regional – C/M integrated systems and facilities (Priority 2) **	8 / 9	2

Note:

\* 15 States/Administrations have accomplished the implementation of the C/M strategic coordination, and 17 States/Administrations have accomplished that of the C/M tactical coordination.

\*\* 8 States/Administrations have accomplished the implementation of the C/M integrated systems, and 9 States/Administrations have accomplished that of the C/M integrated facilities.

2.6 Referring to the three priority items, the overall implementation progress is rather slow and partial to reaching the goals of ASBU and regional priorities in line with the target time. Meanwhile, it is also worth noting that the implementation progress in the Region is of huge diversity among States in regard of the implementation maturity.

#### ICAO Webinar on CMAC in 2024

2.7 The ICAO Webinar on CMAC was held by ICAO APAC RSO with support from ICAO EUR/NAT Office, EASA, EUROCONTROL, PANSAs and IATA from 20-21 November 2024. It has attracted over 200 on-line participants from 22 States and 6 International Organizations including CAAs, ANSPs, Airport Authorities, Joint C/M ASM Office, ATC, Aircraft Operators etc. Among them, over 30 participants are from the military of relevant States, including DoD, DoT, Air Force, Navy etc.

2.8 During the Webinar, over twenty presentations were well presented and thoroughly discussed on the subjects including but not limited to: the guidance on CMAC and FUA implementation by ICAO Doc 10088; latest progress, experiences, challenges and solutions by the States in the APAC region; experiences of FUA implementation at European level from key stakeholders' on the constructing and improving the 3-level airspace management framework; operational perspectives and expectations from ATC controllers and aircraft operators. All materials can be accessed at the website <https://www.icao.int/APAC/Meetings/Pages/2024-CMAC-FUA-Webinar.aspx>.

#### ICAO Workshop on CMAC and FUA for APAC in 2025

2.9 A component of air traffic management, airspace management (ASM) is a process by which airspace options are selected and applied to meet the needs of all airspace users, as per the Global Air Traffic Management Operational Concept (Doc 9854). Optimizing airspace for both civil and military operations result in nation-wide benefits. The flexible use of airspace (FUA) is fundamental in supporting the optimization process. The principle “as civil as possible, as military as necessary” enhances interoperability, performance and military mission effectiveness, while providing performance benefits for the whole aviation community, as per the Manual on Civil-Military Cooperation in Air Traffic Management (Doc 10088).

2.10 Given the crucial role of CMAC, particularly FUA as one of the key elements of GANP-ASBU and APAC Seamless ANS Plan, ICAO APAC RSO is planning to hold an on-site workshop on enhanced CMAC and FUA implementation for the Region in Q3 2025 with the support of ICAO EUR/NAT Office. This interactive event is planned to provide the States/Administrations with practical guidance presentations, tabletop exercises and case studies covering subjects including but not limited to the establishment of high-level framework, joint civil-military AMC and coordination procedures, FUA airspace structure design and publication, safety assessment, operational performance evaluation, interoperability between civil military systems, etc. Participants from both civil and military sides are welcome to the Workshop. APAC States/Administrations are invited to share their experiences. For further information, contact the ATM Regional Officer, Ms. Zhang Ying, at [yingzhang@icao.int](mailto:yingzhang@icao.int).

### **3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to:
- a) note the information contained in this paper;
  - b) provide speakers for the planned Workshop on Enhanced CMAC and FUA Implementation in 2025; and
  - c) discuss any relevant matters as appropriate.

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