



International Civil Aviation Organization

ICAO

Twelfth Meeting of the FANS Interoperability Team – Asia
(FIT-Asia/12)

Video Teleconference, 25 – 28 July 2022

Agenda Item 3: PBCS Developments and Implementation

REGIONAL SUPPLEMENTARY PROCEDURES UPDATE

(Presented by the Secretariat)

SUMMARY

This paper presents the status of Regional Supplementary Procedures supporting performance-based separations in Asia/Pacific airspace over the high seas.

1. INTRODUCTION

1.1 ICAO Doc. 7030 – *Regional Supplementary Procedures* (SUPPS) provides the procedural means of implementing in airspace over the high seas the provisions of Doc 4444 – *Procedures for Air Navigation Services – Air Traffic Services* (PANS-ATM) that are subject to regional air navigation agreement, and any regionally agreed procedures supplementing the provisions of Annexes to the Convention and PANS. Doc. 7030 is available through the ICAO Secure Portal at <http://portallogin.icao.int/>.

1.2 Regional Supplementary Procedures must not be in conflict with the provisions contained in the Annexes or PANS.

1.3 Implementation of the performance-based separation minima based on RNAV 10/RNP 10, RNP 4 and/or RNP 2 and the supporting Performance-Based Communications and Surveillance (PBCS) specified in PANS-ATM in airspace over the high seas requires regional air navigation agreement and, therefore, supporting Regional Supplementary Procedures.

2. DISCUSSION

History of PBCS in Doc 7030 - APANPIRG/28 Outcomes

2.1 The 28th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/28, Bangkok, Thailand, 11 to 14 September 2017) agreed to the following Conclusion:

Conclusion APANPIRG/28/15: PBCS-Related Proposals for Amendment to Regional Supplementary Procedures

That, ICAO Asia/Pacific Regional Office is requested to circulate to States and then submit for consideration by the Council of ICAO the Proposals for Amendment to Regional Supplementary Procedures MID/ASIA and PAC to support performance-based separation.

2.2 Accordingly, PfAs to SUPPS MID/ASIA and PAC were circulated to all States and relevant International Organizations on 7 December 2017.

2.3 State Letter T 3/2.1, T 3.3/9: AP039/18 (ATM), notifying Asia/Pacific Administrations, International Organizations and all other ICAO Regions of the approval of the PfA by the Council of ICAO was circulated on 28 March 2018.

Further Update to SUPPS MID/ASIA

2.4 FIT-Asia/11 discussed the need for further amendment to SUPPS to support current or intended implementation of performance-based separations in the Asia/Pacific Region that were not included in the 2018 update. The ICAO Asia/Pacific Regional Office subsequently received formal communications requesting the amendment to SUPPS MID/ASIA as listed in **Table 1**.

Administration FIR/s	50 NM Lateral RNAV 10 (RNP 10)	50 NM Longitudinal RNAV 10 (RNP 10) with PBCS	23 NM Lateral RNP 4 or RNP 2 with PBCS	30 NM Longitudinal RNP 4 or RNP 2 with PBCS
India Chennai, Kolkata, Mumbai		✓		
Indonesia Ujung Pandang	✓	✓	<i>future consideration</i>	✓
Philippines Manila	✓	✓	✓	✓
Singapore Singapore	<i>already in SUPPS</i>	<i>already in SUPPS</i>	✓	✓
China Sanya	for removal	for removal		

Table 1: Proposed update to Doc 7030 MID/ASIA

2.5 The Proposal for Amendment Serial No. APAC-S 22/06-MID/ASIA 6, provided at **Attachment 1**, has been forwarded to ICAO Headquarters for review prior its circulation to all relevant States and International Organizations in order to reach Regional Air Navigation Agreement.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note that Doc 7030 support is necessary for the implementation of performance-based separations in airspace over the high seas;
- c) notify the ICAO Asia/Pacific Regional Office immediately if there is any discrepancy in the PfA at Attachment 1;
- d) notify the ICAO Asia and Pacific Regional Office of any future requirements or proposals for amendment to Doc 7030; and
- e) discuss any relevant matters as appropriate.

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ATTACHMENT A

**PROPOSAL FOR AMENDMENT OF THE
REGIONAL SUPPLEMENTARY PROCEDURES
MIDDLE EAST/ASIA (MID/ASIA) REGION (Doc. 7030/5)**

(Serial No.: APAC-S 22/06-MID/ASIA 6)

a) Regional Supplementary Procedures:

MID/ASIA

b) Proposed by:

ICAO, on behalf of China, India, Indonesia, Philippines, Singapore

c) Proposed amendment:

Editorial Note: Amendments are arranged to show deleted text using strikethrough (text to be deleted), and added text with grey shading (text to be inserted).

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Chapter 6. AIR TRAFFIC SERVICES

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6.2 SEPARATION

6.2.1 Lateral

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6.2.1.3 The minimum lateral separation shall be ~~98~~ 93 km (50 NM) between aircraft meeting RNAV 10 (RNP 10) in accordance with 4.1.1.1 on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, ~~Manila~~, Melbourne, Nauru, New Zealand, Port Moresby, ~~Sanya~~, and Singapore and Ujung Pandang FIRs.

6.2.1.4 The minimum lateral separation shall be 42.6 km (23 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, ~~Manila~~, Melbourne, Nauru, New Zealand, ~~and~~ Port Moresby ~~and~~ Singapore FIRs. This minimum is applied in accordance with 5.4.1.2.1.6 b) of PANS-ATM and provided the following conditions are met:

- a) communication – CPDLC RCP 240 ~~per para~~ in accordance with 3.1.1.1.1;
- b) navigation – RNP 4, or RNP 2 ~~per para~~ in accordance with 4.1.2.1 and 4.1.2.2;
- c) surveillance – ADS-C RSP 180 ~~per para~~ in accordance with 5.4.1.2

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6.2.2 Longitudinal

(P-ATM – Chapters 5 and 13)

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6.2.2.2 The minimum longitudinal separation shall be 98-93 km (50 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Chennai, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kolkata, Kuala Lumpur, Manila, Melbourne, Mumbai, Nauru, New Zealand, Port Moresby, Sanya, and Singapore and Ujung Pandang FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

- a) Communication – CPDLC RCP240 ~~per para.~~ in accordance with 3.1.1.21.1.;
- b) Navigation – RNAV 10 (RNP 10) RNP 4, or RNP 2 ~~per para~~ in accordance with 4.1.1.1, 4.1.2.1 and 4.1.2.2;
- c) Surveillance – ADS-C RSP 180 ~~per para.~~ in accordance with 5.4.1.2.

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6.2.2.4 The minimum longitudinal separation shall be 55.5 km (30 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Manila, Melbourne, Nauru, New Zealand, and Port Moresby, Singapore and Ujung Pandang FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

- a) communication – CPDLC RCP 240 ~~per para.~~ in accordance with 3.1.1.21.1.;
- b) navigation – RNP 4, or RNP 2 ~~per para.~~ in accordance with 4.1.2.1 and 4.1.2.2;
- c) surveillance – ADS-C RSP 180 ~~per para.~~ in accordance with 5.4.1.2.

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-END-

d) Date when proposal received:

21 November 2021

e) Proposer's reason for amendment:

1. The Eleventh Meeting of the Future Air Navigation Services (FANS) Interoperability Team – Asia (FIT-Asia/11, 23 to 26 August 2021) noted that the ICAO Asia/Pacific Regional Office would prepare and submit a Proposal for Amendment (PfA) to ICAO Doc 7030 Regional Supplementary Procedures (SUPPS) MID/ASIA enabling the implementation of separation minimums supported by Performance-Based Navigation (PBN) and Performance-Based Communications and Surveillance (PBCS). The following States subsequently submitted formal requests to ICAO requesting amendment of SUPPS as described in section c):
 - i. India (Chennai, Kolkata and Mumbai FIRs): 50 NM longitudinal separation;
 - ii. Indonesia (Ujung Pandang FIR only): 50 NM lateral/50 NM longitudinal and 30 NM

- longitudinal separation;
- iii. Philippines: 50 NM lateral/50NM longitudinal, and 23NM lateral/30NM longitudinal separation;
 - iv. Singapore: 23NM lateral/30NM longitudinal separation;
2. China requested the removal of reference to Sanya FIR from Regional Supplementary Procedures paragraphs 6.2.1.3 and 6.2.2.2 as the separation minimums specified are no longer applied in the Sanya FIR due to radar and/or ADS-B surveillance and VHF voice communications coverage of the entire FIR

f) Proposed implementation date of the amendment:

As soon as practicable after approval by Council.

g) Action by the Secretary General:

The proposal has been circulated to the following States and international organizations:

Afghanistan	Cyprus	Kazakhstan
Albania	Czech Republic	Kenya
Algeria	Democratic People's Rep. of	Kuwait
Andorra	Korea	Kyrgyzstan
Angola	Democratic Republic of the	Latvia
Argentina	Congo	Lebanon
Armenia	Denmark	Libya
Australia	Djibouti	Lithuania
Austria	Dominican Republic	Luxembourg
Azerbaijan	Ecuador	Madagascar
Bahamas	Egypt	Malaysia
Bahrain	El Salvador	Maldives
Bangladesh	Eritrea	Mali
Belarus	Estonia	Malta
Belgium	Ethiopia	Mauritania
Benin	Finland	Mauritius
Bhutan	France	Mexico
Bolivia (Plurinational State of)	Gabon	Monaco
Bosnia and Herzegovina	Gambia	Mongolia
Botswana	Georgia	Montenegro
Brazil	Germany	Morocco
Brunei Darussalam	Ghana	Mozambique
Bulgaria	Greece	Namibia
Burkina Faso	Guinea-Bissau	Nepal
Cameroon	Haiti	Netherlands
Canada	Hungary	New Zealand
Cape Verde	Iceland	Niger
Central African Republic	India	Nigeria
Chad	Indonesia	Norway
Chile	Iran (Islamic Republic of)	Oman
China	Iraq	Pakistan
Colombia	Ireland	Paraguay
Congo	Israel	Peru
Côte d'Ivoire	Italy	Philippines
Croatia	Jamaica	Poland
Cuba	Japan	Portugal
	Jordan	Qatar

Republic of Korea	Spain	Turkey
Republic of Moldova	Sri Lanka	Turkmenistan
Romania	Sudan	Uganda
Russian Federation	Suriname	Ukraine
San Marino	Swaziland	United Arab Emirates
Saudi Arabia	Sweden	United Kingdom
Senegal	Switzerland	United Republic of Tanzania
Serbia	Syrian Arab Republic	United States
Seychelles	Tajikistan	Uruguay
Sierra Leone	Thailand	Uzbekistan
Singapore	The Former Yugoslav	Venezuela
Slovakia	Republic of Macedonia	Viet Nam
Slovenia	Togo	Yemen
Somalia	Trinidad and Tobago	Zambia
South Africa	Tunisia	Zimbabwe

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h) Secretariat's comments:

This PfA supports implementation of performance-based separations as described in the Asia/Pacific Seamless ANS Plan.

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