



ICAO

International Civil Aviation Organization

Twenty-Seventh Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG/27)

Video Teleconference, 22 – 25 August 2022

Agenda Item 2: Review Outcomes of Related Meetings

FIT-ASIA MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents the outcomes of the Twelfth Meeting of the Future Air Navigation Services (FANS) Interoperability Team-Asia (FIT-Asia/12) for review by RASMAG/27.

1. INTRODUCTION

1.1 The Twelfth Meeting of the FANS Interoperability Team-Asia (FIT-Asia/12) was held by Video Teleconference from 25 to 28 July 2022.

1.2 The full report of the meeting is available on the FIT-Asia/12 meeting web-page at:
<https://www.icao.int/APAC/Meetings/Pages/2022-FIT-Asia12.aspx>

2. DISCUSSION

Central Reporting Agency (CRA) Reports

FIT-Asia Problem Reports

2.1 The lower number of PRs submitted in the last 12 months reflected the dramatic decrease in air traffic due to the impact of the COVID-19 pandemic.

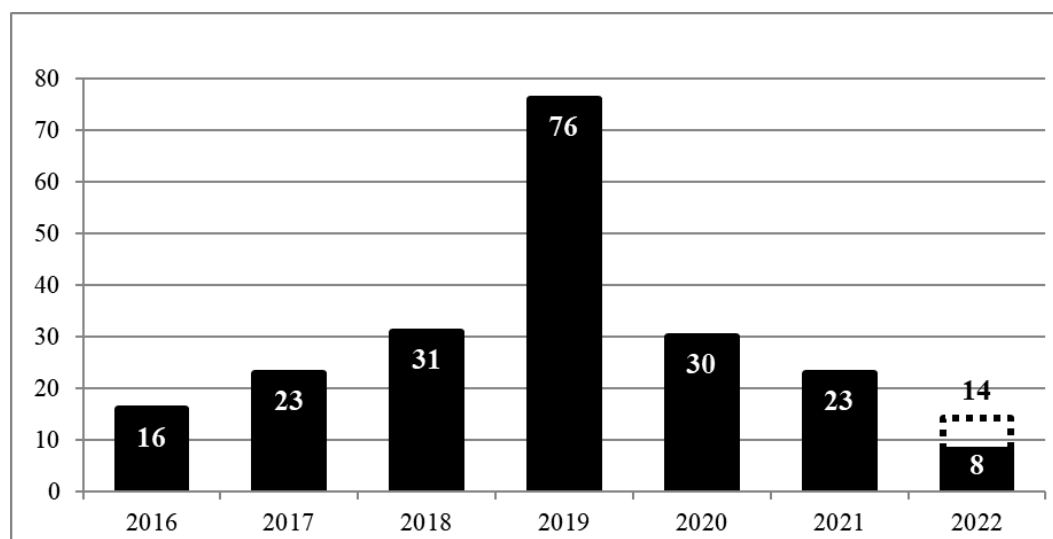


Figure 1: FIT-Asia PR Submissions per Year

2.2 The CRA updated the status or progress of three old PRs that had occurred in the FIT-Asia States, and investigated nine significant new PRs and six less-significant new PRs.

PBCS Developments and Implementation

Latency Monitor Implementation in NZZO FIR

2.2 At FIT-Asia/11, New Zealand proposed that a FANS1/A CPDLC Latency Timer value of 300 seconds as currently being trialled in the North Atlantic (NAT) Region be adopted in the APAC Region for oceanic airspace. The 26th Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/26, 20 – 23 September 2021) adopted **Conclusion RASMAG/26-1: FANS1/A CPDLC Latency Timer**, drafted by FIT-Asia/11, urging States to implement a latency timer value of 300 seconds on a trial basis and report outcomes to FIT-Asia.

2.3 Responding to the Conclusion and related FIT-Asia task list (action item 11/3), New Zealand informed the meeting of the outcomes of its trial of the 300 second latency value. The 300 second latency value had been used in NZZO for four years. No significant issues had been found since implementation, and New Zealand considered their implementation had been successful. An average of 5% of FANS1/A traffic had responded as being unable to set the latency monitor. New Zealand had observed an average of less than two rejects per month from the Airbus fleet in the twelve months from July 2021 to June 2022.

2.4 The meeting was also informed that the 300 seconds latency timer value had been implemented under trial for several years in the NAT Region, and was formalized in the North Atlantic Operations and Airspace Manual.

2.5 FIT-Asia/12 agreed to the following Draft Conclusion for consideration by RASMAG/27:

Draft Conclusion RASMAG/27-x: CPDLC Latency Monitor value

That, recognizing:

1. the need for aircraft to provide an appropriate indication when the age of the time stamp of a received CPDLC message exceeds a defined value (latency timer value), in accordance with ICAO Doc 9869 PBCS Manual safety requirement SR-15; 2. the need for a single, standardized global value.

The Asia-Pacific region adopts a latency timer value of 300 seconds for use in oceanic airspace.

Regional PBCS Implementation Update

2.6 The meeting was updated on the status of PBCS implementation among Asia/Pacific Administrations, as reported using the APAC regional Survey of the Status of Current and Planned Implementation of Performance-Based Horizontal Separation Minima form. The meeting was reminded of relevant Conclusions of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) and the RASMAG:

Conclusion APANPIRG/27-7: PBCS Operator Requirements

Conclusion RASMAG/22-3: Performance-Based Separation Implementation Survey

Conclusion APANPIRG/28-11: PBCS Operational Authorizations

Conclusion RASMAG/23-1: PBCS Compliance

2.7 The survey form had been uploaded to the ICAO APAC Regional Office eDocuments web-page (<https://www.icao.int/APAC/Pages/eDocs.aspx>), for initial reporting by August 2017 and subsequent reporting by no later than 30 April each year.

2.8 A total of 19 APAC Administrations had responded to the survey prior to FIT-Asia/11. Only Australia, Indonesia, Singapore and Thailand provided their annual survey response for 2022. **Attachment A** summarized the current implementation of performance-based separations as reported in survey responses since 2017.

2.9 The meeting was reminded that the provisions of ICAO Annexes 6 and 11, and Doc 4444 PANS-ATM, required that PBCS services and regulations were implemented, summarized as follows:

- by Air Navigation Service Providers applying the following commonly used performance-based separation minima , where supported by ADS-C/CPDLC:
 - 23 NM lateral separation (RNP 4 or RNP 2);
 - 50 NM longitudinal separation (RNAV 10/RNP 10 or RNP 4); and
 - 30 NM longitudinal separation (RNP 4 or RNP 2)
- by Regulatory Authorities:
 - For safety oversight of ANSP PBCS operations; and
 - To approve, and monitor the performance of, PBCS operations by aircraft and aircraft operators of the State of Registry.

Regional Supplementary Procedures Update

2.10 The meeting was informed of the status of Regional Supplementary Procedures (Doc 7030) supporting performance-based separations in in the APAC Region. SUPPS provided the procedural means of implementing in airspace over the high seas the provisions of Doc 4444, and any regionally agreed procedures supplementing, but not in conflict with, the provisions of the Annexes to the Convention and PANS.

2.11 FIT-Asia/11 had 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 consideratio n</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

2.12 The meeting was informed that the Proposal for Amendment Serial No. APAC-S 22/06-MID/ASIA 6 had 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.

Competent Airspace Safety Monitoring Organizations List

2.13 The RASMAG List of Competent Airspace Safety Monitoring Organizations was reviewed and updated by the meeting. The list as reviewed by FIT-Asia/12 is provided for agreement by the meeting in WP/40.

Standardised Reporting Format and Date for ICAO Implementation Status

2.14 The Secretariat informed the meeting of a proposed a revised due date and standardised format for the various State reports of the implementation status of the SAR, Collaborative ATFM, Collaborative AIM and the ATM contingency plan. It was proposed to align the reporting dates of the mentioned implementation status reports to a common date of 28th February each year. It was further proposed that the reporting date for the annual PBCS-related Survey of Implementation Status of Performance-Based Horizontal Separation Minima be revised to the same date. This matter was further discussed under FIT-Asia/12 Flimsy 2.

Review of Annual PBCS Survey of the Implementation of Performance-based Horizontal Separation Minima

2.15 The Secretariat proposed to review of the annual PBCS survey of the implementation Status of Performance-based Horizontal Separation minima.

2.16 Since its introduction, the survey form had remained unchanged. There were items in the survey form that did not reflect the current separation minima in PANS ATM (Doc 4444). There were also items in the PBCS implementation chart used by ICAO to report regional implementation that were not relevant to PBCS implementation.

2.17 In this regard, the meeting was invited to noted that the Global Operational Data Link - GOLD manual (Doc 10037) and the Performance-Based Communication and Surveillance - PBCS manual (Doc 9869) were scheduled to be revised by Dec 2022 and 2023/2024 respectively.

Revised Survey of the Status of Current and Planned Implementation of Performance-Based Horizontal Separation Minima

2.18 Following on from discussion of the survey form, ICAO provided further information on the need for an update of the Survey of the Status of Current and Planned Implementation of Performance-Based Separation Minima. It was noted that States providing performance-based separations dependent upon PBCS within their airspace should complete all questions in the survey form. States that did not provide such separations need only respond to selected questions relating to the regulatory approval and oversight of aircraft operators that filed PBCS indicators in flight plans. An updated form was proposed, with clarified instructions for completion and rationalized questions on State use of performance-based separations.

2.19 ICAO further proposed that the annual submission date for both the survey form and the PBCS performance monitoring data (ANSP to FIT) be brought forward to 28 February each year. A consequential change to the PBCS Action List for ANSPs was also proposed.

2.20 FIT-Asia/12 agreed to the following Draft Conclusion for consideration by RASMAG/27:

Draft Conclusion RASMAG/27-x: Updated Reporting of PBCS Implementation Status and Performance Monitoring Data:

That:

1. the revised *Survey of the Status of Current and Planned Implementation of Performance-Based Separation Minima* at **Attachment B**, and the revised *PBCS Action List for ANSPs* at **Attachment C** be uploaded to the ICAO Asia/Pacific Regional Office website to replace the existing; and
2. States are urged to submit the following to the Asia/Pacific Regional Office by not later than 28 February each year:
 - a) the completed *Survey of the Status of Current and Planned Implementation of Performance-Based Separation Minima* form; and
 - b) PBCS performance data for inclusion in the aggregated regional PBCS performance data report, using the *Data Link Performance Report Template – ANSP to FIT* provided on the ICAO Asia/Pacific Regional Office website.

Note 1: Non-FIT-Asia States may submit their PBCS performance data through the relevant FIT.

Note 2: This Conclusion supersedes Conclusions RASMAG/22-3, 23-1, 23-2, 23-3.

JASMA Assessment of Non-PBCS Approved Aircraft

2.21 JASMA informed the meeting that there were approximately 30 flights per day and 900 flights per month were flying in the Pacific Ocean airspace of Fukuoka FIR in June 2022 that filled "P2" and "RSP180" in their flight plans but for which PBCS approval/authorization was not recorded in the approval database. This issue is further discussed in WP/38.

Review of ADS-C/CPDLC Operations and Performance

Asia/Pacific Region Combined PBCS Monitoring Report

2.22 China presented the aggregated data link performance monitoring report for the Asia/Pacific Region, prepared by China. **Table 2** lists the FIRs for which data link performance reports were provided and included in the regional report.

Reporting FIRs		
State	FIR	Location Indicator
United States	Anchorage Oceanic	PAZA
Japan	Fukuoka	RJJJ
United States	Oakland Oceanic	KZAK
Fiji	Nadi	NFFF
French Polynesia	Tahiti	NTTT
New Zealand	Auckland Oceanic	NZZO
Australia	Brisbane	YBBB
	Melbourne	YMMM
Philippines	Manila	RPHI
Sri Lanka	Colombo	VCCF
India	Chennai	VOMF
	Kolkata	VECF

Reporting FIRs		
State	FIR	Location Indicator
Viet Nam	Ho-Chi-Minh	VVTS
Myanmar	Yangon	VYYF
Indonesia	Ujung Pandang	WAAF
Singapore	Singapore	WSJC
China	Lanzhou	ZLLL
	Urumqi	ZWWW

Table 2: 2021 APAC Combined PBCS Report – Reporting FIRs

2.23 The report highlighted consolidated performance data and issues associated with Actual Surveillance Performance (ASP) and Actual Communications Performance (ACP) for the region.

2.24 Overall ASP for the region had met the 95% criterion (**Table 3**).

ACTUAL SURVEILLANCE PERFORMANCE - FIR AGGREGATE (ALL MEDIA TYPES)						
Region	Asia-Pacific Region					
Performance Criteria	RSP180					
Time Period	2021 January-June			2021 July-December		
Colour key ■ Meets criteria ■ 99.0%-99.9% ■ Under criteria	Message Counts	Criteria		Message Counts	Criteria	
		95%	99.90%		95%	99.90%
FIR		% <= 90sec	% <= 180sec		% <= 90sec	% <= 180sec
PAZA	1196520	98.89%	99.70%	1217086	98.72%	99.62%
RJJJ	1514208	98.30%	99.64%	1781319	98.39%	99.62%
KZAK	3436520	98.94%	99.69%	4305637	98.56%	99.53%
NFFF	98541	98.89%	99.54%	109885	99.19%	99.69%
NTTT	23879	99.72%	99.88%	42068	99.77%	99.89%
NZZO	151438	99.04%	99.80%	145725	99.13%	99.83%
YBBB	392893	99.49%	99.84%	518548	99.66%	99.89%
YMMM	346329	99.01%	99.52%	383003	99.50%	99.80%
VCCF	256657	98.69%	99.71%	251687	98.89%	99.91%
VECF				315611	98.67%	99.56%
VOMF	126634	98.52%	99.43%	148693	98.59%	99.46%
WSJC	205191	99.19%	99.85%	251035	99.23%	99.85%
ZLLL	142990	98.80%	99.70%	208842	98.80%	99.60%
ZWWW	75034	98.90%	99.70%	101660	98.80%	99.60%
VVTS	177227	98.73%	99.80%	188140	98.85%	99.83%
VYYF	172414	98.89%	99.56%	166438	98.99%	99.63%
RPHI	221669	99.29%	99.83%	273277	99.25%	99.83%
WAAF	66829	99.31%	99.75%	84031	99.38%	99.79%

Table 3: Asia/Pacific Region ASP (RSP180)

2.25 Overall ACP for the region met the 95% criterion (**Table 4**). In the first half of 2021, two FIRs failed to meet the 99.9% criterion for Actual Communications Technical Performance (ACTP). In the second half of the year, one FIR did not meet the 99.9% criterion. While the volume of data count had slightly increased in 2021, the trend of regional performance in both the 95% and 99.9% criteria had generally improved.

ACTUAL COMMUNICATION PERFORMANCE - FIR AGGREGATE (ALL MEDIA TYPES)										
Region	Asia-Pacific Region									
Performance Criteria	RCP240									
Time Period	2021 January-June					2021 July - December				
Colour key Meets criteria 99.0%-99.9% Under criteria	Message Counts	ACP Criteria		ACTP Criteria		Message Counts	ACP Criteria		ACTP Criteria	
		95%	99.90%	95%	99.90%		95%	99.90%	95%	99.90%
		% <= 180sec	% <= 210sec	% <= 120sec	% <= 150sec		% <= 180sec	% <= 210sec	% <= 120sec	% <= 150sec
FIR										
PAZA	74627	98.79%	99.27%	98.51%	98.96%	75692	98.88%	99.20%	98.76%	99.15%
RJJJ	30889	99.69%	99.83%	99.72%	99.79%	37089	99.70%	99.82%	99.71%	99.80%
KZAK	192490	99.28%	99.51%	99.51%	99.75%	236799	98.97%	99.29%	99.22%	99.52%
NFFF	2185	99.67%	99.72%	99.86%	99.81%	3148	99.68%	99.71%	99.84%	99.77%
NTTT	730	100.00%	100.00%	100.00%	100.00%	1329	99.69%	100.00%	99.77%	100.00%
NZZO	3431	99.76%	99.88%	99.88%	99.91%	3222	99.78%	99.87%	99.90%	99.93%
YBBB	11591	99.42%	99.33%	99.60%	99.57%	14683	99.62%	99.39%	99.77%	99.58%
YMMM	13777	99.32%	99.36%	99.47%	99.51%	14850	99.48%	99.50%	99.60%	99.66%
VCCF	8037	98.68%	99.70%	99.26%	99.91%	8360	98.27%	99.57%	99.21%	99.89%
VECF						22069	99.49%	99.67%	99.49%	99.67%
VOMF	34545	99.74%	99.85%	99.85%	99.89%	56992	99.72%	99.82%	99.84%	99.89%
WSJC	14786	99.19%	99.45%	99.30%	99.46%	23916	99.16%	99.49%	99.26%	99.47%
ZLLL	1582	97.97%	98.04%	98.98%	99.11%	1759	98.06%	98.29%	98.69%	98.80%
ZWWW	147	97.27%	97.95%	98.63%	98.63%	80	100.00%	100.00%	100.00%	100.00%
VVTS	43261	95.94%	96.45%	99.43%	99.72%	44881	95.70%	96.30%	99.59%	99.77%
VVYF	47863	98.45%	98.73%	98.76%	99.05%	48746	98.67%	98.99%	99.07%	99.33%
RPHI	6412	98.48%	98.67%	99.02%	99.24%	12973	98.75%	98.91%	99.24%	99.41%
WAAF	11281	98.78%	98.99%	99.76%	99.80%	13841	99.27%	99.40%	99.85%	99.88%

Table 4: Asia/Pacific Region ACP (RCP240)

2.26 It was again noted that HF data link (HF DL) performance results did not meet performance requirements in several FIRs.

2.27 Pilot Operator Response Time (PORT) performance requirements were not met by a number of aircraft operators. Operators were advised to first investigate their avionics systems or software updates. If these were appropriately configured, operators should stress the procedures described in ICAO Doc 10037 Global Operational Data Link (GOLD) Manual.

2.28 China pointed out that some of the data collected had format/consistency issues, States were invited to double-check the data before submission each year.

2.29 The meeting was informed that Japan would volunteer the compile task for two years from 2023, and one of the FIT-Asia's States would take over the charge from 2025.

PBCS performance reporting

2.30 The secretariat provided a flimsy to supplement WP/9 Asia/Pacific Region Combined PBCS Monitoring Report, especially on format/consistency issues.

2.31 The meeting was reminded of **Conclusion RASMAG/23-2: PBCS Action List for ANSPs and Conclusion RASMAG/23-3: Data Link Performance Analysis Reporting Templates**. States/Administrations were urged to revisit the APAC eDocuments website, <https://www.icao.int/APAC/Pages/eDocs.aspx> to review the List and the Templates.

2.32 The secretariat informed the meeting that other FIT(s) in the Asia Pacific region used slightly different templates.

Number of Decimal Places:

Operator	ADS-C				CPDLC						
	Count of ADS-C	% of total ADS-C	ASP 95%	ASP 99.9%	Count of CPDLC	% of total CPDLC	ACTP 95%	ACTP 99.9%	ACP 95%	ACP 99.9%	PORT 95%
R	141 591	12.3%	98.2%	99.4%	2 712	7.0%	99.3%	99.4%	98.5%	98.8%	95.9%
AA	113 648	9.9%	99.2%	99.8%	5 309	13.7%	99.9%	99.9%	99.5%	99.6%	97.9%
L	85 874	7.5%	98.0%	99.3%	2 490	6.4%	99.4%	99.6%	98.6%	98.8%	95.0%

Figure 2: Doc 9869 PBCS Manual Table D-6

PBCS monitoring report – RSP						
ANSP/CTA →	ANSP1/CTA1		Period →	1 January to 30 June 2014 (6 months)		
Specification →	RSP 180		Application →	ADS-C		
Colour key		Report counts	95% RSP 180 benchmark		99.9% RSP 180 benchmark	
Meets criteria →			ASP		ASP	
Under criteria but above 99.0% →			<=90 sec		<=180 sec	
Under criteria →			End-to-end		End-to-end	
Media type (100 messages or more)						
SATCOM		893 064	97.98%	99.27%		
VHF		251 619	98.98%	99.54%		
HF		4 013	92.30%	94.49%		

Figure 3: Doc 9869 PBCS Manual Table D-9

ACTUAL SURVEILLANCE PERFORMANCE						
Region	IPACG					
Performance Criteria	RSP180					
Time Period	2021 January-June			2021 July-December		
Colour key ■ Meets criteria ■ 99.0%-99.9% ■ Under criteria	Message Counts	Criteria		Message Counts	Criteria	
		95%	99.90%		95%	99.90%
		% <= 90sec	% <= 180sec		% <= 90sec	% <= 180sec
Aggregate (all media types)						
PAZA	1196520	98.89%	99.70%	1217086	98.72%	99.62%
RJJJ	1514208	98.30%	99.64%	1781319	98.39%	99.62%

Figure 4: IPACG

Figure 5: CRA website (PAC)

Rounding up/down:

Actual data	FIT-Asia	IPACG	CRA (PAC)
98.94%	98.94%	98.94%	98.9%
98.95%	98.95%	98.95%	99.0%
99.00%	99.00%	99.00%	99.0%
99.84%	99.84%	99.84%	99.8%
99.85%	99.85%	99.85%	99.9%
99.90%	99.90%	99.90%	99.9%

Table 5: Rounding up/down

Colour coding:

Actual data	FIT-Asia	IPACG	CRA (PAC)
98.94%	98.94%	98.94%	98.9%
98.95%	98.95%	98.95%	99.0%
99.00%	99.00%	99.00%	99.0%
99.84%	99.84%	99.84%	99.8%
99.85%	99.85%	99.85%	99.9%
99.90%	99.90%	99.90%	99.9%

Table 6: Colour coding

2.33 The importance of not having different templates for PBCS monitoring between neighbouring FIT(s) and support for global standardization was emphasized.

2.34 The meeting agreed to keep the template as it was, although there were inconsistencies in the templates and the colour coding methods, until the publication of the new version of Doc 9869 PBCS Manual in 2023-2024.

Data Link Performance Reports

2.35 The meeting was provided with updated information of Data Link Performance Reports by China, India, Indonesia, Malaysia, New Zealand, Philippines, Singapore and Sri Lanka.

Data Link-related ANS Deficiencies

Asia/Pacific Region Combined PBCS Monitoring Report

2.36 The meeting was provided with updated information on the status of Asia/Pacific engagement in data link problem reporting through the FANS-CRA website, and performance analysis reporting to a recognized FIT. All Asia/Pacific States that provide data link services had registered on the FANS-CRA website. **Table 7** recorded the submission of PRs through the website in 2022 (calendar year).

State	# PR 2022 (to 26 July)	Performance Analysis Reports to FIT
Australia	3	YES
China	0	YES ¹
Fiji	0	YES
France (Polynésie Française)	0	YES
India	4	YES ²
Indonesia	0	YES ³
Japan	7	YES
Malaysia	0	YES ⁴
Myanmar	0	YES
Maldives	0	NO
Papua New Guinea	Yes	NO
Philippines	0	YES
New Zealand	4	YES
Singapore	5	YES
Sri Lanka	0	YES
USA	1	YES
Viet Nam	0	YES

Table 7: Submission of PRs to FANS-CRA and Performance Analysis Reports to FIT

6.1 The Secretariat presented the relevant excerpt of the APANPIRG ATM and Airspace Safety Deficiencies List (**FIT-Asia/12 WP/18 Attachment A**) for review by the meeting.

6.2 The following deficiencies remained current:

India: *Performance monitoring and analysis not reported for Mumbai FIRs.*

¹ Lanzhou and Urumqi FIRs

² Chennai and Kolkata FIRs.

³ Ujung Pandang FIR.

⁴ Kuala Lumpur FIR.

Maldives: *Problem reports not provided to CRA. Performance monitoring and analysis not reported to FIT.*

2.37 These above recommendations are included in the Deficiencies List provided for RASMAG/27 discussion and agreement in WP/41.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information contained in this paper;
 - b) note the regional PBCS implementation Status;
 - c) note the continued need to encourage States to fully analyze PBCS performance that fails to meet RCP/RSP specifications, take rectification action, and report same to FIT;
 - d) note the aggregated regional PBCS performance;
 - e) agree to the **Draft Conclusion RASMAG/26-X: CPDLC Latency Monitor value;**
 - f) agree to the **Draft Conclusion RASMAG/26-X: Updated Reporting of PBCS Implementation Status and Performance Monitoring Data;**
 - g) note the continuing unsuitability of HFDDL for PBCS;
 - h) note and agree to the FIT-Asia/12 recommendations on data link-related APANPIRG ATM and Airspace Safety Deficiencies; and
 - i) discuss any relevant matters as appropriate.

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Draft Conclusion RASMAG/27-X: CPDLC Latency Monitor value	
<p>What: That, recognizing:</p> <p>1. the need for aircraft to provide an appropriate indication when the age of the time stamp of a received CPDLC message exceeds a defined value (latency timer value), in accordance with ICAO Doc 9869 PBCS Manual safety requirement SR-15; 2. the need for a single, standardized global value.</p> <p>The Asia-Pacific region adopts a latency timer value of 300 seconds for use in oceanic airspace.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: To implement a standardized global value for latency timer in the APAC region, in alignment with the value of 300 seconds specified in the ICAO NAT Region <i>North Atlantic Operations and Airspace Manual</i> (NAT Doc 007).</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>
<p>When: 25-Aug-22</p>	<p>Status: Draft to be adopted by Subgroup</p>
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: Aircraft operators</p>	

Draft Conclusion RASMAG/27-x: Updated Reporting of PBCS Implementation Status and Performance Monitoring Data	
<p>What: That:</p> <p>1. The revised <i>Survey of the Status of Current and Planned Implementation of Performance-Based Separation Minima</i> at Attachment B, and the revised <i>PBCS Action List for ANSPs</i> at Attachment C be uploaded to the ICAO Asia/Pacific Regional Office website to replace the existing; and</p> <p>2. States are urged to submit the following to the Asia/Pacific Regional Office by not later than 28 February each year:</p> <p>a) The completed <i>Survey of the Status of Current and Planned Implementation of Performance-Based Separation Minima</i> form; and</p> <p>b) PBCS performance data for inclusion in the aggregated regional PBCS performance data report, using the <i>Data Link Performance Report Template – ANSP to FIT</i> provided on the ICAO Asia/Pacific Regional Office website.</p> <p><i>Note 1: Non-FIT-Asia States may submit their PBCS performance data through the relevant FIT.</i></p> <p><i>Note 2: This Conclusion supersedes Conclusions RASMAG/22-3, 23-1, 23-2 and 23-3</i></p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why:</p> <p>1. to rationalize and simplify the survey questions; and</p> <p>2. to amend the reporting dates for both the annual survey and PBCS performance monitoring data to 28 February each year,</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>

aligning with planned common reporting date for all ATM and Airspace Safety implementation and performance reporting.	
When: 25-Aug-22	Status: Draft to be adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

SURVEY OF THE STATUS OF CURRENT AND PLANNED IMPLEMENTATION OF PERFORMANCE-BASED HORIZONTAL SEPARATION MINIMA

Instructions:

1. Complete the Survey at least once annually and return by email to the ICAO APAC Regional Office (apac@icao.int) by **NOT LATER THAN 28 FEBRUARY 30 APRIL EACH YEAR.**

2. **Administrations that provide ATC Separation Services in Category R airspace¹:**

- Complete all sections of the form.

3. **Administrations that do not provide separation services in Category R airspace:**

- Complete Section 1 Group A (question A3), Group D and E

Refer ICAO Doc 9869 – PBCS Manual Appendix A refers.

¹ The Asia/Pacific Seamless Air Navigation Services Plan defines Category R Airspace: ¹ Category R: remote en-route airspace with Air Traffic Services (ATS) HF or CPDLC communications and outside the coverage of ground-based surveillance mote.

1. Has your State completed any of the following preparations for PBCS implementation?					
PBCS Implementation Task List	Task Group	Task ID	TASK descriptor	Y/N	If NO, Planned Date
	Group A	A-1	AIP (Prescription of an RCP/RSP specification. Also see B-3 below)		
		A-2	PBCS policies, objectives supporting safety oversight of ANSP PBCS operations		
		A-3	PBCS policies, objectives supporting safety oversight of Aircraft Operator and Aircraft System PBCS operations		
		A-4	Proposal for Amendment to ICAO Doc 7030 - <i>Regional Supplementary Procedures</i> for PBCS operations , if applicable		
	Group B	B-1	PBCS Implementation Plan		
		B-2	Target dates for PBCS and relevant ATM operations		
		B-3	RCP/RSP specifications		
		B-4	PBCS awareness		
	Group C	C-1	Operational concepts and procedures for PBCS operations		
C-2		ATM automation system changes to use flight plan RCP/RSP indicators			
C-3		ATM automation changes for PBCS monitoring			
C-4		Confirm initial ANSP compliance with RCP/RSP specifications			
Group D	D-1	Aircraft operator readiness			
	D-2	Confirm initial operator and/or aircraft type/system compliance with RCP/RSP			
Group E	E-1	PBCS monitoring, analysis and reporting - post implementation			

				Y/N	If NO, Planned Date
2. Does your State submit data link problem reports to a recognized Central Reporting Agency (CRA)					
3. Does your State monitor and analyze data link performance in accordance with the following specifications and report the analysis to a recognized FANS Interoperability Team (FIT)?					
Communication Specifications & Interoperability Standards	Normal	RCP240	FANS1/A CPDLC		
	Alternate	RCP400	SATVOICE		
		RCP400	HF		
Surveillance Specifications & Interoperability Standards	Normal	RSP180	FANS1/A ADS-C		
	Alternate	RSP400	SATVOICE		
		RSP400	HF		
4. Has your State implemented or planned to implement the following performance-based horizontal separation minima?					
Navigation Specifications & Applicable ATM Operations	RNAV/RNP	RNAV/RNP 10, RNP 4, RNP 2	50 NM Lateral Separation <i>Communication other than direct controller-pilot voice</i>		
		RNAV/RNP 10, RNP 4	50 NM Longitudinal Separation <i>RCP/240 and RSP/180</i>		
		RNP 4 or RNP 2	30 NM Longitudinal Separation		
			30 NM Lateral Separation <i>In cases where the ANSP has considered there is insufficient operational benefit to justify the investment in the change from 30 NM to 23 NM.</i>		
			23 NM Lateral Separation		
			<i>Other planned or implemented separations dependent on RCP240/RSP180. Please also provide the DOC 4444 PANS- ATM reference.</i>		

1. ANSP action items

- 1.1 Register on CRA website at www.fans-cra.com.
- 1.2 Establish means to extract FANS1A analysis data for CPDLC and ADS-C using guidance provided in ICAO Doc 9869 PBCS Manual Appendix D.
- 1.3 Filter extracted data FANS1A analysis data for CPDLC and ADS-C using guidance in PBCS Manual Appendix D.
- 1.4 Establish means to perform analysis of CPDLC RCP and ADS-C RSP at a suitable interval (usually monthly, but specific interval will be determined by local factors such as volume of data).
- 1.5 Investigate any performance degradation identified during monthly analysis.
- 1.6 Report non-compliance with RCP/RSP specifications to CRA.
- 1.7 Support CRA non-compliance investigations.
- 1.8 Report any aircraft that are filing as PBCS qualified but showing non-compliance with RCP and RSP 95% normal operating criteria to your state CAA and RMA.
- 1.9 Withdraw the use of performance-based separation minima requiring PBCS where aircraft data link performance is not compliant with RCP and RSP 95% operating criteria.
- 1.10 Implement an analysis of service availability to determine the impact of reported unplanned outages in your airspace (usually annually).
- 1.11 Implement local procedures and training to ensure operational staff log FANS1/A problems identified during operations to enable subsequent investigation.
- 1.12 Implement local investigation process for reported FANS1/A problems.
- 1.13 Implement CRA website reporting of confirmed FANS1/A problems.
- 1.14 If implementing PBCS, sign up to Global PBCS Charter on CRA website.

2. ANSP Reports to FIT-Asia

- 2.1 Compile PBCS RCP and RSP performance report for the year from January to December, per regional reporting guidelines, using the template provided on the Asia/Pacific Regional Office website.
- 2.2 Ensure the PBCS performance data for the reporting year is provided to the ICAO Secretariat by not later than 28 February each year for inclusion in aggregated regional data reporting to FIT-Asia, RASMAG and APANPIRG.
- 2.3 Complete the Survey of the Implementation Status of Performance-Based Horizontal Separation Minima using the form available on the Asia/Pacific Regional Office website, and submit to the ICAO Secretariat by not later than 28 February each year.
- 2.4 FIT-Asia States: Compile report on PBCS system performance and availability observed in your FIR and, including comment on operational impact of observed outages, results of analysis of problems and corrective action taken, and submit the report to FIT-Asia each year using the Working Paper template provided for the meeting.

2.5 Non-FIT-Asia/States: Compile report on PBCS system performance and availability observed in your FIR and, including comment on operational impact of observed outages, results of analysis of problems and corrective action taken, and submit the report to the relevant FIT in the format determined by the FIT.

2.6 ~~Ensure report is compiled and available by 31 March each year, to allow adequate time for RASMAG report to be compiled.~~

3. FIT-Asia Reports to RASMAG

3.1 Nominated ANSP compile draft aggregated regional performance report ~~RASMAG report~~ from individual FIR reports for review at each year's FIT-Asia meeting.

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